



GOVERNMENT OF KHYBER PUKHTUNKHWA
Rural Road Development Project
KP-RRDP



**TOPOGRAPHIC SURVEY
REPORT**

October 2023



MINCONSULT SDN. BHD.
Minconsult Sdn Bhd (58835-P) Lot 6, Jalan 51A/223, 46100 Petaling
Jaya, Selangor, Malaysia
Telephone: (603) 7952 5757
Email: info@minconsult.com



CREATIVE ENGINEERING CONSULTANTS
Creative House Fifth Floor, near Phase 3 Chowk, Jamrud Road
Peshawar
Telephone: +92-91 5841554
Email: cecpeshawar@gmail.com

Table of Contents

| | | |
|------------------|--|-----------|
| Chapter 1 | BACKGROUND | 1 |
| 1.1 | Background | 1 |
| 1.2 | Project Need | 1 |
| 1.3 | Project Objectives | 6 |
| 1.4 | Project Design | 6 |
| 1.5 | Study objectives | 6 |
| 1.6 | Study Area | 7 |
| 1.7 | Scope of work | 11 |
| 1.8 | Calibration of Survey Instruments | 11 |
| 1.9 | Units of Measurement | 11 |
| 1.10 | Equipment Used | 11 |
| 1.11 | Horizontal & vertical Control | 11 |
| 1.12 | Horizontal Control | 11 |
| 1.13 | Vertical Control | 12 |
| 1.14 | Existing Feature Topographic Survey | 12 |
| 1.15 | List of Roads | 12 |
| 2. | Location Maps and Traverse Data | 16 |
| 2.1 | District Bannu | 16 |
| 2.1.1 | BN-3 | 16 |
| 2.1.2 | BN-5 | 18 |
| 2.1.3 | N-BN-1 | 20 |
| 2.1.4 | N-BN-11 | 22 |
| 2.2 | District Battagram | 24 |
| 2.2.1 | BTG-16 | 24 |
| 2.2.2 | BTG-2 | 28 |
| 2.3 | District Bunner | 32 |
| 2.3.1 | BUN-11 | 32 |
| 2.3.2 | BUN-9 | 34 |
| 2.3.3 | N-BUN-2 | 36 |
| 2.3.4 | T-1 | 38 |
| 2.4 | District Charsadda | 40 |
| 2.4.1 | CHR-9 | 40 |
| 2.4.2 | CHR-10 | 42 |
| 2.5 | District Chitral | 44 |
| 2.5.1 | N-CHT-1 | 44 |
| 2.5.2 | N-CHT-2 | 46 |
| 2.5.3 | RRD_UCH_NR1 | 48 |
| 2.5.4 | N-CHT-3 | 50 |
| 2.5.5 | N-CHT-4 | 52 |

| | | |
|-------------|--|------------|
| 2.5.6 | N-CHT-5 | 55 |
| 2.5.7 | N-CHT-6 | 57 |
| 2.5.8 | N-CHT-7 | 60 |
| 2.5.9 | N-CHT-8 | 62 |
| 2.5.10 | N-CHT-9 | 64 |
| 2.6 | District Dera Ismail Khan | 67 |
| 2.6.1 | KPR_DIK_NR11 | 67 |
| 2.6.2 | KPR_DIK_NR13 | 69 |
| 2.6.3 | RRD_DIK_R1 | 71 |
| 2.6.4 | RRD_DIK_R2 | 76 |
| 2.6.5 | RRD_DIK_R4 | 78 |
| 2.6.6 | RRD_DIK_R6 | 80 |
| 2.6.7 | RRD_DIK_R7 | 82 |
| 2.6.8 | RRD_DIK_NR4 | 84 |
| 2.6.9 | RRD_DIK_NR5 | 87 |
| 2.6.10 | RRD_DIK_NR6 | 89 |
| 2.6.11 | RRD_DIK_NR7 | 91 |
| 2.6.12 | RRD_DIK_NR8 | 93 |
| 2.6.13 | RRD_DIK_NR9 | 95 |
| 2.6.14 | RRD_DIK_NR10 | 97 |
| 2.6.15 | RRD_DIK_NR12 | 99 |
| 2.6.16 | RRD_DIK_NR14 | 101 |
| 2.7 | District Dir Lower | 103 |
| 2.7.1 | (T-30) | 103 |
| 2.7.2 | DRL-35 | 108 |
| 2.7.3 | DRL-4 | 111 |
| 2.7.4 | T-3 | 113 |
| 2.7.5 | T-31 | 116 |
| 2.7.6 | RRD_DRL_NR1 | 120 |
| 2.8 | District Dir Upper | 122 |
| 2.8.1 | RRD_DRU_R1 | 122 |
| 2.8.2 | RRD_DRU_NR3 | 124 |
| 2.8.3 | RRD_DRU_NR4 | 126 |
| 2.8.4 | T-42 | 128 |
| 2.8.5 | T-43 | 130 |
| 2.9 | District Haripur | 141 |
| 2.9.1 | (T-7) | 141 |
| 2.9.2 | T-35 | 144 |
| 2.9.3 | HRI-17 | 146 |
| 2.10 | District Karak | 149 |
| 2.10.1 | N-KRK-R2 | 149 |
| 2.10.2 | KPR-KRK-NR5 | 151 |
| 2.10.3 | RRD_KRK_R1 | 155 |
| 2.10.5 | RRD_KRK_R3 | 162 |
| 2.11 | District Kohat | 166 |
| 2.11.1 | KOHAT-3 | 166 |
| 2.11.2 | N-KOHAT-2 | 169 |
| 2.12 | District Kohistan | 171 |
| 2.12.1 | RRD_LKH_R1 | 171 |
| 2.12.2 | RRD_LKH_R2 | 173 |
| 2.12.3 | RRD_LKH_R3 | 176 |
| 2.12.4 | RRD_LKH_R4 | 178 |

| | | |
|-------------|-------------------------------|------------|
| 2.12.5 | RRD_UKH_R1..... | 181 |
| 2.13 | District Malakand..... | 184 |
| 2.13.1 | CHR-4..... | 184 |
| 2.13.2 | N-MLK-2..... | 186 |
| 2.13.3 | MLK-7..... | 188 |
| 2.13.4 | N-MLK-1..... | 190 |
| 2.13.5 | MLK-4..... | 194 |
| 2.14 | District Mansehra..... | 196 |
| 2.14.1 | MAN-2..... | 196 |
| 2.14.2 | T-12..... | 200 |
| 2.14.3 | T-22..... | 204 |
| 2.15 | District Shangla..... | 207 |
| 2.15.1 | SNG-14..... | 207 |
| 2.15.2 | SNG-61..... | 209 |
| 2.15.3 | SNG-20..... | 214 |
| 2.15.4 | SNG-26..... | 216 |
| 2.15.5 | SNG-28..... | 218 |
| 2.15.6 | SNG-30..... | 228 |
| 2.15.7 | SNG-27..... | 232 |
| 2.15.8 | SNG-29..... | 242 |
| 2.15.9 | SNG-63..... | 244 |
| 2.15.10 | SNG-22..... | 246 |
| 2.15.11 | SNG-60..... | 252 |
| 2.15.12 | SNG-33..... | 254 |
| 2.15.13 | SNG-7..... | 257 |
| 2.16 | District Swabi..... | 259 |
| 2.16.1 | T-2..... | 259 |
| 2.17 | District Swat..... | 261 |
| 2.17.1 | SWT-5..... | 261 |
| 2.17.2 | T-19..... | 263 |
| 2.17.3 | T-4..... | 265 |
| 2.17.4 | N-SWT-T2..... | 268 |
| 2.17.5 | N-SWT-T3..... | 270 |
| 2.17.6 | N-SWT-T4..... | 272 |
| 2.18 | District Torghar..... | 283 |
| 2.18.1 | TGH-1..... | 283 |

List of Maps

| | |
|--|----|
| Map 1.1 KP Education Accessibility Index..... | 2 |
| Map 1.2 KP Healthcare Accessibility Index | 3 |
| Map 1.3 KP Market Accessibility Index | 4 |
| Map 1.4 KP Road Density | 5 |
| Map 1.5 KP Population by Districts 2017 | 8 |
| Map 1.6 KP Population Density by Districts | 9 |
| Map 1.7 KP Projected Population..... | 10 |

List of Figures

| | |
|--|----|
| Figure 2.1.1 BN-3 Location Map | 16 |
| Figure 2.1.2 BN-5 Location Map | 18 |
| Figure 2.1.3 N-BN-1 Location Map..... | 20 |
| Figure 2.1.4 N-BN-11 Location Map..... | 22 |
| Figure 2.2.1 Location Map BTG-16 | 24 |
| Figure 2.2.2 Location Map BTG-2 | 28 |
| Figure 2.3.1 Location Map BUN-11 | 32 |
| Figure 2.3.2 Location Map BUN-9..... | 34 |
| Figure 2.3.3 Location Map N-BUN-2 | 36 |
| Figure 2.3.4 Location Map T-1 | 38 |
| Figure 2.4.1 Location Map CHR-9..... | 40 |
| Figure 2.4.2 Location Map CHR-10..... | 42 |
| Figure 2.5.1 Location Map N-CHT-1 | 44 |
| Figure 2.5.2 Location Map N-CHT-2 | 46 |
| Figure 2.5.3 Location Map RRD_UCH_NR1 | 48 |
| Figure 2.5.4 Location Map N-CHT-3 | 50 |
| Figure 2.5.5 Location Map N-CHT-4 | 52 |
| Figure 2.5.6 Location Map N-CHT-5 | 55 |
| Figure 2.5.7 Location Map N-CHT-6 | 57 |
| Figure 2.5.8 Location Map N-CHT-7 | 60 |
| Figure 2.5.9 Location Map N-CHT-8 | 62 |
| Figure 2.5.10 Location Map N-CHT-9 | 64 |
| Figure 2.6.1 Location Map KPR_DIK_NR11 | 67 |
| Figure 2.6.2 Location Map KPR_DIK_NR13 | 69 |
| Figure 2.6.3 Location Map RRD_DIK_R1..... | 71 |
| Figure 2.6.4 Location Map RRD_DIK_R2..... | 76 |
| Figure 2.6.5 Location Map RRD_DIK_R4..... | 78 |
| Figure 2.6.6 Location Map RRD_DIK_R6..... | 80 |
| Figure 2.6.7 Location Map RRD_DIK_R7..... | 82 |
| Figure 2.6.8 Location Map RRD_DIK_NR4 | 84 |
| Figure 2.6.9 Location Map RRD_DIK_NR5 | 87 |
| Figure 2.6.10 Location Map RRD_DIK_NR6 | 89 |

| | |
|---|-----|
| Figure 2.6.11 Location Map RRD_DIK_NR7 | 91 |
| Figure 2.6.12 Location Map RRD_DIK_NR8 | 93 |
| Figure 2.6.13 Location Map RRD_DIK_NR9 | 95 |
| Figure 2.6.14 Location Map RRD_DIK_NR10 | 97 |
| Figure 2.6.15 Location Map RRD_DIK_NR12 | 99 |
| Figure 2.6.16 Location Map RRD_DIK_NR14 | 101 |
| Figure 2.7.1 Location Map T-30 | 103 |
| Figure 2.7.2 Location Map DRL-35 | 108 |
| Figure 2.7.3 Location Map DRL-4 | 111 |
| Figure 2.7.4 Location Map T-3 | 113 |
| Figure 2.7.5 Location Map T-31 | 116 |
| Figure 2.7.6 Location Map RRD_DRL_NR1 | 120 |
| Figure 2.8.1 Location Map RRD_DRU_R1 | 122 |
| Figure 2.8.2 Location Map RRD_DRU_NR3 | 124 |
| Figure 2.8.3 Location Map RRD_DRU_NR4 | 126 |
| Figure 2.8.4 Location Map T-42 | 128 |
| Figure 2.8.5 Location Map T-43 | 130 |
| Figure 2.9.1 Location Map T-7 | 141 |
| Figure 2.9.2 Location Map T-35 | 144 |
| Figure 2.9.3 Location Map HRI-17 | 146 |
| Figure 2.10.1 Location Map N-KRK-R2 | 149 |
| Figure 2.10.2 Location Map KPR_KRK_NR5 | 151 |
| Figure 2.10.3 Location Map RRD_KRK_R1 | 155 |
| Figure 2.10.4 Location Map RRD_KRK_R3 | 162 |
| Figure 2.11.1 Location Map KOHAT-3 | 166 |
| Figure 2.11.2 Location Map N-KOHAT-2..... | 169 |
| Figure 2.12.1 Location Map RRD_LKH_R1..... | 171 |
| Figure 2.12.2 Location Map RRD_LKH_R2..... | 173 |
| Figure 2.12.3 Location Map RRD_LKH_R3..... | 176 |
| Figure 2.12.4 Location Map RRD_LKH_R4..... | 178 |
| Figure 2.12.5 Location Map RRD_UKH_R1 | 181 |
| Figure 2.13.1 Location Map CHR-4..... | 184 |
| Figure 2.13.2 Location Map N-MLK-2 | 186 |
| Figure 2.13.3 Location Map MLK-7 | 188 |

| | |
|--|-----|
| Figure 2.13.4 Location Map N-MLK-1 | 190 |
| Figure 2.13.5 Location Map MLK-4 | 194 |
| Figure 2.14.1 Location Map MAN-2..... | 196 |
| Figure 2.14.2 Location Map T-12 | 200 |
| Figure 2.14.3 Location Map T-22 | 204 |
| Figure 2.15.1 Location Map SNG-14..... | 207 |
| Figure 2.15.2 Location Map SNG-61 | 209 |
| Figure 2.15.3 Location Map SNG-20..... | 214 |
| Figure 2.15.4 Location Map SNG-26..... | 216 |
| Figure 2.15.5 Location Map SNG-28..... | 218 |
| Figure 2.15.6 Location Map SNG-30..... | 228 |
| Figure 2.15.7 Location Map SNG-27 | 232 |
| Figure 2.15.8 Location Map SNG-29..... | 242 |
| Figure 2.15.9 Location Map SNG-63..... | 244 |
| Figure 2.15.10 Location Map SNG-22..... | 246 |
| Figure 2.15.11 Location Map SNG-60..... | 252 |
| Figure 2.15.12 Location Map SNG-33..... | 254 |
| Figure 2.15.13 Location Map SNG-7 | 257 |
| Figure 2.16.1 Location Map T-2 | 259 |
| Figure 2.17.1 Location Map SWT-5..... | 261 |
| Figure 2.17.2 Location Map T-19 | 263 |
| Figure 2.17.3 Location Map T-4 | 265 |
| Figure 2.17.4 Location Map N-SWT-T2..... | 268 |
| Figure 2.17.5 Location Map N-SWT-T3..... | 270 |
| Figure 2.17.6 Location Map N-SWT-T4..... | 272 |
| Figure 2.18.1 Location Map TGH-1 | 283 |

List of Tables

| | |
|--|----|
| Table 2.1.1 BN-3 Traverse Points | 17 |
| Table 2.1.2 BN-5 Traverse Points | 19 |
| Table 2.1.3 N-BN-1 Traverse Points | 21 |
| Table 2.1.4 N-BN-11 Traverse Points | 23 |
| Table 2.2.1 BTG-16 Traverse Points..... | 25 |
| Table 2.2.2 BTG-2 Traverse Points..... | 29 |
| Table 2.3.1 BUN-11 Traverse Points..... | 33 |
| Table 2.3.2 BUN-9 Traverse Points..... | 35 |
| Table 2.3.3 N-BUN-2 Traverse Points | 37 |
| Table 2.3.4 T-1 Traverse Points..... | 39 |
| Table 2.4.1 CHR-9 Traverse Points | 41 |
| Table 2.4.2 CHR-10 Traverse Points | 43 |
| Table 2.5.1 N-CHT-1 Traverse Points | 45 |
| Table 2.5.2 N-CHT-2 Traverse Points | 47 |
| Table 2.5.3 RRD_UCH_NR1 Traverse Points..... | 49 |
| Table 2.5.4 N-CHT-3 Traverse Points | 51 |
| Table 2.5.5 N-CHT-4 Traverse Points | 53 |
| Table 2.5.6 N-CHT-5 Traverse Points | 56 |
| Table 2.5.7 N-CHT-6 Traverse Points | 58 |
| Table 2.5.8 N-CHT-7 Traverse Points | 61 |
| Table 2.5.9 N-CHT-8 Traverse Points | 63 |
| Table 2.5.10 N-CHT-9 Traverse Points | 65 |
| Table 2.6.1 KPR_DIK_NR11 Traverse Points | 68 |
| Table 2.6.2 KPR_DIK_NR13 Traverse Points | 70 |
| Table 2.6.3 RRD_DIK_R1 Traverse Points | 72 |
| Table 2.6.4 RRD_DIK_R2 Traverse Points | 77 |
| Table 2.6.5 RRD_DIK_R4 Traverse Points | 79 |
| Table 2.6.6 RRD_DIK_R6 Traverse Points | 81 |
| Table 2.6.7 RRD_DIK_R7 Traverse Points | 83 |
| Table 2.6.8 RRD_DIK_NR4 Traverse Points..... | 85 |
| Table 2.6.9 RRD_DIK_NR5 Traverse Points..... | 88 |
| Table 2.6.10 RRD_DIK_NR6 Traverse Points..... | 90 |

| | |
|--|-----|
| Table 2.6.11 RRD_DIK_NR7 Traverse Points..... | 92 |
| Table 2.6.12 RRD_DIK_NR8 Traverse Points..... | 94 |
| Table 2.6.13 RRD_DIK_NR9 Traverse Points..... | 96 |
| Table 2.6.14 RRD_DIK_NR10 Traverse Points..... | 98 |
| Table 2.6.15 RRD_DIK_NR12 Traverse Points..... | 100 |
| Table 2.6.16 RRD_DIK_NR14 Traverse Points..... | 102 |
| Table 2.7.1 T-30 Traverse Points..... | 104 |
| Table 2.7.2 DRL-35 Traverse Points..... | 109 |
| Table 2.7.3 DRL-4 Traverse Points..... | 112 |
| Table 2.7.4 T-3 Traverse Points..... | 114 |
| Table 2.7.5 T-31 Traverse Points..... | 117 |
| Table 2.7.6 RRD_DRL_NR1 Traverse Points..... | 121 |
| Table 2.8.1 RRD_DRU_R1 Traverse Points..... | 123 |
| Table 2.8.2 RRD_DRU_NR3 Traverse Points..... | 125 |
| Table 2.8.3 RRD_DRU_NR4 Traverse Points..... | 127 |
| Table 2.8.4 T-42 Traverse Points..... | 129 |
| Table 2.8.5 T-43 Traverse Points..... | 131 |
| Table 2.9.1 T-7 Traverse Points..... | 142 |
| Table 2.9.2 T-35 Traverse Points..... | 145 |
| Table 2.9.3 HRI-17 Traverse Points..... | 147 |
| Table 2.10.1 N-KRK-R2 Traverse Points..... | 150 |
| Table 2.10.2 KPR_KRK_NR5 Traverse Points..... | 152 |
| Table 2.10.3 RRD_KRK_R1 Traverse Points..... | 156 |
| Table 2.10.4 RRD_KRK_R3 Traverse Points..... | 163 |
| Table 2.11.1 KOHAT-3 Traverse Points..... | 167 |
| Table 2.11.2 N-KOHAT-2 Traverse Points..... | 170 |
| Table 2.12.1 RRD_LKH_R1 Traverse Points..... | 172 |
| Table 2.12.2 RRD_LKH_R2 Traverse Points..... | 174 |
| Table 2.12.3 RRD_LKH_R3 Traverse Points..... | 177 |
| Table 2.12.4 RRD_LKH_R4 Traverse Points..... | 179 |
| Table 2.12.5 RRD_UKH_R1 Traverse Points..... | 182 |
| Table 2.13.1 CHR-4 Traverse Points..... | 185 |
| Table 2.13.2 N-MLK-2 Traverse Points..... | 187 |
| Table 2.13.3 MLK-7 Traverse Points..... | 189 |

| | |
|---|-----|
| Table 2.13.4 N-MLK-1 Traverse Points | 191 |
| Table 2.13.5 MLK-4 Traverse Points | 195 |
| Table 2.14.1 MAN-2 Traverse Points | 197 |
| Table 2.14.2 T-12 Traverse Points | 201 |
| Table 2.14.3 T-22 Traverse Points | 205 |
| Table 2.15.1 SNG-14 Traverse Points | 208 |
| Table 2.15.2 SNG-61 Traverse Points | 210 |
| Table 2.15.3 SNG-20 Traverse Points | 215 |
| Table 2.15.4 SNG-26 Traverse Points | 217 |
| Table 2.15.5 SNG-28 Traverse Points | 219 |
| Table 2.15.6 SNG-30 Traverse Points | 229 |
| Table 2.15.7 SNG-27 Traverse Points | 233 |
| Table 2.15.8 SNG-29 Traverse Points | 243 |
| Table 2.15.9 SNG-63 Traverse Points | 245 |
| Table 2.15.10 SNG-22 Traverse Points | 247 |
| Table 2.15.11 SNG-60 Traverse Points | 253 |
| Table 2.15.12 SNG-33 Traverse Points | 255 |
| Table 2.15.13 SNG-7 Traverse Points | 258 |
| Table 2.16.1 T-2 Traverse Points | 260 |
| Table 2.17.1 SWT-5 Traverse Points | 262 |
| Table 2.17.2 T-19 Traverse Points | 264 |
| Table 2.17.3 T-4 Traverse Points | 266 |
| Table 2.17.4 N-SWT-T2 Traverse Points | 269 |
| Table 2.17.5 N-SWT-T3 Traverse Points | 271 |
| Table 2.17.6 N-SWT-T4 Traverse Points | 273 |
| Table 2.18.1 TGH-1 Traverse Points..... | 284 |

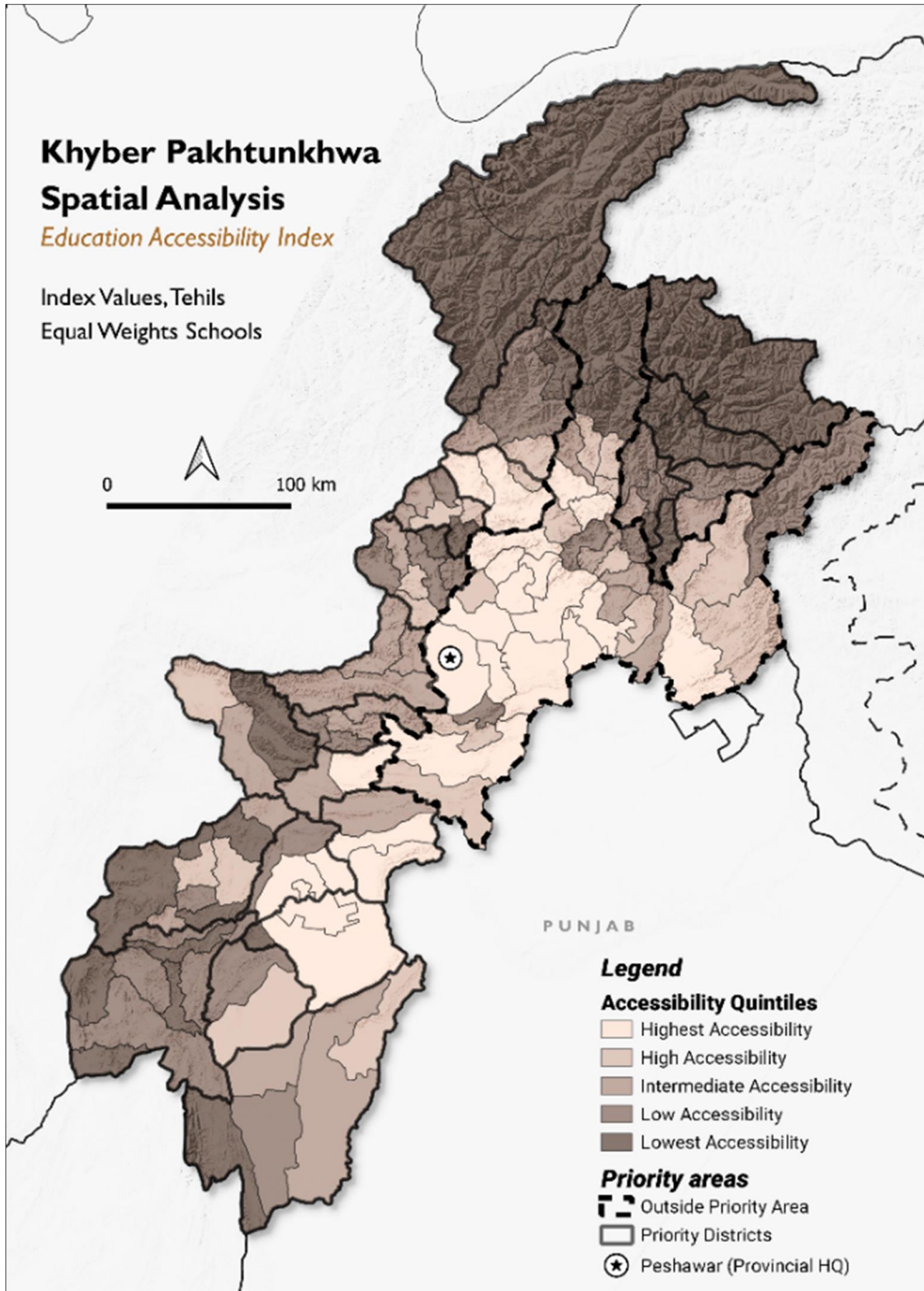
Chapter 1 BACKGROUND

1.1 Background

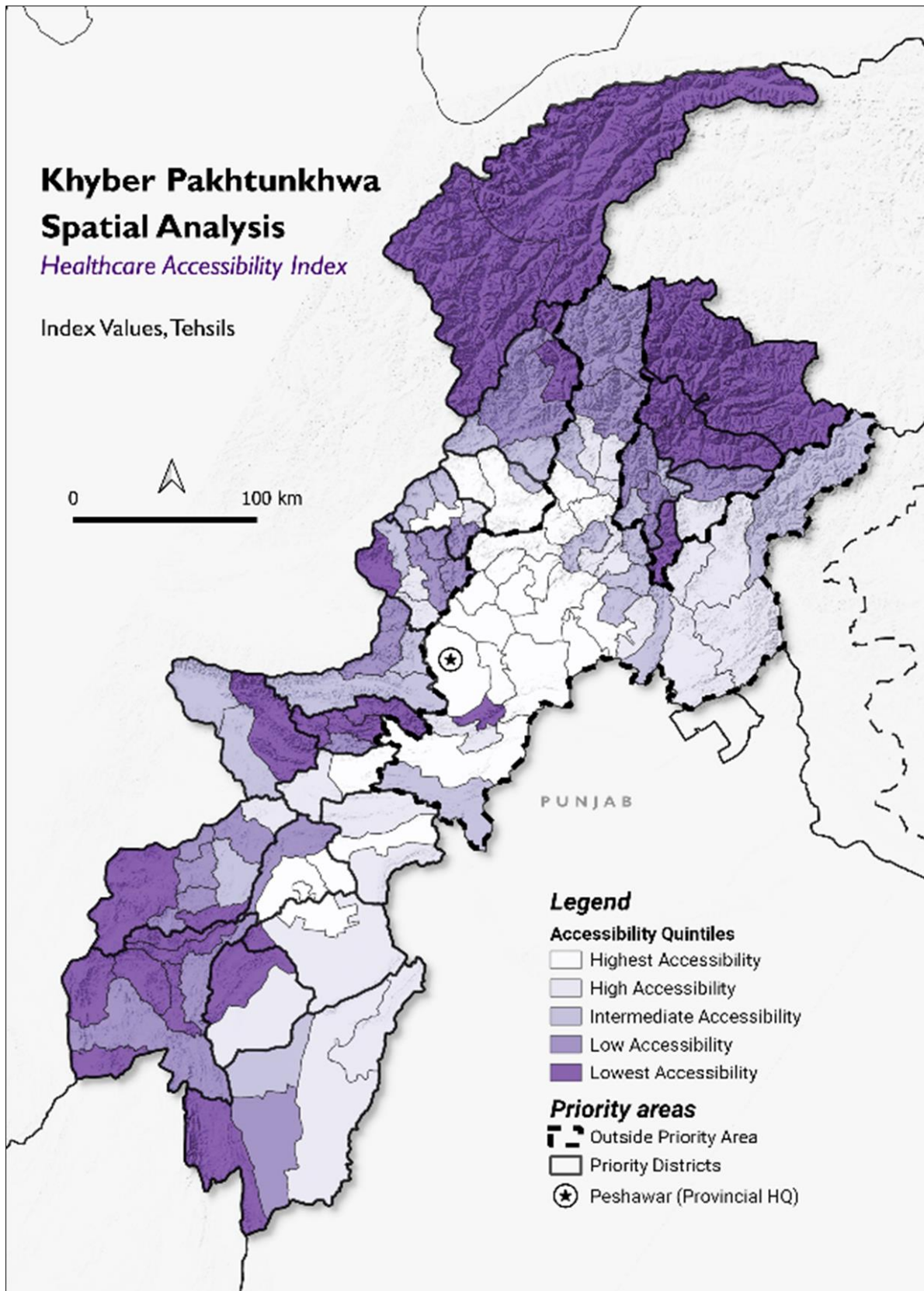
1. The Government of Khyber Pakhtunkhwa has received loan from the Asian Development Bank (ADB) towards the cost of the Khyber Pakhtunkhwa Provincial Roads Improvement Project (Loan 3601/3602-PAK).
2. Communication and Works Department decided to prepare.
 - a) Feasibility Study for Rural Roads Network of 1,337 Km and 62 Number of Bridges;
 - b) Feasibility Study and Detailed Engineering Design of 1,337 Km Rural Roads
 - c) Feasibility Study and Detailed Engineering Design of 62 Number of Bridges;
 - d) Detailed Engineering Design of Communication and Works Department Central Laboratory;
 - e) Preparation of Environmental, Resettlement Documents, and procurement documents; and
 - f) Preparation of PC-I acceptable to the Client and ADB, through existing supervision consultancy contract of Khyber Pakhtunkhwa Provincial Roads Improvement Project, signed between:
 - **(Party-A) Project Director, Project Implementation Unit, Khyber Pakhtunkhwa Provincial Roads Improvement Project, Communication and Works Department, Government of Khyber Pakhtunkhwa, and**
 - **(Party-B) Joint Venture of (i) M/s Minconsult Sdn. Bhd – Malaysia; and (ii) M/s Creative Engineering Consultants – Pakistan,**
3. Engaged for the Construction Supervision of the Khyber Pakhtunkhwa Provincial Roads Improvement Project (Loan 3601/3602-PAK).
4. For the additional works adjustments in the cost and scope of work in the Construction Supervision Consultancy Contract have been made with the condition that the scope for the Main Contract “Construction Supervision of Khyber Pakhtunkhwa Provincial Roads Improvement Project” and timing will not be affected by this additional task of KP-RRDP. Both assignments will go simultaneously and separately.
5. The Communication and Works Department (C&WD) of Khyber Pakhtunkhwa will be the Implementation Agency of the Project and Project Implementation Unit (PIU) has been established headed by a Project Director (Client’s Representative).

1.2 Project Need

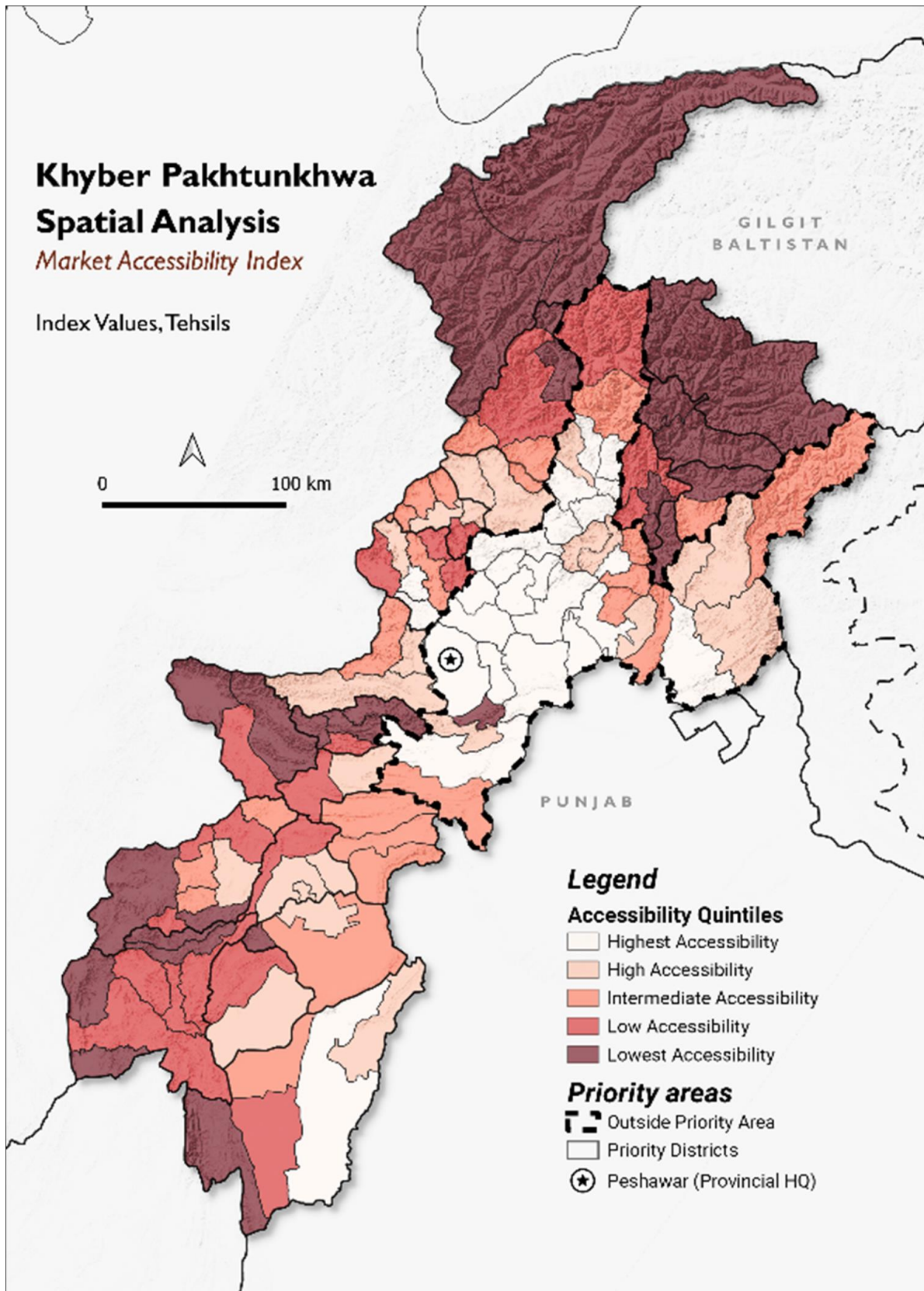
6. Rural roads network in KPK have a critical role in linking basic amenities such as health, education, markets to common citizen along with connecting rural communities to the district centers and the rest of the province. A recent analysis by the World Bank shows that there has been a development disparity among various districts of the province concerning accessibility in accessing the Education, Health, and Market facilities through the Periphery Rural Road Network, which is either non-existent, unpaved or in poor condition.
7. Geo-Spatial Analysis at the Tehsil level for the whole of KPK shows results for the ‘Accessibility Index’ of Education, Health, and Markets in the following Maps. This clearly shows that overall Northern and Southern Districts have low accessibility to such facilities in comparison to Central Districts, but still in Central Districts rural roads connecting the Urban Centers need an upgrade in most cases. This argument can be further strengthened by the fact that 90% of the Province’s Population lives within Two Hours of the Distance from the Urban Center. The following maps shows ‘Accessibility Index’ of Education, Health, and Markets:



Map 1.1 KP Education Accessibility Index

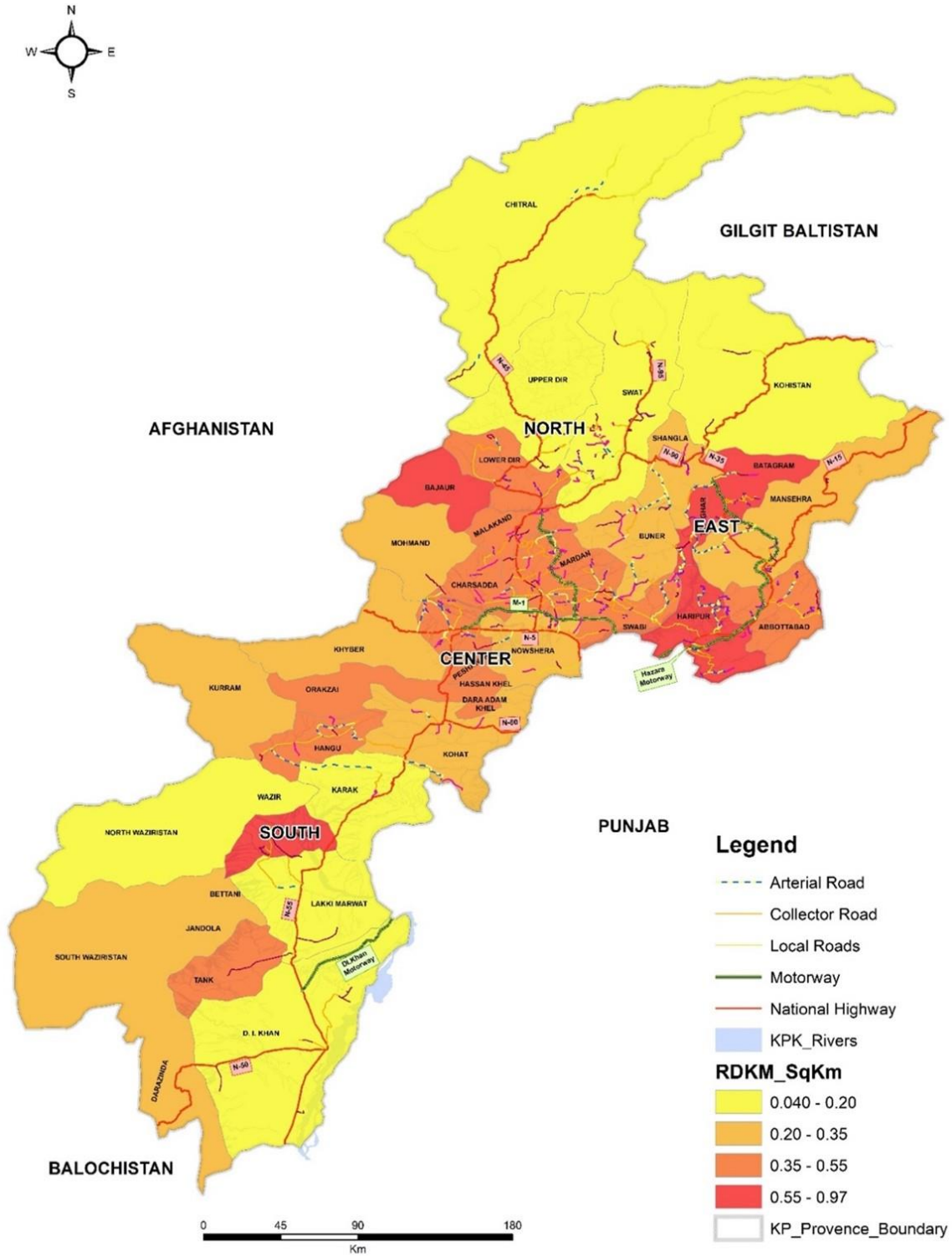


Map 1.2 KP Healthcare Accessibility Index



Map 1.3 KP Market Accessibility Index

8. The following map shows the road density of Khyber Pakhtunkhwa:



Map 1.4 KP Road Density

9. It is evident from the Road Density Map that only four districts show a density greater than 0.55 km per square km area of the district, whereas the Northern and Southern Districts show a very low density of ≤ 0.20 , and many of the Central Districts falls between 0.20 to 0.55 km/sq.km which is still not sufficient enough according to International Standards of accessibility requirement. About 85% of the population in Khyber Pakhtunkhwa lives in rural areas, whereas access to Public Service is not only poor but also deteriorating. Basic services provision in the province lags national averages, partly due to the region's geographic characteristics that make service delivery a challenge. For instance, northern, and southern Districts in the province face severe service delivery challenges in contrast to Central Districts.

10. Geo-Spatial Analysis showed that almost 40% of the rural population in the province must travel more than 01-hour to access a health facility (2nd Highest in the Country). This also has poor access to primary, middle, and secondary schools. 85% of the rural population must travel more than 30 minutes to access a primary school, whereas, in the case of middle and secondary schools, the percentage is 90% to 92% respectively.

1.3 Project Objectives

11. The following are the broad objectives of the Project:

- a) Improve rural accessibility to markets, education, and health facilities through up-gradation of infrastructure and improvement of transport services in the province.
- b) Interventions under the project would address the funding gap for infrastructure maintenance, development, and transport services.
- c) Providing improved and all-weather connectivity help in linking farm to markets thus creating job opportunities and improving the capacity of respective departments to respond to local needs.
- d) Improved network and connectivity under the project would help in unlocking the economic and development opportunities for inhabitants of the province through safer transportation, agriculture, and rural transformation, and reduce the income gap between urban and rural residents.
- e) Timely maintenance and up-gradation of rural roads through informed decision-making would also enhance asset life and optimize the utilization of the province's budget.

1.4 Project Design

12. The project is designed to do the following in a sequence.

- a) **Pre-Feasibility Study** of Rural Roads Network of 1,337 Km and 62 numbers of Proposed Bridges having connectivity to District / Access Road with greater access to Education, Health, Tourism Facilities using Geo-Spatial Analysis through Analytic Hierarchy Process ("AHP") and Multi-Criteria Analysis ("MCA") Techniques.
- b) **Feasibility Study** with Surveys and Investigations of the shortlisted Roads and Bridges at the Feasibility Stage.
- c) **Draft Detailed Engineering Design** of the 1,337 Km Roads and 62 numbers of Bridges finalized at the Feasibility Stage;
- d) **Detailed Engineering Design** of the proposed shortlisted 1,337 Km Roads and 62 numbers of proposed shortlisted Bridges; and
- e) Detailed Engineering Design of Communication and Works Department Central Laboratory as well as environmental and resettlement reports of each shortlisted road and bridge
- f) Conduct the due diligence required,
- g) Familiarize the government officials with ADB policies and procedures on safeguards, procurement, financial management, audit, and administrative requirements to process and implement the project.

1.5 Study objectives

13. The main objective of the study is to conduct site investigation on the selected pre-feasibility roads and bridges. The site investigation encompasses collecting data from the department of the selected roads and bridges;

carrying out manual classification count on each road and bridges, assessing the surface condition in terms of roughness, speed and surface type; proposing design template for the road projects; and selecting feasible roads and bridges for detail engineering design.

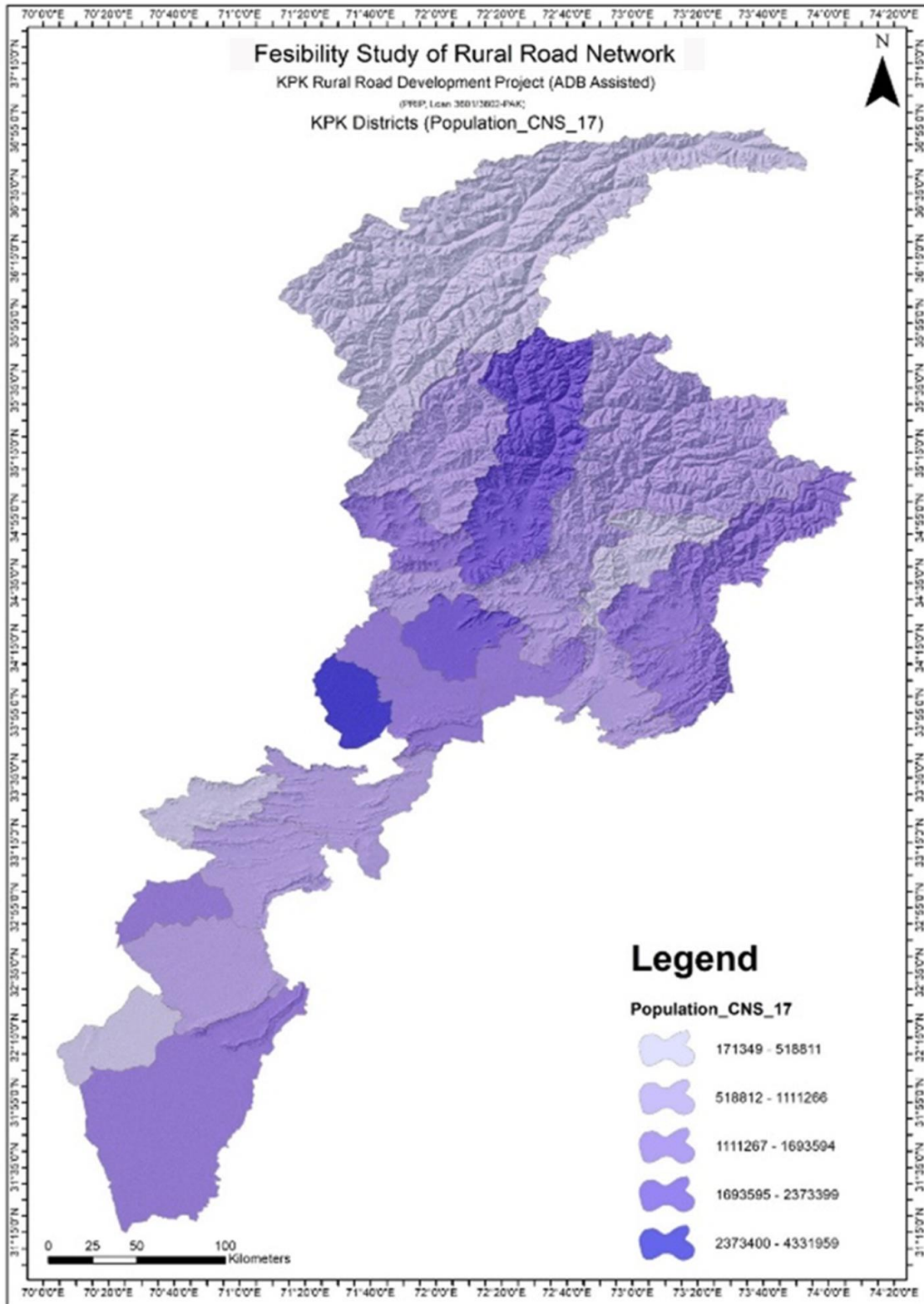
1.6 Study Area

14. Khyber Pakhtunkhwa Rural Road Development Project is only designed for 25 Established Districts, whereas other C&W Project of Khyber Pakhtunkhwa Rural Accessibility Project (KP-RAP) is dealing with Merged Districts as well. A list of the selected districts is given in Table:

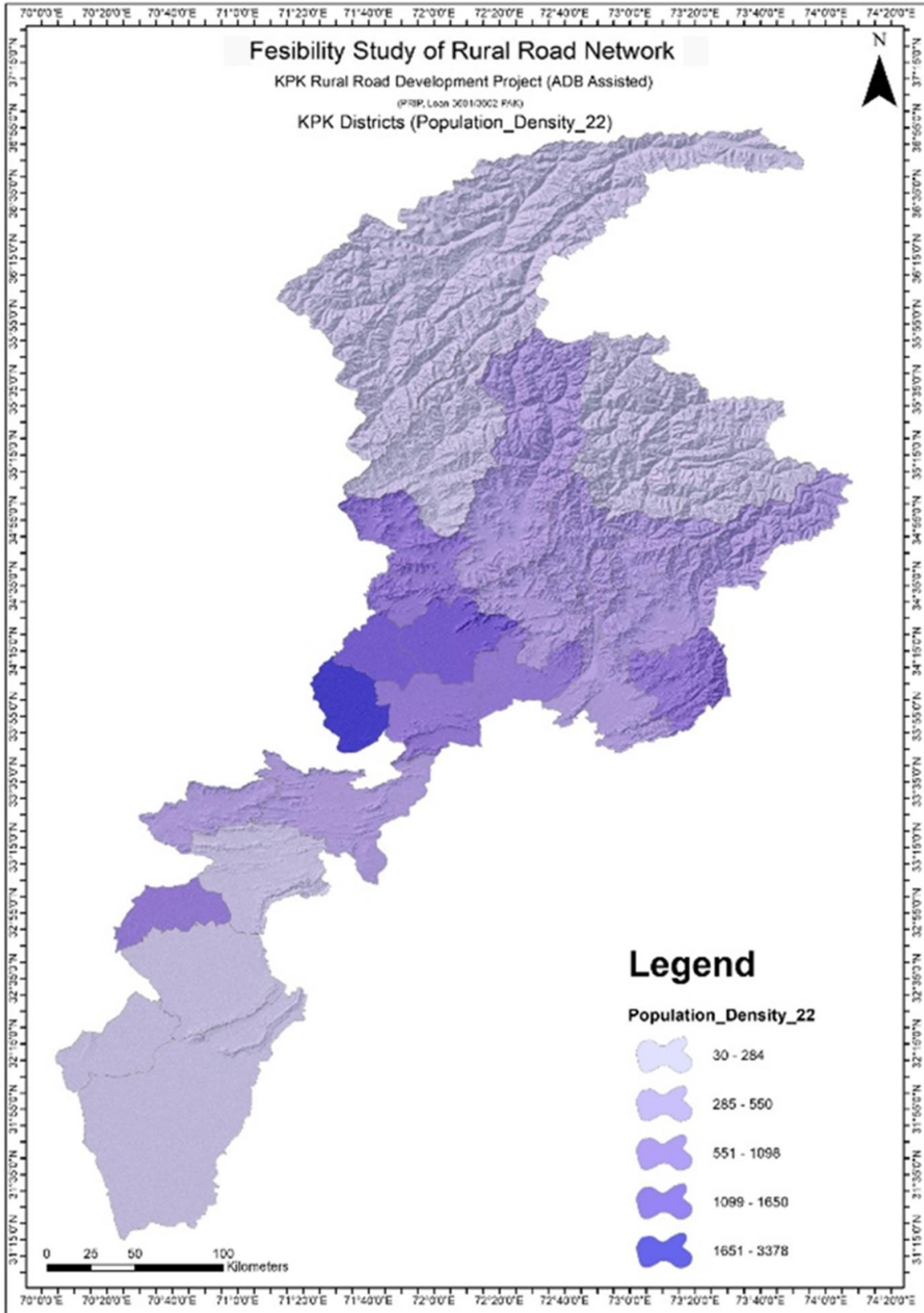
Table: 1.1 Study Area

| S.No | District |
|------|-----------|
| 1 | Bannu |
| 2 | Battagram |
| 3 | Bunner |
| 4 | Charsadda |
| 5 | Chitral |
| 6 | DI Khan |
| 7 | Dir Lower |
| 8 | Dir Upper |
| 9 | Haripur |
| 10 | Karak |
| 11 | Kohat |
| 12 | Kohistan |
| 13 | Malakand |
| 14 | Mansehra |
| 15 | Shangla |
| 16 | Swabi |
| 17 | Swat |
| 18 | Torghar |

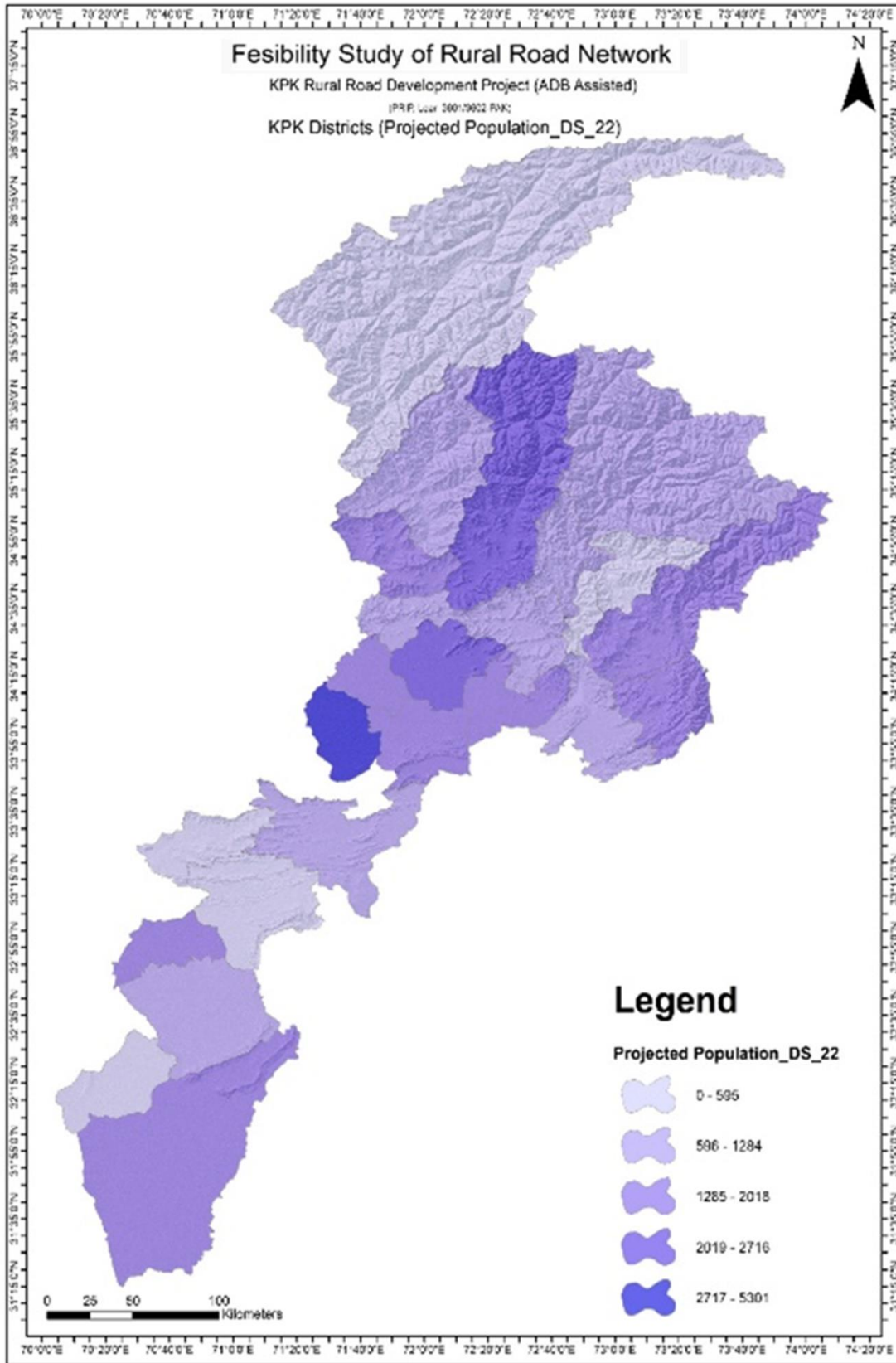
15. Study area population by District for Census 2017 and Project Population for 2022 from Development Statistics and Population Density for 2022 Population concerning District area are shown in the following maps:



Map 1.5 KP Population by Districts 2017



Map 1.6 KP Population Density by Districts



Map 1.7 KP Projected Population

1.7 Scope of work

- Establishment of control Survey.
- Topographic survey of site.
- Documentation and drawing.
- Taking cross sections on defined distance
- Demarcation of trees

1.8 Calibration of Survey Instruments

All instruments calibration checked by chief surveyor before start the site work

1.9 Units of Measurement

All dimensions and levels are in Meter until except as noted. The site survey was accomplished according to the International Standard.

1.10 Equipment Used

The instruments used for this job are listed here under:

- Trimble DGPS R8, Sokkia Total station CX-105 etc.

1.11 Horizontal & vertical Control

RTK Survey Method by DGPS is adopted for achievement of highly accuracy at each point. The Prominent Control point was used as Base Point & all others Point as Rover point reading taken by 03 Minute to 05 Minute, Trimble DGPS R10 and R8 was used in the survey as Base & Rover Method. Accuracy of survey horizontal is 5mm and 10mm vertical. GPS datum (WGS-84), UTM Zone 42S & Geoid EGM 2008 was used for horizontal & vertical control.

1.12 Horizontal Control

The survey team has provided the horizontal control by close circuit traversing using total station starting from and closing on SOP Bench Mark, traverse line required in the area of the scheme. All the work shall be based on known points of Survey of Pakistan (SOP), if available and provided by the Client in the area of scheme otherwise these shall be getting through GPS datum (WGS-84), UTM Zone 42S and Geoid EGM 2008.

Each traverse leg shall be measured with EDM. The Survey party comprising of our senior surveyor would be deputed to visit the area with the Design Engineer, and identify the Boundary of the proposed area, after that the survey work is started.

At a closed interval, permanent survey points have been established in the form of Steel Bar and some in steel rods / nails driven into ground at edge of existing road or parapet wall of concrete structures, painted red, marked with engraved triangle and give the point name. Control point's intervals not more than 1 km control points are labeled.

1.13 Vertical Control

The vertical control shall be based on Survey of Pakistan Department Bench Mark if available in the area of scheme or get through GPS datum (WGS-84), UTM Zone 42S and Geoid EGM 2008. We have to resort to double level method in the absence of any other bench mark in the area of scheme with the accuracy of 0.008m for vertical Control B.M will be marked on permanent structures.

1.14 Existing Feature Topographic Survey

After completion of horizontal and vertical control, topographic survey shall be conducted with 1m (Intermediate) & 5m (Index Contour) contour interval, showing all details on ground including, street, Nullah, road, water courses, drains, electric pole, telephone pole, trees, buildings, grave yard, intersections and Kacha tracks along with road.

Permanent survey points and bench marks shall be established at strategic points or at least one bench mark as per directed. The position of bench mark is made as per best practices for road design and to be shown on the drawing along with reduced levels.

1.15 List of Roads

Table: 1.2 List of Roads

| # | Road Name | Districts | Type | ID | Length |
|----|--|-----------|----------------|---------|--------|
| 1 | Alla Khel To Havid | Bannu | Access | BN-3 | 5.15 |
| 2 | Durrani Chowk to Piran Titter Khel | Bannu | Access | BN-5 | 5.25 |
| 3 | Alla Khel To Mir Sher Khan Chowk Via Havid | Bannu | Access | N-BN-1 | 11.34 |
| 4 | Reconstruction / Widening of Village Waligai Uc Zaraki Pirba Khel Road | Bannu | Access | N-BN-11 | 6.30 |
| 5 | Road Kandara to Sokar Chilar | Battagram | Access | BTG-2 | 7.64 |
| 6 | Rajdari To Kathora Road I/C Link Road | Battagram | Access | BTG-16 | 8.10 |
| 7 | Bababir to Manga Thana to Nagarai | Bunner | Access | N-BUN-2 | 18.80 |
| 8 | Jangdara Bato Road | Bunner | Access | BUN-11 | 6.80 |
| 9 | Girari Road | Bunner | Access | BUN-9 | 5.05 |
| 10 | Rani Ghat | Bunner | Tourism | T-1 | 3.35 |
| 11 | Takhtbhai Road to Malang Abad | Charsadda | Access | CHR-9 | 11.00 |
| 12 | Sardheri Bazar to Nisata via Zarin Abad | Charsadda | Access | CHR-10 | 10.00 |
| 13 | Ramboor Valley Road | Chitral | Flood Affected | N-CHT-3 | 8.0 |
| 14 | Shaghoor to Garam Chahsma Road | Chitral | Flood Affected | N-CHT-4 | 21.9 |
| 15 | Arkari Valley Road | Chitral | Flood Affected | N-CHT-5 | 10.1 |
| 16 | Tirch Road from Nishko Bridge to Shahgroom Tirch | Chitral | Flood Affected | N-CHT-6 | 30.0 |
| 17 | Rech Road | Chitral | Flood Affected | N-CHT-7 | 12.3 |
| 18 | Jin Jeratkoh Road | Chitral | Flood Affected | N-CHT-8 | 8.9 |

| | | | | | |
|----|---|-----------|----------------|--------------|-------|
| 19 | Pashty Road, Pret to Pashty Valley | Chitral | Tourism | N-CHT-9 | 17.1 |
| 20 | Shesha To Madalcasht | Chitral | Flood Affected | N-CHT-1 | 16.67 |
| 21 | Osaic To Orsoon | Chitral | Access | N-CHT-2 | 9.10 |
| 22 | Oveer Road | Chitral | Flood Affected | RRD_UCH_NR1 | 10.00 |
| 23 | Giloti Road | DI Khan | Flood Affected | RRD_DIK_NR14 | 67.00 |
| 24 | Main N-50 to Shero Kuhna Road | DI Khan | Flood Affected | KPR_DIK_NR11 | 6.84 |
| 25 | Main N-55 road to Diyal Via Airport road and CRBC colony | DI Khan | Flood Affected | KPR_DIK_NR13 | 6.10 |
| 26 | Restoration & Rehabilitation of Prova to Chowdwan Road | DI Khan | Flood Affected | RRD_DIK_R1 | 29.62 |
| 27 | Restoration & Rehabilitation of Kulachi to Luni Road | DI Khan | Flood Affected | RRD_DIK_R2 | 6.20 |
| 28 | Restoration & Rehabilitation of Mian Kasirai Shareef Road (Darazinda) | DI Khan | Flood Affected | RRD_DIK_R4 | 10.00 |
| 29 | Restoration & Rehabilitation of Main Parwara jalal Khell Road (Darazinda) | DI Khan | Flood Affected | RRD_DIK_R6 | 7.26 |
| 30 | Restoration & Rehabilitation of Main Daraban road to Kot Wali dad via Garah Khan | DI Khan | Flood Affected | RRD_DIK_R7 | 8.00 |
| 31 | From Indus highway to dhok Rabnawaz and Chah Hussain (9.2 KM) | DI Khan | Flood Affected | RRD_DIK_NR4 | 9.10 |
| 32 | Main chashma road, Thathal Adda to Phahar pur old canal road Via Mubarak shah & Thatha... | DI Khan | Flood Affected | RRD_DIK_NR5 | 10.40 |
| 33 | From chashma road to village Musa khar and Jabbar wala (5.05 KM) | DI Khan | Flood Affected | RRD_DIK_NR6 | 5.05 |
| 34 | Awan Nala Civil Minor road (10.5 KM) | DI Khan | Flood Affected | RRD_DIK_NR7 | 10.50 |
| 35 | From CRBC Canal to Diyal Pahar pur canal road & Rehmat Abad Link(12.56 KM) | DI Khan | Flood Affected | RRD_DIK_NR8 | 12.56 |
| 36 | Pusha Pul To Garrah Rehman | DI Khan | Flood Affected | RRD_DIK_NR9 | 5.30 |
| 37 | Jhandi Sewaag Road | DI Khan | Flood Affected | RRD_DIK_NR12 | 7.50 |
| 38 | Main N-55 road to Sadra Sharif Road | DI Khan | Flood Affected | RRD_DIK_NR10 | 5.00 |
| 39 | Mula Hukam Baba To Sro Gul Khero Shah | Dir Lower | Access | DRL-35 | 5.20 |
| 40 | Sar Banda Munjai Top | Dir Lower | Access | T-30 | 8.39 |
| 41 | Ouch Kotigram Local Road | Dir Lower | Tourism | DRL-4 | 12.73 |
| 42 | To Laram Top | Dir Lower | Tourism | T-3 | 5.70 |
| 43 | Pantolo Picnic Spot | Dir Lower | Access | T-31 | 8.00 |
| 44 | Shorshing Jakra Baba Road | Dir Lower | Flood Affected | RRD_DRL_NR1 | 8.03 |
| 45 | Sheen Ghar Top | Dir Upper | Tourism | T-42 | 16.12 |
| 46 | Link Roads UsheraI Dara | Dir Upper | Flood Affected | RRD_DRU_R1 | 15.35 |
| 47 | Katigram To Shagai U/C Kotke | Dir Upper | Flood Affected | RRD_DRU_NR3 | 5.10 |

| | | | | | |
|----|--|----------------|----------------|-------------|-------|
| 48 | Sundrai To Qadarkandow Road (Nehag Dara) | Dir Upper | Flood Affected | RRD_DRU_NR4 | 8.20 |
| 49 | Uthror to Thal via Badgoi Top | Dir Upper | Tourism | T-43 | 20.00 |
| 50 | Nara Akhoonkhail Waterfall | Haripur | Tourism | T-35 | 9.00 |
| 51 | Noori Water Fall | Haripur | Tourism | T-7 | 5.27 |
| 52 | Anar Gah | Haripur | Tourism | HRI-17 | 4.07 |
| 53 | Takhate Nasrati Bridge to Khadda Banda via Bhogara Culvert Rose Baig Khail Kalah | Karak | Access | N-KRK-R2 | 10.00 |
| 54 | Hamdan to Inzar More | Karak | Flood Affected | KPR_KRK_NR5 | 5.83 |
| 55 | Indus Highway to Nari Khawar | Karak | Flood Affected | RRD_KRK_R1 | 7.15 |
| 56 | Payala More to Shahidan Banda | Karak | Flood Affected | RRD_KRK_R3 | 10.40 |
| 57 | Khusal Garh Road to Kamar Dhoke | Kohat | Access | N-KOHAT-2 | 9.90 |
| 58 | From Mukarab Khan Korona To Kot Road | Kohat | Access | KOHAT-3 | 5.46 |
| 59 | Restoration/Rehabilitation of Batera Road | Kohistan Lower | Flood Affected | RRD_LKH_R1 | 10.32 |
| 60 | Restoration/Rehabilitation Pattan Ziarat Road (Seer Gazi Abad To Kharat) | Kohistan Lower | Flood Affected | RRD_LKH_R2 | 10.00 |
| 61 | Restoration/Rehabilitation of Masham Road | Kohistan Lower | Flood Affected | RRD_LKH_R3 | 5.10 |
| 62 | Restoration/Rehabilitation of Chawa Darra Road | Kohistan Lower | Flood Affected | RRD_LKH_R4 | 13.78 |
| 63 | Jalkot Goshali Road 1: Gabber Nullah Road | Kohistan Upper | Flood Affected | RRD_UKH_R1 | 14.40 |
| 64 | Landi Shah To Narrai Uba | Malakand | Access | CHR-4 | 5.16 |
| 65 | Neher Quarter To Jaban Power House Road | Malakand | Access | MLK-7 | 5.05 |
| 66 | Mura Banda Link Road | Malakand | Access | MLK-4 | 7.06 |
| 67 | Daragai - Palai Interchange Swat Motorway | Malakand | Access | N-MLK-1 | 20.00 |
| 68 | Rehabilitation of Road from Badranga to Jazoonaa Dag Road | Malakand | Access | N-MLK-2 | 8.00 |
| 69 | Shingri Road | Mansehra | Tourism | MAN-2 | 4.54 |
| 70 | To Saiful Maluk Lake | Mansehra | Tourism | T-12 | 8.60 |
| 71 | Sharan Forest | Mansehra | Tourism | T-22 | 15.30 |
| 72 | Chakesar Nebi More To Said Abad | Shangla | Access | SNG-14 | 5.98 |
| 73 | Miankalay Pagorai Kas Road | Shangla | Access | SNG-61 | 7.80 |
| 74 | Towa Chowkai Asharkot | Shangla | Access | SNG-20 | 8.20 |
| 75 | Aluch Bunirwall Road | Shangla | Access | SNG-26 | 5.00 |
| 76 | Bengalai Landai Balo Chawak | Shangla | Access | SNG-28 | 6.90 |
| 77 | Dherai Faiza Sondvi | Shangla | Access | SNG-30 | 8.64 |
| 78 | Main Dara | Shangla | Access | SNG-27 | 5.00 |
| 79 | Chagum Gumbat Road | Shangla | Access | SNG-29 | 5.00 |
| 80 | Alpurai Barkas Kag Road | Shangla | Access | SNG-63 | 7.00 |

| | | | | | |
|----|-----------------------------------|----------|---------|-----------|-------|
| 81 | Chagam Alamay | Shangla | Access | SNG-22 | 5.00 |
| 82 | Martung Chakisar | Shangla | Access | SNG-7 | 14.89 |
| 83 | Rahimabad Kas Basi Road | Shangla | Access | SNG-60 | 8.00 |
| 84 | Zara Road | Shangla | Access | SNG-33 | 5.00 |
| 85 | Beer Gali | Swabi | Tourism | T-2 | 9.20 |
| 86 | Kalam Banr Shahoo Road | Swat | Tourism | SWT-5 | 4.85 |
| 87 | Beshai Meadows | Swat | Tourism | T-19 | 6.92 |
| 88 | Kandol Lake Paristan Lake | Swat | Tourism | T-4 | 10.60 |
| 89 | Taip Banda Road | Swat | Tourism | N-SWT-T-2 | 10 |
| 90 | Uthror to Thal via Badgoi Top | Swat | Tourism | N-SWT-T4 | 14.0 |
| 91 | Desan Meadows to Kalam | Swat | Tourism | N-SWT-T3 | 5.0 |
| 92 | Karrak Madakhel To Hasan Zai Road | Tor Ghar | Access | TGH-1 | 22.10 |

2. Location Maps and Traverse Data

2.1 District Bannu

2.1.1 BN-3

Alla Khel To Havid (BN-3)

2.1.1.1 Location Map

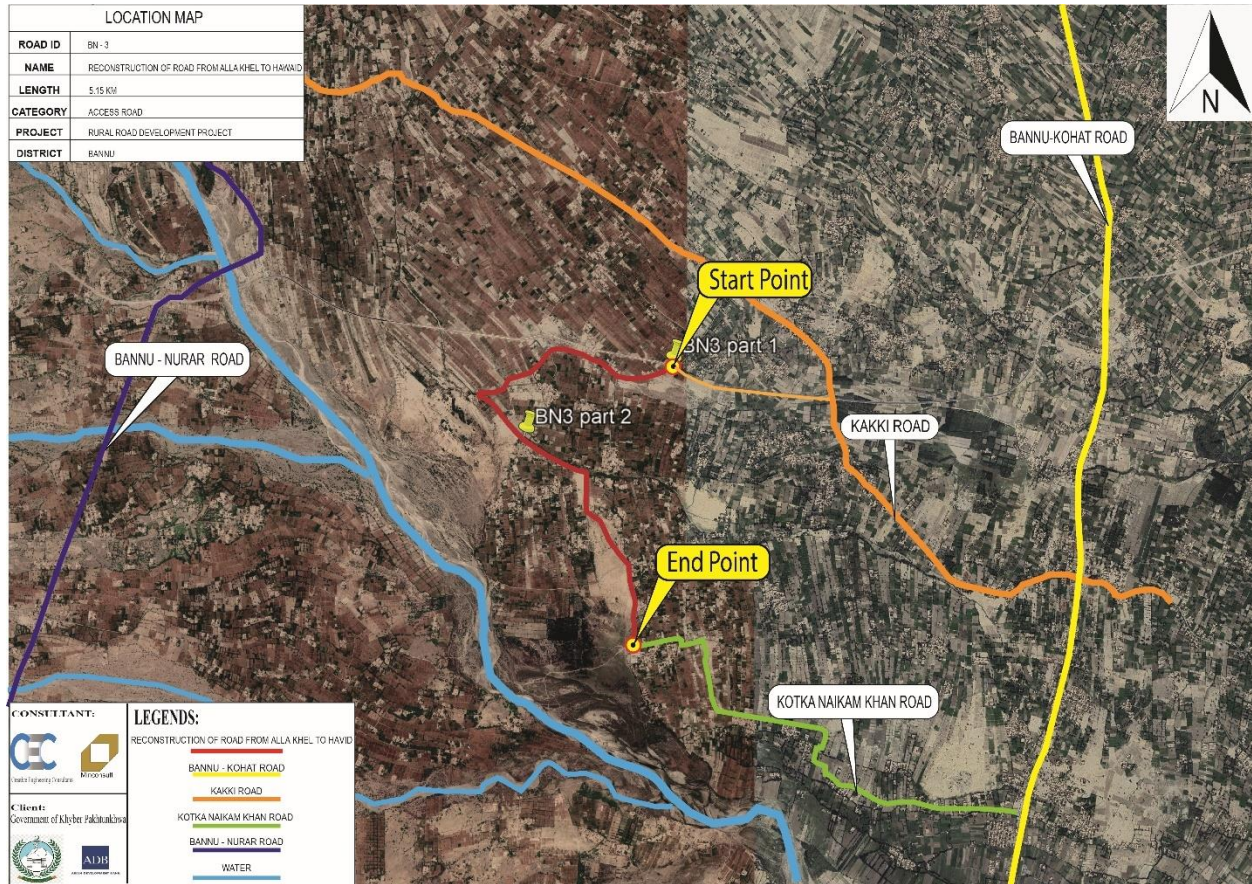


Figure 2.1.1 BN-3 Location Map

2.1.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.1.1 BN-3 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 1 | 3634703.483 | 650424.036 | 273.715 | BM1N |
| 2 | 3634694.267 | 650415.093 | 273.375 | BM2N |
| 3 | 3634705.24 | 650328.861 | 273.702 | BM 1 |
| 4 | 3635109.609 | 648632.883 | 276.326 | BM5 |
| 5 | 3636233.887 | 647510.657 | 286.189 | BM1A |
| 6 | 3636238.123 | 647488.959 | 286.177 | BM1B |
| 7 | 3634773.784 | 649191.192 | 274.699 | BM3N |
| 8 | 3634855.925 | 649031.316 | 275.357 | BM4N |
| 9 | 3636176.496 | 646864.332 | 286.457 | BM6N |
| 10 | 3636181.517 | 646908.405 | 286.763 | BM5N |

2.1.2 BN-5

Durrani Chowk To Piran Titer Khel (BN-5)

2.1.2.1 Location Map

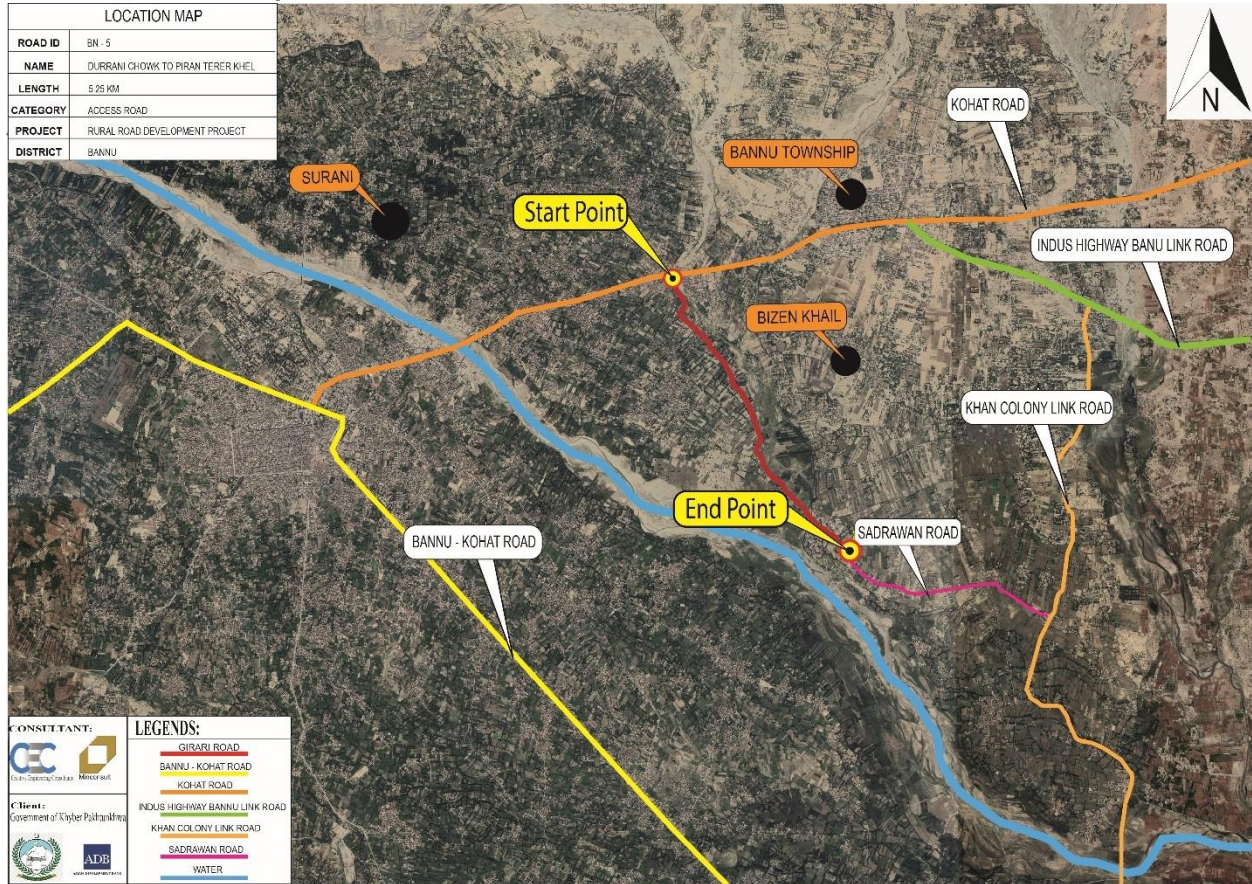


Figure 2.1.2 BN-5 Location Map

2.1.2.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.1.2 BN-5 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|-------------|-------------|-----------|-------------|
| 1 | 3652551.956 | 655912.1753 | 294.8166 | BM4 |
| 2 | 3652583.231 | 655869.8735 | 295.3966 | BM3 |
| 3 | 3653154.038 | 655597.6969 | 297.5163 | BM2 |
| 4 | 3651858.823 | 656433.3104 | 294.67 | BM5 |
| 5 | 3651781.487 | 656448.232 | 293.4221 | BM6 |
| 6 | 3650987.339 | 656860.7198 | 289.6526 | BM7 |
| 7 | 3650912.4 | 656797.3354 | 289.9066 | BM8 |
| 8 | 3650218.525 | 657302.2705 | 287.07 | BM9 |
| 9 | 3649562.746 | 657989.7325 | 288.5634 | BM11 |
| 10 | 3649477.268 | 658037.9748 | 288.1125 | BM12 |
| 11 | 3653321.112 | 655539.2262 | 299.4152 | BM1 |

2.1.3 N-BN-1

Alla Khel To Mir Sher Khan Chowk Via Havid (N-BN-1)

2.1.3.1 Location Map

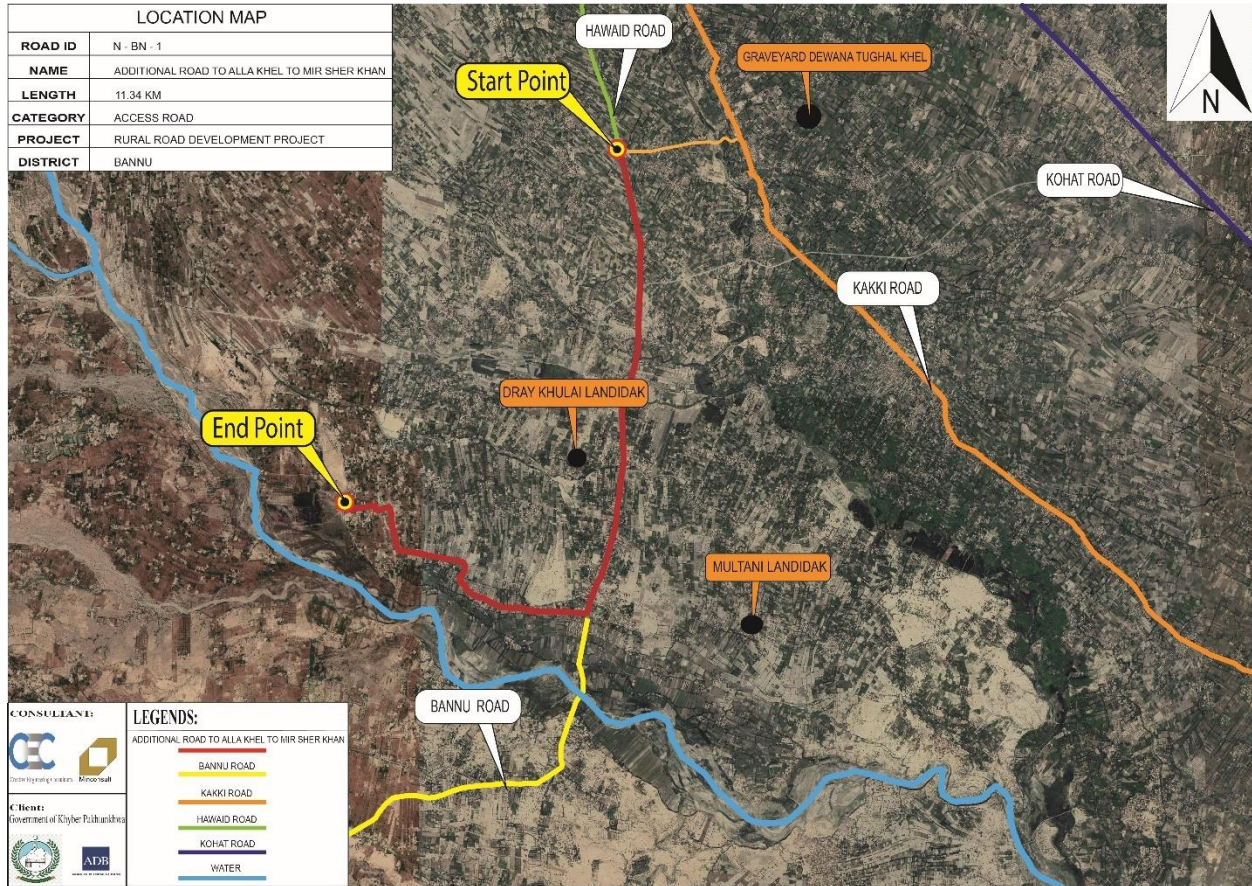


Figure 2.1.3 N-BN-1 Location Map

2.1.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.1.3 N-BN-1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 3639846.293 | 651281.4143 | 291.3581 | BM1 |
| 2 | 3639530.333 | 651284.0509 | 287.6973 | BM2 |
| 3 | 3634703.483 | 650424.036 | 273.715 | BM3 |
| 4 | 3634694.267 | 650415.093 | 273.375 | BM4 |
| 5 | 3634705.24 | 650328.861 | 273.702 | BM5 |
| 6 | 3635109.609 | 648632.883 | 276.326 | BM6 |
| 7 | 3636233.887 | 647510.657 | 286.189 | BM7 |
| 8 | 3636238.123 | 647488.959 | 286.177 | BM8 |
| 9 | 3634773.784 | 649191.192 | 274.699 | BM9 |
| 10 | 3634855.925 | 649031.316 | 275.357 | BM10 |
| 11 | 3636176.496 | 646864.332 | 286.457 | BM11 |
| 12 | 3636181.517 | 646908.405 | 286.763 | BM12 |

2.1.4 N-BN-11

Reconstruction / Widening Of Village Waligai UC Zarakai Pirba Khel Road (N-BN-11)

2.1.4.1 Location Map

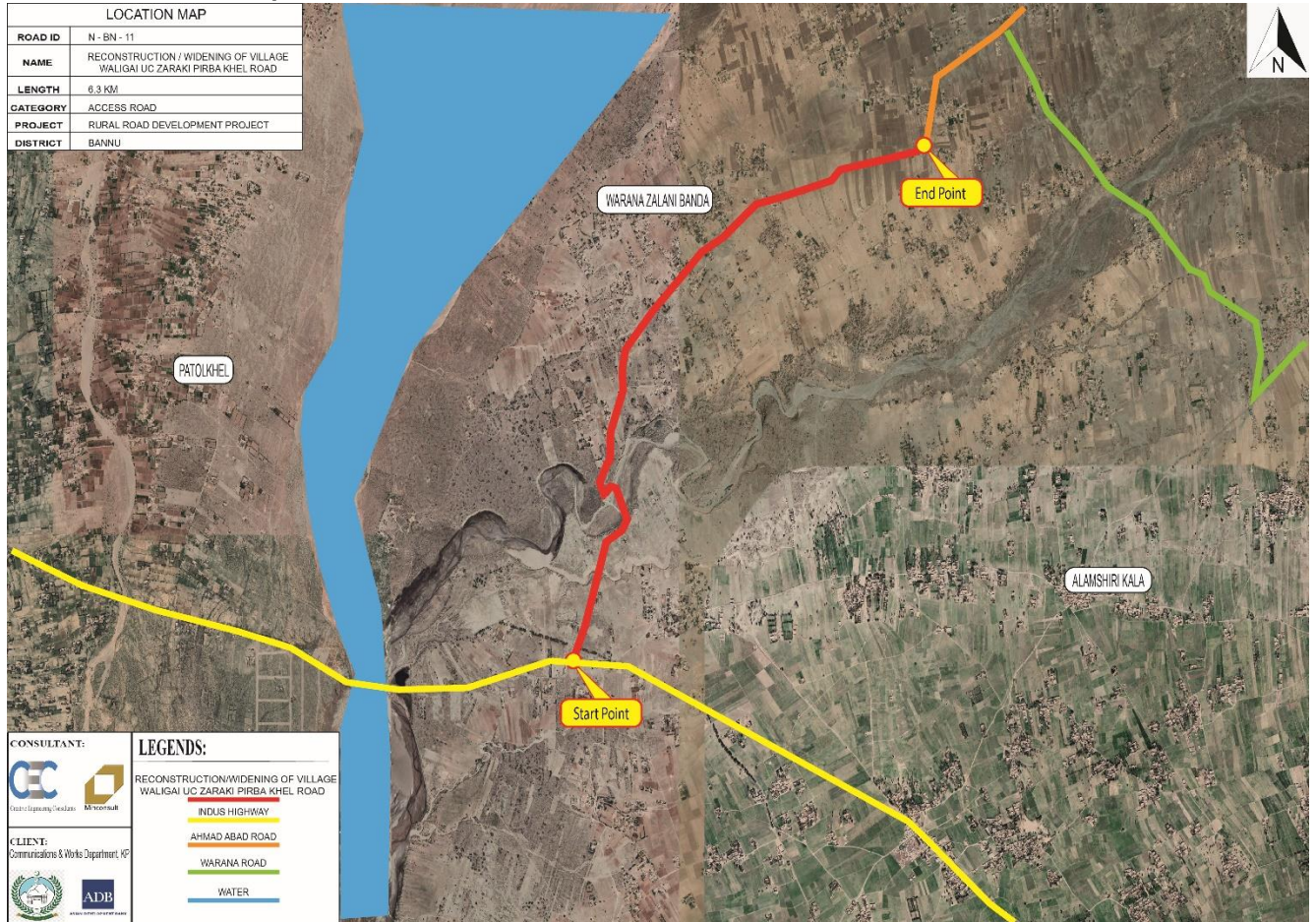


Figure 2.1.4 N-BN-11 Location Map

2.1.4.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.1.4 N-BN-11 Traverse Points

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 674460.293 | 3650222.458 | 360.535 | BN-1 |
| 2 | 674457.195 | 3650241.385 | 360.139 | BN-2 |
| 3 | 674712.614 | 3650988.757 | 357.609 | BN-4 |
| 4 | 674698.035 | 3650932.322 | 357.17 | BN-3 |
| 5 | 674992.513 | 3651344.039 | 360.421 | BN 6 |
| 6 | 674900.139 | 3651259.115 | 360.366 | BN-5 |
| 7 | 674790.175 | 3651916.41 | 360.651 | BN-7 |
| 8 | 674789.478 | 3651972.075 | 361.24 | BN-8 |
| 9 | 674918.751 | 3652710.99 | 360.941 | BN-9 |
| 10 | 674958.147 | 3652748.062 | 360.632 | BN-10 |
| 11 | 675437.336 | 3653258.782 | 364.366 | BN-11 |
| 12 | 675507.928 | 3653331.577 | 365.389 | BN-12 |
| 13 | 675827.028 | 3653584.758 | 368.959 | BN-13 |
| 14 | 675900.63 | 3653636.7 | 370.105 | BN-14 |
| 15 | 676414.801 | 3653934.133 | 377.845 | BN-15 |
| 16 | 676403.013 | 3653951.397 | 377.76 | BN-16 |
| 17 | 677049.099 | 3654179.771 | 382.567 | BN-17 |
| 18 | 677050.67 | 3654174.159 | 382.536 | BN-18 |
| 19 | 677779.21 | 3654331.761 | 386.571 | BN-19 |
| 20 | 677829.386 | 3654347.084 | 386.817 | BN-20 |
| 21 | 677866.85 | 3654370.001 | 387.028 | BN-21 |

2.2 District Battagram

2.2.1 BTG-16

Rajdari To Kathora Road I/C Link Road (BTG-16)

2.2.1.1 Location Map

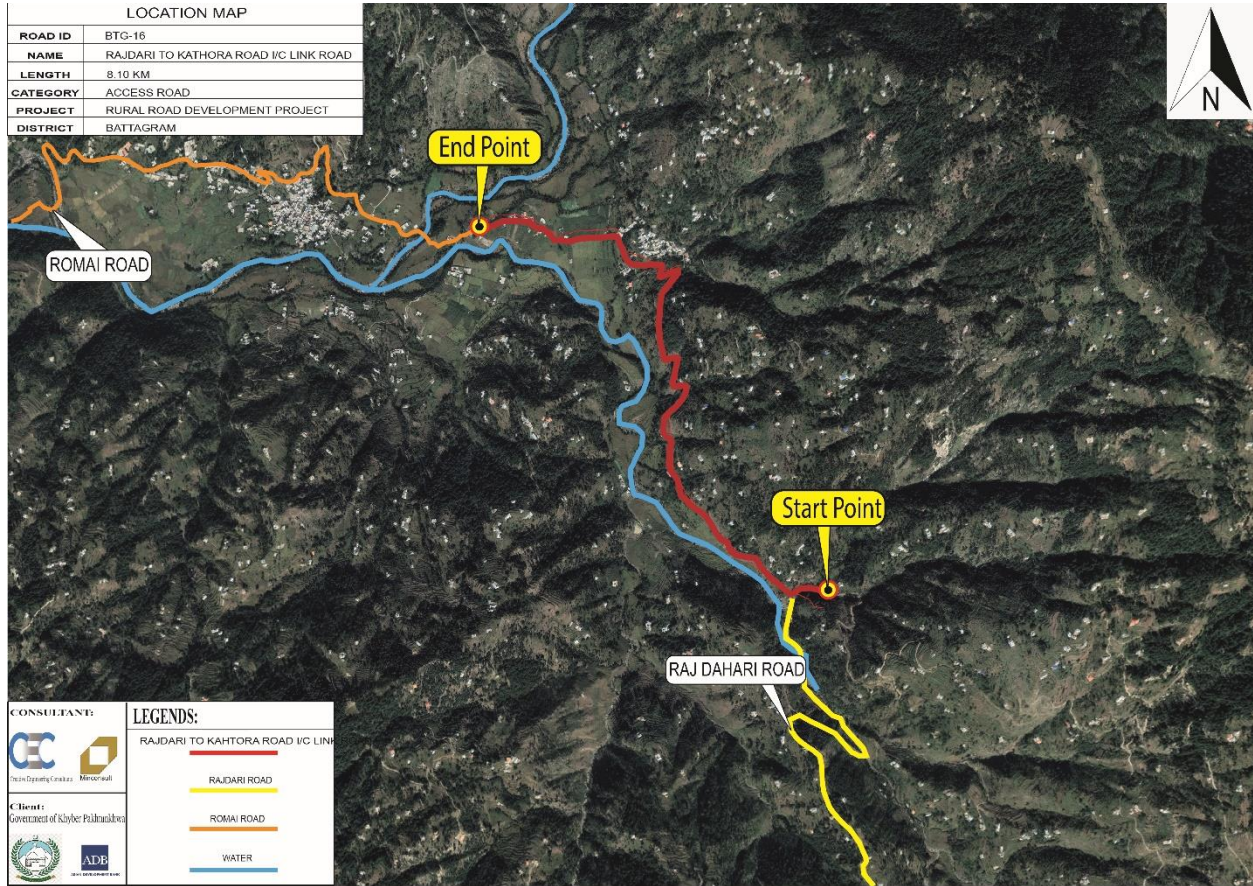


Figure 2.2.1 Location Map BTG-16

2.2.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.2.1 BTG-16 Traverse Points

| S.NO | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 327141.972 | 3838140.582 | 1632.865 | BS-1 |
| 2 | 328627.745 | 3836206.156 | 1926.595 | RK-1 |
| 3 | 328626.611 | 3836211.944 | 1926.904 | CP-1 |
| 4 | 328635.715 | 3836249.630 | 1927.235 | RK-2 |
| 5 | 328519.291 | 3836459.392 | 1889.472 | RK-3 |
| 6 | 328483.023 | 3836499.952 | 1885.322 | RK-4 |
| 7 | 328400.230 | 3836525.167 | 1864.970 | RK-5 |
| 8 | 328389.864 | 3836598.731 | 1851.743 | RK-6 |
| 9 | 328423.802 | 3836665.213 | 1848.968 | RK-7 |
| 10 | 328354.393 | 3836754.523 | 1838.150 | RK-8 |
| 11 | 328332.840 | 3836811.077 | 1831.935 | RK-9 |
| 12 | 328257.520 | 3836890.521 | 1819.208 | RK-10 |
| 13 | 328173.681 | 3836938.243 | 1812.628 | RK-11 |
| 14 | 328133.026 | 3836925.537 | 1789.142 | RK-12 |
| 15 | 328113.725 | 3837020.538 | 1787.018 | RK-13 |
| 16 | 328068.199 | 3837088.645 | 1787.914 | RK-14 |
| 17 | 328065.045 | 3837138.756 | 1786.327 | RK-15 |
| 18 | 328010.397 | 3837220.610 | 1790.353 | RK-16 |
| 19 | 327954.035 | 3837313.158 | 1780.292 | RK-17 |
| 20 | 327978.198 | 3837448.187 | 1786.192 | RK-18 |
| 21 | 327925.535 | 3837552.315 | 1776.244 | RK-19 |
| 22 | 327872.905 | 3837603.071 | 1775.850 | RK-20 |

| S.NO | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 23 | 327879.710 | 3837678.015 | 1768.100 | RK-21 |
| 24 | 327919.423 | 3837761.594 | 1762.881 | RK-22 |
| 25 | 327891.365 | 3837833.710 | 1759.351 | RK-23 |
| 26 | 327810.598 | 3837873.514 | 1753.781 | RK-24 |
| 27 | 327735.277 | 3837905.862 | 1752.560 | RK-25 |
| 28 | 327720.260 | 3837903.908 | 1749.905 | RK-26 |
| 29 | 327700.553 | 3837958.838 | 1745.963 | RK-27 |
| 30 | 327646.537 | 3837979.686 | 1753.698 | RK-28 |
| 31 | 327544.148 | 3838002.749 | 1742.334 | RK-29 |
| 32 | 327531.031 | 3837959.735 | 1718.149 | RK-30 |
| 33 | 327616.094 | 3837923.104 | 1700.648 | RK-31 |
| 34 | 327516.303 | 3837906.297 | 1682.806 | RK-32 |
| 35 | 327429.112 | 3837976.433 | 1674.376 | RK-33 |
| 36 | 327337.674 | 3838074.342 | 1658.131 | RK-34 |
| 37 | 327181.187 | 3838222.181 | 1622.215 | RK-35 |
| 38 | 327123.486 | 3838204.286 | 1612.181 | RK-36 |
| 39 | 327039.463 | 3838157.938 | 1596.368 | RK-37 |
| 40 | 327016.606 | 3838084.428 | 1593.257 | RK-38 |
| 41 | 327092.857 | 3837985.105 | 1576.082 | RK-39 |
| 42 | 327056.489 | 3838034.228 | 1568.899 | RK-40 |
| 43 | 326923.956 | 3838053.451 | 1547.802 | RK-41 |
| 44 | 326896.125 | 3838099.964 | 1537.588 | RK-42 |
| 45 | 326899.578 | 3838163.674 | 1524.609 | RK-43 |
| 46 | 326873.792 | 3838274.344 | 1500.648 | RK-44 |

| S.NO | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 47 | 326929.556 | 3838323.826 | 1481.417 | RK-45 |
| 48 | 326974.145 | 3838347.887 | 1471.807 | RK-46 |
| 49 | 326809.433 | 3838378.760 | 1439.204 | RK-47 |
| 50 | 326741.939 | 3838391.303 | 1427.258 | RK-48 |
| 51 | 326681.653 | 3838373.722 | 1420.956 | RK-49 |
| 52 | 326618.217 | 3838433.630 | 1419.494 | RK-50 |
| 53 | 326566.104 | 3838484.657 | 1411.509 | RK-51 |

2.2.2 BTG-2

Road Kandar to Sokar Chilar

2.2.2.1 Location Map

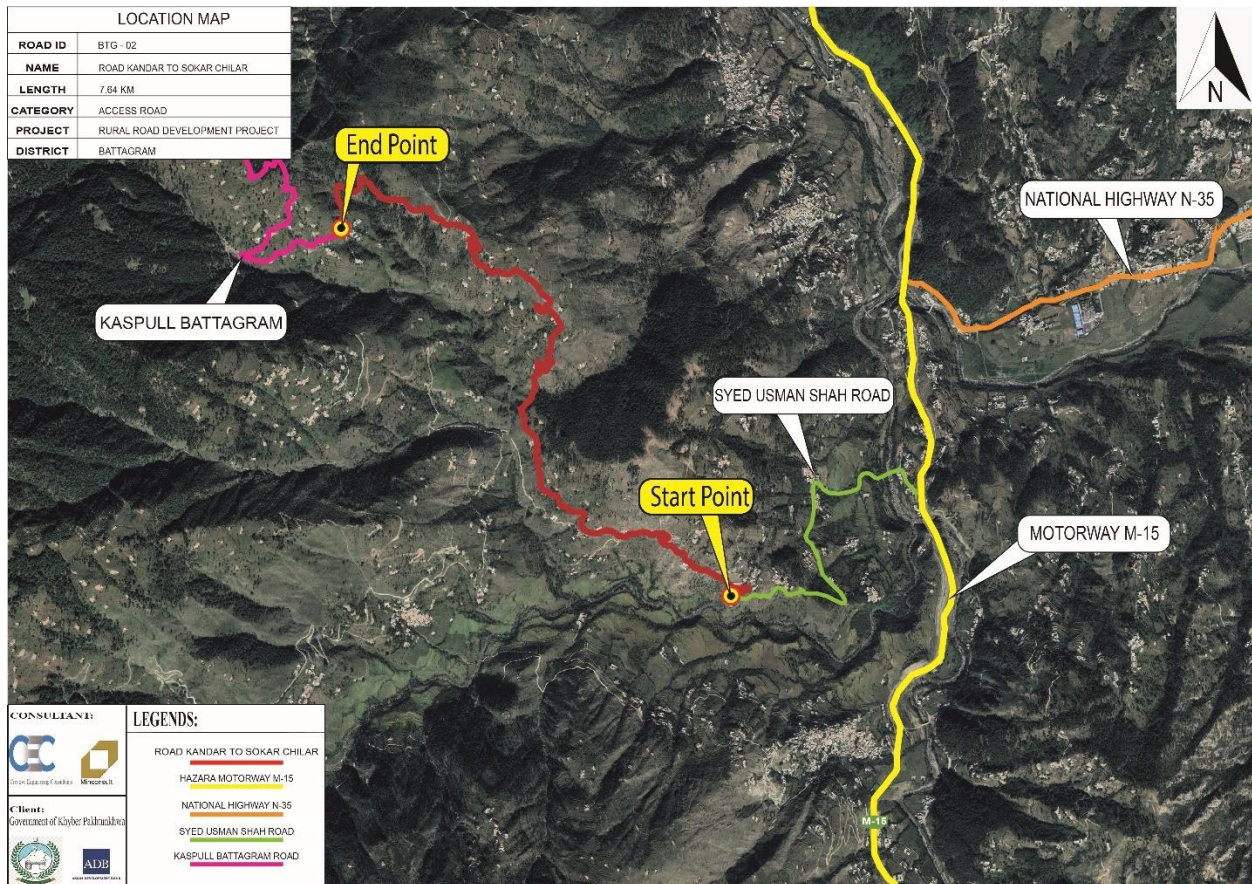


Figure 2.2.2 Location Map BTG-2

2.2.2.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.2.2 BTG-2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 314678.721 | 3837355.611 | 1323.023 | BS-1 |
| 2 | 314940.664 | 3837160.984 | 1261.652 | KS-2 |
| 3 | 315083.3 | 3837172.361 | 1253.23 | KS-1A |
| 4 | 315028.313 | 3837170.15 | 1258.27 | KS-1 |
| 5 | 314990.224 | 3837216.236 | 1294.386 | KS-3 |
| 6 | 314942.418 | 3837218.687 | 1299.593 | KS-4 |
| 7 | 314806.288 | 3837317.417 | 1326.32 | KS-5 |
| 8 | 314729.194 | 3837339.566 | 1323.08 | KS-6 |
| 9 | 314577.416 | 3837495.985 | 1356.645 | KS-7 |
| 10 | 314499.092 | 3837526.755 | 1368.928 | KS-8 |
| 11 | 314323.686 | 3837527.836 | 1363.481 | KS-9 |
| 12 | 314153.76 | 3837544.259 | 1377.516 | KS-10 |
| 13 | 314072.275 | 3837658.173 | 1407.556 | KS-11 |
| 14 | 313912.384 | 3837858.84 | 1428.324 | KS-12 |
| 15 | 313903.052 | 3837908.266 | 1428.796 | KS-13 |
| 16 | 313902.126 | 3838002.807 | 1427.684 | KS-15 |
| 17 | 313984.963 | 3838459.066 | 1516.557 | KS-21 |
| 18 | 314003.608 | 3838445.085 | 1507.409 | KS-20 |
| 19 | 313970.039 | 3838392.412 | 1495.697 | KS-19 |
| 20 | 313918.91 | 3838421.164 | 1483.028 | KS-18 |
| 21 | 313828.769 | 3838189.283 | 1446.695 | KS.16 |
| 22 | 313841.681 | 3838109.39 | 1435.029 | KS.15 |
| 23 | 313841.683 | 3838109.388 | 1435.018 | KS.14 |
| 24 | 313912.4 | 3837858.832 | 1426.53 | KS.12A |
| 25 | 313903.068 | 3837908.283 | 1426.98 | KS.13A |
| 26 | 314054.952 | 3838606.041 | 1539.879 | KS-22 |
| 27 | 313999.462 | 3838733.141 | 1570.546 | KS-26 |
| 28 | 313804.752 | 3838886.276 | 1604.171 | KS-30 |
| 29 | 313804.747 | 3838886.246 | 1604.171 | KS-29 |
| 30 | 313889.384 | 3838844.97 | 1594.602 | KS-28 |
| 31 | 313950.454 | 3838790.613 | 1584.482 | KS-27 |
| 32 | 313603.983 | 3839087.489 | 1650.162 | KS-35 |
| 33 | 313484.434 | 3839132.015 | 1664.8 | KS-36 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 34 | 313363.517 | 3839199.632 | 1655.852 | KS-37 |
| 35 | 313322.461 | 3839195.199 | 1655.391 | KS-38 |
| 36 | 313179.36 | 3839251.775 | 1659.59 | KS-39 |
| 37 | 313079.74 | 3839341.988 | 1657.659 | KS-40 |
| 38 | 313005.357 | 3839292.71 | 1663.236 | KS-41 |
| 39 | 312936.796 | 3839263.715 | 1661.17 | KS-42 |
| 40 | 312968.136 | 3839127.142 | 1670.704 | KS-43 |
| 41 | 312934.657 | 3839082.359 | 1678.162 | KS-44 |
| 42 | 312859.45 | 3839045.188 | 1684.676 | KS-45 |
| 43 | 312769.039 | 3839036.284 | 1691.328 | KS-46 |
| 44 | 312657.691 | 3838989.197 | 1690.089 | KS-47 |
| 45 | 312560.752 | 3838953.89 | 1692.04 | KS-48 |
| 46 | 312433.402 | 3838991.495 | 1698.548 | KS-49 |
| 47 | 313921.343 | 3838832.866 | 1592.816 | KS-27A |
| 48 | 313596.82 | 3839051.49 | 1630.076 | KS-32 |
| 49 | 313621.92 | 3838957.192 | 1614.992 | KS-31A |
| 50 | 313647.31 | 3839006.813 | 1637.359 | KS-33 |
| 51 | 312528.35 | 3838852.651 | 1691.885 | KS-53 |
| 52 | 312725.22 | 3838745.911 | 1689.925 | KS-54 |
| 53 | 313027.353 | 3838577.329 | 1697.213 | KS-55 |
| 54 | 313060.085 | 3838532.391 | 1698.087 | KS-56 |
| 55 | 313054.23 | 3838405.049 | 1690.258 | KS-57 |
| 56 | 313029.92 | 3838324.452 | 1700.442 | KS-58 |
| 57 | 312992.509 | 3838254.903 | 1701.611 | KS-59 |
| 58 | 312904.555 | 3838265.958 | 1722.731 | KS-61 |
| 59 | 312957.152 | 3838333.789 | 1735.63 | KS-62 |
| 60 | 312988.224 | 3838390.77 | 1729.303 | KS-63 |
| 61 | 312978.053 | 3838433.671 | 1731.013 | KS-67 |
| 62 | 312788.779 | 3838442.981 | 1802.234 | KS-70 |
| 63 | 312790.194 | 3838403.795 | 1809.647 | KS-71 |
| 64 | 312875.814 | 3838418.35 | 1777.424 | KS-69 |
| 65 | 312882.75 | 3838375.309 | 1770.164 | KS-68 |
| 66 | 312909.047 | 3838432.455 | 1755.093 | KS.67 |
| 67 | 312933.61 | 3838458.978 | 1747.928 | KS.66 |
| 68 | 312934.8 | 3838487.741 | 1741.17 | KS.65 |
| 69 | 312979.714 | 3838451.801 | 1731.887 | KS.64 |

| S.No | Easting | Northing | Elevation | REMARKS |
|-------------|----------------|-----------------|------------------|----------------|
| 70 | 313696.087 | 3838893.286 | 1610.511 | KS-31 |

2.3 District Bunner

2.3.1 BUN-11

Jangdara Bato Road (BUN-11)

2.3.1.1 Location Map



Figure 2.3.1 Location Map BUN-11

2.3.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.3.1 BUN-11 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 257349.779 | 3818103.319 | 762.918 | BM1 |
| 2 | 257349.617 | 3818103.298 | 762.475 | BM2 |
| 3 | 257218.578 | 3817719.96 | 757.001 | BM11 |
| 4 | 257149.471 | 3817606.257 | 758.033 | BM12 |
| 5 | 256802.416 | 3816937.184 | 782.66 | BM13 |
| 6 | 256753.268 | 3816809.615 | 783.505 | BM14 |
| 7 | 256327.409 | 3816198.974 | 801.435 | BM15 |
| 8 | 256225.027 | 3816114.032 | 805.531 | BM16 |
| 9 | 255729.844 | 3815897.879 | 821.965 | BM18 |
| 10 | 255888.949 | 3815953.39 | 816.457 | BM17 |
| 11 | 258883.994 | 3820289.8 | 720.233 | BM1 |
| 12 | 258825.858 | 3820166.724 | 711.072 | BM2 |
| 13 | 258752.431 | 3820044.757 | 709.396 | BM3 |
| 14 | 258471.096 | 3819520.564 | 714.838 | BM3 |

2.3.2 BUN-9

Girari Road

2.3.2.1 Location Map

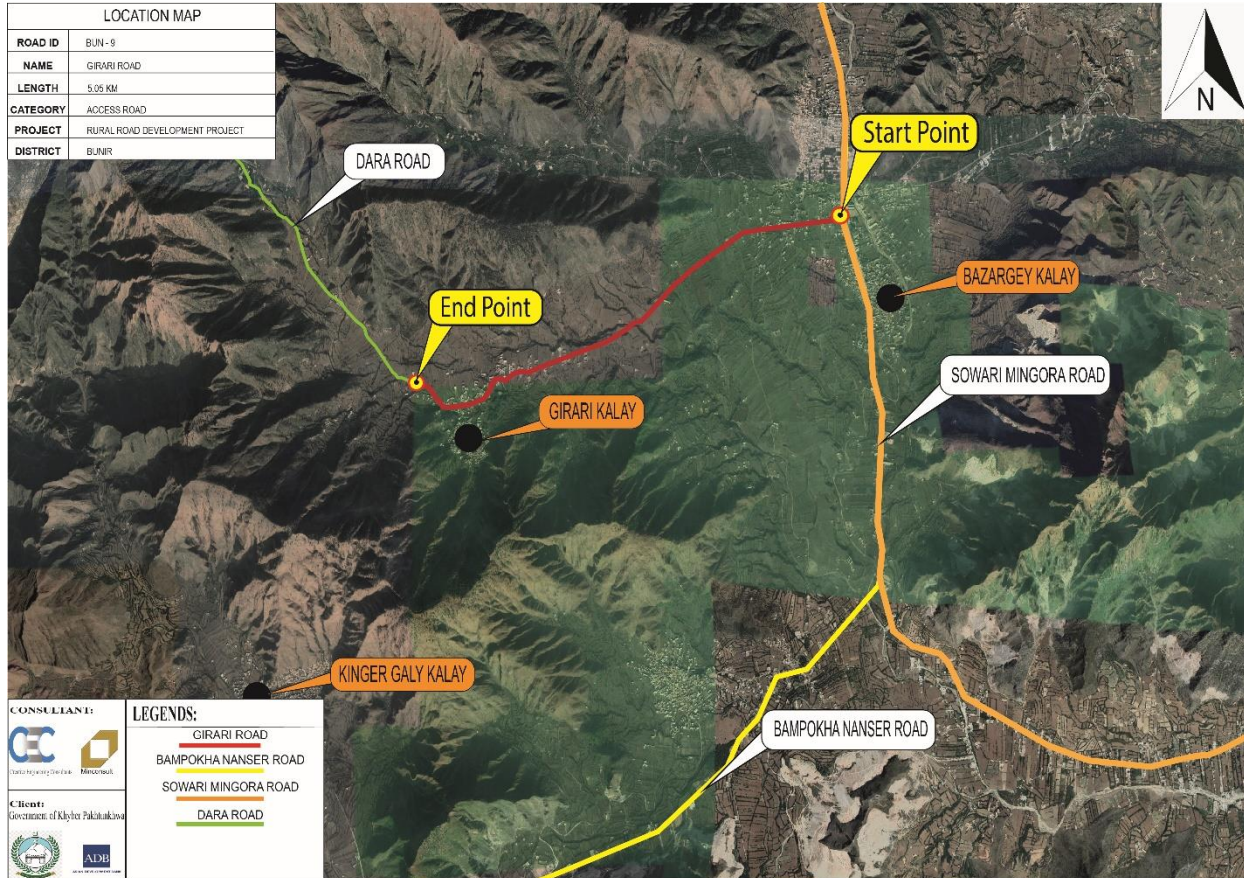


Figure 2.3.2 Location Map BUN-9

2.3.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.3.2 BUN-9 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 252655.749 | 3826234.433 | 804.455 | BM1 |
| 2 | 252485.161 | 3826227.056 | 811.371 | BM2 |
| 3 | 252327.864 | 3826206.315 | 815.947 | BM3 |
| 4 | 252103.793 | 3826184.055 | 822.33 | BM4 |
| 5 | 251887.061 | 3826165.009 | 827.789 | BM5 |
| 6 | 251597.62 | 3826143.203 | 833.227 | BM6 |
| 7 | 250810.341 | 3825655.909 | 823.345 | BASE2 |
| 8 | 250809.566 | 3825656.131 | 822.792 | BASE3 |
| 9 | 250809.424 | 3825657.57 | 823.166 | BASE3 |
| 10 | 250354.38 | 3825354.302 | 825.783 | BM |
| 11 | 250808.92 | 3825656.778 | 821.482 | BASE |
| 12 | 251501.76 | 3826092.347 | 833.263 | BM7 |
| 13 | 251378.845 | 3826029.893 | 829.776 | BM8 |
| 14 | 251032.477 | 3825835.099 | 827.821 | BM8 |
| 15 | 250918.325 | 3825771.246 | 823.298 | BM10 |
| 16 | 250786.255 | 3825665.208 | 816.358 | BM11 |
| 17 | 250691.991 | 3825573.654 | 821.539 | BM12 |

2.3.3 N-BUN-2

Bababir to Manga Thana to Nagarai (N-BUN-2)

2.3.3.1 Location Map

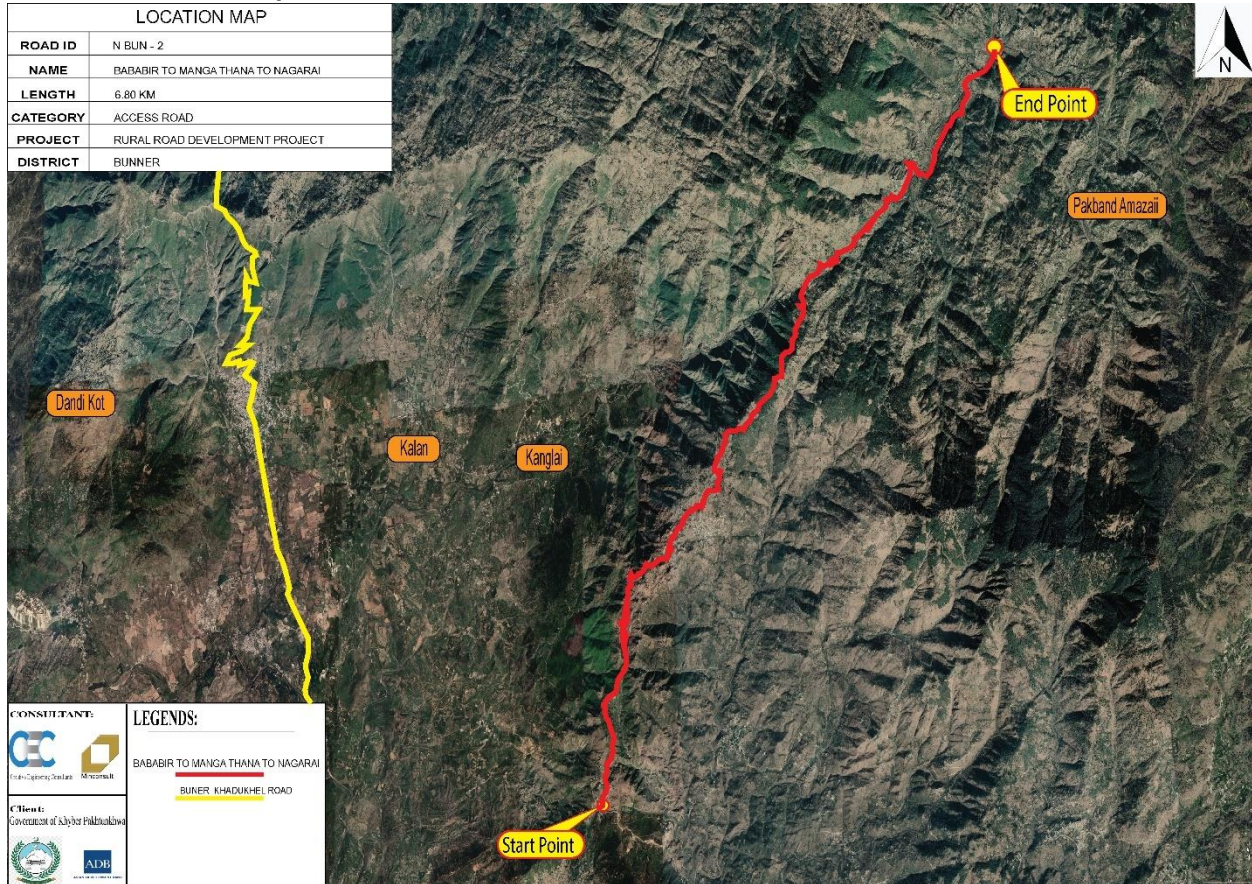


Figure 2.3.3 Location Map N-BUN-2

2.3.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.3.3 N-BUN-2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 257349.779 | 3818103.319 | 762.918 | BM1 |
| 2 | 257349.617 | 3818103.298 | 762.475 | BM2 |
| 3 | 257218.578 | 3817719.96 | 757.001 | BM11 |
| 4 | 257149.471 | 3817606.257 | 758.033 | BM12 |
| 5 | 256802.416 | 3816937.184 | 782.66 | BM13 |
| 6 | 256753.268 | 3816809.615 | 783.505 | BM14 |
| 7 | 256327.409 | 3816198.974 | 801.435 | BM15 |
| 8 | 256225.027 | 3816114.032 | 805.531 | BM16 |
| 9 | 255729.844 | 3815897.879 | 821.965 | BM18 |
| 10 | 255888.949 | 3815953.39 | 816.457 | BM17 |
| 11 | 258883.994 | 3820289.8 | 720.233 | BM1 |
| 12 | 258825.858 | 3820166.724 | 711.072 | BM2 |
| 13 | 258752.431 | 3820044.757 | 709.396 | BM3 |
| 14 | 258471.096 | 3819520.564 | 714.838 | BM3 |
| 15 | 258269.761 | 3819463.079 | 718.156 | BM |
| 16 | 258106.405 | 3819316.916 | 718.234 | BM |

2.3.4 T-1

Rani Ghat road

2.3.4.1 Location Map

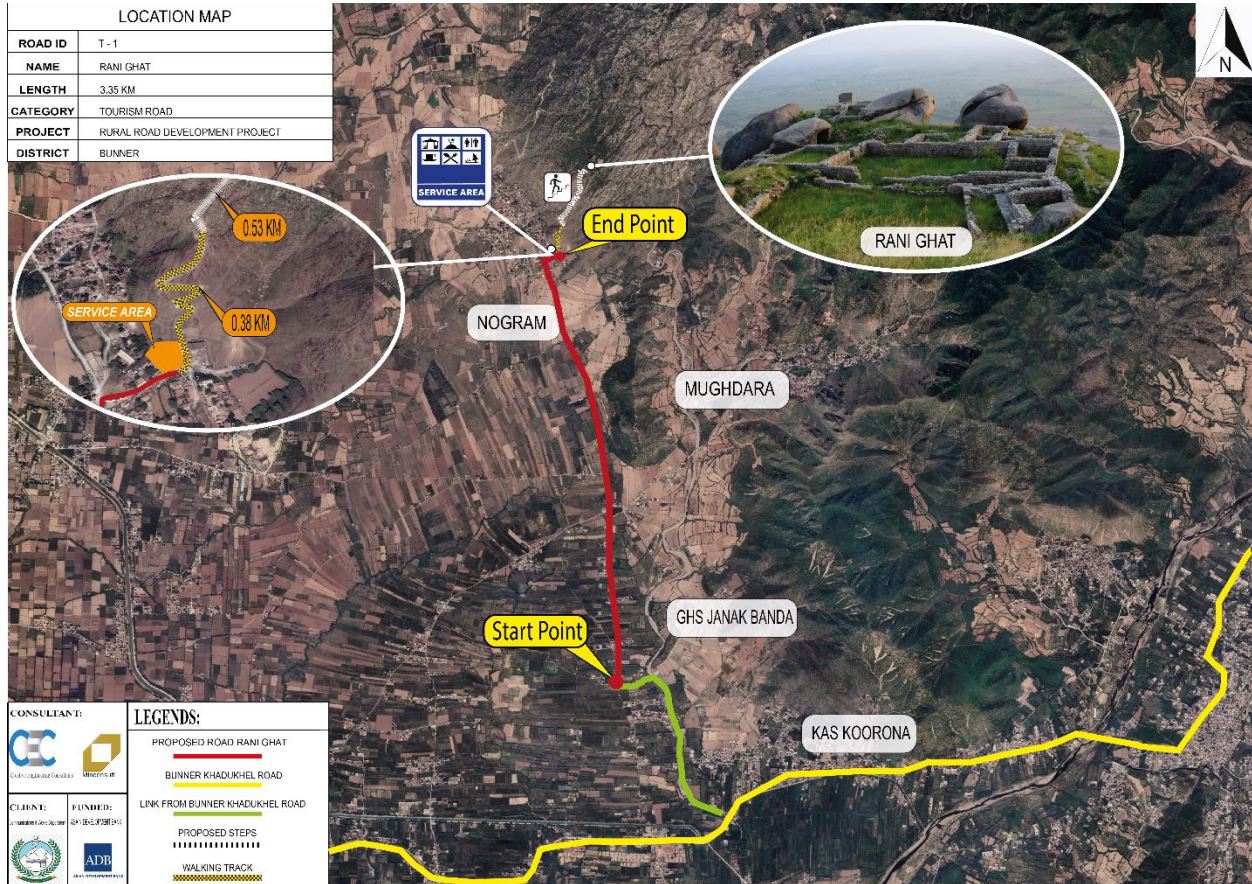


Figure 2.3.4 Location Map T-1

2.3.4.2 Traverse Points

The Traverse Point coordinates, and description are as follows: -

Table 2.3.4 T-1 Traverse Points

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 1 | 265047.598 | 3786805.784 | 333.09 | BM1 |
| 2 | 265063.521 | 3786878.565 | 334.091 | BM2 |
| 3 | 265035.505 | 3787175.594 | 337.537 | BM3 |
| 4 | 265038.151 | 3787288.896 | 338.636 | BMM4 |
| 5 | 265019.651 | 3787814.256 | 346.307 | BM6 |
| 6 | 265024.988 | 3788071.227 | 347.207 | BM6 |
| 7 | 264943.822 | 3788668.708 | 350.54 | BM7 |
| 8 | 264896.832 | 3788832.872 | 352.941 | BM8 |
| 9 | 264716.853 | 3790121.131 | 400.911 | BM10 |
| 10 | 264716.87 | 3790121.188 | 400.915 | BM10 |
| 11 | 265019.651 | 3787814.256 | 346.307 | BM6 |
| 12 | 265024.988 | 3788071.227 | 347.207 | BM6 |
| 13 | 264943.822 | 3788668.708 | 350.54 | BM7 |
| 14 | 264896.832 | 3788832.872 | 352.941 | BM8 |
| 15 | 264716.853 | 3790121.131 | 400.911 | BM10 |
| 16 | 264716.87 | 3790121.188 | 400.915 | BM10 |

2.4 District Charsadda

Location Maps and Traverse Data

2.4.1 CHR-9

Takhtbhai Road to Malang Abad

2.4.1.1 Location Map

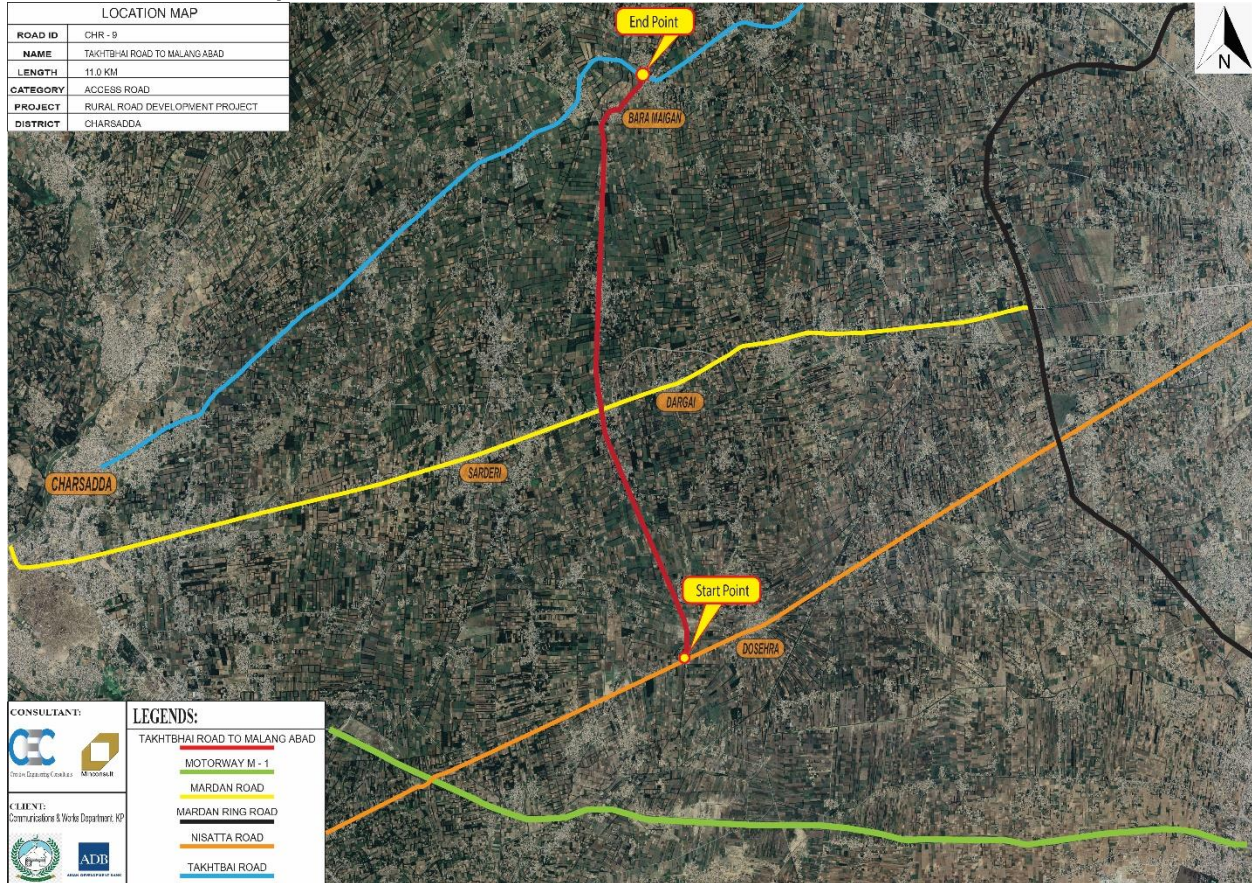


Figure 2.4.1 Location Map CHR-9

2.4.1.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.4.1 CHR-9 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 252655.749 | 3826234.433 | 804.455 | BM1 |
| 2 | 252485.161 | 3826227.056 | 811.371 | BM2 |
| 3 | 252327.864 | 3826206.315 | 815.947 | BM3 |
| 4 | 252103.793 | 3826184.055 | 822.33 | BM4 |
| 5 | 251887.061 | 3826165.009 | 827.789 | BM5 |
| 6 | 251597.62 | 3826143.203 | 833.227 | BM6 |
| 7 | 250810.341 | 3825655.909 | 823.345 | BASE2 |
| 8 | 250809.566 | 3825656.131 | 822.792 | BASE3 |
| 9 | 250809.424 | 3825657.57 | 823.166 | BASE3 |
| 10 | 250354.38 | 3825354.302 | 825.783 | BM |
| 11 | 250808.92 | 3825656.778 | 821.482 | BASE |
| 12 | 251501.76 | 3826092.347 | 833.263 | BM7 |
| 13 | 251378.845 | 3826029.893 | 829.776 | BM8 |
| 14 | 251032.477 | 3825835.099 | 827.821 | BM8 |
| 15 | 250918.325 | 3825771.246 | 823.298 | BM10 |
| 16 | 250786.255 | 3825665.208 | 816.358 | BM11 |
| 17 | 250691.991 | 3825573.654 | 821.539 | BM12 |

2.4.2 CHR-10

Sardheri Bazar to Nisatta via Zarin Abad

2.4.2.1 Location Map

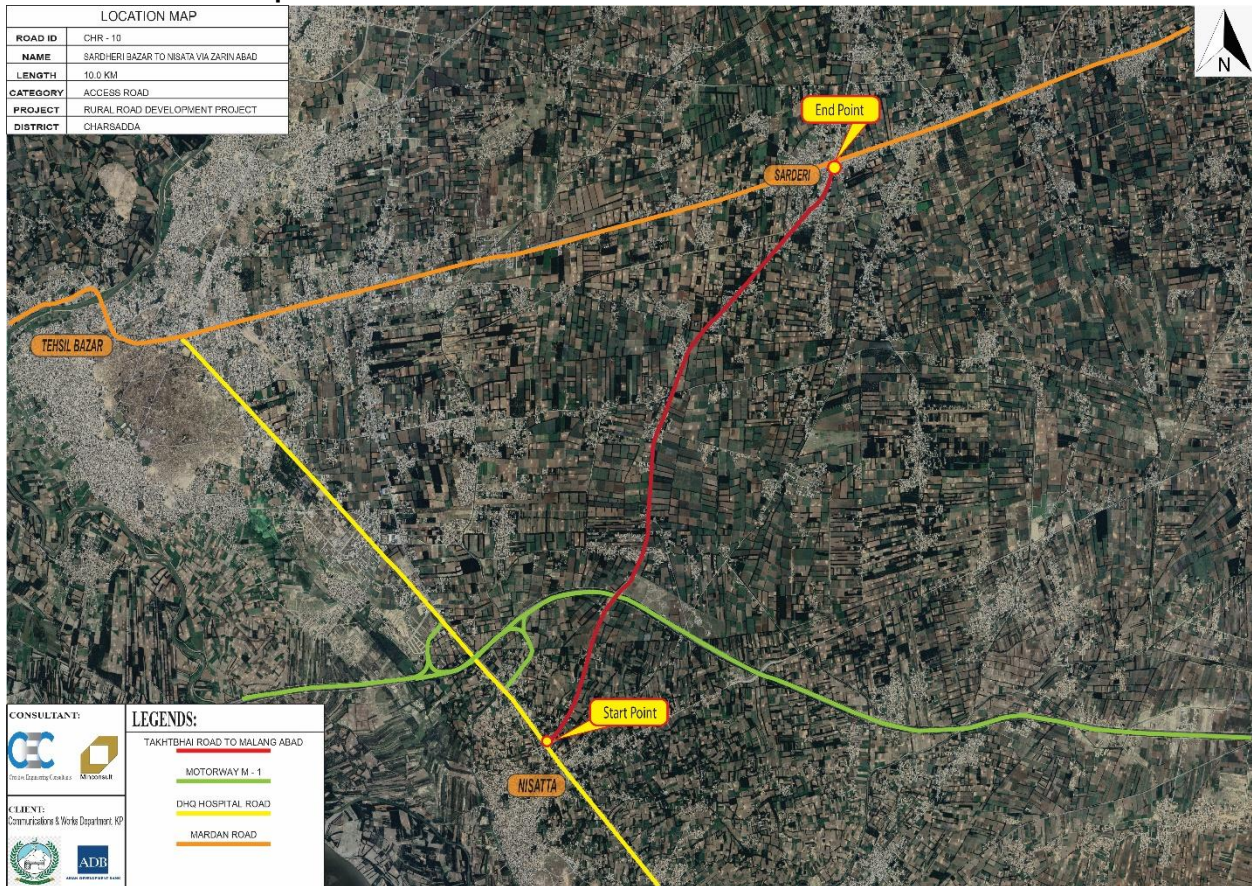


Figure 2.4.2 Location Map CHR-10

2.4.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.4.2 CHR-10 Traverse Points

| S.NO | DESCRIPTION | EASTING | NORTHING | ELEVATION |
|------|-------------|------------|-------------|-----------|
| 1 | BM7 | 759756.541 | 3781563.229 | 305.163 |
| 2 | BM8 | 759739.666 | 3781531.734 | 305.092 |
| 3 | BM9 | 759597.626 | 3780168.54 | 301.808 |
| 4 | BM10 | 759592.216 | 3780155.894 | 301.806 |
| 5 | BM11 | 759039.136 | 3779390.657 | 300.416 |
| 6 | BM12 | 758988.931 | 3779292.843 | 300.505 |
| 7 | BM13 | 758493.995 | 3778101.02 | 300.835 |
| 8 | BM12A | 758521.713 | 3778131.687 | 300.704 |

2.5 District Chitral

Location Maps and Traverse Data

2.5.1 N-CHT-1

Shesha To MadalCASHT

2.5.1.1 Location Map

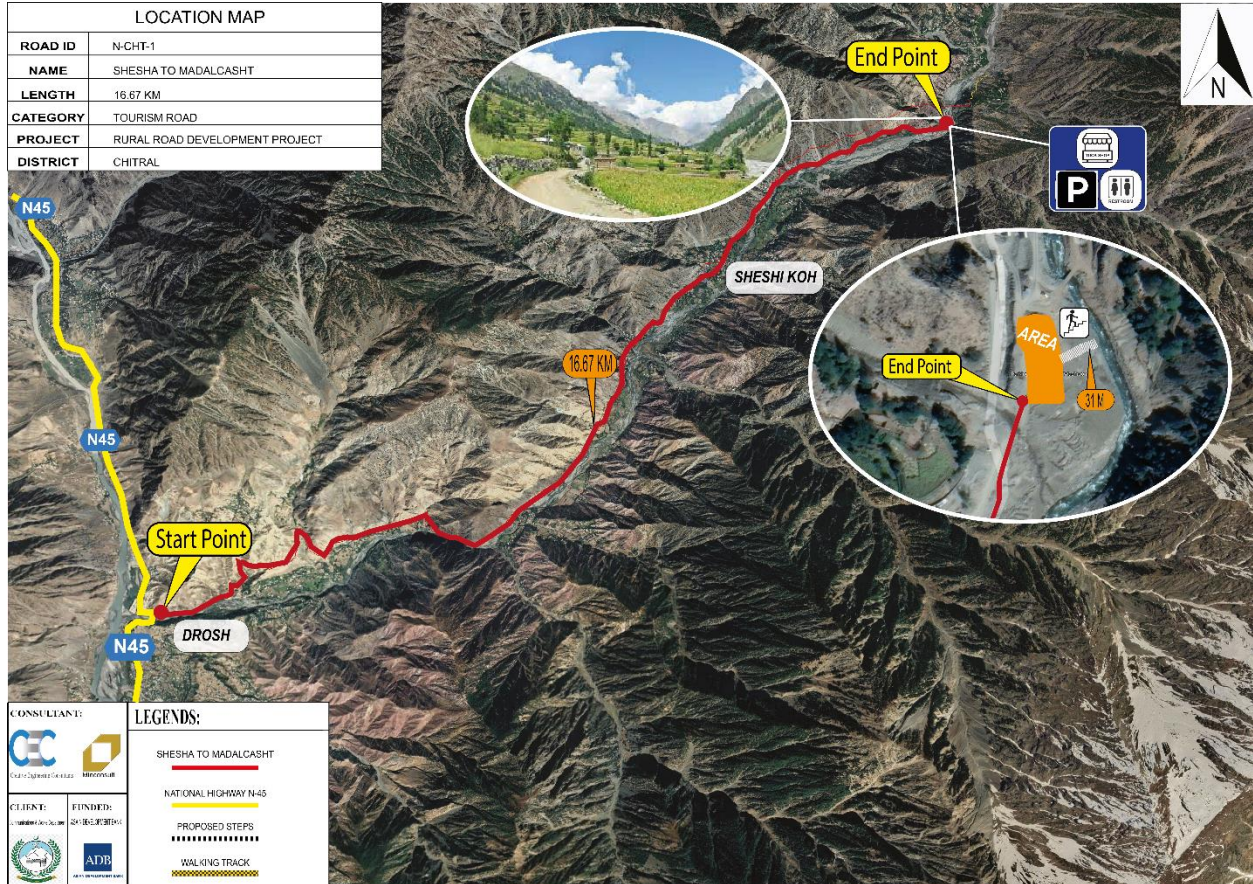


Figure 2.5.1 Location Map N-CHT-1

2.5.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.1 N-CHT-1 Traverse Points

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 1 | 3949745.826 | 764209.695 | 1682.856 | BM 1 |
| 2 | 3949709.344 | 763813.278 | 1663.033 | BM 2 |
| 3 | 3949626.579 | 763444.423 | 1662.53 | BM 3 |
| 4 | 3949363.889 | 763047.539 | 1651.379 | BM 4 |
| 5 | 3941841.078 | 754420.798 | 1273.503 | BM 5 |

2.5.2 N-CHT-2

Osaic To Orsoon

2.5.2.1 Location Map

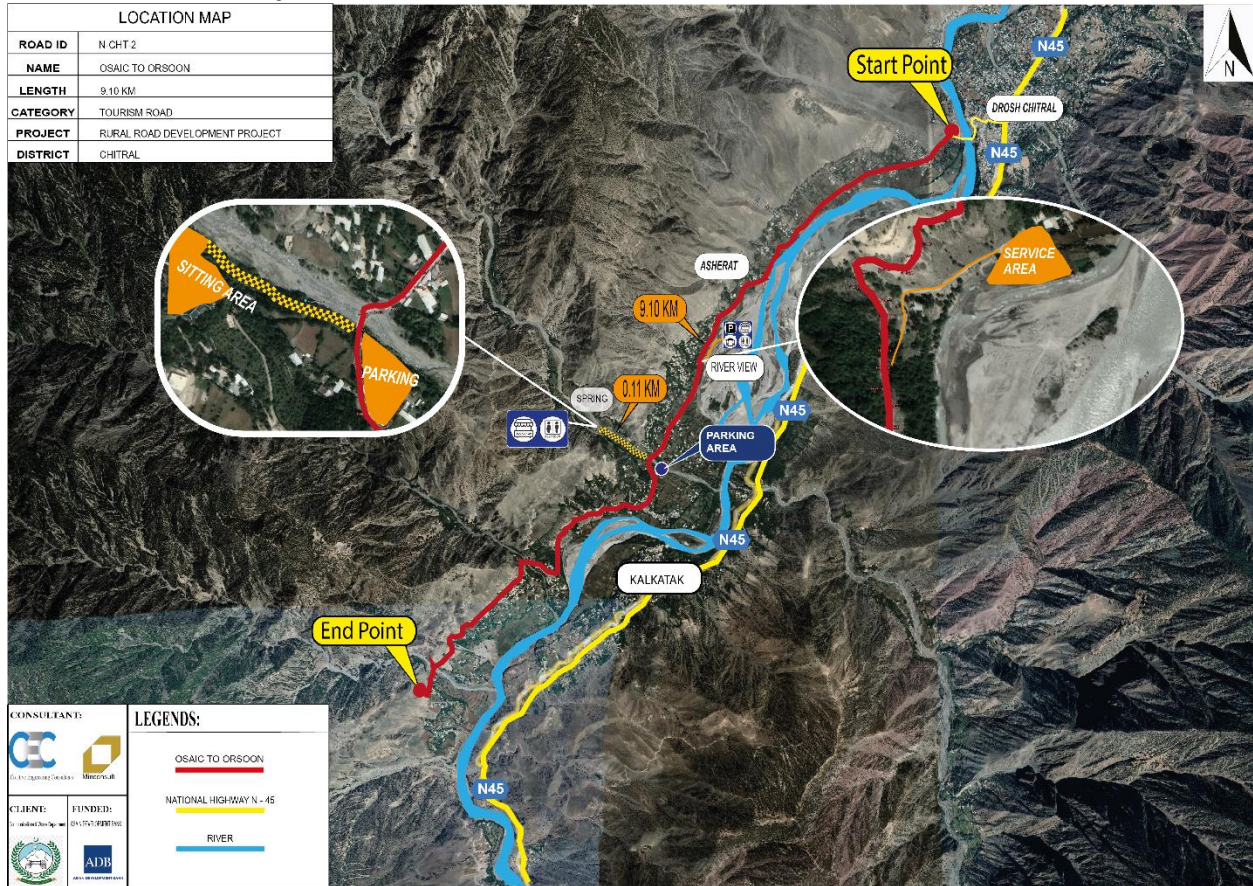


Figure 2.5.2 Location Map N-CHT-2

2.5.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.2 N-CHT-2 Traverse Points

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 1 | 3933088.047 | 747989.549 | 1266.051 | BM 1 |
| 2 | 3934172.406 | 748769.664 | 1276.297 | BM 2 |
| 3 | 3933988.505 | 749107.677 | 1266.264 | BM 3 |
| 4 | 3934164.997 | 749137.867 | 1250.703 | BM 4 |
| 5 | 3934454.446 | 749220.377 | 1267.798 | BM 5 |
| 6 | 3934656.678 | 749600.259 | 1275.217 | BM 6 |
| 7 | 3935610.576 | 750307.055 | 1243.773 | BM 7 |
| 8 | 3936099.609 | 750478.911 | 1240.22 | BM 8 |
| 9 | 3937545.846 | 751543.459 | 1257.404 | BM 9 |
| 10 | 3936877.423 | 750977.356 | 1242.186 | BM 10 |
| 11 | 3937894.236 | 751970.72 | 1253.872 | BM 11 |
| 12 | 3938423.843 | 752917.301 | 1252.248 | BM 12 |

2.5.3 RRD_UCH_NR1

Oveer Road

2.5.3.1 Location Map



Figure 2.5.3 Location Map RRD_UCH_NR1

2.5.3.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.5.3 RRD_UCH_NR1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 231660.269 | 4005227.31 | 2421.721 | BM2 |
| 2 | 231702.309 | 4005102.966 | 2395.278 | BM1 |
| 3 | 230650.937 | 4005731.426 | 2435.272 | BM3 |
| 4 | 230661.463 | 4005741.146 | 2426.511 | BM4 |
| 5 | 228931.12 | 4006830.502 | 2924.318 | BM9 |
| 6 | 229206.118 | 4007227.901 | 2782.579 | BM8 |
| 7 | 229214.818 | 4007225.273 | 2779.528 | BM7 |
| 8 | 229333.471 | 4006811.14 | 2727.161 | BM5 |
| 9 | 229327.351 | 4006828.82 | 2723.248 | BM6 |
| 10 | 228317.373 | 4006387.807 | 2961.654 | BM11 |
| 11 | 228321.173 | 4006384.529 | 2959.757 | BM12 |
| 12 | 228373.521 | 4005666.939 | 3040.949 | BM13 |
| 13 | 228367.839 | 4005676.06 | 3041.728 | BM14 |
| 14 | 227519.019 | 4004962.577 | 3107.96 | BM15 |
| 15 | 227513.342 | 4004957.326 | 3108.955 | BM16 |
| 16 | 227504.89 | 4004948.186 | 3110.264 | BM17 |

2.5.4 N-CHT-3

Ramboor Valley Road

2.5.4.1 Location Map

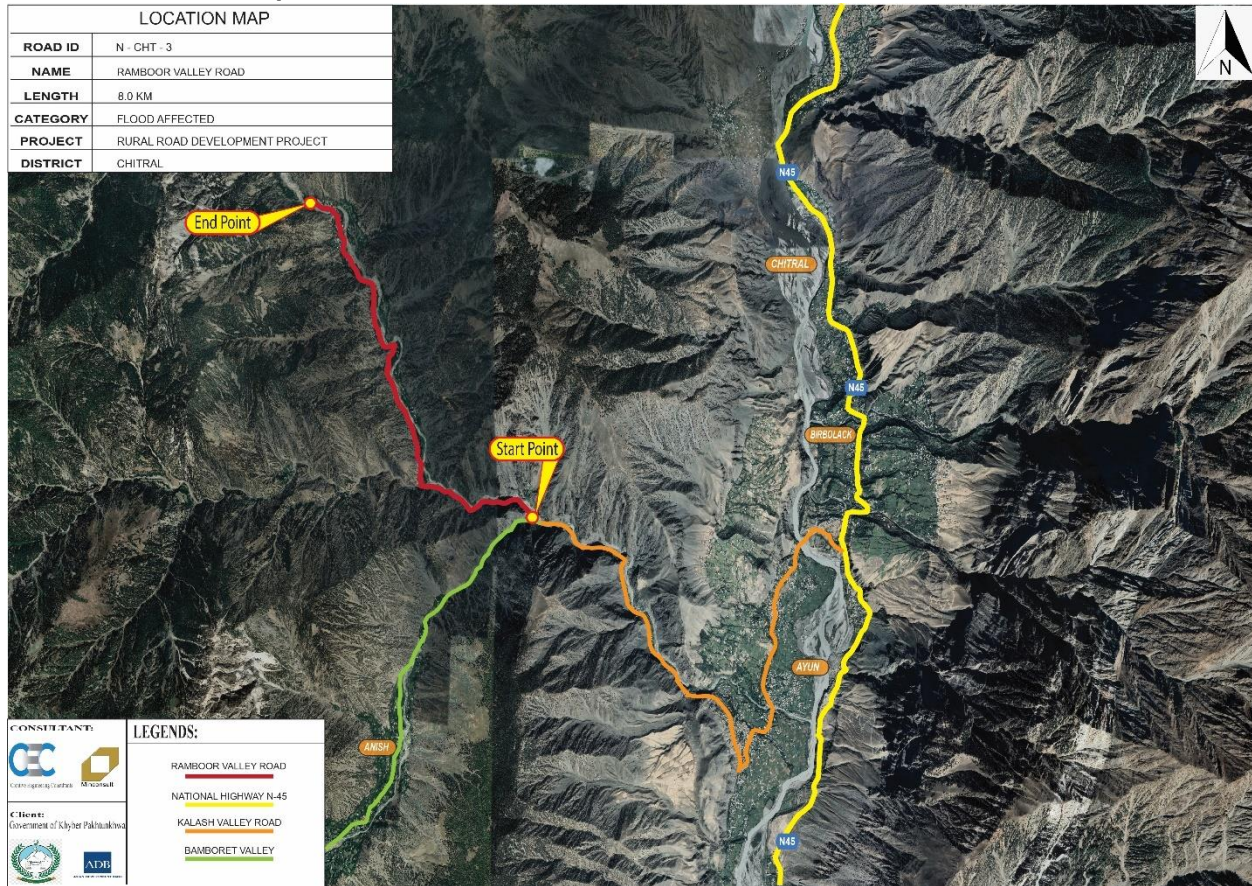


Figure 2.5.4 Location Map N-CHT-3

2.5.4.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.4 N-CHT-3 Traverse Points

| S.No | Northing | Easting | Elevation |
|------|----------|----------|-----------|
| A1 | 3989298 | 745257.7 | 1852.688 |
| A6 | 3990324 | 746540.5 | 1868.248 |
| A7 | 3990719 | 746499.6 | 1871.796 |
| A8 | 3991043 | 746132.3 | 1894.938 |
| A9 | 3991120 | 745563.5 | 1941.825 |
| A10 | 3991260 | 745169 | 1984.327 |
| A11 | 3991457 | 744683 | 1992.147 |
| A12 | 3991852 | 744500.8 | 1997.624 |
| A13 | 3992432 | 744219 | 2038.553 |
| A14 | 3992863 | 743950.4 | 2048.814 |
| A15 | 3993288 | 743829.7 | 2070.426 |
| A16 | 3993586 | 743682 | 2124.177 |
| A17 | 3993827 | 743512.6 | 2159.048 |
| A18 | 3993840 | 743499.9 | 2158.816 |
| A19 | 3994228 | 742992.4 | 2163.321 |
| A20 | 3994635 | 742581.3 | 2170.239 |
| A21 | 3994653 | 742560.3 | 2170.91 |
| A22 | 3994192 | 743049.1 | 2160.727 |
| A23 | 3994095 | 743238.5 | 2158.681 |
| A24 | 3994050 | 743289.8 | 2155.941 |
| A25 | 3994046 | 743288.5 | 2155.923 |

2.5.5 N-CHT-4

Shaghoor to Garam Chahsma Road

2.5.5.1 Location Map



Figure 2.5.5 Location Map N-CHT-4

2.5.5.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.5 N-CHT-4 Traverse Points

| S.No | Northing | Easting | Elevation |
|-------------|-----------------|----------------|------------------|
| S1 | 3988842 | 748699.1 | 1824.718 |
| S2 | 3989008 | 748585.9 | 1824.089 |
| S3 | 3989195 | 748109.5 | 1844.054 |
| S4 | 3989315 | 747279.6 | 1830.755 |
| S5 | 3989328 | 747258 | 1828.652 |
| S6 | 3989306 | 746212.6 | 1841.209 |
| S7 | 3989198 | 745623.8 | 1848.483 |
| S8 | 3989344 | 745134.5 | 1852.727 |
| S9 | 3989295 | 744644.3 | 1862.837 |
| S10 | 3989115 | 744198.8 | 1883.85 |
| S11 | 3989042 | 743704.5 | 1909.144 |
| S12 | 3988911 | 743250.5 | 1907.293 |
| S13 | 3988794 | 742696.6 | 1921.527 |
| S14 | 3988762 | 742208.2 | 1926.425 |
| S15 | 3988711 | 741754.2 | 1936.853 |
| S16 | 3988569 | 741309.3 | 1960.507 |
| S17 | 3988508 | 740825.7 | 1963.623 |
| S18 | 3988394 | 740310.1 | 1956.768 |
| S19 | 3988321 | 739843 | 1968.454 |
| S20 | 3988430 | 739440.6 | 1978.372 |
| S21 | 3988456 | 739025.3 | 1981.684 |
| S22 | 3988211 | 738524.8 | 1998.662 |
| S23 | 3988052 | 738140 | 2001.364 |
| S24 | 3988042 | 737586.6 | 2024.39 |
| S25 | 3988107 | 737048.1 | 2036.144 |
| S26 | 3987858 | 736423.5 | 2051.923 |
| S27 | 3987733 | 735946.7 | 2067.006 |
| S28 | 3987570 | 735517.6 | 2076.781 |
| S29 | 3987244 | 735106.8 | 2105.613 |
| S30 | 3987209 | 734604.5 | 2115.46 |
| S31 | 3987196 | 734069.2 | 2126.184 |
| S32 | 3987223 | 734062.3 | 2126.609 |
| S33 | 3987071 | 733498 | 2148.432 |
| S34 | 3986818 | 733049.5 | 2172.238 |
| S35 | 3986655 | 732504.4 | 2181.426 |

| S.No | Northing | Easting | Elevation |
|-------------|-----------------|----------------|------------------|
| S36 | 3986571 | 731717.1 | 2196.336 |
| S37 | 3986533 | 731597.8 | 2198.306 |
| S38 | 3986268 | 731012.5 | 2213.662 |
| S39 | 3986257 | 730984.3 | 2214.036 |

2.5.6 N-CHT-5

Arkari Valley Road

2.5.6.1 Location Map



Figure 2.5.6 Location Map N-CHT-5

2.5.6.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.6 N-CHT-5 Traverse Points

| S.No | Northing | Easting | Elevation |
|------|----------|----------|-----------|
| A1 | 3989298 | 745257.7 | 1852.688 |
| A6 | 3990324 | 746540.5 | 1868.248 |
| A7 | 3990719 | 746499.6 | 1871.796 |
| A8 | 3991043 | 746132.3 | 1894.938 |
| A9 | 3991120 | 745563.5 | 1941.825 |
| A10 | 3991260 | 745169 | 1984.327 |
| A11 | 3991457 | 744683 | 1992.147 |
| A12 | 3991852 | 744500.8 | 1997.624 |
| A13 | 3992432 | 744219 | 2038.553 |
| A14 | 3992863 | 743950.4 | 2048.814 |
| A15 | 3993288 | 743829.7 | 2070.426 |
| A16 | 3993586 | 743682 | 2124.177 |
| A17 | 3993827 | 743512.6 | 2159.048 |
| A18 | 3993840 | 743499.9 | 2158.816 |
| A19 | 3994228 | 742992.4 | 2163.321 |
| A20 | 3994635 | 742581.3 | 2170.239 |
| A21 | 3994653 | 742560.3 | 2170.91 |
| A22 | 3994192 | 743049.1 | 2160.727 |
| A23 | 3994095 | 743238.5 | 2158.681 |
| A24 | 3994050 | 743289.8 | 2155.941 |
| A25 | 3994046 | 743288.5 | 2155.923 |

2.5.7 N-CHT-6

Tirch Road from Nishko Bridge to Shahgroom Tirch

2.5.7.1 Location Map

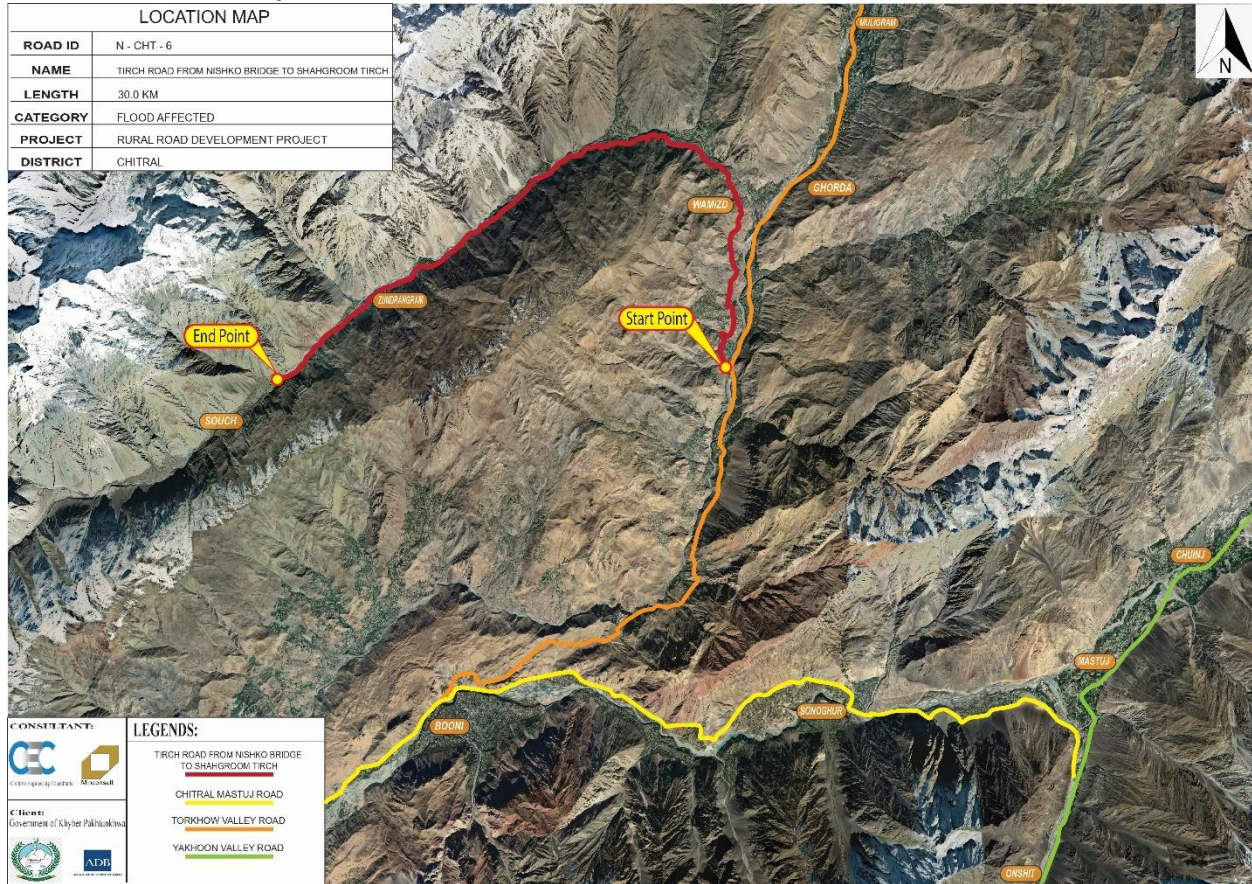


Figure 2.5.7 Location Map N-CHT-6

2.5.7.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.7 N-CHT-6 Traverse Points

| S.No | Northing | Easting | Elevation | Description |
|------|----------|---------|-----------|-------------|
| 1 | 242589.1 | 4025359 | 2936.387 | H-10 |
| 2 | 242501.8 | 4025451 | 2867.166 | H-11 |
| 3 | 242370.4 | 4025429 | 2871.869 | H-12 |
| 4 | 242625.3 | 4025660 | 2880.963 | S1 |
| 5 | 242549.6 | 4025827 | 2908.398 | S2 |
| 6 | 243186.7 | 4026082 | 2889.188 | S3 |
| 7 | 243626 | 4026449 | 2836.487 | S4 |
| 8 | 244010.2 | 4026693 | 2833.119 | S5 |
| 9 | 244041.5 | 4026651 | 2821.526 | S6 |
| 10 | 244472.5 | 4027160 | 2817.756 | S7 |
| 11 | 245257 | 4027556 | 2788.647 | S8 |
| 12 | 245812.7 | 4027863 | 2776.182 | S9 |
| 13 | 246241.2 | 4028142 | 2777.405 | S10 |
| 14 | 246785.8 | 4028271 | 2764.255 | S11 |
| 15 | 247281.4 | 4028728 | 2740.453 | S12 |
| 16 | 247900.7 | 4029065 | 2718.509 | S13 |
| 17 | 248275.4 | 4029461 | 2685.645 | S14 |
| 18 | 248614.6 | 4029776 | 2674.072 | S15 |
| 19 | 249125.5 | 4030140 | 2665.22 | S16 |
| 20 | 249810.1 | 4030556 | 2650.182 | S17 |
| 21 | 250440.5 | 4031073 | 2627.708 | S18 |
| 22 | 250957.7 | 4031392 | 2618.707 | S19 |
| 23 | 251518.2 | 4031561 | 2605.011 | S20 |
| 24 | 252149.1 | 4031917 | 2606.092 | S21 |
| 25 | 252667.2 | 4031977 | 2614.582 | S22 |
| 26 | 253248.2 | 4032299 | 2572.875 | S23 |
| 27 | 253733.9 | 4032558 | 2581.214 | S24 |
| 28 | 254241.9 | 4032990 | 2551.701 | S25 |
| 29 | 254761.1 | 4033313 | 2538.47 | S26 |
| 30 | 255399 | 4033586 | 2574.14 | S27 |
| 31 | 255933 | 4033964 | 2525.721 | S28 |
| 32 | 256482.2 | 4034385 | 2524.675 | S29 |
| 33 | 257122.5 | 4034768 | 2509.103 | S30 |
| 34 | 257687.5 | 4035174 | 2503.688 | S31 |
| 35 | 258429.2 | 4035399 | 2484.506 | S32 |
| 36 | 258941.5 | 4035610 | 2485.547 | S33 |

| S.No | Northing | Easting | Elevation | Description |
|------|----------|---------|-----------|-------------|
| 37 | 259460.9 | 4035638 | 2483.112 | S34 |
| 38 | 260051.2 | 4035737 | 2486.388 | S35 |
| 39 | 260551.9 | 4035835 | 2477.489 | S36 |
| 40 | 261048.8 | 4035896 | 2492.955 | S37 |
| 41 | 261394.6 | 4035862 | 2476.276 | S38 |
| 42 | 261996.2 | 4035645 | 2460.822 | S39 |
| 43 | 262695.3 | 4035475 | 2450.199 | S40 |
| 44 | 262997.3 | 4035311 | 2418.29 | S41 |
| 45 | 263053.1 | 4035185 | 2429.874 | S42 |
| 46 | 263414.2 | 4034882 | 2424.052 | S43 |
| 47 | 263918.8 | 4034718 | 2424.377 | S44 |
| 48 | 264254.5 | 4034022 | 2423.245 | S45 |
| 49 | 264485 | 4033568 | 2413.729 | S46 |
| 50 | 264355.8 | 4033139 | 2406.337 | S47 |
| 51 | 264374.5 | 4033020 | 2406.759 | S48 |
| 52 | 264039.3 | 4032455 | 2394.322 | S49 |
| 53 | 264159.6 | 4031705 | 2378.948 | S50 |
| 54 | 264058.3 | 4031218 | 2364.238 | S51 |
| 55 | 263883 | 4030592 | 2377.668 | S52 |
| 56 | 264096.4 | 4030064 | 2369.681 | S53 |
| 57 | 263804.6 | 4029529 | 2334.983 | S54 |
| 58 | 263735.4 | 4029439 | 2331.15 | S55 |
| 59 | 263588.6 | 4028961 | 2314.2 | S56 |
| 60 | 263707.6 | 4028522 | 2257.767 | S57 |
| 61 | 263822.7 | 4028528 | 2238.068 | S58 |
| 62 | 263945.6 | 4028434 | 2217.586 | S59 |

2.5.8 N-CHT-7

Rech Road

2.5.8.1 Location Map

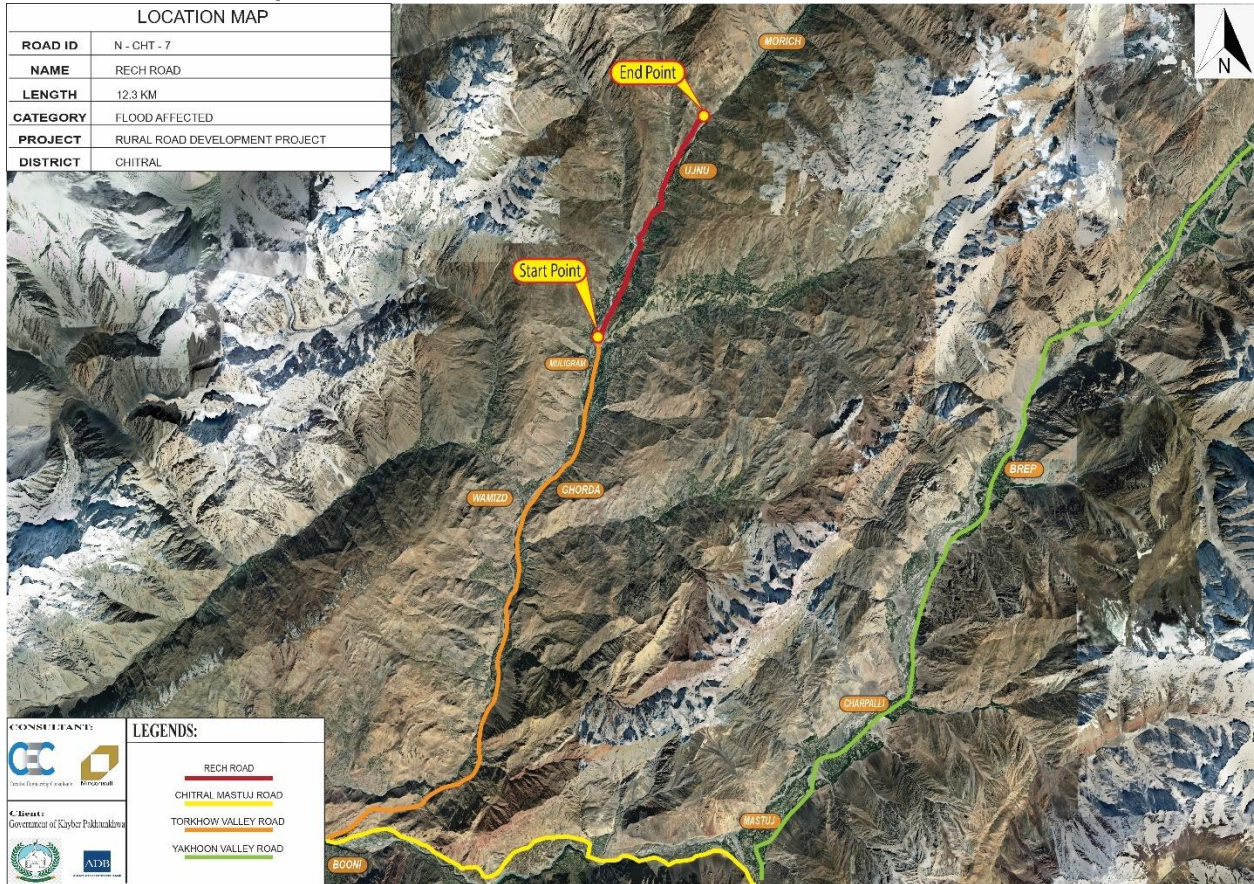


Figure 2.5.8 Location Map N-CHT-7

2.5.8.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.8 N-CHT-7 Traverse Points

| S.No | Description | Northing | Easting | Elevation |
|------|-------------|----------|----------|-----------|
| R1 | GCP | 4040484 | 269234.6 | 2385.207 |
| R2 | GCP | 4040732 | 269435.8 | 2404.164 |
| R3 | GCP | 4040942 | 269545.9 | 2422.361 |
| R4 | GCP | 4040992 | 269583.8 | 2414.874 |
| R5 | GCP | 4041487 | 269826.7 | 2403.378 |
| R6 | GCP | 4042005 | 270177.2 | 2405.397 |
| R7 | GCP | 4042076 | 270243.5 | 2402.973 |
| R8 | GCP | 4042481 | 270466.2 | 2430.801 |
| R9 | GCP | 4042679 | 270564.7 | 2440.237 |
| R10 | GCP | 4043461 | 270960.9 | 2441.347 |
| R11 | GCP | 4044138 | 271294.4 | 2430.438 |
| R12 | GCP | 4044624 | 271586.9 | 2470.301 |
| R13 | GCP | 4044781 | 271535.6 | 2478.951 |
| R14 | GCP | 4045563 | 271986.6 | 2476.219 |
| R15 | GCP | 4046000 | 272339.3 | 2483.18 |
| R16 | GCP | 4046258 | 272697.7 | 2487.237 |
| R17 | GCP | 4046771 | 272851.4 | 2501.441 |
| R18 | GCP | 4047316 | 273012.7 | 2487.521 |
| R19 | GCP | 4047838 | 273320.1 | 2466.577 |
| R20 | GCP | 4048220 | 273530.9 | 2450.9 |
| R21 | GCP | 4048551 | 273706.6 | 2449.344 |
| R22 | GCP | 4048944 | 274075.3 | 2510.202 |
| R23 | GCP | 4049294 | 274419.8 | 2557.395 |
| R24 | GCP | 4049798 | 274622.7 | 2599.13 |
| R25 | GCP | 4049975 | 274812.9 | 2612.306 |
| TP10 | GCP | 4045505 | 271954.8 | 2482.809 |
| TP11 | GCP | 4045505 | 271949.8 | 2482.682 |

2.5.9 N-CHT-8

Jin Jeratkoh Road

2.5.9.1 Location Map

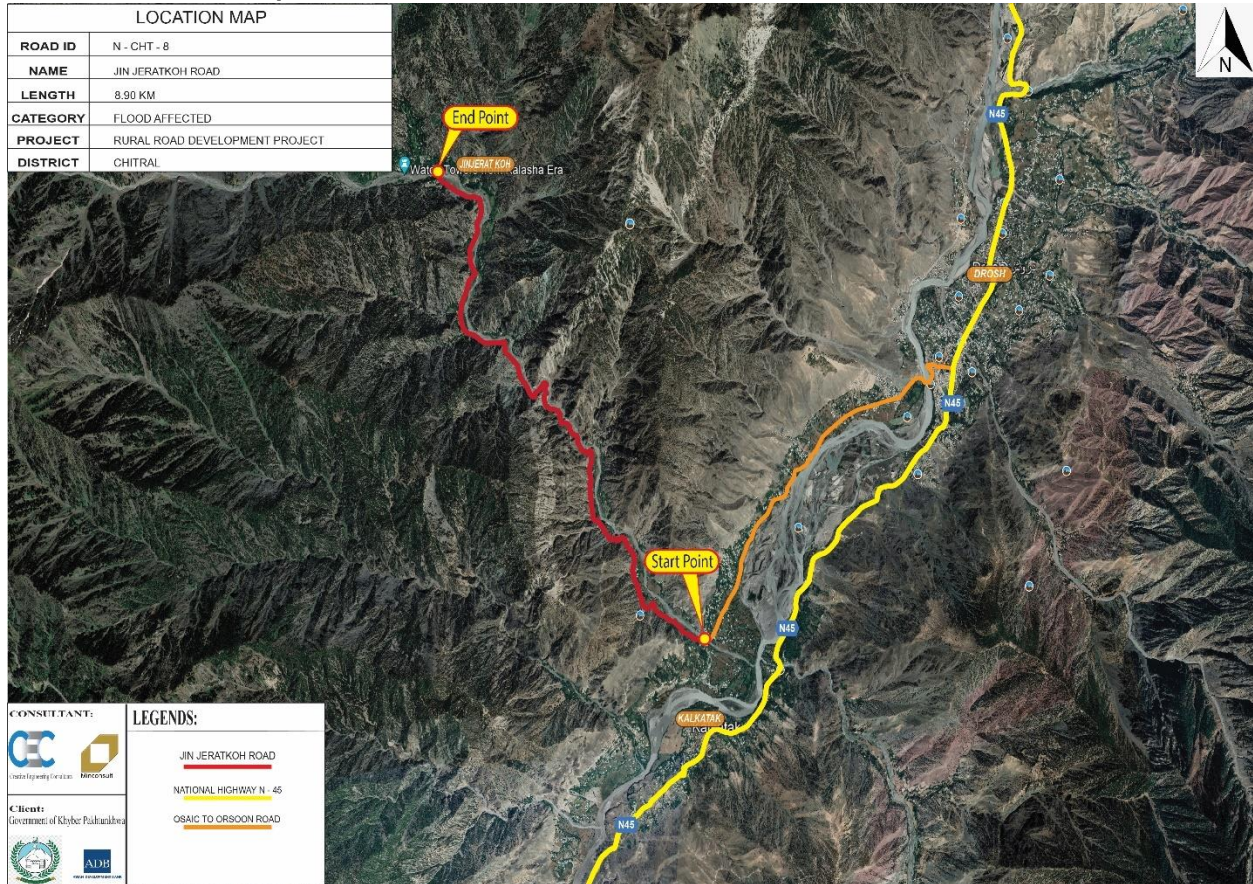


Figure 2.5.9 Location Map N-CHT-8

2.5.9.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.9 N-CHT-8 Traverse Points

| S.No | Description | Northing | Easting | Elevation |
|-------------|--------------------|-----------------|----------------|------------------|
| G1 | GCP | 3935222 | 749793.4 | 1338.967 |
| G2 | GCP | 3935400 | 749488.4 | 1375.776 |
| G3 | GCP | 3935547 | 749118.9 | 1432.526 |
| G4 | GCP | 3936028 | 748963.1 | 1464.01 |
| G5 | GCP | 3936357 | 748756.1 | 1503.958 |
| G6 | GCP | 3936579 | 748418.1 | 1528.057 |
| G7 | GCP | 3937170 | 748314.5 | 1558.419 |
| G8 | GCP | 3937688 | 747938.1 | 1602.56 |
| G9 | GCP | 3938087 | 747677.6 | 1652.059 |
| G10 | GCP | 3938163 | 747372.9 | 1691.025 |
| G11 | GCP | 3938587 | 747060.8 | 1736.156 |
| G12 | GCP | 3938704 | 746570.2 | 1771.582 |
| G13 | GCP | 3939275 | 746603.2 | 1829.871 |
| G14 | GCP | 3939778 | 746700.6 | 1868.027 |
| G16 | GCP | 3940274 | 746442.6 | 1937.633 |
| G17 | GCP | 3940267 | 746456.7 | 1934.951 |

2.5.10 N-CHT-9

Pashty Road, Pret to Pashty Valley

2.5.10.1 Location Map



Figure 2.5.10 Location Map N-CHT-9

2.5.10.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.5.10 N-CHT-9 Traverse Points

| S.No | Northing | Easting | Elevation | Description |
|------|----------|---------|-----------|-------------|
| 1 | 232944.7 | 3994207 | 1911.625 | base_1 |
| 2 | 232944.4 | 3994207 | 1909.919 | B_11 |
| 3 | 232931.1 | 3994162 | 1907.785 | P1 |
| 4 | 232897.3 | 3994110 | 1893.825 | P2 |
| 5 | 232830.9 | 3994213 | 1879.615 | cul |
| 6 | 232832 | 3994294 | 1872.256 | cul2 |
| 7 | 232782.9 | 3994397 | 1850.255 | P3 |
| 8 | 232744.8 | 3994455 | 1836.818 | P4 |
| 9 | 232709.6 | 3994430 | 1837.026 | CUL |
| 10 | 232629 | 3994383 | 1837.756 | CUI |
| 11 | 232342 | 3994260 | 1821.106 | P5 |
| 12 | 232520.2 | 3993996 | 1764.794 | P6 |
| 13 | 232376.5 | 3994165 | 1794.483 | Cul |
| 14 | 231218.3 | 3994803 | 1928.644 | B2 |
| 15 | 231222.5 | 3994801 | 1928.488 | check1 |
| 16 | 231218.2 | 3994804 | 1929.462 | P12 |
| 17 | 231256.2 | 3994482 | 1917.363 | P11 |
| 18 | 231386.1 | 3994499 | 1885.609 | P10 |
| 19 | 231717.2 | 3994178 | 1881.045 | P9 |
| 20 | 231918.2 | 3994150 | 1852.15 | P |
| 21 | 231937.3 | 3994095 | 1843.827 | P8 |
| 22 | 231952.6 | 3994055 | 1834.781 | Prop2 |
| 23 | 232072.1 | 3994131 | 1800.209 | Prop3 |
| 24 | 232093.7 | 3994183 | 1777.6 | P7 |
| 25 | 231218.3 | 3994803 | 1930.466 | base_2 |
| 26 | 231086.3 | 3994966 | 1926.968 | cul4 |
| 27 | 231019.3 | 3995174 | 1965.577 | cul5 |
| 28 | 230938.6 | 3995385 | 1994.739 | P13 |
| 29 | 230596.5 | 3995635 | 2041.255 | P14 |
| 30 | 230433.8 | 3996038 | 2063.313 | P15 |
| 31 | 230216.7 | 3996208 | 2094.319 | P16 |
| 32 | 229965.2 | 3996567 | 2153.079 | Cul5 |
| 33 | 229953.1 | 3996563 | 2153.174 | P17 |
| 34 | 229649.2 | 3996596 | 2164.993 | Cul6 |
| 35 | 229712.1 | 3996525 | 2175.921 | P18 |
| 36 | 229321.3 | 3996752 | 2304.346 | P19 |

| S.No | Northing | Easting | Elevation | Description |
|------|----------|---------|-----------|-------------|
| 37 | 229008 | 3996967 | 2385.956 | P20 |
| 38 | 228816.4 | 3997067 | 2394.365 | P21 |
| 39 | 228820.9 | 3997083 | 2386.578 | Cul8 |
| 40 | 228580.4 | 3997320 | 2473.323 | P22 |
| 41 | 228378.3 | 3997629 | 2572.028 | P23 |
| 42 | 228537.7 | 3997980 | 2715.141 | P24 |
| 43 | 228553.4 | 3997977 | 2714.527 | P25 |
| 44 | 228544.8 | 3997986 | 2717.099 | B3 |
| 45 | 228544.8 | 3997986 | 2718.961 | base_3 |
| 46 | 228827 | 3997835 | 2771.648 | P26 |
| 47 | 229032.7 | 3997887 | 2851.237 | P27 |
| 48 | 229282.9 | 3998254 | 2974.135 | P28 |
| 49 | 228757.5 | 3998380 | 3065.151 | P29 |
| 50 | 228241.2 | 3998542 | 3151.568 | P30 |
| 51 | 227853.8 | 3998781 | 3230.341 | P31 |
| 52 | 227558.1 | 3998788 | 3258.144 | P32 |
| 53 | 227157 | 3998558 | 3296.792 | P33 |
| 54 | 226790.7 | 3998462 | 3236.102 | P34 |
| 55 | 226337.5 | 3998589 | 3195.555 | P35 |
| 56 | 225858.2 | 3998465 | 3174.364 | P36 |
| 57 | 225505.7 | 3998340 | 3211.935 | P37 |
| 58 | 225337.7 | 3998353 | 3200.843 | P38 |

2.6 District Dera Ismail Khan

2.6.1 KPR_DIK_NR11

Main N-50 to Shero Kuhna Road

2.6.1.1 Location Map

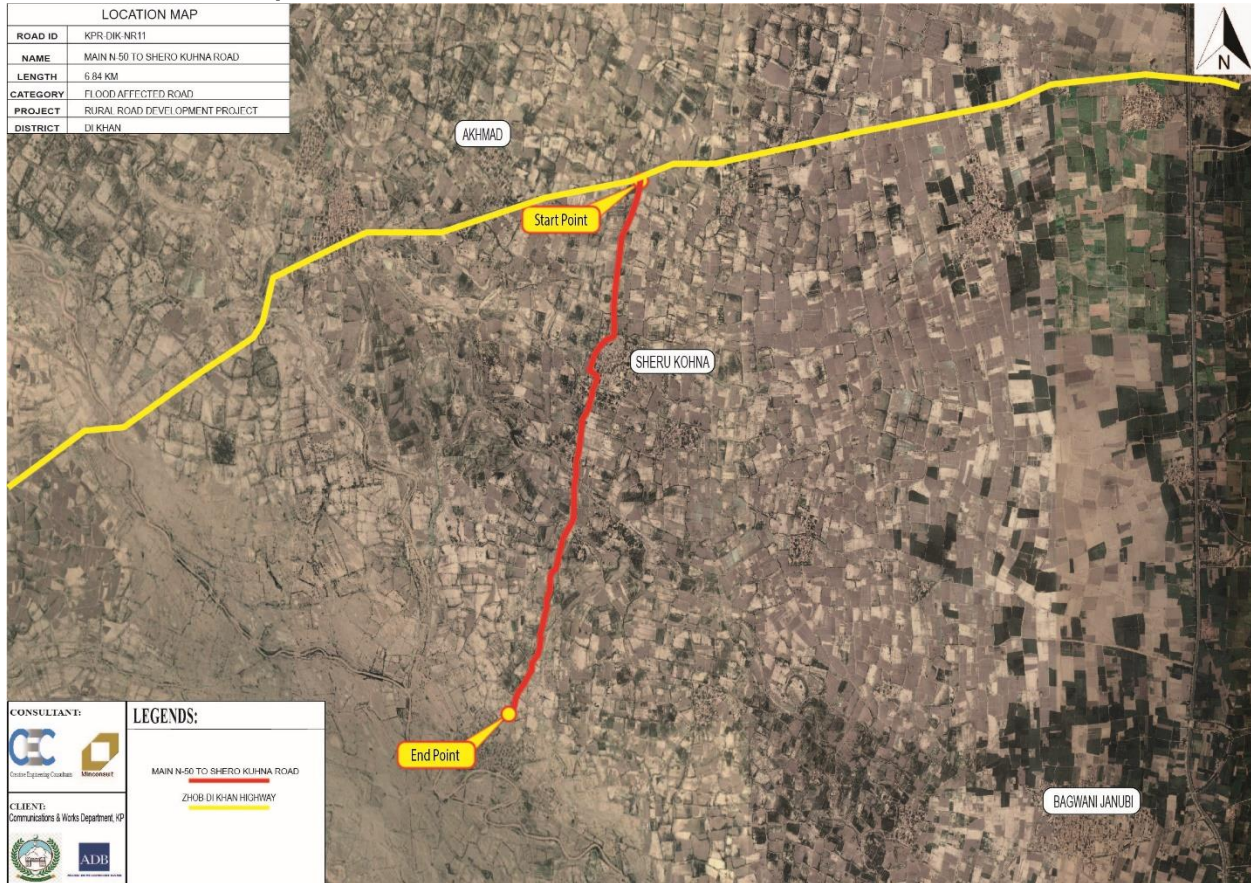


Figure 2.6.1 Location Map KPR_DIK_NR11

2.6.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.1 KPR_DIK_NR11 Traverse Points

| SR. NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|--------|-------------|-------------|-----------|-------------|
| 1 | 653933.5498 | 3521466.595 | 148.6279 | bm2 |
| 2 | 653935.8886 | 3521474.944 | 148.5289 | bm1 |
| 3 | 653640.3215 | 3520421.564 | 148.2905 | bm3 |
| 4 | 653635.6139 | 3520405.08 | 148.3196 | bm4 |
| 5 | 653047.121 | 3517392.263 | 147.335 | cp1 |
| 6 | 652734.5444 | 3516598.702 | 145.8328 | cp3 |
| 7 | 652735.8124 | 3516590.792 | 147.3888 | cp4 |
| 8 | 652736.0838 | 3516590.937 | 145.7308 | cp4 |

2.6.2 KPR_DIK_NR13

Main N-55 road to Diyal Via Airport Road and CRBC colony

2.6.2.1 Location Map

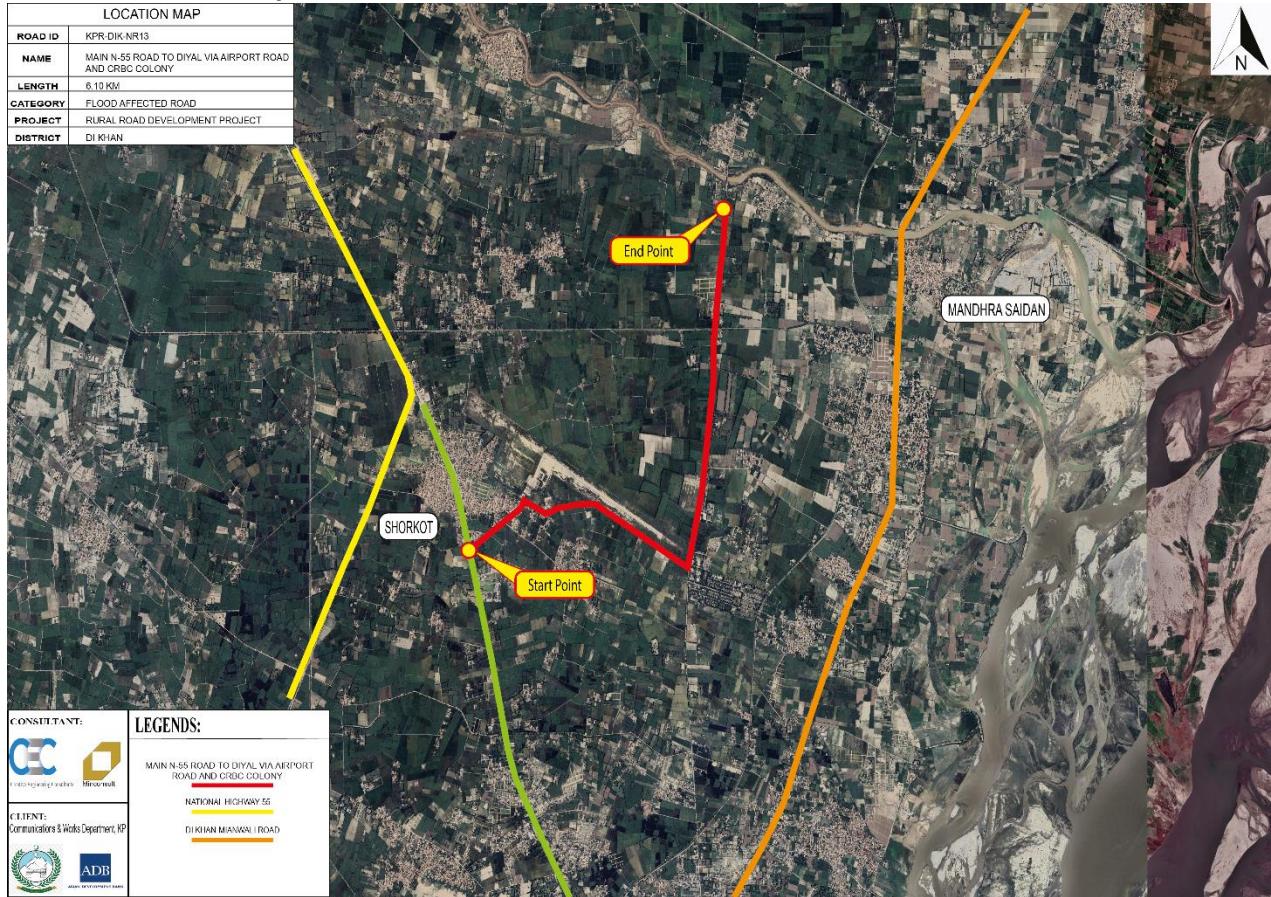


Figure 2.6.2 Location Map KPR_DIK_NR13

2.6.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.2 KPR_DIK_NR13 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 678225.2073 | 3531711.292 | 133.613 | BM1 |
| 2 | 678221.6696 | 3531704.142 | 133.612 | BM2 |
| 3 | 680495.3747 | 3532460.323 | 132.6092 | BM3 |
| 4 | 680493.7778 | 3532473.55 | 132.6272 | BM4 |
| 5 | 680665.2246 | 3534581.531 | 132.2798 | BM5 |
| 6 | 680667.2695 | 3534572.516 | 132.2268 | BM6 |

2.6.3 RRD_DIK_R1

Restoration & Rehabilitation of Prova to Chowdwan Road

2.6.3.1 Location Map

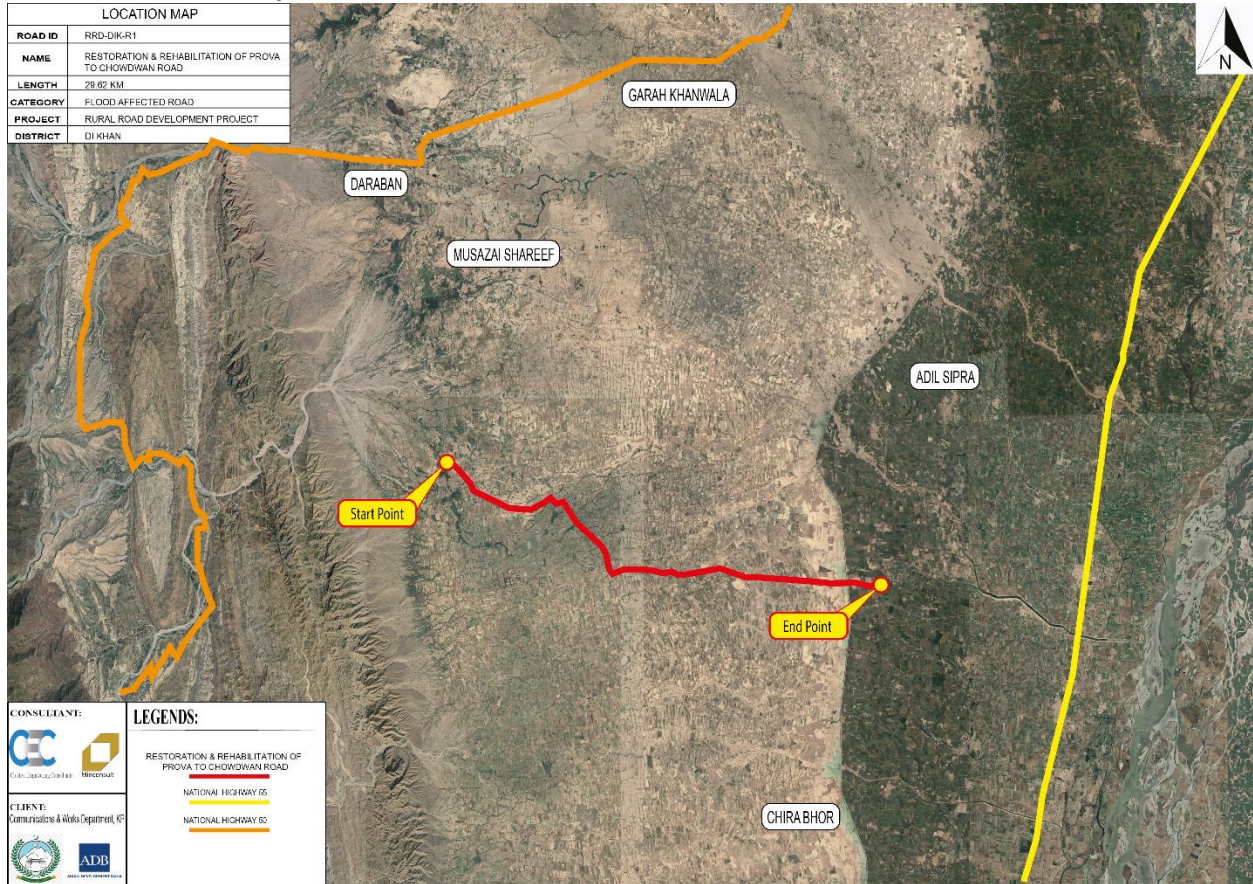


Figure 2.6.3 Location Map RRD_DIK_R1

2.6.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.3 RRD_DIK_R1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 654846.028 | 3492177.497 | 180.527 | BM1 |
| 2 | 654843.469 | 3492184.566 | 180.559 | BM2 |
| 3 | 654442.05 | 3492027.176 | 181.315 | BM3 |
| 4 | 654438.899 | 3492033.842 | 181.359 | BM4 |
| 5 | 652274.47 | 3492078.097 | 185.201 | BM5 |
| 6 | 652275.254 | 3492070.598 | 185.203 | BM6 |
| 7 | 651918.767 | 3492054.976 | 185.723 | BM7 |
| 8 | 651916.154 | 3492062.469 | 185.709 | BM8 |
| 9 | 651526.712 | 3492053.948 | 186.562 | BM9 |
| 10 | 651527.804 | 3492061.502 | 186.6 | BM10 |
| 11 | 648677.655 | 3492234.616 | 191.667 | BM11 |
| 12 | 648679.739 | 3492226.901 | 191.664 | BM12 |
| 13 | 647773.167 | 3492280.825 | 193.839 | BM13 |
| 14 | 647774.953 | 3492288.235 | 193.819 | BM14 |
| 15 | 647148.565 | 3492317.792 | 195.031 | BM15 |
| 16 | 647145.337 | 3492325.486 | 195.048 | BM16 |
| 17 | 653326.348 | 3492110.606 | 183.212 | BM17 |
| 18 | 653325.958 | 3492118.316 | 183.18 | BM18 |
| 19 | 652781.902 | 3492099.513 | 185.531 | BM19 |
| 20 | 652782.956 | 3492092.022 | 185.533 | BM20 |
| 21 | 651168.965 | 3492077.523 | 186.834 | BM21 |
| 22 | 651171.346 | 3492084.959 | 186.763 | BM22 |
| 23 | 650658.089 | 3492109.804 | 187.205 | BM23 |
| 24 | 650657.081 | 3492117.389 | 187.205 | BM24 |
| 25 | 650025.926 | 3492147.769 | 188.843 | BM25 |
| 26 | 650027.323 | 3492155.211 | 188.862 | BM26 |
| 27 | 649400.53 | 3492184.464 | 190.179 | BM27 |
| 28 | 649402.226 | 3492191.851 | 190.137 | BM28 |
| 29 | 646594.378 | 3492302.83 | 196.674 | BM29 |
| 30 | 646594.569 | 3492310.312 | 196.645 | BM30 |
| 31 | 643280.529 | 3492437.901 | 201.297 | BM31 |

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|------------|-------------|-----------|-------------|
| 32 | 642876.212 | 3492374.935 | 202.338 | BM32 |
| 33 | 642875.15 | 3492382.367 | 202.293 | BM33 |
| 34 | 642442.42 | 3492345.433 | 203.399 | BM34 |
| 35 | 642433.186 | 3492339.498 | 203.34 | BM35 |
| 36 | 641497.457 | 3492424.248 | 205.429 | BM36 |
| 37 | 641496.928 | 3492431.806 | 205.385 | BM37 |
| 38 | 640935.117 | 3492505.299 | 206.131 | BM38 |
| 39 | 640935.94 | 3492512.777 | 206.165 | BM39 |
| 40 | 638483.255 | 3492398.046 | 213.062 | BM40 |
| 41 | 638478.275 | 3492404.26 | 213.064 | BM41 |
| 42 | 638009.948 | 3493060.782 | 213.806 | BM42 |
| 43 | 638016.475 | 3493064.576 | 213.782 | BM43 |
| 44 | 645319.226 | 3492604.304 | 198.636 | BM44 |
| 45 | 645317.981 | 3492596.891 | 198.575 | BM45 |
| 46 | 644716.679 | 3492661.33 | 198.364 | BM46 |
| 47 | 644717.785 | 3492669.131 | 198.358 | BM47 |
| 48 | 644105.306 | 3492573.838 | 199.358 | BM48 |
| 49 | 644107.881 | 3492566.597 | 199.33 | BM49 |
| 50 | 639914.051 | 3492594.869 | 208.092 | BM50 |
| 51 | 639914.302 | 3492587.385 | 208.005 | BM51 |
| 52 | 638478.277 | 3492404.259 | 213.072 | BM52 |
| 53 | 638483.267 | 3492398.035 | 213.055 | BM53 |
| 54 | 637075.62 | 3494139.954 | 215.537 | BM54 |
| 55 | 637073.779 | 3494150.409 | 215.543 | BM55 |
| 56 | 636655.413 | 3494423.721 | 216.444 | BM56 |
| 57 | 636645.958 | 3494420.896 | 216.441 | BM57 |
| 58 | 636288.986 | 3494647.566 | 217.252 | BM58 |
| 59 | 636291.877 | 3494655.012 | 217.176 | BM59 |
| 60 | 636109.295 | 3494875.982 | 217.123 | BM60 |
| 61 | 636104.209 | 3494870.297 | 217.106 | BM61 |
| 62 | 636042.116 | 3494959.832 | 217.004 | BM62 |
| 63 | 636035.87 | 3494955.585 | 217.001 | BM63 |
| 64 | 635862.461 | 3495172.073 | 216.163 | BM64 |
| 65 | 635868.803 | 3495176.234 | 216.111 | BM65 |
| 66 | 635717.107 | 3495353.964 | 215.83 | BM66 |
| 67 | 635720.803 | 3495361.413 | 215.818 | BM67 |

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|------------|-------------|-----------|-------------|
| 68 | 635020.971 | 3495745.795 | 217.091 | BM68 |
| 69 | 635023.128 | 3495738.401 | 217.09 | BM69 |
| 70 | 637832.628 | 3493493.024 | 214.432 | BM70 |
| 71 | 637823.588 | 3493492.768 | 214.397 | BM71 |
| 72 | 637478.494 | 3493864.063 | 214.8 | BM72 |
| 73 | 637481.532 | 3493871.129 | 214.754 | BM73 |
| 74 | 634741.279 | 3495899.838 | 214.214 | BM74 |
| 75 | 634738.837 | 3495896.756 | 214.411 | BM75 |
| 76 | 634355.975 | 3495888.358 | 216.287 | BM76 |
| 77 | 634361.565 | 3495883.228 | 216.315 | BM77 |
| 78 | 634184.816 | 3495785.196 | 217.4 | BM78 |
| 79 | 634189.391 | 3495778.928 | 217.299 | BM79 |
| 80 | 633726.348 | 3495564.524 | 218.209 | BM80 |
| 81 | 633723.524 | 3495571.406 | 218.199 | BM81 |
| 82 | 633369.559 | 3495408.125 | 219.908 | BM82 |
| 83 | 633371.914 | 3495401.088 | 219.915 | BM83 |
| 84 | 633148.049 | 3495393.079 | 219.879 | BM84 |
| 85 | 633171.121 | 3495399.736 | 219.866 | BM85 |
| 86 | 632746.858 | 3495414.495 | 221.701 | BM86 |
| 87 | 632747.995 | 3495406.17 | 221.702 | BM87 |
| 88 | 632274.007 | 3495430.924 | 220.994 | BM88 |
| 89 | 632274.125 | 3495423.433 | 220.983 | BM89 |
| 90 | 630983.67 | 3495834.947 | 225.283 | BM90 |
| 91 | 630980.196 | 3495828.371 | 225.299 | BM91 |
| 92 | 630671.003 | 3495941.588 | 226.292 | BM92 |
| 93 | 630675.15 | 3495947.881 | 226.307 | BM93 |
| 94 | 629861.515 | 3496252.489 | 229.745 | BM94 |
| 95 | 629857.205 | 3496246.44 | 229.801 | BM95 |
| 96 | 628757.159 | 3497356.931 | 237.186 | BM96 |
| 97 | 628762.046 | 3497362.634 | 237.225 | BM97 |
| 98 | 628205.358 | 3497637.904 | 242.008 | BM98 |
| 99 | 628198.092 | 3497635.644 | 242.116 | BM99 |
| 100 | 632274.007 | 3495430.924 | 220.994 | BM100 |
| 101 | 632274.111 | 3495423.421 | 220.989 | BM101 |
| 102 | 631741.324 | 3495549.617 | 223.172 | BM102 |
| 103 | 631747.151 | 3495555.338 | 223.163 | BM103 |

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|-------------|----------------|-----------------|------------------|--------------------|
| 104 | 631387.805 | 3495679.127 | 223.891 | BM104 |
| 105 | 631389.726 | 3495686.25 | 223.891 | BM105 |
| 106 | 629597.236 | 3496712.802 | 230.643 | BM106 |
| 107 | 629590.397 | 3496709.888 | 230.64 | BM107 |
| 108 | 629270.199 | 3496995.709 | 233.344 | BM108 |
| 109 | 629273.306 | 3497002.426 | 233.333 | BM109 |

2.6.4 RRD_DIK_R2

Restoration & Rehabilitation of Kulachi to Luni Road

2.6.4.1 Location Map

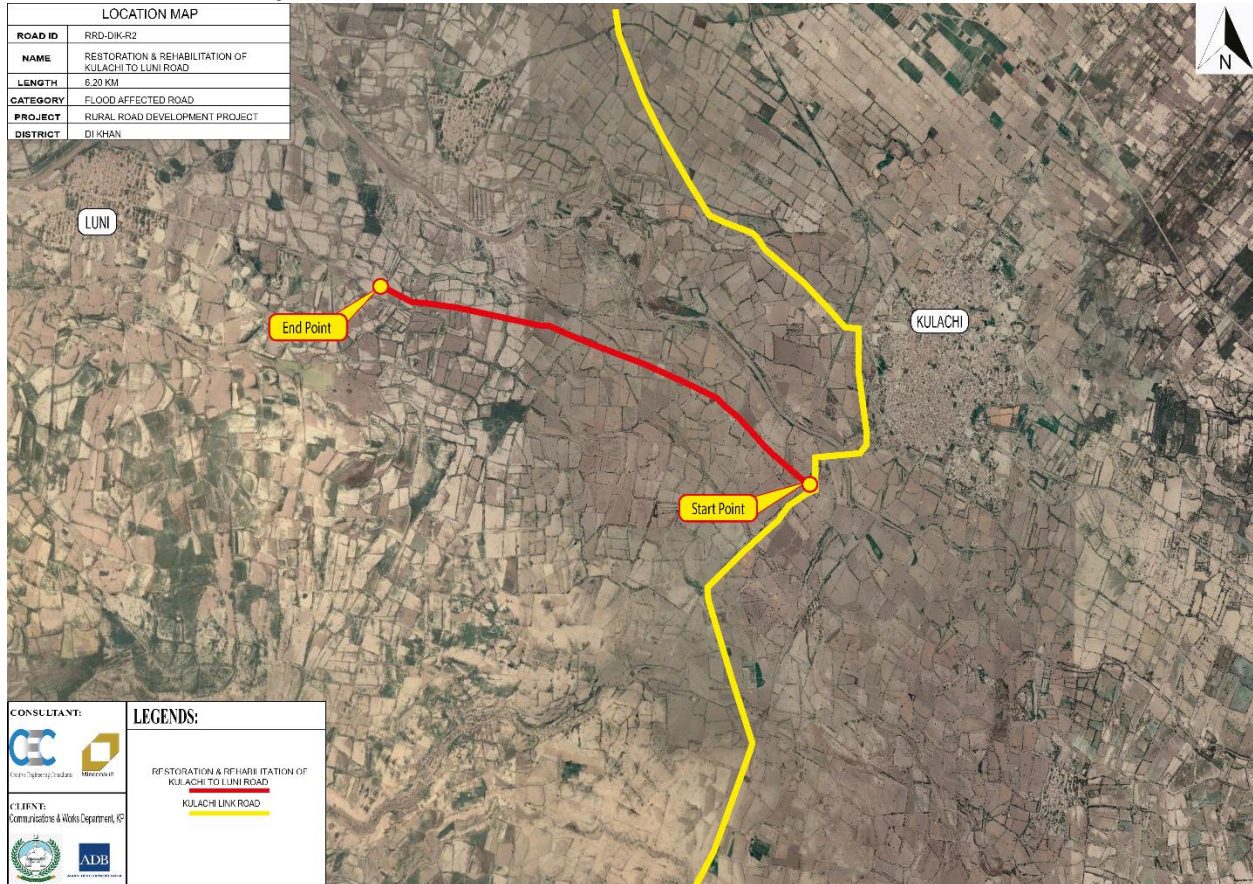


Figure 2.6.4 Location Map RRD_DIK_R2

2.6.4.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.4 RRD_DIK_R2 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 636380.867 | 3532441.22 | 220.839 | BM1 |
| 2 | 636372.998 | 3532446.297 | 220.792 | BM2 |
| 3 | 635757.644 | 3532868.736 | 220.685 | BM3 |
| 4 | 635767.577 | 3532871.383 | 220.696 | BM4 |
| 5 | 635109.1 | 3533390.17 | 221.428 | BM5 |
| 6 | 635107.549 | 3533399.246 | 221.444 | BM6 |
| 7 | 634765.678 | 3533525.946 | 221.595 | BM7 |
| 8 | 634757.107 | 3533520.258 | 221.59 | BM8 |
| 9 | 634380.932 | 3533657.69 | 221.9 | BM9 |
| 10 | 634379.231 | 3533649.97 | 221.916 | BM10 |
| 11 | 634133.665 | 3533736.951 | 222.058 | bm11 |
| 12 | 634137.071 | 3533743.959 | 221.979 | bm12 |
| 17 | 633879.767 | 3533815.982 | 222.703 | BM17 |
| 18 | 633879.772 | 3533824.006 | 222.612 | BM18 |
| 19 | 633581.763 | 3533900.113 | 223.804 | BM19 |
| 20 | 633576.113 | 3533910.585 | 223.358 | BM20 |
| 21 | 633310.545 | 3533990.099 | 224.101 | BM21 |
| 22 | 633303.073 | 3533984.392 | 224.435 | BM22 |
| 23 | 632954.867 | 3534104.747 | 224.16 | BM23 |
| 24 | 632953.619 | 3534113.386 | 224.511 | BM24 |
| 25 | 632677.61 | 3534149.419 | 224.738 | BM25 |
| 26 | 632675.52 | 3534141.853 | 224.771 | BM26 |
| 27 | 632370.303 | 3534183.511 | 224.767 | BM27 |
| 28 | 632380.267 | 3534189.269 | 224.769 | BM28 |
| 29 | 632023.083 | 3534233.825 | 225.445 | BM29 |
| 30 | 632019.915 | 3534242.586 | 225.473 | BM30 |
| 31 | 631865.867 | 3534264.689 | 224.869 | bm31 |
| 32 | 631868.083 | 3534256.316 | 225.274 | bm32 |
| 33 | 631129.956 | 3534330.044 | 226.65 | BM33 |
| 34 | 631126.07 | 3534337.847 | 226.44 | BM34 |
| 35 | 630904.098 | 3534415.757 | 226.716 | BM35 |
| 36 | 630909.843 | 3534421.774 | 226.564 | BM36 |

2.6.5 RRD_DIK_R4

Restoration & Rehabilitation of Mian Kasirai Shareef Road (Darazinda)

2.6.5.1 Location Map



Figure 2.6.5 Location Map RRD_DIK_R4

2.6.5.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.5 RRD_DIK_R4 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|---------|-------------|-----------|-------------|
| 1 | 3507616 | 604177.447 | 474.4258 | bm1 |
| 2 | 3507604 | 604165.4693 | 475.1058 | bm2 |
| 3 | 3506741 | 603434.7115 | 497.5493 | bm3 |
| 4 | 3506720 | 603432.0108 | 498.5053 | bm4 |
| 5 | 3506481 | 603349.5677 | 509.0785 | bm5 |
| 6 | 3506474 | 603351.7009 | 509.2715 | bm6 |
| 7 | 3505518 | 602965.2666 | 526.874 | bm7 |
| 8 | 3505508 | 602960.5678 | 527.5011 | bm8 |
| 9 | 3505298 | 601883.7787 | 587.3362 | bm9 |
| 10 | 3505302 | 601874.053 | 587.4602 | bm10 |
| 11 | 3504768 | 601476.5582 | 637.2825 | bm11 |
| 12 | 3504761 | 601462.5573 | 639.0705 | bm12 |
| 13 | 3504601 | 600188.3773 | 796.6532 | bm13 |
| 14 | 3504605 | 600176.9485 | 797.0392 | bm14 |
| 15 | 3504303 | 599577.5329 | 839.3237 | bm16 |
| 16 | 3504314 | 599548.0446 | 840.0907 | bm15 |
| 17 | 3503618 | 600053.1999 | 849.4278 | bm17 |
| 18 | 3503614 | 600061.2469 | 848.6668 | bm18 |
| 19 | 3503618 | 600053.1824 | 849.3922 | bm19 |
| 20 | 3503613 | 600061.2604 | 848.6312 | bm20 |

2.6.6 RRD_DIK_R6

Restoration & Rehabilitation of Main Parwara jalal Khell Road (Darazinda)

2.6.6.1 Location Map

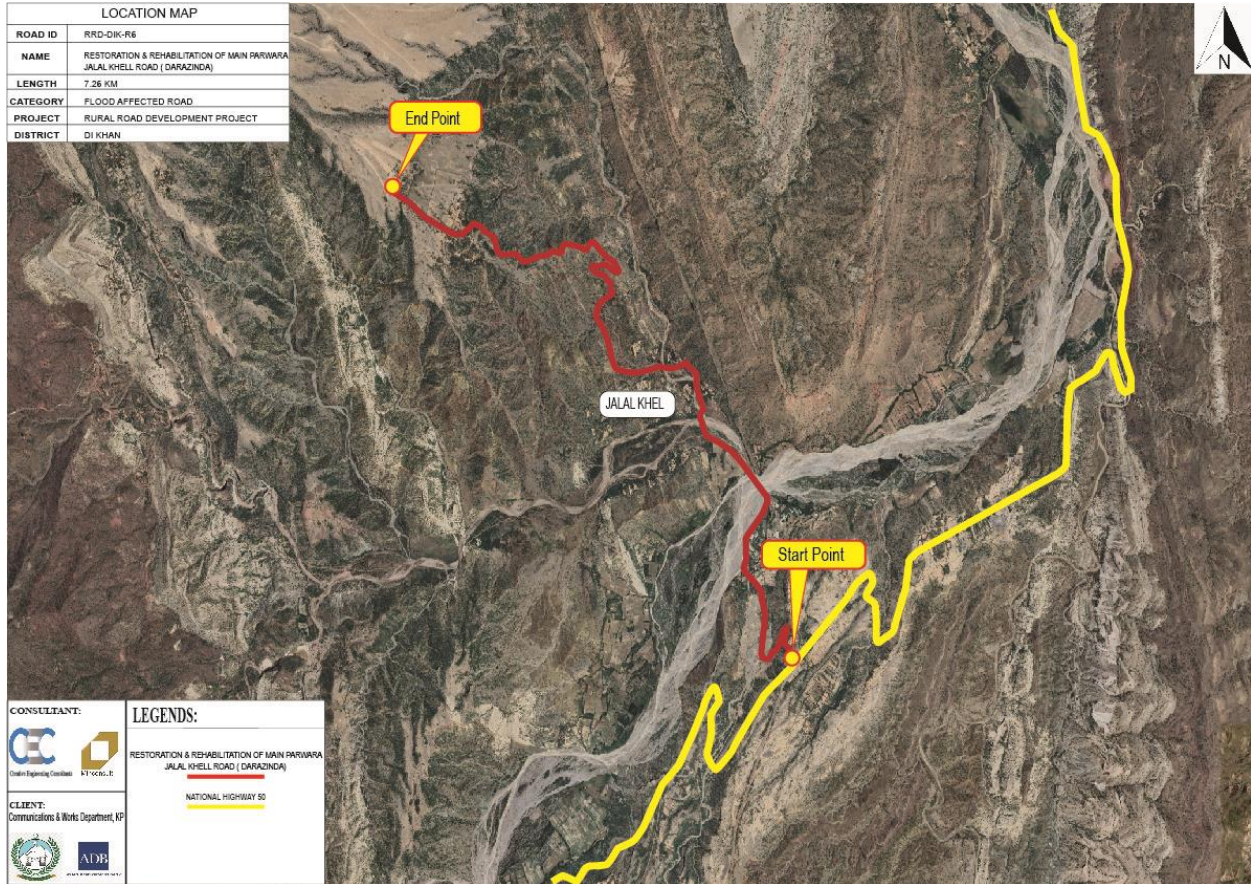


Figure 2.6.6 Location Map RRD_DIK_R6

2.6.6.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.6 RRD_DIK_R6 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 607967.782 | 3490760.01 | 761.3738 | set_base |
| 2 | 607488.7382 | 3491031.398 | 764.7754 | bm14 |
| 3 | 607483.8469 | 3491037.97 | 764.7354 | bm13 |
| 4 | 608224.3887 | 3490808.198 | 750.4126 | cp1 |
| 5 | 608214.3782 | 3490813.69 | 751.1646 | cp2 |
| 6 | 608368.2328 | 3490621.825 | 732.366 | bm12 |
| 7 | 608382.5354 | 3490613.68 | 730.977 | bm11 |
| 8 | 608876.3048 | 3490647.238 | 679.799 | cp3 |
| 9 | 608883.8676 | 3490654.366 | 679.613 | cp4 |
| 10 | 609198.9617 | 3490683.108 | 643.11 | cp5 |
| 11 | 609205.5084 | 3490671.481 | 641.669 | cp6 |
| 12 | 609162.3707 | 3490652.662 | 651.1747 | cp5 |
| 13 | 609157.654 | 3490652.411 | 651.5967 | cp6 |
| 14 | 609176.2934 | 3490211.402 | 570.0193 | bm7 |
| 15 | 609182.5857 | 3490186.271 | 569.6223 | bm8 |
| 16 | 609658.4967 | 3489840.473 | 558.5725 | bm9 |
| 17 | 609676.5914 | 3489847.741 | 557.8175 | bm10 |
| 18 | 610453.2368 | 3488401.586 | 549.9184 | cp7 |
| 19 | 610448.9086 | 3488402.308 | 549.8924 | cp8 |

2.6.7 RRD_DIK_R7

Restoration & Rehabilitation of Main Daraban road to Kot Wali dad via Garah Khan

2.6.7.1 Location Map

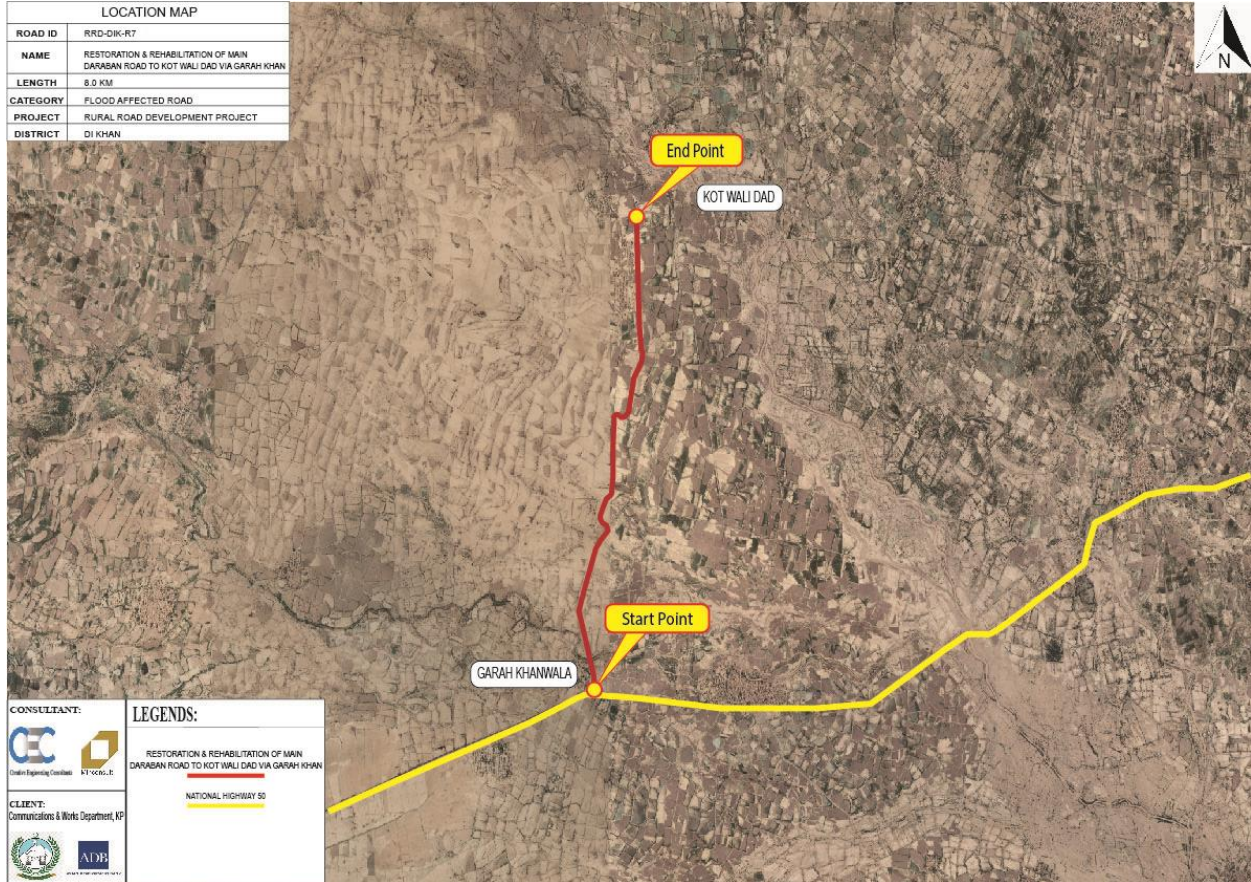


Figure 2.6.7 Location Map RRD_DIK_R7

2.6.7.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.7 RRD_DIK_R7 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|-------------|----------------|-----------------|------------------|--------------------|
| 1 | 639826.7602 | 3520159.839 | 157.9816 | bm1 |
| 2 | 639833.2797 | 3520172.896 | 157.9706 | bm2 |
| 3 | 640354.5856 | 3522128.015 | 158.8934 | bm3 |
| 4 | 640362.7026 | 3522146.197 | 158.7834 | bm4 |
| 5 | 640420.6238 | 3524656.679 | 159.3274 | bm5 |
| 6 | 640416.6066 | 3524649.919 | 159.4284 | bm6 |

2.6.8 RRD_DIK_NR4

From Indus highway to dhok Rabnawaz and Chah Hussain (9.2 KM)

2.6.8.1 Location Map

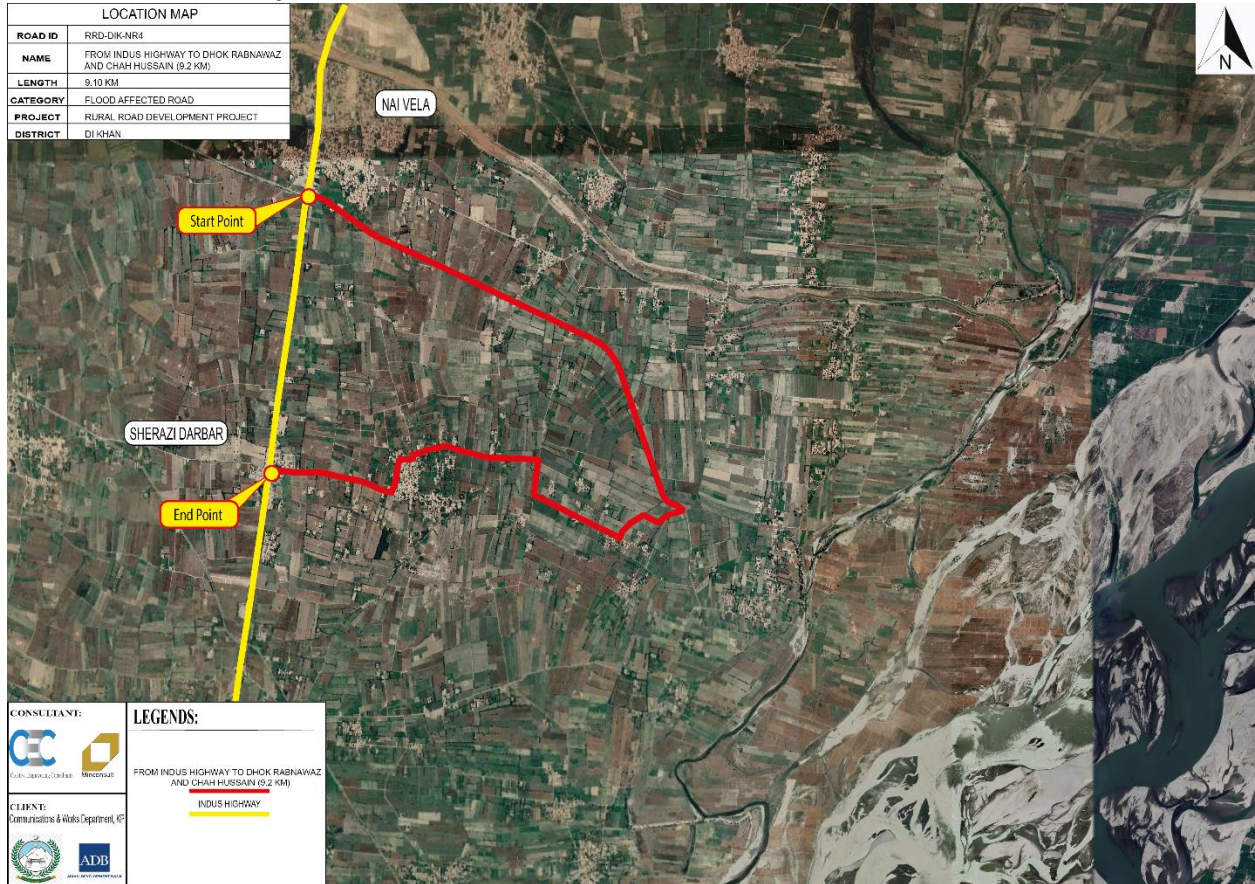


Figure 2.6.8 Location Map RRD_DIK_NR4

2.6.8.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.8 RRD_DIK_NR4 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 668551.777 | 3500204.663 | 171.171 | BM1 |
| 2 | 668549.755 | 3500199.928 | 171.207 | BM2 |
| 3 | 668951.288 | 3500018.496 | 170.991 | BM3 |
| 4 | 668947.257 | 3500016.898 | 170.976 | BM4 |
| 5 | 669284.417 | 3499851.133 | 170.423 | BM5 |
| 6 | 669280.514 | 3499851.993 | 170.265 | BM6 |
| 8 | 669462.566 | 3499782.186 | 170.542 | BM8 |
| 9 | 670323.08 | 3499455.4 | 168.843 | BM9 |
| 10 | 670326.314 | 3499464.398 | 168.57 | BM10 |
| 11 | 670481.738 | 3499391.164 | 167.671 | BM11 |
| 12 | 670488.045 | 3499388.454 | 167.646 | BM12 |
| 13 | 670942.701 | 3499216.406 | 166.84 | BM13 |
| 14 | 670946.773 | 3499212.457 | 166.869 | BM14 |
| 15 | 671634.398 | 3498441.706 | 165.772 | BM15 |
| 15 | 671634.394 | 3498441.741 | 165.785 | BM15 |
| 16 | 671634.01 | 3498439.304 | 165.791 | BM16 |
| 16 | 671634.021 | 3498439.293 | 165.807 | BM16 |
| 17 | 671793.387 | 3498060.98 | 164.893 | BM17 |
| 18 | 671795.278 | 3498056.059 | 164.882 | BM18 |
| 19 | 671682.542 | 3497758.057 | 164.075 | BM19 |
| 20 | 671680.368 | 3497756.271 | 164 | BM20 |
| 21 | 671544.366 | 3497674.679 | 163.885 | BM21 |
| 22 | 671546.115 | 3497673.429 | 163.871 | BM22 |
| 23 | 671451.201 | 3497578.982 | 163.631 | BM23 |
| 24 | 671449.03 | 3497578.386 | 163.605 | BM24 |
| 25 | 670206.244 | 3498192.138 | 167.666 | BM25 |
| 26 | 670205.618 | 3498186.43 | 167.684 | BM26 |
| 27 | 669983.208 | 3498231.241 | 168.312 | BM27 |
| 28 | 669983.131 | 3498237.119 | 168.352 | BM28 |
| 30 | 669345.747 | 3497898.024 | 168.802 | BM30 |
| 31 | 668810.347 | 3498016.645 | 169.053 | BM31 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 32 | 668811.904 | 3498024.736 | 169.033 | BM32 |
| 33 | 668504.27 | 3498040.13 | 169.365 | BM33 |
| 33 | 668504.275 | 3498040.138 | 169.363 | BM33 |
| 34 | 668503.539 | 3498031.786 | 169.322 | BM34 |
| 35 | 668232.153 | 3498049.183 | 170.112 | BM35 |
| 36 | 668230.416 | 3498045.001 | 170.196 | BM36 |

2.6.9 RRD_DIK_NR5

Main chashma road, Thatthal Adda to Phahar pur old canal road Via Mubarak shah & Thatha

2.6.9.1 Location Map

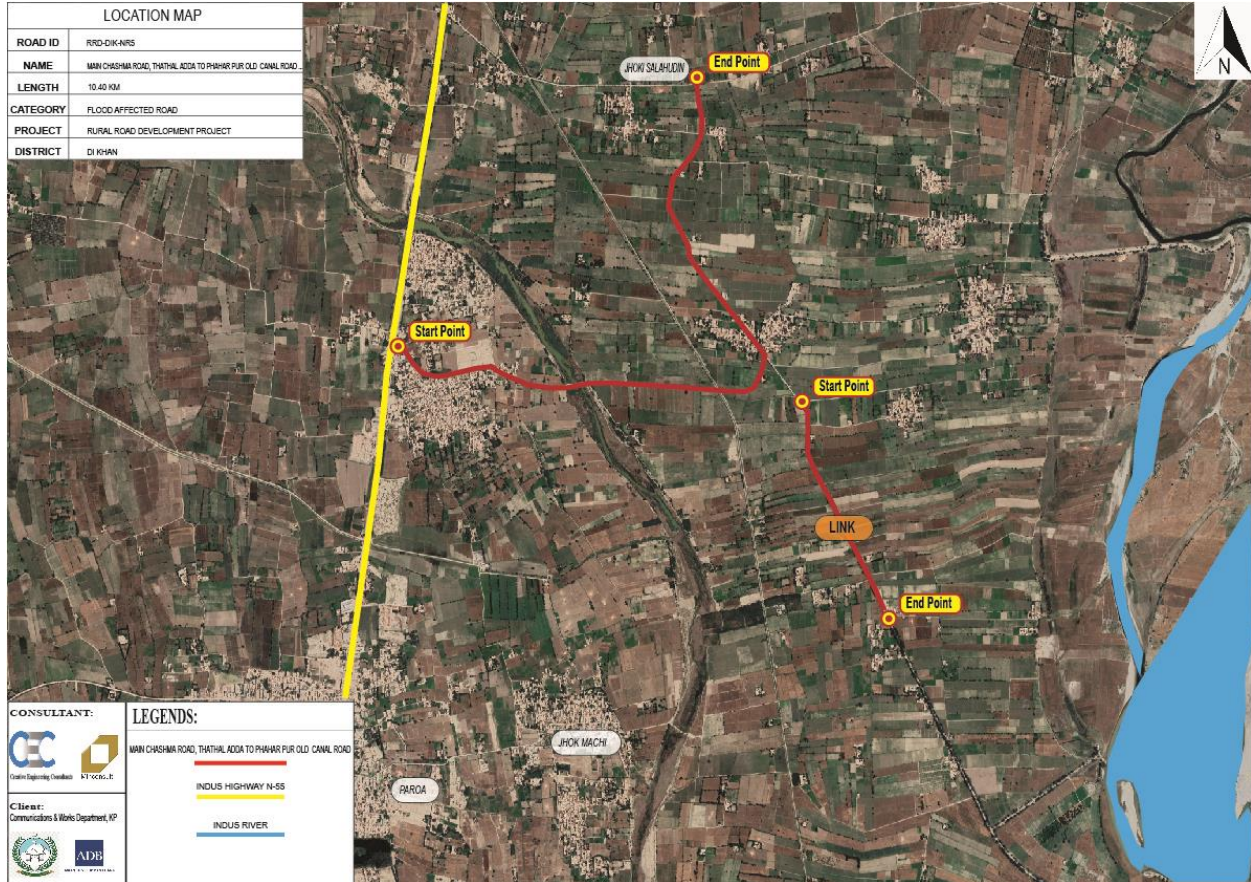


Figure 2.6.9 Location Map RRD_DIK_NR5

2.6.9.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.9 RRD_DIK_NR5 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 679463.38 | 3545015.47 | 183.511 | BM1 |
| 2 | 679465.467 | 3545014.603 | 183.53 | BM2 |
| 3 | 678548.644 | 3545372.941 | 184.349 | BM3 |
| 4 | 678552.417 | 3545380.843 | 184.11 | BM4 |
| 5 | 682796.868 | 3544229.239 | 181.672 | BM5 |
| 6 | 682802.686 | 3544227.682 | 181.946 | BM6 |
| 7 | 683163.852 | 3543606.537 | 181.764 | BM7 |
| 8 | 683159.246 | 3543608.326 | 181.993 | BM8 |
| 9 | 680125.107 | 3544852.151 | 182.765 | BM9 |
| 10 | 680129.105 | 3544850.949 | 182.785 | BM10 |
| 11 | 680571.136 | 3544751.353 | 182.245 | BM11 |
| 12 | 680575.4 | 3544746.673 | 182.57 | BM12 |
| 13 | 681879.754 | 3544389.188 | 182.455 | BM13 |
| 14 | 681883.882 | 3544389.103 | 182.465 | BM14 |
| 15 | 682796.845 | 3544229.249 | 181.659 | BM15 |
| 16 | 682802.707 | 3544227.682 | 181.939 | BM16 |
| 17 | 683410.494 | 3543176.637 | 181.654 | BM17 |
| 18 | 683405.162 | 3543180.615 | 182.026 | BM18 |
| 19 | 684613.776 | 3541077.558 | 181.415 | BM19 |
| 20 | 684616.965 | 3541074.684 | 181.382 | BM20 |
| 21 | 684800.728 | 3540752.486 | 180.467 | BM21 |
| 22 | 684802.05 | 3540750.436 | 180.47 | BM22 |
| 23 | 684899.529 | 3540376.032 | 181.651 | BM23 |
| 24 | 684899.062 | 3540381.868 | 181.661 | BM24 |
| 25 | 683833.982 | 3542432.573 | 181.657 | BM25 |
| 26 | 683839.134 | 3542428.473 | 181.508 | BM26 |
| 27 | 684145.143 | 3541893.468 | 181.543 | BM27 |
| 28 | 684138 | 3541910.752 | 181.208 | BM28 |
| 29 | 685401.064 | 3539784.568 | 181.053 | BM29 |
| 30 | 685396.956 | 3539785.72 | 181.073 | BM30 |
| 31 | 685852.6 | 3539655.298 | 180.714 | BM31 |
| 32 | 685856.847 | 3539654.001 | 180.752 | BM32 |
| 33 | 685926.083 | 3539623.765 | 180.753 | BM33 |

2.6.10 RRD_DIK_NR6

From chashma road to village Musa khar and Jabbar wala (5.05 KM)

2.6.10.1 Location Map

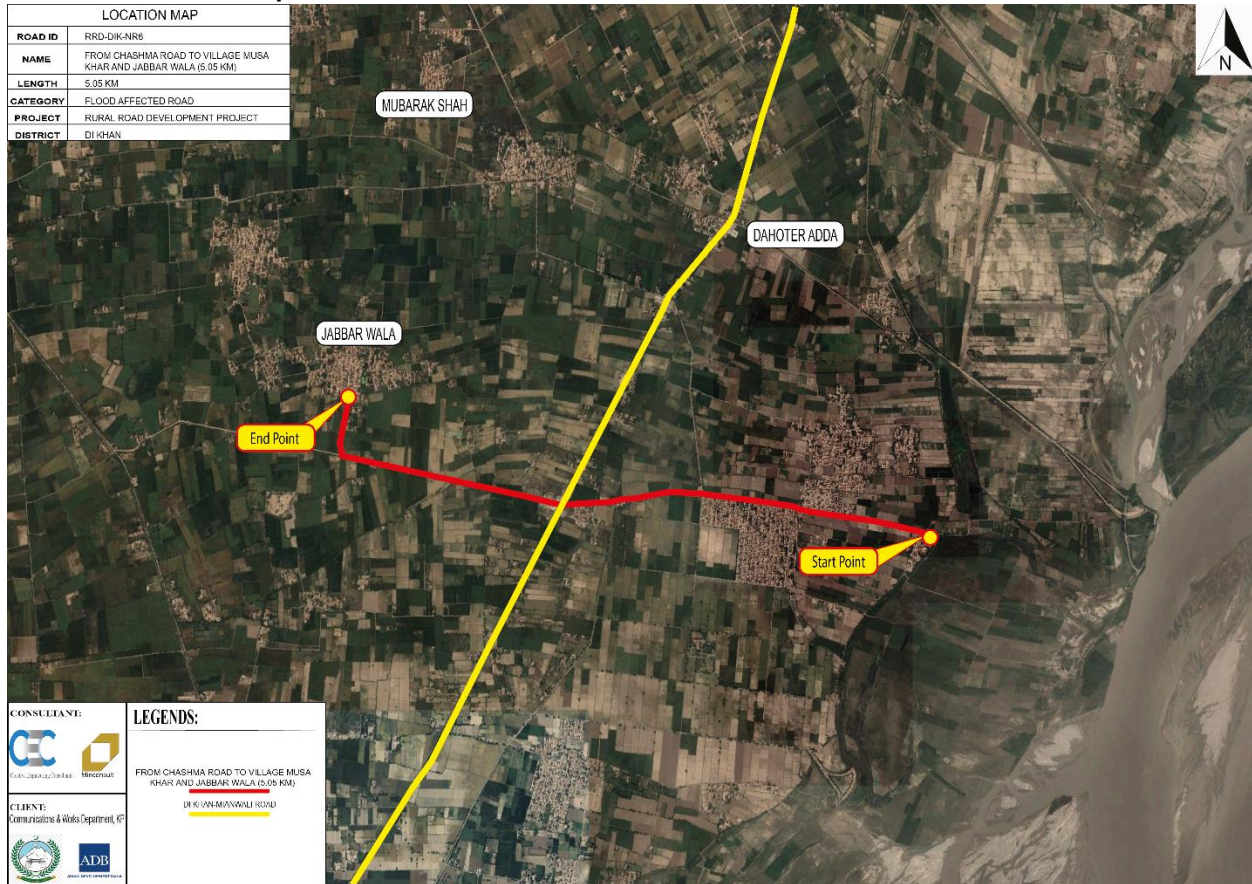


Figure 2.6.10 Location Map RRD_DIK_NR6

2.6.10.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.10 RRD_DIK_NR6 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 683449.49 | 3538904.873 | 134.8 | BM-1 |
| 2 | 683424.191 | 3538794.024 | 134.162 | BM-2 |
| 3 | 685038.279 | 3538257.997 | 133.182 | BM-3 |
| 4 | 685131.573 | 3538235.589 | 133.704 | BM-4 |
| 5 | 687972.742 | 3538108.449 | 131.296 | BM-8 |
| 6 | 687887.999 | 3538122.882 | 131.686 | BM-7 |
| 7 | 686216.933 | 3538337.146 | 132.677 | BM-6 |
| 8 | 685996.466 | 3538345.416 | 132.414 | BM-5 |

2.6.11 RRD_DIK_NR7

Awan Nala Civil Minor road (10.5 KM)

2.6.11.1 Location Map

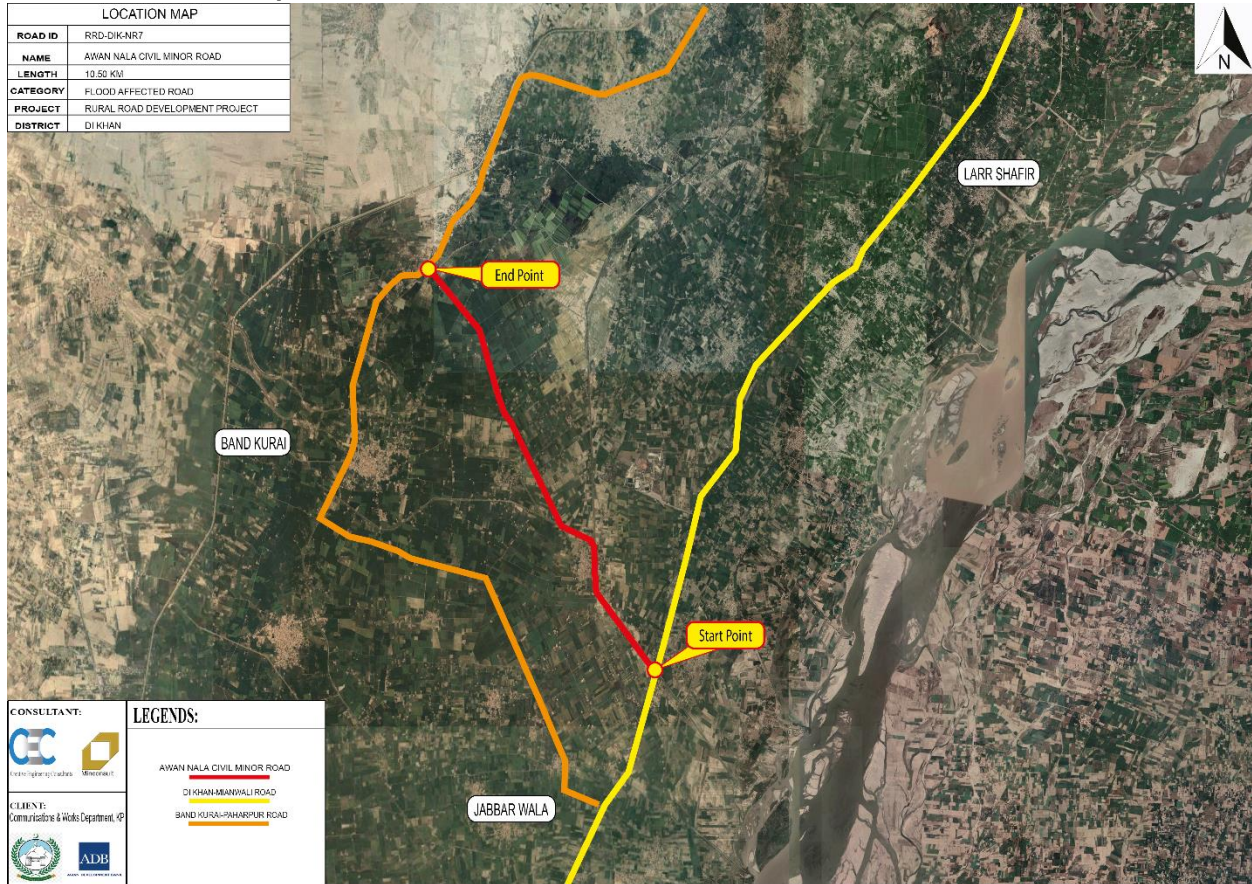


Figure 2.6.11 Location Map RRD_DIK_NR7

2.6.11.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.11 RRD_DIK_NR7 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 686098.402 | 3543520.049 | 178.035 | BM3 |
| 2 | 685892.661 | 3543732.459 | 178.051 | BM5 |
| 3 | 685786.974 | 3543844.194 | 178.477 | BM4 |
| 4 | 685639.405 | 3544045.712 | 177.834 | BM5A |
| 5 | 685630.317 | 3544044.759 | 177.399 | BM6 |
| 6 | 685609.705 | 3544344.828 | 177.396 | BM8 |
| 7 | 685609.438 | 3544349.282 | 177.403 | BM7 |
| 8 | 687168.542 | 3542417.766 | 177.01 | BM1 |
| 9 | 687175.382 | 3542408.791 | 177.015 | BM2 |
| 10 | 687175.364 | 3542408.794 | 177.011 | BM2 |
| 11 | 685502.352 | 3545029.871 | 177.266 | BM9 |
| 12 | 685505.461 | 3545053.1 | 177.328 | BM10 |
| 13 | 683514.808 | 3547240.847 | 177.15 | BM17 |
| 14 | 683512.732 | 3547245.348 | 177.369 | BM18 |
| 15 | 683402.265 | 3547422.422 | 177.923 | BM19 |
| 16 | 683399.735 | 3547425.524 | 177.897 | BM20 |
| 17 | 683153.088 | 3547766.44 | 178.227 | BM22 |
| 18 | 683153.149 | 3547771.781 | 178.24 | BM21 |
| 19 | 682758.257 | 3548753.806 | 178.3 | BM23 |
| 20 | 682756.959 | 3548757.694 | 178.315 | BM24 |
| 21 | 682561.286 | 3549261.941 | 178.315 | BM25 |
| 22 | 682560.101 | 3549265.399 | 178.28 | BM26 |
| 23 | 684727.622 | 3545344.85 | 177.371 | BM11 |
| 24 | 684723.173 | 3545356.568 | 177.341 | BM12 |
| 25 | 684369.804 | 3545912.7 | 177.46 | BM13 |
| 26 | 684364.253 | 3545908.273 | 176.684 | BM14 |
| 27 | 684120.143 | 3546293.463 | 177.215 | BM15 |
| 28 | 684119.708 | 3546296.854 | 177.231 | BM16 |
| 29 | 681575.925 | 3550230.96 | 178.716 | BM28 |
| 30 | 681578.802 | 3550228.127 | 178.709 | BM27 |
| 31 | 681354.639 | 3550444.163 | 178.73 | BM31 |
| 32 | 681357.483 | 3550441.717 | 178.744 | BM30 |

2.6.12 RRD_DIK_NR8

From CRBC Canal to Diyal Pahar pur canal road & Rehmat Abad Link(12.56 KM)

2.6.12.1 Location Map

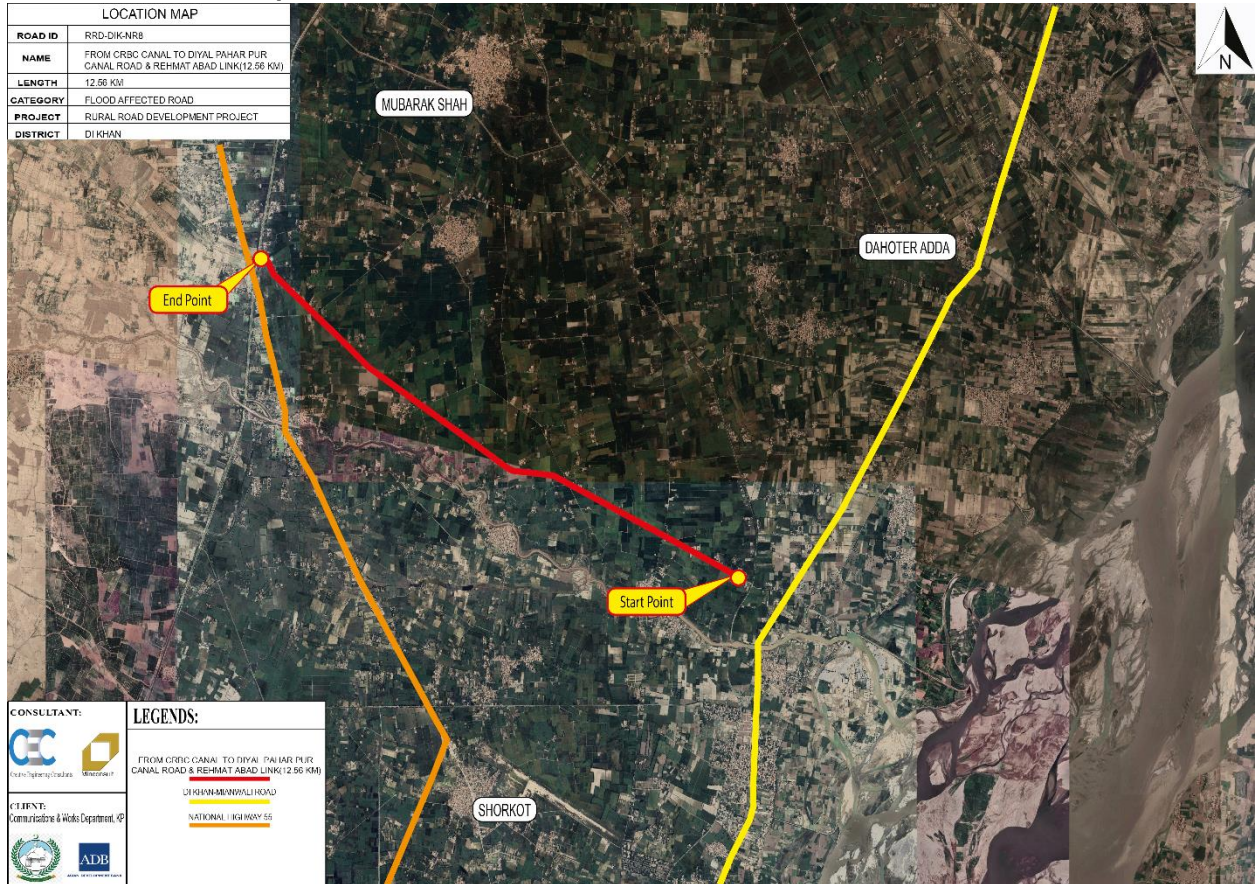


Figure 2.6.12 Location Map RRD_DIK_NR8

2.6.12.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.12 RRD_DIK_NR8 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 673791.241 | 3539993.191 | 138.33 | bm1 |
| 2 | 673808.4881 | 3539986.814 | 138.163 | bm2 |
| 3 | 675438.8587 | 3538657.028 | 135.3728 | bm3 |
| 4 | 675447.2391 | 3538648.221 | 135.4188 | bm4 |
| 5 | 676682.1616 | 3537839.899 | 135.3398 | bm6 |
| 6 | 676674.0235 | 3537839.986 | 135.4108 | bm5 |
| 7 | 679579.8279 | 3536604.348 | 132.6691 | bm10 |
| 8 | 679585.4761 | 3536606.926 | 132.9781 | bm9 |
| 9 | 674222.3909 | 3537924.286 | 137.0952 | bm13 |
| 10 | 674231.2435 | 3537923.154 | 136.8462 | bm14 |

2.6.13 RRD_DIK_NR9

Pusha Pul To Garrah Rehman

2.6.13.1 Location map

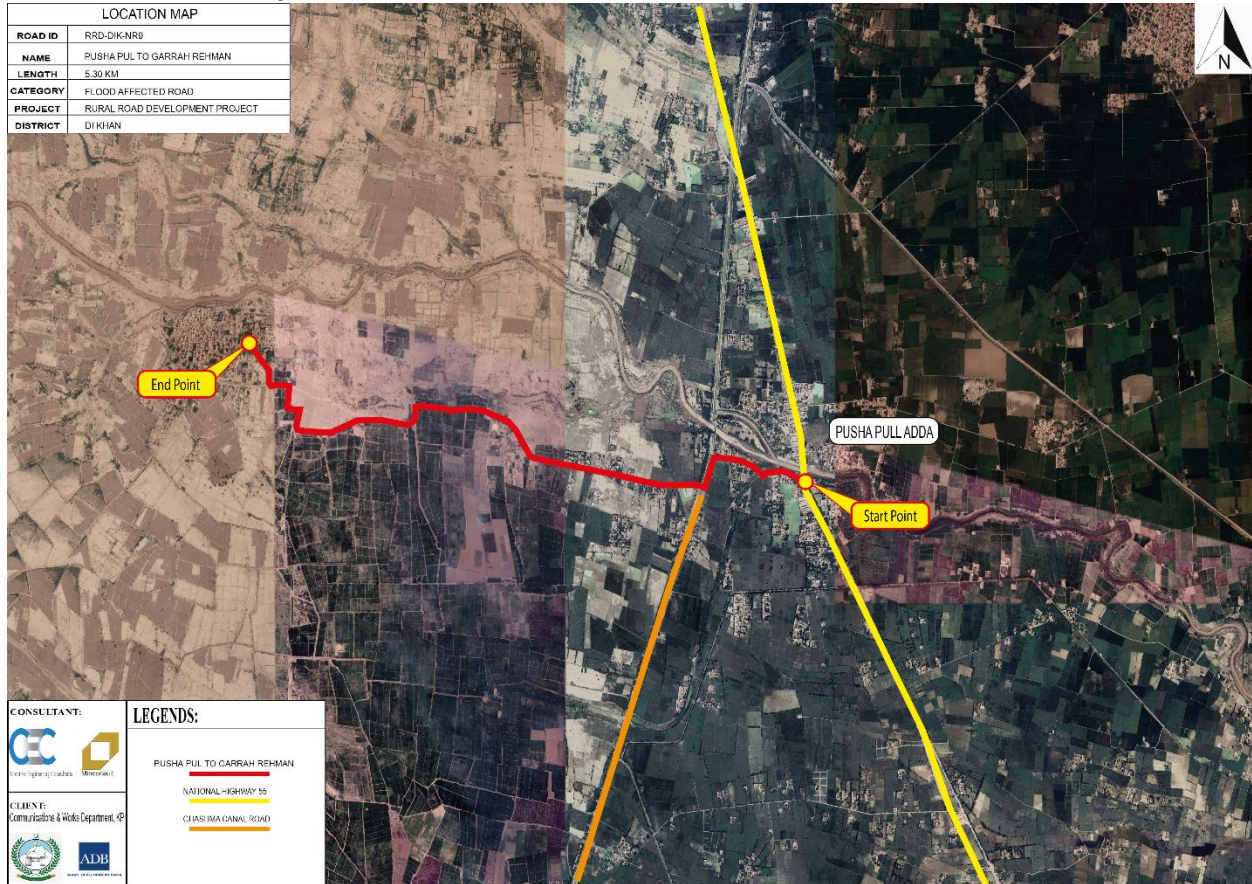


Figure 2.6.13 Location Map RRD_DIK_NR9

2.6.13.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.13 RRD_DIK_NR9 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 672367.83 | 3537509.528 | 136.9951 | bm1 |
| 2 | 672370.4157 | 3537519.842 | 137.0301 | bm2 |
| 3 | 671383.9406 | 3537864.943 | 137.7409 | bm3 |
| 4 | 671376.2356 | 3537866.597 | 137.7919 | bm4 |
| 5 | 669829.4248 | 3538239.068 | 139.908 | bm 7 |
| 6 | 669841.6959 | 3538240.552 | 139.921 | bm8 |

2.6.14 RRD_DIK_NR10

Main N-55 road to Sadra Sharif Road

2.6.14.1 Location Map

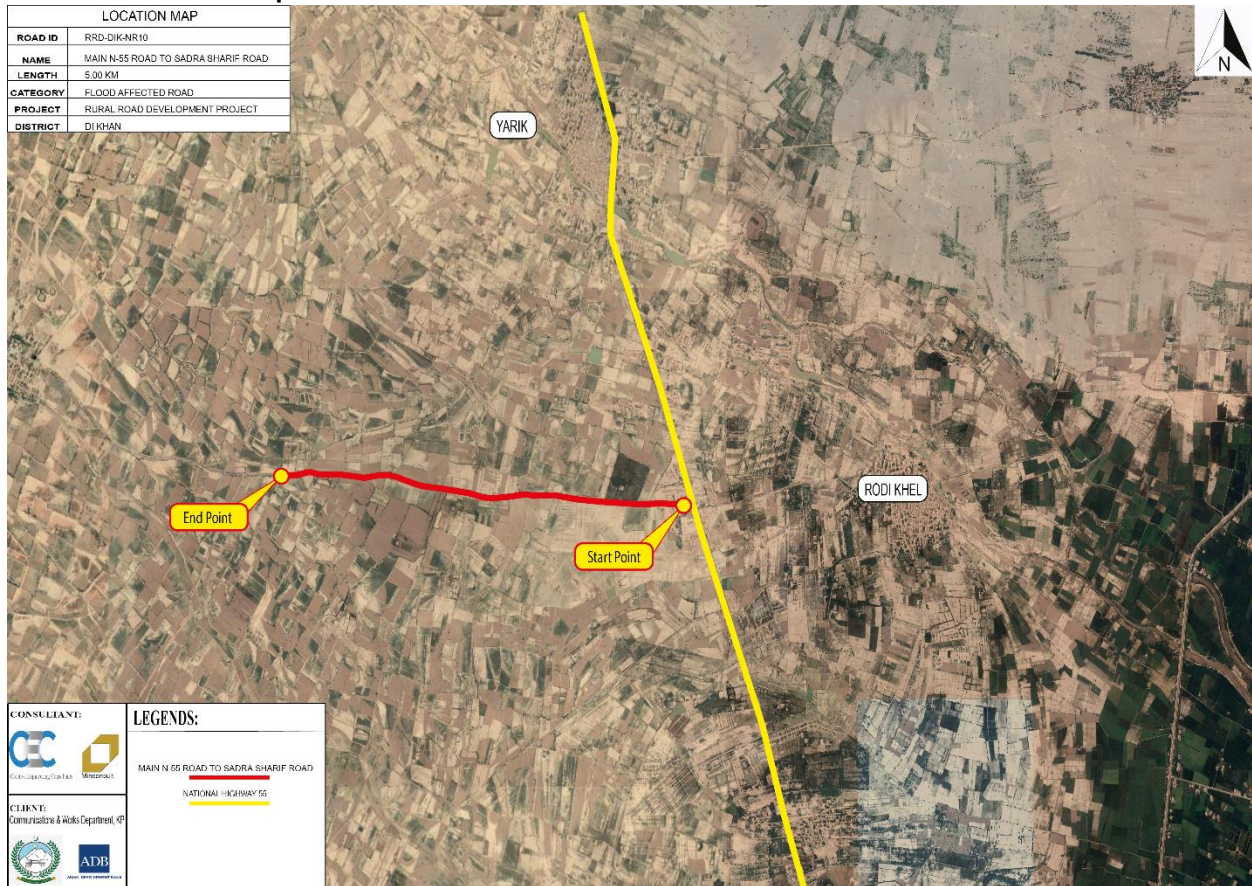


Figure 2.6.14 Location Map RRD_DIK_NR10

2.6.14.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.6.14 RRD_DIK_NR10 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 670102.5212 | 3549838.058 | 147.309 | bm1 |
| 2 | 670092.9825 | 3549833.26 | 147.254 | bm2 |
| 3 | 669044.5214 | 3549844.794 | 148.078 | bm4 |
| 4 | 669063.6535 | 3549846.491 | 148.071 | bm3 |
| 5 | 667840.0361 | 3549871.621 | 149.6987 | bm5 |
| 6 | 667840.1145 | 3549871.554 | 149.9257 | bm5 |
| 7 | 667836.9414 | 3549876.052 | 149.9167 | bm6 |
| 8 | 666248.8649 | 3550061.921 | 151.5159 | bm7 |
| 9 | 666242.5488 | 3550055.607 | 151.4069 | bm8 |
| 10 | 665097.7545 | 3550024.013 | 152.9109 | bm9 |
| 11 | 665105.2437 | 3550029.23 | 152.8279 | bm10 |
| 12 | 670102.5212 | 3549838.058 | 147.309 | bm1 |
| 13 | 670092.9825 | 3549833.26 | 147.254 | bm2 |
| 14 | 669044.5214 | 3549844.794 | 148.078 | bm4 |
| 15 | 669063.6535 | 3549846.491 | 148.071 | bm3 |
| 16 | 667840.0361 | 3549871.621 | 149.6987 | bm5 |
| 17 | 667840.1145 | 3549871.554 | 149.9257 | bm5 |
| 18 | 667836.9414 | 3549876.052 | 149.9167 | bm6 |
| 19 | 666248.8649 | 3550061.921 | 151.5159 | bm7 |
| 20 | 666242.5488 | 3550055.607 | 151.4069 | bm8 |
| 21 | 665097.7545 | 3550024.013 | 152.9109 | bm9 |
| 22 | 665105.2437 | 3550029.23 | 152.8279 | bm10 |

2.6.15 RRD_DIK_NR12

Jindi Sewaag Road

2.6.15.1 Location Map

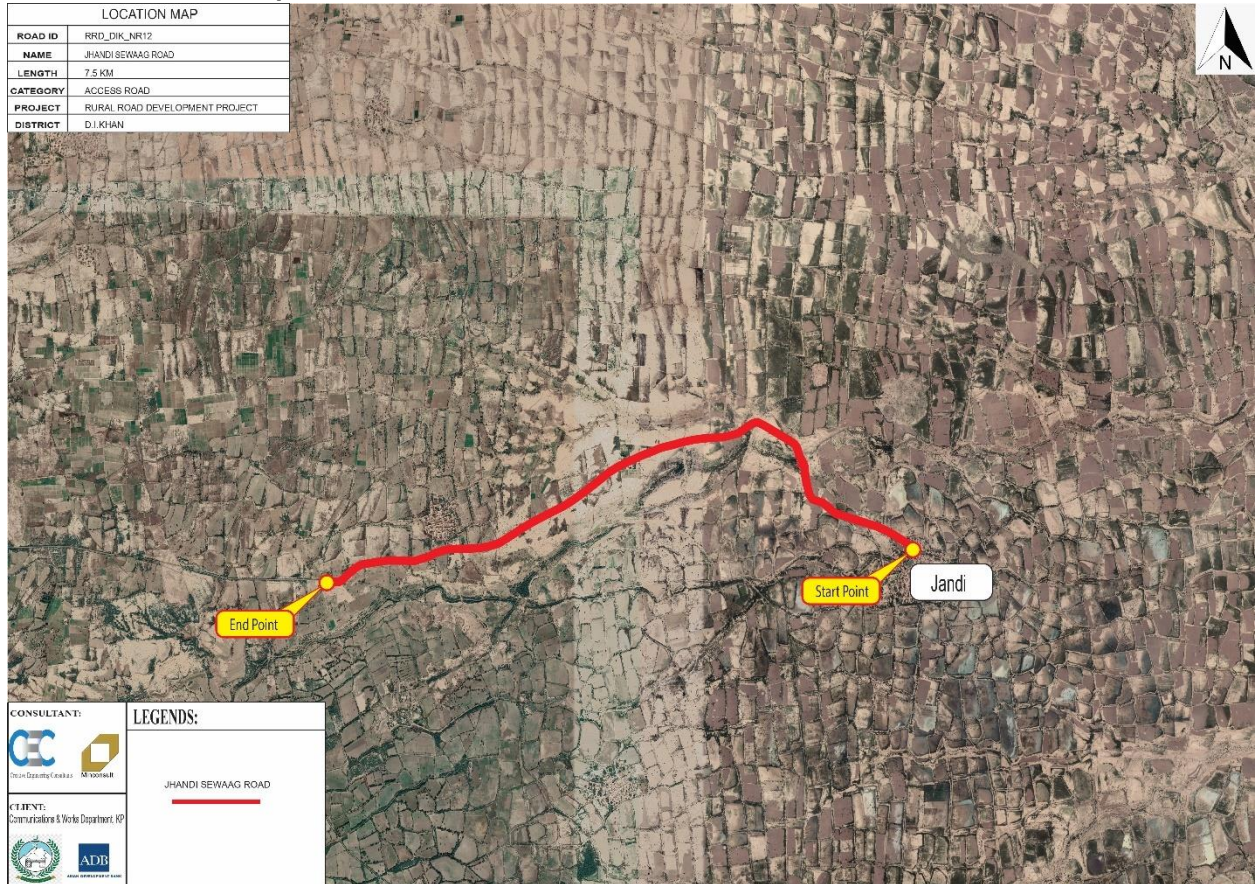


Figure 2.6.15 Location Map RRD_DIK_NR12

2.6.15.2 Traverse Points

The Traverse Point coordinates, and description are as follows: -

Table 2.6.15 RRD_DIK_NR12 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|---------|-------------|-----------|-------------|
| 1 | 3507616 | 604177.447 | 474.4258 | bm1 |
| 2 | 3507604 | 604165.4693 | 475.1058 | bm2 |
| 3 | 3506741 | 603434.7115 | 497.5493 | bm3 |
| 4 | 3506720 | 603432.0108 | 498.5053 | bm4 |
| 5 | 3506481 | 603349.5677 | 509.0785 | bm5 |
| 6 | 3506474 | 603351.7009 | 509.2715 | bm6 |
| 7 | 3505518 | 602965.2666 | 526.874 | bm7 |
| 8 | 3505508 | 602960.5678 | 527.5011 | bm8 |
| 9 | 3505298 | 601883.7787 | 587.3362 | bm9 |
| 10 | 3505302 | 601874.053 | 587.4602 | bm10 |
| 11 | 3504768 | 601476.5582 | 637.2825 | bm11 |
| 12 | 3504761 | 601462.5573 | 639.0705 | bm12 |
| 13 | 3504601 | 600188.3773 | 796.6532 | bm13 |
| 14 | 3504605 | 600176.9485 | 797.0392 | bm14 |
| 15 | 3504303 | 599577.5329 | 839.3237 | bm16 |
| 16 | 3504314 | 599548.0446 | 840.0907 | bm15 |
| 17 | 3503618 | 600053.1999 | 849.4278 | bm17 |
| 18 | 3503614 | 600061.2469 | 848.6668 | bm18 |
| 19 | 3503618 | 600053.1824 | 849.3922 | bm19 |
| 20 | 3503613 | 600061.2604 | 848.6312 | bm20 |

2.6.16 RRD_DIK_NR14

Giloti Road

2.6.16.1 Location Map

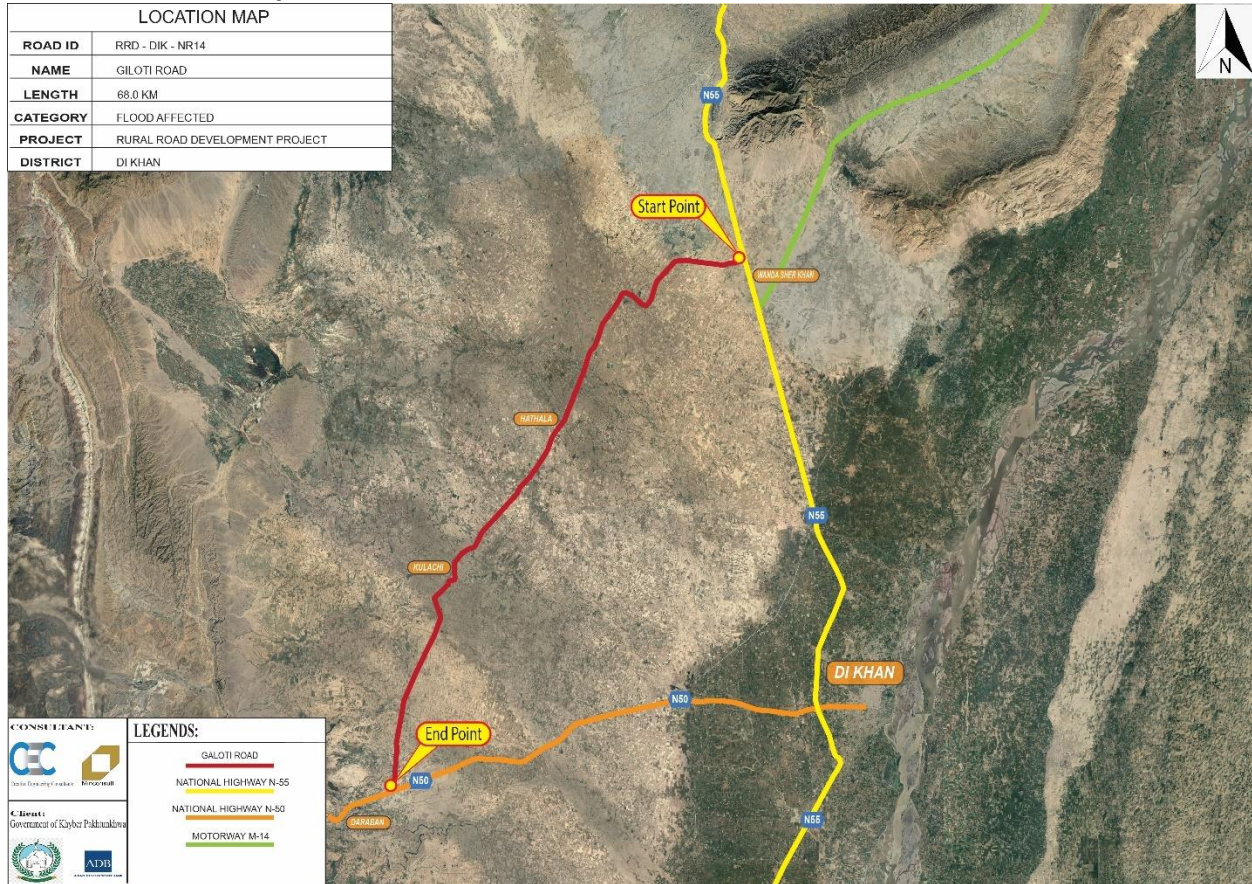


Figure 2.6.16 Location Map RRD_DIK_NR14

2.6.16.2 Traverse Points

The Traverse Point coordinates, and description are as follows: -

Table 2.6.16 RRD_DIK_NR14 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 636380.867 | 3532441.22 | 220.839 | BM1 |
| 2 | 636372.998 | 3532446.297 | 220.792 | BM2 |
| 3 | 635757.644 | 3532868.736 | 220.685 | BM3 |
| 4 | 635767.577 | 3532871.383 | 220.696 | BM4 |
| 5 | 635109.1 | 3533390.17 | 221.428 | BM5 |
| 6 | 635107.549 | 3533399.246 | 221.444 | BM6 |
| 7 | 634765.678 | 3533525.946 | 221.595 | BM7 |
| 8 | 634757.107 | 3533520.258 | 221.59 | BM8 |
| 9 | 634380.932 | 3533657.69 | 221.9 | BM9 |
| 10 | 634379.231 | 3533649.97 | 221.916 | BM10 |
| 11 | 634133.665 | 3533736.951 | 222.058 | bm11 |
| 12 | 634137.071 | 3533743.959 | 221.979 | bm12 |
| 17 | 633879.767 | 3533815.982 | 222.703 | BM17 |
| 18 | 633879.772 | 3533824.006 | 222.612 | BM18 |
| 19 | 633581.763 | 3533900.113 | 223.804 | BM19 |
| 20 | 633576.113 | 3533910.585 | 223.358 | BM20 |
| 21 | 633310.545 | 3533990.099 | 224.101 | BM21 |
| 22 | 633303.073 | 3533984.392 | 224.435 | BM22 |
| 23 | 632954.867 | 3534104.747 | 224.16 | BM23 |
| 24 | 632953.619 | 3534113.386 | 224.511 | BM24 |
| 25 | 632677.61 | 3534149.419 | 224.738 | BM25 |
| 26 | 632675.52 | 3534141.853 | 224.771 | BM26 |
| 27 | 632370.303 | 3534183.511 | 224.767 | BM27 |
| 28 | 632380.267 | 3534189.269 | 224.769 | BM28 |
| 29 | 632023.083 | 3534233.825 | 225.445 | BM29 |
| 30 | 632019.915 | 3534242.586 | 225.473 | BM30 |
| 31 | 631865.867 | 3534264.689 | 224.869 | bm31 |
| 32 | 631868.083 | 3534256.316 | 225.274 | bm32 |
| 33 | 631129.956 | 3534330.044 | 226.65 | BM33 |
| 34 | 631126.07 | 3534337.847 | 226.44 | BM34 |
| 35 | 630904.098 | 3534415.757 | 226.716 | BM35 |
| 36 | 630909.843 | 3534421.774 | 226.564 | BM36 |

2.7 District Dir Lower

2.7.1 (T-30)

Sar Banda Munjai Top

2.7.1.1 Location Map

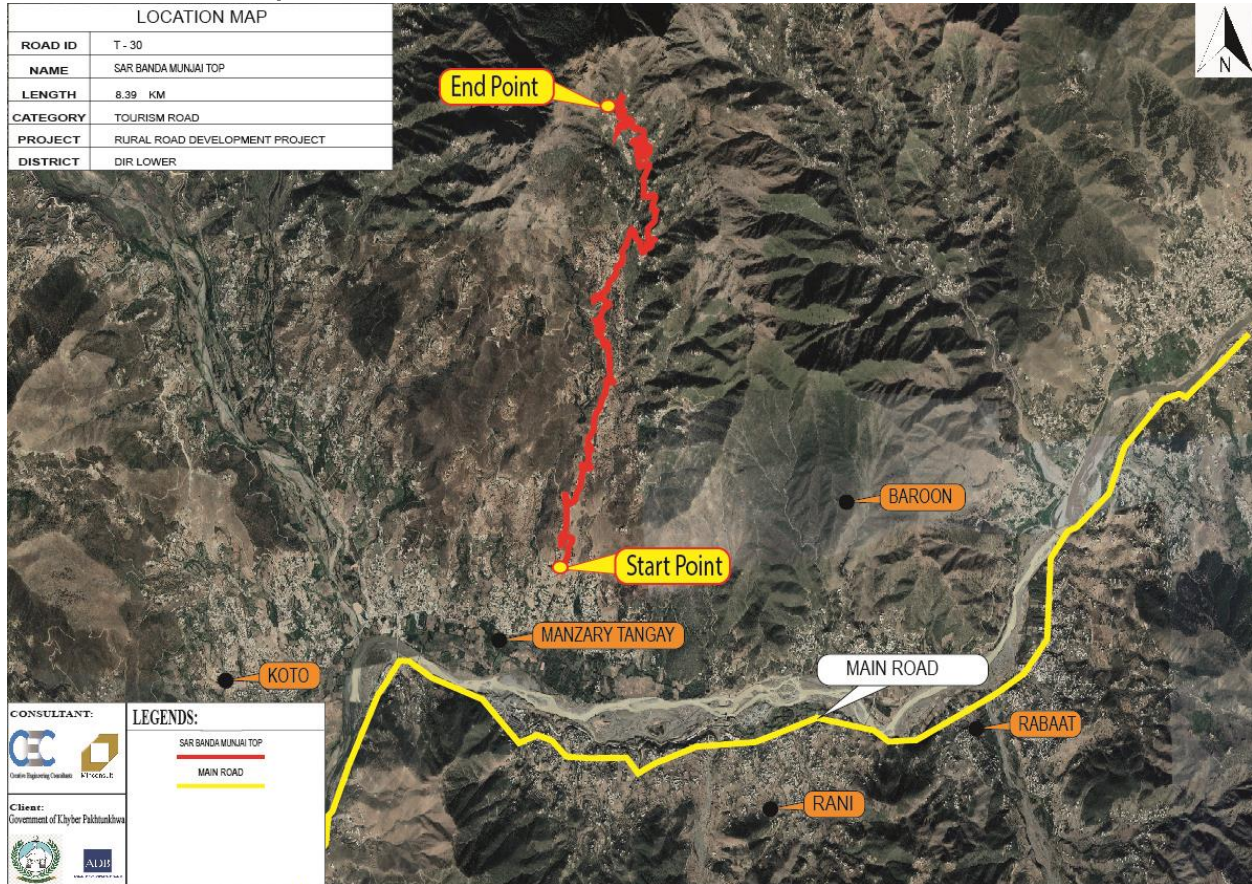


Figure 2.7.1 Location Map T-30

2.7.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.7.1 T-30 Traverse Points

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 1 | 3862984.639 | 764726.700 | 917.436 | BM1 |
| 2 | 3862969.845 | 764752.850 | 906.729 | BM2 |
| 3 | 3862982.777 | 764760.736 | 908.189 | BM3 |
| 4 | 3863003.296 | 764762.512 | 910.559 | BM4 |
| 5 | 3863087.621 | 764806.630 | 919.855 | BM5 |
| 6 | 3863140.857 | 764805.766 | 922.043 | BM6 |
| 7 | 3863208.710 | 764847.145 | 930.619 | BM7 |
| 8 | 3863237.214 | 764843.960 | 931.220 | BM8 |
| 9 | 3863232.420 | 764780.741 | 937.552 | BM9 |
| 10 | 3863162.576 | 764733.386 | 942.135 | BM10 |
| 11 | 3863241.747 | 764719.762 | 949.823 | BM11 |
| 12 | 3863289.622 | 764769.587 | 955.302 | BM12 |
| 13 | 3863353.653 | 764775.074 | 962.689 | BM13 |
| 14 | 3863553.060 | 764778.146 | 988.520 | BM14 |
| 15 | 3863533.006 | 764821.403 | 992.952 | BM15 |
| 16 | 3863563.027 | 764870.629 | 998.902 | BM16 |
| 17 | 3863630.722 | 764887.518 | 1004.317 | BM17 |
| 18 | 3863673.448 | 764920.372 | 1009.591 | BM18 |
| 19 | 3863824.431 | 764944.828 | 1031.410 | BM19 |
| 20 | 3863869.964 | 764929.887 | 1035.687 | BM20 |
| 21 | 3863841.047 | 764966.011 | 1040.030 | BM21 |

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 22 | 3863836.810 | 764993.091 | 1042.028 | BM22 |
| 23 | 3863858.355 | 765003.485 | 1050.452 | BM23 |
| 24 | 3863872.252 | 764983.878 | 1051.629 | BM24 |
| 25 | 3863963.579 | 765027.145 | 1070.998 | BM24 |
| 26 | 3863964.901 | 765016.300 | 1071.017 | BM26 |
| 27 | 3864033.252 | 765016.812 | 1082.452 | BM27 |
| 28 | 3864081.019 | 764988.885 | 1088.376 | BM28 |
| 29 | 3866963.271 | 765305.520 | 1707.089 | BM29 |
| 30 | 3866971.473 | 765299.543 | 1707.101 | BM30 |
| 31 | 3866890.909 | 765296.498 | 1691.281 | BM31 |
| 32 | 3866816.839 | 765242.768 | 1677.883 | BM32 |
| S.No | Northing | Easting | Elevation | Description |
| 33 | 3866842.429 | 765258.541 | 1676.112 | BM33 |
| 34 | 3866863.984 | 765317.783 | 1678.010 | BM34 |
| 35 | 3866896.378 | 765351.401 | 1679.081 | BM35 |
| 36 | 3866850.417 | 765433.896 | 1668.204 | BM36 |
| 37 | 3866839.873 | 765479.519 | 1662.101 | BM37 |
| 38 | 3866819.007 | 765528.573 | 1653.500 | BM38 |
| 39 | 3866729.226 | 765541.419 | 1647.339 | BM39 |
| 40 | 3866674.738 | 765567.070 | 1644.183 | BM40 |
| 41 | 3866664.609 | 765589.738 | 1642.925 | BM41 |
| 42 | 3866639.834 | 765587.531 | 1634.260 | BM42 |
| 43 | 3866621.716 | 765544.435 | 1630.574 | BM43 |
| 44 | 3866713.139 | 765493.572 | 1619.874 | BM44 |

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 45 | 3866721.336 | 765424.212 | 1604.557 | BM45 |
| 46 | 3866660.200 | 765471.198 | 1583.424 | BM46 |
| 47 | 3866541.077 | 765488.306 | 1570.074 | BM47 |
| 48 | 3866527.333 | 765504.951 | 1569.973 | BM48 |
| 49 | 3866529.412 | 765531.402 | 1567.569 | BM49 |
| 50 | 3866407.524 | 765536.125 | 1550.041 | BM50 |
| 51 | 3866271.030 | 765552.524 | 1541.896 | BM51 |
| 52 | 3866259.160 | 765600.564 | 1536.595 | BM52 |
| 53 | 3866149.611 | 765647.870 | 1519.960 | BM53 |
| 54 | 3865981.156 | 765596.967 | 1488.318 | BM54 |
| 55 | 3865899.140 | 765606.871 | 1475.770 | BM55 |
| 56 | 3865880.351 | 765643.822 | 1469.498 | BM56 |
| 57 | 3865835.278 | 765623.548 | 1454.458 | BM57 |
| 58 | 3865836.566 | 765639.422 | 1454.599 | BM58 |
| 59 | 3865797.337 | 765536.543 | 1424.896 | BM59 |
| 60 | 3865865.412 | 765500.668 | 1415.246 | BM60 |
| 61 | 3865875.802 | 765473.474 | 1410.721 | BM61 |
| 62 | 3865859.920 | 765379.037 | 1388.593 | BM62 |
| 63 | 3865716.643 | 765336.969 | 1382.130 | BM63 |
| 64 | 3865586.226 | 765273.388 | 1366.841 | BM64 |
| 65 | 3865531.788 | 765240.331 | 1361.426 | BM65 |
| 66 | 3865493.712 | 765197.190 | 1355.538 | BM66 |
| 67 | 3865372.430 | 765088.004 | 1340.144 | BM67 |
| 68 | 3865319.332 | 765028.329 | 1332.785 | BM68 |

| S.No | Northing | Easting | Elevation | Description |
|------|-------------|------------|-----------|-------------|
| 69 | 3865286.925 | 765174.212 | 1312.349 | BM69 |
| 70 | 3865238.232 | 765030.987 | 1288.289 | BM70 |
| S.No | Northing | Easting | Elevation | Description |
| 71 | 3865209.459 | 765010.495 | 1278.679 | BM71 |
| 72 | 3864144.224 | 765021.530 | 1095.386 | BM72 |
| 73 | 3864174.859 | 765050.790 | 1098.921 | BM73 |
| 74 | 3864259.740 | 765051.550 | 1110.007 | BM74 |
| 75 | 3864347.813 | 765084.785 | 1121.557 | BM75 |
| 76 | 3864463.352 | 765143.471 | 1135.159 | BM76 |
| 77 | 3864621.532 | 765178.032 | 1149.942 | BM77 |
| 78 | 3864604.248 | 765243.191 | 1157.202 | BM78 |
| 79 | 3864639.687 | 765227.649 | 1164.013 | BM79 |

2.7.2 DRL-35

Mula Hukam Baba to Sro Gul Khero Shah

2.7.2.1 Location Map

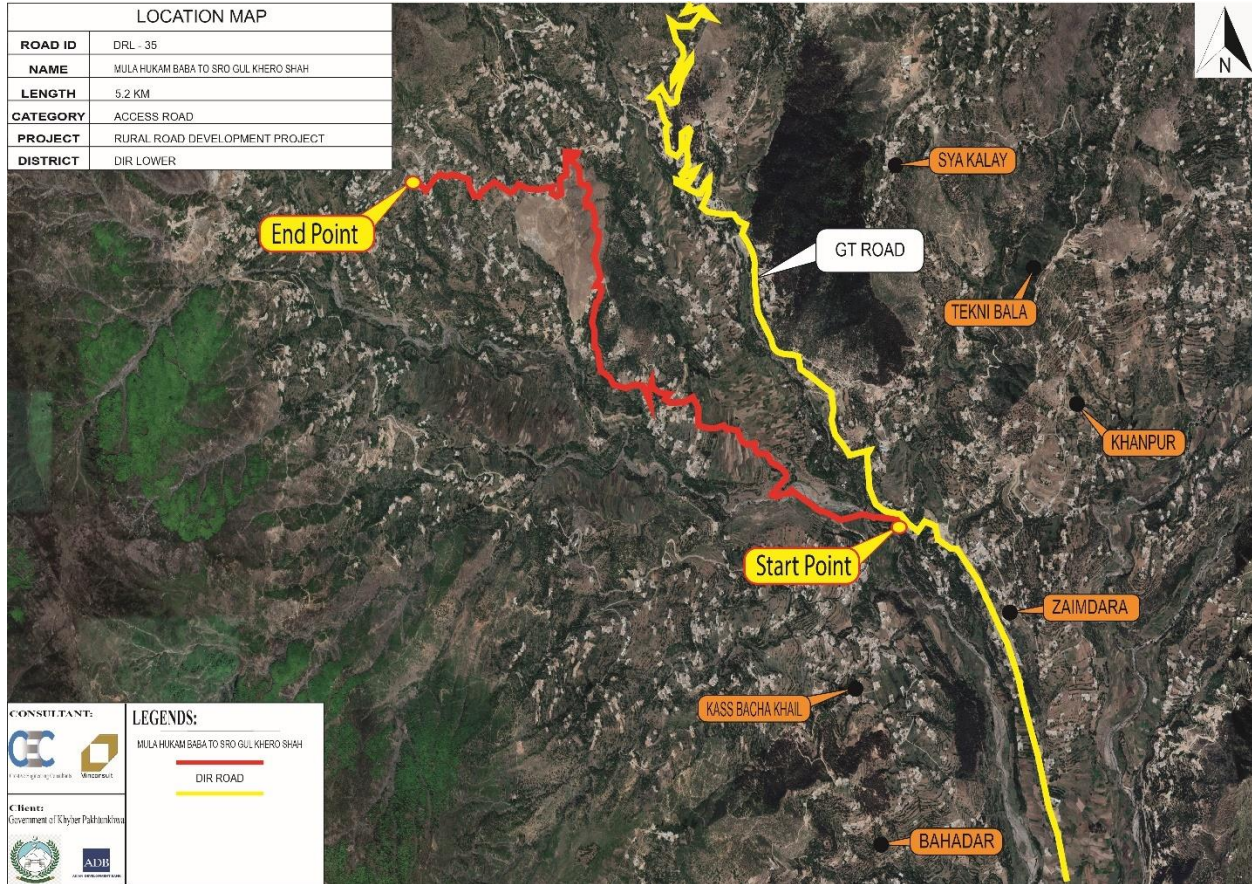


Figure 2.7.2 Location Map DRL-35

2.7.2.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.7.2 DRL-35 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 1 | 3878536.082 | 752766.942 | 1431.54 | BM 1 |
| 2 | 3878540.697 | 752766.382 | 1431.427 | BM 2 |
| 3 | 3878645.159 | 752843.366 | 1413.849 | BM 3 |
| 4 | 3878657.117 | 752929.192 | 1405.973 | BM 4 |
| 5 | 3878679.901 | 752960.927 | 1402.346 | BM 5 |
| 6 | 3878618.652 | 752994.425 | 1400.918 | BM 6 |
| 7 | 3878572.559 | 752999.23 | 1400.485 | BM 7 |
| 8 | 3878540.763 | 753021.852 | 1398.009 | BM 8 |
| 9 | 3878532.426 | 753075.838 | 1392.263 | BM 9 |
| 10 | 3878551.192 | 753141.042 | 1385.736 | BM 10 |
| 11 | 3878530.577 | 753170.888 | 1382.082 | BM 11 |
| 12 | 3878508.435 | 753249.755 | 1371.073 | BM 13 |
| 13 | 3878472.283 | 753332.349 | 1355.749 | BM 14 |
| 14 | 3878431.311 | 753380.86 | 1342.962 | BM 15 |
| 15 | 3878419.576 | 753410.529 | 1337.761 | BM 16 |
| 16 | 3878339.466 | 753517.29 | 1323.951 | BM 17 |
| 17 | 3878298.92 | 753502.297 | 1323.498 | BM 18 |
| 18 | 3878284.061 | 753486.827 | 1321.488 | BM 19 |
| 19 | 3878264.303 | 753478.153 | 1319.897 | BM 20 |
| 20 | 3878229.58 | 753438.33 | 1313.213 | BM 21 |
| 21 | 3878228.396 | 753484.555 | 1306.628 | BM 22 |
| 22 | 3878166.855 | 753749.89 | 1293.533 | BM 23 |
| 23 | 3878157.748 | 753783.907 | 1293.11 | BM 24 |
| 24 | 3878133.87 | 753856.32 | 1291.361 | BM 25 |
| 25 | 3878158.044 | 753997.081 | 1285.068 | BM 26 |
| 26 | 3878143.609 | 754077.752 | 1294.999 | BM 27 |
| 27 | 3878145.728 | 754159.627 | 1303.069 | BM 28 |
| 28 | 3878130.247 | 754194.273 | 1307.003 | BM 29 |
| 29 | 3878105.775 | 754214.594 | 1311.034 | BM 30 |
| 30 | 3879392.11 | 752389.434 | 1535.093 | BM 50 |
| 31 | 3879440.05 | 752382.441 | 1536.523 | BM 51 |
| 32 | 3879392.068 | 752389.409 | 1535.095 | BM 50 |
| 33 | 3879440.004 | 752382.363 | 1536.53 | BM 50 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 34 | 3879440.006 | 752382.378 | 1536.527 | BM 51 |
| 35 | 3879495.487 | 752378.973 | 1540.839 | BM 52 |
| 36 | 3879556.149 | 752349.664 | 1549.587 | BM 52 |
| 37 | 3879556.146 | 752349.671 | 1549.583 | BM 53 |
| 38 | 3879564.401 | 752328.891 | 1549.752 | BM 54 |
| 39 | 3879645.052 | 752338.75 | 1553.829 | BM 55 |
| 40 | 3879707.232 | 752273.956 | 1557.807 | BM 56 |
| 41 | 3879751.476 | 752245.394 | 1565.373 | BM 57 |
| 42 | 3879793.36 | 752208.516 | 1564.13 | BM 57 |
| 43 | 3879791.032 | 752213.459 | 1569.313 | BM 57 |
| 44 | 3879788.475 | 752218.815 | 1569.295 | BM 57 |
| 45 | 3879785.088 | 752224.994 | 1571.484 | BM 57 |
| 46 | 3879780.568 | 752228.372 | 1567.634 | BM 57 |
| 47 | 3879802.723 | 752250.658 | 1575.795 | BM 58 |
| 48 | 3879260.147 | 752396.326 | 1522.044 | BM 49 |
| 49 | 3879237.672 | 752402.275 | 1521.259 | BM 48 |
| 50 | 3878532.411 | 753075.811 | 1392.254 | BM9 |
| 51 | 3878170.716 | 753722.784 | 1292.979 | BM31 |
| 52 | 3879495.518 | 752379.009 | 1540.975 | BM52 |
| 53 | 3879556.152 | 752349.685 | 1549.738 | BM53 |
| 54 | 3879564.424 | 752328.916 | 1549.884 | BM54 |
| 55 | 3879645.038 | 752338.74 | 1553.917 | BN55 |

2.7.3 DRL-4

Ouch Kotigram Local Road

2.7.3.1 Location Map

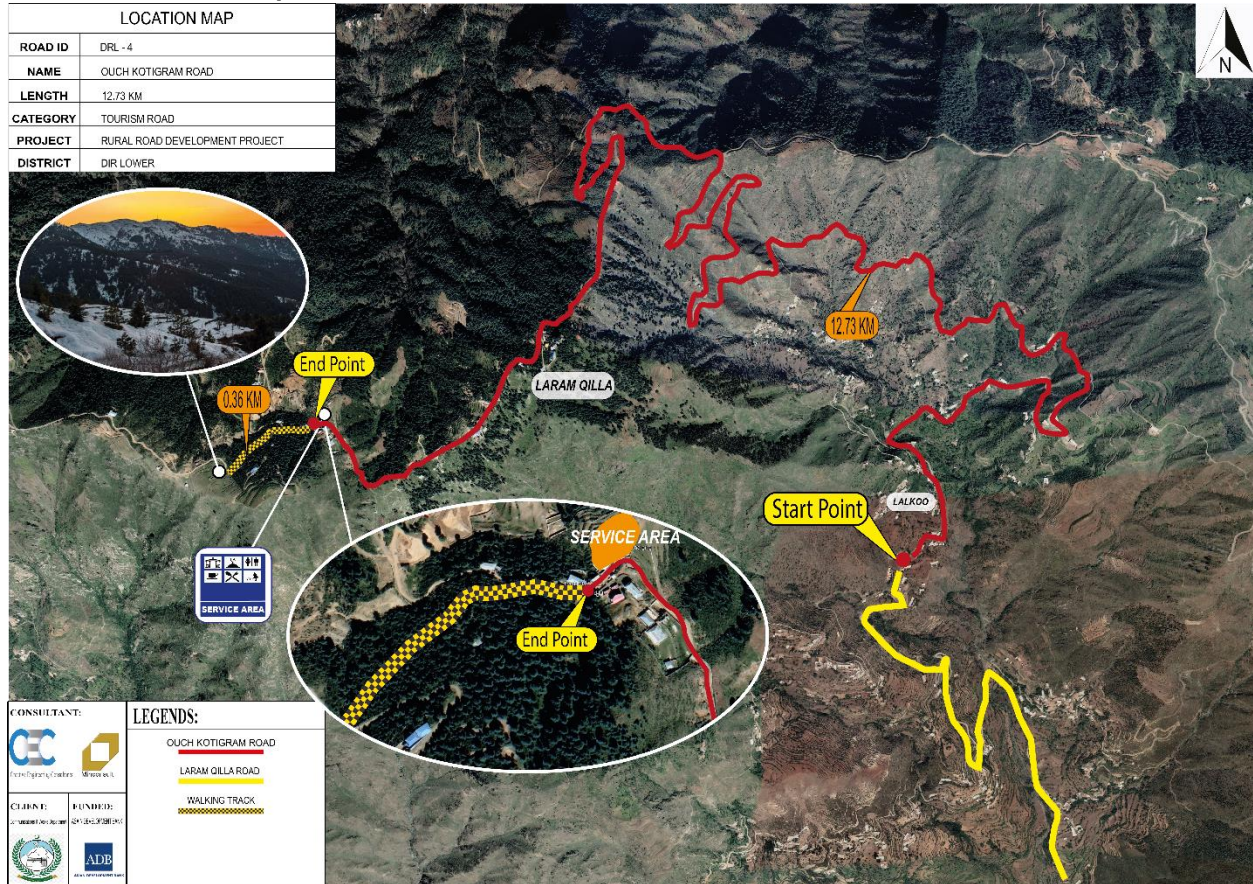


Figure 2.7.3 Location Map DRL-4

2.7.3.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.7.3 DRL-4 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 1 | 3849624.317 | 775593.496 | 974.547 | BM1 |
| 2 | 3849621.921 | 775596.71 | 974.345 | BM2 |
| 3 | 3849619.901 | 775599.274 | 974.207 | BM3 |
| 4 | 3849955.053 | 775229.705 | 1001.58 | BM4 |
| 5 | 3849953.435 | 775225.287 | 1001.482 | BM5 |
| 6 | 3851092.895 | 774351.088 | 1091.323 | BM6 |
| 7 | 3851101.162 | 774350.059 | 1091.792 | BM7 |
| 8 | 3851114.185 | 774346.551 | 1092.66 | BM8 |
| 9 | 3851792.941 | 774253.687 | 1142.319 | BM9 |
| 10 | 3851784.101 | 774254.899 | 1142.305 | BM10 |
| 11 | 3852630.871 | 773771.939 | 1295.807 | BM11 |
| 12 | 3852629.665 | 773771.769 | 1295.857 | BM12 |
| 13 | 3853511.04 | 773398.529 | 1465.462 | BM13 |
| 14 | 3853517.636 | 773397.864 | 1466.194 | BM14 |
| 15 | 3854146.199 | 773932.212 | 1618.328 | BM15 |
| 16 | 3854161.576 | 773916.592 | 1618.291 | BM16 |
| 17 | 3854547.964 | 773428.747 | 1722.395 | BM17 |
| 18 | 3854551.613 | 773424.177 | 1722.903 | BM18 |
| 19 | 3854785.163 | 773068.642 | 1787.968 | BM19 |
| 20 | 3854782.852 | 773066.658 | 1787.921 | BM20 |
| 21 | 3854580.01 | 772438.364 | 1876.661 | BM21 |
| 22 | 3854588.941 | 772448.841 | 1876.161 | BM22 |
| 23 | 3855176.172 | 772520.1 | 2025.721 | BM23 |
| 24 | 3855178.851 | 772519.855 | 2025.752 | BM24 |
| 25 | 3854746.89 | 772064.357 | 2160.387 | BM25 |
| 26 | 3854745.15 | 772063.817 | 2160.413 | BM26 |
| 27 | 3854087.512 | 771659.522 | 2173.17 | BM27 |
| 28 | 3854082.613 | 771657.586 | 2173.411 | BM28 |
| 29 | 3854045.155 | 771053.376 | 2209.129 | BM29 |
| 30 | 3854045.314 | 771051.056 | 2209.141 | BM30 |

2.7.4 T-3

Road to Laram Top

2.7.4.1 Location Map

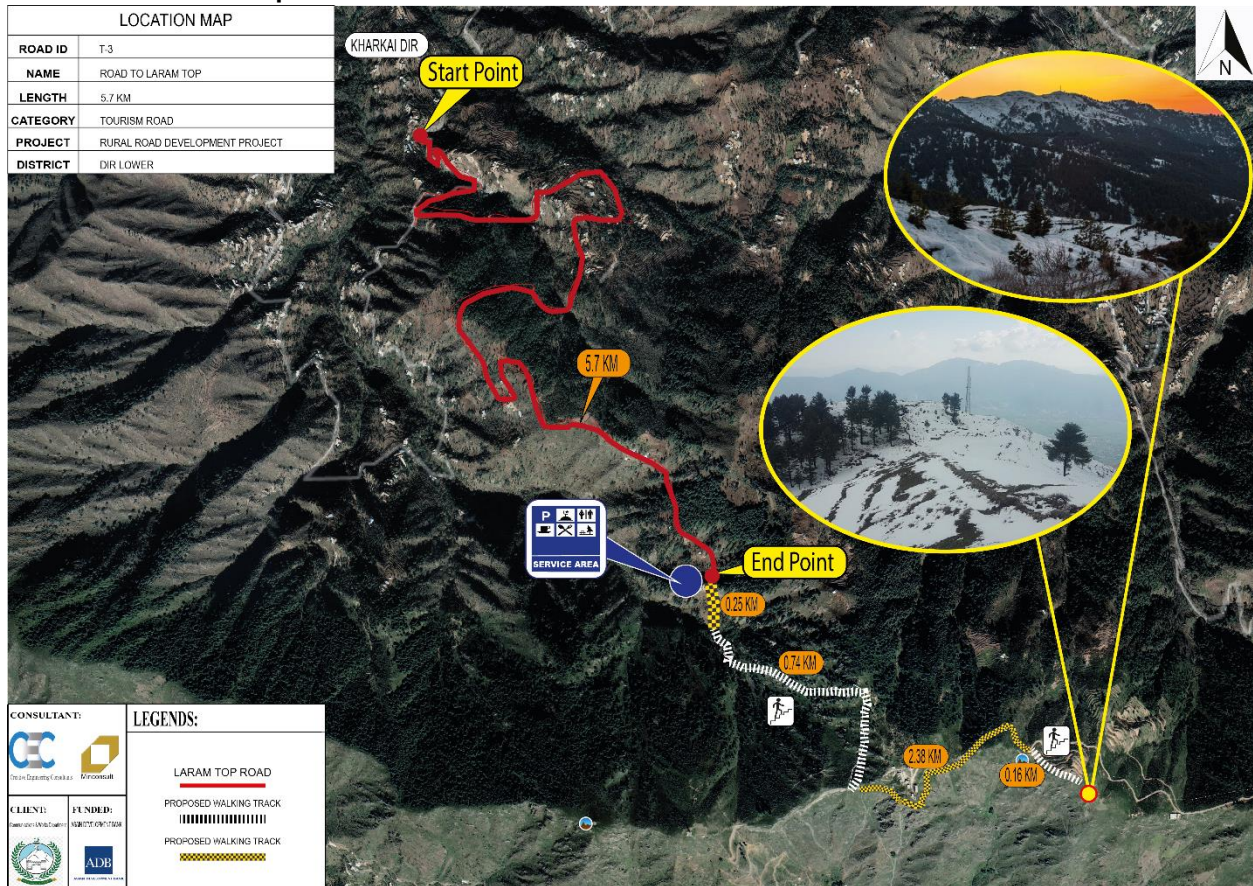


Figure 2.7.4 Location Map T-3

2.7.4.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.7.4 T-3 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 767112.024 | 3856130.962 | 1489.568 | BM 1 |
| 2 | 767119.787 | 3856125.41 | 1489.338 | BM 2 |
| 3 | 767119.709 | 3856134.614 | 1489.326 | BM 3 |
| 4 | 767202.014 | 3856515.834 | 1360.471 | BM 4 |
| 5 | 767184.286 | 3856499.871 | 1364.791 | BM 5 |
| 6 | 767123.492 | 3856484.88 | 1375.231 | BM 6 |
| 7 | 767112.23 | 3856464.897 | 1377.326 | BM 7 |
| 8 | 767116.971 | 3856437.519 | 1381.566 | BM 8 |
| 9 | 767164.045 | 3856457.838 | 1390.565 | BM 9 |
| 10 | 767149.609 | 3856434.468 | 1395.137 | BM 10 |
| 11 | 767159.165 | 3856387.269 | 1403.543 | BM 11 |
| 12 | 767200.232 | 3856342.138 | 1411.311 | BM 12 |
| 13 | 767190.277 | 3856404.902 | 1423.588 | BM 13 |
| 14 | 767202.765 | 3856389.212 | 1428.636 | BM 14 |
| 15 | 767245.935 | 3856324.12 | 1438.253 | BM 15 |
| 16 | 767326.566 | 3856301.637 | 1450.001 | BM 16 |
| 17 | 767373.856 | 3856263.332 | 1458.902 | BM 17 |
| 18 | 767399.359 | 3856255.451 | 1462.088 | BM 18 |
| 19 | 767390.798 | 3856217.529 | 1458.653 | BM 19 |
| 20 | 767370.431 | 3856232.626 | 1460.731 | BM 20 |
| 21 | 767313.237 | 3856241.765 | 1464.581 | BM 21 |
| 22 | 767295.45 | 3856228.892 | 1465.46 | BM 22 |
| 23 | 767258.407 | 3856208.604 | 1471.056 | BM 23 |
| 24 | 767212.497 | 3856211.54 | 1474.359 | BM 24 |
| 25 | 767165.449 | 3856212.624 | 1478.08 | BM 25 |
| 26 | 767138.604 | 3856168.087 | 1482.491 | BM 26 |
| 27 | 767124.62 | 3856157.697 | 1483.834 | BM 27 |
| 28 | 767130.107 | 3856071.91 | 1493.524 | BM 28 |
| 29 | 767150.934 | 3856140.463 | 1505.802 | BM 29 |
| 30 | 767206.978 | 3856145.478 | 1514.21 | BM 30 |
| 31 | 767260.53 | 3856126.113 | 1523.008 | BM 31 |
| 32 | 767308.39 | 3856143.521 | 1519.895 | BM 32 |
| 33 | 767346.495 | 3856130.765 | 1524.938 | BM 33 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 34 | 767402.569 | 3856092.623 | 1530.074 | BM 34 |
| 35 | 767450.691 | 3856114.859 | 1537.429 | BM 35 |
| 36 | 767497.33 | 3856122.417 | 1539.549 | BM 36 |
| 37 | 767573.514 | 3856090.412 | 1542.132 | BM 37 |
| 38 | 767601.305 | 3856098.076 | 1541.721 | BM 38 |
| 39 | 767625.659 | 3856131.001 | 1547.911 | BM 39 |
| 40 | 767619.098 | 3856158.667 | 1554.249 | BM 40 |
| 41 | 767626.176 | 3856163.603 | 1561.683 | BM 41 |
| 42 | 767634.937 | 3856188.93 | 1565.422 | BM 42 |
| 43 | 767658.486 | 3856208.988 | 1572.564 | BM 43 |
| 44 | 767657.378 | 3856175.547 | 1578.55 | BM 44 |
| 45 | 767678.007 | 3856204.124 | 1581.912 | BM 45 |
| 46 | 767738.733 | 3856220.042 | 1593.996 | BM 46 |
| 47 | 767758.602 | 3856255.877 | 1595.546 | BM 47 |
| 48 | 767775.151 | 3856279.379 | 1593.329 | BM 48 |
| 49 | 767817.996 | 3856293.499 | 1593.987 | BM 49 |
| 50 | 767840.025 | 3856296.477 | 1594.561 | BM 50 |
| 51 | 767856.575 | 3856293.548 | 1595.556 | BM 51 |
| 52 | 767864.863 | 3856284.535 | 1598.131 | BM 52 |
| 53 | 767895.343 | 3856270.133 | 1598.218 | BM 53 |
| 54 | 767916.706 | 3856258.423 | 1596.503 | BM 54 |
| 55 | 767940.441 | 3856244.279 | 1596.88 | BM 55 |
| 56 | 767958.382 | 3856213.366 | 1597.848 | BM 56 |
| 57 | 767972.517 | 3856178.81 | 1602.279 | BM 57 |

2.7.5 T-31

Pantolo Picnic Spot

2.7.5.1 Location Map

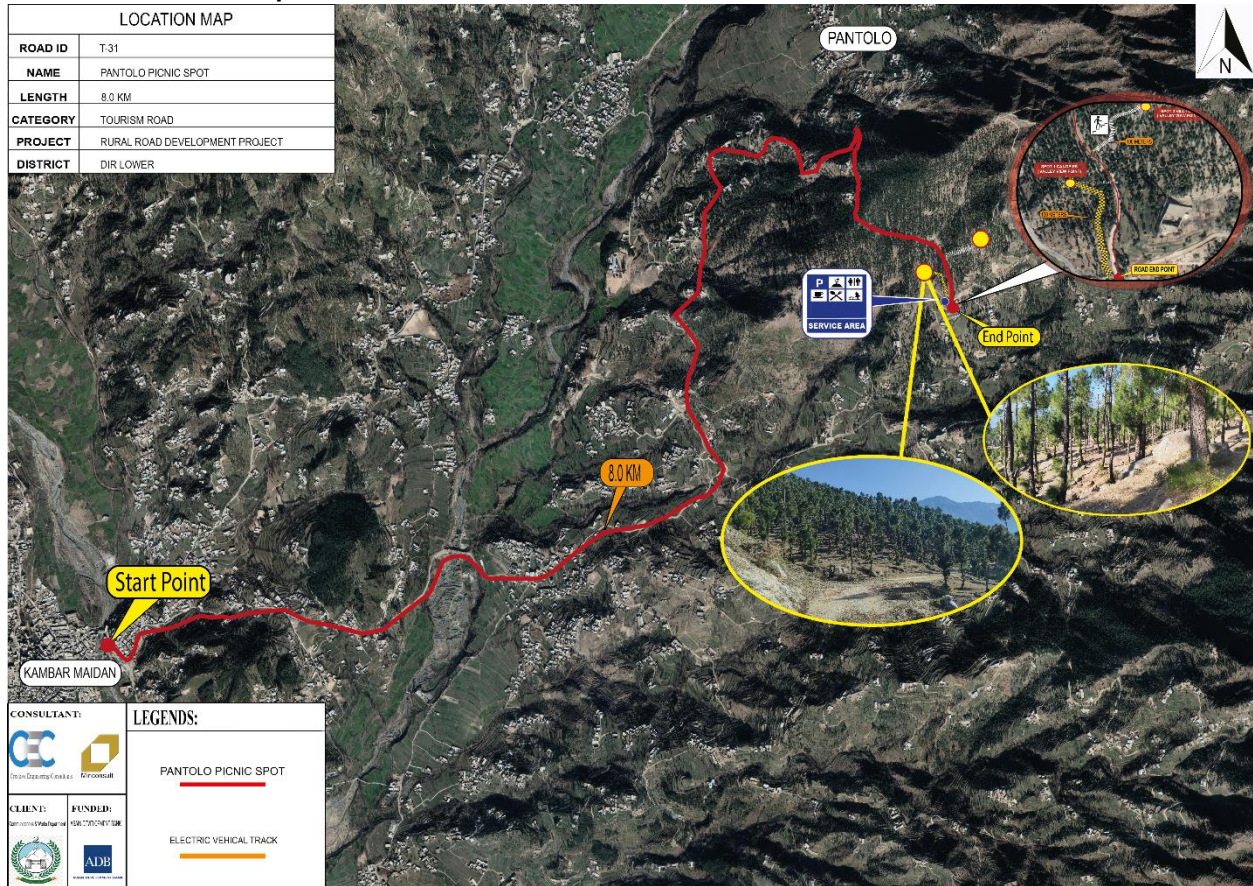


Figure 2.7.5 Location Map T-31

2.7.5.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.7.5 T-31 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 1 | 3872597.676 | 757985.57 | 1094.119 | BM-1 |
| 2 | 3872598.499 | 757998.548 | 1093.817 | BM-2 |
| 3 | 3872609.501 | 758002.879 | 1093.94 | BM-3 |
| 4 | 3872408.929 | 757380.878 | 1044.264 | BM-4 |
| 5 | 3872375.961 | 757398.376 | 1043.755 | BM-5 |
| 6 | 3872336.905 | 757473.727 | 1041.577 | BM-6 |
| 7 | 3872401.046 | 757496.284 | 1048.372 | BM-7 |
| 8 | 3872463.294 | 757517.007 | 1052.431 | BM-8 |
| 9 | 3872502.506 | 757553.125 | 1055.041 | BM-9 |
| 10 | 3872515.615 | 757634.074 | 1059.439 | BM-10 |
| 11 | 3872539.265 | 757667.106 | 1059.533 | BM-11 |
| 12 | 3872571.87 | 757721.496 | 1058.627 | BM-12 |
| 13 | 3872593.574 | 757769.983 | 1060.347 | BM-13 |
| 14 | 3872568.695 | 757808.666 | 1064.84 | BM-14 |
| 15 | 3872569.349 | 757883.13 | 1072.427 | BM-15 |
| 16 | 3872585.783 | 757940.522 | 1079.888 | BM-16 |
| 17 | 3872608.14 | 757974.654 | 1088.698 | BM-17 |
| 18 | 3872621.341 | 758014.578 | 1091.04 | BM-18 |
| 19 | 3872606.535 | 758034.531 | 1094.306 | BM-19 |
| 20 | 3872608.255 | 758163.95 | 1105.986 | BM-20 |
| 21 | 3872570.931 | 758227.613 | 1113.193 | BM-21 |
| 22 | 3872561.015 | 758290.441 | 1114.301 | BM-22 |
| 23 | 3872548.353 | 758329.222 | 1113.29 | BM-23 |
| 24 | 3872549.603 | 758375.518 | 1111.575 | BM-24 |
| 25 | 3872555.688 | 758401.453 | 1109.343 | BM-25 |
| 26 | 3872507.521 | 758554.611 | 1106.517 | BM-26 |
| 27 | 3872518.768 | 758620.652 | 1108.894 | BM-27 |
| 28 | 3872529.836 | 758667.872 | 1105.828 | BM-28 |
| 29 | 3872587.72 | 758726.32 | 1096.697 | BM-29 |
| 30 | 3872616.223 | 758744.808 | 1093.568 | BM-30 |
| 31 | 3872633.03 | 758773.386 | 1092.143 | BM-31 |
| 32 | 3872699.112 | 758832.071 | 1090.959 | BM-32 |
| 33 | 3872745.433 | 758849.719 | 1089.308 | BM-33 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 34 | 3872849.796 | 758861.738 | 1090.208 | BM-34 |
| 35 | 3872888.762 | 758928.278 | 1092.065 | BM-35 |
| 36 | 3872882.925 | 759020.505 | 1091.769 | BM-36 |
| 37 | 3872803.998 | 759080.599 | 1097.288 | BM-37 |
| 38 | 3872777.203 | 759118.022 | 1104.785 | BM-38 |
| 39 | 3872789.519 | 759189.798 | 1111.44 | BM-39 |
| 40 | 3872779.018 | 759245.959 | 1116.122 | BM-40 |
| 41 | 3872747.543 | 759319.506 | 1118.013 | BM-41 |
| 42 | 3872822.047 | 759370.478 | 1129.972 | BM-42 |
| 43 | 3872840.229 | 759407.926 | 1132.922 | BM-43 |
| 44 | 3872871.653 | 759427.304 | 1134.825 | BM-44 |
| 45 | 3872872.767 | 759425.097 | 1138.536 | BM-45 |
| 46 | 3872876.116 | 759429.377 | 1138.608 | BM-46 |
| 47 | 3872897.164 | 759540.016 | 1140.901 | BM-47 |
| 48 | 3872969.611 | 759570.4 | 1142.908 | BM-48 |
| 49 | 3873024.851 | 759655.556 | 1145.609 | BM-49 |
| 50 | 3872996.728 | 759744.256 | 1154.138 | BM-50 |
| 51 | 3872996.625 | 759764.237 | 1158.554 | BM-51 |
| 52 | 3872993.785 | 759752.838 | 1158.531 | BM-52 |
| 53 | 3873054.283 | 759878.193 | 1160.779 | BM-53 |
| 54 | 3873079.93 | 759984.923 | 1164.786 | BM-54 |
| 55 | 3873108.67 | 759995.97 | 1165.789 | BM-55 |
| 56 | 3873160.649 | 760078.396 | 1167.77 | BM-56 |
| 57 | 3873176.297 | 760099.476 | 1167.221 | BM-57 |
| 58 | 3873249.35 | 760138.632 | 1168.501 | BM-58 |
| 59 | 3873273.157 | 760161.706 | 1172.538 | BM-59 |
| 60 | 3873263.529 | 760184.996 | 1173.793 | BM-60 |
| 61 | 3873298.272 | 760189.664 | 1176.143 | BM-61 |
| 62 | 3873318.998 | 760132.269 | 1179.372 | BM-62 |
| 63 | 3873331.365 | 760104.236 | 1183.64 | BM-63 |
| 64 | 3873325.747 | 760064.411 | 1186.057 | BM-64 |
| 65 | 3873357.263 | 760077.053 | 1189.398 | BM-65 |
| 66 | 3873377.532 | 760086.314 | 1192.237 | BM-66 |
| 67 | 3873429.135 | 760069.878 | 1196.85 | BM-67 |
| 68 | 3873465.668 | 760032.25 | 1196.185 | BM-68 |
| 69 | 3873526.269 | 760009.315 | 1200.232 | BM-69 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|------------|-----------|---------|
| 70 | 3873874.582 | 759998.037 | 1200.111 | BM-70 |
| 71 | 3873912.186 | 759939.242 | 1202.047 | BM-71 |
| 72 | 3873940.073 | 759906.18 | 1203.652 | BM-72 |
| 73 | 3873958.932 | 759905.472 | 1203.421 | BM-73 |
| 74 | 3874004.186 | 759984.79 | 1200.634 | BM-74 |
| 75 | 3874026.965 | 759994.606 | 1200.725 | BM-75 |
| 76 | 3874067.176 | 759968.212 | 1200.146 | BM-76 |
| 77 | 3874127.96 | 759998.304 | 1195.618 | BM-77 |
| 78 | 3874178.02 | 760031.551 | 1193.143 | BM-78 |
| 79 | 3874201.49 | 760026.381 | 1197.129 | BM-79 |
| 80 | 3874262.547 | 759998.695 | 1202.924 | BM-80 |
| 81 | 3874296.513 | 760023.052 | 1208.899 | BM-81 |
| 82 | 3874344.259 | 759967.782 | 1217.119 | BM-82 |
| 83 | 3874350.202 | 760002.973 | 1221.99 | BM-83 |
| 84 | 3874412.541 | 760005.42 | 1226.712 | BM-84 |
| 85 | 3874473.389 | 760038.211 | 1229.086 | BM-85 |
| 86 | 3874503.775 | 760048.217 | 1229.869 | BM-86 |
| 87 | 3874534.732 | 760077.255 | 1230.061 | BM-87 |
| 88 | 3874595.867 | 760103.582 | 1242.752 | BM-88 |
| 89 | 3874613.726 | 760072.066 | 1244.738 | BM-89 |
| 90 | 3874635.724 | 760034.755 | 1246.714 | BM-90 |
| 91 | 3874638.5 | 760091.612 | 1257.037 | BM-91 |
| 92 | 3874638.067 | 760145.724 | 1259.039 | BM-92 |
| 93 | 3874624.88 | 760199.377 | 1263.434 | BM-93 |
| 94 | 3874625.519 | 760245.12 | 1271.169 | BM-94 |
| 95 | 3874608.749 | 760290.15 | 1278.009 | BM-95 |
| 96 | 3874670.168 | 760303.154 | 1295.497 | BM-96 |
| 97 | 3874658.262 | 760305.911 | 1294.805 | BM-97 |
| 98 | 3874696.293 | 760342.618 | 1312.317 | BM-98 |
| 99 | 3874657.887 | 760453.891 | 1329.733 | BM-99 |
| 100 | 3872801.184 | 759341.955 | 1136.897 | BM-100 |
| 101 | 3872806.575 | 759343.687 | 1136.923 | BM-101 |
| 102 | 3872793.572 | 759337.975 | 1136.965 | BM-102 |

2.7.6 RRD_DRL_NR1

Shorshing Jakra Baba Road

2.7.6.1 Location Map

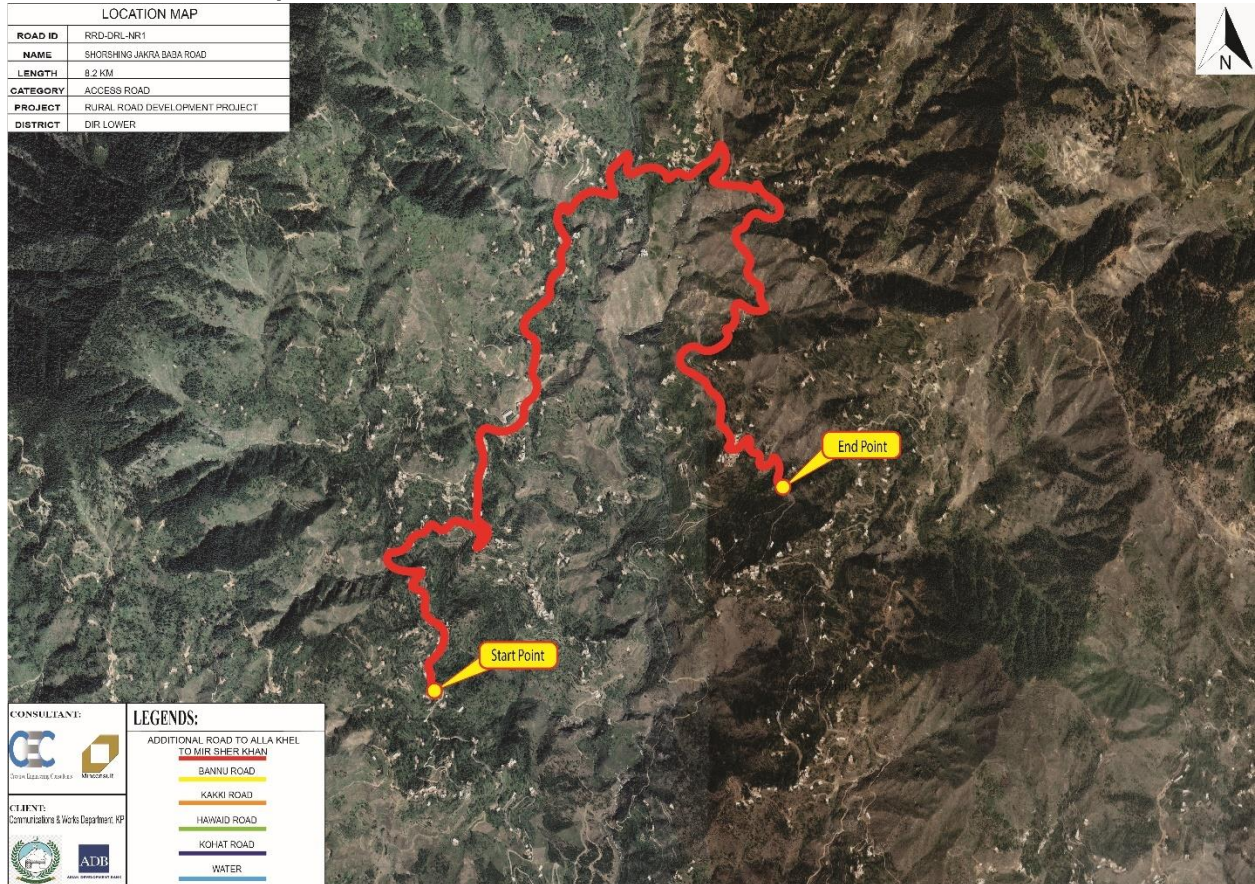


Figure 2.7.6 Location Map RRD_DRL_NR1

2.7.6.2 Traverse Points

The Traverse Point coordinates, and description are as follows.

Table 2.7.6 RRD_DRL_NR1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 237901.173 | 3858488.774 | 1665.295 | BM1 |
| 2 | 237897.097 | 3858498.362 | 1664.001 | BM2 |
| 3 | 237532.394 | 3858895.377 | 1688.975 | BM3 |
| 4 | 237574.097 | 3859194.1 | 1728.724 | BM5 |
| 5 | 237811.573 | 3859757.242 | 1831.354 | BM8 |
| 6 | 237570.994 | 3859804.907 | 1825.902 | BM9 |
| 7 | 236513.641 | 3859039.961 | 1695.796 | BM20 |
| 8 | 237825.45 | 3859749.158 | 1831.351 | BM7 |
| 9 | 237310.467 | 3859855.153 | 1791.32 | BM12 |
| 10 | 237321.633 | 3859852.65 | 1790.902 | BM11 |
| 11 | 237061.519 | 3859940.916 | 1764.773 | BM |
| 12 | 237068.721 | 3859950.206 | 1764.338 | BM |
| 13 | 236538.688 | 3859116.118 | 1699.142 | BM19 |
| 14 | 236619.54 | 3859370.014 | 1710.451 | BM |
| 15 | 236608.166 | 3859360.453 | 1710.083 | BM |
| 16 | 236710.688 | 3859605.177 | 1726.129 | BM |
| 17 | 236724.277 | 3859590.031 | 1725.126 | BM |
| 18 | 236538.688 | 3859116.118 | 1699.142 | BM |
| 19 | 236385.091 | 3858803.426 | 1669.458 | BM21 |
| 20 | 236367.075 | 3858794.496 | 1668.797 | BM |
| 21 | 236153.468 | 3858418.117 | 1646.293 | BM23 |
| 22 | 236139.565 | 3858410.971 | 1646.056 | BM24 |
| 23 | 235998.229 | 3858387.815 | 1636.844 | BM25 |
| 24 | 235989.031 | 3858392.924 | 1636.759 | BM26 |
| 25 | 235869.528 | 3858235.285 | 1634.253 | BM27 |
| 26 | 235866.649 | 3858223.633 | 1634.503 | BM28 |
| 27 | 235935.726 | 3858022.336 | 1629.965 | BM29 |
| 28 | 235945.692 | 3858013.189 | 1630.542 | BM |
| 29 | 236042.516 | 3857526.093 | 1615.075 | BM |
| 30 | 236013.731 | 3857520.764 | 1615.962 | BM31 |

2.8 District Dir Upper

2.8.1 RRD_DRU_R1

Link Roads Usherai Dara

2.8.1.1 Location Map

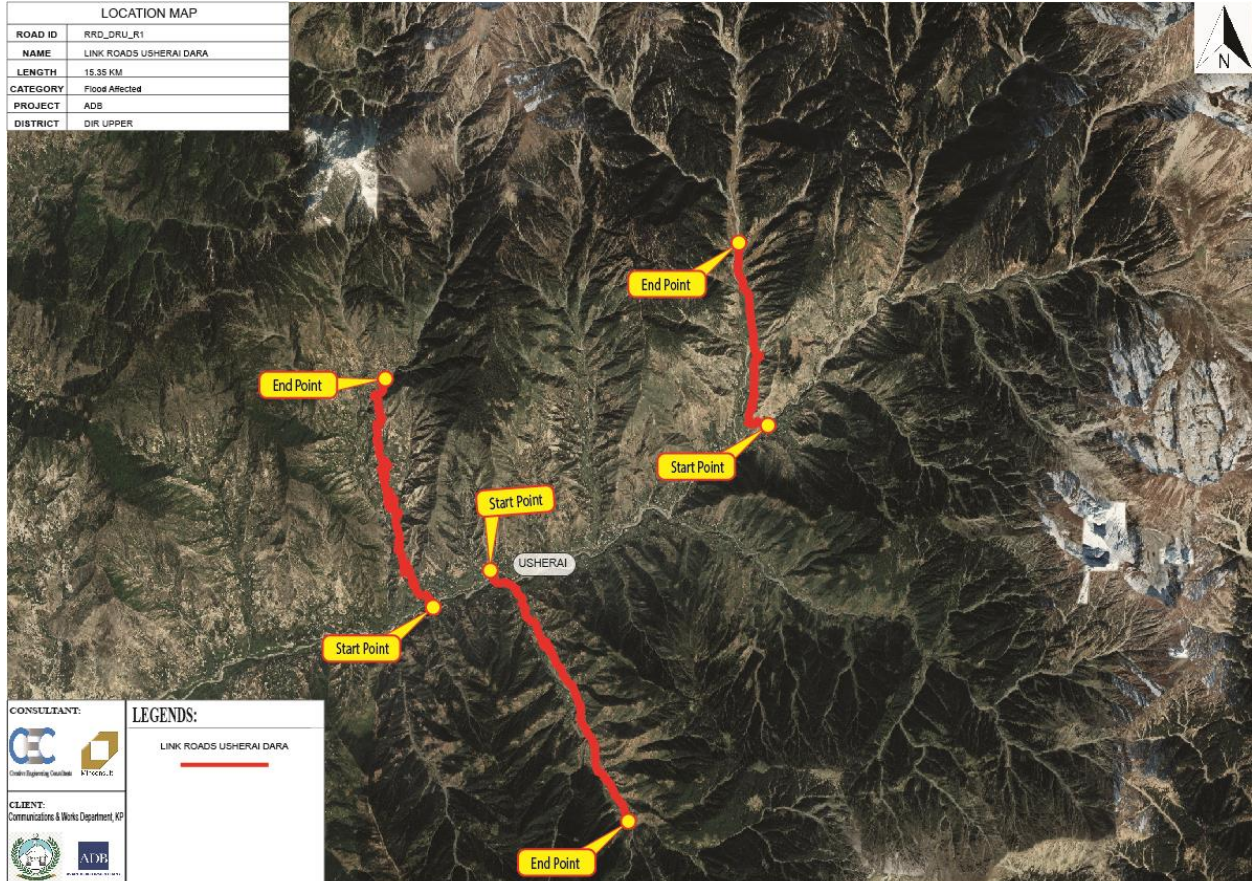


Figure 2.8.1 Location Map RRD_DRU_R1

2.8.1.2 Traverse Points

The Traverse Point coordinates, and description are as follows

Table 2.8.1 RRD_DRU_R1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 237017.649 | 3894601.676 | 1507.067 | BM1 |
| 2 | 237004.709 | 3894594.283 | 1506.758 | BM2 |
| 3 | 236720.679 | 3894981.892 | 1575.707 | BM3 |
| 4 | 236705.684 | 3895001.154 | 1579.809 | BM4 |
| 5 | 236667.577 | 3895225.668 | 1630.669 | BM5 |
| 6 | 236677.351 | 3895247.708 | 1635.498 | BM6 |
| 7 | 236510.846 | 3895810.82 | 1708.893 | BM7 |
| 8 | 236503.027 | 3895815.019 | 1707.222 | BM8 |
| 9 | 236320.095 | 3896370.038 | 1749.115 | BM9 |
| 10 | 236316.028 | 3896346.151 | 1752.214 | BM10 |
| 11 | 236237.245 | 3896875.204 | 1837.61 | BM11 |
| 12 | 236244.903 | 3896870.328 | 1838.909 | BM12 |
| 13 | 236356.469 | 3897000.372 | 1920.127 | BM13 |
| 14 | 236365.571 | 3897021.852 | 1925.007 | BM14 |
| 15 | 236398.501 | 3898442.08 | 2046.852 | BM19 |
| 16 | 236372.951 | 3898445.936 | 2047.343 | BM20 |
| 17 | 236214.037 | 3898142.251 | 2091.916 | BM18 |
| 18 | 236227.339 | 3898128.433 | 2091.82 | BM17 |
| 19 | 236245.959 | 3897864.849 | 2071.454 | BM16 |
| 20 | 236257.763 | 3897857.371 | 2071.206 | BM15 |

2.8.2 RRD_DRU_NR3

Katigram To Shagai U/C Kotke

2.8.2.1 Location Map

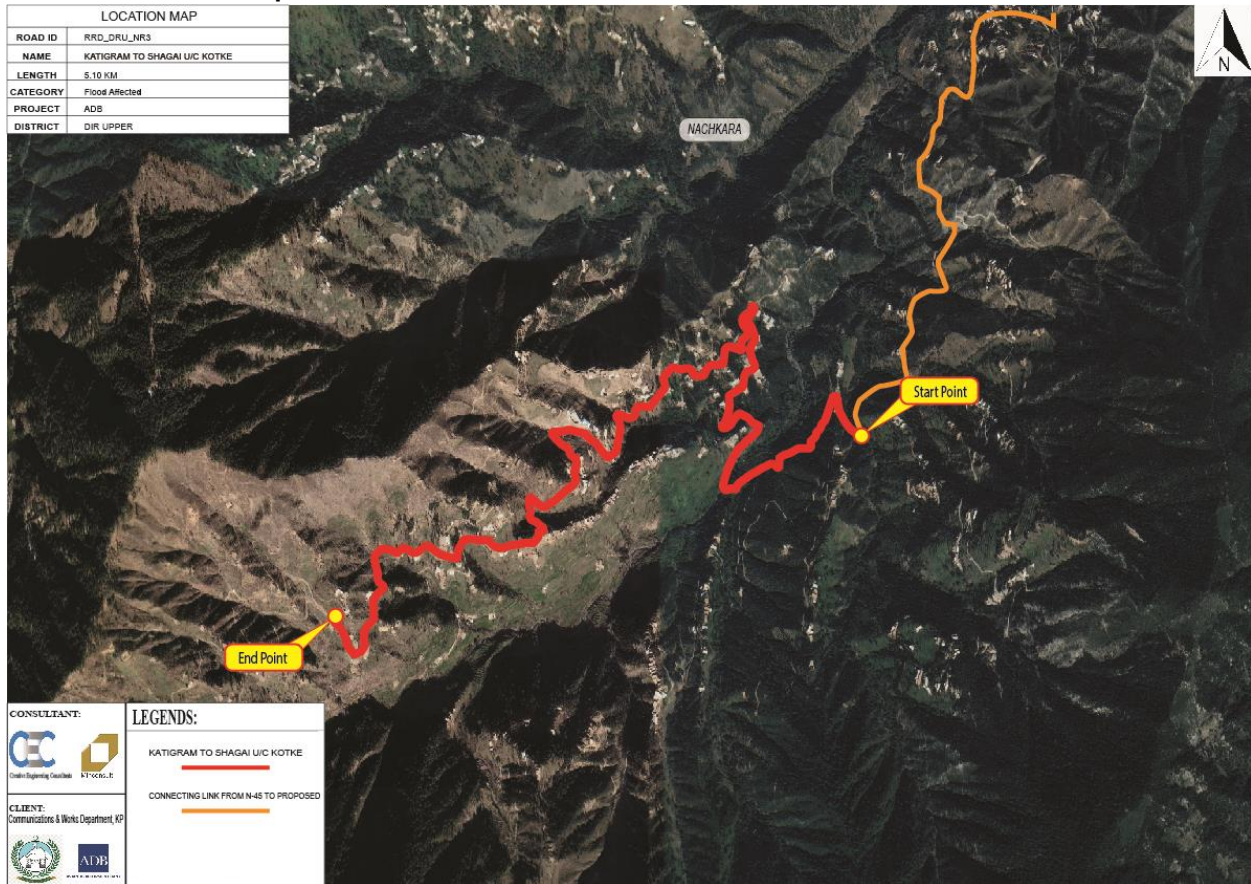


Figure 2.8.2 Location Map RRD_DRU_NR3

2.8.2.2 Traverse Points

The Traverse Point coordinates, and description are as follows.

Table 2.8.2 RRD_DRU_NR3 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 770070.915 | 3879120.404 | 1490.674 | bm1 |
| 2 | 770058.341 | 3879141.016 | 1495.372 | bm2 |
| 3 | 769585.679 | 3878868.216 | 1470.295 | BM 4 |
| 4 | 769589.882 | 3878877.444 | 1470.535 | BM 3 |
| 5 | 769689.778 | 3879281.406 | 1525.101 | bm6 |
| 6 | 769702.309 | 3879289.52 | 1525.096 | bm5 |
| 7 | 768587.128 | 3878673.399 | 1722.575 | bm11 |
| 8 | 768584.207 | 3878670.533 | 1722.503 | bm12 |
| 9 | 768738.842 | 3878653.189 | 1713.37 | BM 10 |
| 10 | 768746.342 | 3878657.177 | 1713.167 | bm9 |
| 11 | 768994.14 | 3878875.26 | 1684.033 | bm8 |
| 12 | 768994.695 | 3878886.097 | 1684.944 | bm7 |
| 13 | 768587.128 | 3878673.399 | 1722.575 | BM11 |
| 14 | 768250.988 | 3878462.868 | 1788.544 | BM14 |
| 15 | 768250.854 | 3878468.67 | 1787.843 | BM13 |

2.8.3 RRD_DRU_NR4

Sundrai To Qadarkandow Road (Nehag Dara)

2.8.3.1 Location Map

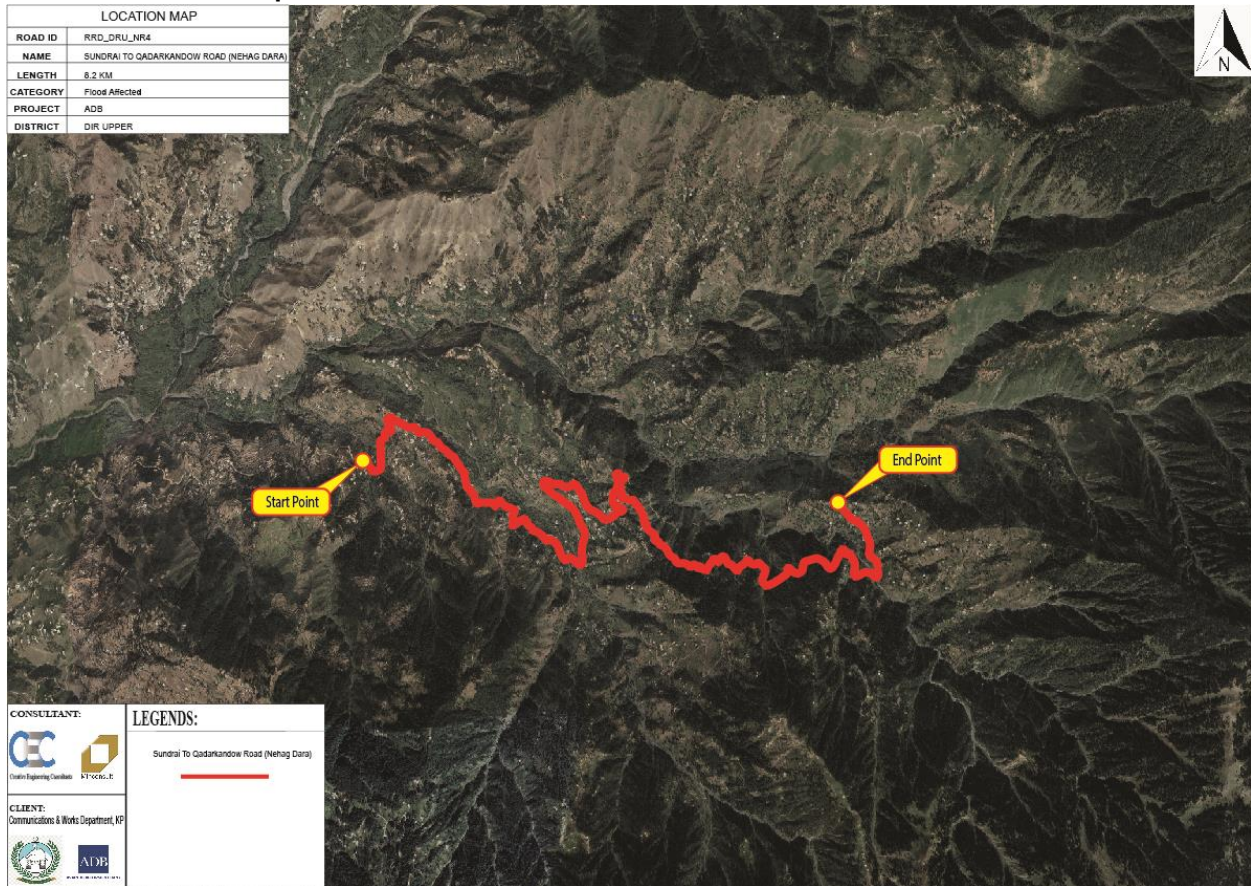


Figure 2.8.3 Location Map RRD_DRU_NR4

2.8.3.2 Traverse Points

The Traverse Point coordinates, and description are as follows

Table 2.8.3 RRD_DRU_NR4 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 239575.135 | 3880336.468 | 1722.769 | BM4 |
| 2 | 239571.029 | 3880341.128 | 1722.455 | bm3 |
| 3 | 239826.457 | 3880160.533 | 1738.713 | bm5 |
| 4 | 239838.5 | 3880151.141 | 1739.41 | BM6 |
| 5 | 239861.917 | 3880427.98 | 1754.244 | bm7 |
| 6 | 239851.15 | 3880455.213 | 1753.763 | bm8 |
| 7 | 239643.84 | 3880627.449 | 1749.446 | BM9 |
| 8 | 239626.344 | 3880646.906 | 1751.094 | bm10 |
| 9 | 238205.09 | 3880806.563 | 1536.6 | bm 1 |
| 10 | 238210.208 | 3880802.256 | 1536.467 | bm 2 |
| 11 | 239626.344 | 3880646.906 | 1751.094 | BM10 |
| 12 | 240136.452 | 3880467.81 | 1809.121 | BM12 |
| 13 | 240131.527 | 3880456.929 | 1808.158 | BM11 |
| 14 | 241141.507 | 3880151.372 | 1951.341 | BM17 |
| 15 | 241149.688 | 3880151.499 | 1951.838 | BM18 |
| 16 | 241149.685 | 3880151.48 | 1951.851 | BM18 |
| 17 | 242106.365 | 3880126.276 | 1979.012 | BM20 |
| 18 | 242119.566 | 3880117.518 | 1975.982 | BM19 |

2.8.4 T-42

Sheen Ghar Top

2.8.4.1 Location Map

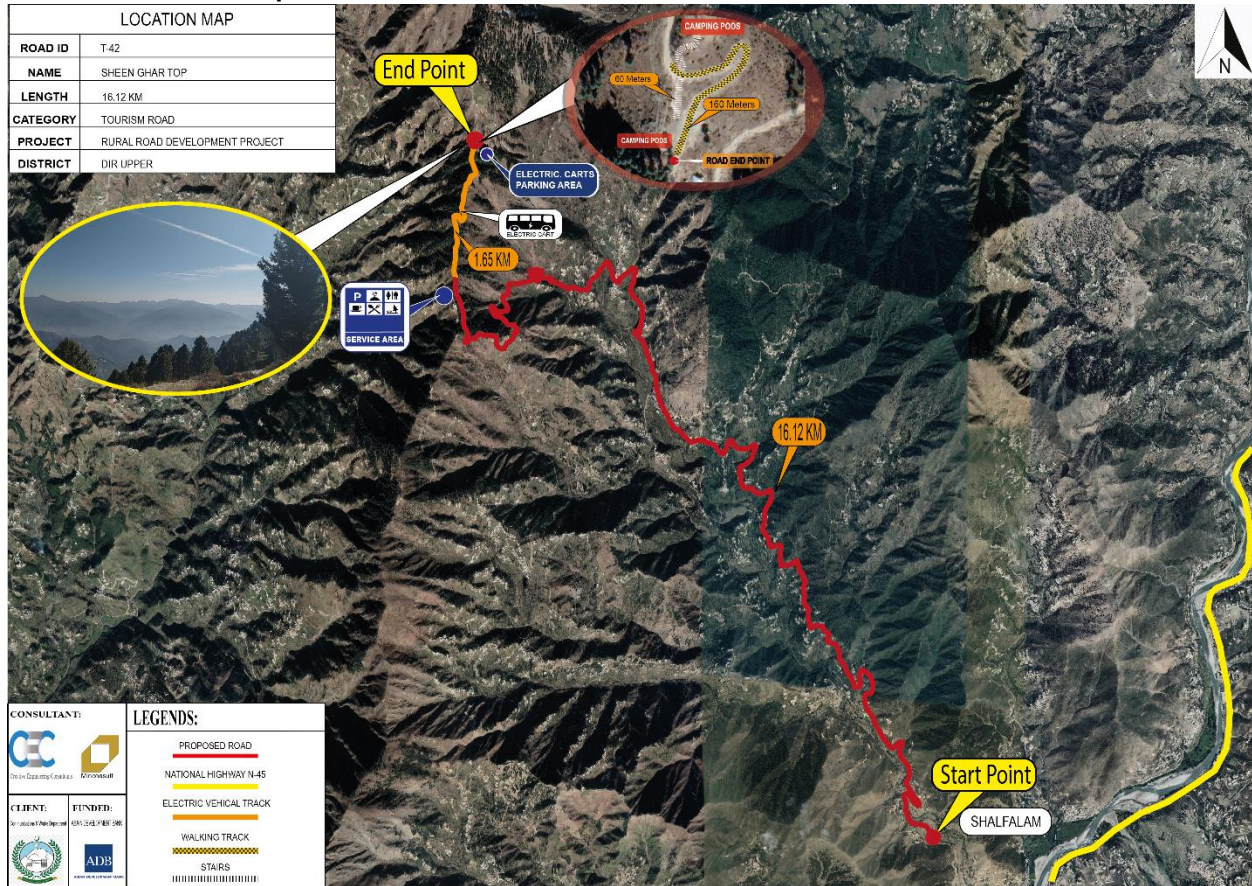


Figure 2.8.4 Location Map T-42

2.8.4.2 Traverse Points

The Traverse Point coordinates, and description are as follows

Table 2.8.4 T-42 Traverse Points

| S.No | Easting | Northing | Elevation | Remarks |
|------|-------------|-------------|-----------|---------|
| 1 | 771256.9294 | 3869136.273 | 1091.1857 | BM-1 |
| 2 | 773563.297 | 3867047.596 | 844.124 | BM-2 |
| 3 | 772129.132 | 3867872.889 | 955.257 | BM-3 |
| 4 | 772144.126 | 3867674.066 | 936.248 | BM-4 |
| 5 | 772052.467 | 3868179.953 | 989.398 | BM-5 |
| 6 | 771814.256 | 3868388.113 | 999.592 | BM-6 |
| 7 | 771514.534 | 3868774.521 | 1021.96 | BM-7 |
| 8 | 771478.66 | 3869158.242 | 1053.568 | BM-8 |
| 9 | 771269.843 | 3869094.222 | 1089.019 | BM-9 |
| 10 | 771044.059 | 3869431.8 | 1143.515 | BM-10 |
| 11 | 770761.715 | 3869692.155 | 1172.287 | BM-11 |
| 12 | 770665.403 | 3870079.565 | 1189.388 | BM-12 |
| 13 | 770390.458 | 3870197.759 | 1205.835 | BM-13 |
| 14 | 767303.657 | 3872135.707 | 1853.892 | BM-14 |
| 15 | 767562.747 | 3871947.417 | 1905.316 | BM-15 |
| 16 | 767277.051 | 3871855.805 | 1970.786 | BM-16 |
| 17 | 767099.6 | 3871871.732 | 2040.577 | BM-17 |
| 18 | 766937.212 | 3872211.133 | 2100.564 | BM-18 |
| 19 | 766980.276 | 3872639.375 | 2149.214 | BM-19 |
| 20 | 767133.199 | 3873340.254 | 2217.541 | BM-20 |
| 21 | 767040.347 | 3872933.825 | 2210.672 | BM-21 |

2.8.5 T-43

Uthror to Thal via Badgoi Top

2.8.5.1 Location Map

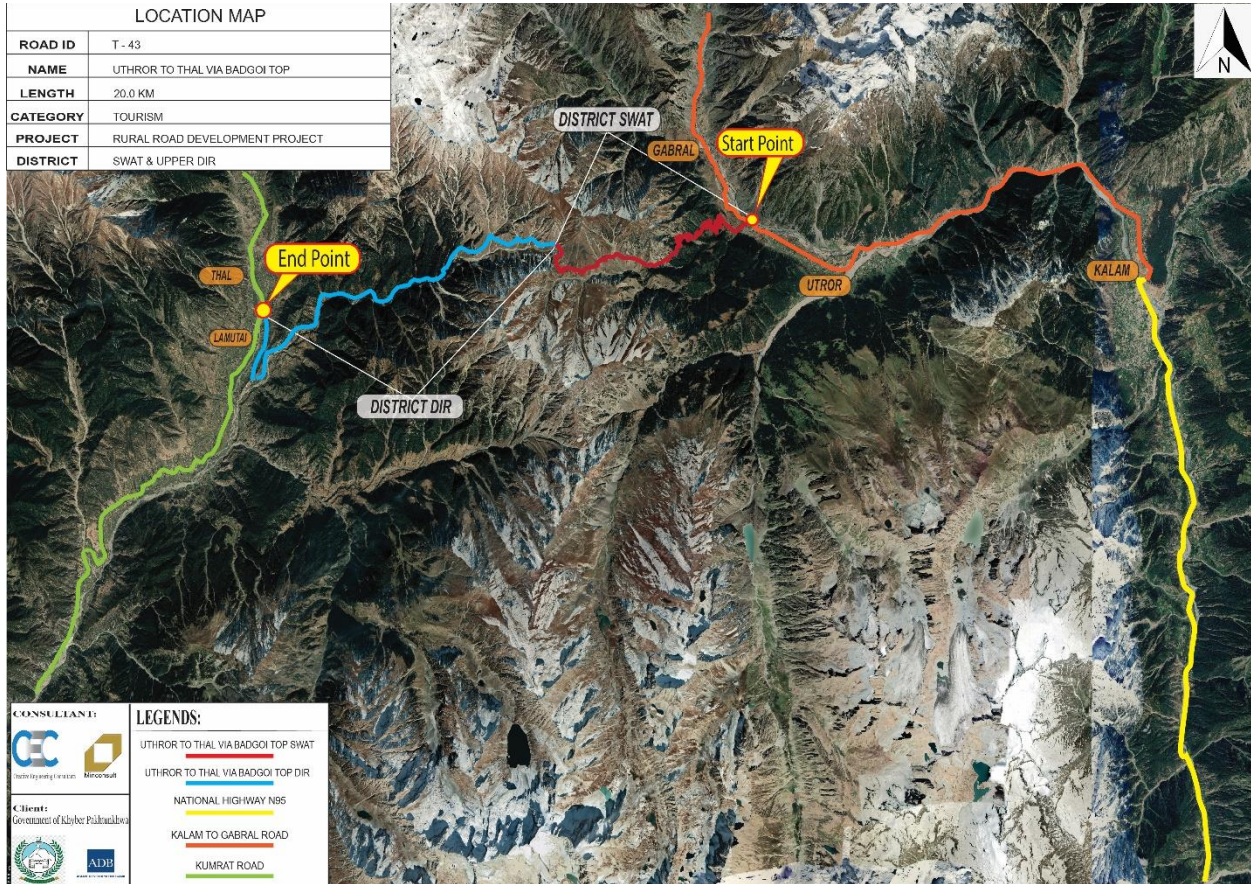


Figure 2.8.5 Location Map T-43

2.8.5.2 Traverse Points

The Traverse Point coordinates, and description are as follows

Table 2.8.5 T-43 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 1 | 3128352 | 1252057 | 2057 | K-1 |
| 2 | 3128341.99 | 1252043.36 | 2056.62 | K-2 |
| 3 | 3128415.19 | 1252123.81 | 2057.41 | K-3 |
| 4 | 3128463.92 | 1252173.4 | 2061.05 | K-4 |
| 5 | 3128599.17 | 1252112.65 | 2063.71 | K-5 |
| 6 | 3128630.58 | 1251980.52 | 2070.66 | K-6 |
| 7 | 3128642.2 | 1251933.54 | 2073.71 | K-7 |
| 8 | 3128565.22 | 1251278.91 | 2089.48 | K-8 |
| 9 | 31289559 | 1251264.29 | 2090.34 | K-9 |
| 10 | 3128434.75 | 1250994.71 | 2099.351 | K-10 |
| 11 | 3128408.61 | 1250956.4 | 2100.548 | K-11 |
| 12 | 3128360.63 | 1250820.19 | 2102.061 | K-12 |
| 13 | 3128355.97 | 1250803.77 | 2103.279 | K-13 |
| 14 | 3128357.18 | 1250759.87 | 2106.175 | K-14 |
| 15 | 3128338.84 | 1250678.34 | 2107.563 | K-15 |
| 16 | 3128317.25 | 1250607.01 | 2107.842 | K-16 |
| 17 | 3128320.41 | 1250576.63 | 2108.553 | K-17 |
| 18 | 3128298.31 | 1250459.88 | 2115.688 | K-18 |
| 19 | 3128272.34 | 1250365.83 | 2117.714 | K-19 |
| 20 | 3128248.71 | 1250319.41 | 2118.543 | K-20 |
| 21 | 3128253.09 | 1250305.91 | 2118.182 | K-21 |
| 22 | 3128333.41 | 1250330.54 | 2126.553 | K-22 |
| 23 | 3128417.18 | 1250362.12 | 2134.199 | K-23 |
| 24 | 3128472.87 | 1250387.92 | 2143.437 | K-24 |
| 25 | 3128580.59 | 1250378.77 | 2151.803 | K-25 |
| 26 | 3128611.38 | 1250361.24 | 2154.84 | K-26 |
| 27 | 3128622.92 | 1250364.84 | 2155.976 | K-27 |
| 28 | 3128647.13 | 1250404.31 | 2161.98 | K-28 |
| 29 | 3128715.9 | 1250472.28 | 2176.194 | K-29 |
| 30 | 3128730.14 | 1250491.36 | 2179.616 | K-30 |
| 31 | 3128745.5 | 1250555.94 | 2186.972 | K-31 |
| 32 | 3128749.27 | 1250601.25 | 2190.845 | K-32 |
| 33 | 3128732.65 | 1250746.03 | 2197.445 | K-33 |
| 34 | 3128727.24 | 1250790.23 | 2200.127 | K-34 |
| 35 | 3128720.08 | 1250858.92 | 2204.349 | K-35 |
| 36 | 3128740.66 | 1250946.26 | 2206.911 | K-36 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 37 | 3128791.99 | 1251036.61 | 2209.053 | K-37 |
| 38 | 3128887.08 | 1251151.6 | 2214.009 | K-38 |
| 39 | 3129275.35 | 1251369.15 | 2253.839 | K-39 |
| 40 | 3129300.85 | 1251389.22 | 2260.067 | K-40 |
| 41 | 3129401.75 | 1251474.46 | 2273.631 | K-41 |
| 42 | 3130026.93 | 1251966.59 | 2341.629 | K-42 |
| 43 | 3130047.85 | 1251970.06 | 2341.045 | K-43 |
| 44 | 3130276.71 | 1252027.58 | 2352.441 | K-44 |
| 45 | 3130333.82 | 1252030.27 | 2360.425 | K-45 |
| 46 | 3130398.97 | 1252094.41 | 2365.373 | K-46 |
| 47 | 3130408.12 | 1252153.75 | 2365.941 | K-47 |
| 48 | 3130407.06 | 1252489.26 | 2390.543 | K-48 |
| 49 | 3130412.88 | 1252538.27 | 2393.917 | K-49 |
| 50 | 3130469.35 | 1252605.88 | 2408.691 | K-50 |
| 51 | 3130619.35 | 1252938.98 | 2461.985 | K-51 |
| 52 | 3130628.6 | 1252939.18 | 2462.686 | K-52 |
| 53 | 3130815.42 | 1252999.06 | 2480.08 | K-53 |
| 54 | 3130899.74 | 1253025.12 | 2489.82 | K-54 |
| 55 | 3130972.26 | 1253009.77 | 2499.098 | K-55 |
| 56 | 3131126.47 | 1253065.2 | 2513.183 | K-56 |
| 57 | 3131262.83 | 1253074.29 | 2520.603 | K-57 |
| 58 | 3131617.52 | 1252996.11 | 2555.347 | K-58 |
| 59 | 3131721.54 | 1252994.11 | 2569.405 | K-59 |
| 60 | 3131846.45 | 1253050.6 | 2585.027 | K-60 |
| 61 | 3132085.8 | 1253218.12 | 2619.472 | K-61 |
| 62 | 3132194.19 | 1253252.53 | 2633.942 | K-62 |
| 63 | 3132334.61 | 1253260.11 | 2644.308 | K-63 |
| 64 | 3132508.11 | 1253059.39 | 2650.138 | K-64 |
| 65 | 3132722.63 | 1252931.35 | 2672.322 | K-65 |
| 66 | 3132840.47 | 1252978.5 | 2685.591 | K-66 |
| 67 | 3132870.93 | 1252988.27 | 2688.828 | K-67 |
| 68 | 3132963.58 | 1253208.5 | 2713.036 | K-68 |
| 69 | 3133177.44 | 1253411.6 | 2748.579 | K-69 |
| 70 | 3133422.84 | 1253546.53 | 2774.977 | K-70 |
| 71 | 3133525.22 | 1253571.49 | 2783.104 | K-71 |
| 72 | 3133585.57 | 1253571.49 | 2789.312 | K-72 |
| 73 | 3133666.64 | 1253611.92 | 2802.299 | K-73 |
| 74 | 3133681.5 | 1253698.23 | 2813.78 | K-74 |
| 75 | 3133719.55 | 1253742.93 | 2817.593 | K-75 |
| 76 | 3133795.64 | 1253697.24 | 2823.664 | K-76 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 77 | 3133824.51 | 1253722.85 | 2826.672 | K-77 |
| 78 | 3133904.77 | 1253685.91 | 2831.331 | K-78 |
| 79 | 3134005.97 | 1253705.78 | 2843.604 | K-79 |
| 80 | 3134137.93 | 1253768.19 | 2859.07 | K-80 |
| 81 | 3134237.43 | 1253829.83 | 2869.224 | K-81 |
| 82 | 3134265.19 | 1253774.18 | 2878.672 | K-82 |
| 83 | 3134253.34 | 1253752.07 | 2883.054 | K-83 |
| 84 | 3134403.84 | 1253758.93 | 2892.153 | K-84 |
| 85 | 3134491.87 | 1253857.71 | 2905.024 | K-85 |
| 86 | 3134571.77 | 1253859.68 | 2913.287 | K-86 |
| 87 | 3134674.58 | 1253880.62 | 2923.675 | K-87 |
| 88 | 3134741.9 | 1253910.53 | 2928.684 | K-88 |
| 89 | 3134814.55 | 1254004.12 | 2940.349 | K-89 |
| 90 | 3139846.98 | 1254075.4 | 2961.08 | K-90 |
| 91 | 3133905.69 | 1254113.95 | 2667.496 | K-91 |
| 92 | 3134933.2 | 1254159.32 | 2971.413 | K-92 |
| 93 | 3134986.03 | 1254354.06 | 2986.87 | K-93 |
| 94 | 3135373.28 | 1254688.2 | 3045.51 | K-94 |
| 95 | 3135416.8 | 1254676.77 | 3051.102 | K-95 |
| 96 | 3135438.53 | 1254676.06 | 3053.283 | K-96 |
| 97 | 3135600.13 | 1254673.74 | 3076.23 | K-97 |
| 98 | 3135695.6 | 1254723.33 | 3085.597 | K-98 |
| 99 | 3135818.56 | 1254795.9 | 3124.099 | K-99 |
| 100 | 3135843.58 | 1254775.25 | 3125.233 | K-100 |
| 101 | 3135831.71 | 1254672.22 | 3132.478 | K-101 |
| 102 | 3135873.53 | 1254686 | 3136.53 | K-102 |
| 103 | 3136820.55 | 1255037.03 | 3259.613 | K-103 |
| 104 | 3136856.77 | 1255031.77 | 3263.331 | K-104 |
| 105 | 3136683.27 | 1255060.62 | 3248.744 | K-105 |
| 106 | 3136952.49 | 1255021.28 | 3271.329 | K-106 |
| 107 | 3137173.81 | 1255055.71 | 3293.367 | K-107 |
| 108 | 3137357.93 | 1255159.9 | 3315.086 | K-108 |
| 109 | 3137514.33 | 1255143.19 | 3332.731 | K-109 |
| 110 | 3137598.96 | 1255164.29 | 3342.478 | K-110 |
| 111 | 3137995.92 | 1255083.04 | 3396.898 | K-111 |
| 112 | 3138197.64 | 1255088.16 | 3425.278 | K-112 |
| 113 | 3138830.82 | 1254893.42 | 3533.529 | K-113 |
| 114 | 3139289.28 | 1254423.3 | 3419.399 | K-114 |
| 115 | 3139189.07 | 1254475.55 | 3423.58 | K-115 |
| 116 | 3139325.13 | 1254433.47 | 3419.182 | K-116 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 117 | 3139543.28 | 1254410.37 | 3407.271 | K-117 |
| 118 | 3139635.21 | 1254489.77 | 3395.383 | K-118 |
| 119 | 3139863.58 | 1254612.97 | 3395.21 | K-119 |
| 120 | 3140008.74 | 1254673.5 | 3387.218 | K-120 |
| 121 | 3140288.08 | 1254852.07 | 3354.92 | K-121 |
| 122 | 3140404.9 | 1254938.15 | 3337.161 | K-122 |
| 123 | 3140557.32 | 1254886.55 | 3305.524 | K-123 |
| 124 | 3141019.78 | 1254974.35 | 3276.588 | K-124 |
| 125 | 3140332.2 | 1254967.13 | 3245.479 | K-125 |
| 126 | 3141566.33 | 1254925.49 | 3223.961 | K-126 |
| 127 | 3141687.07 | 1254802.02 | 3226.042 | K-127 |
| 128 | 3142038.07 | 1254951.2 | 3134.294 | K-128 |
| 129 | 3142144.01 | 1255011.46 | 3119.774 | K-129 |
| 130 | 3142254.35 | 1255066.98 | 3107.184 | K-130 |
| 131 | 3142349.67 | 1255106.55 | 3095.261 | K-131 |
| 132 | 3142383.81 | 1255107.36 | 3091.102 | K-132 |
| 133 | 3142385.55 | 1255156.86 | 3084.977 | K-133 |
| 134 | 3142432.07 | 1255238.59 | 3081.315 | K-134 |
| 135 | 3142472.32 | 1255242.21 | 3081.606 | K-135 |
| 136 | 3142491.63 | 1255256.91 | 3079.02 | K-136 |
| 137 | 3142502.55 | 1255290.71 | 3075.469 | K-137 |
| 138 | 3142595.33 | 1255327.87 | 3066.318 | K-138 |
| 139 | 3142649.88 | 1255333.23 | 3067.426 | K-139 |
| 140 | 3142658.55 | 1255353.22 | 3065.424 | K-140 |
| 141 | 3142648.2 | 1255404.46 | 3061.93 | K-141 |
| 142 | 3142670.52 | 1255463.04 | 3056.312 | K-142 |
| 143 | 3142707.76 | 1255531.39 | 3050.723 | K-143 |
| 144 | 3142784.69 | 1255542.32 | 3043.751 | K-144 |
| 145 | 3142753.34 | 1255581.05 | 3036.372 | K-145 |
| 146 | 3142673.31 | 1255628.7 | 3032.661 | K-146 |
| 147 | 3142656.06 | 1255728.5 | 3021.974 | K-147 |
| 148 | 3142608.32 | 1255826.19 | 3010.901 | K-148 |
| 149 | 3142712.18 | 1255743.11 | 2992.542 | K-149 |
| 150 | 3142735.33 | 1255713.51 | 2984.67 | K-150 |
| 151 | 3142731.41 | 1255762.78 | 2978.715 | K-151 |
| 152 | 3142711.28 | 1255849.13 | 2961.894 | K-152 |
| 153 | 3142831.48 | 1255899.14 | 2909.777 | K-153 |
| 154 | 3142904.55 | 1255928.74 | 2897.443 | K-154 |
| 155 | 3142957.33 | 1255925.98 | 2888.401 | K-155 |
| 156 | 3143059.29 | 1255942.82 | 2870.451 | K-156 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 157 | 3143144.31 | 1255945.25 | 2856.758 | K-157 |
| 158 | 3143040.43 | 1255893.08 | 2843.652 | K-158 |
| 159 | 3143020.83 | 1255775.79 | 2828.422 | K-159 |
| 160 | 3143173.82 | 1255868.8 | 2794.819 | K-160 |
| 161 | 3143276.78 | 1255867.47 | 2776.717 | K-161 |
| 162 | 3143322.01 | 1256023.43 | 2757.461 | K-162 |
| 163 | 3143345.31 | 1255961.48 | 2737.264 | K-163 |
| 164 | 3143401.93 | 1256062.07 | 2732.036 | K-164 |
| 165 | 3143458.76 | 1256143.93 | 2720.808 | K-165 |
| 166 | 3143504.19 | 1256273.81 | 2708.644 | K-166 |
| 167 | 3143549.99 | 1256337.75 | 2703.278 | K-167 |
| 168 | 3143576.02 | 1256333.53 | 2688.13 | K-168 |
| 169 | 3143558.54 | 1256266.88 | 2680.421 | K-169 |
| 170 | 3143571.8 | 1256205.96 | 2669.712 | K-170 |
| 171 | 3143647.78 | 1256322.87 | 2650.707 | K-171 |
| 172 | 3143681.02 | 1256428.03 | 2640.493 | K-172 |
| 173 | 3143728.44 | 1256495.59 | 2632.026 | K-173 |
| 174 | 3143742.96 | 1256503.5 | 2630.069 | M-15 |
| 175 | 3143831.17 | 1256163.25 | 2609.871 | M-14 |
| 176 | 3143864.08 | 1256321.46 | 2595.054 | M-13 |
| 177 | 3143963.78 | 1256160.34 | 2559.62 | M-12 |
| 178 | 3144012.05 | 1256127.76 | 2551.943 | M-11 |
| 179 | 3143997.82 | 1256177.48 | 2542.752 | M-10 |
| 180 | 3143952.67 | 1256434.17 | 2516.104 | M-9 |
| 181 | 3143951.56 | 1256533.15 | 2503.793 | M-8 |
| 182 | 3144020.3 | 1256435.96 | 2486.325 | M-7 |
| 183 | 3144089.75 | 1256335.03 | 2472.57 | M-6 |
| 184 | 3144112.51 | 1256365.59 | 2466.968 | M-5 |
| 185 | 3144097.9 | 1256419.16 | 2464.251 | M-4 |
| 186 | 3144051.26 | 1256504.91 | 2450.159 | M-3 |
| 187 | 3144030.93 | 1256561.89 | 2444.033 | M-2 |
| 188 | 3143996.34 | 1256712.04 | 2431.284 | M-1 |
| 189 | 3144133.65 | 1256507.98 | 2407.201 | K-174 |
| 190 | 3144247.84 | 1256414.25 | 2396.428 | K-175 |
| 191 | 3144388.99 | 1256422.14 | 2383.492 | K-176 |
| 192 | 3144575.22 | 1256346.53 | 2364.14 | K-177 |
| 193 | 3144732.72 | 1256314.3 | 2350.591 | K-178 |
| 194 | 3144950.69 | 1256536.49 | 2326.612 | K-179 |
| 195 | 3145075.78 | 1256472.86 | 2306.549 | K-180 |
| 196 | 3145135.18 | 1256603 | 2296.836 | K-181 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 197 | 3145246.88 | 1256684.17 | 2292.614 | K-182 |
| 198 | 3145166.02 | 1256634.99 | 2289.555 | K-183 |
| 199 | 3145814.17 | 1256379.23 | 2275.893 | K-184 |
| 200 | 3146037.54 | 1256299.97 | 2272.193 | K-185 |
| 201 | 3146667.13 | 1256059.18 | 2260.476 | K-186 |
| 202 | 3146814.99 | 1256012.32 | 2258.278 | K-187 |
| 203 | 3146944.94 | 1255954.14 | 2256.791 | K-188 |
| 204 | 3147595.18 | 1255710.8 | 2252.616 | K-189 |
| 205 | 3147644.89 | 1255700.55 | 2257.785 | K-190 |
| 206 | 3147866.31 | 1255625.66 | 2269.467 | K-191 |
| 207 | 3148193.08 | 1255535.96 | 2267.826 | K-192 |
| 208 | 3148403.63 | 1255536.05 | 2276.98 | K-193 |
| 209 | 3148501.44 | 1255585.94 | 2279.347 | K-194 |
| 210 | 3148603.11 | 1255597.33 | 2270.45 | K-195 |
| 211 | 3148660.05 | 1255583.32 | 2263.974 | K-196 |
| 212 | 3148756.23 | 1255694.95 | 2257.518 | K-197 |
| 213 | 3148883.68 | 1255939.7 | 2246.817 | K-198 |
| 214 | 3148940.81 | 1256195.28 | 2234.595 | K-199 |
| 215 | 3148946.04 | 1256242.82 | 2234.711 | K-200 |
| 216 | 3149299.6 | 1256219.7 | 2238.759 | K-201 |
| 217 | 3149743.69 | 1256441.16 | 2253.438 | K-202 |
| 218 | 3149854.24 | 1256456.33 | 2257.321 | K-203 |
| 219 | 3150033.11 | 1256471.62 | 2259.719 | K-204 |
| 220 | 3150152.03 | 1256518.91 | 2262.221 | K-205 |
| 221 | 3150224.96 | 1256596.89 | 2265.027 | K-206 |
| 222 | 3150264.68 | 1256664.58 | 2261.449 | K-207 |
| 223 | 3150293.9 | 1256617.07 | 2250.578 | K-208 |
| 224 | 3150336.42 | 1256567.32 | 2244.403 | K-209 |
| 225 | 3150375.03 | 1256584.95 | 2234.364 | K-210 |
| 226 | 3150506.77 | 1256660.14 | 2222.473 | K-211 |
| 227 | 3151365.58 | 1256964.84 | 2209.3 | K-212 |
| 228 | 3151409.96 | 1257027.99 | 2218.192 | K-213 |
| 229 | 3151522.72 | 1257157.23 | 2225.32 | K-214 |
| 230 | 3151657.89 | 1257326.53 | 2210.433 | K-215 |
| 231 | 3151640.56 | 1257504.14 | 2215.597 | K-216 |
| 232 | 3152493.15 | 1257894.73 | 2169.128 | K-217 |
| 233 | 3152899.33 | 1258125.24 | 2152.307 | K-218 |
| 234 | 3153038.09 | 1258256.29 | 2146.082 | K-219 |
| 235 | 3153108.47 | 1258484.89 | 2143.495 | K-220 |
| 236 | 3153302.13 | 1258920.46 | 2134.14 | K-221 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 237 | 3153431.06 | 1258960.5 | 2132.724 | K-222 |
| 238 | 3153920.62 | 1259642.33 | 2113.303 | K-223 |
| 239 | 3154736.82 | 1259738.58 | 2100.679 | K-224 |
| 240 | 3155189.37 | 1259891.49 | 2105.379 | K-225 |
| 241 | 3155611.87 | 1260223.12 | 2057.074 | K-226 |
| 242 | 3156075.08 | 1260459.34 | 2073.145 | K-227 |
| 243 | 3156539.09 | 1260022.02 | 2041.417 | K-228 |
| 244 | 3157058.24 | 1259822.05 | 2031.537 | K-229 |
| 245 | 3157434.28 | 1259618.77 | 2053.788 | K-230 |
| 246 | 3157514.91 | 1259617.84 | 2051.456 | K-231 |
| 247 | 3157710.01 | 1259582.39 | 2059.682 | K-232 |
| 248 | 3158060.41 | 1259547.83 | 2078.381 | K-233 |
| 249 | 3158188.98 | 1259468.81 | 2086.467 | K-234 |
| 250 | 3158247.11 | 1259475.17 | 2082.765 | K-235 |
| 251 | 3158364.55 | 1259445.72 | 2081.87 | K-236 |
| 252 | 3158655.3 | 1258668.34 | 2058.361 | K-237 |
| 253 | 3158790.46 | 1258388.02 | 2040.843 | K-238 |
| 254 | 3159069.54 | 1258188.16 | 2038.978 | K-239 |
| 255 | 3159143.49 | 1258198.87 | 2038.948 | K-240 |
| 256 | 3159251.96 | 1258219.01 | 2030.326 | K-241 |
| 257 | 3159250.45 | 1258041.35 | 2018.988 | K-242 |
| 258 | 3159153.76 | 1257881.41 | 2011.025 | K-243 |
| 259 | 3159155.5 | 1257678.45 | 2008.217 | K-244 |
| 260 | 3158931.55 | 1257750.62 | 1989.388 | K-245 |
| 261 | 3158894.61 | 1257710.65 | 1989.375 | K-246 |
| 262 | 3138814.08 | 1254497.91 | 3497.027 | K115/1 |
| 263 | 3138536.38 | 1254734.97 | 3519.43 | K115/2 |
| 264 | 3138730.54 | 1254802.77 | 3538.543 | K115/3 |
| 265 | 3128536.56 | 1252313.25 | 2064.866 | T.K1 |
| 266 | 3128446.51 | 1252614.72 | 2074.139 | T.K2 |
| 267 | 3128322.56 | 1252842.7 | 2080.876 | T.K3 |
| 268 | 3128094.82 | 1253034.24 | 2094.887 | T.K4 |
| 269 | 3128035.47 | 1253145.1 | 2099.831 | T.K5 |
| 270 | 3127988.02 | 1253366.1 | 2105.562 | T.K6 |
| 271 | 3127989.41 | 1253413.09 | 2105.612 | T.K7 |
| 272 | 3127959.58 | 1253518.95 | 2112.609 | T.K8 |
| 273 | 3127953.08 | 1253655.74 | 2121.274 | T.K9 |
| 274 | 3127978.76 | 1253749.05 | 2127.119 | T.K10 |
| 275 | 3127995.99 | 1253922.7 | 2141.095 | T.K11 |
| 276 | 3127964.59 | 1253448.33 | 2110.759 | T.K6/1 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 277 | 3127960.43 | 1253478.31 | 2112.245 | T.K6/2 |
| 278 | 3127941.95 | 1254127.86 | 2151.478 | T.K11/1 |
| 279 | 3127929.76 | 1254122.8 | 2151.403 | T.K11/2 |
| 280 | 3128188.39 | 1255163.49 | 2169.078 | T.K16/1 |
| 281 | 3127979.48 | 1254009.73 | 2145.1 | T.K12 |
| 282 | 3127913.65 | 1254125.38 | 2147.89 | T.K13 |
| 283 | 3127937.14 | 1254243.98 | 2155.222 | T.K14 |
| 284 | 3128095.67 | 1254707.74 | 2163.836 | T.K15 |
| 285 | 3128190.06 | 1255133.74 | 2164.119 | T.K16 |
| 286 | 3128180.21 | 1255180.34 | 2165.994 | T.K17 |
| 287 | 3128047.35 | 1255718.85 | 2194.925 | T.K18 |
| 288 | 3127889.11 | 1255968.87 | 2217.333 | T.K18/1 |
| 289 | 3128025.16 | 1255768.37 | 2191.88 | T.K19 |
| 290 | 3127952.18 | 1255867.98 | 2200.701 | T.K20 |
| 291 | 3127742.49 | 1256120.68 | 2224.613 | T.K21 |
| 292 | 3127677.59 | 1256184.1 | 2229.075 | T.K22 |
| 293 | 3127501.55 | 1256284.68 | 2244.324 | T.K22/1 |
| 294 | 3127178 | 1256549.69 | 2263.398 | T.K22/2 |
| 295 | 3127520.25 | 1256275.24 | 2239.536 | T.K23 |
| 296 | 3127265.47 | 1256480.32 | 2255.954 | T.K24 |
| 297 | 3127446.29 | 1256325.52 | 2244.304 | T.K25 |
| 298 | 3127018.88 | 1256674.74 | 2261.469 | T.K26 |
| 299 | 3126929.54 | 1256812.39 | 2269.054 | T.K27 |
| 300 | 3126826.24 | 1257111.87 | 2277.605 | T.K28 |
| 301 | 3126905.28 | 1257284.12 | 2286.782 | T.K29 |
| 302 | 3126915.05 | 1257621.46 | 2279.245 | T.K30 |
| 303 | 3126787.76 | 1257751.83 | 2280.77 | T.K31 |
| 304 | 3126717.15 | 1257914.27 | 2281.845 | T.K32 |
| 305 | 3126390.52 | 1258249.16 | 2289.965 | T.K33 |
| 306 | 3126216.7 | 1258287.37 | 2293.98 | T.K34 |
| 307 | 3126108.59 | 1258316.85 | 2298.762 | T.K35 |
| 308 | 3125983.99 | 1258361.94 | 2297.704 | T.K36 |
| 309 | 3125925.52 | 1258362.78 | 2298.331 | T.K37 |
| 310 | 3125815.48 | 1258421.28 | 2298.017 | T.K38 |
| 311 | 3125687.74 | 1258530.85 | 2297.682 | T.K39 |
| 312 | 3125431.23 | 1258545.38 | 2294.953 | T.K40 |
| 313 | 3125287.52 | 1258568.44 | 2300.113 | T.K41 |
| 314 | 3125128.67 | 1258679.74 | 2307.363 | T.K42 |
| 315 | 3125058.57 | 1258698.27 | 2310.2 | T.K43 |
| 316 | 3124955.22 | 1258814.14 | 2313.884 | T.K44 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 317 | 3124924.86 | 1258957.05 | 2322.85 | T.K45 |
| 318 | 3124834.23 | 1259018.67 | 2324.761 | T.K46 |
| 319 | 3124815.91 | 1259045.3 | 2328.07 | T.K47 |
| 320 | 3124797.53 | 1259100.66 | 2329.783 | T.K48 |
| 321 | 3124753.58 | 1259192.31 | 2336.254 | T.K49 |
| 322 | 3124695.68 | 1259263.61 | 2339.952 | T.K50 |
| 323 | 3124636.47 | 1259371.38 | 2346.683 | T.K51 |
| 324 | 3124629.27 | 1259464.53 | 2351.235 | T.K52 |
| 325 | 3124520.47 | 1259558.36 | 2346.086 | T.K53 |
| 326 | 3124493.68 | 1259579.82 | 2347.348 | T.K54 |
| 327 | 3124369.75 | 1259728.02 | 2344.339 | T.K55 |
| 328 | 3124280.3 | 1260220.49 | 2351.028 | T.K56 |
| 329 | 3123687.88 | 1260772.59 | 2359.733 | T.K57 |
| 330 | 3123596.59 | 1260777.84 | 2359.793 | T.K58 |
| 331 | 3123502.1 | 1260866.5 | 2358.143 | T.K59 |
| 332 | 3123414.16 | 1260985.95 | 2354.06 | T.K60 |
| 333 | 3123213.17 | 1261159.45 | 2354.757 | T.K61 |
| 334 | 3123067.9 | 1261192.46 | 2357.389 | T.K62 |
| 335 | 3122872.39 | 1261257.39 | 2363.415 | T.K63 |
| 336 | 3122763.16 | 1261362.31 | 2368.584 | T.K64 |
| 337 | 3122659.99 | 1261407.78 | 2375.655 | T.K65 |
| 338 | 3122566.41 | 1261509.29 | 2382.097 | T.K66 |
| 339 | 3122510.71 | 1261587.25 | 2381.778 | T.K67 |
| 340 | 3122512.97 | 1261671.6 | 2382.062 | T.K68 |
| 341 | 3122349.07 | 1261861.04 | 2388.397 | T.K69 |
| 342 | 3122063.11 | 1262035.41 | 2385.192 | T.K70 |
| 343 | 3121545.05 | 1262205.14 | 2396.402 | T.K71 |
| 344 | 3121364.21 | 1262327.88 | 2403.044 | T.K72 |
| 345 | 3120878.05 | 1262786.77 | 2414.177 | T.K73 |
| 346 | 3120668.59 | 1262875.59 | 2428.391 | T.K74 |
| 347 | 3120550.9 | 1262991.63 | 2439.68 | T.K75 |
| 348 | 3120431.53 | 1263024.67 | 2437.253 | T.K76 |
| 349 | 3120403.18 | 1263072.03 | 2439.538 | T.K77 |
| 350 | 3120404.44 | 1263175.16 | 2444.68 | T.K78 |
| 351 | 3120430.99 | 1263341.2 | 2454.478 | T.K79 |
| 352 | 3120438.44 | 1263444.69 | 2456.095 | T.K80 |
| 353 | 3120396.78 | 1263575.09 | 2460.367 | T.K81 |
| 354 | 3120349.07 | 1263629.57 | 2465.421 | T.K82 |
| 355 | 3120315.68 | 1263645.23 | 2460.844 | T.K83 |
| 356 | 3120253.99 | 1263770.51 | 2467.038 | T.K84 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 357 | 3120200.57 | 1263830.34 | 2477.964 | T.K85 |
| 358 | 3120093.7 | 1263941.23 | 2482.98 | T.K86 |
| 359 | 3120045.75 | 1263951.19 | 2483.96 | T.K87 |
| 360 | 3119975.54 | 1263975.57 | 2482.642 | T.K88 |
| 361 | 3119925.66 | 1264001.7 | 2477.71 | T.K89 |
| 362 | 3119839.55 | 1264106.57 | 2477.43 | T.K90 |
| 363 | 3119818.38 | 1264219.28 | 2477.026 | T.K91 |
| 364 | 3119843.48 | 1264276.49 | 2477.421 | T.K92 |
| 365 | 3119845.87 | 1264308.55 | 2481.399 | T.K93 |
| 366 | 3119817.36 | 1264394.29 | 2478.063 | T.K94 |
| 367 | 3119728.09 | 1264458.41 | 2485.511 | T.K95 |
| 368 | 3119664.1 | 1264533.81 | 2486.519 | T.K96 |
| 369 | 3119642.13 | 1264584.93 | 2487.545 | T.K97 |
| 370 | 3119620.12 | 1264641.77 | 2485.575 | T.K98 |
| 371 | 3119602 | 1264703.56 | 2484.524 | T.K99 |

2.9 District Haripur

Location Maps and Traverse Data

2.9.1 (T-7)

Noori Waterfall

2.9.1.1 Location Map



Figure 2.9.1 Location Map T-7

2.9.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.9.1 T-7 Traverse Points

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 1 | 327122.229 | 3752041.147 | 836.939 | BM15 |
| 2 | 327439.862 | 3752204.790 | 829.812 | BM13 |
| 3 | 327409.154 | 3752205.056 | 831.719 | BM14 |
| 4 | 327615.682 | 3752005.319 | 793.086 | BM11 |
| 5 | 327625.357 | 3751970.028 | 799.518 | BM12 |
| 6 | 328327.712 | 3752502.575 | 768.824 | BM8 |
| 7 | 328342.833 | 3752513.383 | 768.831 | BM7 |
| 8 | 328676.883 | 3752613.796 | 784.103 | BM6 |
| 9 | 328715.151 | 3752606.791 | 785.434 | BM5 |
| 10 | 330363.900 | 3753119.952 | 850.991 | BM 1d |
| 11 | 330375.652 | 3753103.727 | 852.778 | BM 1c |
| 12 | 327096.206 | 3752008.104 | 838.210 | BM 16 |
| 13 | 327122.047 | 3752041.967 | 836.943 | BM 15 |
| 14 | 326549.968 | 3751860.051 | 810.363 | BM 18 |
| 15 | 326545.648 | 3751861.051 | 810.232 | BM 17 |
| 16 | 327439.864 | 3752204.785 | 829.810 | BM 13 |
| 17 | 327409.169 | 3752205.052 | 831.711 | BM 14 |
| 18 | 327930.394 | 3752263.783 | 778.104 | BM 9 |
| 19 | 327904.667 | 3752254.815 | 778.729 | BM 10 |
| 20 | 327625.323 | 3751970.003 | 801.507 | BM 12 |
| 21 | 327615.660 | 3752005.279 | 795.081 | BM 11 |

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 22 | 329851.315 | 3752620.832 | 792.728 | BM1 b |
| 23 | 329836.305 | 3752609.995 | 792.473 | BM 1a |
| 24 | 328715.527 | 3752606.125 | 785.454 | BM 5 |
| 25 | 328677.239 | 3752613.029 | 784.122 | BM 6 |
| 26 | 328342.716 | 3752513.514 | 770.803 | BM 7 |
| 27 | 328327.616 | 3752502.683 | 770.777 | BM 8 |
| 28 | 329022.241 | 3752379.877 | 762.757 | BM4a |
| 29 | 329489.970 | 3752471.557 | 762.025 | BM 1 |
| 30 | 329484.914 | 3752464.612 | 762.086 | BM 2 |
| 31 | 329055.791 | 3752362.794 | 756.766 | BM4 |
| 32 | 329065.153 | 3752353.058 | 756.337 | BM3 |

2.9.2 T-35

Nara Akhoonkhail Waterfall

2.9.2.1 Location Map

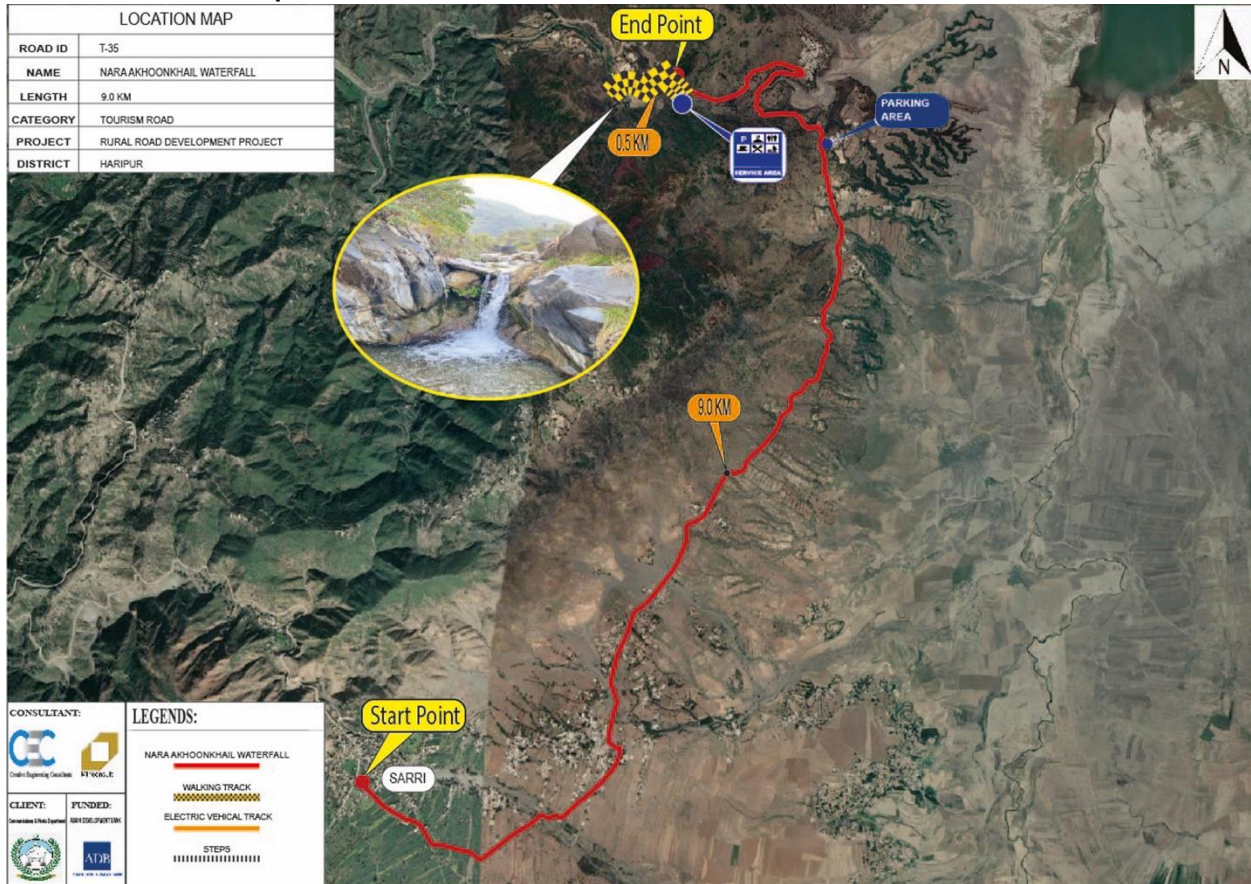


Figure 2.9.2 Location Map T-35

2.9.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.9.2 T-35 Traverse Points

| SR. NO | EASTING | NORTHING | ELEVATION | REMARKS |
|--------|------------|-------------|-----------|---------|
| 1 | 301755.98 | 3771225.716 | 476.59 | bm 28 |
| 2 | 301774.377 | 3771241.679 | 478.601 | bm 27 |
| 3 | 301333.997 | 3771264.29 | 474.247 | bm 30 |
| 4 | 301339.766 | 3771262.583 | 476.12 | bm 29 |
| 5 | 302094.41 | 3771374.711 | 448.598 | bm 26 |
| 6 | 302072.147 | 3771375.327 | 446.937 | bm 25 |
| 7 | 302095.612 | 3771120.21 | 468.375 | bm 24 |
| 8 | 302115.317 | 3771114.684 | 469.177 | bm 23 |
| 9 | 302302.663 | 3770710.304 | 460.856 | bm 21 |
| 10 | 302356.39 | 3770203.627 | 457.961 | bm 20 |
| 11 | 302361.96 | 3770142.282 | 459.067 | bm 19 |
| 12 | 302262.074 | 3769575.518 | 461.61 | bm 18 |
| 13 | 302236.261 | 3769520.53 | 457.219 | bm 17 |
| 14 | 301958.96 | 3769159.936 | 464.726 | bm 16 |
| 15 | 301953.947 | 3769164.865 | 464.711 | bm 15 |
| 16 | 301504.429 | 3768641.815 | 477.843 | bm 14 |
| 17 | 301512.591 | 3768640.688 | 477.392 | bm 13 |
| 18 | 301142.797 | 3768116.831 | 482.953 | bm 12 |
| 19 | 301121.499 | 3768095.041 | 483.236 | bm 11 |
| 20 | 300837.432 | 3767550.343 | 462.134 | bm 10 |
| 21 | 300830.792 | 3767557.302 | 462.525 | bm 9 |
| 22 | 299215.685 | 3766957.071 | 495.256 | bm 2 |
| 23 | 299219.477 | 3766967.349 | 495.464 | bm 1 |
| 24 | 300887.196 | 3767115.775 | 457.918 | bm 7 |
| 25 | 299743.517 | 3766540.408 | 474.268 | bm 4 |
| 26 | 299689.072 | 3766523.206 | 474.818 | bm3 |
| 27 | 302096.495 | 3771120.971 | 468.342 | BM24TS |
| 28 | 302096.495 | 3771120.971 | 468.342 | BM24TS |
| 29 | 302116.165 | 3771115.368 | 469.164 | BM23TS |
| 30 | 302236.452 | 3769520.435 | 457.142 | BM17TS |
| 31 | 302262.346 | 3769575.367 | 461.525 | BM18TS |
| 32 | 301121.175 | 3768094.442 | 483.085 | BM11TS |
| 33 | 300837.427 | 3767550.292 | 461.996 | BM10TS |
| 34 | 299743.518 | 3766540.409 | 474.268 | BSBM4 |

2.9.3 HRI-17

Anar Gah

2.9.3.1 Location Map

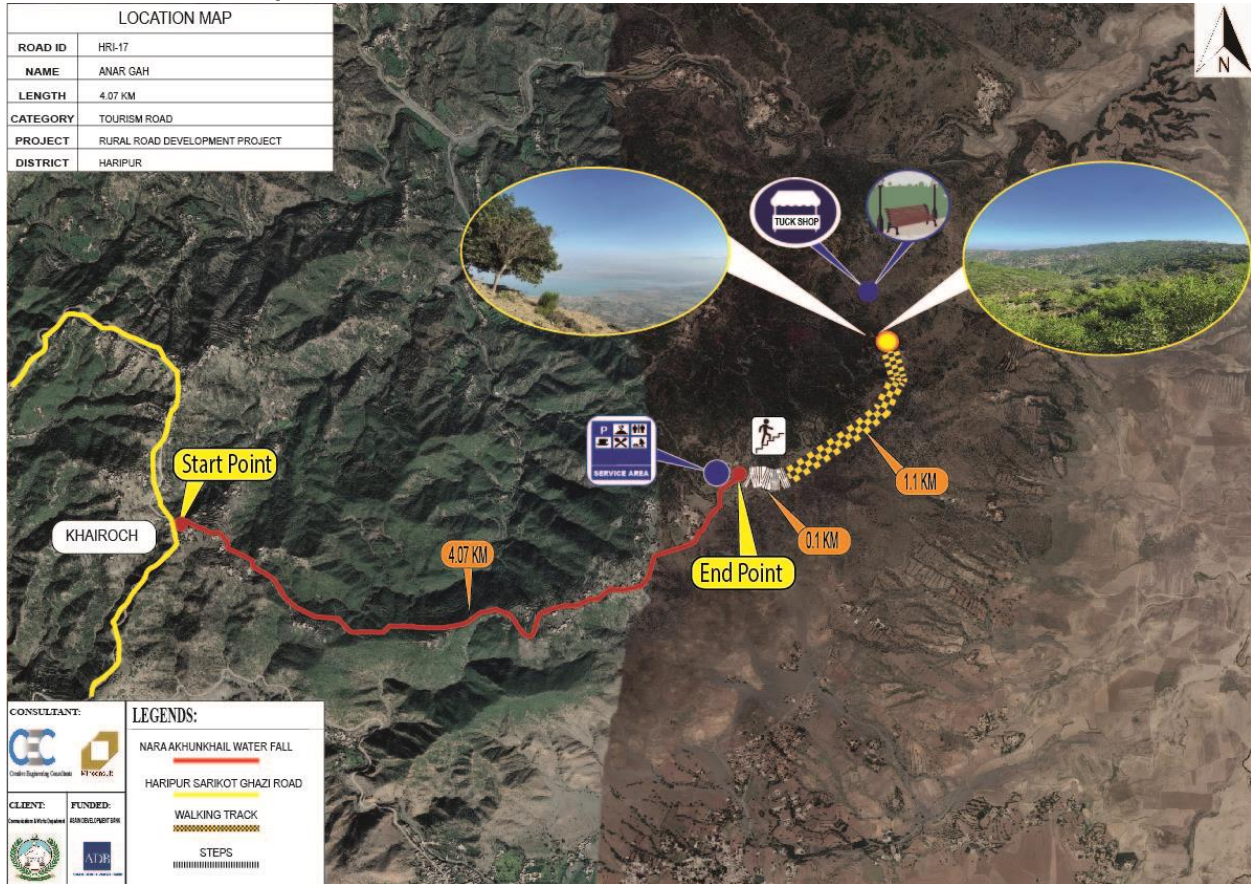


Figure 2.9.3 Location Map HRI-17

2.9.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.9.3 HRI-17 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 298306.052 | 3769030.338 | 787.329 | cp 12 |
| 2 | 298306.37 | 3769036.397 | 786.032 | cp 11 |
| 3 | 298955.109 | 3768567.698 | 766.357 | cp 5 |
| 4 | 298937.997 | 3768565.581 | 765.972 | cp 6 |
| 5 | 298804.657 | 3768594.022 | 761.54 | cp 7 |
| 6 | 298792.074 | 3768621.994 | 762.662 | cp 8 |
| 7 | 298738.609 | 3768664.699 | 767.648 | cp 10 |
| 8 | 298727.075 | 3768668.04 | 768.976 | cp 9 |
| 9 | 298401.117 | 3768917.185 | 797.569 | bm 16 |
| 10 | 297960.039 | 3769186.436 | 768.816 | bm 20 |
| 11 | 297956.861 | 3769193.825 | 768.26 | bm 19 |
| 12 | 298020.585 | 3769192.513 | 779.053 | bm 18 |
| 13 | 298054.655 | 3769157.526 | 782.035 | bm 17 |
| 14 | 298413.232 | 3768920.663 | 796.035 | bm 15 |
| 15 | 298546.862 | 3768691.833 | 782.834 | bm 13 |
| 16 | 298535.943 | 3768738.888 | 778.123 | bm 14 |
| 17 | 299011.503 | 3768608.596 | 769.554 | bm 12 |
| 18 | 299024.179 | 3768619.825 | 770.176 | bm 11 |
| 19 | 299722.219 | 3768543.651 | 770.926 | cp 4 |
| 20 | 299715.517 | 3768547.138 | 771.845 | cp 3 |
| 21 | 299554.227 | 3768690.447 | 748.373 | bm 9 |
| 22 | 299541.993 | 3768682.244 | 748.524 | bm 10 |
| 23 | 299858.418 | 3768692.89 | 792.575 | bm 7 |
| 24 | 299808.112 | 3768683.617 | 787.227 | bm 8 |
| 25 | 300310.651 | 3768771.388 | 833.151 | bm 6 |
| 26 | 300334.827 | 3768761.941 | 829.517 | bm 5 |
| 27 | 300357.557 | 3768906.906 | 840.888 | cp 2 |
| 28 | 300361.797 | 3768912.562 | 841.52 | cp 1 |
| 29 | 300475.137 | 3768977.169 | 835.059 | bm 4 |
| 30 | 300713.943 | 3769289.143 | 832.06 | bm 2 |
| 31 | 300716.992 | 3769310.438 | 832.22 | bm 1 |
| 32 | 300549.603 | 3769017.159 | 835.228 | bm 3 |
| 33 | 299197.936 | 3768596.046 | 767.431 | CP |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 34 | 299403.419 | 3768631.474 | 753.453 | CP |
| 35 | 299400.634 | 3768627.133 | 755.549 | CP |
| 36 | 299465.993 | 3768651.78 | 753.588 | CP |
| 37 | 299472.938 | 3768654.343 | 753.58 | CP |
| 38 | 299547.784 | 3768681.938 | 748.459 | CP |
| 39 | 299547.879 | 3768681.965 | 750.633 | CP |
| 40 | 299541.689 | 3768675.034 | 748.575 | CP |
| 41 | 299627.903 | 3768647.766 | 751.944 | CP |
| 42 | 299638.195 | 3768643.176 | 753.033 | CP |
| 43 | 299634.054 | 3768643.627 | 752.748 | CP |
| 44 | 299663.629 | 3768641.448 | 754.886 | CP |
| 45 | 299680.777 | 3768610.636 | 758.433 | CP |
| 46 | 299680.619 | 3768606.529 | 758.857 | CP |
| 47 | 299717.499 | 3768545.711 | 771.781 | CP |
| 48 | 299717.497 | 3768545.712 | 771.781 | CP |
| 49 | 299721.542 | 3768589.477 | 775.539 | CP |
| 50 | 299725.936 | 3768600.377 | 776.829 | CP |
| 51 | 299763.932 | 3768667.893 | 781.439 | CP |
| 52 | 299814.453 | 3768686.559 | 787.868 | CP |
| 53 | 299924.873 | 3768730.749 | 800.767 | CP |
| 54 | 299929.396 | 3768729.935 | 800.743 | CP |
| 55 | 299991.908 | 3768686.743 | 800.63 | CP |
| 56 | 300798.116 | 3769354.374 | 836.144 | CP |
| 57 | 300713.103 | 3769289.74 | 831.994 | BM2TS |
| 58 | 300653.06 | 3769179.688 | 833.613 | CP |
| 59 | 300650.116 | 3769172.682 | 833.663 | CP |

2.10 District Karak

2.10.1 N-KRK-R2

Takhate Nasrati Bridge to Khadda Banda via Bhogara Culvert Rose Baig Khail Kalah

2.10.1.1 Location Map

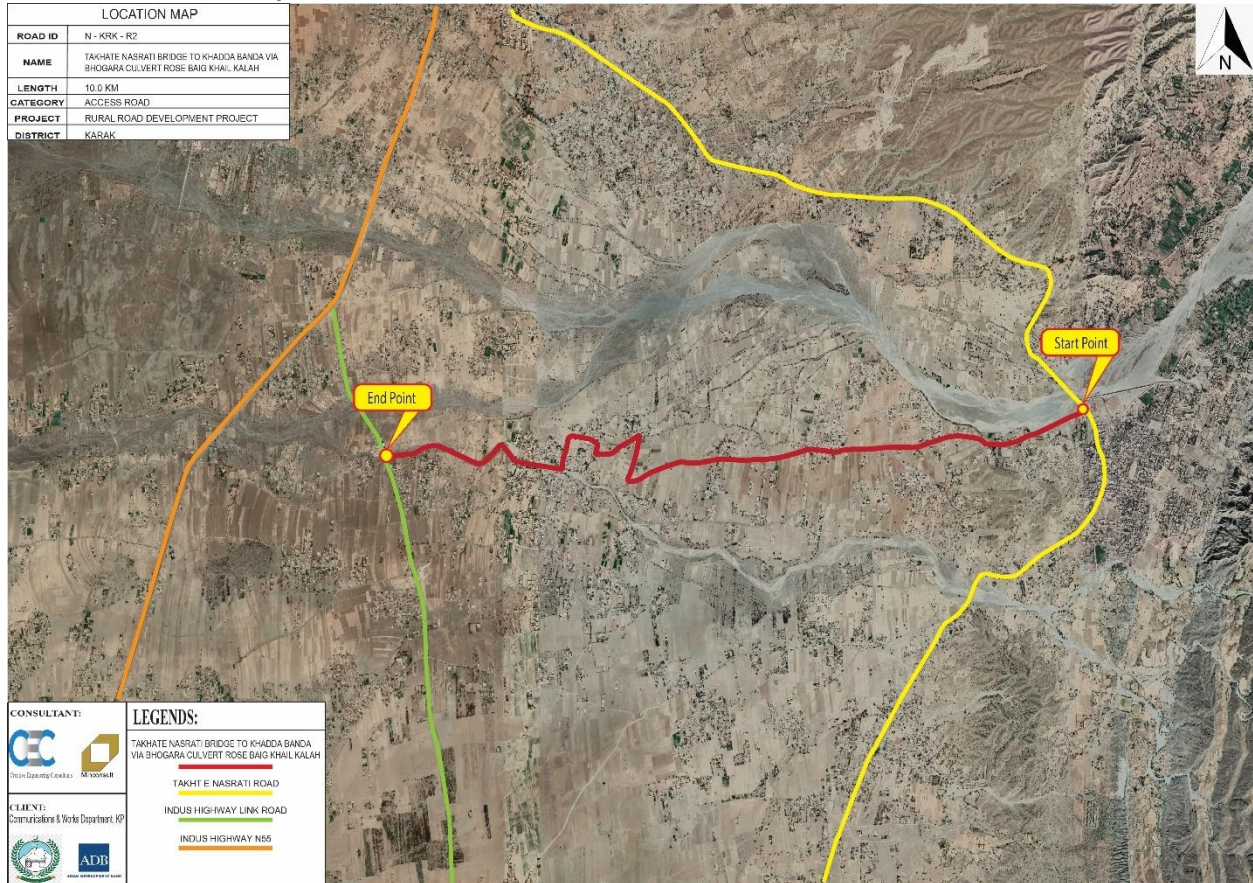


Figure 2.10.1 Location Map N-KRK-R2

2.10.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.10.1 N-KRK-R2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 694532.201 | 3654415.477 | 539.429 | BM1 |
| 2 | 694515.943 | 3654419.835 | 537.788 | BM2 |
| 3 | 693521.38 | 3654153.39 | 533.372 | BM3 |
| 4 | 693483.55 | 3654168.732 | 533.929 | BM4 |
| 5 | 691801.776 | 3654070.503 | 506.685 | BM5 |
| 6 | 691799.014 | 3654076.545 | 506.603 | BM6 |
| 7 | 690643.6 | 3653922.534 | 494.032 | BM7 |
| 8 | 690630.563 | 3653921.664 | 493.966 | BM8 |
| 9 | 690011.318 | 3654089.94 | 490.875 | BM9 |
| 10 | 689994.804 | 3654082.889 | 491.026 | BM10 |
| 11 | 689412.158 | 3654088.485 | 482.405 | BM11 |
| 12 | 689418.466 | 3654108.104 | 482.074 | BM12 |
| 13 | 689358.105 | 3653886.282 | 477.111 | BM13 |
| 14 | 689358.459 | 3653875.479 | 475.674 | BM14 |
| 15 | 689351.872 | 3653836.344 | 476.327 | BASE 2 |
| 16 | 688900.948 | 3653886.026 | 470.155 | BM15 |
| 17 | 688887.614 | 3653896.502 | 471.402 | BM16 |
| 18 | 687872.008 | 3653934.204 | 459.965 | BM17 |
| 19 | 687850.129 | 3653932.321 | 459.557 | BM18 |

2.10.2 KPR-KRK-NR5

Hamdan to Inzar More

2.10.2.1 Location Map

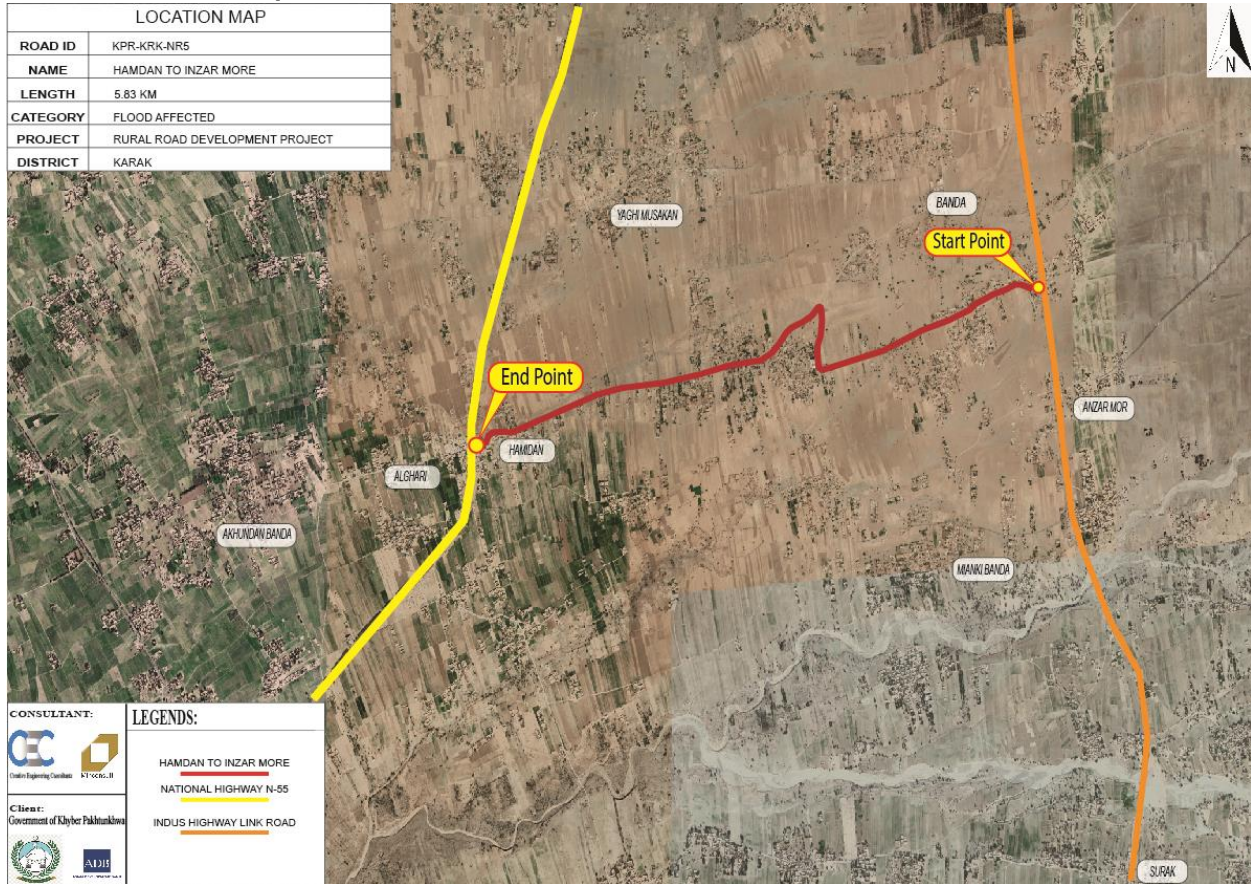


Figure 2.10.2 Location Map KPR_KRK_NR5

2.10.2.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.10.2 KPR_KRK_NR5 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|---------|
| 1 | 686722.309 | 3648553.183 | 392.937 | BM10 |
| 2 | 686724.874 | 3648389.543 | 392.923 | cp 1 |
| 3 | 688623.424 | 3648771.058 | 411.975 | BM .1 |
| 4 | 688604.514 | 3648772.206 | 411.589 | BM.2 |
| 5 | 687962.439 | 3648556.861 | 404.854 | BM.3 |
| 6 | 687946.317 | 3648552.075 | 404.477 | BM.4 |
| 7 | 687192.647 | 3648238.666 | 395.932 | BM.5 |
| 8 | 687181.957 | 3648238.143 | 395.846 | BM.6 |
| 9 | 686706.634 | 3648141.872 | 390.87 | BM.8 |
| 10 | 686704.339 | 3648162.345 | 390.976 | BM.7 |
| 11 | 683708.816 | 3647498.149 | 363.718 | BM.20 |
| 12 | 683708.935 | 3647484.347 | 363.678 | BM19 |
| 13 | 684151.299 | 3647645.83 | 367.293 | BM 18 |
| 14 | 684179.565 | 3647655.751 | 367.215 | BM17 |
| 15 | 684656.308 | 3647846.252 | 371.251 | BM16 |
| 16 | 684637.814 | 3647841.788 | 371.455 | BM15 |
| 17 | 685364.74 | 3647992.081 | 377.984 | BM14 |
| 18 | 685404.065 | 3647994.151 | 378.734 | BM13 |
| 19 | 686186.577 | 3648173.701 | 386.55 | BM11 |
| 20 | 686161.083 | 3648165.436 | 386.266 | BM12 |
| 21 | 686722.309 | 3648553.179 | 392.9365 | BSBM10 |
| 22 | 686662.6775 | 3648547.685 | 392.0499 | CP1 |
| 23 | 686662.9314 | 3648541.558 | 391.9953 | CP2 |
| 24 | 686537.4763 | 3648448.774 | 391.1319 | CP3 |
| 25 | 686532.3194 | 3648441.725 | 391.0524 | CP4 |
| 26 | 686363.6394 | 3648301.546 | 387.9658 | CP5 |
| 27 | 686356.8625 | 3648296.831 | 387.8899 | CP6 |
| 28 | 686265.0115 | 3648209.703 | 386.975 | CP7 |
| 29 | 686260.8769 | 3648204.439 | 386.8606 | CP8 |
| 30 | 686161.0802 | 3648165.436 | 386.2683 | BS BM12 |
| 31 | 686044.9981 | 3648147.016 | 385.411 | CP1 |
| 32 | 686034.2483 | 3648148.511 | 385.3594 | CP2 |
| 33 | 685896.9136 | 3648112.06 | 383.8929 | CP3 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|---------|
| 34 | 685889.5571 | 3648113.192 | 383.9571 | CP4 |
| 35 | 685753.2573 | 3648077.534 | 382.2875 | CP5 |
| 36 | 685736.6125 | 3648078.684 | 382.3099 | CP6 |
| 37 | 685736.6333 | 3648078.689 | 382.3078 | BSCP6 |
| 38 | 685604.7142 | 3648051.628 | 380.6874 | CP7 |
| 39 | 685600.6281 | 3648046.058 | 380.6669 | CP8 |
| 40 | 685455.0159 | 3648011.227 | 379.1756 | CP9 |
| 41 | 685435.7429 | 3648007.469 | 378.9495 | CP10 |
| 42 | 685364.7381 | 3647992.081 | 377.9783 | BS BM14 |
| 43 | 688604.512 | 3648772.196 | 411.594 | BM2GPS |
| 44 | 688512.842 | 3648744.897 | 410.346 | CP1 |
| 45 | 688503.826 | 3648746.893 | 410.275 | CP2 |
| 46 | 688234.279 | 3648708.929 | 408.433 | CP3 |
| 47 | 688229 | 3648703.202 | 408.39 | CP4 |
| 48 | 688093.602 | 3648632.379 | 407.254 | CP5 |
| 49 | 688087.478 | 3648635.415 | 407.054 | CP6 |
| 50 | 687961.799 | 3648558.328 | 404.837 | BM3 |
| 51 | 687945.653 | 3648553.621 | 404.446 | BM4 |
| 52 | 686677.684 | 3648251.916 | 391.376 | CP |
| 53 | 686693.436 | 3648255.098 | 391.777 | CP |
| 54 | 686839.836 | 3648202.851 | 391.78 | CP |
| 55 | 687014.127 | 3648175.003 | 393.84 | CP |
| 56 | 687012.868 | 3648186.213 | 394.201 | CP |
| 57 | 687267.058 | 3648267.182 | 396.76 | CP |
| 58 | 687276.664 | 3648274.081 | 396.924 | CP |
| 59 | 687108.352 | 3648159.147 | 394.493 | CP |
| 60 | 687515.556 | 3648381.964 | 399.16 | CP |
| 61 | 687529.744 | 3648392.432 | 399.381 | CP |
| 62 | 687840.045 | 3648502.417 | 403.456 | CP |
| 63 | 687840.456 | 3648492.602 | 402.47 | CP |
| 64 | 683708.9105 | 3647484.342 | 363.6787 | BM1 |
| 65 | 683708.8099 | 3647498.157 | 363.7194 | BM20 |
| 66 | 683787.6766 | 3647519.038 | 362.7987 | CP1 |
| 67 | 683793.9525 | 3647522.127 | 362.786 | CP2 |
| 68 | 683822.4467 | 3647587.01 | 363.2462 | CP3 |
| 69 | 683825.3739 | 3647589.868 | 363.2225 | CP4 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|----------|
| 70 | 684021.8836 | 3647596.93 | 364.754 | CP5 |
| 71 | 684029.0675 | 3647602.136 | 364.7868 | CPP |
| 72 | 684151.6026 | 3647645.179 | 367.3152 | TS BM18 |
| 73 | 684179.8861 | 3647655.021 | 367.2256 | TS BM17 |
| 74 | 684151.3308 | 3647645.853 | 367.2978 | BM 18 BS |
| 75 | 684531.0947 | 3647806.072 | 370.2371 | CP7 |
| 76 | 684527.7938 | 3647797.768 | 370.1218 | CP8 |
| 77 | 684637.8882 | 3647841.941 | 371.4732 | TS BM 15 |
| 78 | 684656.3056 | 3647846.246 | 371.2537 | BM 16 BS |
| 79 | 684894.1085 | 3647931.251 | 373.7301 | CP9 |
| 80 | 684900.1333 | 3647926.282 | 373.7172 | CP10 |
| 81 | 685176.9171 | 3647967.009 | 376.17 | CP11 |
| 82 | 685170.3415 | 3647973.952 | 376.2789 | CP12 |

2.10.3 RRD_KRK_R1

Indus Highway to Nari Khawar

2.10.3.1 Location Map

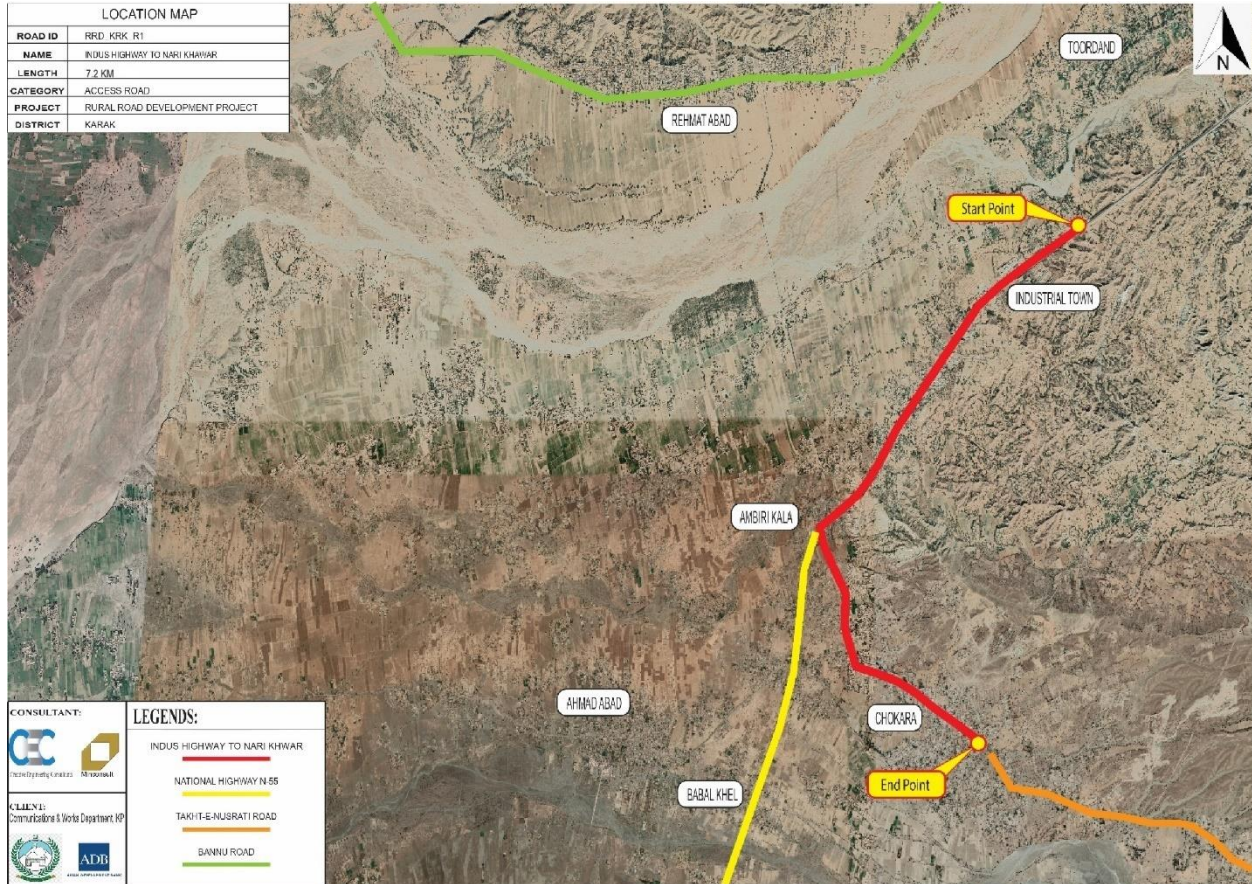


Figure 2.10.3 Location Map RRD_KRK_R1

2.10.3.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.10.3 RRD_KRK_R1 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|-----------|
| 1 | 690773.4155 | 3657944.921 | 486.117 | CP1 |
| 2 | 690772.8823 | 3657951.251 | 486.4118 | CP2 |
| 3 | 690831.0355 | 3658031.446 | 489.0143 | CP3 |
| 4 | 690837.6963 | 3658032.252 | 489.023 | CP4 |
| 5 | 690891.3589 | 3658101.401 | 489.6429 | CP5 |
| 6 | 690895.3588 | 3658107.315 | 489.5769 | CP6 |
| 7 | 690966.906 | 3658193.232 | 485.3894 | CLOSEBM7 |
| 8 | 690978.0288 | 3658203.868 | 484.504 | CLOSE BM8 |
| 9 | 690977.0259 | 3658204.674 | 484.472 | BSBM8 |
| 10 | 691052.3598 | 3658255.305 | 477.9616 | CP1 |
| 11 | 691052.8174 | 3658260.168 | 477.8294 | CP2 |
| 12 | 691138.0546 | 3658298.528 | 471.9048 | CP3 |
| 13 | 691144.5136 | 3658300.36 | 471.6187 | CP4 |
| 14 | 691211.7648 | 3658350.271 | 469.5651 | CP5 |
| 15 | 691211.1953 | 3658358.609 | 469.0807 | CP6 |
| 16 | 691250.478 | 3658407.68 | 466.2322 | CP7 |
| 17 | 691254.3509 | 3658407.905 | 466.1344 | CP8 |
| 18 | 691295.6033 | 3658487.883 | 464.2865 | CP9 |
| 19 | 691303.7598 | 3658491.684 | 464.5427 | CP10 |
| 20 | 691335.8121 | 3658562.582 | 464.2169 | CLOSE BM9 |
| 21 | 691356.8627 | 3658578.426 | 464.0991 | BSBM10 |
| 22 | 691426.6433 | 3658590.356 | 463.0825 | CP1 |
| 23 | 691432.4769 | 3658596.195 | 462.951 | CP2 |
| 24 | 691350.7089 | 3658578.733 | 464.4073 | CP2 |
| 25 | 691350.3125 | 3658583.355 | 462.7075 | CP2 |
| 26 | 691349.7948 | 3658590.828 | 460.685 | CP2 |
| 27 | 691347.8797 | 3658608.026 | 459.1107 | CP2 |
| 28 | 691571.4997 | 3658633.076 | 461.9896 | CP3 |
| 29 | 691578.4289 | 3658629.659 | 461.8263 | CP4 |
| 30 | 691643.7672 | 3658655.932 | 460.8634 | CP5 |
| 31 | 691643.7281 | 3658661.6 | 461.0346 | CP6 |
| 32 | 691855.49 | 3658902.541 | 468.424 | BSBM 12 |
| 33 | 692441.1694 | 3661454.379 | 481.4075 | BSBM 22 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|-----------|
| 34 | 692505.6479 | 3661402.246 | 481.5068 | CP1 |
| 35 | 692517.036 | 3661405.034 | 482.102 | CP2 |
| 36 | 692517.5615 | 3661355.765 | 480.9299 | CP3 |
| 37 | 692521.7416 | 3661350.713 | 481.1219 | CP4 |
| 38 | 692499.3495 | 3661294.042 | 478.7307 | CP5 |
| 39 | 692501.4611 | 3661286.699 | 478.7168 | CP6 |
| 40 | 692460.2161 | 3661218.456 | 476.445 | CP7 |
| 41 | 692463.8796 | 3661212.995 | 476.3009 | CP8 |
| 42 | 692439.4282 | 3661152.614 | 473.3718 | CP9 |
| 43 | 692444.2156 | 3661147.512 | 472.8267 | CP10 |
| 44 | 692468.7834 | 3661090.931 | 471.6882 | CLOSEBM20 |
| 45 | 692468.2677 | 3661090.934 | 471.704 | BSBM20 |
| 46 | 692531.1903 | 3661050.758 | 473.5616 | CP1 |
| 47 | 692539.8707 | 3661051.913 | 474.2675 | CP2 |
| 48 | 692590.4966 | 3660998.653 | 474.6755 | CP3 |
| 49 | 692594.036 | 3660993.002 | 474.4724 | CP4 |
| 50 | 692632.5632 | 3660866.213 | 476.9032 | CP5 |
| 51 | 692628.8712 | 3660860.97 | 477.1264 | CP6 |
| 52 | 692671.0787 | 3660757.109 | 481.6919 | CP7 |
| 53 | 692669.4811 | 3660747.503 | 481.81 | CP8 |
| 54 | 692737.0872 | 3660630.145 | 489.42 | CP9 |
| 55 | 692742.2118 | 3660633.894 | 489.5662 | CP10 |
| 56 | 692775.7367 | 3660584.558 | 493.2197 | CLOSEBM18 |
| 57 | 692776.1575 | 3660584.479 | 493.1872 | BSBM18 |
| 58 | 692788.1905 | 3660474.516 | 495.404 | CP1 |
| 59 | 692781.4132 | 3660470.36 | 495.51 | CP2 |
| 60 | 692798.7381 | 3660320.334 | 495.1847 | CP3 |
| 61 | 692794.0891 | 3660320.104 | 495.0492 | CP4 |
| 62 | 690423.831 | 3656840.004 | 458.878 | BM2TS |
| 63 | 690361.469 | 3657001.57 | 458.767 | CP1 |
| 64 | 690356.83 | 3657003.804 | 458.747 | CP2 |
| 65 | 690186.651 | 3657371.526 | 458.426 | CP3 |
| 66 | 690183.617 | 3657367.081 | 458.384 | CP4 |
| 67 | 690159.364 | 3657446.63 | 456.736 | BM3TS |
| 68 | 690171.006 | 3657445.529 | 457.753 | BM4TS |
| 69 | 690312.9 | 3657598.23 | 459.655 | CP5 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|------------|
| 70 | 690309.282 | 3657603.365 | 459.673 | CP6 |
| 71 | 690564.029 | 3657737.837 | 470.361 | CP7 |
| 72 | 690561.527 | 3657745.333 | 470.776 | CP8 |
| 73 | 690734.765 | 3657871.164 | 482.865 | BM6TS |
| 74 | 691855.492 | 3658902.546 | 468.423 | BM12TS |
| 75 | 691772.074 | 3658793.111 | 467.578 | CP1 |
| 76 | 691768.424 | 3658796.251 | 467.318 | CP2 |
| 77 | 692324.292 | 3659376.195 | 471.479 | BM14TS |
| 78 | 692224.153 | 3659298.817 | 469.824 | CP1 |
| 79 | 692224.725 | 3659293.414 | 469.86 | CP2 |
| 80 | 692107.13 | 3659218.121 | 468.233 | CP3 |
| 81 | 692108.155 | 3659213.326 | 468.141 | CP4 |
| 82 | 691997.831 | 3659098.122 | 467.081 | CP5 |
| 83 | 691998.695 | 3659103.238 | 467.072 | CP6 |
| 84 | 691912.664 | 3658997.266 | 468.804 | CP7 |
| 85 | 691907.616 | 3658997.621 | 468.881 | CP8 |
| 86 | 691855.469 | 3658902.574 | 468.4 | CLOSEBM12 |
| 87 | 692324.327 | 3659376.222 | 471.484 | BM14TS |
| 88 | 692392.38 | 3659514.355 | 473.409 | CP1 |
| 89 | 692395.51 | 3659510.196 | 473.236 | CP2 |
| 90 | 692515.754 | 3659579.742 | 473.748 | CP3 |
| 91 | 692517.452 | 3659584.418 | 473.813 | CP4 |
| 92 | 692595.038 | 3659620.776 | 474.289 | CP5 |
| 93 | 692599.782 | 3659619.784 | 474.551 | CP6 |
| 94 | 692668.827 | 3659795.864 | 477.352 | CP7 |
| 95 | 692661.098 | 3659797.175 | 476.939 | CP8 |
| 96 | 692675.537 | 3659828.313 | 478.461 | BM15TS |
| 97 | 692685.534 | 3659863.722 | 480.049 | BM16TS |
| 98 | 692735.116 | 3659979.594 | 482.669 | CP1 |
| 99 | 692732.78 | 3659983.779 | 482.685 | CP2 |
| 100 | 692788.82 | 3660092.079 | 485.058 | CP3 |
| 101 | 692793.438 | 3660090.044 | 485.337 | CP4 |
| 102 | 692794.245 | 3660320.019 | 495.032 | CP4F/Close |
| 103 | 690735.1084 | 3657870.56 | 482.8971 | BSBM6 |
| 104 | 690773.4155 | 3657944.921 | 486.117 | CP1 |
| 105 | 690772.8823 | 3657951.251 | 486.4118 | CP2 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|-----------|
| 106 | 690831.0355 | 3658031.446 | 489.0143 | CP3 |
| 107 | 690837.6963 | 3658032.252 | 489.023 | CP4 |
| 108 | 690891.3589 | 3658101.401 | 489.6429 | CP5 |
| 109 | 690895.3588 | 3658107.315 | 489.5769 | CP6 |
| 110 | 690966.906 | 3658193.232 | 485.3894 | CLOSEBM7 |
| 111 | 690978.0288 | 3658203.868 | 484.504 | CLOSE BM8 |
| 112 | 690977.0259 | 3658204.674 | 484.472 | BSBM8 |
| 113 | 691052.3598 | 3658255.305 | 477.9616 | CP1 |
| 114 | 691052.8174 | 3658260.168 | 477.8294 | CP2 |
| 115 | 691138.0546 | 3658298.528 | 471.9048 | CP3 |
| 116 | 691144.5136 | 3658300.36 | 471.6187 | CP4 |
| 117 | 691211.7648 | 3658350.271 | 469.5651 | CP5 |
| 118 | 691211.1953 | 3658358.609 | 469.0807 | CP6 |
| 119 | 691250.478 | 3658407.68 | 466.2322 | CP7 |
| 120 | 691254.3509 | 3658407.905 | 466.1344 | CP8 |
| 121 | 691295.6033 | 3658487.883 | 464.2865 | CP9 |
| 122 | 691303.7598 | 3658491.684 | 464.5427 | CP10 |
| 123 | 691335.8121 | 3658562.582 | 464.2169 | CLOSE BM9 |
| 124 | 691356.8627 | 3658578.426 | 464.0991 | BSBM10 |
| 125 | 691426.6433 | 3658590.356 | 463.0825 | CP1 |
| 126 | 691432.4769 | 3658596.195 | 462.951 | CP2 |
| 127 | 691350.7089 | 3658578.733 | 464.4073 | CP2 |
| 128 | 691350.3125 | 3658583.355 | 462.7075 | CP2 |
| 129 | 691349.7948 | 3658590.828 | 460.685 | CP2 |
| 130 | 691347.8797 | 3658608.026 | 459.1107 | CP2 |
| 131 | 691571.4997 | 3658633.076 | 461.9896 | CP3 |
| 132 | 691578.4289 | 3658629.659 | 461.8263 | CP4 |
| 133 | 691643.7672 | 3658655.932 | 460.8634 | CP5 |
| 134 | 691643.7281 | 3658661.6 | 461.0346 | CP6 |
| 135 | 691855.49 | 3658902.541 | 468.424 | BSBM 12 |
| 136 | 691911.955 | 3661859.394 | 476.294 | BM 24 |
| 137 | 691916.848 | 3661848.761 | 476.044 | BM 23 |
| 138 | 692441.156 | 3661454.386 | 481.408 | BM 22 |
| 139 | 692452.052 | 3661456.934 | 481.437 | BM 21 |
| 140 | 692540.23 | 3661412.955 | 484.566 | BP 3 |
| 141 | 692468.274 | 3661090.93 | 471.705 | BM 20 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|-----------|
| 142 | 692499.091 | 3661069.707 | 471.924 | BM 19 |
| 143 | 692685.534 | 3659863.723 | 480.053 | BM 16 |
| 144 | 692676.684 | 3659827.524 | 478.422 | BM 15 |
| 145 | 692776.148 | 3660584.505 | 493.192 | BM 18 |
| 146 | 692787.495 | 3660570.269 | 494.616 | BM 17 |
| 147 | 692800.494 | 3660584.687 | 499.644 | BP 2 |
| 148 | 692324.323 | 3659376.222 | 471.474 | BM 14 |
| 149 | 692310.755 | 3659355.361 | 471.464 | BM 13 |
| 150 | 691855.492 | 3658902.546 | 468.425 | BM 12 |
| 151 | 691835.059 | 3658888.091 | 467.002 | BM 11 |
| 152 | 691356.862 | 3658578.426 | 464.098 | BM 10 |
| 153 | 691336.101 | 3658562.463 | 464.228 | BM 9 |
| 154 | 690965.97 | 3658193.963 | 485.343 | BM 7 |
| 155 | 691018.975 | 3658219.589 | 491.66 | BP 1 |
| 156 | 690735.108 | 3657870.56 | 482.899 | BM 6 |
| 157 | 690718.974 | 3657859.565 | 481.456 | BM 5 |
| 158 | 690171.678 | 3657445.779 | 457.801 | BM 4 |
| 159 | 690160.007 | 3657446.892 | 456.779 | BM 3 |
| 160 | 690423.826 | 3656840.009 | 458.873 | BM 2 |
| 161 | 690405.071 | 3656859.502 | 458.936 | BM 1 |
| 162 | 690735.1084 | 3657870.56 | 482.8971 | BSBM6 |
| 163 | 690773.4155 | 3657944.921 | 486.117 | CP1 |
| 164 | 690772.8823 | 3657951.251 | 486.4118 | CP2 |
| 165 | 690831.0355 | 3658031.446 | 489.0143 | CP3 |
| 166 | 690837.6963 | 3658032.252 | 489.023 | CP4 |
| 167 | 690891.3589 | 3658101.401 | 489.6429 | CP5 |
| 168 | 690895.3588 | 3658107.315 | 489.5769 | CP6 |
| 169 | 690966.906 | 3658193.232 | 485.3894 | CLOSEBM7 |
| 170 | 690978.0288 | 3658203.868 | 484.504 | CLOSE BM8 |
| 171 | 690977.0259 | 3658204.674 | 484.472 | BSBM8 |
| 172 | 691052.3598 | 3658255.305 | 477.9616 | CP1 |
| 173 | 691052.8174 | 3658260.168 | 477.8294 | CP2 |
| 174 | 691138.0546 | 3658298.528 | 471.9048 | CP3 |
| 175 | 691144.5136 | 3658300.36 | 471.6187 | CP4 |
| 176 | 691211.7648 | 3658350.271 | 469.5651 | CP5 |
| 177 | 691211.1953 | 3658358.609 | 469.0807 | CP6 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|-----------|
| 178 | 691250.478 | 3658407.68 | 466.2322 | CP7 |
| 179 | 691254.3509 | 3658407.905 | 466.1344 | CP8 |
| 180 | 691295.6033 | 3658487.883 | 464.2865 | CP9 |
| 181 | 691303.7598 | 3658491.684 | 464.5427 | CP10 |
| 182 | 691335.8121 | 3658562.582 | 464.2169 | CLOSE BM9 |
| 183 | 691356.8627 | 3658578.426 | 464.0991 | BSBM10 |
| 184 | 691426.6433 | 3658590.356 | 463.0825 | CP1 |
| 185 | 691432.4769 | 3658596.195 | 462.951 | CP2 |
| 186 | 691350.7089 | 3658578.733 | 464.4073 | CP2 |
| 187 | 691350.3125 | 3658583.355 | 462.7075 | CP2 |
| 188 | 691349.7948 | 3658590.828 | 460.685 | CP2 |
| 189 | 691347.8797 | 3658608.026 | 459.1107 | CP2 |
| 190 | 691571.4997 | 3658633.076 | 461.9896 | CP3 |
| 191 | 691578.4289 | 3658629.659 | 461.8263 | CP4 |
| 192 | 691643.7672 | 3658655.932 | 460.8634 | CP5 |
| 193 | 691643.7281 | 3658661.6 | 461.0346 | CP6 |
| 194 | 691855.49 | 3658902.541 | 468.424 | BSBM 12 |

2.10.5 RRD_KRK_R3

Construction From Guddi Khel Road to Indus Highway Link Road

2.10.5.1 Location Map

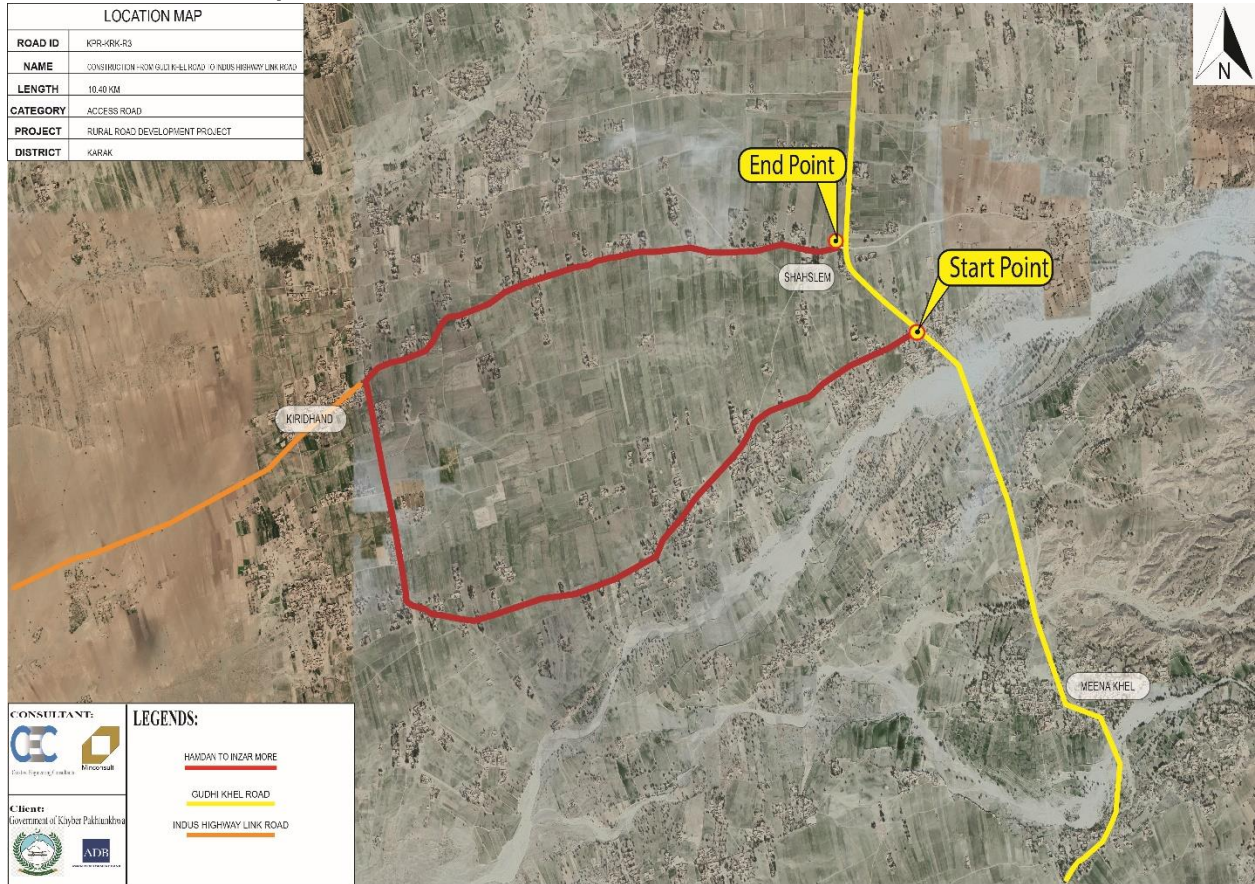


Figure 2.10.4 Location Map RRD_KRK_R3

2.10.5.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.10.4 RRD_KRK_R3 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|---------|
| 1 | 690010.8379 | 3638791.773 | 419.7436 | CP1 |
| 2 | 690004.527 | 3638790.678 | 419.674 | CP2 |
| 3 | 689813.3616 | 3638696.629 | 416.9986 | CP3 |
| 4 | 689803.9605 | 3638691.549 | 416.9638 | CP4 |
| 5 | 689708.4681 | 3638644.034 | 415.3503 | BLD 1 |
| 6 | 689675.9295 | 3638639.58 | 415.6131 | CP5 |
| 7 | 689668.1572 | 3638640.078 | 415.4991 | CP6 |
| 8 | 689513.3284 | 3638570.423 | 413.5563 | CP7 |
| 9 | 689507.0082 | 3638569.247 | 413.4937 | CP8 |
| 10 | 689459.6931 | 3638538.911 | 412.6853 | BS BM28 |
| 11 | 689329.5562 | 3638447.545 | 411.412 | CP1 |
| 12 | 689320.0913 | 3638445.976 | 411.2153 | CP2 |
| 13 | 689231.6019 | 3638394.58 | 410.762 | CP3 |
| 14 | 689226.6386 | 3638394.015 | 410.7001 | CP4 |
| 15 | 689156.5124 | 3638368.855 | 410.1297 | CP5 |
| 16 | 689150.5417 | 3638368.673 | 410.0584 | CP6 |
| 17 | 689064.0594 | 3638347.884 | 409.0984 | CP7 |
| 18 | 689053.9327 | 3638346.024 | 408.9398 | CP8 |
| 19 | 687458.4319 | 3639183.453 | 387.674 | CP2GPS |
| 20 | 687316.1049 | 3639192.924 | 385.77 | CP1 |
| 21 | 687319.2729 | 3639180.593 | 385.892 | CP2 |
| 22 | 687174.1199 | 3639153.249 | 384.574 | CP3 |
| 23 | 687160.1869 | 3639145.578 | 384.481 | CP4 |
| 24 | 687160.1919 | 3639145.577 | 384.478 | CP4 |
| 25 | 687022.0939 | 3639117.231 | 383.242 | CP5 |
| 26 | 687014.1619 | 3639122.996 | 382.86 | CP6 |
| 27 | 686861.4409 | 3639068.884 | 380.003 | CP7 |
| 28 | 686855.5819 | 3639058.833 | 380.423 | CP8 |
| 29 | 686732.4219 | 3638990.713 | 377.64 | CP3GPS |
| 30 | 686740.4479 | 3639015.007 | 378.412 | CP4GPS |
| 31 | 686740.4499 | 3639015.334 | 378.471 | CP4GPS |
| 32 | 686470.6899 | 3638872.757 | 374.013 | BM7TS |
| 33 | 686464.5889 | 3638871.086 | 373.958 | BM8TS |
| 34 | 686464.6489 | 3638871.003 | 373.988 | BM8TS |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|------------|
| 35 | 686220.6219 | 3638646.318 | 369.946 | CP9 |
| 36 | 686212.6129 | 3638656.141 | 369.57 | CP10 |
| 37 | 686014.2359 | 3638571.009 | 368.521 | CP11 |
| 38 | 686015.5709 | 3638558.106 | 368.524 | CP12 |
| 39 | 685874.5429 | 3638560.864 | 366.406 | BM9Close |
| 40 | 685857.0589 | 3638558.639 | 366.383 | BM10Close |
| 41 | 687807.4659 | 3639295.355 | 391.381 | CP |
| 42 | 687808.4349 | 3639286.853 | 391.352 | CP |
| 43 | 687922.0539 | 3639309.162 | 393.139 | BM 5 CLOSD |
| 44 | 688078.5109 | 3639336.57 | 394.749 | CP |
| 45 | 688079.0289 | 3639322.903 | 394.76 | CP |
| 46 | 689154.8569 | 3639393.442 | 409.741 | BM3 CLOSD |
| 47 | 689233.4725 | 3639367.661 | 410.533 | CP |
| 48 | 689347.4061 | 3639401.651 | 411 | CP |
| 49 | 688069.5484 | 3637332.034 | 388.6358 | CP1 |
| 50 | 688073.5769 | 3637334.962 | 388.5617 | CP2 |
| 51 | 688213.0402 | 3637531.371 | 392.574 | CP3 |
| 52 | 688217.4828 | 3637536.33 | 392.8601 | CP4 |
| 53 | 688301.3273 | 3637657.588 | 395.058 | TS BM23 |
| 54 | 688312.9523 | 3637679.419 | 395.4685 | TS BM24 |
| 55 | 688348.9341 | 3637711.458 | 395.6873 | CP5 |
| 56 | 688350.5552 | 3637718.351 | 395.6815 | CP6 |
| 57 | 688472.8898 | 3637821.197 | 397.3014 | CP7 |
| 58 | 688476.3157 | 3637821.873 | 397.3224 | CP8 |
| 59 | 688676.3497 | 3637986.37 | 402.005 | CP9 |
| 60 | 688676.3552 | 3637986.365 | 402.0056 | CP10 |
| 61 | 688704.0969 | 3638060.08 | 402.8551 | CP11 |
| 62 | 688708.8454 | 3638062.96 | 402.8767 | CP12 |
| 63 | 688750.2276 | 3638129.018 | 403.1836 | CP13 |
| 64 | 688753.0883 | 3638133.233 | 403.2361 | CP14 |
| 65 | 688781.671 | 3638191.356 | 404.1544 | TS BM 25 |
| 66 | 688793.1496 | 3638202.866 | 404.5393 | TS BM 26 |
| 67 | 688781.5319 | 3638191.378 | 404.1275 | BM 25 BS |
| 68 | 688817.9333 | 3638234.496 | 405.0371 | CP15 |
| 69 | 688821.9642 | 3638237.084 | 405.0964 | CP16 |
| 70 | 687579.9671 | 3637089.326 | 385.7187 | CP1 |
| 71 | 687569.4902 | 3637087.57 | 385.5405 | CP2 |
| 72 | 687452.0169 | 3639210.901 | 387.517 | cp1 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|---------|
| 73 | 687458.4309 | 3639183.46 | 387.677 | cp2 |
| 74 | 687921.9079 | 3639309.199 | 393.15 | BM5 |
| 75 | 687944.6179 | 3639331.398 | 393.327 | BM 6 |
| 76 | 689154.4919 | 3639394.355 | 409.753 | Bm 3 |
| 77 | 689152.7919 | 3639361.94 | 409.506 | BM4 |
| 78 | 689505.7579 | 3639377.793 | 415.939 | BM2 |
| 79 | 689517.2299 | 3639378.582 | 416.043 | BM1 |
| 80 | 690125.0659 | 3638864.834 | 422.075 | BM29 |
| 81 | 690117.9789 | 3638866.537 | 421.941 | BM30 |
| 82 | 687845.8939 | 3637193.684 | 389.039 | BM.21 |
| 83 | 687835.5639 | 3637187.18 | 388.923 | BM.22 |
| 84 | 688300.7649 | 3637657.307 | 395.017 | BM23 |
| 85 | 688312.3489 | 3637679.123 | 395.433 | BM24 |
| 86 | 689459.6359 | 3638538.874 | 412.702 | BM 28 |
| 87 | 689437.2999 | 3638526.532 | 412.754 | BM27 |
| 88 | 688793.0099 | 3638202.89 | 404.51 | BM26 |
| 89 | 688781.5379 | 3638191.381 | 404.129 | BM25 |
| 90 | 686732.4329 | 3638991.048 | 377.7 | cp3 |
| 91 | 686740.4639 | 3639015.331 | 378.469 | cp 4 |
| 92 | 686464.6579 | 3638870.988 | 373.988 | BM8 |
| 93 | 686470.7509 | 3638872.663 | 374.032 | BM7 |
| 94 | 685874.6079 | 3638560.939 | 366.47 | BM9 |
| 95 | 685857.1339 | 3638558.732 | 366.451 | BM10 |
| 96 | 685812.2949 | 3637943.29 | 363.282 | BM11 |
| 97 | 685818.8529 | 3637974.934 | 363.091 | BM12 |
| 98 | 686009.1709 | 3637221.306 | 365.084 | BM 14 |
| 99 | 686013.4199 | 3637265.66 | 364.7 | BM13 |
| 100 | 686221.7399 | 3636904.004 | 368.077 | BM 15 |
| 101 | 686244.5419 | 3636887.607 | 367.837 | BM16 |
| 102 | 686244.5289 | 3636887.62 | 367.871 | BM16 |
| 103 | 687104.4229 | 3636991.058 | 379.255 | BM 17 |
| 104 | 687132.0519 | 3636997.742 | 379.636 | BM 18 |
| 105 | 687407.3089 | 3637040.507 | 383.895 | BM19 |
| 106 | 687464.6859 | 3637042.022 | 384.341 | BM20 |
| 107 | 689323.5041 | 3639390.046 | 411 | CP |

2.11 District Kohat

2.11.1 KOHAT-3

From Mukarab Khan Korona To Kot Road

2.11.1.1 Location Map

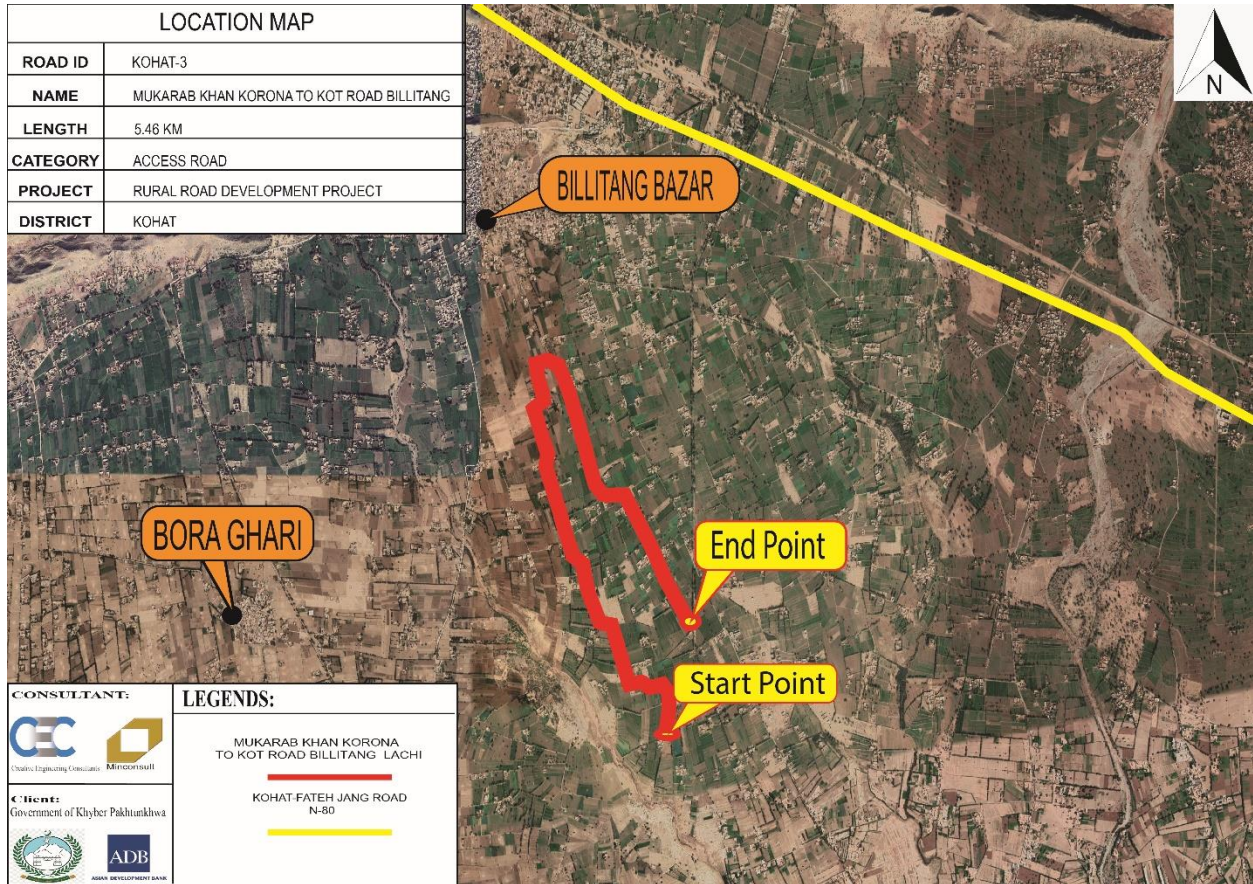


Figure 2.11.1 Location Map KOHAT-3

2.11.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.11.1 KOHAT-3 Traverse Points

| S NO | EASTING | NORTHING | ELEVATION | CODE |
|------|------------|-------------|-----------|-------|
| 1 | 738100.400 | 3711172.150 | 385.000 | ID15 |
| 2 | 738077.340 | 3711216.200 | 385.160 | ID16 |
| 3 | 738007.510 | 3711092.770 | 384.490 | ID17 |
| 4 | 738174.250 | 3711169.690 | 384.620 | ID14 |
| 5 | 738247.490 | 3711007.730 | 383.990 | ID53 |
| 6 | 738300.730 | 3710880.660 | 383.380 | ID12 |
| 7 | 738400.760 | 3710602.480 | 382.040 | ID11 |
| 8 | 738458.620 | 3710437.060 | 381.300 | ID10 |
| 9 | 738504.210 | 3710348.030 | 381.080 | ID9 |
| 10 | 738579.600 | 3710354.810 | 380.770 | ID8 |
| 11 | 738600.910 | 3710333.350 | 380.530 | IDD8 |
| 12 | 738711.560 | 3710331.810 | 379.940 | ID7 |
| 13 | 738841.840 | 3710130.230 | 378.820 | ID6 |
| 14 | 738963.210 | 3709936.300 | 378.170 | ID5 |
| 15 | 739048.500 | 3709775.150 | 377.570 | ID4 |
| 16 | 739104.660 | 3709706.880 | 377.110 | ID3 |
| 17 | 739170.670 | 3709615.580 | 376.540 | ID2 |
| 18 | 739263.480 | 3709487.380 | 376.400 | ID1 |
| 19 | 738077.322 | 3711216.169 | 385.165 | ID16 |
| 20 | 738058.270 | 3710950.030 | 384.105 | ID18 |
| 21 | 738007.189 | 3710811.216 | 383.484 | ID.19 |
| 22 | 738061.330 | 3710547.810 | 382.348 | ID.20 |

| S NO | EASTING | NORTHING | ELEVATION | CODE |
|------|------------|-------------|-----------|------|
| 23 | 738178.344 | 3710265.085 | 381.278 | ID21 |
| 24 | 738225.477 | 3710128.451 | 380.573 | ID22 |
| 25 | 738256.540 | 3710057.236 | 380.322 | ID23 |
| 26 | 738299.052 | 3709952.883 | 379.733 | ID24 |
| 27 | 738363.499 | 3709952.056 | 379.749 | ID25 |
| 28 | 738410.701 | 3709754.210 | 378.371 | ID26 |
| S NO | EASTING | NORTHING | ELEVATION | CODE |
| 29 | 738611.237 | 3709522.310 | 376.868 | ID27 |
| 30 | 738707.778 | 3709262.932 | 375.642 | ID28 |
| 31 | 738848.468 | 3709168.027 | 374.843 | ID29 |
| 32 | 739023.542 | 3709159.366 | 374.531 | ID30 |
| 33 | 739085.134 | 3709050.299 | 374.046 | ID31 |
| 34 | 739057.610 | 3708946.435 | 373.342 | ID32 |
| 35 | 739038.347 | 3708812.852 | 372.895 | ID33 |

2.11.2 N-KOHAT-2

Khushal Garh Road to Kamar Dhoke

2.11.2.1 Location map

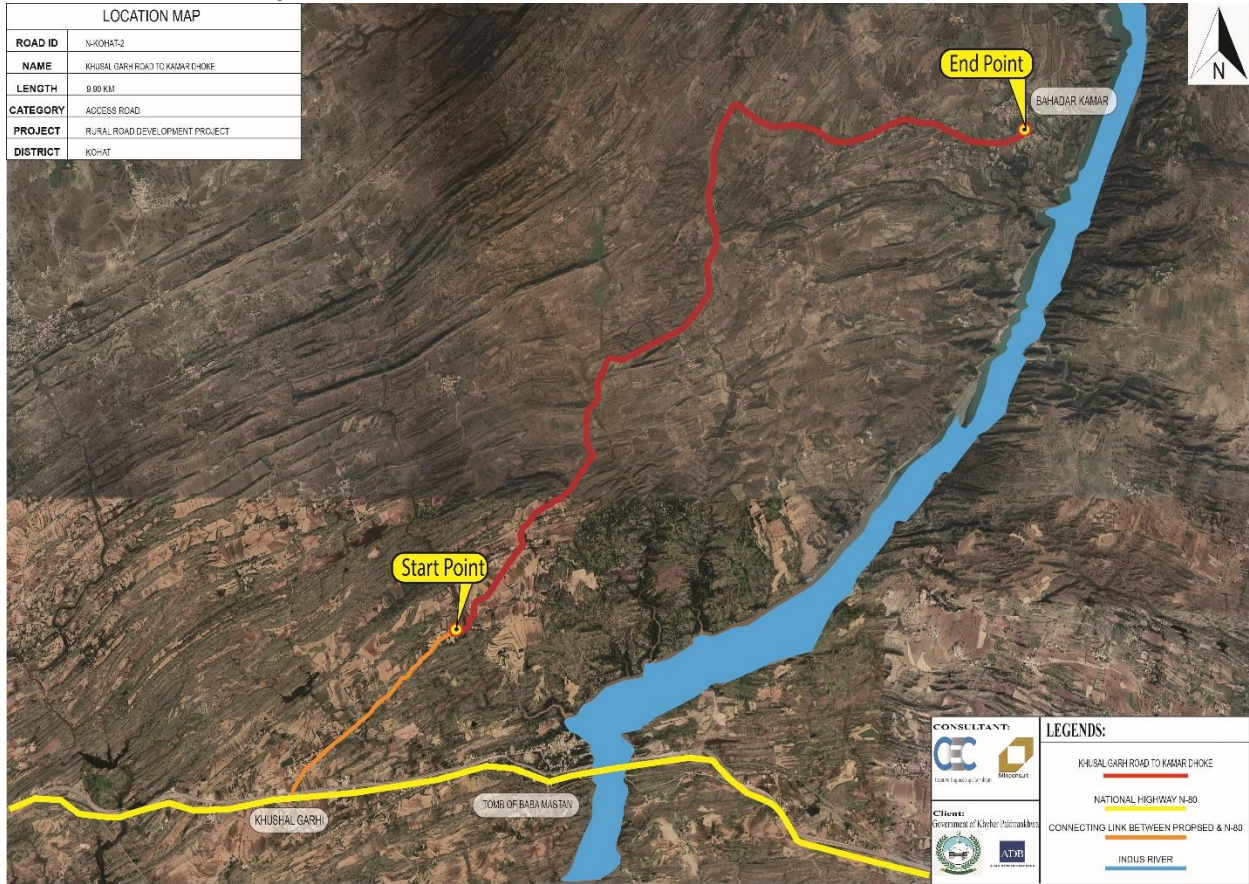


Figure 2.11.2 Location Map N-KOHAT-2

2.11.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.11.2 N-KOHAT-2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 694532.201 | 3654415.477 | 539.429 | BM1 |
| 2 | 694515.943 | 3654419.835 | 537.788 | BM2 |
| 3 | 693521.38 | 3654153.39 | 533.372 | BM3 |
| 4 | 693483.55 | 3654168.732 | 533.929 | BM4 |
| 5 | 691801.776 | 3654070.503 | 506.685 | BM5 |
| 6 | 691799.014 | 3654076.545 | 506.603 | BM6 |
| 7 | 690643.6 | 3653922.534 | 494.032 | BM7 |
| 8 | 690630.563 | 3653921.664 | 493.966 | BM8 |
| 9 | 690011.318 | 3654089.94 | 490.875 | BM9 |
| 10 | 689994.804 | 3654082.889 | 491.026 | BM10 |
| 11 | 689412.158 | 3654088.485 | 482.405 | BM11 |
| 12 | 689418.466 | 3654108.104 | 482.074 | BM12 |
| 13 | 689358.105 | 3653886.282 | 477.111 | BM13 |
| 14 | 689358.459 | 3653875.479 | 475.674 | BM14 |
| 15 | 689351.872 | 3653836.344 | 476.327 | BASE 2 |
| 16 | 688900.948 | 3653886.026 | 470.155 | BM15 |
| 17 | 688887.614 | 3653896.502 | 471.402 | BM16 |
| 18 | 687872.008 | 3653934.204 | 459.965 | BM17 |
| 19 | 687850.129 | 3653932.321 | 459.557 | BM18 |

2.12 District Kohistan

2.12.1 RRD_LKH_R1

Restoration/Rehabilitation of Batera Road

2.12.1.1 Location Map

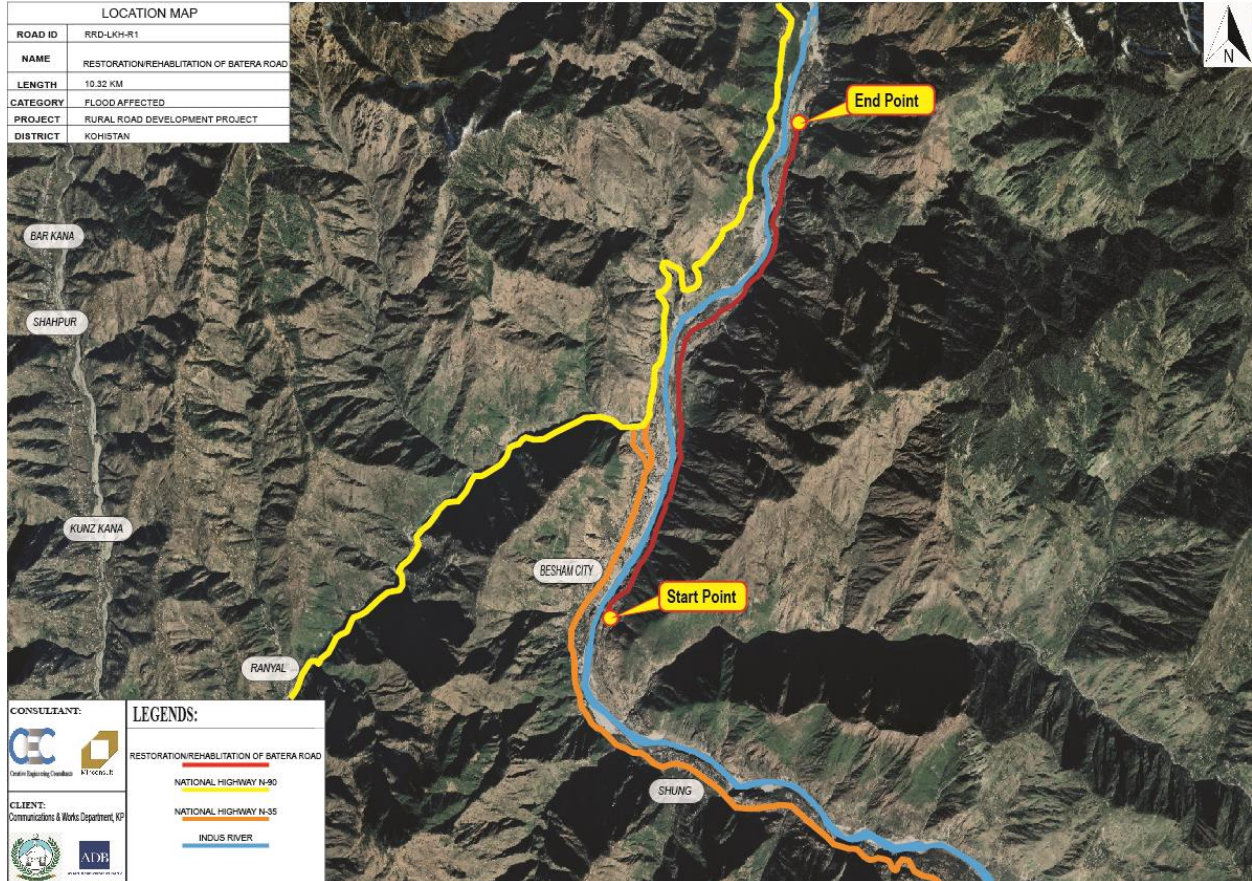


Figure 2.12.1 Location Map RRD_LKH_R1

2.12.1.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.12.1 RRD_LKH_R1 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 306767.808 | 3868938.122 | 588.011 | BM 15 |
| 2 | 306773.28 | 3868950.652 | 587.509 | BM 16 |
| 3 | 306717.827 | 3867893.847 | 589.663 | BM 14 |
| 4 | 306725.147 | 3867875.67 | 589.765 | BM 13 |
| 5 | 306672.532 | 3867169.342 | 617.927 | BM 12 |
| 6 | 306670.674 | 3867162.141 | 617.796 | BM 11 |
| 7 | 306453.955 | 3866546.362 | 613.449 | BM 9 |
| 8 | 306453.136 | 3866556.493 | 613.743 | BM 10 |
| 9 | 306106.45 | 3865818.073 | 606.285 | BM 8 |
| 10 | 309186.678 | 3872922.593 | 593.349 | bm 34 |
| 11 | 309182.526 | 3872907.619 | 593.424 | bm 33 |
| 12 | 309178.65 | 3872798.585 | 594.655 | bm 32 |
| 13 | 309176.262 | 3872786.608 | 594.457 | bm 31 |
| 14 | 308978.981 | 3872122.85 | 592.024 | bm 30 |
| 15 | 308971.851 | 3872125.111 | 592.028 | bm 29 |
| 16 | 308866.244 | 3871791.262 | 589.249 | bm 27 |
| 17 | 308868.421 | 3871809.068 | 590.421 | bm 28 |
| 18 | 308757.173 | 3871421.348 | 590.546 | bm 25 |
| 19 | 308760.143 | 3871424.09 | 590.524 | bm 26 |
| 20 | 308672.63 | 3870776.425 | 589.841 | bm 23 |
| 21 | 308674.081 | 3870790.473 | 590.2 | bm 24 |
| 22 | 308273.215 | 3870286.127 | 582.675 | bm22 |
| 23 | 308253.942 | 3870283.634 | 582.866 | bm21 |
| 24 | 307916.362 | 3869893.976 | 572.002 | bm 19 |
| 25 | 307926.446 | 3869902.722 | 571.851 | bm 20 |
| 26 | 305151.291 | 3864630.078 | 558.958 | bm 1 |
| 27 | 305146.968 | 3864621.848 | 559.368 | bm 2 |
| 28 | 305504.916 | 3864977.749 | 590.768 | bm 3 |
| 29 | 305517.725 | 3864982.138 | 591.068 | bm 4 |
| 30 | 305846.874 | 3865440.689 | 600.935 | bm 5 |
| 31 | 305858.313 | 3865455.983 | 601.361 | bm 6 |
| 32 | 306093.505 | 3865803.75 | 605.882 | bm 7 |

2.12.2 RRD_LKH_R2

Restoration/Rehabilitation Pattan Ziarat Road (Seer Gazi Abad To Kharat)

2.12.2.1 Location Map

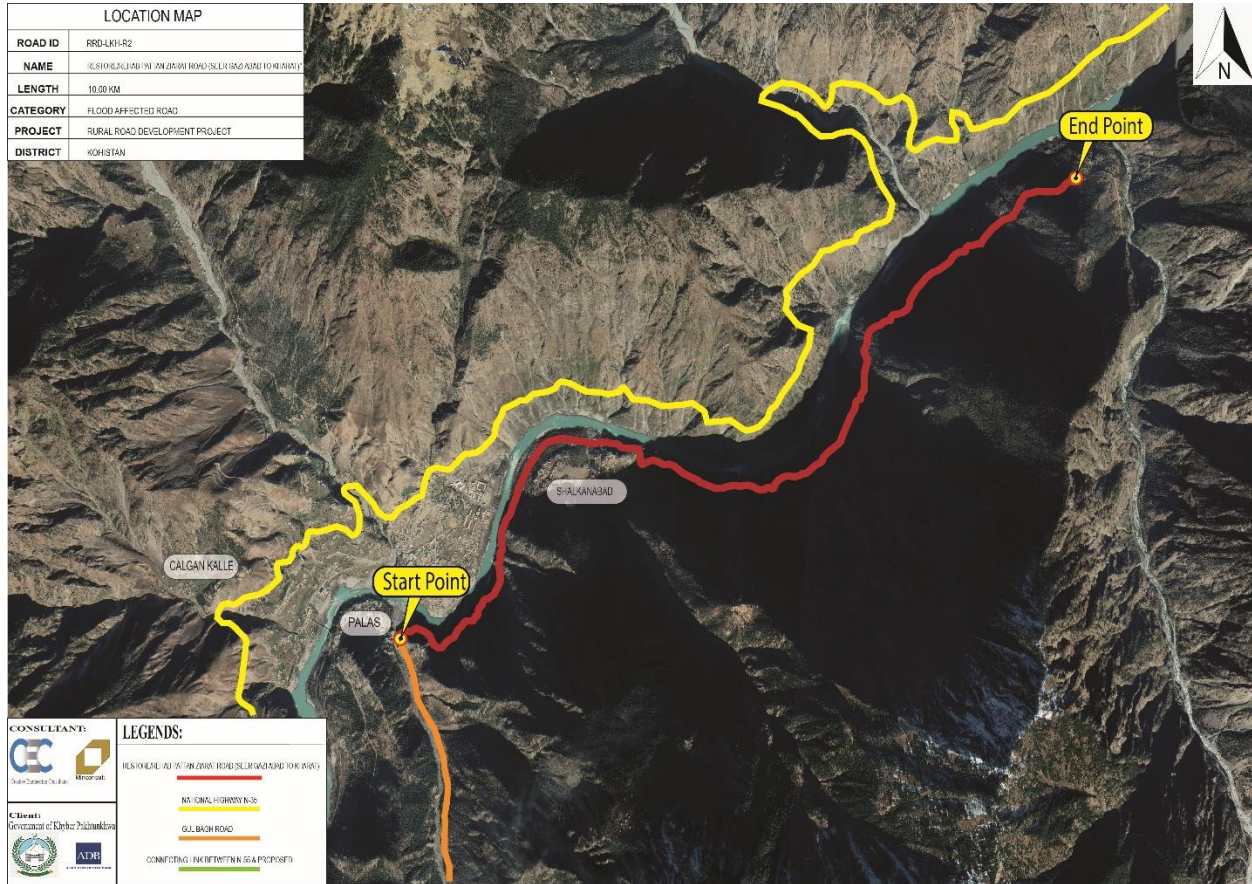


Figure 2.12.2 Location Map RRD_LKH_R2

2.12.2.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.12.2 RRD_LKH_R2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 318014.505 | 3886217.733 | 706.023 | bp1 |
| 2 | 318018.384 | 3886173.123 | 708.837 | bm 1 |
| 3 | 318016.581 | 3886180.933 | 708.17 | bm 2 |
| 4 | 318540.147 | 3886165.876 | 703.246 | bm 3 |
| 5 | 318547.562 | 3886169.799 | 703.48 | bm 4 |
| 6 | 318879.868 | 3886444.891 | 696.021 | bm 5 |
| 7 | 318884.605 | 3886449.771 | 696.193 | bm 6 |
| 8 | 318996.319 | 3886550.778 | 692.419 | bp2 |
| 9 | 319055.603 | 3886821.627 | 699.745 | cp1 |
| 10 | 319063.12 | 3886832.902 | 699.582 | cp2 |
| 11 | 319056.185 | 3886822.98 | 699.734 | bp3 |
| 12 | 319216.371 | 3887300.349 | 681.325 | bm 7 |
| 13 | 319232.509 | 3887324.314 | 684.464 | bm 8 |
| 14 | 319595.551 | 3887855.097 | 684.54 | bm 9 |
| 15 | 319603.143 | 3887855.971 | 684.707 | bm 10 |
| 16 | 320216.257 | 3887842.356 | 683.528 | bm 11 |
| 17 | 320241.57 | 3887831.896 | 684.505 | bm 12 |
| 18 | 320832.237 | 3887640.057 | 711.265 | bm 13 |
| 19 | 320863.108 | 3887632.242 | 710.809 | bm 14 |
| 20 | 321070.063 | 3887525.567 | 722.957 | bp4 |
| 21 | 321907.412 | 3887427.226 | 759.686 | bm 15 |
| 22 | 321910.835 | 3887452.023 | 759.225 | bm 16 |
| 23 | 322848.613 | 3888432.369 | 854.34 | bp7 |
| 24 | 322851.456 | 3888600.268 | 858.396 | bm 18 |
| 25 | 322844.374 | 3888587.3 | 857.069 | bm 17 |
| 26 | 322897.266 | 3888740.139 | 864.815 | bp8 |
| 27 | 323135.99 | 3888869.331 | 866.973 | bm 19 |
| 28 | 323142.952 | 3888873.781 | 867.438 | bm 20 |
| 29 | 323756.524 | 3889362.578 | 859.363 | cp3 |
| 30 | 323781.674 | 3889377.164 | 859.779 | cp4 |
| 31 | 323878.687 | 3889429.566 | 860.148 | bm 21 |
| 32 | 323885.154 | 3889434.69 | 860.174 | bm 22 |
| 33 | 324396.813 | 3889725.89 | 872.383 | bm 23 |

| S.No | Easting | Northing | Elevation | REMARKS |
|-------------|----------------|-----------------|------------------|----------------|
| 34 | 324406.199 | 3889741.477 | 873.691 | bm 24 |
| 35 | 324957.138 | 3889961.339 | 885.776 | bm 25 |
| 36 | 324969.036 | 3889959.028 | 886.511 | bm 26 |

2.12.3 RRD_LKH_R3

Restoration/Rehabilitation of Masham Road

2.12.3.1 Location Map

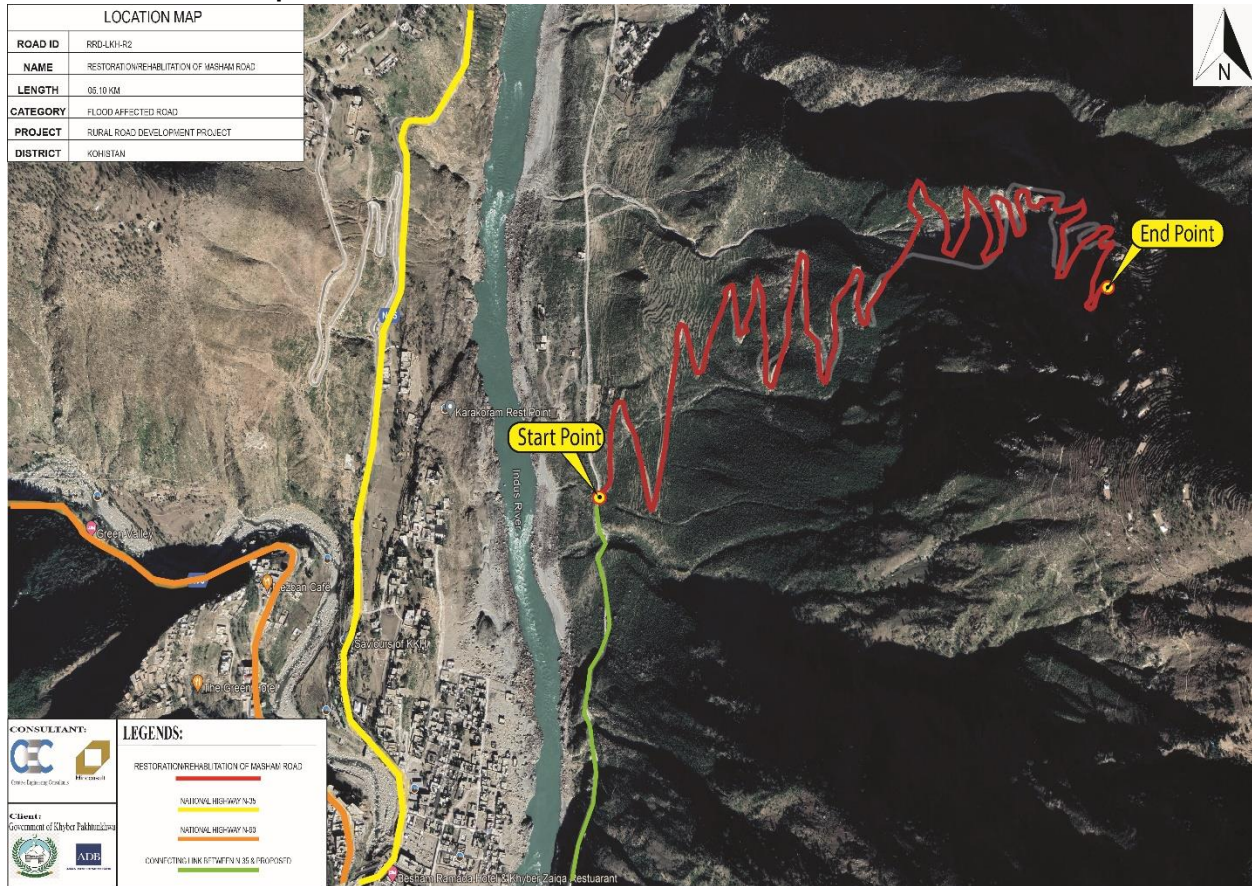


Figure 2.12.3 Location Map RRD_LKH_R3

2.12.3.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.12.3 RRD_LKH_R3 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 307821.434 | 3868302.467 | 1241.552 | bm 15 |
| 2 | 307827.016 | 3868310.463 | 1243.302 | bm 16 |
| 3 | 307856.259 | 3868524.207 | 1146.976 | bm 14 |
| 4 | 307850.3 | 3868516.42 | 1146.047 | bm 13 |
| 5 | 307618.369 | 3868564.133 | 1025.68 | bp 5 |
| 6 | 307622.079 | 3868567.587 | 1026.25 | bp 4 |
| 7 | 307529.022 | 3868594.219 | 965.493 | bm 11 |
| 8 | 307536.317 | 3868596.763 | 966.946 | bm 12 |
| 9 | 307269.926 | 3868471.061 | 815.911 | bm 9 |
| 10 | 307269.826 | 3868462.067 | 817.058 | bm10 |
| 11 | 307265.908 | 3868480.885 | 813.623 | BP 3 |
| 12 | 307267.709 | 3868482.411 | 813.618 | BP 2 |
| 13 | 307156.733 | 3868429.329 | 750.483 | BM 8 |
| 14 | 307153.487 | 3868423.13 | 749.884 | BM 7 |
| 15 | 306958.44 | 3868350.761 | 680.566 | BM 6 |
| 16 | 306956.524 | 3868343.863 | 680.375 | BM 5 |
| 17 | 306823.424 | 3868095.922 | 622.88 | BM 4 |
| 18 | 306818.305 | 3868103.302 | 622.186 | BM 3 |
| 19 | 306726.737 | 3867945.508 | 587.674 | BM 2 |
| 20 | 306724.1 | 3867937.856 | 587.663 | BM 1 |

2.12.4 RRD_LKH_R4

Restoration/Rehabilitation of Chawa Darra Road

2.12.4.1 Location Map

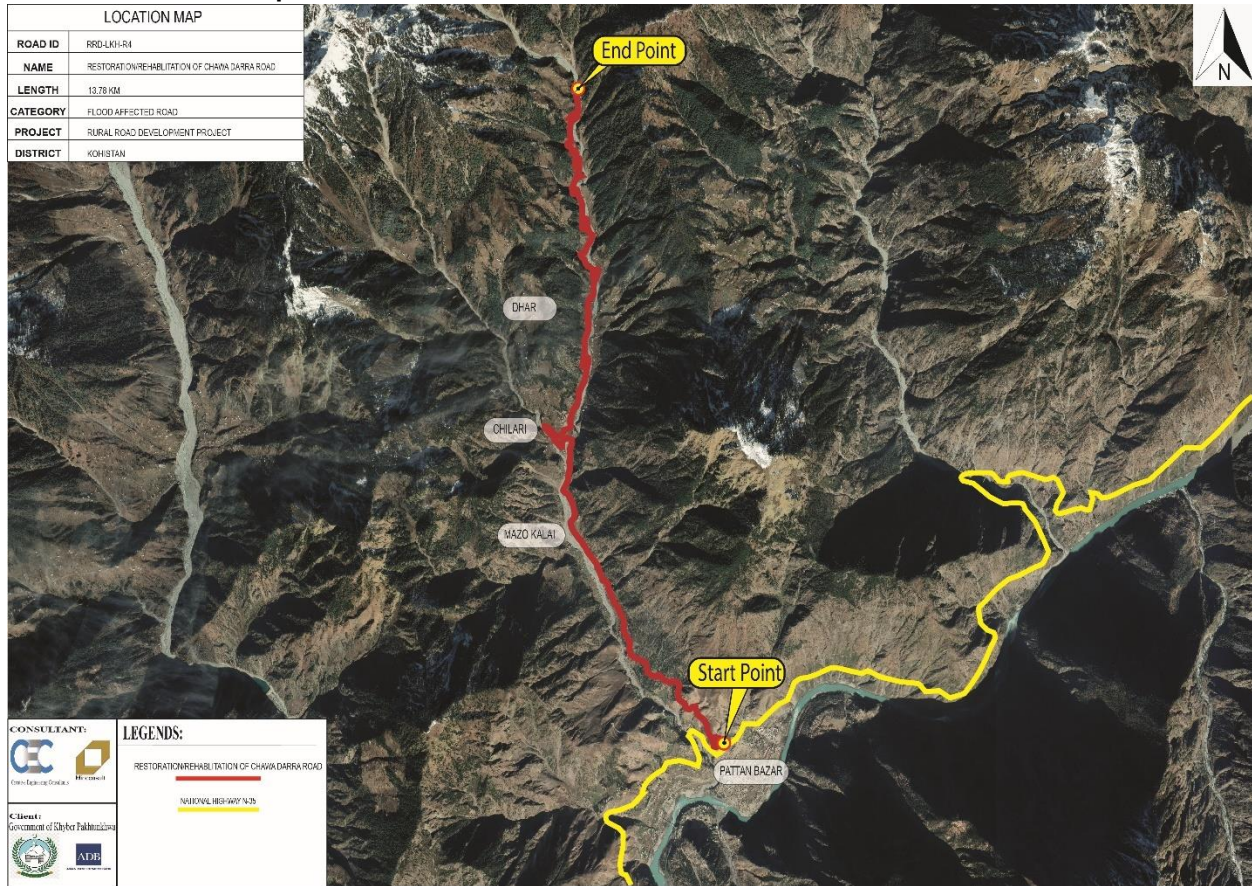


Figure 2.12.4 Location Map RRD_LKH_R4

2.12.4.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.12.4 RRD_LKH_R4 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 316198.192 | 3893869.186 | 1663.821 | cp |
| 2 | 316183.491 | 3893909.455 | 1671.604 | cp2 |
| 3 | 315955.115 | 3894383.085 | 1760.256 | bm 10 |
| 4 | 315954.387 | 3894389.297 | 1759.527 | bm 9 |
| 5 | 315971.314 | 3894879.268 | 1871.614 | bm 8 |
| 6 | 315963.559 | 3894898.078 | 1874.811 | bm 7 |
| 7 | 315971.51 | 3895261.495 | 1946.041 | bm 6 |
| 8 | 315984.664 | 3895272.967 | 1946.927 | bm 5 |
| 9 | 316028 | 3895342.316 | 1980.187 | bm 4 |
| 10 | 316036.413 | 3895363.694 | 1983.031 | bm 3 |
| 11 | 316021.221 | 3895609.56 | 2018.406 | bm 1 |
| 12 | 316009.691 | 3895575.537 | 2012.479 | bm 2 |
| 13 | 316200.43 | 3893880.968 | 1665.6 | bm 10 |
| 14 | 315668.191 | 3890724.983 | 1208.718 | bm 25 |
| 15 | 315668.065 | 3890733.098 | 1209.427 | bm 24 |
| 16 | 315785.664 | 3891271.399 | 1268.043 | bm 23 |
| 17 | 315786.089 | 3891291.444 | 1270.735 | bm 22 |
| 18 | 315617.188 | 3891314.595 | 1282.055 | bm 21 |
| 19 | 315606.528 | 3891321.336 | 1281.331 | bm 20 |
| 20 | 315544.167 | 3891461.89 | 1331.041 | bm 18 |
| 21 | 315537.526 | 3891471.108 | 1330.537 | bm 19 |
| 22 | 315833.728 | 3891733.177 | 1371.817 | bm 17 |
| 23 | 315842.399 | 3891748.26 | 1372.619 | bm 16 |
| 24 | 315711.599 | 3890686.374 | 1205.849 | cp1 |
| 25 | 315741.854 | 3890692.647 | 1205.026 | cp2 |
| 26 | 315759.658 | 3890313.67 | 1161.174 | cp3 |
| 27 | 315757.203 | 3890293.657 | 1159.146 | cp4 |
| 28 | 315830.5 | 3890156.315 | 1142.276 | bm 26 |
| 29 | 315840.594 | 3890147.922 | 1140.458 | bm 27 |
| 30 | 316002.218 | 3889949.52 | 1117.934 | cp5 |
| 31 | 316008.711 | 3889939.622 | 1115.662 | cp6 |
| 32 | 316319.61 | 3889416.207 | 1076.525 | bm 28 |
| 33 | 316324.92 | 3889405.43 | 1075.61 | bm 29 |

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 34 | 316411.736 | 3889243.135 | 1068.945 | cp7 |
| 35 | 316422.281 | 3889232.662 | 1067.8 | cp8 |
| 36 | 316577.152 | 3888807.684 | 1036.201 | cp9 |
| 37 | 316584.224 | 3888798.415 | 1034.754 | cp10 |
| 38 | 316630.986 | 3888624.886 | 1024.476 | cp11 |
| 39 | 316654.554 | 3888576.976 | 1020.184 | cp12 |
| 40 | 316821.581 | 3888498.8 | 1007.266 | bm 30 |
| 41 | 316826.748 | 3888493.361 | 1007.033 | bm 31 |
| 42 | 317213.452 | 3888204.073 | 966.214 | bm 32 |
| 43 | 317245.863 | 3888198.738 | 962.635 | bm 33 |
| 44 | 317390.252 | 3887970.318 | 942.453 | cp13 |
| 45 | 317398.957 | 3887968.154 | 941.702 | cp14 |
| 46 | 317873.122 | 3887448.234 | 875.492 | bm 36 |
| 47 | 317888.04 | 3887434.334 | 873.052 | bm 37 |
| 48 | 317985.261 | 3887320.461 | 827.802 | bm 39 |
| 49 | 317978.608 | 3887317.577 | 828.134 | bm 38 |
| 50 | 318273.174 | 3887397.055 | 797.584 | bm 40 |
| 51 | 318281.018 | 3887389.556 | 796.726 | bm 41 |
| 52 | 316028.727 | 3892149.064 | 1412.295 | CP |
| 53 | 316028.771 | 3892153.147 | 1412.724 | CP |
| 54 | 315930.833 | 3891889.608 | 1388.27 | CP |
| 55 | 315902 | 3891795.201 | 1378.827 | CP |
| 56 | 316200.415 | 3893881.006 | 1665.554 | BM 11 |
| 57 | 316198.774 | 3893875.306 | 1664.398 | BM10 |
| 58 | 316160.01 | 3893509.777 | 1605.012 | bm 12 |
| 59 | 316168.034 | 3893505.457 | 1604.457 | bm 13 |
| 60 | 316075.095 | 3892401.436 | 1435.321 | bm 14 |
| 61 | 316076.559 | 3892394.957 | 1434.611 | bm 15 |
| 62 | 317509.01 | 3887832.313 | 927.122 | bm34 |
| 63 | 317523.245 | 3887827.442 | 926.063 | bm35 |
| 64 | 317752.486 | 3887693.258 | 895.668 | cp |
| 65 | 317760.109 | 3887686.145 | 894.868 | cp .2 |

2.12.5 RRD_UKH_R1

Jalkot Goshali Road 1: Gabber Nullah Road

2.12.5.1 Location Map

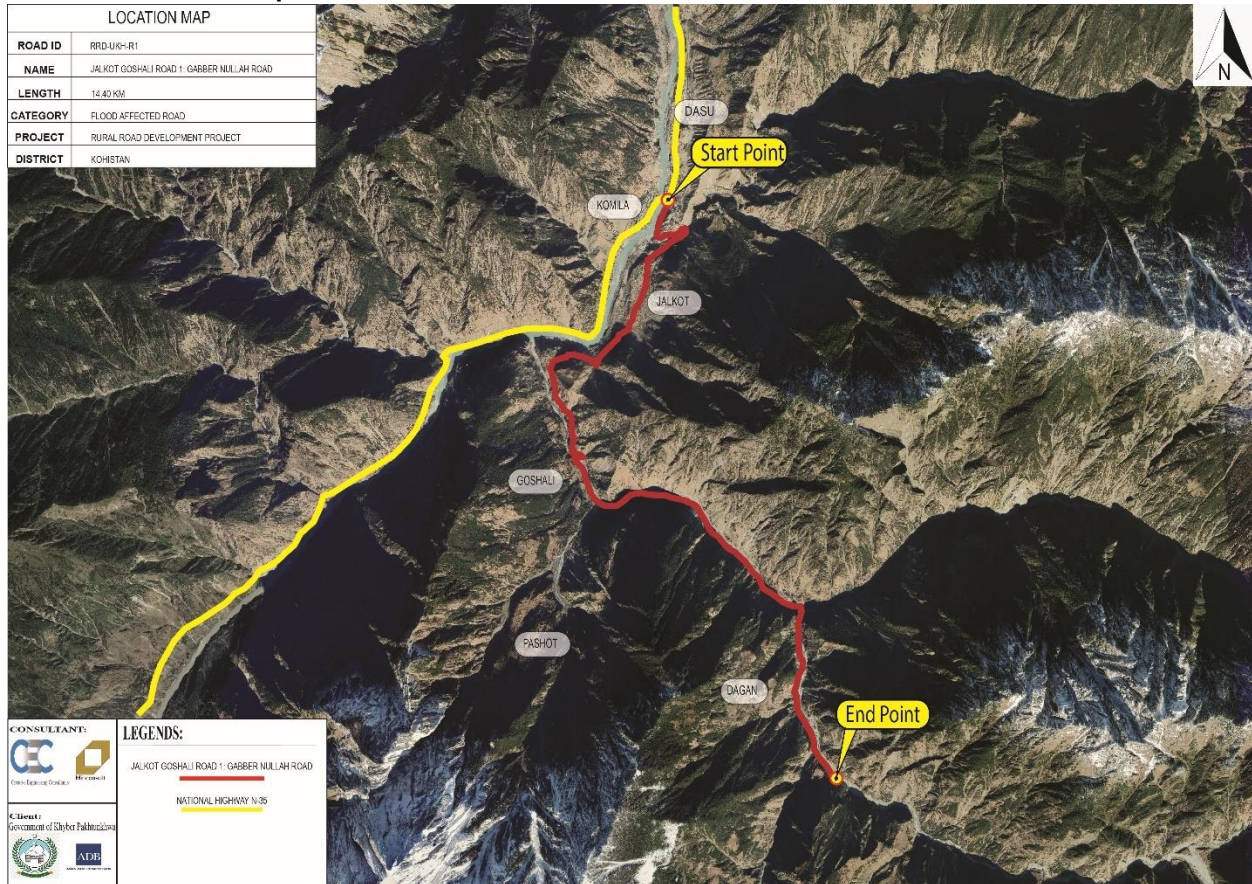


Figure 2.12.5 Location Map RRD_UKH_R1

2.12.5.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.12.5 RRD_UKH_R1 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|-------------|-------------|-----------|----------|
| 1 | 340404.7613 | 3897078.412 | 978.3872 | BM30 BS |
| 2 | 338112.9565 | 3902789.891 | 800.7007 | BM4CLOSE |
| 3 | 338109.9005 | 3902996.572 | 763.3569 | BM3 BS |
| 4 | 337779.624 | 3902105.249 | 861.161 | BM6 |
| 5 | 336241.095 | 3900778.48 | 879.753 | BM12 |
| 6 | 336247.333 | 3900767.585 | 879.252 | BM11 |
| 7 | 336507.908 | 3901290.841 | 847.399 | BM9 |
| 8 | 336513.827 | 3901295.326 | 846.773 | BM10 |
| 9 | 337350.326 | 3901519.024 | 816.524 | BM8 |
| 10 | 337363.853 | 3901542.723 | 815.833 | BM7 |
| 11 | 337779.76 | 3902104.973 | 861.2 | BM6 |
| 12 | 338114.698 | 3902789.118 | 800.772 | BM4 |
| 13 | 338109.901 | 3902996.571 | 763.349 | BM3 |
| 14 | 338267.633 | 3903601.709 | 740.636 | BM1 |
| 15 | 338265.438 | 3903588.535 | 741.922 | BM2 |
| 16 | 336543.159 | 3899847.083 | 814.97 | BM13 |
| 17 | 336554.005 | 3899845.409 | 813.282 | BM14 |
| 18 | 338721.608 | 3898995.163 | 876.869 | BM19 |
| 19 | 338718.083 | 3898992.033 | 877.097 | BM20 |
| 20 | 338707.836 | 3899039.599 | 874.383 | BP1 |
| 21 | 338091.311 | 3899217.25 | 850.999 | BM18 |
| 22 | 337515.9 | 3899209.705 | 829.464 | BM17 |
| 23 | 336891.339 | 3899215.267 | 800.395 | BM16 |
| 24 | 336878.517 | 3899222.518 | 800.216 | BM15 |
| 25 | 340412.223 | 3897572.369 | 955.478 | BM28 |
| 26 | 340405.563 | 3897567.624 | 955.712 | BM27 |
| 27 | 340405.999 | 3897090.021 | 979.031 | BM29 |
| 28 | 340404.725 | 3897078.507 | 978.379 | BM30 |
| 29 | 340403.429 | 3896581.101 | 1013.834 | BM31 |
| 30 | 340395.847 | 3896563.514 | 1014.682 | BM32 |
| 31 | 340473.444 | 3895915.146 | 1083.395 | BM33 |
| 32 | 340480.226 | 3895891.155 | 1085.209 | BM34 |
| 33 | 340935.189 | 3895135.046 | 1106.338 | BM36 |

| S.No | Easting | Northing | Elevation | REMARKS |
|-------------|----------------|-----------------|------------------|----------------|
| 34 | 340938.061 | 3895148.862 | 1104.318 | BM35 |
| 35 | 340922.34 | 3895154.086 | 1105.029 | BM37 |
| 36 | 340048.895 | 3897698.951 | 939.907 | BM26 |
| 37 | 340040.79 | 3897697.92 | 940.065 | BM25 |
| 38 | 339713.232 | 3898041.114 | 920.344 | BM24 |
| 39 | 339709.931 | 3898054.094 | 920.044 | BM23 |
| 40 | 339316.233 | 3898382.752 | 916.338 | BM21 |
| 41 | 339321.622 | 3898378.75 | 915.998 | BM22 |

2.13 District Malakand

2.13.1 CHR-4

Landi Shah To Narrai Uba

2.13.1.1 Location Map

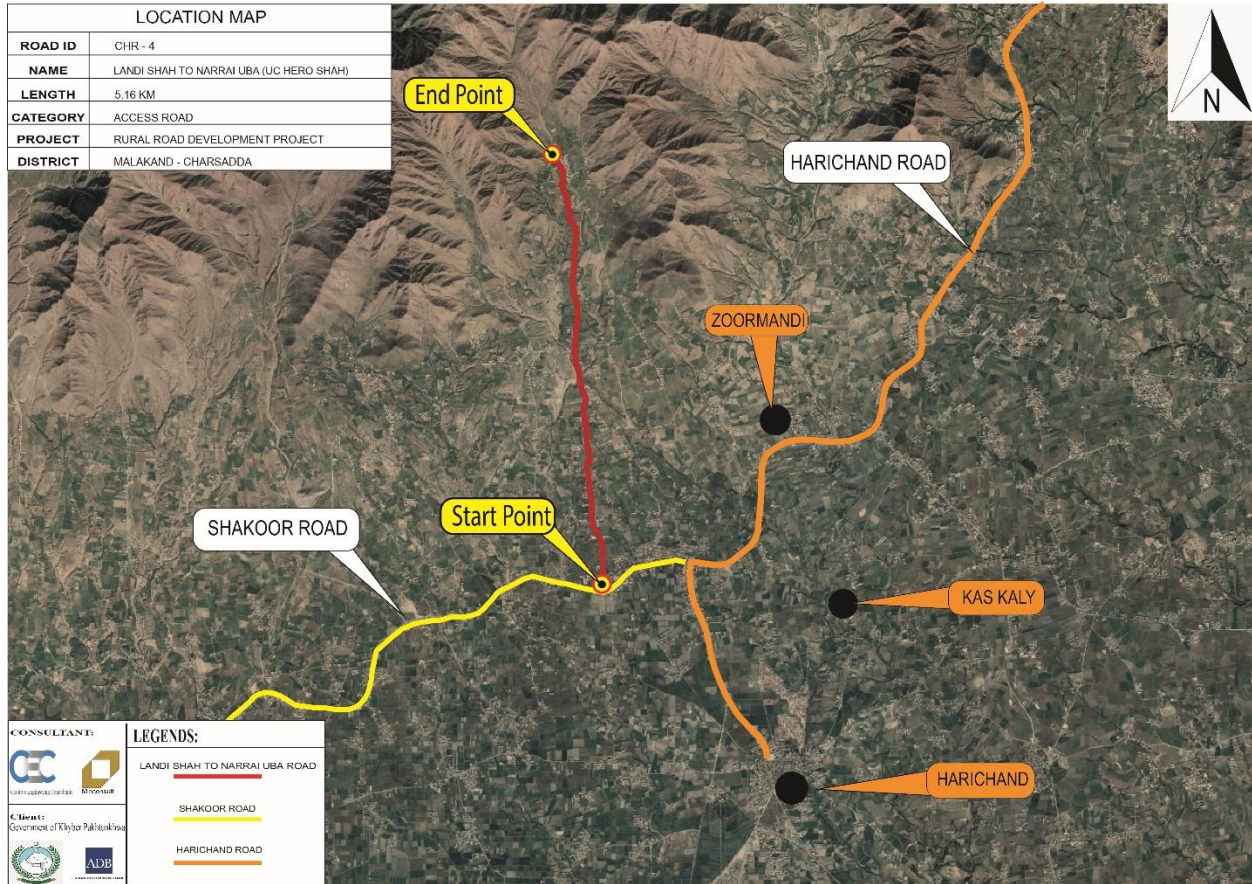


Figure 2.13.1 Location Map CHR-4

2.13.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.13.1 CHR-4 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 755849.250 | 3810456.466 | 427.573 | BM1A |
| 2 | 755847.747 | 3810469.927 | 427.534 | BM2B |
| 3 | 755852.685 | 3810915.975 | 431.591 | BM1 |
| 4 | 755845.162 | 3810940.690 | 431.959 | BM2 |
| 5 | 755703.339 | 3811448.931 | 439.002 | BM3 |
| 6 | 755697.076 | 3811498.738 | 439.745 | BM4 |
| 7 | 755596.124 | 3812657.584 | 456.776 | BM5 |
| 8 | 755570.019 | 3812696.109 | 456.460 | BM6 |
| 9 | 755525.213 | 3812889.355 | 447.958 | BM7 |
| 10 | 755515.975 | 3812919.376 | 448.068 | BM8 |
| 11 | 755476.920 | 3813663.547 | 473.203 | BM8A |
| 12 | 755473.171 | 3813694.083 | 473.696 | BM9 |
| 13 | 755426.904 | 3814179.957 | 480.794 | BM11 |
| 14 | 755430.377 | 3814214.482 | 480.699 | BM12 |
| 15 | 755335.929 | 3814888.353 | 502.439 | BM13 |
| 16 | 755328.949 | 3814904.102 | 503.628 | BM14 |
| 17 | 755274.320 | 3815149.890 | 506.466 | BM15 |
| 18 | 755276.762 | 3815204.256 | 508.041 | BM16 |

2.13.2 N-MLK-2

Rehabilitation of Road from Badranga to Jazoon Dag Road

2.13.2.1 Location Map

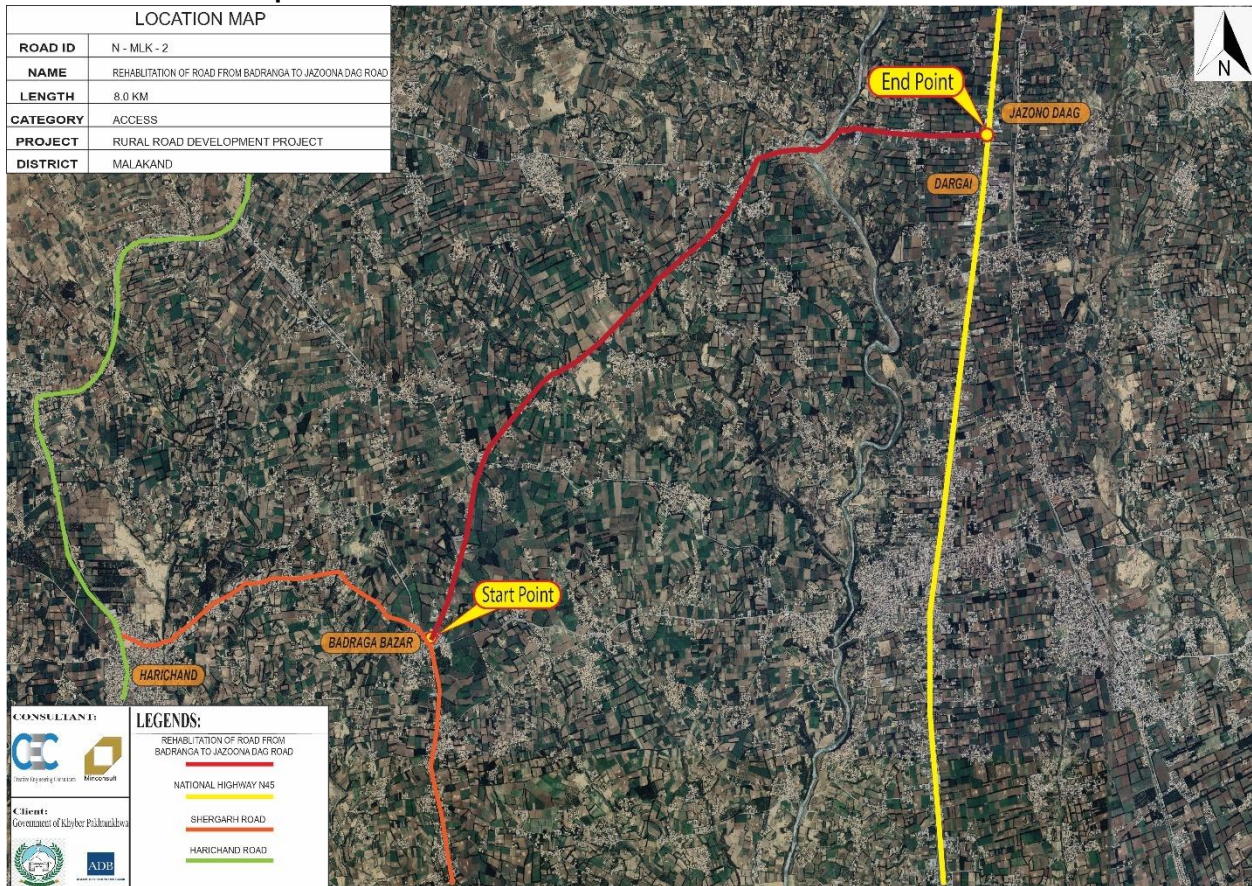


Figure 2.13.2 Location Map N-MLK-2

2.13.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.13.2 N-MLK-2 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| 1 | 766955.1 | 3813414 | 411.595 | M-1 |
| 2 | 766946.4 | 3813333 | 411.027 | M-2 |
| 3 | 766787.8 | 3813401 | 411.506 | M-3 |
| 4 | 766702.9 | 3813388 | 411.067 | M-4 |
| 5 | 766018.9 | 3813380 | 408.607 | M-5 |
| 6 | 765777.3 | 3813407 | 408.339 | M-6 |
| 7 | 764465.9 | 3813130 | 410.83 | M- 7 |
| 8 | 764468 | 3813049 | 411.77 | M-8 |
| 9 | 763766.5 | 3812248 | 409.575 | M-9 |
| 10 | 763699.1 | 3812199 | 410.019 | M-10 |
| 11 | 762695.8 | 3811342 | 407.425 | M-11 |
| 12 | 762659.7 | 3811328 | 406.021 | M-12 |
| 13 | 761535.4 | 3810096 | 411.555 | M-13 |
| 14 | 761514.3 | 3809974 | 410.393 | M-14 |

2.13.3 MLK-7

Neher Quarter To Jaban Power House Road

2.13.3.1 Location Map

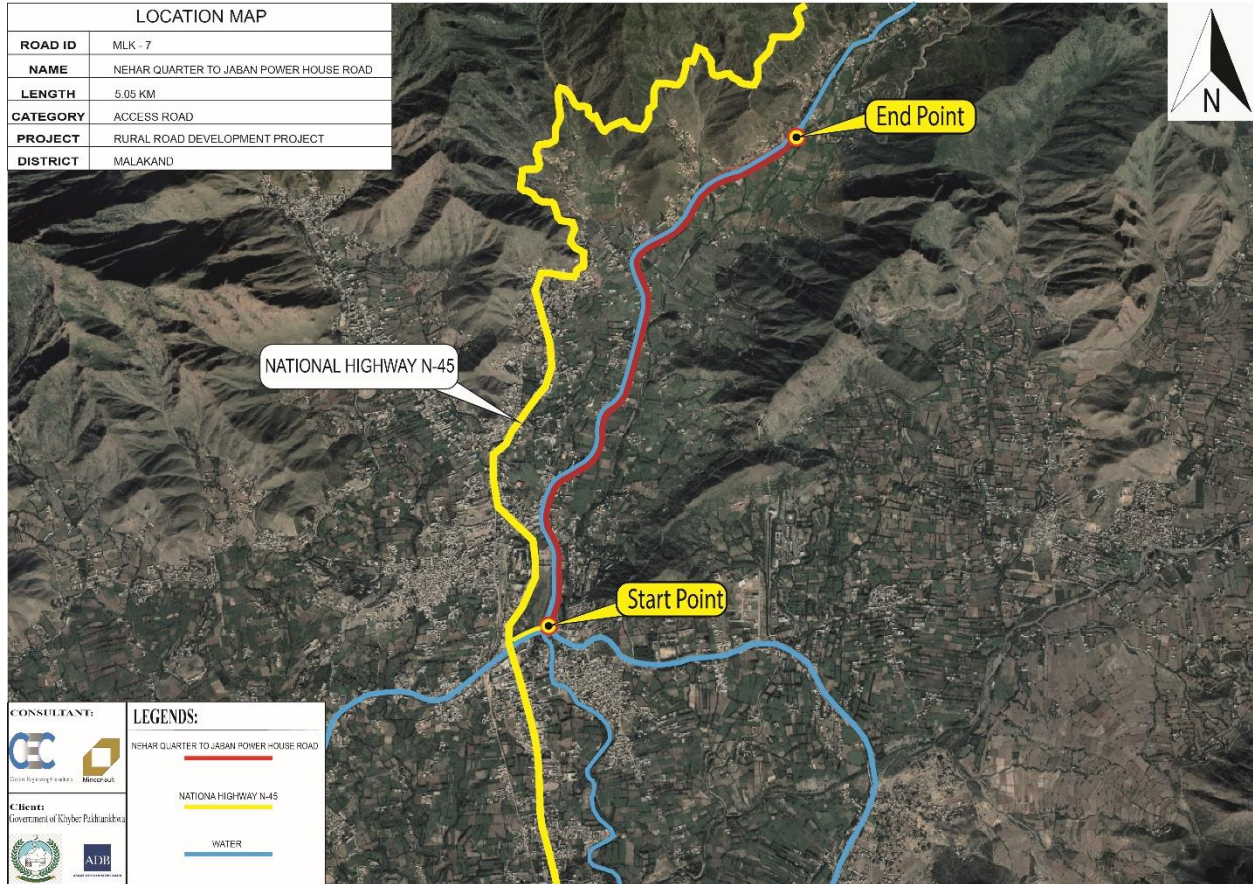


Figure 2.13.3 Location Map MLK-7

2.13.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.13.3 MLK-7 Traverse Points

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 1 | 766110.328 | 3822552.055 | 467.232 | BM1 |
| 1 | 766116.057 | 3822569.643 | 467.200 | BM2 |
| 2 | 766115.125 | 3823309.909 | 473.556 | BM3 |
| 3 | 766089.086 | 3823355.542 | 473.944 | BM4 |
| 4 | 766370.219 | 3823880.802 | 479.955 | BM5 |
| 5 | 766358.664 | 3823894.263 | 479.991 | BM6 |
| 6 | 766841.778 | 3825360.816 | 501.510 | BM7 |
| 7 | 766825.174 | 3825348.063 | 501.499 | BM8 |
| 8 | 766773.780 | 3825676.427 | 507.870 | BM9 |
| 9 | 766787.691 | 3825692.570 | 508.004 | BM10 |
| 10 | 767335.577 | 3826254.620 | 519.498 | BM11 |
| 11 | 767328.304 | 3826261.859 | 519.533 | BM12 |
| 12 | 767954.893 | 3826596.605 | 530.299 | BM13 |
| 13 | 767947.474 | 3826610.447 | 530.252 | BM14 |

2.13.4 N-MLK-1

Daragai - Palai Interchange Swat Motorway

2.13.4.1 Location Map

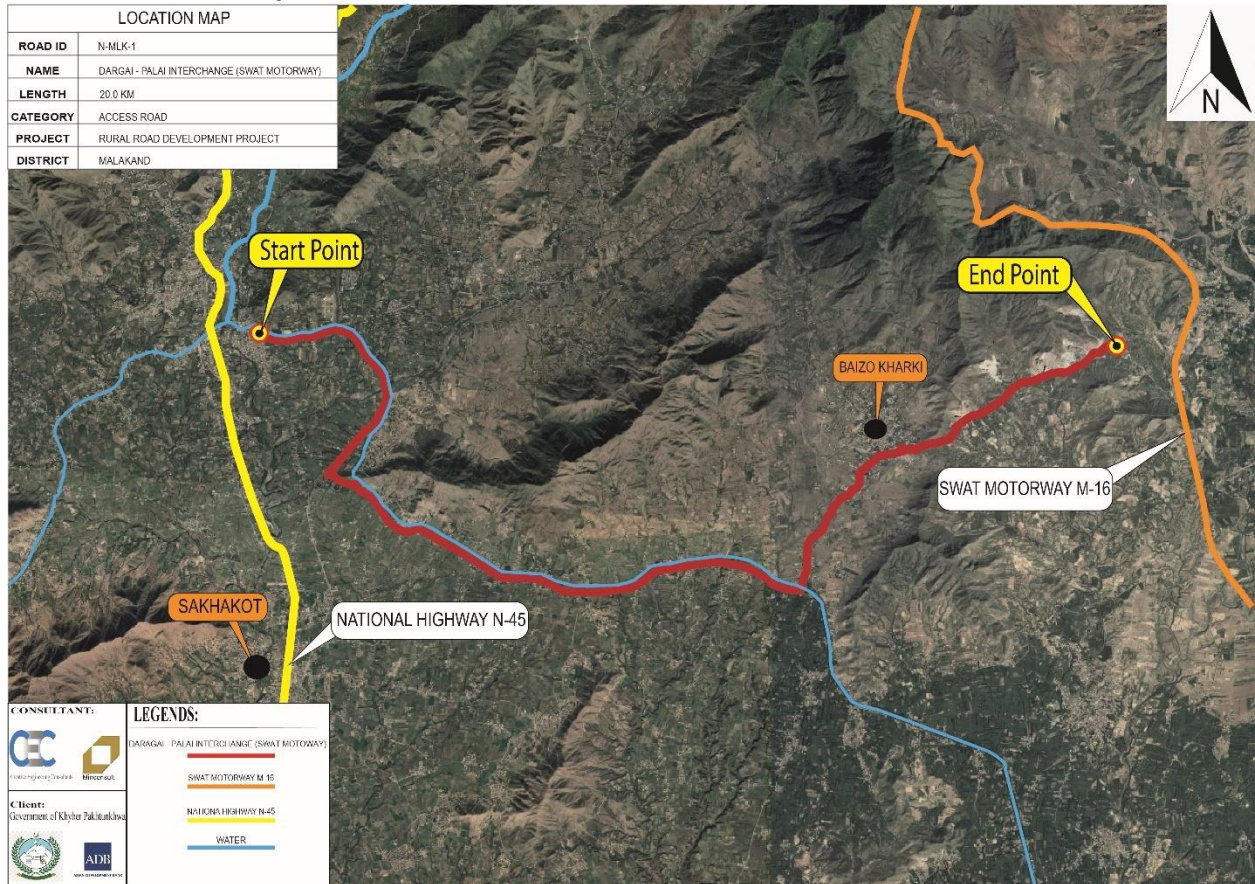


Figure 2.13.4 Location Map N-MLK-1

2.13.4.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.13.4 N-MLK-1 Traverse Points

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 1 | 766719.627 | 3822358.887 | 462.116 | BM1 |
| 2 | 766730.376 | 3822365.099 | 462.185 | BM2 |
| 3 | 767953.453 | 3822477.964 | 461.399 | BM3 |
| 4 | 767987.320 | 3822471.380 | 461.070 | BM4 |
| 5 | 768228.389 | 3822336.780 | 461.098 | BM5 |
| 6 | 768264.878 | 3822291.062 | 461.281 | BM6 |
| 7 | 768649.287 | 3821830.549 | 458.871 | BM8 |
| 8 | 768603.148 | 3821881.870 | 459.874 | BM7 |
| 9 | 768552.422 | 3820900.145 | 456.085 | BM9 |
| 10 | 768525.700 | 3820897.185 | 454.792 | BM10 |
| 11 | 767874.736 | 3820157.324 | 447.688 | BM11 |
| 12 | 767833.931 | 3820119.960 | 447.497 | BM12 |
| 13 | 767972.103 | 3820051.997 | 444.877 | BM13 |
| 14 | 767996.924 | 3820022.379 | 445.905 | BM14 |
| 15 | 768632.358 | 3819694.044 | 454.118 | BM15 |
| 16 | 768662.559 | 3819648.257 | 454.463 | BM16 |
| 17 | 768999.864 | 3819266.370 | 454.421 | BM17 |
| 18 | 769041.443 | 3819248.863 | 454.378 | BM18 |
| 19 | 770233.858 | 3818826.169 | 454.465 | BM19 |
| 20 | 770267.331 | 3818808.154 | 454.466 | BM20 |
| 21 | 770570.762 | 3818626.126 | 453.702 | BM21 |
| 22 | 770583.464 | 3818647.219 | 453.639 | BM22 |

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 23 | 771485.527 | 3818460.041 | 453.890 | BM23 |
| 24 | 771494.139 | 3818467.708 | 453.655 | BM24 |
| 25 | 772195.763 | 3818331.862 | 454.445 | BM25 |
| 26 | 772200.207 | 3818370.286 | 454.167 | BM26 |
| 27 | 772956.355 | 3818437.951 | 453.629 | BM27 |
| 28 | 772942.300 | 3818456.960 | 453.461 | BM28 |
| 29 | 774506.402 | 3818858.356 | 453.620 | BM31 |
| 30 | 774567.415 | 3818852.714 | 454.949 | BM32 |
| 31 | 773678.473 | 3818801.205 | 453.583 | BM30 |
| 32 | 772956.355 | 3818437.951 | 453.629 | bM27 |
| 33 | 774567.410 | 3818852.723 | 454.958 | BM32 |
| 34 | 775702.208 | 3818479.250 | 451.747 | BM34 |
| 35 | 775701.624 | 3818457.008 | 451.840 | BM33 |
| 36 | 776007.622 | 3819422.095 | 461.181 | BM35 |
| 37 | 776007.611 | 3819422.106 | 461.174 | BM35 |
| 38 | 776022.313 | 3819436.865 | 461.695 | BM36 |
| 39 | 776454.392 | 3820015.596 | 472.137 | BM38 |
| 40 | 775702.175 | 3818479.275 | 451.759 | BM34 |
| 41 | 777282.567 | 3820792.757 | 501.203 | BM40 |
| 42 | 777276.748 | 3820758.521 | 498.379 | BM39 |
| 43 | 777644.429 | 3820868.563 | 529.380 | BM42 |
| 44 | 776434.521 | 3820010.201 | 471.717 | BM37 |
| 45 | 776454.405 | 3820015.603 | 472.140 | BM38 |
| 46 | 777839.944 | 3820905.281 | 516.858 | BM43 |

| S. No | Easting | Northing | Elevation | Description |
|-------|------------|-------------|-----------|-------------|
| 47 | 777622.477 | 3820870.434 | 529.751 | BM41 |
| 48 | 777869.143 | 3820912.796 | 515.312 | BM44 |
| 49 | 777839.945 | 3820905.223 | 516.875 | BM43 |
| 50 | 778684.621 | 3821469.579 | 491.342 | BM45 |
| 51 | 778689.829 | 3821480.848 | 491.333 | BM46 |
| 52 | 779868.027 | 3822118.512 | 491.507 | BM47 |
| 53 | 779876.496 | 3822116.846 | 491.807 | BM48 |
| 54 | 781180.390 | 3822728.072 | 479.231 | BM51 |
| 55 | 781195.551 | 3822739.856 | 478.263 | BM52 |

2.13.5 MLK-4

Mura Banda Link Road

2.13.5.1 Location Map

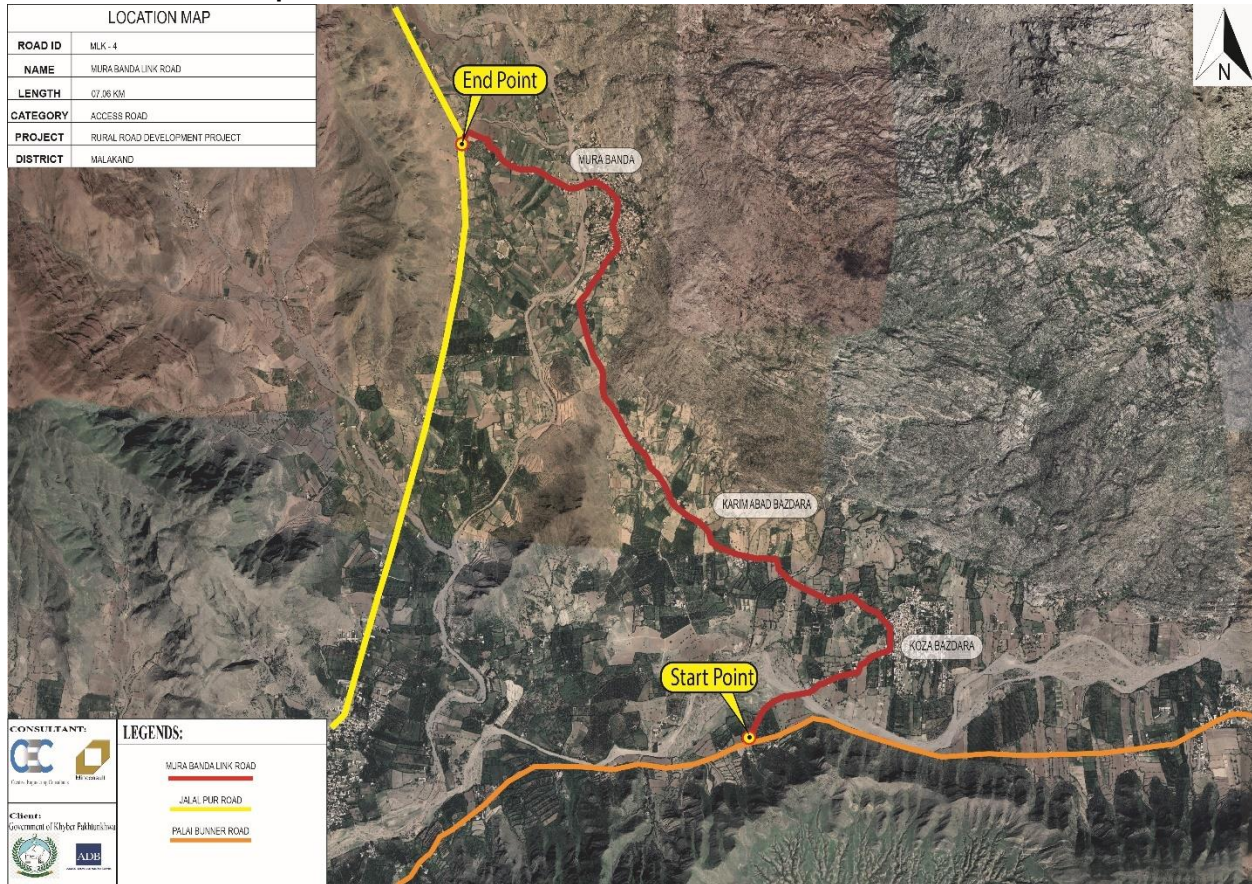


Figure 2.13.5 Location Map MLK-4

2.13.5.2 Traverse Points

The Traverse Point coordinates and description are as follows:

Table 2.13.5 MLK-4 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 234432.189 | 3828647.545 | 496.322 | BMTS28 |
| 2 | 234508.287 | 3828577.36 | 493.021 | BM27TS |
| 3 | 236169.23 | 3824893.975 | 461.501 | bm 1 |
| 4 | 236159.238 | 3824874.518 | 461.389 | bm 2 |
| 5 | 236607.89 | 3825190.112 | 459.645 | bm 4 |
| 6 | 236529.636 | 3825177.937 | 459.252 | bm 3 |
| 7 | 236876.116 | 3825291.987 | 467.558 | bm 5 |
| 8 | 237015.676 | 3825308.127 | 469.956 | bm 6 |
| 9 | 237264.682 | 3825456.646 | 475.902 | bm 7 |
| 10 | 237253.873 | 3825580.821 | 479.641 | bm 8 |
| 11 | 236959.783 | 3825793.131 | 470.284 | bm 9 |
| 12 | 236328.583 | 3826049.249 | 466.282 | bm 11 |
| 13 | 235263.112 | 3828009.844 | 477.321 | bm 21 |
| 14 | 235277.699 | 3828038.867 | 475.895 | bm 22 |
| 15 | 234125.675 | 3828662.248 | 506.591 | bm 30 |
| 16 | 234133.226 | 3828690.301 | 507.377 | bm 29 |
| 17 | 234415.916 | 3828630.212 | 496.617 | bm 28 |
| 18 | 234495.038 | 3828563.398 | 493.236 | bm 27 |
| 19 | 235000.827 | 3828417.366 | 474.688 | bm 26 |
| 20 | 235021.349 | 3828425.361 | 474.638 | bm 25 |
| 21 | 235232.037 | 3828388.082 | 475.246 | bm 24 |
| 22 | 235253.163 | 3828382.621 | 474.92 | bm 23 |
| 23 | 235021.048 | 3827536.006 | 471.634 | bm 20 |
| 24 | 235048.258 | 3827496.052 | 473.601 | bm 19 |
| 25 | 235197.533 | 3827078.861 | 487.166 | bm 18 |
| 26 | 235261.674 | 3826970.399 | 472.778 | bm 17 |
| 27 | 235636.585 | 3826445.771 | 466.25 | bm 15 |
| 28 | 236287.667 | 3826039.535 | 465.925 | bm 12 |
| 29 | 235917.714 | 3826221.462 | 473.677 | bm 13 |
| 30 | 235862.591 | 3826282.672 | 474.752 | bm 14 |
| 31 | 235568.788 | 3826558.074 | 472.276 | bm 16 |

2.14 District Mansehra

2.14.1 MAN-2

Shingri Road

2.14.1.1 Location Map

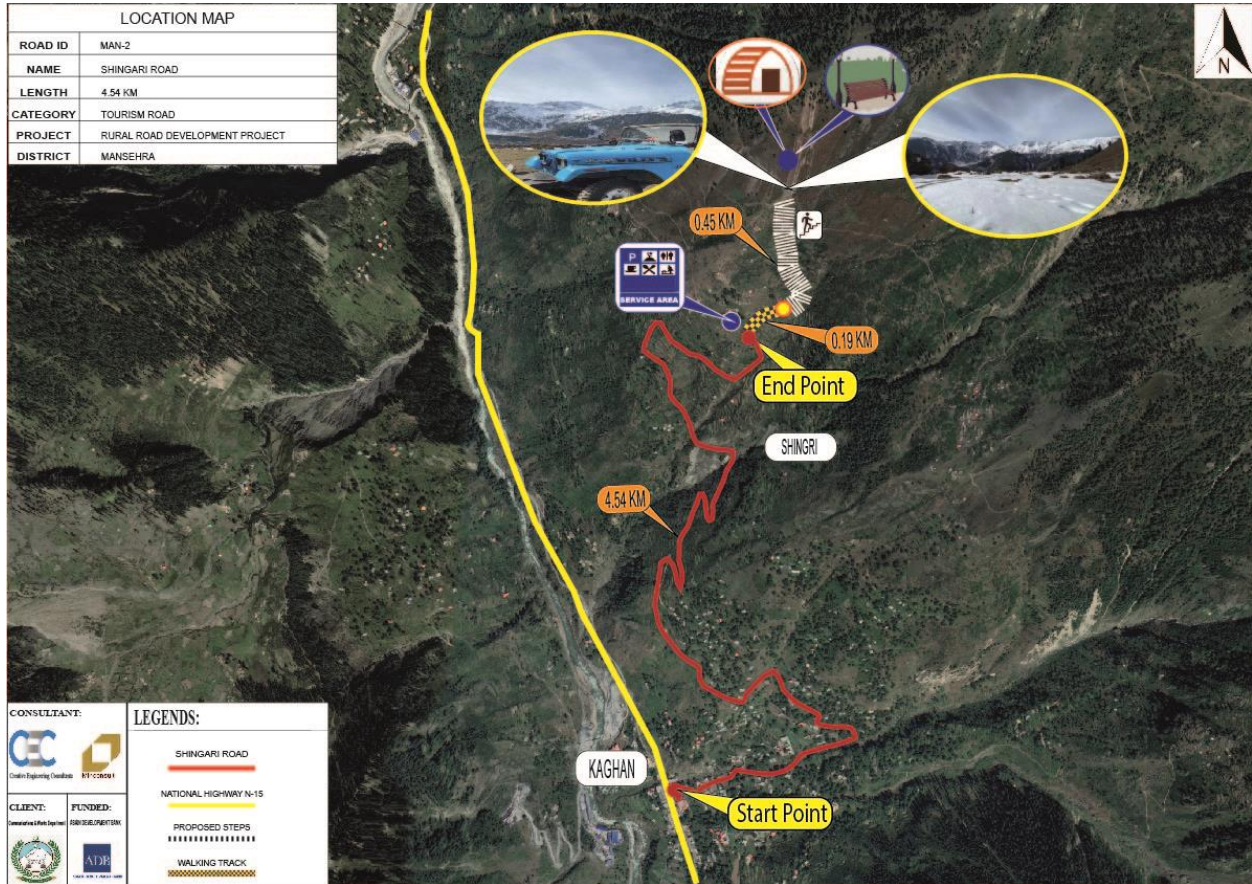


Figure 2.14.1 Location Map MAN-2

2.14.1.2 Traverse Points

The Traverse Point coordinates and description are as follows

Table 2.14.1 MAN-2 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 365139.6175 | 3851369.418 | 2515.1275 | BSBM16 |
| 2 | 365026.0618 | 3851430.309 | 2504.9272 | CP2 |
| 3 | 364946.5574 | 3851486.883 | 2499.8366 | CP3 |
| 4 | 364939.9955 | 3851495.502 | 2499.2124 | CP4 |
| 5 | 364927.0632 | 3851522.435 | 2497.6169 | CP5 |
| 6 | 364921.9887 | 3851530.578 | 2496.3485 | CP6 |
| 7 | 364898.9947 | 3851549.517 | 2490.5325 | CP7 |
| 8 | 364895.3081 | 3851549.426 | 2489.8377 | CP8 |
| 9 | 364881.4503 | 3851485.427 | 2486.0569 | CP9 |
| 10 | 364882.6918 | 3851475.328 | 2485.4536 | CP10 |
| 11 | 364884.9145 | 3851433.444 | 2480.8842 | CP11 |
| 12 | 364887.0764 | 3851430.219 | 2480.3885 | CP12 |
| 13 | 364922.718 | 3851394.719 | 2475.6005 | CP13 |
| 14 | 364926.508 | 3851392.155 | 2475.1058 | CP14 |
| 15 | 364933.9798 | 3851355.214 | 2470.4554 | CP15 |
| 16 | 364934.8498 | 3851350.067 | 2470.1912 | CP16 |
| 17 | 364977.0661 | 3851248.763 | 2462.21 | CP19 |
| 18 | 364978.4394 | 3851244.058 | 2461.5224 | CP20 |
| 19 | 365041.4028 | 3851164.527 | 2452.982 | CP21 |
| 20 | 365043.0107 | 3851159.172 | 2452.6179 | CP22 |
| 21 | 365067.1198 | 3851067.589 | 2439.2215 | CP1 |
| 22 | 365069.3296 | 3851058.788 | 2438.4608 | CP2 |
| 23 | 365235.3158 | 3851014.659 | 2415.2335 | CP3 |
| 24 | 365238.1728 | 3851010.33 | 2414.595 | CP4 |
| 25 | 365180.7108 | 3850895.94 | 2385.2747 | CP5 |
| 26 | 365178.5282 | 3850891.996 | 2384.5466 | CP6 |
| 27 | 365163.4041 | 3850849.426 | 2378.7939 | CP7 |
| 28 | 365161.9559 | 3850844.698 | 2377.274 | CP8 |
| 29 | 365108.4966 | 3850842.441 | 2346.4492 | CP1 |
| 30 | 365104.2433 | 3850839.799 | 2345.9154 | CP2 |
| 31 | 365067.4119 | 3849517.621 | 2053.9951 | CP3 |
| 32 | 365073.1742 | 3849520.725 | 2054.6391 | CP4 |
| 33 | 365627.819 | 3849845.432 | 2172.473 | BM6TS |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 34 | 365604.574 | 3849880.695 | 2182.51 | CP1 |
| 35 | 365606.092 | 3849884.042 | 2182.986 | CP2 |
| 36 | 365549.064 | 3849912.852 | 2190.415 | CP3 |
| 37 | 365544.491 | 3849913.655 | 2191.387 | CP4 |
| 38 | 365499.359 | 3849956.076 | 2202.713 | CP5 |
| 39 | 365502.789 | 3849957.342 | 2202.927 | CP6 |
| 40 | 365468.191 | 3850014.855 | 2203.593 | CP7 |
| 41 | 365468.193 | 3850018.846 | 2203.883 | CP8 |
| 42 | 365360.923 | 3850042.207 | 2206.305 | CP9 |
| 43 | 365357.364 | 3850042.912 | 2205.923 | CP10 |
| 44 | 365379.034 | 3850067.519 | 2207.244 | CP |
| 45 | 365374.447 | 3850067.251 | 2207.059 | CP |
| 46 | 365302.858 | 3849980.591 | 2198.456 | CP11 |
| 47 | 365301.067 | 3849974.972 | 2197.851 | CP12 |
| 48 | 365257.555 | 3849952.648 | 2191.63 | CP13 |
| 49 | 365253.507 | 3849954.505 | 2191.607 | CP14 |
| 50 | 365238.077 | 3849966.986 | 2193.803 | BM7TS |
| 51 | 365235.076 | 3849973.701 | 2194.471 | BM8TS |
| 52 | 365235.211 | 3849973.752 | 2194.438 | BM8TS |
| 53 | 365164.978 | 3850030.848 | 2204.984 | CP15 |
| 54 | 365163.646 | 3850034.767 | 2205.074 | CP16 |
| 55 | 365124.854 | 3850021.537 | 2203.725 | CP17 |
| 56 | 365119.185 | 3850022.249 | 2204.114 | CP18 |
| 57 | 365098.972 | 3850041.727 | 2205.402 | CP19 |
| 58 | 365100.958 | 3850050.271 | 2206.167 | CP20 |
| 59 | 364988.98 | 3850172.971 | 2228.777 | CP21 |
| 60 | 364985.904 | 3850166.189 | 2226.868 | CP22 |
| 61 | 364927.788 | 3850261.119 | 2237.794 | CP23 |
| 62 | 364924.502 | 3850266.444 | 2238.023 | CP24 |
| 63 | 364901.856 | 3850373.876 | 2240.101 | CP25 |
| 64 | 364899.927 | 3850381.054 | 2241.6 | CP26 |
| 65 | 364935.077 | 3850478.911 | 2262.872 | BM9TS |
| 66 | 364931.275 | 3850475.305 | 2261.791 | CP27 |
| 67 | 364934.629 | 3850481.197 | 2262.703 | CP28 |
| 68 | 364959.328 | 3850592.482 | 2283.321 | CP29 |
| 69 | 364965.455 | 3850588.805 | 2284.603 | CP30 |
| 70 | 365007.652 | 3850519.476 | 2303.637 | CP31 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 71 | 365008.126 | 3850526.883 | 2304.699 | CP32 |
| 72 | 365028.536 | 3850704.283 | 2324.743 | CP33 |
| 73 | 365031.596 | 3850714.221 | 2326.135 | CP34 |
| 74 | 365627.818 | 3849845.438 | 2172.479 | BM6TS |
| 75 | 365715.367 | 3849840.002 | 2164.922 | CP1 |
| 76 | 365722.174 | 3849843.041 | 2164.557 | CP2 |
| 77 | 365763.218 | 3849775.698 | 2152.428 | CP3 |
| 78 | 365765.778 | 3849770.346 | 2152.159 | CP4 |
| 79 | 365583.443 | 3849720.629 | 2124.741 | CP5 |
| 80 | 365577.856 | 3849719.594 | 2124.553 | CP6 |
| 81 | 365499.102 | 3849662.285 | 2112.348 | CP7 |
| 82 | 365504.37 | 3849660.681 | 2112.536 | CP8 |
| 83 | 365362.821 | 3849620.178 | 2093.829 | CP9 |
| 84 | 365367.269 | 3849623.043 | 2093.961 | CP10 |
| 85 | 364921.847 | 3849548.788 | 2037.758 | BM 1 |
| 86 | 364942.519 | 3849545.637 | 2039.508 | BM 2 |
| 87 | 365276.746 | 3849620.286 | 2078.523 | BM3 |
| 88 | 365280.672 | 3849625.12 | 2079.032 | CP4 |
| 89 | 365277.319 | 3849620.133 | 2078.569 | CP3 |
| 90 | 365021.178 | 3849543.165 | 2049.755 | CP2 |
| 91 | 365019.422 | 3849538.38 | 2048.871 | CP1 |
| 92 | 365281.029 | 3849628.507 | 2079.519 | BM4 |
| 93 | 365623.242 | 3849842.902 | 2172.827 | BM 5 |
| 94 | 365627.818 | 3849845.438 | 2172.468 | BM 6 |
| 95 | 365238.229 | 3849967.046 | 2193.769 | BM7 |
| 96 | 365235.208 | 3849973.755 | 2194.435 | BM8 |
| 97 | 364936.806 | 3850479.704 | 2262.874 | BM 9 |
| 98 | 364933.615 | 3850485.861 | 2263.477 | BM 10 |
| 99 | 365120.387 | 3850765.609 | 2361.938 | BM 11 |
| 100 | 365114.626 | 3850754.969 | 2359.965 | BM 12 |
| 101 | 365038.767 | 3851129.75 | 2448 | BM 13 |
| 102 | 365056.696 | 3851114.594 | 2446.312 | BM 14 |
| 103 | 365136.11 | 3851369.697 | 2514.906 | BM 15 |
| 104 | 365139.555 | 3851369.472 | 2515.134 | BM 16 |

2.14.2 T-12

To Saiful Maluk Lake

2.14.2.1 Location Map



Figure 2.14.2 Location Map T-12

2.14.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.14.2 T-12 Traverse Points

| S.No | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|-------------|------------|-----------|-------------|
| 1 | 3863755.749 | 376909.069 | 2438.720 | BM30 |
| 2 | 3863759.042 | 376920.533 | 2439.084 | BM29 |
| 3 | 3863731.316 | 377304.490 | 2471.070 | BM 28 |
| 4 | 3863730.694 | 377295.824 | 2468.604 | BM 27 |
| 5 | 3863765.743 | 377457.437 | 2485.057 | BM 26 |
| 6 | 3863766.784 | 377471.878 | 2485.056 | BM 25 |
| 7 | 3863599.458 | 377977.861 | 2540.183 | BM 24 |
| 8 | 3863594.322 | 377976.426 | 2540.353 | BM 23 |
| 9 | 3863417.178 | 378723.417 | 2624.686 | BM 22 |
| 10 | 3863424.848 | 378722.147 | 2624.664 | BM 21 |
| 11 | 3863254.020 | 379225.057 | 2694.407 | BM 20 |
| 12 | 3863285.875 | 379250.673 | 2696.789 | BM 19 |
| 13 | 3863536.609 | 379164.431 | 2749.028 | BM18 |
| 14 | 3863537.977 | 379149.838 | 2748.052 | BM17 |
| 15 | 3863385.565 | 379631.247 | 2855.705 | BM 16 |
| 16 | 3863375.894 | 379628.769 | 2854.182 | BM 15 |
| 17 | 3862392.822 | 380472.150 | 3000.839 | BM 14 |
| 18 | 3862382.136 | 380462.733 | 3001.673 | BM 13 |
| 19 | 3862087.981 | 380497.153 | 3057.993 | BM 11 |
| 20 | 3862084.134 | 380506.888 | 3057.998 | BM 12 |
| 21 | 3862015.122 | 380677.677 | 3123.048 | BM 10 |
| 22 | 3862007.748 | 380693.599 | 3124.783 | BM 9 |

| S.No | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|-------------|------------|-----------|-------------|
| 23 | 3861890.603 | 380740.977 | 3170.884 | BM8 |
| 24 | 3861898.260 | 380734.125 | 3169.484 | BM7 |
| 25 | 3861662.085 | 380665.499 | 3213.336 | BM 6 |
| 26 | 3861648.994 | 380644.911 | 3216.653 | BM 5 |
| 27 | 3861085.996 | 380662.530 | 3231.071 | BM4 |
| 28 | 3861084.522 | 380655.421 | 3231.825 | BM |
| 29 | 3860910.160 | 380832.130 | 3219.691 | BM 2 |
| 30 | 3860899.893 | 380816.493 | 3217.627 | BM 1 |
| 31 | 3862015.118 | 380677.669 | 3123.042 | BM10TS |
| 32 | 3862084.151 | 380506.890 | 3058.005 | BM12TS |
| 33 | 3862084.126 | 380506.898 | 3058.005 | BM12TS |
| 34 | 3862382.357 | 380462.072 | 3001.655 | BM13TS |
| 35 | 3862393.068 | 380471.491 | 3000.818 | BM14TS |
| 36 | 3862392.834 | 380472.152 | 3000.838 | BM14TS |
| 37 | 3863765.743 | 377457.436 | 2485.048 | BM26 |
| 38 | 3863730.282 | 377295.809 | 2468.532 | BM27TS |
| 39 | 3863730.696 | 377295.818 | 2468.584 | BM27TS |
| 40 | 3863536.609 | 379164.429 | 2749.019 | BM18TS |
| 41 | 3863376.657 | 379629.457 | 2854.151 | BM15TS |
| 42 | 3863386.357 | 379631.936 | 2855.652 | BM16TS |
| 43 | 3863536.613 | 379164.393 | 2749.013 | BSBM18 |
| 44 | 3863285.698 | 379250.947 | 2696.831 | CLOSEBM19 |
| 45 | 3863253.811 | 379225.316 | 2694.447 | CLOSEBM20 |
| 46 | 3863254.016 | 379225.100 | 2694.406 | BS BM20 |

| S.No | EASTING | NORTHING | ELEVATION | DISCRIPTION |
|------|-------------|------------|-----------|-------------|
| 47 | 3863425.053 | 378721.962 | 2624.674 | CLOSE BM21 |
| 48 | 3863417.376 | 378723.247 | 2624.698 | CLOSE BM22 |
| 49 | 3863417.176 | 378723.386 | 2624.688 | BS BM22 |
| 50 | 3860910.155 | 380832.137 | 3219.693 | BSBM2 |
| 51 | 3861084.730 | 380655.535 | 3231.837 | CLOSE BM3 |
| 52 | 3861086.157 | 380662.651 | 3231.063 | CLOSE BM4 |
| 53 | 3861086.041 | 380662.518 | 3231.062 | BSBM4 |
| 54 | 3861649.176 | 380642.970 | 3216.589 | CLOSE BM5 |
| 55 | 3861661.979 | 380665.444 | 3213.333 | BSBM6 |
| 56 | 3861898.152 | 380734.160 | 3169.500 | CLOSE BM7 |
| 57 | 3861890.582 | 380740.925 | 3170.882 | BSBM8 |
| 58 | 3861890.622 | 380741.030 | 3170.881 | BS BM8 |
| 59 | 3862008.002 | 380693.245 | 3124.786 | CLOSE BM9 |
| 60 | 3862015.309 | 380677.275 | 3123.031 | CLOSE BM10 |

2.14.3 T-22

Sharan Forest

2.14.3.1 Location Map

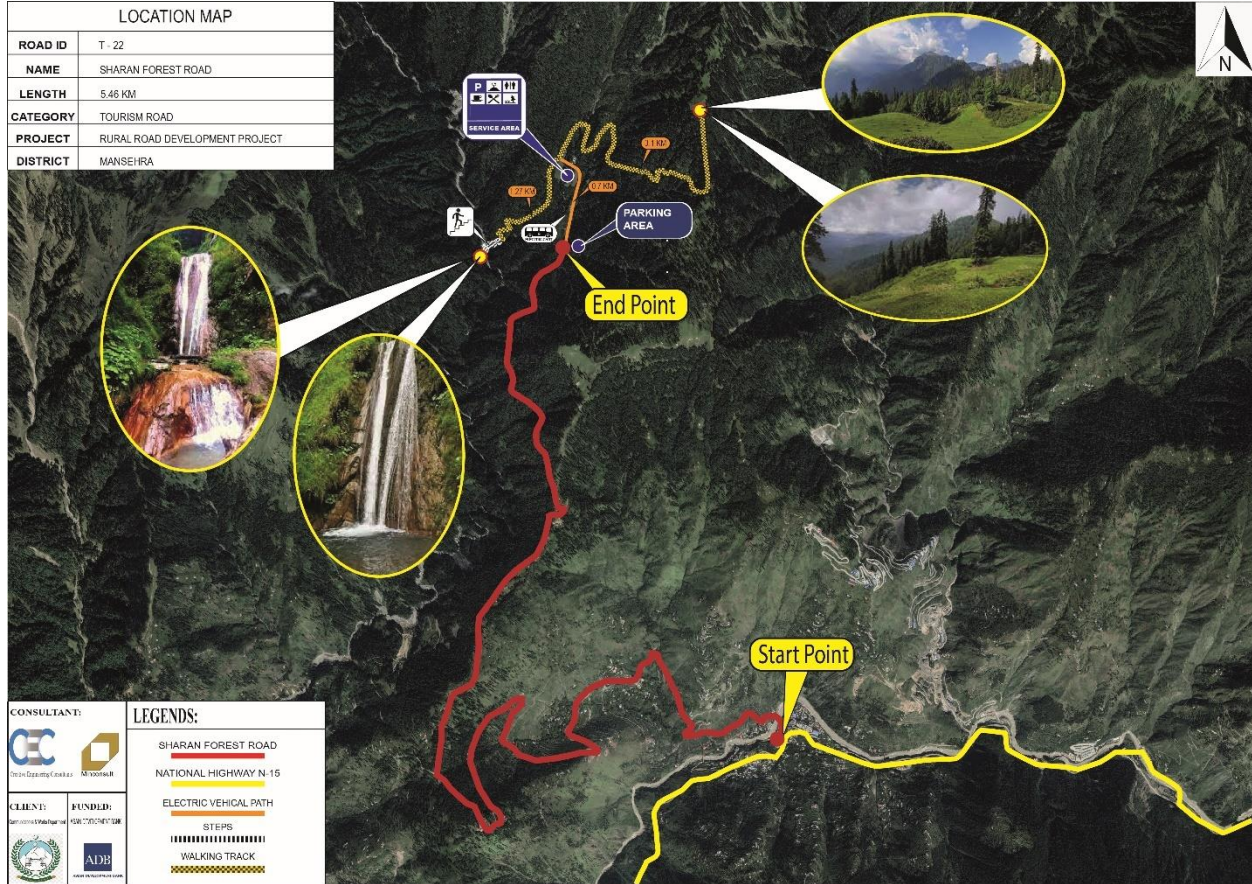


Figure 2.14.3 Location Map T-22

2.14.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.14.3 T-22 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 1 | 358085.34 | 3836778.619 | 1454.274 | BM1 |
| 2 | 358104.933 | 3836783.307 | 1456.467 | BM2 |
| 3 | 357563.747 | 3837344.649 | 1508.602 | BM3 |
| 4 | 357568.948 | 3837336.878 | 1508.362 | BM4 |
| 5 | 356959.595 | 3837101.246 | 1593.571 | BM5 |
| 6 | 356954.397 | 3837083.713 | 1593.481 | BM6 |
| 7 | 356091.324 | 3836163.362 | 2113.405 | BM7 |
| 8 | 356084.048 | 3836178.452 | 2112.315 | BM8 |
| 9 | 355855.992 | 3836560.168 | 2040.194 | BM9 |
| 10 | 355849.086 | 3836567.693 | 2038.759 | BM10 |
| 11 | 356277.275 | 3837008.403 | 1882.405 | BM11 |
| 12 | 356920.777 | 3836640.172 | 1716.023 | BM12 |
| 13 | 356908.843 | 3836634.494 | 1717.683 | BM13 |
| 14 | 356435.693 | 3838192.003 | 2286.301 | BM14 |
| 15 | 356447.803 | 3838194.775 | 2286.502 | BM15 |
| 16 | 355954.264 | 3837540.559 | 2264.322 | BM16 |
| 17 | 355960.513 | 3837553.828 | 2266.989 | BM17 |
| 18 | 355672.562 | 3837030.357 | 2234.484 | BM18 |
| 19 | 355674.833 | 3837024.041 | 2233.04 | BM19 |
| 20 | 355558.069 | 3836527.089 | 2174.827 | BM20 |
| 21 | 355596.848 | 3836502.215 | 2178.968 | BM21 |
| 22 | 356277.274 | 3837008.412 | 1882.356 | BM22 |
| 23 | 356282.364 | 3837006.338 | 1881.843 | BM23 |
| 24 | 358889.431 | 3836589.296 | 1266.687 | BM24 |
| 25 | 358424.904 | 3836771.014 | 1324.269 | BM25 |
| 26 | 358432.168 | 3836771.379 | 1323.826 | BM26 |
| 27 | 358878.378 | 3836575.904 | 1267.537 | BM27 |
| 28 | 358889.455 | 3836589.287 | 1266.778 | BM28 |
| 29 | 355675.511 | 3837024.253 | 2232.488 | BM29 |
| 30 | 355673.2528 | 3837030.59 | 2233.9448 | BM30 |
| 31 | 355672.5435 | 3837030.319 | 2234.4914 | BM31 |
| 32 | 355954.2645 | 3837540.567 | 2264.382 | BM32 |
| 33 | 356451.7482 | 3838191.096 | 2286.3612 | BM33 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|-------------|-----------|-------------|
| 34 | 356439.6316 | 3838188.384 | 2286.1639 | BM34 |
| 35 | 356435.7309 | 3838192.032 | 2286.3073 | BM35 |
| 36 | 356756.9033 | 3838553.14 | 2369.0629 | BM36 |
| 37 | 356752.6606 | 3838550.205 | 2368.5556 | BM37 |
| 38 | 356667.4492 | 3838762.801 | 2404.9547 | BM38 |
| 39 | 356675.6388 | 3838759.824 | 2404.9271 | BM39 |
| 40 | 356682.2054 | 3838625.397 | 2391.13 | BM40 |
| 41 | 356674.0034 | 3838634.087 | 2390.954 | BM41 |
| 42 | 356646.4684 | 3838901.178 | 2430.5304 | BM42 |
| 43 | 356635.7991 | 3838895.08 | 2427.2706 | BM43 |
| 44 | 356908.8442 | 3836634.495 | 1717.7056 | BM44 |
| 45 | 356956.1129 | 3837083.385 | 1593.4163 | BM45 |
| 46 | 356961.3605 | 3837100.899 | 1593.4814 | BM46 |
| 47 | 356954.3669 | 3837083.692 | 1593.4952 | BM47 |
| 48 | 357564.1573 | 3837343.977 | 1508.4747 | BM48 |
| 49 | 357569.3493 | 3837336.184 | 1508.2484 | BM49 |
| 50 | 357568.9498 | 3837336.862 | 1508.369 | BM50 |
| 51 | 356277.31 | 3837008.432 | 1882.379 | BM51 |
| 52 | 355591.184 | 3836506.264 | 2179.163 | BM52 |
| 53 | 356772.76 | 3841322.301 | 2397.813 | BM53 |
| 54 | 356769.948 | 3841313.071 | 2396.531 | BM54 |
| 55 | 356667.08 | 3840463.707 | 2356.453 | BM55 |
| 56 | 356673.157 | 3840471.327 | 2355.296 | BM56 |
| 57 | 356275.347 | 3840070.474 | 2374.463 | BM57 |
| 58 | 356273.586 | 3840065.416 | 2375.491 | BM58 |
| 59 | 356294.434 | 3839492.926 | 2434.651 | BM59 |
| 60 | 356306.253 | 3839502.432 | 2435.085 | BM60 |
| 61 | 356282.348 | 3837006.335 | 1881.824 | BM61 |
| 62 | 356919.587 | 3836637.019 | 1715.945 | BM62 |
| 63 | 356907.619 | 3836631.41 | 1717.634 | BM63 |
| 64 | 358424.902 | 3836771.009 | 1324.291 | BM64 |
| 65 | 358085.517 | 3836779.111 | 1454.439 | BM65 |
| 66 | 358105.144 | 3836783.685 | 1456.583 | BM66 |
| 67 | 358104.938 | 3836783.304 | 1456.447 | BM67 |
| 68 | 358424.913 | 3836771.011 | 1324.287 | BM68 |

2.15 District Shangla

2.15.1 SNG-14

Chakesar Nebi More To Said Abad

2.15.1.1 Location Map



Figure 2.15.1 Location Map SNG-14

2.15.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.1 SNG-14 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 293872.303 | 3854969.838 | 1479.204 | bm1 |
| 2 | 293867.359 | 3854983.43 | 1481.255 | bm2 |
| 3 | 293953.584 | 3854737.64 | 1386.989 | bm3 |
| 4 | 293959.057 | 3854711.053 | 1378.398 | bm4 |
| 5 | 294340.11 | 3854551.071 | 1309.232 | bm5 |
| 6 | 294352.015 | 3854517.704 | 1305.47 | bm6 |
| 7 | 294802.234 | 3854043.43 | 1262.827 | bm7 |
| 8 | 294780.273 | 3854026.287 | 1257.78 | bm8 |
| 9 | 295421.672 | 3853735.924 | 1184.425 | bm9 |
| 10 | 295476.747 | 3853665.332 | 1179.356 | bm10 |
| 11 | 295950.408 | 3852963.092 | 1181.958 | bm11 |
| 12 | 295979.375 | 3852963.559 | 1183.788 | bm12 |

2.15.2 SNG-61

Miankalay Pagorai Kas Road

2.15.2.1 Location Map

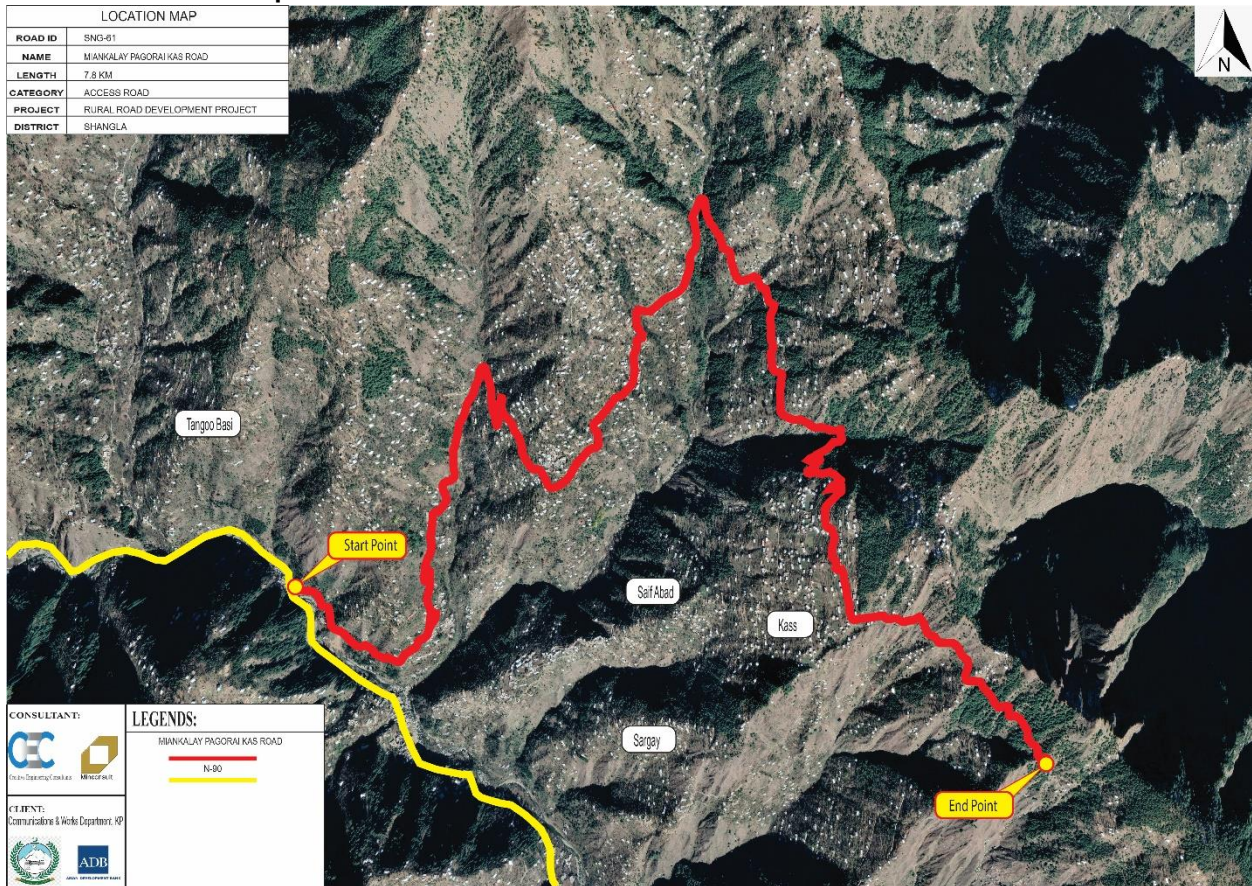


Figure 2.15.2 Location Map SNG-61

2.15.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.2 SNG-61 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|--------------|
| 1 | 288693.843 | 3864647.542 | 1509.038 | P CUL |
| 2 | 288693.864 | 3864647.608 | 1508.689 | INV |
| 3 | 288698.99 | 3864645.072 | 1507.776 | INV |
| 4 | 288698.779 | 3864645.134 | 1508.692 | P CUL |
| 5 | 288712.262 | 3864567.174 | 1499.671 | Proposed Cul |
| 6 | 288709.086 | 3864569.691 | 1499.473 | Proposed Cul |
| 7 | 288633.892 | 3864511.198 | 1489.856 | P CUL |
| 8 | 288633.889 | 3864511.236 | 1489.189 | INV |
| 9 | 288636.6 | 3864506.46 | 1488.733 | INV |
| 10 | 288636.553 | 3864506.674 | 1489.615 | P CUL |
| 11 | 288579.527 | 3864224.048 | 1472.766 | Proposed Cul |
| 12 | 288574.517 | 3864224.701 | 1472.797 | Proposed Cul |
| 13 | 288600.185 | 3864161.747 | 1443.96 | Proposed Cul |
| 14 | 288595.599 | 3864162.376 | 1443.986 | Proposed Cul |
| 15 | 288429.975 | 3863795.376 | 1381.319 | Proposed Cul |
| 16 | 288426.568 | 3863798.58 | 1381.392 | Proposed Cul |
| 17 | 288326.155 | 3863785.32 | 1366.668 | Proposed Cul |
| 18 | 288328.014 | 3863789.264 | 1367.125 | Proposed Cul |
| 19 | 288097.709 | 3863880.265 | 1336.886 | Proposed Cul |
| 20 | 288094.858 | 3863877.184 | 1336.867 | Proposed Cul |
| 21 | 287962.533 | 3864043.131 | 1308.462 | P CUL |
| 22 | 287965.383 | 3864047.705 | 1308.748 | CLOSE |
| 23 | 287962.513 | 3864042.884 | 1307.767 | INV |
| 24 | 287913.593 | 3864097.506 | 1296.064 | INV |
| 25 | 287913.529 | 3864097.338 | 1296.496 | P CUL |
| 26 | 287909.135 | 3864094.098 | 1296.219 | P CUL |
| 27 | 287908.925 | 3864094.154 | 1295.579 | INV |
| 28 | 287764.364 | 3864137.876 | 1277.794 | P CUL |
| 29 | 287767.45 | 3864142.163 | 1277.876 | P CUL |
| 30 | 287767.458 | 3864142.147 | 1277.521 | INV |
| 31 | 287764.538 | 3864137.552 | 1276.967 | INV |
| 32 | 287749.203 | 3864192.917 | 1281.158 | Proposed Cul |
| 33 | 287746.108 | 3864189.792 | 1280.956 | Proposed Cul |
| 34 | 288764.838 | 3864815.597 | 1542.519 | Proposed Cul |
| 35 | 288760.042 | 3864818.616 | 1542.726 | Proposed Cul |
| 36 | 288843.833 | 3865011.438 | 1558.928 | INV |

| S.no | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|--------------|
| 37 | 288843.527 | 3865011.432 | 1560.007 | P CUL |
| 38 | 288838.757 | 3865013.778 | 1560.013 | P CUL |
| 39 | 288838.616 | 3865013.962 | 1559.303 | INV |
| 40 | 288953.384 | 3865233.443 | 1611.376 | S CUL |
| 41 | 288950.728 | 3865234.219 | 1611.13 | S CUL |
| 42 | 288953.03 | 3865240.336 | 1610.891 | S CUL |
| 43 | 288954.898 | 3865239.547 | 1610.889 | S CUL |
| 44 | 288954.253 | 3865240.002 | 1609.655 | INV |
| 45 | 288952.046 | 3865233.628 | 1609.324 | INV |
| 46 | 288990.498 | 3865066.83 | 1635.321 | Proposed Cul |
| 47 | 288994.587 | 3865067.126 | 1635.11 | Proposed Cul |
| 48 | 289158.071 | 3864871.753 | 1715.727 | INV |
| 49 | 289157.747 | 3864871.639 | 1716.577 | P CUL |
| 50 | 289151.612 | 3864869.79 | 1715.694 | P CUL |
| 51 | 289151.633 | 3864869.6 | 1714.802 | INV |
| 52 | 289311.625 | 3864651.488 | 1726.382 | INV |
| 53 | 289311.484 | 3864651.468 | 1727.101 | P CUL |
| 54 | 289306.585 | 3864649.469 | 1726.998 | P CUL |
| 55 | 289306.473 | 3864649.393 | 1726.622 | INV |
| 56 | 289490.111 | 3864749.031 | 1739.734 | Proposed Cul |
| 57 | 289487.625 | 3864753.3 | 1740.219 | Proposed Cul |
| 58 | 289601.81 | 3864832.72 | 1750.97 | INV |
| 59 | 289601.676 | 3864832.602 | 1751.835 | P CUL |
| 60 | 289598.261 | 3864833.876 | 1752.066 | P CUL |
| 61 | 289598.141 | 3864833.869 | 1751.236 | INV |
| 62 | 289582.721 | 3864909.998 | 1759.36 | INV |
| 63 | 289582.631 | 3864910.051 | 1760.171 | P CUL |
| 64 | 289577.535 | 3864911.878 | 1760.15 | P CUL |
| 65 | 289577.368 | 3864912.076 | 1759.553 | INV |
| 66 | 289739.854 | 3865057.177 | 1772.375 | INV |
| 67 | 289739.794 | 3865057.289 | 1773.306 | P CUL |
| 68 | 289738.36 | 3865062.093 | 1773.15 | P CUL |
| 69 | 289738.238 | 3865062.235 | 1772.706 | INV |
| 70 | 289801.27 | 3865210.614 | 1777.342 | INV |
| 71 | 289801.335 | 3865210.622 | 1777.757 | P CUL |
| 72 | 289805.042 | 3865210.346 | 1777.703 | P CUL |
| 73 | 289805.144 | 3865210.488 | 1777.205 | P CUL |
| 74 | 289815.663 | 3865271.079 | 1778.268 | INV |
| 75 | 289815.623 | 3865271.026 | 1778.93 | P CUL |
| 76 | 289817.58 | 3865265.795 | 1778.953 | CLOSE |

| S.no | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|--------------|
| 77 | 289831.803 | 3865451.573 | 1787.554 | Proposed Cul |
| 78 | 289830.235 | 3865456.599 | 1787.765 | Proposed Cul |
| 79 | 289994.335 | 3865508.672 | 1793.272 | INV |
| 80 | 289994.233 | 3865508.57 | 1793.902 | P CUL |
| 81 | 289993.931 | 3865503.408 | 1793.639 | P CUL |
| 82 | 289993.796 | 3865503.149 | 1792.847 | INV |
| 83 | 290075.38 | 3865547.02 | 1791.414 | INV |
| 84 | 290075.326 | 3865547.143 | 1792.217 | P CUL |
| 85 | 290071.266 | 3865550.794 | 1792.333 | P CUL |
| 86 | 290071.143 | 3865550.738 | 1791.745 | INV |
| 87 | 290114.367 | 3865681.221 | 1789.824 | INV |
| 88 | 290114.51 | 3865681.222 | 1790.369 | P CUL |
| 89 | 290119.93 | 3865680.93 | 1790.179 | P CUL |
| 90 | 290119.994 | 3865680.821 | 1789.454 | INV |
| 91 | 290144.129 | 3865884.577 | 1798.257 | Proposed Cul |
| 92 | 290138.449 | 3865888.092 | 1798.518 | Proposed Cul |
| 93 | 290186.76 | 3865963.21 | 1804.62 | Causeway |
| 94 | 290189.352 | 3865963.882 | 1804.218 | Causeway |
| 95 | 290192.694 | 3865962.276 | 1804.497 | Causeway |
| 96 | 290195.193 | 3865966.167 | 1804.441 | Causeway |
| 97 | 290190.576 | 3865968.686 | 1804.254 | Causeway |
| 98 | 290186.673 | 3865968.138 | 1804.556 | Causeway |
| 99 | 290335.347 | 3865703.611 | 1837.914 | Proposed Cul |
| 100 | 290340.253 | 3865705.015 | 1838.096 | Proposed Cul |
| 101 | 290363.751 | 3865599.962 | 1834.156 | INV |
| 102 | 290363.801 | 3865600.177 | 1835.07 | P CUL |
| 103 | 290368.049 | 3865603.084 | 1835.592 | P CUL |
| 104 | 290368.204 | 3865603.292 | 1835.142 | INV |
| 105 | 290472.37 | 3865585.962 | 1836.842 | Proposed Cul |
| 106 | 290475.396 | 3865589.619 | 1837.287 | Proposed Cul |
| 107 | 290525.068 | 3865528.172 | 1844.196 | Proposed Cul |
| 108 | 290530.367 | 3865529.513 | 1844.757 | Proposed Cul |
| 109 | 290557.279 | 3865443.676 | 1863.802 | Proposed Cul |
| 110 | 290563.697 | 3865439.897 | 1864.708 | Proposed Cul |
| 111 | 290539.933 | 3865332.197 | 1879.52 | Proposed Cul |
| 112 | 290545.537 | 3865329.629 | 1879.73 | Proposed Cul |
| 113 | 290553.641 | 3865251.95 | 1883.026 | Proposed Cul |
| 114 | 290559.448 | 3865249.818 | 1883.542 | Proposed Cul |
| 115 | 290588.711 | 3865128.99 | 1891.939 | Proposed Cul |
| 116 | 290595.133 | 3865131.811 | 1892.653 | Proposed Cul |

| S.no | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|--------------|
| 117 | 290674.757 | 3864914.653 | 1898.012 | Proposed Cul |
| 118 | 290675.746 | 3864918.85 | 1898.418 | Proposed Cul |
| 119 | 290873.512 | 3864851.091 | 1905.242 | Proposed Cul |
| 120 | 290878.077 | 3864854.052 | 1905.749 | Proposed Cul |
| 121 | 290893.898 | 3864818.547 | 1907.28 | Proposed Cul |
| 122 | 290900.093 | 3864817.557 | 1907.728 | Proposed Cul |
| 123 | 290799.596 | 3864775.658 | 1921.254 | Proposed Cul |
| 124 | 290798.427 | 3864768.533 | 1922.035 | Proposed Cul |
| 125 | 290777.235 | 3864735.28 | 1946.602 | Proposed Cul |
| 126 | 290775.09 | 3864740.052 | 1946.224 | Proposed Cul |
| 127 | 290699.641 | 3864679.253 | 1968.98 | Proposed Cul |
| 128 | 290699.705 | 3864674.528 | 1969.469 | Proposed Cul |
| 129 | 290704.464 | 3864667.144 | 1974.157 | Proposed Cul |
| 130 | 290706.337 | 3864662.287 | 1974.612 | Proposed Cul |
| 131 | 290829.816 | 3864669.04 | 1993.649 | Proposed Cul |
| 132 | 290827.001 | 3864672.807 | 1993.38 | Proposed Cul |
| 133 | 290820.235 | 3864312.574 | 2058.994 | Proposed Cul |
| 134 | 290816.321 | 3864312.615 | 2058.848 | Proposed Cul |
| 135 | 290879.754 | 3864169.242 | 2073.271 | Proposed Cul |
| 136 | 290882.897 | 3864169.398 | 2073.184 | Proposed Cul |
| 137 | 291052.338 | 3864031.215 | 2071.716 | Proposed Cul |
| 138 | 291053.678 | 3864027.674 | 2071.353 | Proposed Cul |
| 139 | 291253.773 | 3864016.31 | 2075.693 | Proposed Cul |
| 140 | 291255.702 | 3864019.789 | 2075.957 | Proposed Cul |
| 141 | 291571.5 | 3863717.749 | 2088.358 | Proposed Cul |
| 142 | 291574.315 | 3863720.058 | 2088.839 | Proposed Cul |
| 143 | 291601.938 | 3863661.955 | 2098.589 | Proposed Cul |
| 144 | 291603.855 | 3863664.203 | 2099.89 | Proposed Cul |
| 145 | 291628.711 | 3863630.31 | 2093.837 | Proposed Cul |
| 146 | 291631.971 | 3863631.774 | 2093.91 | Proposed Cul |
| 147 | 291694.607 | 3863615.847 | 2099.383 | Proposed Cul |
| 148 | 291697.233 | 3863618.53 | 2099.771 | Proposed Cul |
| 149 | 291842.178 | 3863435.634 | 2115.163 | Proposed Cul |
| 150 | 291837.699 | 3863432.743 | 2114.848 | Proposed Cul |

2.15.3 SNG-20

Towa Chowkai Asharkot

2.15.3.1 Location Map

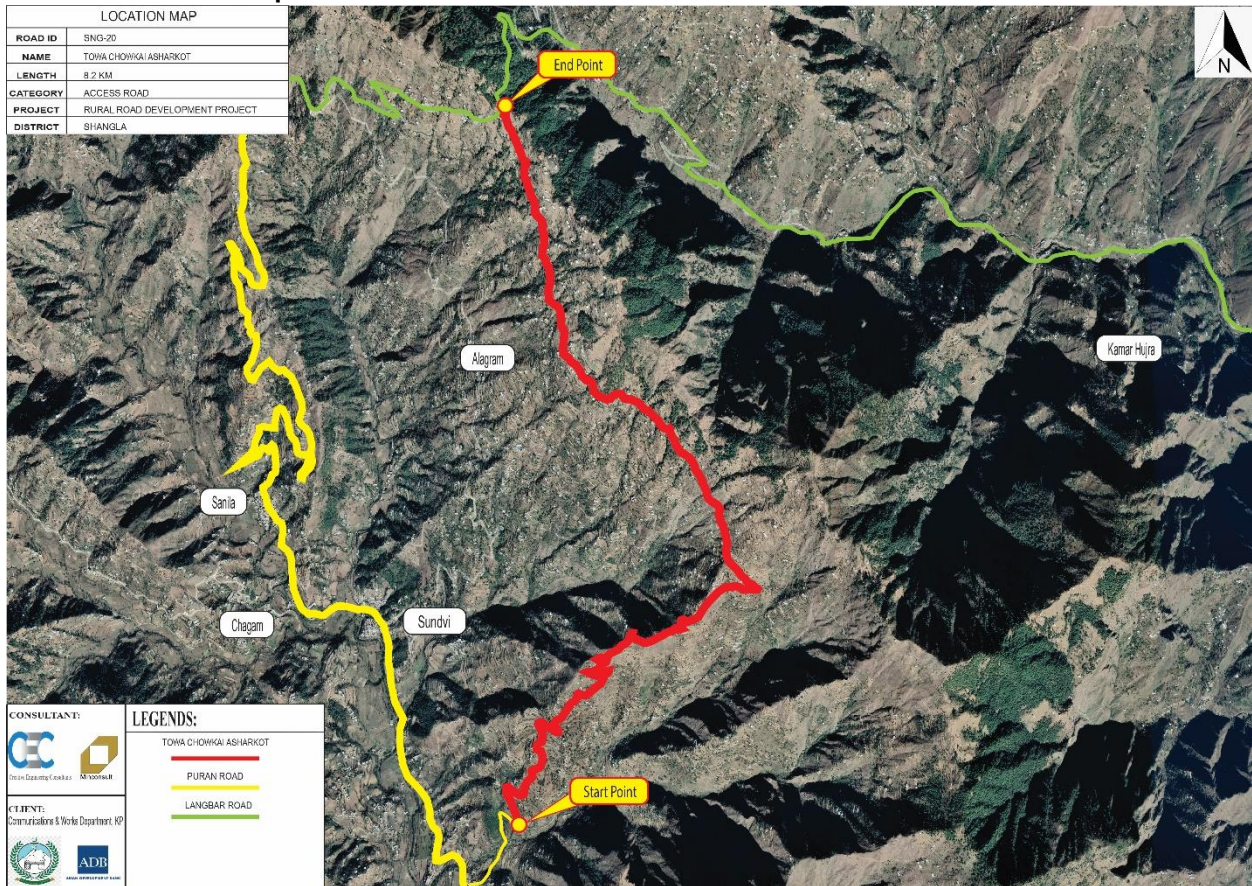


Figure 2.15.3 Location Map SNG-20

2.15.3.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.3 SNG-20 Traverse Points

| S.No | Easting | Northing | Altitude |
|---------------|----------------|-----------------|-----------------|
| gcp 1 | 288950.9 | 3848973 | 1443.726 |
| gcp 21 | 288190.1 | 3847937 | 1137.215 |
| gcp 22 | 288193.3 | 3847941 | 1137.673 |
| cc2 | 288298.8 | 3852770 | 1857.742 |
| cc 1 | 288291.6 | 3852776 | 1857.698 |
| cc | 288444.2 | 3852396 | 1833.757 |
| cc 4 | 288448.9 | 3852393 | 1833.713 |
| cc 5 | 288572 | 3851849 | 1799.228 |
| cc 6 | 288574.8 | 3851841 | 1799.146 |
| cc7 | 288717.1 | 3851304 | 1772.675 |
| cc 8 | 288720.6 | 3851296 | 1772.656 |
| cc 10 | 289078 | 3850909 | 1786.539 |
| cc 9 | 289068.9 | 3850903 | 1785.049 |
| cc 11 | 289577.7 | 3850573 | 1780.532 |
| cc 12 | 289591 | 3850560 | 1780.435 |
| cc 13 | 289948.2 | 3849935 | 1747.583 |
| cc 14 | 289953.9 | 3849933 | 1746.262 |
| cc 15 | 290186.2 | 3849622 | 1715.318 |
| cc 16 | 290179.3 | 3849615 | 1713.717 |
| cc 17 | 289598.4 | 3849391 | 1658.422 |
| cc 18 | 289613.9 | 3849383 | 1658.342 |
| cc 19 | 289205.6 | 3849320 | 1568.595 |
| cc20 | 289200.3 | 3849329 | 1566.314 |
| cc 22 | 288943.5 | 3848967 | 1442.795 |
| cc 21 | 288948.9 | 3848980 | 1444.767 |
| cc 23 | 288591.8 | 3848617 | 1356.275 |
| cc 24 | 288578.8 | 3848622 | 1354.236 |
| cc 25 | 288294.8 | 3848216 | 1242.257 |
| cc 26 | 288290.8 | 3848207 | 1240.647 |
| cc 27 | 288205.1 | 3847942 | 1139.46 |
| cc 28 | 288194 | 3847938 | 1137.611 |

2.15.4 SNG-26

Aluch Bunirwall Road

2.15.4.1 Location Map



Figure 2.15.4 Location Map SNG-26

2.15.4.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.4 SNG-26 Traverse Points

| S.No | Easting | Northing | Altitude | Description |
|-------------|----------------|-----------------|-----------------|--------------------|
| Pt20 | 285612.7 | 3849504 | 1225.213 | rtk 2 |
| Pt21 | 285630.9 | 3849514 | 1227.074 | rtk 1 |
| Pt22 | 285227 | 3849608 | 1212.638 | Rtk3 |
| Pt23 | 285212 | 3849621 | 1210.974 | Rtk 4 |
| Pt24 | 284730.9 | 3849816 | 1235.028 | Rtk 5 |
| Pt25 | 284721.4 | 3849827 | 1235.081 | Rtk6 |
| Pt26 | 284260 | 3849819 | 1244.781 | Rtk 7 |
| Pt27 | 284250.4 | 3849821 | 1245.78 | Rtk 8 |
| Pt28 | 283789.6 | 3849898 | 1302.945 | Rtk 9 |
| Pt29 | 283777.7 | 3849899 | 1302.873 | Rtk 10 |
| Pt30 | 283362.8 | 3849904 | 1374.189 | Rtk 11 |
| Pt31 | 283375.5 | 3849888 | 1369.163 | Rtk 12 |
| Pt32 | 283283.8 | 3849846 | 1371.827 | Rtk a 1 |
| Pt33 | 283279.4 | 3849849 | 1373.539 | Rtk a 2 |
| Pt34 | 282921.6 | 3849730 | 1450.987 | Rtk 14 |
| Pt35 | 282925.8 | 3849736 | 1451.012 | Rtk 13 |
| Pt36 | 282561.4 | 3849700 | 1544.053 | Rtk 16 |

2.15.5 SNG-28

Bengalai Landai Balo Chawak

2.15.5.1 Location Map

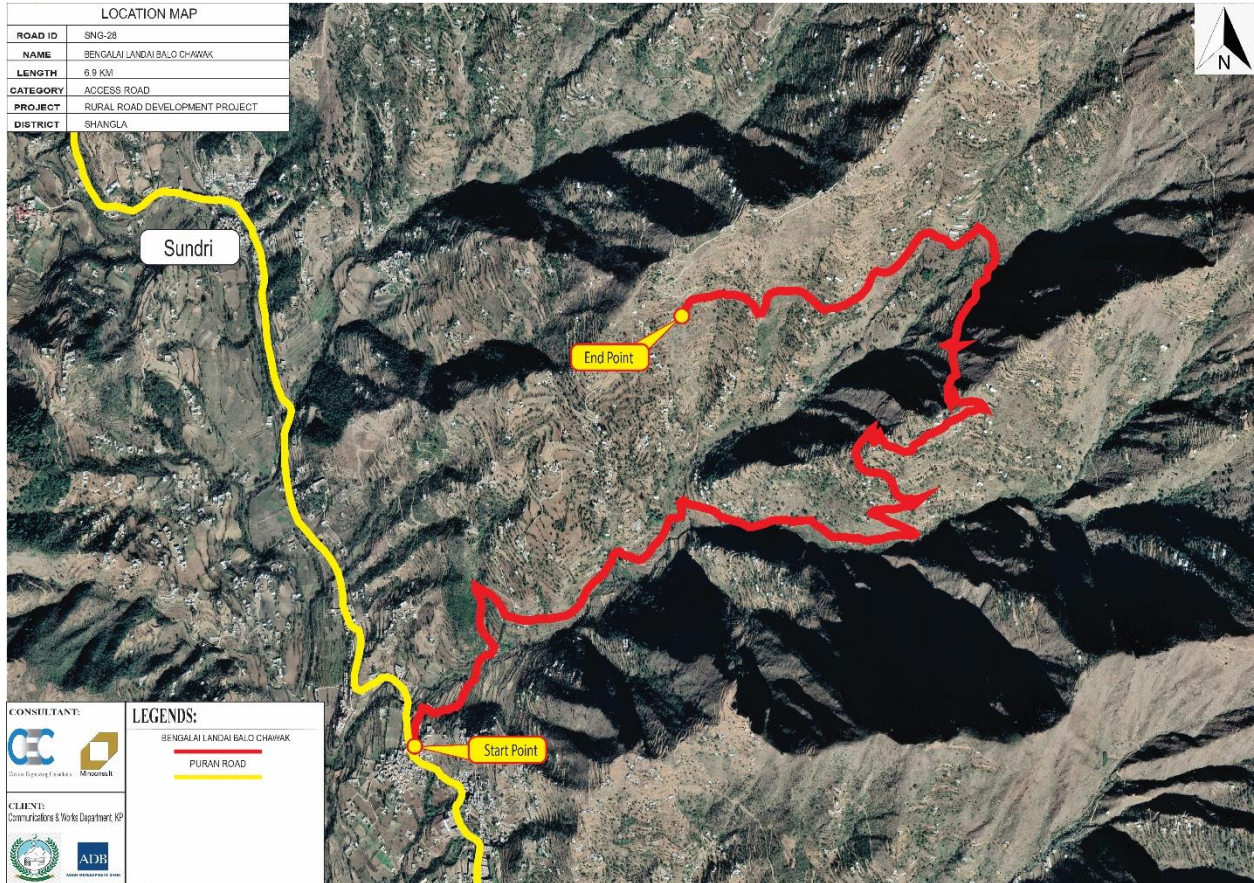


Figure 2.15.5 Location Map SNG-28

2.15.5.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.15.5 SNG-28 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| Pt0 | 288952.5 | 3848977 | 1443.227 | gcp 2 |
| Pt1 | 288950.9 | 3848973 | 1443.726 | gcp 1 |
| Pt2 | 289430.6 | 3849029 | 1430.149 | gcp 3 |
| Pt3 | 289445 | 3849028 | 1434.505 | gcp 4 |
| Pt4 | 289857.8 | 3849153 | 1482.289 | gcp 5 |
| Pt5 | 289862.5 | 3849161 | 1482.283 | gcp 6 |
| Pt6 | 290105.4 | 3849006 | 1474.714 | gcp 8 |
| Pt7 | 290111.7 | 3849025 | 1477.677 | gcp 7 |
| Pt8 | 290111.5 | 3848631 | 1561.065 | gcp 9 |
| Pt9 | 290111.4 | 3848624 | 1554.75 | gcp 10 |
| Pt10 | 289702.1 | 3848565 | 1462.154 | gcp 11 |
| Pt11 | 289689.8 | 3848558 | 1458.216 | gcp 12 |
| Pt12 | 289909.1 | 3848334 | 1407.015 | gcp 13 |
| Pt13 | 289912.2 | 3848327 | 1405.24 | gcp 14 |
| Pt14 | 289807 | 3848188 | 1312.172 | gcp 15 |
| Pt15 | 289799.3 | 3848186 | 1310.672 | gcp 16 |
| Pt16 | 289103.8 | 3848273 | 1214.211 | gcp 17 |
| Pt17 | 289093.6 | 3848280 | 1215.176 | gcp 18 |
| Pt18 | 288792.3 | 3848118 | 1167.844 | gcp 19 |
| Pt19 | 288764.2 | 3848111 | 1166.939 | gcp 20 |
| Pt20 | 288190.1 | 3847937 | 1137.215 | gcp 21 |
| Pt21 | 288193.3 | 3847941 | 1137.673 | gcp 22 |
| Pt22 | 288080.7 | 3847745 | 1084.592 | gcp 23 |
| Pt23 | 288072.6 | 3847737 | 1084.353 | gcp 24 |
| Pt24 | 287766.7 | 3847427 | 1072.661 | gcp 25 |
| Pt25 | 287763.4 | 3847434 | 1072.508 | gcp 26 |
| Pt26 | 288298.8 | 3852770 | 1857.742 | cc2 |
| Pt27 | 288291.6 | 3852776 | 1857.698 | cc 1 |
| Pt28 | 288444.2 | 3852396 | 1833.757 | cc |
| Pt29 | 288448.9 | 3852393 | 1833.713 | cc 4 |
| Pt30 | 288572 | 3851849 | 1799.228 | cc 5 |
| Pt31 | 288574.8 | 3851841 | 1799.146 | cc 6 |
| Pt32 | 288717.1 | 3851304 | 1772.675 | cc7 |
| Pt33 | 288720.6 | 3851296 | 1772.656 | cc 8 |
| Pt34 | 289078 | 3850909 | 1786.539 | cc 10 |
| Pt35 | 289068.9 | 3850903 | 1785.049 | cc 9 |
| Pt36 | 289577.7 | 3850573 | 1780.532 | cc 11 |
| Pt37 | 289591 | 3850560 | 1780.435 | cc 12 |

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| Pt38 | 289948.2 | 3849935 | 1747.583 | cc 13 |
| Pt39 | 289953.9 | 3849933 | 1746.262 | cc 14 |
| Pt40 | 290186.2 | 3849622 | 1715.318 | cc 15 |
| Pt41 | 290179.3 | 3849615 | 1713.717 | cc 16 |
| Pt42 | 289598.4 | 3849391 | 1658.422 | cc 17 |
| Pt43 | 289613.9 | 3849383 | 1658.342 | cc 18 |
| Pt44 | 289205.6 | 3849320 | 1568.595 | cc 19 |
| Pt45 | 289200.3 | 3849329 | 1566.314 | cc20 |
| Pt46 | 288943.5 | 3848967 | 1442.795 | cc 22 |
| Pt47 | 288948.9 | 3848980 | 1444.767 | cc 21 |
| Pt48 | 288591.8 | 3848617 | 1356.275 | cc 23 |
| Pt49 | 288578.8 | 3848622 | 1354.236 | cc 24 |
| Pt50 | 288294.8 | 3848216 | 1242.257 | cc 25 |
| Pt51 | 288290.8 | 3848207 | 1240.647 | cc 26 |
| Pt52 | 288205.1 | 3847942 | 1139.46 | cc 27 |
| Pt53 | 288194 | 3847938 | 1137.611 | cc 28 |
| Pt54 | 288528.1 | 3852141 | 1823.384 | PCC start |
| Pt55 | 288525.6 | 3852141 | 1823.507 | PCC start |
| Pt56 | 288566.2 | 3852091 | 1811.998 | PCC end |
| Pt57 | 288567.1 | 3852094 | 1811.91 | PCC end |
| Pt58 | 288595.4 | 3852000 | 1806.81 | cw |
| Pt59 | 288596.7 | 3851998 | 1806.494 | cw |
| Pt60 | 288597.5 | 3851996 | 1806.841 | cw |
| Pt61 | 288600.6 | 3851997 | 1806.615 | up stream |
| Pt62 | 288594.2 | 3851994 | 1806.629 | cw |
| Pt63 | 288593.6 | 3851997 | 1806.335 | cw |
| Pt64 | 288592.4 | 3851999 | 1806.566 | cw |
| Pt65 | 288592.5 | 3851996 | 1805.399 | down stream |
| Pt66 | 288624.5 | 3851779 | 1792.947 | cw |
| Pt67 | 288625.7 | 3851776 | 1793.01 | cw |
| Pt68 | 288626.8 | 3851773 | 1793.011 | cw |
| Pt69 | 288622.9 | 3851771 | 1792.834 | cw |
| Pt70 | 288621.9 | 3851775 | 1792.7 | cw |
| Pt71 | 288620.9 | 3851777 | 1792.743 | cw |
| Pt72 | 288621 | 3851772 | 1792.222 | down stream |
| Pt73 | 288626.4 | 3851779 | 1792.664 | up stream |
| Pt74 | 288632.1 | 3851705 | 1784.053 | cul |
| Pt75 | 288632.3 | 3851704 | 1784.14 | cul |
| Pt76 | 288633 | 3851703 | 1784.044 | cul |
| Pt77 | 288632.4 | 3851704 | 1783.579 | pipe bed |
| Pt78 | 288632.3 | 3851704 | 1784.007 | pipe top |
| Pt79 | 288633.3 | 3851705 | 1784.038 | up stream |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt80 | 288629.5 | 3851702 | 1783.626 | cul |
| Pt81 | 288628.9 | 3851703 | 1783.725 | cul |
| Pt82 | 288628.9 | 3851702 | 1782.848 | pipe bed |
| Pt83 | 288628.9 | 3851702 | 1783.394 | pipe top |
| Pt84 | 288628.7 | 3851702 | 1782.642 | down stream |
| Pt85 | 288634.2 | 3851693 | 1783.029 | cul |
| Pt86 | 288634.2 | 3851691 | 1782.964 | cul |
| Pt87 | 288634.3 | 3851692 | 1782.328 | pipe bed |
| Pt88 | 288634.3 | 3851692 | 1782.861 | pipe top |
| Pt89 | 288635.6 | 3851692 | 1782.911 | up stream |
| Pt90 | 288630.6 | 3851692 | 1782.593 | cul |
| Pt91 | 288630.9 | 3851693 | 1782.855 | cul |
| Pt92 | 288630.5 | 3851693 | 1781.966 | pipe bed |
| Pt93 | 288630.5 | 3851693 | 1782.527 | pipe top |
| Pt94 | 288629.7 | 3851692 | 1781.342 | down stream |
| Pt95 | 288694.9 | 3851510 | 1772.523 | cw |
| Pt96 | 288696.5 | 3851508 | 1772.412 | cw |
| Pt97 | 288697.7 | 3851504 | 1772.409 | cw |
| Pt98 | 288694.7 | 3851500 | 1772.042 | cw |
| Pt99 | 288694.7 | 3851504 | 1771.969 | cw |
| Pt100 | 288692.9 | 3851506 | 1772.396 | cw |
| Pt101 | 288693.1 | 3851501 | 1771.056 | down stream |
| Pt102 | 288697.8 | 3851511 | 1772.524 | up stream |
| Pt103 | 288938.4 | 3851016 | 1774.865 | cw |
| Pt104 | 288938.9 | 3851016 | 1775.057 | cw |
| Pt105 | 288938.4 | 3851017 | 1774.72 | cw |
| Pt106 | 288937.5 | 3851018 | 1774.58 | cw |
| Pt107 | 288936.6 | 3851018 | 1774.823 | cw |
| Pt108 | 288935.8 | 3851015 | 1774.824 | cw |
| Pt109 | 288935.4 | 3851016 | 1774.576 | cw |
| Pt110 | 288934.8 | 3851017 | 1774.383 | cw |
| Pt111 | 288933.4 | 3851018 | 1774.789 | cw |
| Pt112 | 288940.1 | 3851018 | 1774.702 | up stream |
| Pt113 | 288933.7 | 3851016 | 1773.951 | down stream |
| Pt114 | 289318.5 | 3850852 | 1777.916 | cw |
| Pt115 | 289319.5 | 3850852 | 1777.752 | cw |
| Pt116 | 289320 | 3850851 | 1777.542 | cw |
| Pt117 | 289321.5 | 3850850 | 1777.708 | cw |
| Pt118 | 289322.2 | 3850849 | 1777.937 | cw |
| Pt119 | 289320.7 | 3850845 | 1777.58 | cw |
| Pt120 | 289320.2 | 3850846 | 1777.399 | cw |
| Pt121 | 289319.4 | 3850847 | 1777.443 | cw |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt122 | 289317.9 | 3850848 | 1777.703 | cw |
| Pt123 | 289317 | 3850849 | 1777.794 | cw |
| Pt124 | 289322.3 | 3850854 | 1778.039 | up stream |
| Pt125 | 289318.8 | 3850844 | 1776.688 | down stream |
| Pt126 | 289531.8 | 3850694 | 1780.844 | cw |
| Pt127 | 289531.9 | 3850695 | 1780.578 | cw |
| Pt128 | 289531.8 | 3850696 | 1780.567 | cw |
| Pt129 | 289530.6 | 3850696 | 1781.988 | cw |
| Pt130 | 289530.6 | 3850698 | 1780.493 | cw |
| Pt131 | 289531.5 | 3850697 | 1780.816 | cw |
| Pt132 | 289532.3 | 3850697 | 1780.964 | cw |
| Pt133 | 289533.5 | 3850694 | 1781.353 | cw |
| Pt134 | 289535.2 | 3850699 | 1781.369 | up stream |
| Pt135 | 289530.4 | 3850693 | 1780.746 | down stream |
| Pt136 | 289953.9 | 3849932 | 1745.854 | cul |
| Pt137 | 289954.7 | 3849930 | 1745.65 | cul |
| Pt138 | 289954.7 | 3849931 | 1744.822 | cul bed |
| Pt139 | 289954.4 | 3849932 | 1744.974 | cul bed |
| Pt140 | 289951.4 | 3849927 | 1744.842 | cul |
| Pt141 | 289951.3 | 3849928 | 1745.296 | cul |
| Pt142 | 289951.2 | 3849927 | 1743.843 | cul bed |
| Pt143 | 289951.2 | 3849928 | 1744.257 | cul bed |
| Pt144 | 289958.3 | 3849936 | 1746.287 | up stream |
| Pt145 | 289944.9 | 3849923 | 1738.412 | down stream |
| Pt146 | 290076.3 | 3849704 | 1739.956 | PCC start |
| Pt147 | 290074.5 | 3849701 | 1739.767 | PCC start |
| Pt148 | 290169.8 | 3849613 | 1715.393 | PCC end |
| Pt149 | 290169.8 | 3849618 | 1712.683 | PCC end |
| Pt150 | 289577.3 | 3849379 | 1647.458 | PCC start |
| Pt151 | 289579.4 | 3849381 | 1647.364 | PCC start |
| Pt152 | 288948.3 | 3848981 | 1445.094 | cul |
| Pt153 | 288948.9 | 3848981 | 1445.03 | cul |
| Pt154 | 288949.5 | 3848981 | 1445.034 | cul |
| Pt155 | 288949.1 | 3848981 | 1444.497 | pipe bed |
| Pt156 | 288949 | 3848981 | 1444.94 | pipe top |
| Pt157 | 288949 | 3848981 | 1445.052 | cr top |
| Pt158 | 288948.9 | 3848981 | 1444.943 | cr bed |
| Pt159 | 288948.9 | 3848982 | 1444.556 | up stream |
| Pt160 | 288949.9 | 3848983 | 1444.722 | up stream |
| Pt161 | 288950 | 3848971 | 1443.783 | cul |
| Pt162 | 288948.8 | 3848971 | 1443.744 | cul |
| Pt163 | 288949 | 3848971 | 1443.622 | cr bed |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt164 | 288949.9 | 3848971 | 1443.668 | cr bed |
| Pt165 | 288949.5 | 3848971 | 1442.908 | pipe bed |
| Pt166 | 288949.5 | 3848971 | 1443.25 | pipe top |
| Pt167 | 288949.4 | 3848976 | 1444.42 | PCC end |
| Pt168 | 288947.1 | 3848979 | 1444.424 | PCC end |
| Pt169 | 289677.7 | 3849032 | 1447.634 | PCC start |
| Pt170 | 289679.4 | 3849030 | 1447.476 | PCC |
| Pt171 | 289712.3 | 3849089 | 1461.939 | cul |
| Pt172 | 289711.6 | 3849089 | 1461.83 | cul |
| Pt173 | 289711.6 | 3849089 | 1461.048 | cul bed |
| Pt174 | 289712.2 | 3849090 | 1460.95 | cul bed |
| Pt175 | 289709.8 | 3849090 | 1461.745 | up stream |
| Pt176 | 289713.6 | 3849087 | 1461.541 | cul |
| Pt177 | 289712.5 | 3849086 | 1461.463 | cul |
| Pt178 | 289713.4 | 3849087 | 1460.749 | cul bed |
| Pt179 | 289713.2 | 3849086 | 1460.698 | cul bed |
| Pt180 | 289713.4 | 3849086 | 1460.164 | down stream |
| Pt181 | 289710.9 | 3849088 | 1461.616 | PCC end |
| Pt182 | 289712.6 | 3849086 | 1461.439 | PCC end |
| Pt183 | 289966.6 | 3848561 | 1532.641 | PCC start |
| Pt184 | 289965 | 3848563 | 1532.563 | PCC start |
| Pt185 | 288953.4 | 3848315 | 1186.901 | cw |
| Pt186 | 288952.7 | 3848312 | 1186.85 | cw |
| Pt187 | 288952.1 | 3848307 | 1186.824 | cw |
| Pt188 | 288952.8 | 3848311 | 1186.105 | pipe bed |
| Pt189 | 288952.8 | 3848311 | 1186.587 | pipe top |
| Pt190 | 288952.9 | 3848312 | 1185.934 | pipe bed |
| Pt191 | 288952.9 | 3848312 | 1186.474 | pipe top |
| Pt192 | 288953.2 | 3848313 | 1185.798 | pipe bed |
| Pt193 | 288953.2 | 3848313 | 1186.405 | pipe top |
| Pt194 | 288950.8 | 3848317 | 1186.766 | cw |
| Pt195 | 288950.6 | 3848316 | 1186.703 | cw |
| Pt196 | 288949.3 | 3848311 | 1186.483 | cw |
| Pt197 | 288949.9 | 3848314 | 1185.946 | pipe bed |
| Pt198 | 288949.9 | 3848314 | 1186.39 | pipe top |
| Pt199 | 288944.8 | 3848310 | 1188.574 | pipe bed |
| Pt200 | 288950.2 | 3848315 | 1186.704 | pipe top |
| Pt201 | 288950.3 | 3848316 | 1186.195 | pipe bed |
| Pt202 | 288950.4 | 3848316 | 1186.791 | pipe top |
| Pt203 | 288947.7 | 3848318 | 1186.34 | up stream |
| Pt204 | 288946.4 | 3848321 | 1186.463 | up stream |
| Pt205 | 288953.1 | 3848312 | 1185.336 | down stream |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt206 | 288955 | 3848307 | 1184.355 | down stream |
| Pt207 | 288666.2 | 3848135 | 1162.811 | cul |
| Pt208 | 288665.6 | 3848134 | 1162.673 | cul |
| Pt209 | 288666.2 | 3848134 | 1161.65 | bed |
| Pt210 | 288666 | 3848134 | 1161.609 | bed |
| Pt211 | 288666.2 | 3848135 | 1162.632 | slab bed |
| Pt212 | 288665.8 | 3848134 | 1162.756 | slab bed |
| Pt213 | 288665.8 | 3848134 | 1162.888 | slab top |
| Pt214 | 288666.4 | 3848135 | 1162.899 | slab top |
| Pt215 | 288666.5 | 3848133 | 1161.04 | down stream |
| Pt216 | 288662.7 | 3848137 | 1163.177 | cul |
| Pt217 | 288663.6 | 3848138 | 1163.066 | cul |
| Pt218 | 288663.5 | 3848137 | 1162.829 | slab bed |
| Pt219 | 288663.4 | 3848137 | 1162.952 | slab top |
| Pt220 | 288662.5 | 3848137 | 1162.894 | slab top |
| Pt221 | 288662.5 | 3848137 | 1162.777 | slab |
| Pt222 | 288663.1 | 3848138 | 1162.386 | cul bed |
| Pt223 | 288663.4 | 3848138 | 1162.385 | cul bed |
| Pt224 | 288661.1 | 3848139 | 1162.452 | up stream |
| Pt225 | 288662.8 | 3848139 | 1162.634 | up stream |
| Pt226 | 288665.9 | 3848134 | 1162.678 | rw |
| Pt227 | 288665.5 | 3848134 | 1162.735 | rw |
| Pt228 | 288666 | 3848134 | 1161.531 | bed |
| Pt229 | 288667.5 | 3848126 | 1160.227 | bed |
| Pt230 | 288667.3 | 3848126 | 1161.613 | rw |
| Pt231 | 288667.2 | 3848124 | 1163.714 | rw |
| Pt232 | 288192.8 | 3847938 | 1137.574 | PCC end |
| Pt233 | 288193 | 3847942 | 1137.572 | PCC end |
| Pt234 | 288193 | 3847937 | 1137.498 | PCC end |
| Pt235 | 288189.6 | 3847937 | 1137.222 | PCC end |
| Pt236 | 287763.4 | 3847434 | 1072.347 | tttt |
| Pt237 | 288204.8 | 3847942 | 1139.252 | tttt |
| Pt238 | 288193.3 | 3847941 | 1137.465 | ttttt |
| Pt239 | 288100.7 | 3847979 | 1116.66 | cul |
| Pt240 | 288101.3 | 3847980 | 1116.637 | cul |
| Pt241 | 288101.2 | 3847980 | 1115.922 | cul bed |
| Pt242 | 288100.9 | 3847979 | 1116.02 | cup bed |
| Pt243 | 288101 | 3847979 | 1116.735 | slab bed |
| Pt244 | 288101.5 | 3847980 | 1116.733 | slab bed |
| Pt245 | 288101.5 | 3847980 | 1116.966 | slab top |
| Pt246 | 288100.9 | 3847979 | 1116.8 | slab top |
| Pt247 | 288099.3 | 3847983 | 1116.239 | up stream |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt248 | 288103.8 | 3847977 | 1116.762 | cul top |
| Pt249 | 288102.8 | 3847975 | 1116.695 | cul top |
| Pt250 | 288103.8 | 3847976 | 1115.814 | cul bed |
| Pt251 | 288103.1 | 3847976 | 1115.43 | cul bed |
| Pt252 | 288103.1 | 3847975 | 1116.563 | slab bed |
| Pt253 | 288103 | 3847975 | 1116.702 | s |
| Pt254 | 288103.8 | 3847976 | 1116.525 | slab bed |
| Pt255 | 288103.8 | 3847977 | 1116.727 | slab top |
| Pt256 | 288104.1 | 3847974 | 1115.491 | down stream |
| Pt257 | 288117.4 | 3847837 | 1096.962 | cul top |
| Pt258 | 288118.4 | 3847836 | 1096.737 | cul top |
| Pt259 | 288118.2 | 3847836 | 1095.694 | cul bed |
| Pt260 | 288117.7 | 3847837 | 1095.606 | cul bed |
| Pt261 | 288118.5 | 3847836 | 1096.654 | slab bed |
| Pt262 | 288118.5 | 3847836 | 1096.722 | slab top |
| Pt263 | 288117.7 | 3847837 | 1096.798 | slab bed |
| Pt264 | 288117.4 | 3847837 | 1097.004 | slab top |
| Pt265 | 288117.6 | 3847839 | 1096.25 | up stream |
| Pt266 | 288116.7 | 3847833 | 1096.675 | cul top |
| Pt267 | 288117.9 | 3847831 | 1096.372 | cul top |
| Pt268 | 288117.4 | 3847832 | 1095.259 | cul bed |
| Pt269 | 288117 | 3847832 | 1095.166 | cul bed |
| Pt270 | 288116.9 | 3847833 | 1096.457 | slab bed |
| Pt271 | 288116.7 | 3847833 | 1096.658 | slab top |
| Pt272 | 288117.5 | 3847832 | 1096.341 | slab bed |
| Pt273 | 288117.7 | 3847831 | 1096.461 | slab top |
| Pt274 | 288115.5 | 3847830 | 1095.534 | down stream |
| Pt275 | 288133.7 | 3847768 | 1086.369 | rw |
| Pt276 | 288134.1 | 3847767 | 1086.451 | rw |
| Pt277 | 288134.3 | 3847767 | 1086.019 | rw bed |
| Pt278 | 288112.5 | 3847767 | 1084.757 | rw |
| Pt279 | 288112.4 | 3847765 | 1084.838 | rw |
| Pt280 | 288112.1 | 3847766 | 1084.689 | rw |
| Pt281 | 288112.6 | 3847766 | 1084.818 | rw |
| Pt282 | 288112.6 | 3847765 | 1084.783 | dw |
| Pt283 | 288112.6 | 3847765 | 1084.298 | bed |
| Pt284 | 288122.9 | 3847767 | 1085.841 | rw |
| Pt285 | 288122.9 | 3847766 | 1085.829 | rw |
| Pt286 | 288122.8 | 3847766 | 1085.348 | rw |
| Pt287 | 288122.7 | 3847765 | 1085.268 | rw |
| Pt288 | 288122.8 | 3847765 | 1084.269 | bed |
| Pt289 | 288134.5 | 3847766 | 1085.893 | rw |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-----------------|
| Pt290 | 288134.5 | 3847765 | 1084.734 | bed |
| Pt291 | 288105.2 | 3847765 | 1084.118 | cul top |
| Pt292 | 288102.7 | 3847762 | 1084.15 | cul top |
| Pt293 | 288102.8 | 3847761 | 1084.09 | cul top |
| Pt294 | 288102.8 | 3847761 | 1083.775 | cul bed |
| Pt295 | 288102.7 | 3847762 | 1083.457 | pipe bed |
| Pt296 | 288102.7 | 3847762 | 1083.957 | pipe top |
| Pt297 | 288103.7 | 3847763 | 1083.401 | pipe bed |
| Pt298 | 288103.7 | 3847763 | 1084.002 | Pipe top |
| Pt299 | 288104.8 | 3847764 | 1083.694 | pipe bed |
| Pt300 | 288104.8 | 3847765 | 1084.156 | pipe top |
| Pt301 | 288106.9 | 3847762 | 1083.575 | up stream |
| Pt302 | 288102.8 | 3847768 | 1083.825 | cul top |
| Pt303 | 288101.4 | 3847766 | 1084.19 | cul top |
| Pt304 | 288098.5 | 3847763 | 1084.108 | cul top |
| Pt305 | 288099.3 | 3847764 | 1083.454 | pipe bed |
| Pt306 | 288099.3 | 3847764 | 1083.963 | pipe top |
| Pt307 | 288100.1 | 3847765 | 1083.323 | pipe bed |
| Pt308 | 288100.2 | 3847765 | 1083.927 | pipe top |
| Pt309 | 288101.1 | 3847766 | 1083.354 | pipe bed |
| Pt310 | 288101.1 | 3847766 | 1083.968 | pipe top |
| Pt311 | 288098.2 | 3847766 | 1082.844 | down stream |
| Pt312 | 287983.3 | 3847582 | 1081.596 | cul bed |
| Pt313 | 287983.6 | 3847582 | 1081.606 | cul bed |
| Pt314 | 287985.1 | 3847582 | 1081.597 | up stream |
| Pt315 | 287983.8 | 3847582 | 1082.323 | cul top |
| Pt316 | 287982.9 | 3847582 | 1082.312 | cul top |
| Pt317 | 287978.7 | 3847582 | 1082.193 | cul top |
| Pt318 | 287979.3 | 3847583 | 1082.296 | cul top |
| Pt319 | 287978.8 | 3847583 | 1081.407 | cul bed |
| Pt320 | 287978.9 | 3847583 | 1081.461 | cul bed |
| Pt321 | 287977.1 | 3847583 | 1081.256 | down stream |
| Pt322 | 287976.5 | 3847583 | 1080.785 | drain bed |
| Pt323 | 287976.8 | 3847583 | 1081.687 | drain top |
| Pt324 | 287976.9 | 3847583 | 1081.702 | drain top |
| Pt325 | 287976.8 | 3847583 | 1081.255 | drain bed |
| Pt326 | 287976.9 | 3847584 | 1081.659 | drain top |
| Pt327 | 287976.9 | 3847584 | 1081.76 | drain top |
| Pt328 | 287977.3 | 3847584 | 1081.726 | PCC drain start |
| Pt329 | 287904.3 | 3847565 | 1077.273 | drain top |
| Pt330 | 287904.3 | 3847565 | 1077.367 | drama top |
| Pt331 | 287904.3 | 3847565 | 1076.816 | drain bed |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------------|
| Pt332 | 287904.3 | 3847565 | 1076.819 | drain bed |
| Pt333 | 287904.3 | 3847565 | 1077.36 | drain top |
| Pt334 | 287904.4 | 3847566 | 1077.389 | drain top |
| Pt335 | 287903.6 | 3847565 | 1076.412 | pcc drain bed end |
| Pt336 | 287891.1 | 3847560 | 1076.401 | rw |
| Pt337 | 287891.2 | 3847559 | 1076.39 | rw |
| Pt338 | 287890.6 | 3847559 | 1075.586 | bed |
| Pt339 | 287880.9 | 3847555 | 1076.319 | rw |
| Pt340 | 287880.7 | 3847555 | 1076.28 | rw |
| Pt341 | 287880.5 | 3847556 | 1074.724 | bed |
| Pt342 | 287873.3 | 3847555 | 1076.049 | rw |
| Pt343 | 287873.2 | 3847556 | 1075.985 | rw |
| Pt344 | 287860.2 | 3847562 | 1075.562 | rw |
| Pt345 | 287859.8 | 3847562 | 1075.546 | rw |
| Pt346 | 287859.1 | 3847563 | 1075.549 | rw |
| Pt347 | 287859.5 | 3847563 | 1075.529 | rw |
| Pt348 | 287859.8 | 3847563 | 1073.961 | bed |
| Pt349 | 287764.6 | 3847435 | 1072.226 | PCC end |
| Pt350 | 287766.7 | 3847431 | 1072.372 | PCC end |

2.15.6 SNG-30

Dherai Faiza Sondvi

2.15.6.1 Location Map

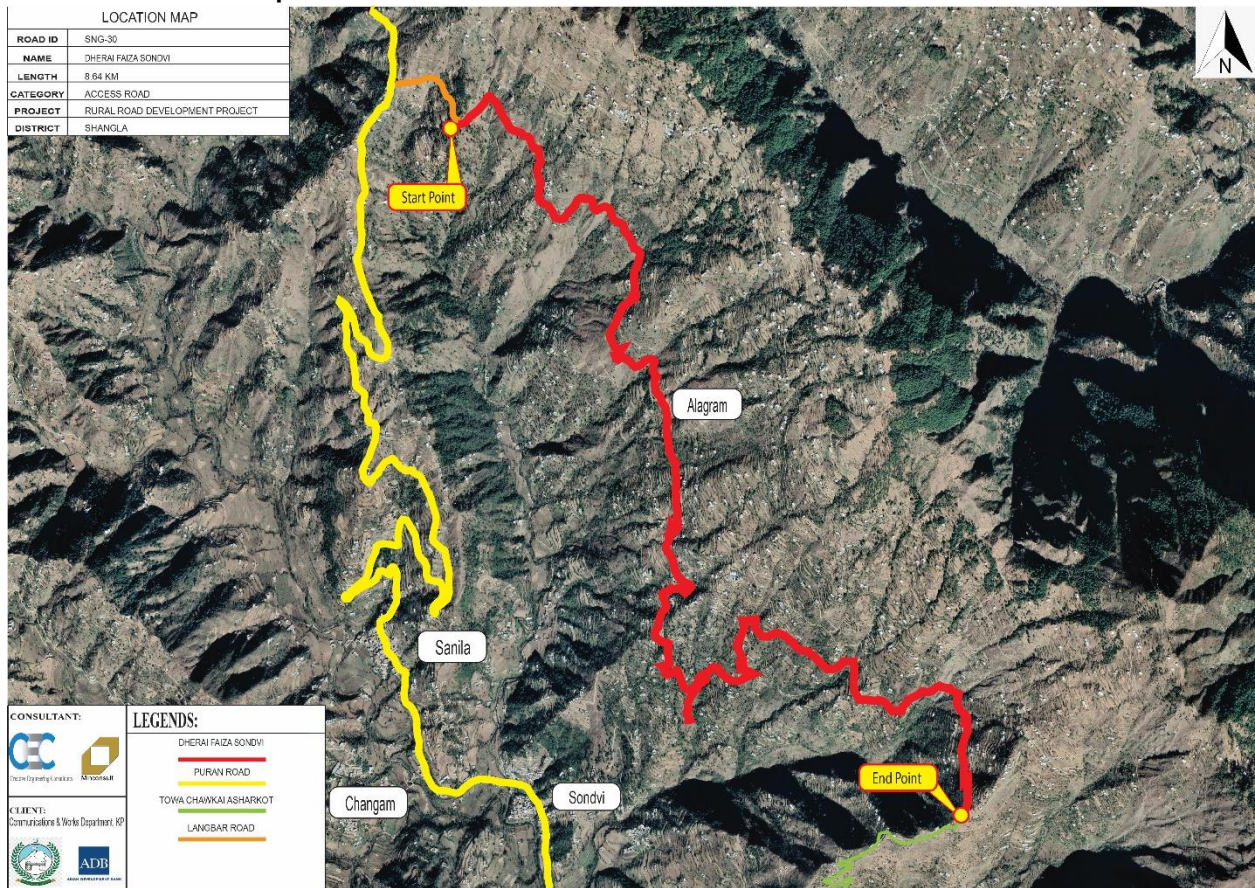


Figure 2.15.6 Location Map SNG-30

2.15.6.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.6 SNG-30 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| 1 | 286782.7 | 3852880 | 1723.009 | BM 1 |
| 2 | 286793 | 3852847 | 1722.106 | BM2 |
| 3 | 289603 | 3849411 | 1694.907 | BM 5 |
| 4 | 289608.1 | 3849407 | 1696.935 | BM 6 |
| 5 | 288159.4 | 3850080 | 1378.563 | BM 3 |
| 6 | 288139.1 | 3850072 | 1373.254 | BM 4 |
| 7 | 287258.4 | 3852726 | 1670.334 | Causway |
| 8 | 287256 | 3852730 | 1670.687 | Causway |
| 9 | 287259.7 | 3852734 | 1670.699 | Causway |
| 10 | 287261.6 | 3852730 | 1670.423 | Causway |
| 11 | 287259.7 | 3852577 | 1650.386 | P CUL |
| 12 | 287259.6 | 3852577 | 1649.37 | INV |
| 13 | 287263.5 | 3852579 | 1649.532 | INV |
| 14 | 287263.6 | 3852579 | 1650.66 | P CUL |
| 15 | 287308.8 | 3852445 | 1624.224 | P CUL |
| 16 | 287313.1 | 3852448 | 1624.51 | P CUL |
| 17 | 287313.2 | 3852448 | 1623.898 | INV |
| 18 | 287308.1 | 3852445 | 1623.117 | INV |
| 19 | 287556.2 | 3852477 | 1637.991 | INV |
| 20 | 287556.4 | 3852477 | 1638.464 | P CUL |
| 21 | 287559.4 | 3852479 | 1638.65 | P CUL |
| 22 | 287559.5 | 3852479 | 1638.089 | INV |
| 23 | 287660.3 | 3852425 | 1622.689 | S CUL |
| 24 | 287660.8 | 3852424 | 1622.654 | S CUL |
| 25 | 287660.2 | 3852425 | 1621.331 | INV |
| 26 | 287664.9 | 3852427 | 1622.047 | INV |
| 27 | 287664.5 | 3852427 | 1622.815 | S CUL |
| 28 | 287738.2 | 3852353 | 1619.633 | INV |
| 29 | 287738.1 | 3852353 | 1620.281 | P CUL |
| 30 | 287734.7 | 3852346 | 1619.922 | P CUL |
| 31 | 287734.5 | 3852346 | 1619.121 | INV |
| 32 | 287833.9 | 3852220 | 1598.457 | INV |
| 33 | 287834 | 3852220 | 1599.679 | S CUL |
| 34 | 287834.3 | 3852219 | 1599.679 | S CUL |
| 35 | 287839.3 | 3852220 | 1599.823 | S CUL |
| 36 | 287838.9 | 3852222 | 1599.836 | S CUL |
| 37 | 287839.2 | 3852221 | 1598.735 | INV |
| 38 | 287805.9 | 3852003 | 1593.815 | INV |

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| 39 | 287805.7 | 3852003 | 1594.5 | P CUL |
| 40 | 287800.4 | 3852003 | 1594.022 | P CUL |
| 41 | 287800.3 | 3852003 | 1593.171 | INV |
| 42 | 287786.8 | 3852005 | 1583.787 | INV |
| 43 | 287786.6 | 3852005 | 1584.293 | P CUL |
| 44 | 287781.4 | 3852005 | 1584.072 | P CUL |
| 45 | 287781.2 | 3852006 | 1583.263 | INV |
| 46 | 287773.9 | 3852006 | 1580.398 | INV |
| 47 | 287773.7 | 3852006 | 1581.163 | P CUL |
| 48 | 287768.9 | 3852008 | 1580.796 | P CUL |
| 49 | 287768.5 | 3852008 | 1579.978 | INV |
| 50 | 287763.8 | 3851993 | 1578.463 | INV |
| 51 | 287764 | 3851993 | 1579.104 | P CUL |
| 52 | 287767.4 | 3851990 | 1579.464 | P CUL |
| 53 | 287767.5 | 3851990 | 1579.013 | INV |
| 54 | 287684.9 | 3851696 | 1529.156 | INV |
| 55 | 287684.9 | 3851696 | 1529.71 | P CUL |
| 56 | 287683.5 | 3851701 | 1530.219 | P CUL |
| 57 | 287683.4 | 3851701 | 1529.918 | INV |
| 58 | 288057.7 | 3850530 | 1455.636 | INV |
| 59 | 288057.7 | 3850530 | 1456.255 | P CUL |
| 60 | 288050.8 | 3850527 | 1455.375 | P CUL |
| 61 | 288050.7 | 3850527 | 1454.651 | INV |
| 62 | 287975.6 | 3850529 | 1442.863 | INV |
| 63 | 287975.7 | 3850529 | 1443.44 | P CUL |
| 64 | 287981 | 3850529 | 1444.357 | P CUL |
| 65 | 287981.3 | 3850529 | 1443.666 | INV |
| 66 | 287997.8 | 3849861 | 1307.314 | INV |
| 67 | 287997.9 | 3849861 | 1308.407 | S CUL |
| 68 | 287997.3 | 3849861 | 1308.403 | S CUL |
| 69 | 288001.7 | 3849854 | 1306.619 | INV |
| 70 | 288001.2 | 3849854 | 1308.335 | S CUL |
| 71 | 287774.8 | 3849751 | 1251.91 | INV |
| 72 | 287774.7 | 3849751 | 1252.48 | P CUL |
| 73 | 287774.9 | 3849743 | 1252.352 | P CUL |
| 74 | 287775 | 3849743 | 1251.34 | INV |
| 75 | 287627.5 | 3849794 | 1230.816 | INV |
| 76 | 287627.6 | 3849793 | 1229.459 | S CUL |
| 77 | 287627.3 | 3849793 | 1232.556 | S CUL |
| 78 | 287628.4 | 3849794 | 1232.571 | S CUL |
| 79 | 287632.7 | 3849788 | 1232.481 | S CUL |
| 80 | 287632.5 | 3849788 | 1230.228 | INV |

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| 81 | 287645.5 | 3849673 | 1198.438 | INV |
| 82 | 287646.1 | 3849673 | 1200.362 | S CUL |
| 83 | 287644.8 | 3849674 | 1200.413 | S CUL |
| 84 | 287646.3 | 3849681 | 1200.497 | S CUL |
| 85 | 287647.5 | 3849680 | 1200.493 | S CUL |
| 86 | 287646.9 | 3849681 | 1198.69 | INV |
| 87 | 287598.9 | 3849331 | 1143.377 | INV |
| 88 | 287598.6 | 3849330 | 1144.032 | P CUL |
| 89 | 287600.1 | 3849331 | 1144.059 | P CUL |
| 90 | 287602.5 | 3849323 | 1143.867 | P CUL |
| 91 | 287601.7 | 3849323 | 1143.159 | INV |
| 92 | 288236.9 | 3850116 | 1395.272 | INV |
| 93 | 288236.6 | 3850117 | 1396.434 | P CUL |
| 94 | 288238.5 | 3850120 | 1396.485 | P CUL |
| 95 | 288238.1 | 3850121 | 1395.683 | INV |
| 96 | 289036.8 | 3850165 | 1552.126 | INV |
| 97 | 289036.8 | 3850165 | 1552.139 | INV |
| 98 | 289036.1 | 3850165 | 1553.554 | S CUL |
| 99 | 289037.2 | 3850165 | 1553.604 | S CUL |
| 100 | 289035.4 | 3850162 | 1553.583 | S CUL |
| 101 | 289034.5 | 3850163 | 1553.527 | S CUL |

2.15.7 SNG-27

Main Dara

2.15.7.1 Location Map

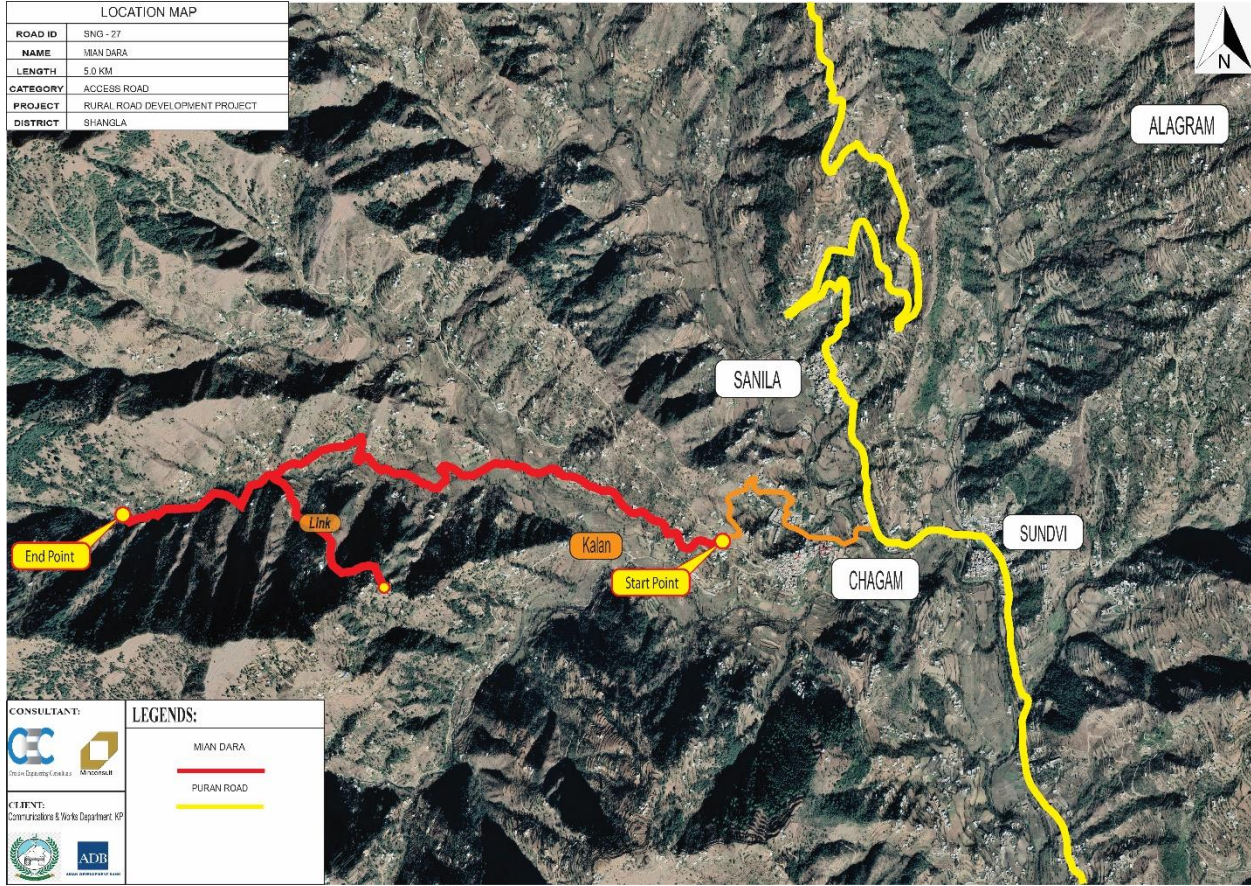


Figure 2.15.7 Location Map SNG-27

2.15.7.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.7 SNG-27 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| Pt0 | 285542.9 | 3849487 | 1214.057 | gcp 1 |
| Pt1 | 285552 | 3849469 | 1210.799 | gcp 2 |
| Pt2 | 285673.9 | 3849379 | 1163.253 | gcp 3 |
| Pt3 | 285665.8 | 3849380 | 1163.34 | GCP 4 |
| Pt4 | 285274.5 | 3849405 | 1155.151 | gcp 6 |
| Pt5 | 285299.9 | 3849407 | 1155.474 | gcp 5 |
| Pt6 | 284822.2 | 3849548 | 1195.614 | gcp 7 |
| Pt7 | 284791.4 | 3849559 | 1203.175 | gcp 8 |
| Pt8 | 284607.8 | 3849343 | 1249.549 | gcp 9 |
| Pt9 | 284583.3 | 3849337 | 1251.325 | gcp 10 |
| Pt10 | 284265.1 | 3849057 | 1271.242 | gcp 11 |
| Pt11 | 284255.1 | 3849053 | 1269.178 | gcp 12 |
| Pt12 | 284025.1 | 3848498 | 1278.809 | gcp 13 |
| Pt13 | 284009.1 | 3848499 | 1281.584 | gcp 14 |
| Pt14 | 283595.5 | 3848492 | 1315.699 | gcp 15 |
| Pt15 | 283586.6 | 3848509 | 1317.54 | gcp 16 |
| Pt16 | 283087.2 | 3848424 | 1391.138 | gcp 17 |
| Pt17 | 283028.8 | 3848416 | 1400.413 | GCP 18 |
| Pt18 | 282639.5 | 3848401 | 1464.62 | gcp 19 |
| Pt19 | 282620 | 3848394 | 1468.569 | gcp 20 |
| Pt20 | 285612.7 | 3849504 | 1225.213 | rtk 2 |
| Pt21 | 285630.9 | 3849514 | 1227.074 | rtk 1 |
| Pt22 | 285227 | 3849608 | 1212.638 | Rtk3 |
| Pt23 | 285212 | 3849621 | 1210.974 | Rtk 4 |
| Pt24 | 284730.9 | 3849816 | 1235.028 | Rtk 5 |
| Pt25 | 284721.4 | 3849827 | 1235.081 | Rtk6 |
| Pt26 | 284260 | 3849819 | 1244.781 | Rtk 7 |
| Pt27 | 284250.4 | 3849821 | 1245.78 | Rtk 8 |
| Pt28 | 283789.6 | 3849898 | 1302.945 | Rtk 9 |
| Pt29 | 283777.7 | 3849899 | 1302.873 | Rtk 10 |
| Pt30 | 283362.8 | 3849904 | 1374.189 | Rtk 11 |
| Pt31 | 283375.5 | 3849888 | 1369.163 | Rtk 12 |
| Pt32 | 283283.8 | 3849846 | 1371.827 | Rtk a 1 |
| Pt33 | 283279.4 | 3849849 | 1373.539 | Rtk a 2 |
| Pt34 | 282921.6 | 3849730 | 1450.987 | Rtk 14 |
| Pt35 | 282925.8 | 3849736 | 1451.012 | Rtk 13 |
| Pt36 | 282561.4 | 3849700 | 1544.053 | Rtk 16 |
| Pt37 | 282572.8 | 3849696 | 1537.686 | cw |

| S.no | Easting | Northing | Elevation | Description |
|------|----------|----------|-----------|-------------|
| Pt38 | 282573.1 | 3849691 | 1537.758 | cw |
| Pt39 | 282571.1 | 3849692 | 1538.559 | up stirm |
| Pt40 | 282572.3 | 3849696 | 1538.33 | up strim |
| Pt41 | 282581.1 | 3849695 | 1535.896 | down sterim |
| Pt42 | 282579.2 | 3849695 | 1537.187 | cw |
| Pt43 | 282580.1 | 3849690 | 1537.105 | cw |
| Pt44 | 282581.8 | 3849691 | 1536.328 | down ster |
| Pt45 | 282607.2 | 3849670 | 1531.483 | Rtk 15 |
| Pt46 | 282623.7 | 3849664 | 1526.704 | cw |
| Pt47 | 282624.1 | 3849666 | 1526.502 | cw |
| Pt48 | 282621.8 | 3849666 | 1526.95 | cw |
| Pt49 | 282626.2 | 3849665 | 1526.254 | cw |
| Pt50 | 282625.9 | 3849667 | 1525.719 | down stirm |
| Pt51 | 282621.9 | 3849664 | 1526.72 | up strim |
| Pt52 | 282974.4 | 3849756 | 1434.129 | up STRIM |
| Pt53 | 282974 | 3849758 | 1434.277 | cw |
| Pt54 | 282976 | 3849757 | 1434.219 | cw |
| Pt55 | 282976.7 | 3849762 | 1434.105 | cw |
| Pt56 | 282974.8 | 3849762 | 1434.074 | cw |
| Pt57 | 282975.5 | 3849763 | 1433.385 | down STRIM |
| Pt58 | 283244.9 | 3849835 | 1377.031 | cw |
| Pt59 | 283242.9 | 3849834 | 1377.163 | up sterim |
| Pt60 | 283240.4 | 3849836 | 1377.382 | up sterim |
| Pt61 | 283244 | 3849839 | 1376.946 | cw |
| Pt62 | 283248.5 | 3849840 | 1376.798 | cw |
| Pt63 | 283249.7 | 3849836 | 1376.784 | cw |
| Pt64 | 283251.5 | 3849838 | 1376.049 | down STRIM |
| Pt65 | 283251.1 | 3849841 | 1375.663 | down STRIM |
| Pt66 | 283765.7 | 3849909 | 1300.501 | cw |
| Pt67 | 283764.2 | 3849912 | 1300.451 | cw |
| Pt68 | 283759.8 | 3849913 | 1300.433 | up stream |
| Pt69 | 283758.9 | 3849911 | 1300.582 | up stream |
| Pt70 | 283767.5 | 3849913 | 1300.31 | cw |
| Pt71 | 283769.9 | 3849908 | 1300.326 | cw |
| Pt72 | 283769.6 | 3849913 | 1300.004 | down sterim |
| Pt73 | 283771.5 | 3849908 | 1299.779 | down sterim |
| Pt74 | 283775.2 | 3849909 | 1297.759 | down sterim |
| Pt76 | 283773.2 | 3849908 | 1298.381 | down sterim |
| Pt77 | 283703 | 3849911 | 1311.265 | cup top |
| Pt78 | 283702.4 | 3849912 | 1311.488 | cup top |
| Pt79 | 283702.9 | 3849912 | 1310.851 | cul bed |
| Pt80 | 283703.2 | 3849911 | 1310.809 | cul bed |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt81 | 283702.3 | 3849911 | 1311.398 | stone cul |
| Pt82 | 283698.6 | 3849910 | 1311.044 | cul bed |
| Pt83 | 283699.1 | 3849909 | 1311.006 | cul bed |
| Pt84 | 283699.3 | 3849909 | 1311.388 | cul top |
| Pt85 | 283698.6 | 3849910 | 1311.507 | cul top |
| Pt86 | 283698 | 3849909 | 1311.101 | up stream |
| Pt87 | 283704.2 | 3849913 | 1310.559 | down stream |
| Pt88 | 283829.9 | 3849858 | 1298.77 | cul |
| Pt89 | 283828.3 | 3849859 | 1298.955 | cul |
| Pt90 | 283829.2 | 3849855 | 1298.948 | cul |
| Pt91 | 283827 | 3849855 | 1299.052 | cul |
| Pt92 | 283827.2 | 3849854 | 1298.858 | up stream |
| Pt93 | 283829.6 | 3849859 | 1297.887 | down sterim |
| Pt94 | 284034.7 | 3849798 | 1284.984 | PCC end |
| Pt95 | 284032.7 | 3849796 | 1285.059 | PCC end |
| Pt96 | 284107.4 | 3849770 | 1271.258 | pipe bed |
| Pt97 | 284107.3 | 3849770 | 1271.379 | pipe up |
| Pt99 | 284109.4 | 3849774 | 1270.92 | pipe bed |
| Pt100 | 284109.3 | 3849774 | 1271.07 | pipe top |
| Pt101 | 284109.7 | 3849776 | 1270.799 | down sterim |
| Pt102 | 284106.1 | 3849769 | 1271.279 | up stream |
| Pt103 | 284159.5 | 3849809 | 1259.467 | cul bed |
| Pt104 | 284159.3 | 3849808 | 1259.471 | cul bed |
| Pt105 | 284159.9 | 3849808 | 1258.926 | down sterim |
| Pt106 | 284158.9 | 3849809 | 1260.4 | cul |
| Pt107 | 284158.5 | 3849808 | 1260.474 | cul |
| Pt108 | 284155.5 | 3849809 | 1260.554 | cul |
| Pt109 | 284155.9 | 3849810 | 1260.519 | cul |
| Pt110 | 284155 | 3849809 | 1260.109 | cul bed |
| Pt111 | 284154.7 | 3849810 | 1260.34 | up stream |
| Pt112 | 284129 | 3849852 | 1260.398 | cw |
| Pt113 | 284124.1 | 3849854 | 1259.715 | cw |
| Pt114 | 284120.3 | 3849856 | 1259.559 | up stream |
| Pt115 | 284121.7 | 3849859 | 1259.96 | cw |
| Pt116 | 284123 | 3849863 | 1260.404 | cw |
| Pt117 | 284125.8 | 3849861 | 1260.264 | cw |
| Pt118 | 284126.1 | 3849859 | 1259.91 | cw |
| Pt119 | 284126.9 | 3849857 | 1259.712 | cw |
| Pt120 | 284127.9 | 3849856 | 1259.845 | cw |
| Pt121 | 284129.8 | 3849854 | 1260.312 | cw |
| Pt122 | 284127.8 | 3849858 | 1258.742 | down sterim |
| Pt123 | 284221.7 | 3849838 | 1247.718 | cw |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt124 | 284226 | 3849837 | 1247.603 | cw |
| Pt125 | 284226.9 | 3849834 | 1247.649 | cw |
| Pt126 | 284224.5 | 3849833 | 1247.633 | cw |
| Pt127 | 284226.9 | 3849835 | 1247.151 | down sterim |
| Pt128 | 284227.8 | 3849836 | 1247.332 | down sterim |
| Pt129 | 284228.4 | 3849835 | 1245.918 | down sterim |
| Pt130 | 284219.1 | 3849835 | 1247.133 | down sterim |
| Pt131 | 284277.9 | 3849820 | 1241.659 | cw |
| Pt132 | 284277.2 | 3849819 | 1242.313 | cw |
| Pt133 | 284279.7 | 3849820 | 1241.441 | cw |
| Pt134 | 284282.3 | 3849820 | 1241.853 | cw |
| Pt135 | 284284.3 | 3849816 | 1241.734 | cw |
| Pt136 | 284282.7 | 3849816 | 1241.676 | cw |
| Pt137 | 284283.4 | 3849814 | 1241.042 | down sterim |
| Pt138 | 284279.3 | 3849815 | 1241.864 | cw |
| Pt139 | 284277.3 | 3849821 | 1241.661 | up stream |
| Pt140 | 284263.8 | 3849818 | 1244.241 | PCC start |
| Pt141 | 284264 | 3849821 | 1244.385 | PCC start |
| Pt142 | 284329.4 | 3849842 | 1243.855 | pipe bed |
| Pt143 | 284329.5 | 3849842 | 1243.981 | pipe top |
| Pt144 | 284337.1 | 3849841 | 1243.707 | pipe bed |
| Pt145 | 284337 | 3849841 | 1243.969 | pipe top |
| Pt146 | 284337.4 | 3849842 | 1244.064 | cul |
| Pt147 | 284336.8 | 3849841 | 1244.056 | cul |
| Pt148 | 284330.6 | 3849841 | 1243.742 | cul |
| Pt149 | 284330.8 | 3849843 | 1243.908 | cul |
| Pt150 | 284386.9 | 3849862 | 1241.723 | pipe bed |
| Pt151 | 284386.9 | 3849862 | 1241.822 | pipe top |
| Pt152 | 284385.3 | 3849866 | 1242.174 | pipe bed |
| Pt153 | 284385.3 | 3849865 | 1242.314 | pipe top |
| Pt154 | 284463.8 | 3849872 | 1232.846 | cul |
| Pt155 | 284464.7 | 3849872 | 1232.797 | cul |
| Pt156 | 284464.2 | 3849872 | 1232.402 | pipe bed |
| Pt157 | 284464.2 | 3849872 | 1232.71 | pipe top |
| Pt158 | 284462.9 | 3849872 | 1232.939 | up stream |
| Pt159 | 284466.5 | 3849875 | 1232.497 | cul |
| Pt160 | 284465.8 | 3849875 | 1232.605 | cul |
| Pt161 | 284466.2 | 3849875 | 1232.259 | pipe bed |
| Pt162 | 284466.8 | 3849876 | 1232.029 | down sterim |
| Pt163 | 284546.4 | 3849856 | 1222.724 | up stream |
| Pt164 | 284547.6 | 3849855 | 1222.683 | pipe bed |
| Pt165 | 284547.7 | 3849855 | 1223.168 | pipe top |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt166 | 284547.9 | 3849856 | 1222.727 | pipe bed |
| Pt167 | 284548 | 3849856 | 1223.178 | pipe top |
| Pt168 | 284547.3 | 3849855 | 1223.297 | cul |
| Pt169 | 284548.4 | 3849856 | 1223.217 | cul |
| Pt170 | 284550.8 | 3849854 | 1223.206 | cul |
| Pt171 | 284549.5 | 3849852 | 1223.171 | cul |
| Pt172 | 284550.7 | 3849853 | 1222.588 | pipe bed |
| Pt173 | 284550.6 | 3849853 | 1223.099 | pipe top |
| Pt174 | 284551 | 3849853 | 1222.634 | pipe bed |
| Pt175 | 284551 | 3849854 | 1223.014 | pipe top |
| Pt176 | 284551.8 | 3849852 | 1222.637 | down sterim |
| Pt177 | 284552.7 | 3849852 | 1221.642 | down stream |
| Pt178 | 284560.3 | 3849852 | 1224.431 | rw |
| Pt179 | 284560.1 | 3849852 | 1224.444 | rw |
| Pt180 | 284565.9 | 3849848 | 1225.317 | rw |
| Pt181 | 284566.1 | 3849849 | 1225.36 | rw |
| Pt182 | 284565 | 3849849 | 1223.966 | rw bed |
| Pt183 | 284643.9 | 3849828 | 1224.783 | pipe bed |
| Pt184 | 284643.5 | 3849828 | 1224.788 | up stream |
| Pt185 | 284643.8 | 3849827 | 1225.275 | cul |
| Pt186 | 284644.8 | 3849828 | 1225.293 | cul |
| Pt187 | 284647.2 | 3849824 | 1225.216 | cul |
| Pt188 | 284648.1 | 3849824 | 1225.273 | cul |
| Pt189 | 284648.2 | 3849823 | 1224.628 | pipe bed |
| Pt190 | 284648.1 | 3849823 | 1224.916 | pipe top |
| Pt191 | 284648.9 | 3849823 | 1224.511 | down stream |
| Pt192 | 284709.8 | 3849841 | 1227.685 | pipe bed |
| Pt193 | 284709.9 | 3849841 | 1228.103 | pipe top |
| Pt194 | 284710.1 | 3849841 | 1228.118 | slab bed |
| Pt195 | 284709.6 | 3849841 | 1228.121 | slab bed |
| Pt196 | 284709.7 | 3849841 | 1228.255 | cul |
| Pt197 | 284710.1 | 3849841 | 1228.235 | cul |
| Pt198 | 284709.2 | 3849840 | 1226.668 | down stream |
| Pt199 | 284715.4 | 3849846 | 1228.336 | pipe bed |
| Pt200 | 284715.4 | 3849846 | 1228.809 | pipe top |
| Pt201 | 284715.5 | 3849846 | 1228.837 | slab bed |
| Pt202 | 284715.2 | 3849846 | 1228.836 | slab bed |
| Pt203 | 284715 | 3849846 | 1228.998 | cul |
| Pt204 | 284715.5 | 3849845 | 1229.155 | cul |
| Pt205 | 284719 | 3849847 | 1229.02 | up stream |
| Pt206 | 285436.3 | 3849463 | 1204.375 | PCC |
| Pt207 | 285436.8 | 3849461 | 1204.297 | PCC end |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt208 | 285559.1 | 3849478 | 1215.792 | PCC start |
| Pt209 | 285560.9 | 3849481 | 1215.759 | PCC start |
| Pt210 | 285544.3 | 3849482 | 1213.62 | PCC start |
| Pt211 | 285546.9 | 3849484 | 1213.232 | PCC start |
| Pt212 | 285798.4 | 3849375 | 1188.052 | rw |
| Pt213 | 285779.6 | 3849378 | 1190.263 | rw |
| Pt214 | 285773.8 | 3849381 | 1190.353 | rw |
| Pt215 | 285774.3 | 3849381 | 1190.352 | rw |
| Pt216 | 285773.5 | 3849380 | 1188.803 | rw bed |
| Pt217 | 285798 | 3849376 | 1188.154 | rw bed |
| Pt218 | 285730.4 | 3849352 | 1165.63 | cul |
| Pt219 | 285729.1 | 3849353 | 1165.598 | cul |
| Pt220 | 285729.8 | 3849353 | 1164.814 | pipe bed |
| Pt221 | 285729.8 | 3849353 | 1165.335 | pipe top |
| Pt222 | 285728.7 | 3849352 | 1163.26 | down stream |
| Pt223 | 285730 | 3849353 | 1165.251 | slab bed |
| Pt224 | 285729.4 | 3849353 | 1165.287 | slab bed |
| Pt225 | 285730 | 3849353 | 1165.546 | slab top |
| Pt226 | 285729.4 | 3849353 | 1165.523 | slab top |
| Pt227 | 285730.6 | 3849356 | 1165.54 | cul |
| Pt228 | 285731.6 | 3849356 | 1165.523 | cul |
| Pt229 | 285731.2 | 3849356 | 1164.935 | pipe bed |
| Pt230 | 285731.3 | 3849356 | 1165.355 | pipe top |
| Pt231 | 285731.1 | 3849356 | 1165.321 | slab bed |
| Pt232 | 285731.1 | 3849356 | 1165.55 | slab top |
| Pt233 | 285731.6 | 3849356 | 1165.457 | slab top |
| Pt234 | 285731.8 | 3849357 | 1165.079 | up stream |
| Pt235 | 285682.1 | 3849383 | 1165.563 | rw top |
| Pt236 | 285682.2 | 3849384 | 1165.45 | rw |
| Pt237 | 285681.7 | 3849383 | 1163.198 | rw bed |
| Pt238 | 285671.9 | 3849384 | 1165.545 | rw top |
| Pt239 | 285671.9 | 3849384 | 1165.516 | rw |
| Pt240 | 285672.7 | 3849383 | 1163.312 | rw bed |
| Pt241 | 285675.8 | 3849379 | 1163.135 | rw |
| Pt242 | 285675.9 | 3849379 | 1162.98 | rw top |
| Pt243 | 285675.6 | 3849378 | 1161.623 | rw bed |
| Pt244 | 285666.3 | 3849377 | 1163.22 | rw |
| Pt245 | 285658.7 | 3849373 | 1163.522 | rw |
| Pt246 | 285659.1 | 3849373 | 1162.061 | rw bed |
| Pt247 | 285658.2 | 3849373 | 1163.387 | PCC end |
| Pt248 | 285656.5 | 3849376 | 1163.465 | PCC end |
| Pt249 | 285634 | 3849318 | 1166.302 | PCC start |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt250 | 285630.7 | 3849319 | 1166.098 | PCC start |
| Pt251 | 285293.3 | 3849406 | 1155.283 | cul |
| Pt252 | 285292.7 | 3849404 | 1155.295 | cul |
| Pt253 | 285294 | 3849405 | 1154.601 | pipe bed |
| Pt254 | 285289.7 | 3849406 | 1155.218 | cul |
| Pt255 | 285289.8 | 3849407 | 1155.222 | cul |
| Pt256 | 285289.5 | 3849406 | 1154.728 | pipe bed |
| Pt257 | 285287.4 | 3849406 | 1154.547 | up stream |
| Pt258 | 285295.8 | 3849405 | 1154.586 | down stream |
| Pt259 | 285114.5 | 3849438 | 1156.87 | cul |
| Pt260 | 285112.9 | 3849439 | 1157.057 | cul |
| Pt261 | 285113.2 | 3849438 | 1156.373 | pipe bed |
| Pt262 | 285113.5 | 3849438 | 1156.839 | pipe top |
| Pt263 | 285113.7 | 3849437 | 1155.653 | down stream |
| Pt264 | 285114.2 | 3849442 | 1157.098 | cul |
| Pt265 | 285112.6 | 3849443 | 1157.164 | cul |
| Pt266 | 285113.3 | 3849443 | 1156.975 | pipe top |
| Pt267 | 285113.6 | 3849443 | 1156.628 | pipe bed |
| Pt268 | 285113.8 | 3849444 | 1156.803 | up stream |
| Pt269 | 285091.1 | 3849450 | 1157.832 | cw |
| Pt270 | 285090.9 | 3849454 | 1157.943 | cw |
| Pt271 | 285085.9 | 3849454 | 1157.854 | cw |
| Pt272 | 285081.4 | 3849455 | 1158.058 | cw |
| Pt273 | 285081 | 3849452 | 1158.155 | cw |
| Pt274 | 285086.8 | 3849450 | 1157.794 | cw |
| Pt275 | 285083.8 | 3849457 | 1157.796 | up stream |
| Pt276 | 285086.9 | 3849450 | 1156.696 | down stream |
| Pt277 | 284519.6 | 3849305 | 1261.473 | PCC end |
| Pt278 | 284518.6 | 3849308 | 1261.387 | PCC end |
| Pt279 | 284256.2 | 3849051 | 1268.997 | cw |
| Pt280 | 284254.7 | 3849049 | 1268.132 | cw |
| Pt281 | 284254.7 | 3849046 | 1267.588 | cw |
| Pt282 | 284255.7 | 3849047 | 1266.627 | down stream |
| Pt283 | 284250.9 | 3849047 | 1268.142 | cw |
| Pt284 | 284251.2 | 3849050 | 1268.307 | cw |
| Pt285 | 284252.4 | 3849053 | 1268.757 | cw |
| Pt286 | 284249.7 | 3849052 | 1268.933 | up stream |
| Pt287 | 283855.5 | 3848458 | 1288.689 | cw |
| Pt288 | 283854.7 | 3848461 | 1288.905 | cw |
| Pt289 | 283846.8 | 3848464 | 1288.786 | cw |
| Pt290 | 283839.9 | 3848465 | 1289.097 | up stream |
| Pt291 | 283838.4 | 3848463 | 1289.574 | cw |

| S.no | Easting | Northing | Elevation | Description |
|-------|----------|----------|-----------|-------------|
| Pt292 | 283843.3 | 3848460 | 1288.818 | cw |
| Pt293 | 283850.3 | 3848458 | 1288.62 | cw |
| Pt294 | 283850.4 | 3848455 | 1288.464 | down stream |
| Pt297 | 283737.6 | 3848468 | 1302.635 | cul |
| Pt298 | 283737 | 3848468 | 1302.667 | cul |
| Pt299 | 283737.1 | 3848468 | 1302.431 | pipe bed |
| Pt300 | 283740 | 3848464 | 1302.481 | cul |
| Pt301 | 283739.5 | 3848464 | 1302.685 | cul |
| Pt302 | 283739.8 | 3848464 | 1302.246 | pipe bed |
| Pt303 | 283740.6 | 3848462 | 1302.228 | down stream |
| Pt304 | 283736.5 | 3848469 | 1302.447 | up stream |
| Pt305 | 283592.7 | 3848495 | 1315.491 | cw |
| Pt306 | 283592 | 3848499 | 1315.457 | cw |
| Pt307 | 283587.6 | 3848500 | 1315.677 | up stream |
| Pt308 | 283592.7 | 3848502 | 1315.583 | cw |
| Pt309 | 283595.8 | 3848502 | 1315.527 | cw |
| Pt310 | 283597.1 | 3848499 | 1314.516 | down stream |
| Pt311 | 283595.3 | 3848497 | 1315.353 | cw |
| Pt312 | 283517.5 | 3848523 | 1323.993 | cw |
| Pt313 | 283515.5 | 3848526 | 1323.931 | cw |
| Pt314 | 283512.2 | 3848523 | 1323.94 | cw |
| Pt315 | 283510.1 | 3848524 | 1324.227 | up stream |
| Pt316 | 283511.1 | 3848520 | 1324.146 | cw |
| Pt317 | 283514.6 | 3848519 | 1324.113 | cw |
| Pt318 | 283515.9 | 3848522 | 1323.831 | cw |
| Pt319 | 283516.4 | 3848521 | 1323.658 | down stream |
| Pt322 | 283264.1 | 3848485 | 1373.508 | cw |
| Pt323 | 283262.2 | 3848485 | 1373.393 | cw |
| Pt324 | 283259.8 | 3848486 | 1373.731 | cw |
| Pt325 | 283260.1 | 3848483 | 1373.61 | up stream |
| Pt326 | 283262.2 | 3848488 | 1373.481 | cw |
| Pt327 | 283263.6 | 3848488 | 1373.237 | cw |
| Pt328 | 283265.3 | 3848488 | 1373.216 | cw |
| Pt329 | 283264.2 | 3848489 | 1372.321 | down stream |
| Pt330 | 282934.2 | 3848419 | 1411.77 | PCC start |
| Pt331 | 282935.5 | 3848422 | 1411.783 | PCC start |
| Pt332 | 282831.4 | 3848439 | 1435.79 | PCC end |
| Pt333 | 282831.9 | 3848441 | 1435.764 | PCC end |
| Pt334 | 282696.1 | 3848412 | 1453.493 | cw |
| Pt335 | 282696.4 | 3848415 | 1453.245 | cw |
| Pt336 | 282690.6 | 3848411 | 1453.367 | cw |
| Pt337 | 282683.2 | 3848411 | 1453.593 | cw |

| S.no | Easting | Northing | Elevation | Description |
|--------------|----------------|-----------------|------------------|--------------------|
| Pt338 | 282684.4 | 3848414 | 1453.571 | cw |
| Pt339 | 282690.4 | 3848414 | 1453.41 | cw |
| Pt340 | 282692.4 | 3848415 | 1452.763 | down stream |
| Pt341 | 282683.1 | 3848409 | 1453.748 | up stream |
| Pt342 | 282696.4 | 3848415 | 1453.152 | cw |
| Pt343 | 282711.1 | 3848425 | 1451.071 | pcc |
| Pt344 | 282708.4 | 3848426 | 1451.035 | pcc |
| Pt345 | 282632.1 | 3848396 | 1465.942 | PCC end |
| Pt346 | 282630.9 | 3848399 | 1465.896 | PCC end |

2.15.8 SNG-29

Chagum Gumbat Road

2.15.8.1 Location Map

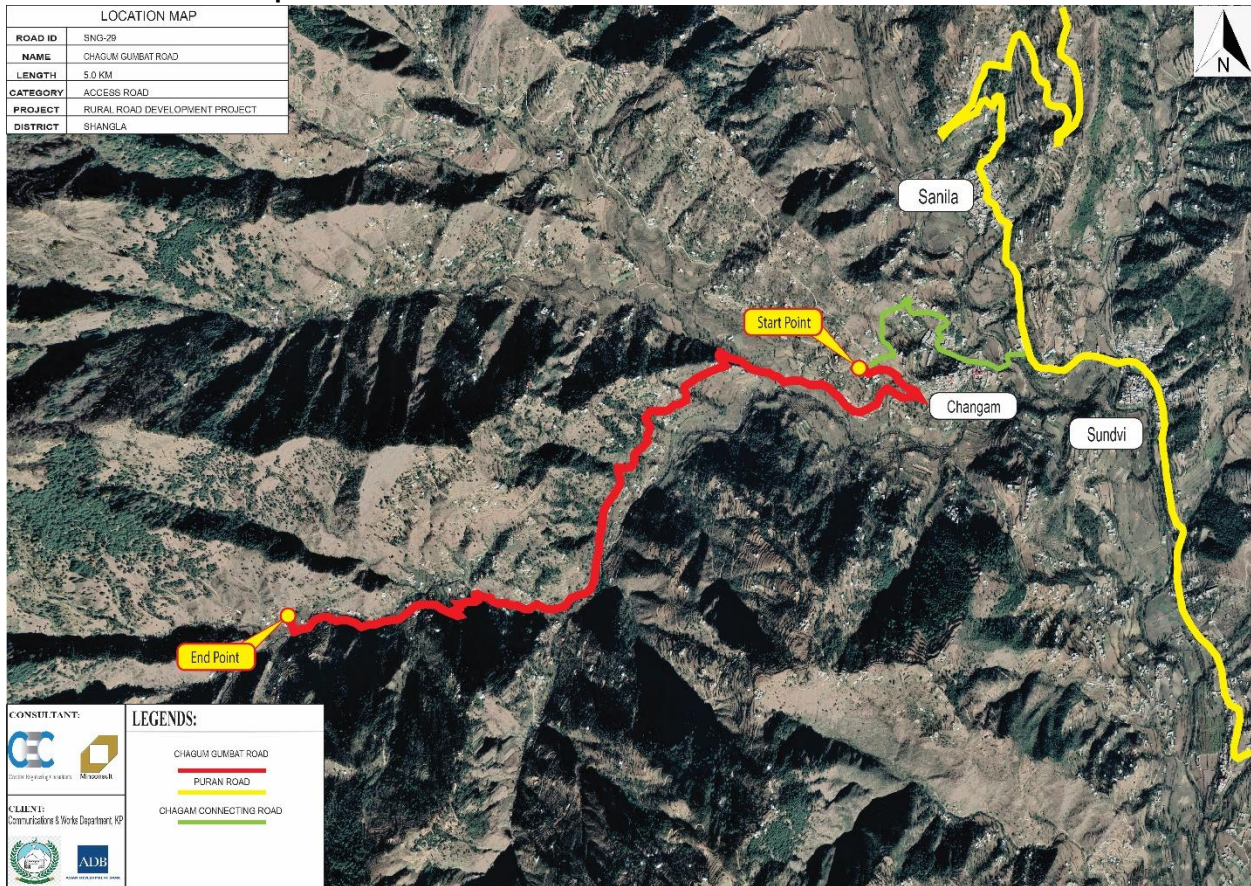


Figure 2.15.8 Location Map SNG-29

2.15.8.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.8 SNG-29 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|-------------|----------------|-----------------|------------------|--------------------|
| Pt0 | 285542.9 | 3849487 | 1214.057 | gcp 1 |
| Pt1 | 285552 | 3849469 | 1210.799 | gcp 2 |
| Pt2 | 285673.9 | 3849379 | 1163.253 | gcp 3 |
| Pt3 | 285665.8 | 3849380 | 1163.34 | GCP 4 |
| Pt4 | 285274.5 | 3849405 | 1155.151 | gcp 6 |
| Pt5 | 285299.9 | 3849407 | 1155.474 | gcp 5 |
| Pt6 | 284822.2 | 3849548 | 1195.614 | gcp 7 |
| Pt7 | 284791.4 | 3849559 | 1203.175 | gcp 8 |
| Pt8 | 284607.8 | 3849343 | 1249.549 | gcp 9 |
| Pt9 | 284583.3 | 3849337 | 1251.325 | gcp 10 |
| Pt10 | 284265.1 | 3849057 | 1271.242 | gcp 11 |
| Pt11 | 284255.1 | 3849053 | 1269.178 | gcp 12 |
| Pt12 | 284025.1 | 3848498 | 1278.809 | gcp 13 |
| Pt13 | 284009.1 | 3848499 | 1281.584 | gcp 14 |
| Pt14 | 283595.5 | 3848492 | 1315.699 | gcp 15 |
| Pt15 | 283586.6 | 3848509 | 1317.54 | gcp 16 |
| Pt16 | 283087.2 | 3848424 | 1391.138 | gcp 17 |
| Pt17 | 283028.8 | 3848416 | 1400.413 | GCP 18 |
| Pt18 | 282639.5 | 3848401 | 1464.62 | gcp 19 |
| Pt19 | 282620 | 3848394 | 1468.569 | gcp 20 |

2.15.9 SNG-63

Alpurai Barkas Kag Road

2.15.9.1 Location Map

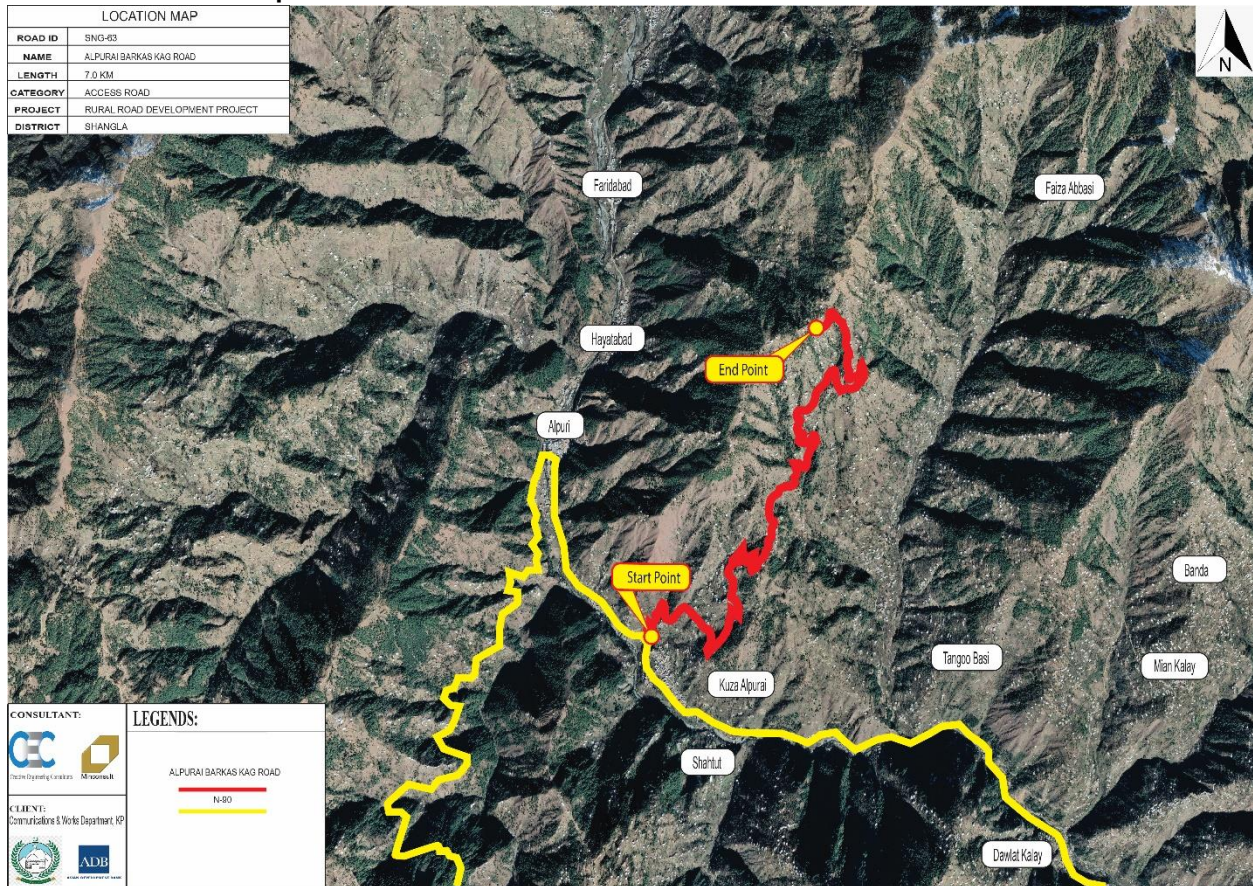


Figure 2.15.9 Location Map SNG-63

2.15.9.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.9 SNG-63 Traverse Points

| S.No | Easting | Northing | Altitude |
|--------------|----------------|-----------------|-----------------|
| BM 1 | 284594.8 | 3865247 | 1485.769 |
| BM 2 | 284607.7 | 3865257 | 1493.005 |
| BM 3 | 285513.5 | 3865685 | 1929.246 |
| BM 4 | 285544.2 | 3865692 | 1936.063 |
| BM 5 | 286011.3 | 3866710 | 2064.084 |
| BM 6 | 285999 | 3866707 | 2066.246 |
| BM 7 | 286224.6 | 3867106 | 2124.684 |
| BM 8 | 286229.2 | 3867115 | 2126.408 |
| BM 9 | 286137.5 | 3867497 | 2293.679 |
| BM 10 | 286129.3 | 3867493 | 2293.767 |

2.15.10 SNG-22

Chagam Alamay

2.15.10.1 Location Map

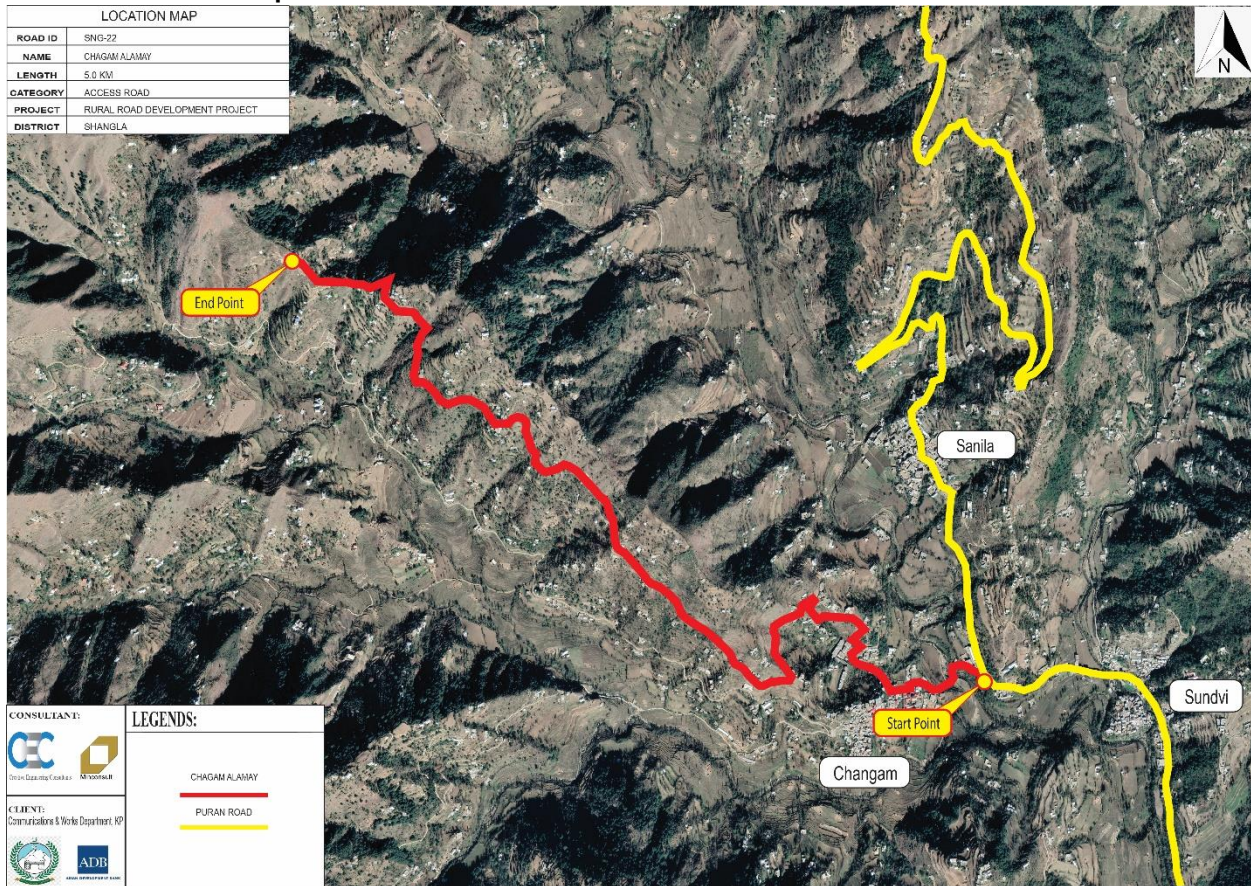


Figure 2.15.10 Location Map SNG-22

2.15.10.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.10 SNG-22 Traverse Points

| S.No | Easting | Northing | Altitude | Description |
|------|----------|----------|----------|-------------|
| Pt0 | 286576.9 | 3849467 | 1106.282 | BP1 |
| Pt1 | 286575.7 | 3849461 | 1106.256 | test |
| Pt2 | 286470 | 3849477 | 1109.569 | gcp 1None |
| Pt3 | 286464.8 | 3849484 | 1110.064 | Gcp 2None |
| Pt4 | 286464.4 | 3849478 | 1109.455 | Rw |
| Pt5 | 286464.3 | 3849477 | 1109.45 | rw1 |
| Pt6 | 286464.2 | 3849477 | 1108.754 | Rw1b |
| Pt7 | 286450.4 | 3849483 | 1107.155 | rw1 b |
| Pt8 | 286450.6 | 3849483 | 1107.989 | rw1t |
| Pt9 | 286450.9 | 3849484 | 1107.952 | rw1t |
| Pt10 | 286441.7 | 3849491 | 1106.231 | rw1t |
| Pt11 | 286441.2 | 3849491 | 1106.256 | rw1t |
| Pt12 | 286441.1 | 3849491 | 1106.158 | rw1b |
| Pt13 | 286436.3 | 3849497 | 1103.419 | rw1b |
| Pt14 | 286436.6 | 3849497 | 1104.632 | rw1t |
| Pt15 | 286436.9 | 3849498 | 1104.601 | rw1t |
| Pt16 | 286423.2 | 3849506 | 1101.989 | rw2t |
| Pt17 | 286423.5 | 3849507 | 1101.979 | rw1t |
| Pt18 | 286419.5 | 3849507 | 1101.433 | rw1t |
| Pt19 | 286419.6 | 3849507 | 1101.548 | rw1t |
| Pt20 | 286408.7 | 3849506 | 1100.192 | rw1t |
| Pt21 | 286408.6 | 3849506 | 1100.231 | rw1t |
| Pt22 | 286408.3 | 3849505 | 1098.941 | rw1b |
| Pt23 | 286400.3 | 3849511 | 1098.62 | rw1t |
| Pt24 | 286399.8 | 3849510 | 1098.724 | rw1t |
| Pt25 | 286399.5 | 3849510 | 1097.529 | rw1b |
| Pt26 | 286383.8 | 3849521 | 1094.844 | rw1t |
| Pt27 | 286383.4 | 3849520 | 1094.927 | rw1t |
| Pt28 | 286341 | 3849515 | 1089.381 | rw1t |
| Pt29 | 286341.2 | 3849514 | 1089.462 | rw1t |
| Pt30 | 286341.2 | 3849514 | 1086.308 | rw1b |
| Pt31 | 286339.9 | 3849513 | 1086.396 | Spain 1 b |
| Pt32 | 286340.6 | 3849514 | 1086.41 | Spain 1b |
| Pt33 | 286339.8 | 3849512 | 1088.389 | cr |
| Pt34 | 286340 | 3849513 | 1088.171 | can |

| S.No | Easting | Northing | Altitude | Description |
|------|----------|----------|----------|-----------------|
| Pt35 | 286340 | 3849513 | 1088.171 | cr |
| Pt36 | 286340.8 | 3849514 | 1088.181 | cr |
| Pt37 | 286340.7 | 3849514 | 1088.296 | cr b |
| Pt38 | 286340.7 | 3849514 | 1088.617 | cr t |
| Pt39 | 286339.8 | 3849513 | 1088.317 | cr b |
| Pt40 | 286339.7 | 3849513 | 1088.573 | crt |
| Pt41 | 286339.4 | 3849512 | 1089.246 | cl 1 |
| Pt42 | 286340.5 | 3849514 | 1089.371 | cl 1 |
| Pt43 | 286333.3 | 3849518 | 1089.397 | cl 1 |
| Pt44 | 286332.6 | 3849515 | 1089.496 | cl1 |
| Pt45 | 286332.3 | 3849515 | 1088.703 | cr top1 |
| Pt46 | 286332.3 | 3849515 | 1088.431 | cr 1b |
| Pt47 | 286333.1 | 3849518 | 1088.634 | cr 1t |
| Pt48 | 286333.1 | 3849518 | 1088.257 | cr b 1 |
| Pt49 | 286332.7 | 3849517 | 1086.377 | Spain 1 |
| Pt50 | 286332.3 | 3849516 | 1086.366 | Spain 1 |
| Pt51 | 286336.4 | 3849513 | 1089.228 | cl 1 |
| Pt52 | 286337.1 | 3849516 | 1089.36 | cl 1 |
| Pt53 | 286339.9 | 3849493 | 1083.77 | bdgarch1 b |
| Pt54 | 286336 | 3849502 | 1083.421 | bdgarch b 1 |
| Pt55 | 286340.5 | 3849503 | 1083.419 | bdgsrch b 1 |
| Pt56 | 286338.5 | 3849498 | 1081.723 | na b 1 |
| Pt57 | 286344.3 | 3849495 | 1083.677 | bdgarch b 1 |
| Pt58 | 286344.3 | 3849495 | 1083.96 | cr bed |
| Pt59 | 286345.6 | 3849494 | 1084.357 | cr bed |
| Pt60 | 286346 | 3849493 | 1085.756 | cr bed |
| Pt61 | 286341.2 | 3849504 | 1081.974 | cr bed |
| Pt62 | 286340.7 | 3849507 | 1082.635 | cr bed |
| Pt63 | 286335.1 | 3849502 | 1084.629 | cr bed |
| Pt64 | 286335.8 | 3849502 | 1084.934 | cr bed |
| Pt65 | 286339.9 | 3849493 | 1084.727 | cr bed |
| Pt66 | 286339.7 | 3849492 | 1084.694 | cr bed |
| Pt67 | 286339.9 | 3849491 | 1085.587 | cr bed |
| Pt68 | 286334.5 | 3849504 | 1087.458 | cr top |
| Pt69 | 286335.1 | 3849503 | 1087.533 | cr top |
| Pt70 | 286335.5 | 3849502 | 1087.488 | bdg arch cr top |
| Pt71 | 286335.5 | 3849502 | 1087.01 | bdg arch cr bed |
| Pt72 | 286340 | 3849492 | 1087.603 | bdg arch cr top |
| Pt73 | 286340 | 3849492 | 1087.166 | bdg arch cr bed |
| Pt74 | 286339.9 | 3849491 | 1087.638 | cr top |

| S.No | Easting | Northing | Altitude | Description |
|-------|----------|----------|----------|-----------------|
| Pt75 | 286340.2 | 3849490 | 1087.838 | cr top |
| Pt76 | 286339.5 | 3849505 | 1089.203 | bdg arch 1 |
| Pt77 | 286335.3 | 3849504 | 1089.417 | bdg arch 1 |
| Pt78 | 286343.9 | 3849493 | 1089.418 | bdg arch 1 |
| Pt79 | 286340.6 | 3849491 | 1089.475 | bdg arch 1 |
| Pt80 | 286345.7 | 3849480 | 1090.2 | rw b 2 |
| Pt81 | 286345.6 | 3849480 | 1091.109 | rw 2 top |
| Pt82 | 286345.8 | 3849479 | 1091.152 | rw 2 top |
| Pt83 | 286333.4 | 3849473 | 1092.031 | rw 2 top |
| Pt84 | 286333.5 | 3849473 | 1092.003 | rw 2 top |
| Pt85 | 286333.5 | 3849473 | 1092.527 | rw 2 top |
| Pt86 | 286333.3 | 3849473 | 1092.552 | rw 2 top |
| Pt87 | 286331.4 | 3849472 | 1092.621 | rw 2 top |
| Pt88 | 286331.7 | 3849472 | 1092.392 | rw 2 top |
| Pt89 | 286331.3 | 3849472 | 1093.032 | rw 2 top |
| Pt90 | 286331.6 | 3849472 | 1092.937 | rw 2 top |
| Pt91 | 286092.5 | 3849467 | 1139.94 | Gcp 3 |
| Pt92 | 286081.6 | 3849470 | 1141.882 | GCP 4 |
| Pt93 | 285863 | 3849712 | 1181.864 | GCP5 |
| Pt94 | 285850.5 | 3849716 | 1183.195 | Gcp6 |
| Pt95 | 285655 | 3849587 | 1238.777 | Gcp 7 |
| Pt96 | 285666.6 | 3849572 | 1237.461 | Gcp 8 |
| Pt97 | 285401.7 | 3849676 | 1279.357 | Gcp 9 |
| Pt98 | 285349 | 3849715 | 1289.575 | Gcp 10 |
| Pt99 | 285096.8 | 3849944 | 1364.925 | Gcp 11 |
| Pt100 | 285083 | 3849956 | 1367.743 | Gcp 12 |
| Pt101 | 284776.5 | 3850278 | 1417.819 | Gcp 13 |
| Pt102 | 284763.9 | 3850269 | 1412.157 | Gcp 14 |
| Pt103 | 284419.2 | 3850470 | 1434.935 | Gcp 15 |
| Pt104 | 284419.4 | 3850482 | 1439.463 | Gcp 16 |
| Pt105 | 284263 | 3850744 | 1480.327 | Gcp 17 |
| Pt106 | 284264.2 | 3850760 | 1478.538 | Gcp 18 |
| Pt107 | 283976.2 | 3850856 | 1502.255 | Gcp 19 |
| Pt108 | 283982.7 | 3850846 | 1497.02 | Gcp 20 |
| Pt109 | 285175.3 | 3849848 | 1334.669 | Bp2None |
| Pt111 | 285171.7 | 3849850 | 1334.659 | t2None |
| Pt112 | 286466.9 | 3849478 | 1109.624 | black top start |
| Pt113 | 286462.3 | 3849485 | 1109.925 | black top start |
| Pt114 | 286267.6 | 3849450 | 1107.036 | rw |
| Pt115 | 286268 | 3849450 | 1106.872 | rw |

| S.No | Easting | Northing | Altitude | Description |
|-------|----------|----------|----------|-----------------|
| Pt116 | 286268.7 | 3849450 | 1104.717 | bed |
| Pt117 | 286228.7 | 3849481 | 1113.328 | rw |
| Pt118 | 286228.9 | 3849481 | 1113.376 | rw |
| Pt119 | 286229 | 3849481 | 1112.802 | bed |
| Pt120 | 286216 | 3849486 | 1114.251 | pipe bed |
| Pt121 | 286215.9 | 3849486 | 1114.777 | pipe top |
| Pt122 | 286216.4 | 3849486 | 1114.955 | slab top |
| Pt123 | 286215.6 | 3849486 | 1114.95 | slab top |
| Pt124 | 286216.6 | 3849486 | 1115.172 | cul |
| Pt125 | 286215.6 | 3849486 | 1115.37 | cul |
| Pt126 | 286216.2 | 3849485 | 1114.26 | down stream |
| Pt127 | 286216.7 | 3849495 | 1114.71 | pipe bed |
| Pt128 | 286216.4 | 3849495 | 1115.12 | pipe top |
| Pt129 | 286215.9 | 3849494 | 1115.797 | cul |
| Pt130 | 286217.4 | 3849495 | 1115.627 | cul |
| Pt131 | 286216.1 | 3849496 | 1114.7 | up stream |
| Pt132 | 285942.6 | 3849585 | 1139.635 | pipe bed |
| Pt133 | 285942.6 | 3849585 | 1140.285 | pipe top |
| Pt134 | 285942.7 | 3849585 | 1140.485 | slab bed |
| Pt135 | 285942.9 | 3849585 | 1140.623 | slab top |
| Pt136 | 285942.6 | 3849584 | 1140.595 | slab top |
| Pt137 | 285942.7 | 3849584 | 1140.708 | cul |
| Pt138 | 285943 | 3849586 | 1140.849 | cul |
| Pt139 | 285942 | 3849585 | 1139.723 | up stream |
| Pt140 | 285946.9 | 3849582 | 1139.505 | pipe bed |
| Pt141 | 285946.8 | 3849582 | 1140.142 | pipe top |
| Pt142 | 285946.7 | 3849581 | 1140.11 | slab bed |
| Pt143 | 285946.6 | 3849581 | 1140.251 | slab top |
| Pt144 | 285946.8 | 3849582 | 1140.234 | slab bed |
| Pt145 | 285946.8 | 3849582 | 1140.354 | slab top |
| Pt146 | 285946.6 | 3849582 | 1140.611 | cul |
| Pt147 | 285946.4 | 3849581 | 1140.417 | cul |
| Pt148 | 285948.3 | 3849581 | 1139.065 | down stream |
| Pt149 | 285288.4 | 3849755 | 1296.351 | black top |
| Pt150 | 285290.8 | 3849756 | 1296.142 | black top |
| Pt151 | 285289.7 | 3849756 | 1296.176 | black top start |
| Pt152 | 285227.5 | 3849828 | 1322.157 | black top end |
| Pt153 | 285228.6 | 3849830 | 1321.879 | black top end |
| Pt154 | 284381.1 | 3850582 | 1441.216 | pipe bed |
| Pt155 | 284381.3 | 3850582 | 1441.663 | pipe top |

| S.No | Easting | Northing | Altitude | Description |
|--------------|----------------|-----------------|-----------------|--------------------|
| Pt156 | 284381.5 | 3850583 | 1442.095 | cul |
| Pt157 | 284381.4 | 3850582 | 1441.924 | cul |
| Pt158 | 284380.8 | 3850582 | 1441.074 | down stream |
| Pt159 | 284385.1 | 3850582 | 1441.51 | pipe bed |
| Pt160 | 284385.1 | 3850582 | 1441.968 | pipe top |
| Pt161 | 284385 | 3850583 | 1442.206 | cul |
| Pt162 | 284385 | 3850582 | 1442.182 | cul |
| Pt163 | 284386.7 | 3850583 | 1441.865 | up stream |

2.15.11 SNG-60

Rahimabad Kas Basi Road

2.15.11.1 Location Map

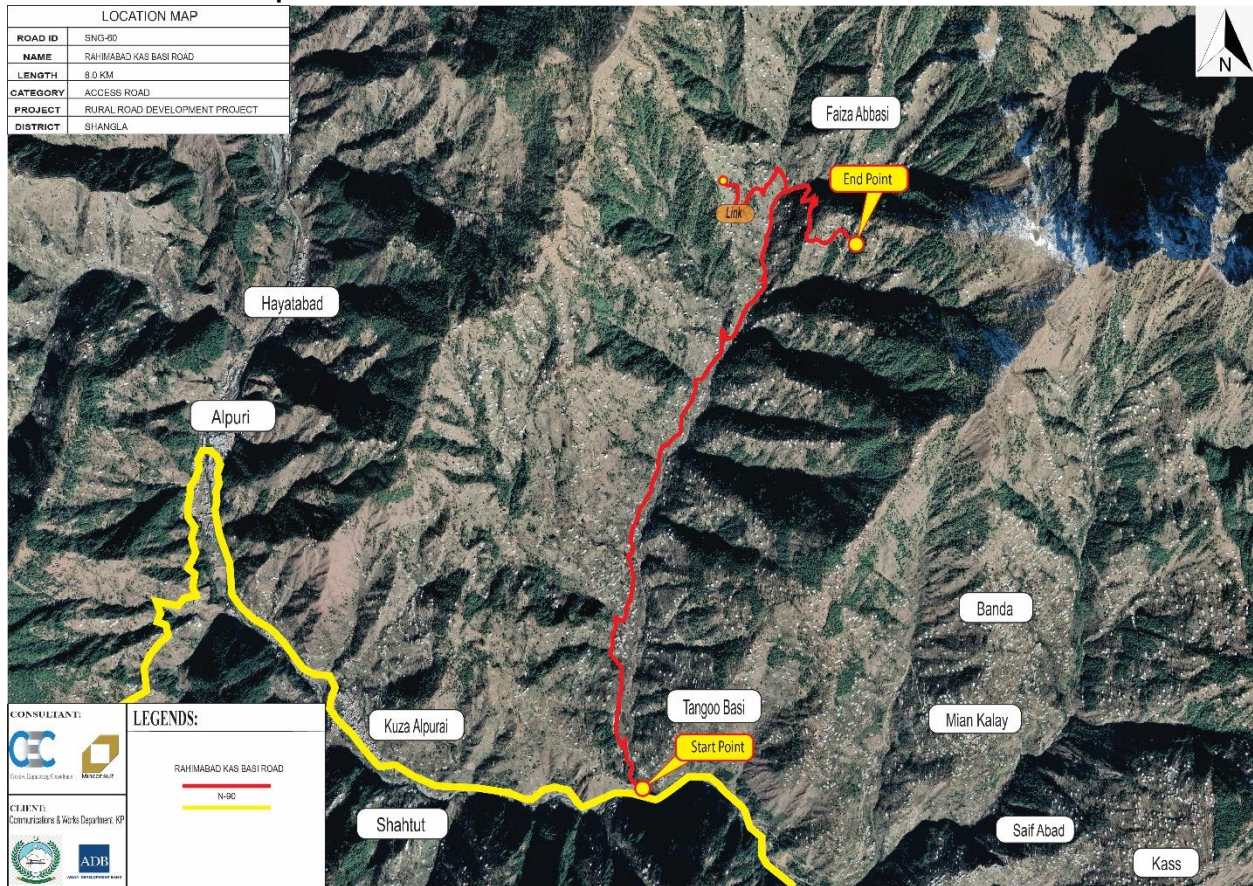


Figure 2.15.11 Location Map SNG-60

2.15.11.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.11 SNG-60 Traverse Points

| S.No | Easting | Northing | Altitude |
|--------------|----------------|-----------------|-----------------|
| BM 1 | 286910.1 | 3864352 | 1327.178 |
| BM 2 | 286908.1 | 3864356 | 1326.931 |
| BM 3 | 286897.1 | 3866145 | 1576.066 |
| BM 4 | 286902.8 | 3866148 | 1576.041 |
| BM 5 | 287294.3 | 3866874 | 1709.217 |
| BM 6 | 287303.4 | 3866880 | 1709.185 |
| BM 7 | 287899.8 | 3867684 | 1796.301 |
| BM 8 | 287860.6 | 3867663 | 1806.1 |
| BM 9 | 288036.2 | 3868209 | 1879.401 |
| BM 10 | 288042.8 | 3868234 | 1883.482 |

2.15.12 SNG-33

Zara Road

2.15.12.1 Location Map

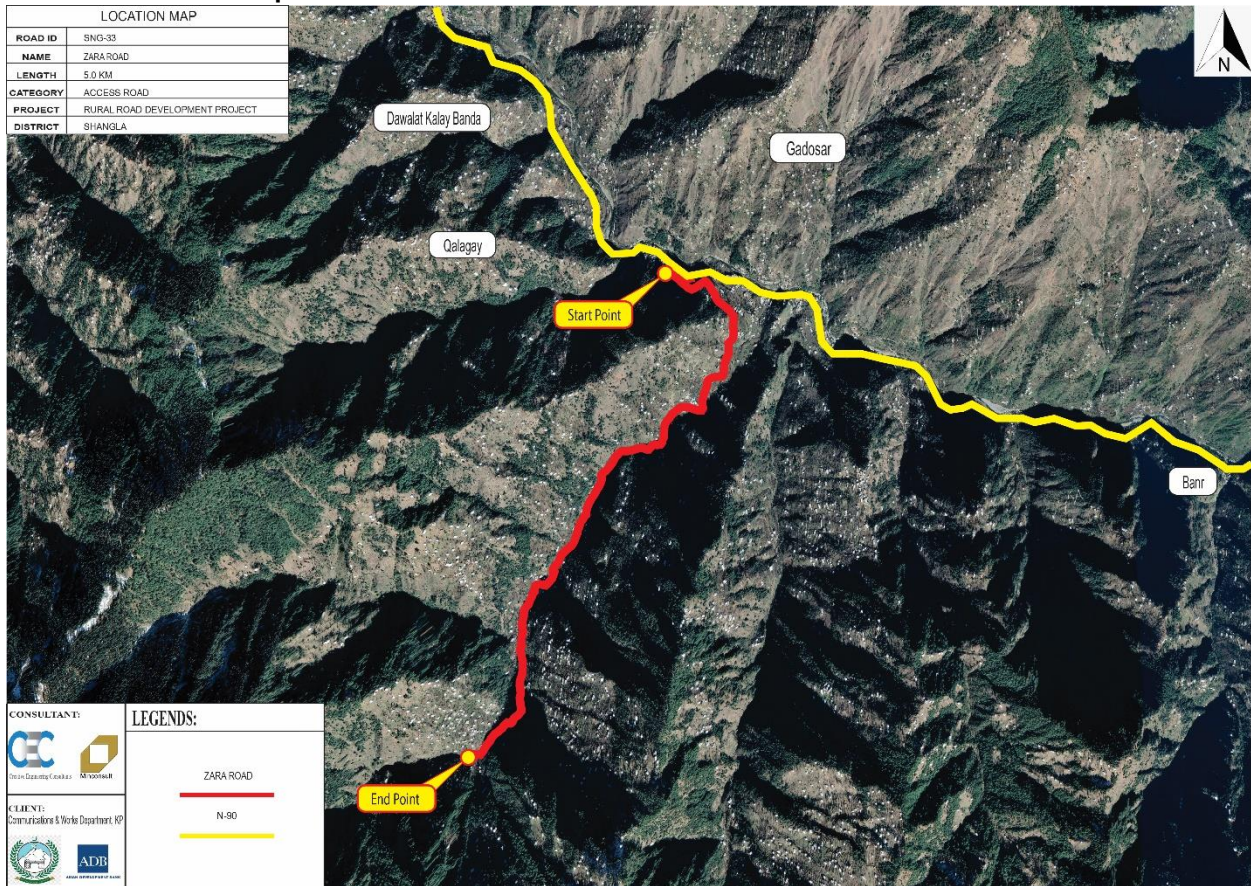


Figure 2.15.12 Location Map SNG-33

2.15.12.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.12 SNG-33 Traverse Points

| S.no | Easting | Northing | Elevation | Description |
|-------------------|------------|-------------|-----------|------------------------|
| Base point | 289756.682 | 3860441.383 | 1276.906 | |
| 1 | 289758.19 | 3860432.306 | 1277.154 | BM 3 |
| 2 | 289745.775 | 3860439.409 | 1277.878 | BM 4 |
| 3 | 289112.494 | 3859590.008 | 1395.578 | BM 6 |
| 4 | 289118.762 | 3859590.97 | 1395.603 | BM 5 |
| 5 | 288962.977 | 3858820.758 | 1527.515 | BM 7 |
| 6 | 288964.109 | 3858812.413 | 1529.569 | BM 8 |
| 7 | 288967.624 | 3858816.156 | 1529.052 | proposed culvert |
| 8 | 288964.703 | 3858816.538 | 1528.899 | proposed culvert |
| 9 | 288955.288 | 3858942.318 | 1498.167 | proposed culvert |
| 10 | 288952.961 | 3858941.751 | 1498.039 | proposed culvert |
| 11 | 288969.336 | 3859151.112 | 1464.178 | proposed culvert |
| 12 | 288972.574 | 3859151.017 | 1464.428 | proposed culvert |
| 13 | 289055.895 | 3859518.819 | 1400.716 | proposed culvert |
| 14 | 289053.066 | 3859522.426 | 1400.6 | proposed culvert |
| 15 | 289069.337 | 3859539.209 | 1397.767 | proposed culvert |
| 16 | 289067.048 | 3859541.496 | 1397.447 | proposed culvert |
| 17 | 289205.373 | 3859622.604 | 1390.087 | S Cul |
| 18 | 289206.843 | 3859624.815 | 1390.297 | S Cul |
| 19 | 289202.776 | 3859627.906 | 1389.775 | S Cul |
| 20 | 289201.26 | 3859625.647 | 1389.771 | S Cul |
| 21 | 289206.477 | 3859623.829 | 1388.428 | inv |
| 22 | 289202.616 | 3859627.996 | 1388.166 | inv |
| 23 | 289474.375 | 3860040.562 | 1327.125 | proposed culvert |
| 24 | 289469.839 | 3860042.031 | 1326.832 | proposed culvert |
| 25 | 289524.931 | 3860149.946 | 1312.994 | S Cul |
| 26 | 289525.417 | 3860150.314 | 1312.975 | S Cul |
| 27 | 289525.233 | 3860149.886 | 1312.282 | inv |
| 28 | 289523.665 | 3860153.114 | 1312.115 | inv |
| 29 | 289523.539 | 3860152.598 | 1313.049 | S Cul |
| 30 | 289524.01 | 3860153.021 | 1312.934 | S Cul |
| 31 | 289589.351 | 3860291.993 | 1297.593 | Causway |
| 32 | 289589.362 | 3860286.492 | 1297.453 | Causway |
| 33 | 289584.026 | 3860285.54 | 1297.627 | Causway |
| 34 | 289585.222 | 3860291.576 | 1297.592 | Causway |
| 35 | 289590.693 | 3860280.896 | 1297.434 | causeway |
| 36 | 289587.808 | 3860277.477 | 1297.633 | causeway |
| 37 | 289709.591 | 3860416.542 | 1278.63 | proposed culvert 3Cell |

| S.no | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|------------------------|
| 38 | 289700.661 | 3860415.662 | 1279.103 | proposed culvert 3Cell |
| 39 | 289959.468 | 3860445.416 | 1256.184 | Causeway |
| 40 | 289951.892 | 3860448.892 | 1256.126 | Causeway |
| 41 | 289964.206 | 3860456.663 | 1256.023 | Causeway |
| 42 | 289959.744 | 3860459.08 | 1256.223 | Causeway |
| 43 | 290123.582 | 3860658.868 | 1238.316 | S Cul |
| 44 | 290122.754 | 3860657.722 | 1238.281 | S Cul |
| 45 | 290118.621 | 3860660.951 | 1238.213 | S Cul |
| 46 | 290119.578 | 3860661.984 | 1238.18 | S Cul |
| 47 | 290119.009 | 3860661.623 | 1237.133 | inv |
| 48 | 290123.334 | 3860657.968 | 1236.697 | inv |
| 49 | 290430.537 | 3860899.034 | 1221.413 | S Cul |
| 50 | 290429.809 | 3860898.089 | 1221.61 | S Cul |
| 51 | 290426.176 | 3860900.947 | 1221.516 | S Cul |
| 52 | 290426.862 | 3860901.826 | 1221.543 | S Cul |
| 53 | 290426.6 | 3860901.692 | 1220.09 | inv |
| 54 | 290430.411 | 3860898.195 | 1219.793 | inv |
| 55 | 290286.897 | 3861519.266 | 1218.908 | inv |
| 56 | 290286.726 | 3861519.244 | 1220.04 | P CUL |
| 57 | 290285.216 | 3861514.363 | 1220.882 | CLOSE |
| 58 | 290138.583 | 3861626.043 | 1195.315 | S Cul |
| 59 | 290139.776 | 3861625.165 | 1195.572 | S Cul |
| 60 | 290136.292 | 3861620.035 | 1195.483 | S Cul |
| 61 | 290134.406 | 3861621.154 | 1195.382 | S Cul |
| 62 | 290135.236 | 3861620.433 | 1194.166 | inv |
| 63 | 290139.739 | 3861625.957 | 1192.717 | inv |
| 64 | 290141.348 | 3861629.419 | 1190.945 | inv |
| 65 | 290141.714 | 3861629.224 | 1192.102 | S Cul |
| 66 | 290140.865 | 3861629.69 | 1192.135 | S Cul |
| 67 | 290144.009 | 3861635.346 | 1192.357 | S Cul |
| 68 | 290145.376 | 3861634.706 | 1192.176 | S Cul |
| 69 | 290145.021 | 3861635.391 | 1190.127 | inv |
| 70 | 290322.867 | 3861591.876 | 1163.053 | inv |
| 71 | 290322.869 | 3861591.64 | 1163.708 | P CUL |
| 72 | 290323.995 | 3861585.649 | 1164.556 | CLOSE |
| 74 | 290319.619 | 3861590.322 | 1164.914 | BM 2 |
| 75 | 290334.568 | 3861594.079 | 1162.235 | BM 1 |

2.15.13 SNG-7

Martung Chakisar

2.15.13.1 Location Map

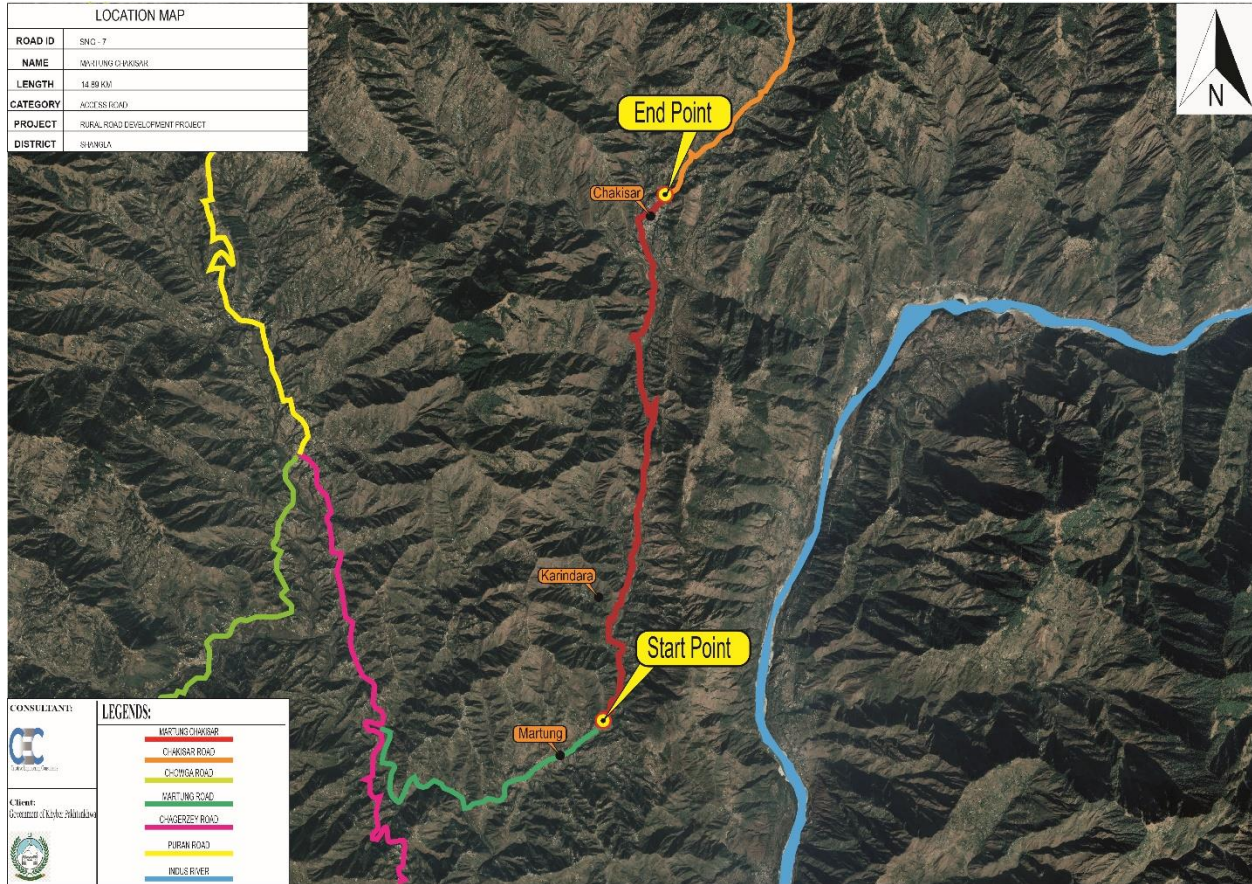


Figure 2.15.13 Location Map SNG-7

2.15.13.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.15.13 SNG-7 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|-------------|-----------|-------------|
| 1 | 295584.48 | 3846994.375 | 1298.167 | BM1 |
| 2 | 295588.608 | 3846958.355 | 1300.972 | BM2 |
| 3 | 295641.879 | 3846690.492 | 1431.248 | BM3 |
| 4 | 295634.076 | 3846662.561 | 1435.885 | BM4 |
| 5 | 295463.756 | 3845798.423 | 1398.578 | BM5 |
| 6 | 295455.574 | 3845767.715 | 1397.538 | BM6 |
| 7 | 295303.953 | 3844897.616 | 1329.522 | BM7 |
| 8 | 295200.768 | 3843953.331 | 1228.014 | BM8 |
| 9 | 295202.043 | 3843993.576 | 1234.934 | BM9 |
| 10 | 295133.943 | 3843495.184 | 1127.535 | BM10 |
| 11 | 295128.364 | 3843437.786 | 1127.906 | BM11 |
| 12 | 294824.741 | 3842757.86 | 1096.312 | BM12 |
| 13 | 294794.288 | 3842695.104 | 1096.495 | BM13 |
| 14 | 294729.961 | 3841985.467 | 1065.386 | BM14 |
| 15 | 294789.481 | 3841946.63 | 1057.239 | BM15 |
| 16 | 294849.024 | 3841238.959 | 1023.383 | BM16 |
| 17 | 294854.167 | 3841213.336 | 1022.236 | BM17 |
| 18 | 294379.514 | 3840354.375 | 977.009 | BM18 |
| 19 | 294365.171 | 3840341.681 | 975.263 | BM19 |
| 20 | 296098.538 | 3851645.57 | 1134.95 | BM20 |
| 21 | 296015.178 | 3851664.502 | 1136.848 | BM21 |
| 22 | 296100.816 | 3851642.902 | 1135.79 | BM22 |
| 23 | 296108.686 | 3851632.79 | 1136.794 | BM23 |
| 24 | 295491.368 | 3851052.957 | 1060.38 | BM24 |
| 25 | 295523.188 | 3850997.527 | 1051.665 | BM25 |
| 26 | 295776.896 | 3850221.402 | 1024.947 | BM26 |
| 27 | 295802.322 | 3850172.085 | 1020.497 | BM27 |
| 28 | 295779.536 | 3850093.167 | 1020.011 | BM28 |
| 29 | 295726.11 | 3849248.817 | 1058.831 | BM29 |
| 30 | 295703.369 | 3849225.169 | 1059.978 | BM30 |
| 31 | 295287.457 | 3848592.335 | 1088.711 | BM31 |
| 32 | 295290.37 | 3848602.946 | 1088.96 | BM32 |
| 33 | 295455.859 | 3847862.207 | 1192.712 | BM33 |
| 34 | 295437.396 | 3847830.457 | 1196.562 | BM34 |

2.16 District Swabi

2.16.1 T-2

Beer Gali

2.16.1.1 Location Map

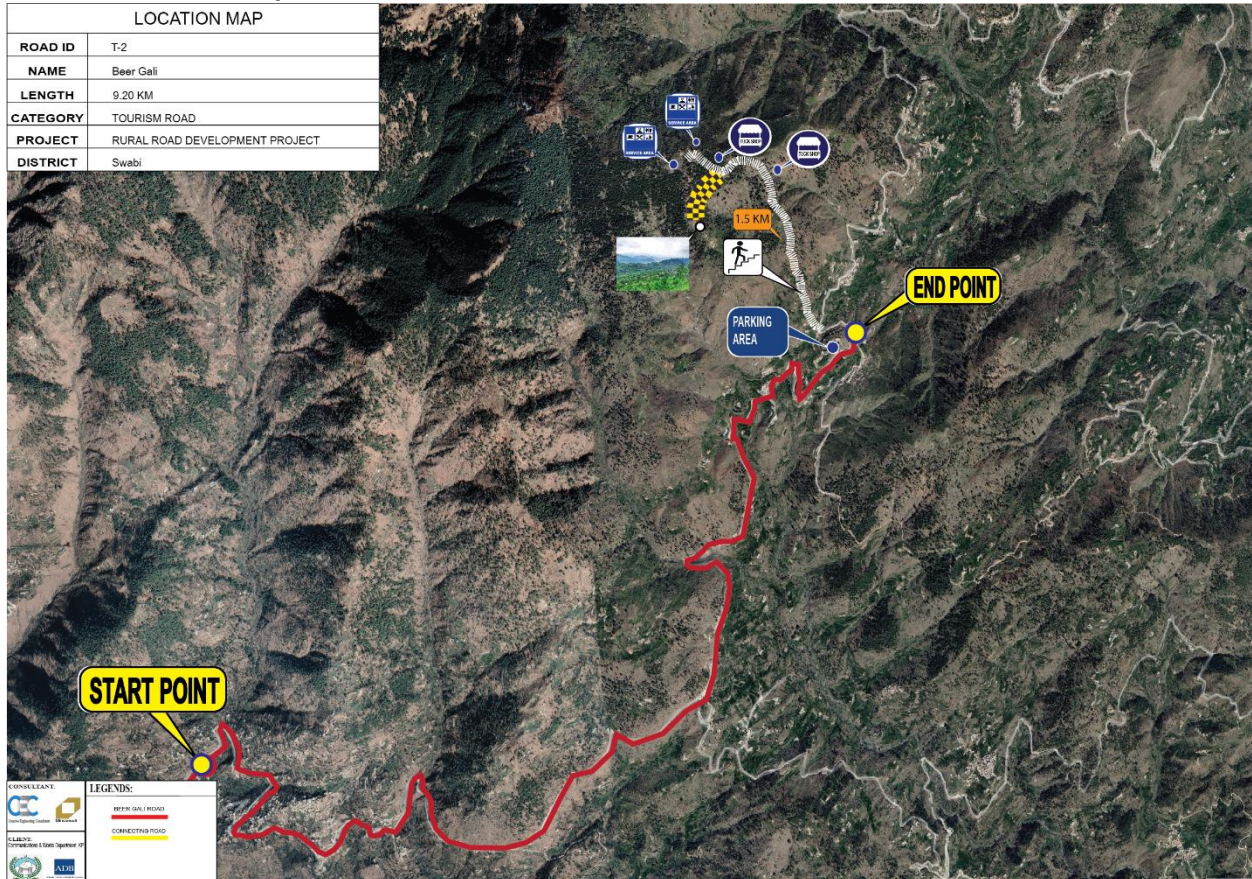


Figure 2.16.1 Location Map T-2

2.16.1.2 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.16.1 T-2 Traverse Points

| S.No | Easting | Northing | Elevation | REMARKS |
|------|------------|-------------|-----------|---------|
| 1 | 291079.415 | 3796693.747 | 1538.017 | BM-1 |
| 2 | 290982.394 | 3796669.635 | 1533.465 | BM-2 |
| 3 | 290051.762 | 3794875.758 | 1362.39 | BM-3 |
| 4 | 289914.698 | 3794797.943 | 1349.977 | BM-4 |
| 5 | 289617.98 | 3794652.282 | 1327.622 | BM-5 |
| 6 | 289400.604 | 3794538.466 | 1309.571 | BM6 |
| 7 | 288220.204 | 3794233.997 | 1240.94 | BM-7 |
| 8 | 288048.389 | 3794311.028 | 1218.67 | BM8 |
| 9 | 286807.898 | 3794766.915 | 1183.788 | BM-9 |
| 10 | 286798.02 | 3794664.762 | 1178.461 | BM-10 |
| 11 | 286560.622 | 3794484.551 | 1157.838 | BM-11 |
| 12 | 286471.127 | 3794408.305 | 1154.822 | BM-12 |

2.17 District Swat

2.17.1 SWT-5

Kalam Banr Shahoo Road

2.17.1.1 Location Map

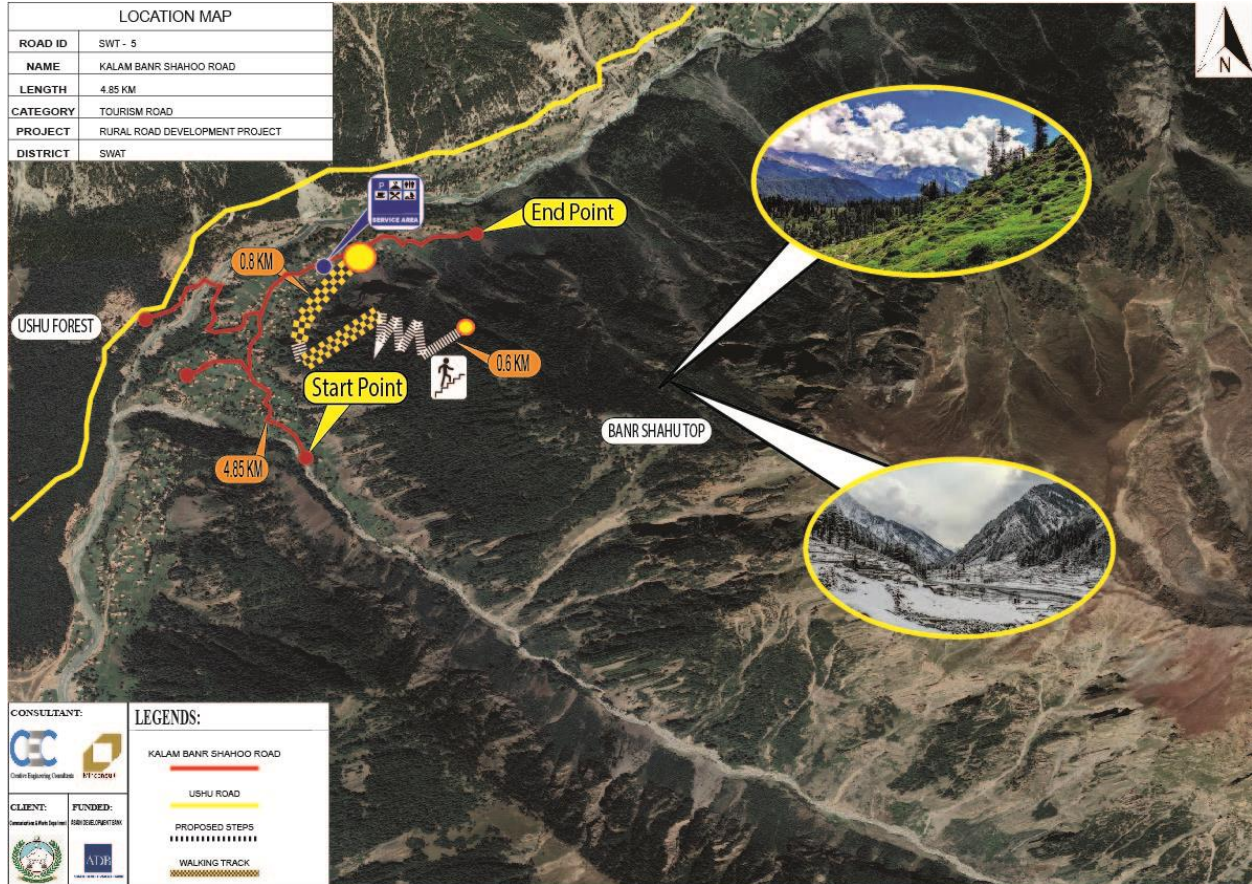


Figure 2.17.1 Location Map SWT-5

2.17.1.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.1 SWT-5 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 282613.009 | 3931693.223 | 2037.254 | BM 4 |
| 2 | 282663.313 | 3931779.924 | 2021.347 | BM 3 |
| 3 | 283208.344 | 3932082.478 | 2062.733 | BM 5 |
| 4 | 283276.538 | 3932117.807 | 2065.162 | BM6 |
| 5 | 283650.827 | 3932279.682 | 2075.457 | BM 7 |
| 6 | 283713.138 | 3932232.363 | 2086.026 | BM 8 |
| 7 | 282274.302 | 3931755.689 | 2069.642 | BM 25 |
| 8 | 282212.151 | 3931701.894 | 2075.557 | BM 15 |
| 9 | 282909.738 | 3931326.668 | 2104.062 | BM |
| 10 | 282855.534 | 3931517.572 | 2091.927 | BM |
| 11 | 282817.295 | 3931463.478 | 2097.751 | BM |
| 12 | 282585.323 | 3931434.007 | 2099.859 | BM |
| 13 | 282617.924 | 3931464.456 | 2099.582 | BM |
| 14 | 282989.779 | 3931164.229 | 2132.196 | BM |

2.17.2 T-19

Beshai Meadows

2.17.2.1 Location Map

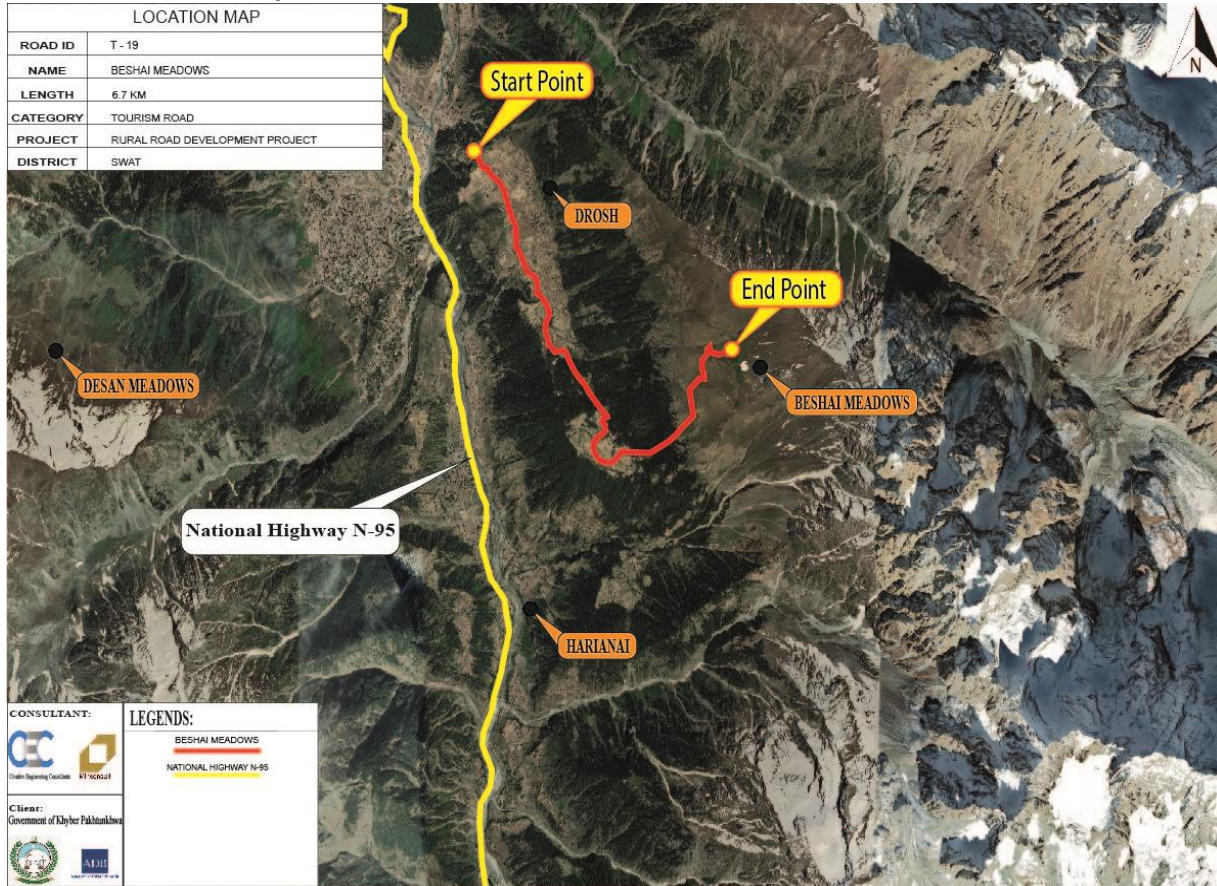


Figure 2.17.2 Location Map T-19

2.17.2.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.2 T-19 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 285237.366 | 3925428.462 | 3016.548 | BM16T19 |
| 2 | 284944.682 | 3925174.621 | 2854.780 | BM14T19 |
| 3 | 284902.159 | 3925158.491 | 2845.313 | BM13T19 |
| 4 | 283927.765 | 3925894.129 | 2576.071 | BM10T19 |
| 5 | 282763.268 | 3927922.750 | 2298.748 | BM 3 T 19 |
| 6 | 283268.929 | 3926949.414 | 2349.427 | BM 6 T 19 |
| 7 | 283233.354 | 3926334.938 | 2467.734 | BM 7 T 19 |
| 8 | 282252.000 | 3928657.451 | 2270.812 | BM1T19 |
| 9 | 282352.980 | 3928519.491 | 2281.189 | BM2T19 |
| 10 | 282794.236 | 3927870.681 | 2299.716 | BM4 T19 |
| 11 | 283120.352 | 3927081.467 | 2331.433 | BM5T19 |

2.17.3 T-4

Kandol Lake Paristan Lake

Location Map

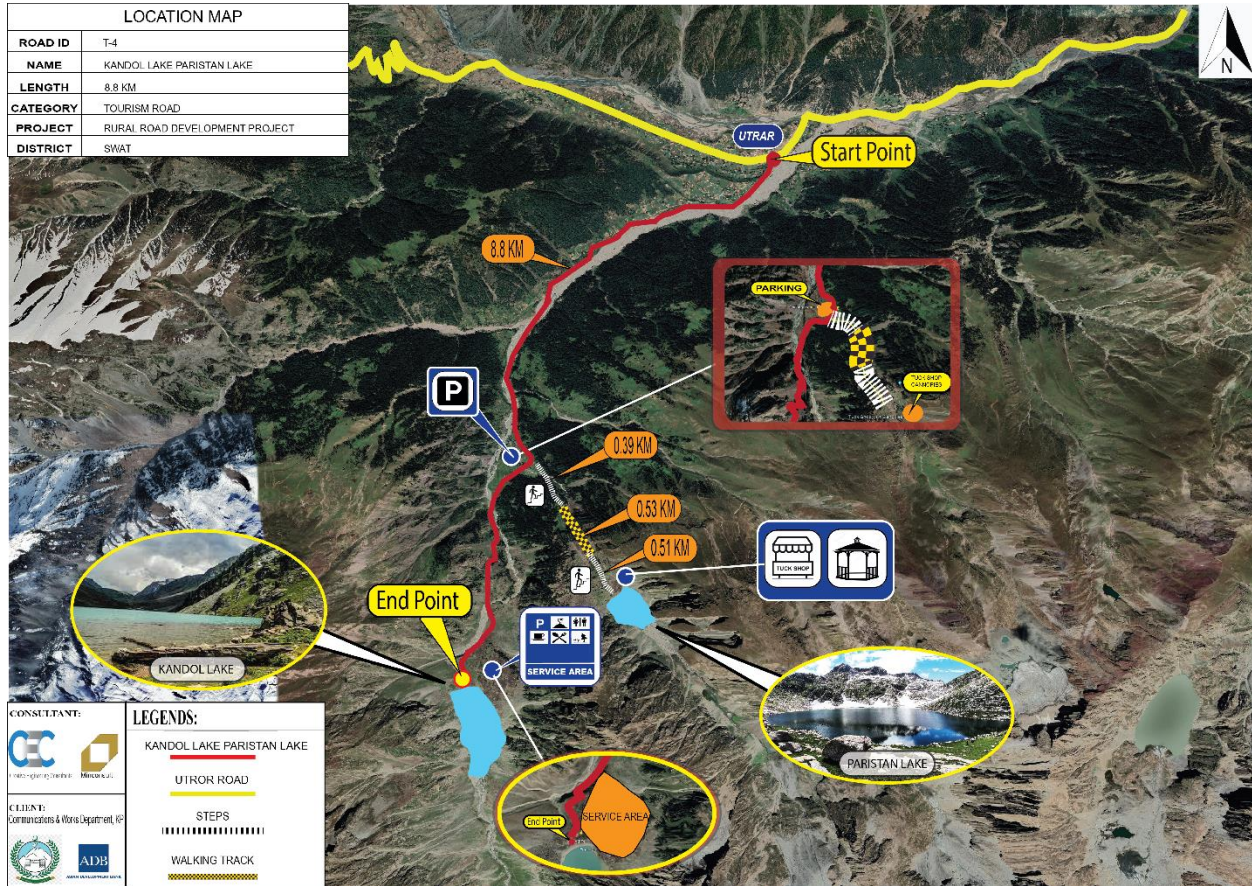


Figure 2.17.3 Location Map T-4

2.17.3.1 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.3 T-4 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 270031.066 | 3929678.456 | 2258.47 | BM 3 |
| 2 | 267510.092 | 3928254.935 | 2422.526 | B3 |
| 3 | 267504.559 | 3928266.418 | 2423.961 | B4 |
| 4 | 270543.77 | 3930260.891 | 2231.066 | BM1 |
| 5 | 270470.015 | 3930154.325 | 2231.058 | BM2 |
| 6 | 269922.864 | 3929637.917 | 2263.367 | BM4 |
| 7 | 269155.052 | 3929461.28 | 2294.254 | BM5 |
| 8 | 268377.991 | 3929009.002 | 2331.881 | BM7 |
| 9 | 267826.209 | 3928301.629 | 2379.78 | B M 9 |
| 10 | 267733.656 | 3928148.618 | 2386.201 | BM10 |
| 11 | 267356.91 | 3927457.969 | 2443.433 | BM 11 |
| 12 | 267328.198 | 3927396.459 | 2448.827 | BM 12 |
| 13 | 267385.108 | 3926567.676 | 2531.561 | BM 13 |
| 14 | 267414.625 | 3926452.184 | 2536.502 | BM14 |
| 15 | 268321.538 | 3928966.124 | 2335.311 | BM8 |
| 16 | 267129.81 | 3925627.068 | 2615.382 | BM15 |
| 17 | 267111.242 | 3925524.042 | 2615.572 | BM 16 |
| 18 | 267142.471 | 3925167.475 | 2688.399 | BM17 |
| 19 | 267176.784 | 3925053.644 | 2721.559 | BM18 |
| 20 | 267081.109 | 3924537.115 | 2882.697 | BM 19 |
| 21 | 267083.498 | 3924433.113 | 2885.5 | BM20 |
| 22 | 266998.98 | 3923760.126 | 2927.94 | BM 21 |

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 23 | 266969.148 | 3923694.069 | 2931.651 | BM 22 |
| 24 | 266769.121 | 3923135.286 | 3016.74 | BM 24 |
| 25 | 266758.113 | 3923161.843 | 3015.216 | BM 23 |

2.17.4 N-SWT-T2

Taip Banda Road

2.17.4.1 Location Map



Figure 2.17.4 Location Map N-SWT-T2

2.17.4.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.4 N-SWT-T2 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|------------|-----------|-------------|
| 1 | 3911625.029 | 834553.948 | 2662.344 | BM_1 |
| 2 | 3912534.679 | 833382.919 | 2549.058 | BM 1 |
| 3 | 3911661.176 | 834534.211 | 2659.501 | BM-2 |
| 4 | 3911977.218 | 833808.661 | 2622.277 | BM-3 |
| 5 | 3912440.062 | 833470.974 | 2563.091 | BM_4 |
| 6 | 3913195.868 | 832525.488 | 2389.315 | B.8 |
| 7 | 3913193.045 | 832528.154 | 2389.927 | B.9 |
| 8 | 3913454.382 | 832336.095 | 2363.665 | B.10 |
| 9 | 3913449.976 | 832337.113 | 2363.698 | B.11 |
| 10 | 3913434.229 | 832306.36 | 2358.239 | B.12 |
| 11 | 3913438.06 | 832304.614 | 2358.26 | B.13 |

2.17.5 N-SWT-T3

Desan Meadows to Kalam

2.17.5.1 Location Map

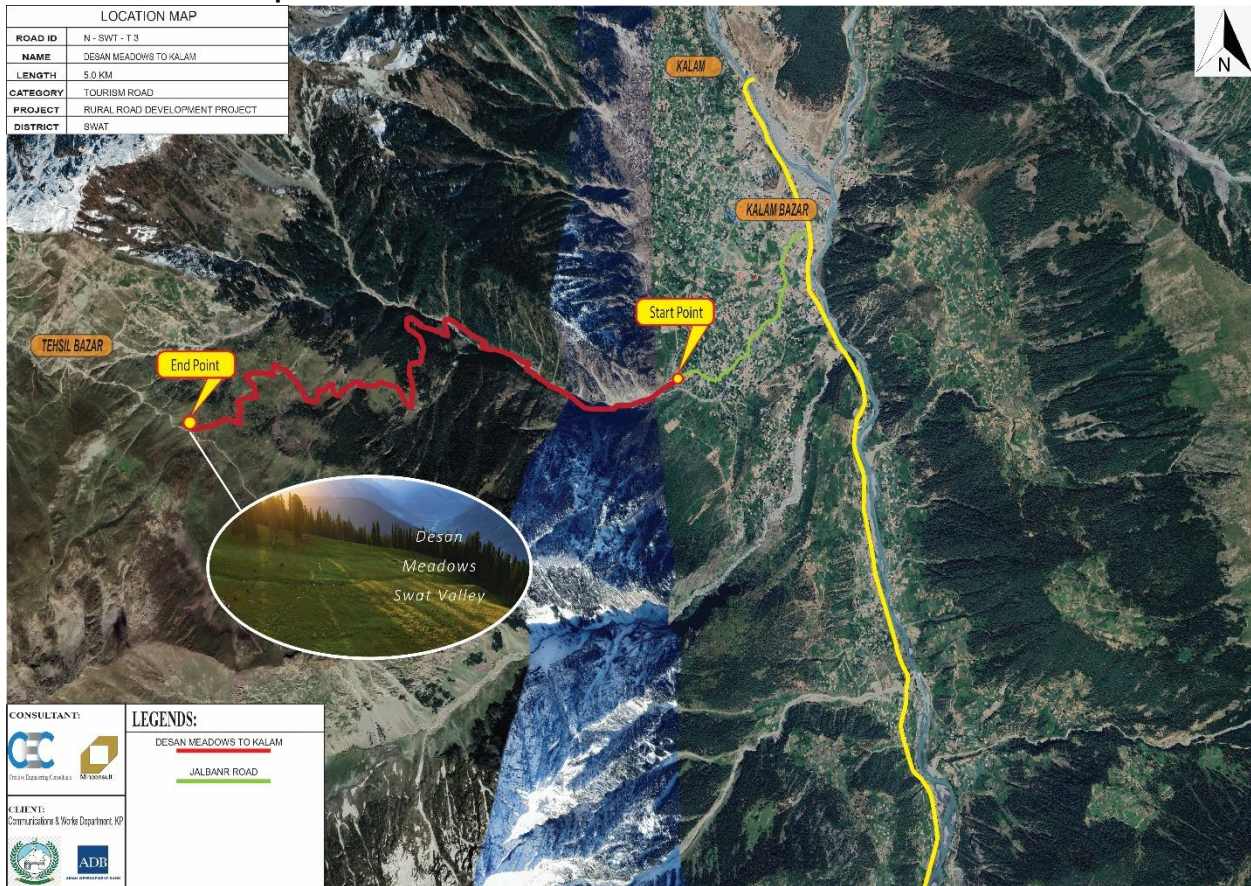


Figure 2.17.5 Location Map N-SWT-T3

2.17.5.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.5 N-SWT-T3 Traverse Points

| S.No | Easting | Northing | Elevation | Description |
|------|------------|-------------|-----------|-------------|
| 1 | 282613.009 | 3931693.223 | 2037.254 | BM 4 |
| 2 | 282663.313 | 3931779.924 | 2021.347 | BM 3 |
| 3 | 283208.344 | 3932082.478 | 2062.733 | BM 5 |
| 4 | 283276.538 | 3932117.807 | 2065.162 | BM6 |
| 5 | 283650.827 | 3932279.682 | 2075.457 | BM 7 |
| 6 | 283713.138 | 3932232.363 | 2086.026 | BM 8 |
| 7 | 282274.302 | 3931755.689 | 2069.642 | BM 25 |
| 8 | 282212.151 | 3931701.894 | 2075.557 | BM 15 |
| 9 | 282909.738 | 3931326.668 | 2104.062 | BM |
| 10 | 282855.534 | 3931517.572 | 2091.927 | BM |
| 11 | 282817.295 | 3931463.478 | 2097.751 | BM |
| 12 | 282585.323 | 3931434.007 | 2099.859 | BM |
| 13 | 282617.924 | 3931464.456 | 2099.582 | BM |
| 14 | 282989.779 | 3931164.229 | 2132.196 | BM |

2.17.6 N-SWT-T4

Uthror to Thal via Badgoi Top

2.17.6.1 Location Map

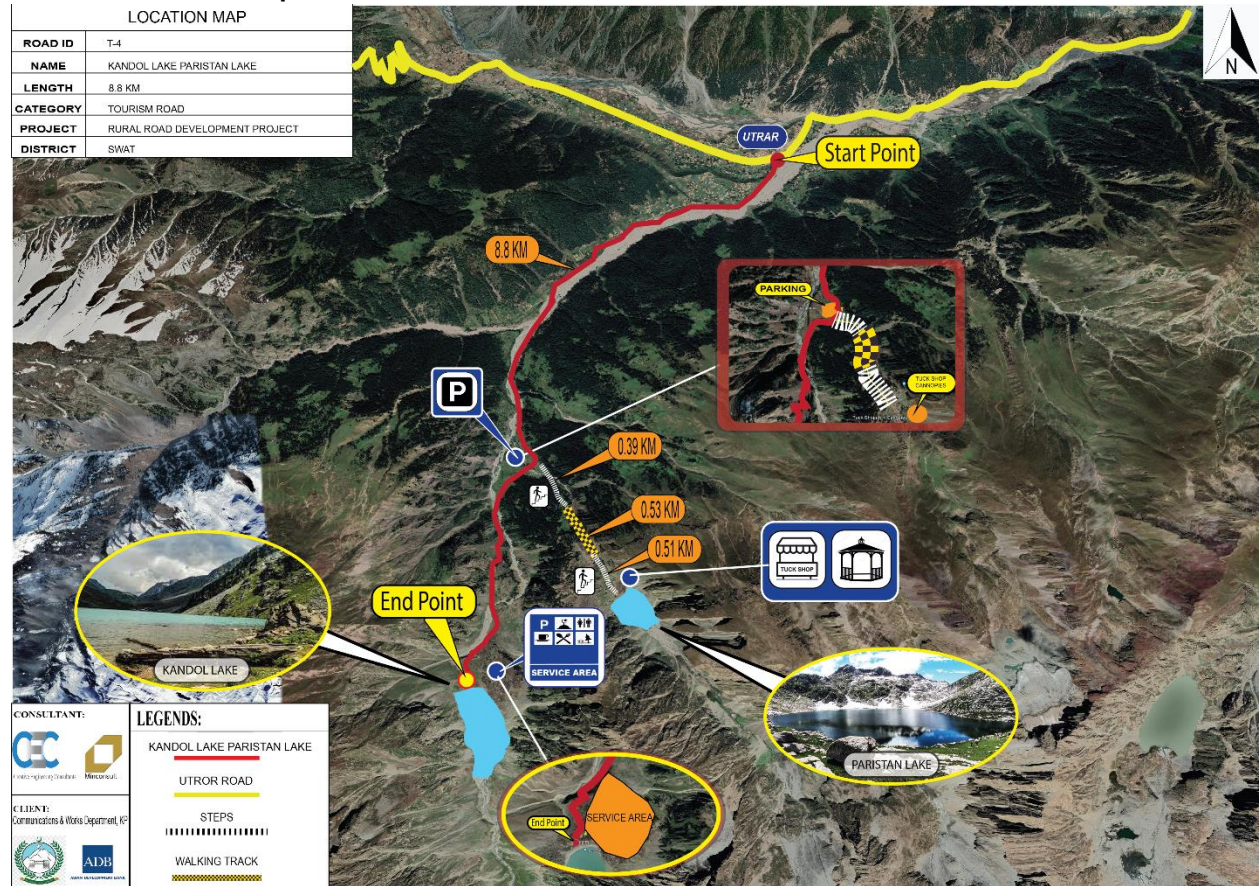


Figure 2.17.6 Location Map N-SWT-T4

2.17.6.2 Traverse Points

The Traverse Point coordinates and description are as follows:-

Table 2.17.6 N-SWT-T4 Traverse Points

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 1 | 3128352 | 1252057 | 2057 | K-1 |
| 2 | 3128341.99 | 1252043.36 | 2056.62 | K-2 |
| 3 | 3128415.19 | 1252123.81 | 2057.41 | K-3 |
| 4 | 3128463.92 | 1252173.4 | 2061.05 | K-4 |
| 5 | 3128599.17 | 1252112.65 | 2063.71 | K-5 |
| 6 | 3128630.58 | 1251980.52 | 2070.66 | K-6 |
| 7 | 3128642.2 | 1251933.54 | 2073.71 | K-7 |
| 8 | 3128565.22 | 1251278.91 | 2089.48 | K-8 |
| 9 | 31289559 | 1251264.29 | 2090.34 | K-9 |
| 10 | 3128434.75 | 1250994.71 | 2099.351 | K-10 |
| 11 | 3128408.61 | 1250956.4 | 2100.548 | K-11 |
| 12 | 3128360.63 | 1250820.19 | 2102.061 | K-12 |
| 13 | 3128355.97 | 1250803.77 | 2103.279 | K-13 |
| 14 | 3128357.18 | 1250759.87 | 2106.175 | K-14 |
| 15 | 3128338.84 | 1250678.34 | 2107.563 | K-15 |
| 16 | 3128317.25 | 1250607.01 | 2107.842 | K-16 |
| 17 | 3128320.41 | 1250576.63 | 2108.553 | K-17 |
| 18 | 3128298.31 | 1250459.88 | 2115.688 | K-18 |
| 19 | 3128272.34 | 1250365.83 | 2117.714 | K-19 |
| 20 | 3128248.71 | 1250319.41 | 2118.543 | K-20 |
| 21 | 3128253.09 | 1250305.91 | 2118.182 | K-21 |
| 22 | 3128333.41 | 1250330.54 | 2126.553 | K-22 |
| 23 | 3128417.18 | 1250362.12 | 2134.199 | K-23 |
| 24 | 3128472.87 | 1250387.92 | 2143.437 | K-24 |
| 25 | 3128580.59 | 1250378.77 | 2151.803 | K-25 |
| 26 | 3128611.38 | 1250361.24 | 2154.84 | K-26 |
| 27 | 3128622.92 | 1250364.84 | 2155.976 | K-27 |
| 28 | 3128647.13 | 1250404.31 | 2161.98 | K-28 |
| 29 | 3128715.9 | 1250472.28 | 2176.194 | K-29 |
| 30 | 3128730.14 | 1250491.36 | 2179.616 | K-30 |
| 31 | 3128745.5 | 1250555.94 | 2186.972 | K-31 |
| 32 | 3128749.27 | 1250601.25 | 2190.845 | K-32 |
| 33 | 3128732.65 | 1250746.03 | 2197.445 | K-33 |
| 34 | 3128727.24 | 1250790.23 | 2200.127 | K-34 |
| 35 | 3128720.08 | 1250858.92 | 2204.349 | K-35 |
| 36 | 3128740.66 | 1250946.26 | 2206.911 | K-36 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 37 | 3128791.99 | 1251036.61 | 2209.053 | K-37 |
| 38 | 3128887.08 | 1251151.6 | 2214.009 | K-38 |
| 39 | 3129275.35 | 1251369.15 | 2253.839 | K-39 |
| 40 | 3129300.85 | 1251389.22 | 2260.067 | K-40 |
| 41 | 3129401.75 | 1251474.46 | 2273.631 | K-41 |
| 42 | 3130026.93 | 1251966.59 | 2341.629 | K-42 |
| 43 | 3130047.85 | 1251970.06 | 2341.045 | K-43 |
| 44 | 3130276.71 | 1252027.58 | 2352.441 | K-44 |
| 45 | 3130333.82 | 1252030.27 | 2360.425 | K-45 |
| 46 | 3130398.97 | 1252094.41 | 2365.373 | K-46 |
| 47 | 3130408.12 | 1252153.75 | 2365.941 | K-47 |
| 48 | 3130407.06 | 1252489.26 | 2390.543 | K-48 |
| 49 | 3130412.88 | 1252538.27 | 2393.917 | K-49 |
| 50 | 3130469.35 | 1252605.88 | 2408.691 | K-50 |
| 51 | 3130619.35 | 1252938.98 | 2461.985 | K-51 |
| 52 | 3130628.6 | 1252939.18 | 2462.686 | K-52 |
| 53 | 3130815.42 | 1252999.06 | 2480.08 | K-53 |
| 54 | 3130899.74 | 1253025.12 | 2489.82 | K-54 |
| 55 | 3130972.26 | 1253009.77 | 2499.098 | K-55 |
| 56 | 3131126.47 | 1253065.2 | 2513.183 | K-56 |
| 57 | 3131262.83 | 1253074.29 | 2520.603 | K-57 |
| 58 | 3131617.52 | 1252996.11 | 2555.347 | K-58 |
| 59 | 3131721.54 | 1252994.11 | 2569.405 | K-59 |
| 60 | 3131846.45 | 1253050.6 | 2585.027 | K-60 |
| 61 | 3132085.8 | 1253218.12 | 2619.472 | K-61 |
| 62 | 3132194.19 | 1253252.53 | 2633.942 | K-62 |
| 63 | 3132334.61 | 1253260.11 | 2644.308 | K-63 |
| 64 | 3132508.11 | 1253059.39 | 2650.138 | K-64 |
| 65 | 3132722.63 | 1252931.35 | 2672.322 | K-65 |
| 66 | 3132840.47 | 1252978.5 | 2685.591 | K-66 |
| 67 | 3132870.93 | 1252988.27 | 2688.828 | K-67 |
| 68 | 3132963.58 | 1253208.5 | 2713.036 | K-68 |
| 69 | 3133177.44 | 1253411.6 | 2748.579 | K-69 |
| 70 | 3133422.84 | 1253546.53 | 2774.977 | K-70 |
| 71 | 3133525.22 | 1253571.49 | 2783.104 | K-71 |
| 72 | 3133585.57 | 1253571.49 | 2789.312 | K-72 |
| 73 | 3133666.64 | 1253611.92 | 2802.299 | K-73 |
| 74 | 3133681.5 | 1253698.23 | 2813.78 | K-74 |
| 75 | 3133719.55 | 1253742.93 | 2817.593 | K-75 |
| 76 | 3133795.64 | 1253697.24 | 2823.664 | K-76 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 77 | 3133824.51 | 1253722.85 | 2826.672 | K-77 |
| 78 | 3133904.77 | 1253685.91 | 2831.331 | K-78 |
| 79 | 3134005.97 | 1253705.78 | 2843.604 | K-79 |
| 80 | 3134137.93 | 1253768.19 | 2859.07 | K-80 |
| 81 | 3134237.43 | 1253829.83 | 2869.224 | K-81 |
| 82 | 3134265.19 | 1253774.18 | 2878.672 | K-82 |
| 83 | 3134253.34 | 1253752.07 | 2883.054 | K-83 |
| 84 | 3134403.84 | 1253758.93 | 2892.153 | K-84 |
| 85 | 3134491.87 | 1253857.71 | 2905.024 | K-85 |
| 86 | 3134571.77 | 1253859.68 | 2913.287 | K-86 |
| 87 | 3134674.58 | 1253880.62 | 2923.675 | K-87 |
| 88 | 3134741.9 | 1253910.53 | 2928.684 | K-88 |
| 89 | 3134814.55 | 1254004.12 | 2940.349 | K-89 |
| 90 | 3139846.98 | 1254075.4 | 2961.08 | K-90 |
| 91 | 3133905.69 | 1254113.95 | 2667.496 | K-91 |
| 92 | 3134933.2 | 1254159.32 | 2971.413 | K-92 |
| 93 | 3134986.03 | 1254354.06 | 2986.87 | K-93 |
| 94 | 3135373.28 | 1254688.2 | 3045.51 | K-94 |
| 95 | 3135416.8 | 1254676.77 | 3051.102 | K-95 |
| 96 | 3135438.53 | 1254676.06 | 3053.283 | K-96 |
| 97 | 3135600.13 | 1254673.74 | 3076.23 | K-97 |
| 98 | 3135695.6 | 1254723.33 | 3085.597 | K-98 |
| 99 | 3135818.56 | 1254795.9 | 3124.099 | K-99 |
| 100 | 3135843.58 | 1254775.25 | 3125.233 | K-100 |
| 101 | 3135831.71 | 1254672.22 | 3132.478 | K-101 |
| 102 | 3135873.53 | 1254686 | 3136.53 | K-102 |
| 103 | 3136820.55 | 1255037.03 | 3259.613 | K-103 |
| 104 | 3136856.77 | 1255031.77 | 3263.331 | K-104 |
| 105 | 3136683.27 | 1255060.62 | 3248.744 | K-105 |
| 106 | 3136952.49 | 1255021.28 | 3271.329 | K-106 |
| 107 | 3137173.81 | 1255055.71 | 3293.367 | K-107 |
| 108 | 3137357.93 | 1255159.9 | 3315.086 | K-108 |
| 109 | 3137514.33 | 1255143.19 | 3332.731 | K-109 |
| 110 | 3137598.96 | 1255164.29 | 3342.478 | K-110 |
| 111 | 3137995.92 | 1255083.04 | 3396.898 | K-111 |
| 112 | 3138197.64 | 1255088.16 | 3425.278 | K-112 |
| 113 | 3138830.82 | 1254893.42 | 3533.529 | K-113 |
| 114 | 3139289.28 | 1254423.3 | 3419.399 | K-114 |
| 115 | 3139189.07 | 1254475.55 | 3423.58 | K-115 |
| 116 | 3139325.13 | 1254433.47 | 3419.182 | K-116 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 117 | 3139543.28 | 1254410.37 | 3407.271 | K-117 |
| 118 | 3139635.21 | 1254489.77 | 3395.383 | K-118 |
| 119 | 3139863.58 | 1254612.97 | 3395.21 | K-119 |
| 120 | 3140008.74 | 1254673.5 | 3387.218 | K-120 |
| 121 | 3140288.08 | 1254852.07 | 3354.92 | K-121 |
| 122 | 3140404.9 | 1254938.15 | 3337.161 | K-122 |
| 123 | 3140557.32 | 1254886.55 | 3305.524 | K-123 |
| 124 | 3141019.78 | 1254974.35 | 3276.588 | K-124 |
| 125 | 3140332.2 | 1254967.13 | 3245.479 | K-125 |
| 126 | 3141566.33 | 1254925.49 | 3223.961 | K-126 |
| 127 | 3141687.07 | 1254802.02 | 3226.042 | K-127 |
| 128 | 3142038.07 | 1254951.2 | 3134.294 | K-128 |
| 129 | 3142144.01 | 1255011.46 | 3119.774 | K-129 |
| 130 | 3142254.35 | 1255066.98 | 3107.184 | K-130 |
| 131 | 3142349.67 | 1255106.55 | 3095.261 | K-131 |
| 132 | 3142383.81 | 1255107.36 | 3091.102 | K-132 |
| 133 | 3142385.55 | 1255156.86 | 3084.977 | K-133 |
| 134 | 3142432.07 | 1255238.59 | 3081.315 | K-134 |
| 135 | 3142472.32 | 1255242.21 | 3081.606 | K-135 |
| 136 | 3142491.63 | 1255256.91 | 3079.02 | K-136 |
| 137 | 3142502.55 | 1255290.71 | 3075.469 | K-137 |
| 138 | 3142595.33 | 1255327.87 | 3066.318 | K-138 |
| 139 | 3142649.88 | 1255333.23 | 3067.426 | K-139 |
| 140 | 3142658.55 | 1255353.22 | 3065.424 | K-140 |
| 141 | 3142648.2 | 1255404.46 | 3061.93 | K-141 |
| 142 | 3142670.52 | 1255463.04 | 3056.312 | K-142 |
| 143 | 3142707.76 | 1255531.39 | 3050.723 | K-143 |
| 144 | 3142784.69 | 1255542.32 | 3043.751 | K-144 |
| 145 | 3142753.34 | 1255581.05 | 3036.372 | K-145 |
| 146 | 3142673.31 | 1255628.7 | 3032.661 | K-146 |
| 147 | 3142656.06 | 1255728.5 | 3021.974 | K-147 |
| 148 | 3142608.32 | 1255826.19 | 3010.901 | K-148 |
| 149 | 3142712.18 | 1255743.11 | 2992.542 | K-149 |
| 150 | 3142735.33 | 1255713.51 | 2984.67 | K-150 |
| 151 | 3142731.41 | 1255762.78 | 2978.715 | K-151 |
| 152 | 3142711.28 | 1255849.13 | 2961.894 | K-152 |
| 153 | 3142831.48 | 1255899.14 | 2909.777 | K-153 |
| 154 | 3142904.55 | 1255928.74 | 2897.443 | K-154 |
| 155 | 3142957.33 | 1255925.98 | 2888.401 | K-155 |
| 156 | 3143059.29 | 1255942.82 | 2870.451 | K-156 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 157 | 3143144.31 | 1255945.25 | 2856.758 | K-157 |
| 158 | 3143040.43 | 1255893.08 | 2843.652 | K-158 |
| 159 | 3143020.83 | 1255775.79 | 2828.422 | K-159 |
| 160 | 3143173.82 | 1255868.8 | 2794.819 | K-160 |
| 161 | 3143276.78 | 1255867.47 | 2776.717 | K-161 |
| 162 | 3143322.01 | 1256023.43 | 2757.461 | K-162 |
| 163 | 3143345.31 | 1255961.48 | 2737.264 | K-163 |
| 164 | 3143401.93 | 1256062.07 | 2732.036 | K-164 |
| 165 | 3143458.76 | 1256143.93 | 2720.808 | K-165 |
| 166 | 3143504.19 | 1256273.81 | 2708.644 | K-166 |
| 167 | 3143549.99 | 1256337.75 | 2703.278 | K-167 |
| 168 | 3143576.02 | 1256333.53 | 2688.13 | K-168 |
| 169 | 3143558.54 | 1256266.88 | 2680.421 | K-169 |
| 170 | 3143571.8 | 1256205.96 | 2669.712 | K-170 |
| 171 | 3143647.78 | 1256322.87 | 2650.707 | K-171 |
| 172 | 3143681.02 | 1256428.03 | 2640.493 | K-172 |
| 173 | 3143728.44 | 1256495.59 | 2632.026 | K-173 |
| 174 | 3143742.96 | 1256503.5 | 2630.069 | M-15 |
| 175 | 3143831.17 | 1256163.25 | 2609.871 | M-14 |
| 176 | 3143864.08 | 1256321.46 | 2595.054 | M-13 |
| 177 | 3143963.78 | 1256160.34 | 2559.62 | M-12 |
| 178 | 3144012.05 | 1256127.76 | 2551.943 | M-11 |
| 179 | 3143997.82 | 1256177.48 | 2542.752 | M-10 |
| 180 | 3143952.67 | 1256434.17 | 2516.104 | M-9 |
| 181 | 3143951.56 | 1256533.15 | 2503.793 | M-8 |
| 182 | 3144020.3 | 1256435.96 | 2486.325 | M-7 |
| 183 | 3144089.75 | 1256335.03 | 2472.57 | M-6 |
| 184 | 3144112.51 | 1256365.59 | 2466.968 | M-5 |
| 185 | 3144097.9 | 1256419.16 | 2464.251 | M-4 |
| 186 | 3144051.26 | 1256504.91 | 2450.159 | M-3 |
| 187 | 3144030.93 | 1256561.89 | 2444.033 | M-2 |
| 188 | 3143996.34 | 1256712.04 | 2431.284 | M-1 |
| 189 | 3144133.65 | 1256507.98 | 2407.201 | K-174 |
| 190 | 3144247.84 | 1256414.25 | 2396.428 | K-175 |
| 191 | 3144388.99 | 1256422.14 | 2383.492 | K-176 |
| 192 | 3144575.22 | 1256346.53 | 2364.14 | K-177 |
| 193 | 3144732.72 | 1256314.3 | 2350.591 | K-178 |
| 194 | 3144950.69 | 1256536.49 | 2326.612 | K-179 |
| 195 | 3145075.78 | 1256472.86 | 2306.549 | K-180 |
| 196 | 3145135.18 | 1256603 | 2296.836 | K-181 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 197 | 3145246.88 | 1256684.17 | 2292.614 | K-182 |
| 198 | 3145166.02 | 1256634.99 | 2289.555 | K-183 |
| 199 | 3145814.17 | 1256379.23 | 2275.893 | K-184 |
| 200 | 3146037.54 | 1256299.97 | 2272.193 | K-185 |
| 201 | 3146667.13 | 1256059.18 | 2260.476 | K-186 |
| 202 | 3146814.99 | 1256012.32 | 2258.278 | K-187 |
| 203 | 3146944.94 | 1255954.14 | 2256.791 | K-188 |
| 204 | 3147595.18 | 1255710.8 | 2252.616 | K-189 |
| 205 | 3147644.89 | 1255700.55 | 2257.785 | K-190 |
| 206 | 3147866.31 | 1255625.66 | 2269.467 | K-191 |
| 207 | 3148193.08 | 1255535.96 | 2267.826 | K-192 |
| 208 | 3148403.63 | 1255536.05 | 2276.98 | K-193 |
| 209 | 3148501.44 | 1255585.94 | 2279.347 | K-194 |
| 210 | 3148603.11 | 1255597.33 | 2270.45 | K-195 |
| 211 | 3148660.05 | 1255583.32 | 2263.974 | K-196 |
| 212 | 3148756.23 | 1255694.95 | 2257.518 | K-197 |
| 213 | 3148883.68 | 1255939.7 | 2246.817 | K-198 |
| 214 | 3148940.81 | 1256195.28 | 2234.595 | K-199 |
| 215 | 3148946.04 | 1256242.82 | 2234.711 | K-200 |
| 216 | 3149299.6 | 1256219.7 | 2238.759 | K-201 |
| 217 | 3149743.69 | 1256441.16 | 2253.438 | K-202 |
| 218 | 3149854.24 | 1256456.33 | 2257.321 | K-203 |
| 219 | 3150033.11 | 1256471.62 | 2259.719 | K-204 |
| 220 | 3150152.03 | 1256518.91 | 2262.221 | K-205 |
| 221 | 3150224.96 | 1256596.89 | 2265.027 | K-206 |
| 222 | 3150264.68 | 1256664.58 | 2261.449 | K-207 |
| 223 | 3150293.9 | 1256617.07 | 2250.578 | K-208 |
| 224 | 3150336.42 | 1256567.32 | 2244.403 | K-209 |
| 225 | 3150375.03 | 1256584.95 | 2234.364 | K-210 |
| 226 | 3150506.77 | 1256660.14 | 2222.473 | K-211 |
| 227 | 3151365.58 | 1256964.84 | 2209.3 | K-212 |
| 228 | 3151409.96 | 1257027.99 | 2218.192 | K-213 |
| 229 | 3151522.72 | 1257157.23 | 2225.32 | K-214 |
| 230 | 3151657.89 | 1257326.53 | 2210.433 | K-215 |
| 231 | 3151640.56 | 1257504.14 | 2215.597 | K-216 |
| 232 | 3152493.15 | 1257894.73 | 2169.128 | K-217 |
| 233 | 3152899.33 | 1258125.24 | 2152.307 | K-218 |
| 234 | 3153038.09 | 1258256.29 | 2146.082 | K-219 |
| 235 | 3153108.47 | 1258484.89 | 2143.495 | K-220 |
| 236 | 3153302.13 | 1258920.46 | 2134.14 | K-221 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 237 | 3153431.06 | 1258960.5 | 2132.724 | K-222 |
| 238 | 3153920.62 | 1259642.33 | 2113.303 | K-223 |
| 239 | 3154736.82 | 1259738.58 | 2100.679 | K-224 |
| 240 | 3155189.37 | 1259891.49 | 2105.379 | K-225 |
| 241 | 3155611.87 | 1260223.12 | 2057.074 | K-226 |
| 242 | 3156075.08 | 1260459.34 | 2073.145 | K-227 |
| 243 | 3156539.09 | 1260022.02 | 2041.417 | K-228 |
| 244 | 3157058.24 | 1259822.05 | 2031.537 | K-229 |
| 245 | 3157434.28 | 1259618.77 | 2053.788 | K-230 |
| 246 | 3157514.91 | 1259617.84 | 2051.456 | K-231 |
| 247 | 3157710.01 | 1259582.39 | 2059.682 | K-232 |
| 248 | 3158060.41 | 1259547.83 | 2078.381 | K-233 |
| 249 | 3158188.98 | 1259468.81 | 2086.467 | K-234 |
| 250 | 3158247.11 | 1259475.17 | 2082.765 | K-235 |
| 251 | 3158364.55 | 1259445.72 | 2081.87 | K-236 |
| 252 | 3158655.3 | 1258668.34 | 2058.361 | K-237 |
| 253 | 3158790.46 | 1258388.02 | 2040.843 | K-238 |
| 254 | 3159069.54 | 1258188.16 | 2038.978 | K-239 |
| 255 | 3159143.49 | 1258198.87 | 2038.948 | K-240 |
| 256 | 3159251.96 | 1258219.01 | 2030.326 | K-241 |
| 257 | 3159250.45 | 1258041.35 | 2018.988 | K-242 |
| 258 | 3159153.76 | 1257881.41 | 2011.025 | K-243 |
| 259 | 3159155.5 | 1257678.45 | 2008.217 | K-244 |
| 260 | 3158931.55 | 1257750.62 | 1989.388 | K-245 |
| 261 | 3158894.61 | 1257710.65 | 1989.375 | K-246 |
| 262 | 3138814.08 | 1254497.91 | 3497.027 | K115/1 |
| 263 | 3138536.38 | 1254734.97 | 3519.43 | K115/2 |
| 264 | 3138730.54 | 1254802.77 | 3538.543 | K115/3 |
| 265 | 3128536.56 | 1252313.25 | 2064.866 | T.K1 |
| 266 | 3128446.51 | 1252614.72 | 2074.139 | T.K2 |
| 267 | 3128322.56 | 1252842.7 | 2080.876 | T.K3 |
| 268 | 3128094.82 | 1253034.24 | 2094.887 | T.K4 |
| 269 | 3128035.47 | 1253145.1 | 2099.831 | T.K5 |
| 270 | 3127988.02 | 1253366.1 | 2105.562 | T.K6 |
| 271 | 3127989.41 | 1253413.09 | 2105.612 | T.K7 |
| 272 | 3127959.58 | 1253518.95 | 2112.609 | T.K8 |
| 273 | 3127953.08 | 1253655.74 | 2121.274 | T.K9 |
| 274 | 3127978.76 | 1253749.05 | 2127.119 | T.K10 |
| 275 | 3127995.99 | 1253922.7 | 2141.095 | T.K11 |
| 276 | 3127964.59 | 1253448.33 | 2110.759 | T.K6/1 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 277 | 3127960.43 | 1253478.31 | 2112.245 | T.K6/2 |
| 278 | 3127941.95 | 1254127.86 | 2151.478 | T.K11/1 |
| 279 | 3127929.76 | 1254122.8 | 2151.403 | T.K11/2 |
| 280 | 3128188.39 | 1255163.49 | 2169.078 | T.K16/1 |
| 281 | 3127979.48 | 1254009.73 | 2145.1 | T.K12 |
| 282 | 3127913.65 | 1254125.38 | 2147.89 | T.K13 |
| 283 | 3127937.14 | 1254243.98 | 2155.222 | T.K14 |
| 284 | 3128095.67 | 1254707.74 | 2163.836 | T.K15 |
| 285 | 3128190.06 | 1255133.74 | 2164.119 | T.K16 |
| 286 | 3128180.21 | 1255180.34 | 2165.994 | T.K17 |
| 287 | 3128047.35 | 1255718.85 | 2194.925 | T.K18 |
| 288 | 3127889.11 | 1255968.87 | 2217.333 | T.K18/1 |
| 289 | 3128025.16 | 1255768.37 | 2191.88 | T.K19 |
| 290 | 3127952.18 | 1255867.98 | 2200.701 | T.K20 |
| 291 | 3127742.49 | 1256120.68 | 2224.613 | T.K21 |
| 292 | 3127677.59 | 1256184.1 | 2229.075 | T.K22 |
| 293 | 3127501.55 | 1256284.68 | 2244.324 | T.K22/1 |
| 294 | 3127178 | 1256549.69 | 2263.398 | T.K22/2 |
| 295 | 3127520.25 | 1256275.24 | 2239.536 | T.K23 |
| 296 | 3127265.47 | 1256480.32 | 2255.954 | T.K24 |
| 297 | 3127446.29 | 1256325.52 | 2244.304 | T.K25 |
| 298 | 3127018.88 | 1256674.74 | 2261.469 | T.K26 |
| 299 | 3126929.54 | 1256812.39 | 2269.054 | T.K27 |
| 300 | 3126826.24 | 1257111.87 | 2277.605 | T.K28 |
| 301 | 3126905.28 | 1257284.12 | 2286.782 | T.K29 |
| 302 | 3126915.05 | 1257621.46 | 2279.245 | T.K30 |
| 303 | 3126787.76 | 1257751.83 | 2280.77 | T.K31 |
| 304 | 3126717.15 | 1257914.27 | 2281.845 | T.K32 |
| 305 | 3126390.52 | 1258249.16 | 2289.965 | T.K33 |
| 306 | 3126216.7 | 1258287.37 | 2293.98 | T.K34 |
| 307 | 3126108.59 | 1258316.85 | 2298.762 | T.K35 |
| 308 | 3125983.99 | 1258361.94 | 2297.704 | T.K36 |
| 309 | 3125925.52 | 1258362.78 | 2298.331 | T.K37 |
| 310 | 3125815.48 | 1258421.28 | 2298.017 | T.K38 |
| 311 | 3125687.74 | 1258530.85 | 2297.682 | T.K39 |
| 312 | 3125431.23 | 1258545.38 | 2294.953 | T.K40 |
| 313 | 3125287.52 | 1258568.44 | 2300.113 | T.K41 |
| 314 | 3125128.67 | 1258679.74 | 2307.363 | T.K42 |
| 315 | 3125058.57 | 1258698.27 | 2310.2 | T.K43 |
| 316 | 3124955.22 | 1258814.14 | 2313.884 | T.K44 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 317 | 3124924.86 | 1258957.05 | 2322.85 | T.K45 |
| 318 | 3124834.23 | 1259018.67 | 2324.761 | T.K46 |
| 319 | 3124815.91 | 1259045.3 | 2328.07 | T.K47 |
| 320 | 3124797.53 | 1259100.66 | 2329.783 | T.K48 |
| 321 | 3124753.58 | 1259192.31 | 2336.254 | T.K49 |
| 322 | 3124695.68 | 1259263.61 | 2339.952 | T.K50 |
| 323 | 3124636.47 | 1259371.38 | 2346.683 | T.K51 |
| 324 | 3124629.27 | 1259464.53 | 2351.235 | T.K52 |
| 325 | 3124520.47 | 1259558.36 | 2346.086 | T.K53 |
| 326 | 3124493.68 | 1259579.82 | 2347.348 | T.K54 |
| 327 | 3124369.75 | 1259728.02 | 2344.339 | T.K55 |
| 328 | 3124280.3 | 1260220.49 | 2351.028 | T.K56 |
| 329 | 3123687.88 | 1260772.59 | 2359.733 | T.K57 |
| 330 | 3123596.59 | 1260777.84 | 2359.793 | T.K58 |
| 331 | 3123502.1 | 1260866.5 | 2358.143 | T.K59 |
| 332 | 3123414.16 | 1260985.95 | 2354.06 | T.K60 |
| 333 | 3123213.17 | 1261159.45 | 2354.757 | T.K61 |
| 334 | 3123067.9 | 1261192.46 | 2357.389 | T.K62 |
| 335 | 3122872.39 | 1261257.39 | 2363.415 | T.K63 |
| 336 | 3122763.16 | 1261362.31 | 2368.584 | T.K64 |
| 337 | 3122659.99 | 1261407.78 | 2375.655 | T.K65 |
| 338 | 3122566.41 | 1261509.29 | 2382.097 | T.K66 |
| 339 | 3122510.71 | 1261587.25 | 2381.778 | T.K67 |
| 340 | 3122512.97 | 1261671.6 | 2382.062 | T.K68 |
| 341 | 3122349.07 | 1261861.04 | 2388.397 | T.K69 |
| 342 | 3122063.11 | 1262035.41 | 2385.192 | T.K70 |
| 343 | 3121545.05 | 1262205.14 | 2396.402 | T.K71 |
| 344 | 3121364.21 | 1262327.88 | 2403.044 | T.K72 |
| 345 | 3120878.05 | 1262786.77 | 2414.177 | T.K73 |
| 346 | 3120668.59 | 1262875.59 | 2428.391 | T.K74 |
| 347 | 3120550.9 | 1262991.63 | 2439.68 | T.K75 |
| 348 | 3120431.53 | 1263024.67 | 2437.253 | T.K76 |
| 349 | 3120403.18 | 1263072.03 | 2439.538 | T.K77 |
| 350 | 3120404.44 | 1263175.16 | 2444.68 | T.K78 |
| 351 | 3120430.99 | 1263341.2 | 2454.478 | T.K79 |
| 352 | 3120438.44 | 1263444.69 | 2456.095 | T.K80 |
| 353 | 3120396.78 | 1263575.09 | 2460.367 | T.K81 |
| 354 | 3120349.07 | 1263629.57 | 2465.421 | T.K82 |
| 355 | 3120315.68 | 1263645.23 | 2460.844 | T.K83 |
| 356 | 3120253.99 | 1263770.51 | 2467.038 | T.K84 |

| S.NO | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|------------|------------|-----------|-------------|
| 357 | 3120200.57 | 1263830.34 | 2477.964 | T.K85 |
| 358 | 3120093.7 | 1263941.23 | 2482.98 | T.K86 |
| 359 | 3120045.75 | 1263951.19 | 2483.96 | T.K87 |
| 360 | 3119975.54 | 1263975.57 | 2482.642 | T.K88 |
| 361 | 3119925.66 | 1264001.7 | 2477.71 | T.K89 |
| 362 | 3119839.55 | 1264106.57 | 2477.43 | T.K90 |
| 363 | 3119818.38 | 1264219.28 | 2477.026 | T.K91 |
| 364 | 3119843.48 | 1264276.49 | 2477.421 | T.K92 |
| 365 | 3119845.87 | 1264308.55 | 2481.399 | T.K93 |
| 366 | 3119817.36 | 1264394.29 | 2478.063 | T.K94 |
| 367 | 3119728.09 | 1264458.41 | 2485.511 | T.K95 |
| 368 | 3119664.1 | 1264533.81 | 2486.519 | T.K96 |
| 369 | 3119642.13 | 1264584.93 | 2487.545 | T.K97 |
| 370 | 3119620.12 | 1264641.77 | 2485.575 | T.K98 |
| 371 | 3119602 | 1264703.56 | 2484.524 | T.K99 |

2.18 District Torghar

2.18.1 TGH-1

Karrak Madakhel To Hasan Zai Road (TGH-1)

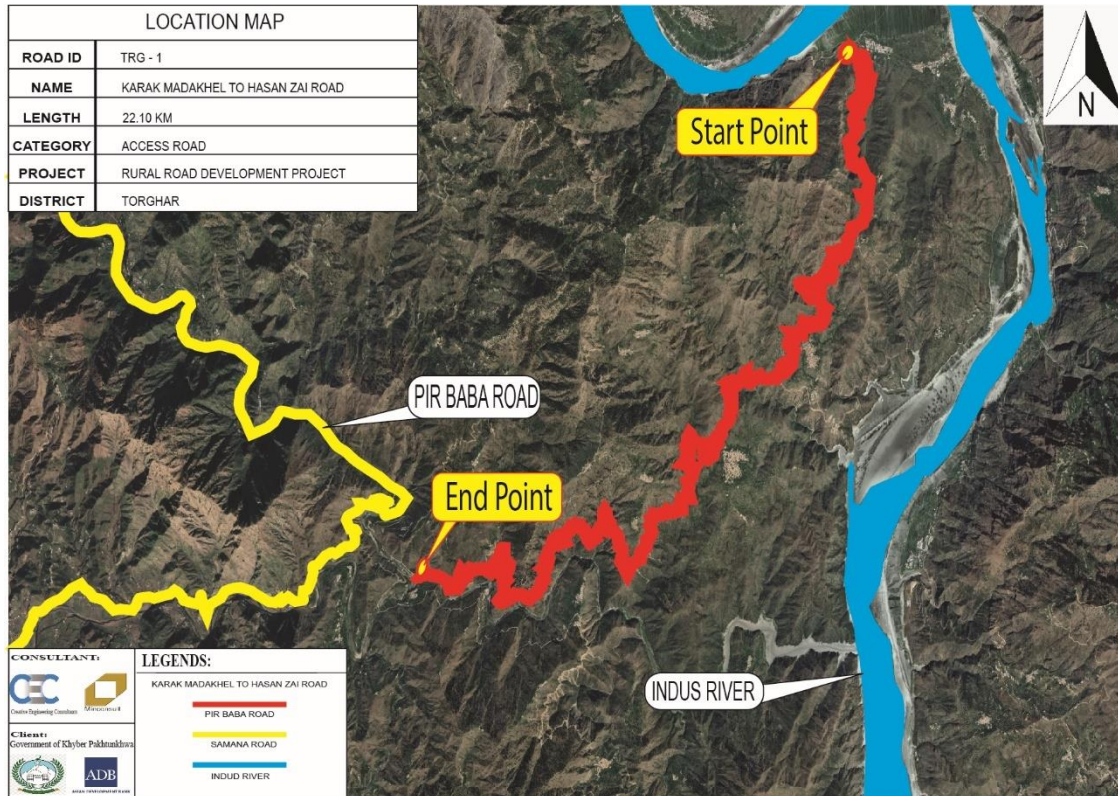


Figure 2.18.1 Location Map TGH-1

2.18.1.1 Traverse Points

The Traverse Point coordinates and description are as follows: -

Table 2.18.1 TGH-1 Traverse Points

| S.No | EASTING | NORTHING | ELEVATION | Description |
|-------------|----------------|-----------------|------------------|--------------------|
| 1 | 292930.687 | 3812774.736 | 610.682 | BS-1 |
| 2 | 292048.797 | 3813077.769 | 552.527 | TG-1 |
| 3 | 292031.417 | 3813083.094 | 553.547 | TG-1A |
| 4 | 292048.801 | 3813077.770 | 552.533 | TG-1c |
| 5 | 292133.058 | 3813085.108 | 546.832 | TG-2 |
| 6 | 292492.126 | 3812865.112 | 547.359 | TG-2A |
| 7 | 292615.189 | 3812910.225 | 564.367 | TG-3 |
| 8 | 292683.217 | 3813024.968 | 584.667 | TG-4 |
| 9 | 292636.554 | 3813039.209 | 574.809 | TG-4A |
| 10 | 292847.476 | 3813125.891 | 586.591 | TG-5 |
| 11 | 292817.474 | 3813126.043 | 585.576 | TG-6 |
| 12 | 292974.223 | 3813144.473 | 590.228 | TG-7 |
| 13 | 293103.956 | 3813089.384 | 594.361 | TG-8 |
| 14 | 293250.608 | 3812728.970 | 648.244 | TG-15 |
| 15 | 293336.787 | 3813395.980 | 588.699 | TG-11 |
| 16 | 293342.632 | 3813138.827 | 622.658 | TG-12 |
| 17 | 293309.331 | 3813065.078 | 628.282 | TG-13 |
| 18 | 293334.090 | 3812923.570 | 640.535 | TG-14 |
| 19 | 293438.032 | 3812761.041 | 645.272 | TG-16 |
| 20 | 293561.721 | 3812796.859 | 637.405 | TG-17 |
| 21 | 293680.190 | 3812773.547 | 645.131 | TG-18 |

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 22 | 293863.878 | 3812817.296 | 645.055 | TG-21 |
| 23 | 294050.019 | 3813160.123 | 668.030 | TG-22 |
| 24 | 294205.275 | 3813488.073 | 661.292 | TG.23 |
| 25 | 295332.416 | 3813049.315 | 803.008 | TG-24 |
| 26 | 295204.774 | 3813202.341 | 800.091 | TG-25 |
| 27 | 295192.403 | 3813380.385 | 802.257 | TG-26 |
| 28 | 295158.323 | 3813499.357 | 800.764 | TG-27 |
| 29 | 295034.990 | 3813577.154 | 787.908 | TG-28 |
| 30 | 295035.529 | 3813677.110 | 780.310 | TG-29 |
| 31 | 294818.170 | 3813498.281 | 742.586 | TG.30 |
| 32 | 294723.339 | 3813443.917 | 730.523 | TG.31 |
| 33 | 295523.714 | 3813243.555 | 812.249 | TG.32 |
| 34 | 295852.615 | 3813776.776 | 801.216 | TG.33 |
| 35 | 296604.827 | 3814456.334 | 834.939 | TG.34 |
| 36 | 297533.307 | 3815409.512 | 799.044 | TG-35 |
| 37 | 297486.709 | 3815444.837 | 793.895 | TG-36 |
| 38 | 296398.704 | 3814338.570 | 791.210 | TG-38 |
| 39 | 296359.432 | 3814558.953 | 834.915 | TG-39 |
| 40 | 298028.393 | 3815793.329 | 833.790 | TG-40 |
| 41 | 297747.828 | 3815475.986 | 798.289 | TG-41 |
| 42 | 298153.270 | 3815994.536 | 844.089 | TG-42 |
| 43 | 298467.966 | 3816123.849 | 811.446 | TG-43 |
| 44 | 298572.150 | 3816315.885 | 808.753 | TG-44 |

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 45 | 298470.237 | 3816502.474 | 814.909 | TG-45 |
| 46 | 298999.641 | 3817260.566 | 874.100 | TG-46 |
| 47 | 299143.936 | 3818612.987 | 755.296 | TG-47 |
| 48 | 299159.065 | 3817405.913 | 850.311 | TG-48 |
| 49 | 299179.130 | 3818690.588 | 745.438 | TG-48A |
| 50 | 299291.835 | 3819157.186 | 662.940 | TG-50 |
| 51 | 299249.457 | 3819554.095 | 626.623 | TG-51 |
| 52 | 299312.509 | 3819449.553 | 616.375 | TG-52 |
| 53 | 299447.693 | 3819358.581 | 565.897 | TG-52A |
| 54 | 298666.047 | 3819671.322 | 494.203 | TG-54 |
| 55 | 299228.722 | 3819689.229 | 518.343 | TG-56 |
| 56 | 294991.053 | 3813782.898 | 773.386 | S-1 |
| 57 | 294927.422 | 3813639.166 | 758.499 | S-2 |
| 58 | 293980.359 | 3812977.108 | 640.409 | S-3 |
| 59 | 293935.297 | 3812893.135 | 642.441 | S-4 |
| 60 | 294107.034 | 3813387.050 | 659.908 | S-5 |
| 61 | 294325.169 | 3813464.938 | 659.303 | S-6 |
| 62 | 294353.909 | 3813556.246 | 668.825 | S-7 |
| 63 | 294454.486 | 3813634.404 | 686.074 | S-8 |
| 64 | 294538.531 | 3813655.135 | 704.851 | S-9 |
| 65 | 294539.791 | 3813658.573 | 704.662 | S-10 |
| 66 | 294540.692 | 3813660.901 | 704.883 | S-11 |
| 67 | 294632.108 | 3813604.039 | 713.906 | S-10A |

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 68 | 294668.300 | 3813535.291 | 721.438 | S-11A |
| 69 | 294700.954 | 3813475.983 | 727.358 | S-12A |
| 70 | 295299.774 | 3813044.635 | 801.229 | S-13 |
| 71 | 295580.193 | 3813341.042 | 817.608 | S.14 |
| 72 | 295625.725 | 3813396.945 | 815.445 | S.15 |
| 73 | 295702.771 | 3813543.400 | 810.123 | S.16 |
| 74 | 295709.526 | 3813595.108 | 810.808 | S.17 |
| 75 | 295710.546 | 3813691.060 | 808.029 | S.18 |
| 76 | 295998.652 | 3813803.436 | 794.980 | S.20 |
| 77 | 296060.095 | 3813795.995 | 798.004 | S.21 |
| 78 | 296186.494 | 3813810.955 | 800.797 | S.22 |
| 79 | 296562.856 | 3814486.013 | 835.007 | S-23 |
| 80 | 296623.512 | 3814467.519 | 834.673 | S-24 |
| 81 | 296683.832 | 3814494.531 | 832.862 | S-25 |
| 82 | 296724.882 | 3814573.216 | 829.792 | S-26 |
| 83 | 296782.986 | 3814656.962 | 832.751 | S-27 |
| 84 | 296972.922 | 3814944.572 | 832.590 | S-28 |
| 85 | 296986.836 | 3814991.407 | 827.748 | S-29 |
| 86 | 297011.381 | 3815124.535 | 809.106 | S-30 |
| 87 | 296997.496 | 3815260.658 | 792.789 | S-31 |
| 88 | 297336.387 | 3815410.389 | 770.194 | S.32 |
| 89 | 297277.439 | 3815438.835 | 764.363 | S.33 |
| 90 | 296966.876 | 3815351.574 | 776.240 | S.26 |

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 91 | 297938.752 | 3815581.920 | 817.486 | S-34 |
| 92 | 297979.248 | 3815853.990 | 835.805 | S-35 |
| 93 | 298251.780 | 3816604.503 | 798.446 | S-36 |
| 94 | 298430.679 | 3816672.567 | 811.091 | S-37 |
| 95 | 298506.638 | 3816683.335 | 816.312 | S-38 |
| 96 | 298510.238 | 3816688.088 | 816.784 | S-39 |
| 97 | 298562.578 | 3816719.381 | 824.667 | S-39A |
| 98 | 298598.064 | 3816711.978 | 826.692 | S-40 |
| 99 | 298654.311 | 3816822.138 | 841.428 | S-41 |
| 100 | 298562.578 | 3816719.381 | 824.667 | S-340 |
| 101 | 298685.318 | 3816964.004 | 860.148 | S-42 |
| 102 | 298714.453 | 3817018.588 | 867.840 | S-43 |
| 103 | 298868.376 | 3817003.906 | 867.292 | S-44 |
| 104 | 298918.684 | 3817106.657 | 863.304 | S-45 |
| 105 | 299113.970 | 3817375.066 | 855.688 | S-47 |
| 106 | 298982.475 | 3817345.802 | 856.200 | S-46 |
| 107 | 299219.890 | 3817507.443 | 848.290 | S-49 |
| 108 | 299247.020 | 3817605.395 | 845.738 | S-50 |
| 109 | 299233.015 | 3817758.981 | 844.315 | S-51 |
| 110 | 299263.956 | 3817787.250 | 846.054 | S-52 |
| 111 | 299320.670 | 3817968.618 | 844.901 | S-53 |
| 112 | 299074.754 | 3818156.137 | 816.077 | S-57 |
| 113 | 299141.851 | 3818156.742 | 822.338 | S-56 |

| S.No | EASTING | NORTHING | ELEVATION | Description |
|------|------------|-------------|-----------|-------------|
| 114 | 299193.411 | 3818090.450 | 830.343 | S-55 |
| 115 | 299233.129 | 3818018.569 | 838.748 | S-54 |
| 116 | 299306.423 | 3817934.310 | 847.308 | S-58 |
| 117 | 299184.916 | 3818663.875 | 747.407 | S-59 |
| 118 | 299126.934 | 3818773.121 | 726.426 | S-60 |
| 119 | 299213.808 | 3818860.010 | 714.700 | S-61 |
| 120 | 299221.458 | 3818901.507 | 711.202 | S-62 |
| 121 | 299146.613 | 3818935.880 | 702.152 | S-63 |
| 122 | 299119.992 | 3818983.907 | 693.986 | S-64 |
| 123 | 299172.719 | 3819038.570 | 685.659 | S-65 |
| 124 | 299286.543 | 3819433.864 | 641.843 | S-66 |
| 125 | 299345.595 | 3819381.591 | 610.408 | S-67 |
| 126 | 299362.209 | 3819270.473 | 602.227 | S-68 |
| 127 | 299374.208 | 3819137.078 | 593.784 | S-69 |
| 128 | 299380.486 | 3819098.343 | 590.261 | S-70 |
| 129 | 299395.404 | 3819221.199 | 580.619 | S-71 |
| 130 | 298743.323 | 3819656.187 | 501.269 | S-74 |
| 131 | 298856.456 | 3819674.133 | 508.332 | TG-53 |
| 132 | 298961.371 | 3819677.011 | 519.716 | S-73 |
| 133 | 299033.864 | 3819707.237 | 520.649 | TG-55 |