

**APPENDIX E**  
**BRIDGE SITE SURVEY DATA 1 & 2**

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Dhaka

| Name of Upazila              |  | Keraniganj                   |                              |                              | Nawabganj                    |                              |                              |
|------------------------------|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Serial Number                |  | 1                            | 2                            | 3                            | 5                            | 10                           | 11                           |
| Bridge Code                  |  | 01-01-01                     | 01-01-02                     | 01-01-03                     | 01-02-01                     | 01-02-06                     | 01-02-07                     |
| Road ID                      |  | 328384033                    | 328383017                    | 328385010                    | 326823068                    | 326823032                    | 326824170/<br>326823118      |
| Road Class                   |  | R2                           | R1                           | R3                           | R1                           | R1                           | R1/R2                        |
| Chainage (km)                |  | 1+000                        | 1+500                        | 0+550                        | 4+200                        | 2+100                        | 0+000                        |
| Condition of Existing Bridge | Existing or not                          | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 |
|                              | Bridge Length (m)                        |                              |                              |                              |                              |                              |                              |
|                              | Bridge Width (m)                         |                              |                              |                              |                              |                              |                              |
|                              | Carriageway Width (m)                    |                              |                              |                              |                              |                              |                              |
|                              | Superstructure Type                      |                              |                              |                              |                              |                              |                              |
|                              | Abutment Type                            |                              |                              |                              |                              |                              |                              |
|                              | Pier Type                                |                              |                              |                              |                              |                              |                              |
|                              | Usage of Bridge                          |                              |                              |                              |                              |                              |                              |
|                              | Condition                                |                              |                              |                              |                              |                              |                              |
|                              | Present Navigation Clearance Height (m)  |                              |                              |                              |                              |                              |                              |
| River Condition              | Bank to Bank Width (m)                   | 25.00                        | 30.00                        | 30.00                        | 30.00                        | 80.00                        | 60.00                        |
|                              | Highest Flood Water Width (m)            | 35.00                        | 40.00                        | 35.00                        | 35.00                        | 85.00                        | 65.00                        |
|                              | Highest Flood Water Depth (m)            | 5.00                         | 7.50                         | 6.50                         | 4.00                         | 8.00                         | 8.00                         |
|                              | Normal Flood Water Width (m)             | 25.00                        | 38.00                        | 25.00                        | 30.00                        | 80.00                        | 60.00                        |
|                              | Normal Flood Water depth (m)             | 4.00                         | 6.00                         | 5.00                         | 3.00                         | 6.50                         | 6.50                         |
|                              | Dry Season Water Width (m)               | 2.00                         | 5.00                         | 3.00                         | 0.00                         | 60.00                        | 40.00                        |
|                              | Dry Season Water Depth (m)               | 0.25                         | 1.00                         | 1.00                         | 0.00                         | 1.00                         | 1.00                         |
|                              | Tidal Fluctuation (m)                    | 0.30                         | 0.30                         | 0.30                         | 0.30                         | 0.30                         | 0.30                         |
|                              | Water Velocity                           | Medium                       | Medium                       | Medium                       | Medium                       | Medium                       | Medium                       |
|                              | Angle of Bridge to Stream (deg)          | 90                           | 90                           | 90                           | 90                           | 90                           | 90                           |
|                              | Ferry Services                           | No                           | No                           | No                           | No                           | No                           | No                           |
|                              | Required Navigation Clearance Height (m) | 1.50                         | 1.00                         | 1.50                         | 1.00                         | 1.50                         | 1.50                         |
|                              | Type of River Traffic                    | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat |
|                              | Condition of Bank                        | Sound                        | Sound                        | Sound                        | Sound                        | Sound                        | Sound                        |
| Condition of Riverbed        | Sound                                    | Sound                        | Sound                        | Sound                        | Sound                        | Sound                        |                              |
| Approach Road                | Total Road Width (m)                     | 5.00                         | 4.30                         | 4.00                         | 2.87                         | 3.66                         | 3.66                         |
|                              | Carriageway Width (m)                    | 5.00                         | 3.66                         | 4.00                         | 2.87                         | 3.66                         | 3.66                         |
|                              | Embankment Height (m)                    | 2.00                         | 1.50                         | 2.00                         | 1.50                         | 3.25                         | 3.25                         |
|                              | Surface Type                             | Earthen                      | HBB/Earthen                  | Earthen                      | Earthen                      | Earthen                      | Earthen                      |
|                              | Surface Condition                        | Good                         | Good                         | Bad                          | Bad                          | Good                         | Good                         |
|                              | Alternative Route (km)                   | No                           | No                           | No                           | No                           | No                           | No                           |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**  
**District: Dhaka**

| Name of Upazilla      |   | Keraniganj   |   |   | Nawabganj  |   |                 |   |
|-----------------------|---|--|---|---|--|---|-----------------|---|
| Serial Number         |   | 1  | 2   | 3   | 5  | 10  | 11              |   |
| Influence Area        | Population (thousand)                                     | 15   | 25  | 20  | 15   | 20  | 18              |   |
|                       | Main Industry   | Agriculture, Textile   | Agriculture, Textile                                      | Agriculture, Textile, Food Industry                       | Agriculture  | Agriculture   | Agriculture     |   |
|                       | Major Agricultural Product                                | Rice, Jute   | Rice, Jute  | Rice, Jute  | Rice, Jute   | Rice, Jute  | Rice, Jute      |   |
|                       | Number of Public Facilities                               | School   | 9   | 15  | 5  | 3   | 4               | 4 |
|                       |   | Clinic   | 7   | 10  | 5  | 1   | 0               | 1 |
|                       |   | Bazar  | 4   | 4   | 3  | 2   | 2               | 2 |
|                       |   | Mosque   | 12  | 20  | 12   | 4   | 6               | 6 |
|                       |   | Gov't Office   | 2   | 4   | 2  | 1   | 4               | 2 |
| Others                |   | 5  | 5   | 4   | 5  | 4   | 5               |   |
| Total                 |   | 39   | 58  | 31  | 16   | 20  | 20              |   |
| Traffic Volume        | Passenger Car   | 10   | 15  | 5   | 5  | 5   | 5               |   |
|                       | Pickup/Truck  | 20   | 15  | 15  | 10   | 50  | 50              |   |
|                       | Bus   | 15   | 10  | 1   | 5  | 50  | 40              |   |
|                       | Motorcycle  | 100  | 30  | 20  | 5  | 5   | 10              |   |
|                       | Rickshaw  | 150  | 150   | 50  | 25   | 150   | 150             |   |
|                       | Auto Rickshaw   | 30   | 15  | 10  | 20   | 10  | 10              |   |
|                       | Bullock Cart  | 0  | 0   | 0   | 5  | 10  | 15              |   |
|                       | Pedestrian  | 2000   | 3000  | 3000  | 2000   | 3000  | 3000            |   |
| Bridge Site Condition | Landuse   | Farm, Residence  | Residence   | Farm  | Farm   | Farm, Residence   | Farm, Residence |   |
|                       | Topography  | Flat   | Flat  | Flat  | Flat   | Flat  | Flat            |   |
|                       | Necessity of Realignment of Approach Road                 | No   | No  | No  | No   | No  | No              |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)         | No   | No  | No  | No   | No  | No              |   |
|                       | Number of Houses to be Relocated                          | No   | No  | No  | No   | No  | No              |   |
|                       | Other Obstruction to be Relocated                         | No   | No  | No  | No   | No  | No              |   |
| Proposed Bridge       | Bridge Length (m)   | 25.00  | 30.00   | 30.00   | 30.00  | 80.00   | 80.00           |   |
|                       | Span Arrangement  | 1x25m  | 1x30m   | 1x30m   | 1x30m  | 2x15m+20m+2x15m   | 3x20m           |   |
|                       | Abutment Height (m)                                       | 4.50   | 4.00  | 4.00  | 4.00   | 5.00  | 5.00            |   |
|                       | Pier Height (m)   | -  | -   | -   | -  | 7.00  | 7.00            |   |
| Remarks               | Approach road of 50.00m length is required on both sides. | Approach road of 50.00m length is required on both sides. The river is curved (appx 100m radius) at the location of the proposed bridge. | Approach road of 50.00m length is required on both sides. | Approach road of 35.00m length is required on both sides. | Approach road of 10.00m length is required on both sides. The surrounding area is densely populated. | Approach road of 30.00m length is required only on one sides. |                 |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Dhaka

| Name of Upazila              |  | Uttara                            |                                   |                           | Dohar                     |                           |                           |
|------------------------------|--|-----------------------------------|-----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Serial Number                |  | 15                                | 16                                | 17                        | 18                        | 19                        | 23                        |
| Bridge Code                  |  | 01-03-01                          | 01-03-02                          | 01-04-01                  | 01-04-02                  | 01-04-03                  | 01-04-07                  |
| Road ID                      |  | Unidentified                      | Unidentified                      | 326184057                 | 326183034                 | 326183022                 | 326183030                 |
| Road Class                   |  | R1                                | R1                                | R2                        | R1                        | R1                        | R1                        |
| Chainage (km)                |  | 0+800                             | 0+300                             | 0+800                     | 0+250                     | 3+610                     | 0+230                     |
| Condition of Existing Bridge | Existing or not                          | Not Existing                      | Not Existing                      | Not Existing              | Not Existing              | Not Existing              | Existing                  |
|                              | Bridge Length (m)                        |                                   |                                   |                           |                           |                           | 38.00                     |
|                              | Bridge Width (m)                         |                                   |                                   |                           |                           |                           | 3.50                      |
|                              | Carriageway Width (m)                    |                                   |                                   |                           |                           |                           | 2.50                      |
|                              | Superstructure Type                      |                                   |                                   |                           |                           |                           | RC Slab                   |
|                              | Abutment Type                            |                                   |                                   |                           |                           |                           | RC reversed 'T' Type      |
|                              | Pier Type                                |                                   |                                   |                           |                           |                           | RC coloumn                |
|                              | Usage of Bridge                          |                                   |                                   |                           |                           |                           | Light vehicles only       |
|                              | Condition                                |                                   |                                   |                           |                           |                           | Weak                      |
|                              | Present Navigation Clearance Height (m)  |                                   |                                   |                           |                           |                           | 0.50                      |
| River Condition              | Bank to Bank Width (m)                   | 100.00                            | 60.00                             | 50.00                     | 75.00                     | 60.00                     | 40.00                     |
|                              | Highest Flood Water Width (m)            | 110.00                            | 65.00                             | 55.00                     | 80.00                     | 65.00                     | 45.00                     |
|                              | Highest Flood Water Depth (m)            | 6.00                              | 6.00                              | 8.00                      | 6.50                      | 8.00                      | 7.50                      |
|                              | Normal Flood Water Width (m)             | 108.00                            | 60.00                             | 50.00                     | 78.00                     | 62.00                     | 40.00                     |
|                              | Normal Flood Water depth (m)             | 4.00                              | 4.00                              | 6.00                      | 4.50                      | 6.50                      | 6.00                      |
|                              | Dry Season Water Width (m)               | 7.00                              | 20.00                             | 20.00                     | 25.00                     | 15.00                     | 10.00                     |
|                              | Dry Season Water Depth (m)               | 1.00                              | 0.25                              | 1.00                      | 0.50                      | 1.00                      | 1.00                      |
|                              | Tidal Fluctuation (m)                    | 0.30                              | 0.30                              | 0.30                      | 0.30                      | 0.50                      | 0.50                      |
|                              | Water Velocity                           | Medium                            | Medium                            | Medium                    | Medium                    | Medium                    | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                                | 90                                | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                                | No                                | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 2.00                              | 2.00                              | 1.50                      | 1.50                      | 1.50                      | 1.50                      |
|                              | Type of River Traffic                    | Launch, Engine Boat, Country Boat | Launch, Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                             | Sound                             | Sound                     | Sound                     | Sound                     | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                             | Sound                             | Sound                     | Sound                     | Sound                     |                           |
| Approach Road                | Total Road Width (m)                     | 4.00                              | 4.00                              | 5.20                      | 5.20                      | 4.87                      | 4.87                      |
|                              | Carriageway Width (m)                    | 3.66                              | 3.66                              | 3.66                      | 3.66                      | 3.66                      | 3.66                      |
|                              | Embankment Height (m)                    | 1.50                              | 1.50                              | 1.00                      | 1.50                      | 0.30                      | 0.50                      |
|                              | Surface Type                             | HBB/Earthen                       | HBB/Earthen                       | HBB/Earthen               | HBB/Earthen               | HBB                       | HBB                       |
|                              | Surface Condition                        | Bad                               | Bad                               | Good                      | Good                      | Good                      | Good                      |
|                              | Alternative Route (km)                   | No                                | No                                | No                        | No                        | No                        | No                        |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Dhaka**

| Name of Upazilla      |   | Uttara  |  | Dohar  |  |   |                      |   |
|-----------------------|---|---|--|--|--|---|----------------------|---|
| Serial Number         |   | 15  | 16   | 17   | 18   | 19  | 23                   |   |
| Influence Area        | Population (thousand)   | 20  | 10   | 15   | 25   | 12  | 15                   |   |
|                       | Main Industry   | Agriculture   | Agriculture  | Agriculture, Textile   | Agriculture, Textile                                     | Agriculture, Textile  | Agriculture, Textile |   |
|                       | Major Agricultural Product  | Rice, Wheat, Jute   | Rice, Wheat, Jute  | Rice, Jute   | Rice, Jute, Veg.   | Rice, Jute  | Rice, Jute, Veg.     |   |
|                       | Number of Public Facilities   | School  | 8  | 8  | 5  | 5   | 4                    | 4 |
|                       |   | Clinic  | 2  | 2  | 2  | 3   | 2                    | 2 |
|                       |   | Bazar   | 2  | 2  | 2  | 2   | 4                    | 3 |
|                       |   | Mosque  | 12   | 10   | 5  | 8   | 8                    | 5 |
|                       |   | Gov't Office  | 2  | 2  | 2  | 15  | 2                    | 2 |
|                       |   | Others  | 12   | 10   | 5  | 10  | 4                    | 5 |
| <b>Total</b>          |   | <b>36</b>   | <b>32</b>  | <b>21</b>  | <b>43</b>  | <b>24</b>   | <b>21</b>            |   |
| Traffic Volume        | Passenger Car   | 25  | 25   | 10   | 50   | 30  | 15                   |   |
|                       | Pickup/Truck  | 15  | 15   | 10   | 30   | 20  | 15                   |   |
|                       | Bus   | 10  | 10   | 10   | 30   | 50  | 25                   |   |
|                       | Motorcycle  | 20  | 20   | 20   | 100  | 25  | 25                   |   |
|                       | Rickshaw  | 200   | 180  | 150  | 250  | 200   | 200                  |   |
|                       | Auto-rickshaw   | 100   | 75   | 10   | 50   | 15  | 20                   |   |
|                       | Bullock Cart  | 0   | 0  | 5  | 5  | 2   | 2                    |   |
|                       | Pedestrian  | 2000  | 1200   | 1200   | 3000   | 2000  | 2000                 |   |
| Bridge Site Condition | Landuse   | Farm  | Farm   | Farm   | Farm   | Farm, Residence   | Farm                 |   |
|                       | Topography  | Flat  | Flat   | Flat   | Flat   | Flat  | Flat                 |   |
|                       | Necessity of Realignment of Approach Road   | No  | No   | No   | No   | No  | No                   |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)   | No  | No   | No   | No   | No  | No                   |   |
|                       | Number of Houses to be Relocated  | No  | No   | No   | No   | No  | No                   |   |
|                       | Other Obstruction to be Relocated   | No  | No   | No   | No   | No  | No                   |   |
| Proposed Bridge       | Bridge Length (m)   | 100.00  | 60.00  | 50.00  | 75.00  | 60.00   | 40.00                |   |
|                       | Span Arrangement  | 5x20m   | 3x20m  | 15m+20m+15m  | 3x25m  | 3x20m   | 10m+20m+10m          |   |
|                       | Abutment Height (m)   | 5.00  | 5.00   | 5.00   | 5.00   | 5.00  | 4.50                 |   |
|                       | Pier Height (m)   | 6.50  | 6.50   | 6.50   | 7.00   | 7.50  | 6.00                 |   |
| Remarks               | Both sides river bank submerged. Approach road of 300m length on one side and 200m length on other side are required. The submerged approach area on both sides are cultivated agricultural land. Avg. depth of water is 1.50m. | Both sides riverbank are submerged. Approach road of 300m on one side and 200m on another side are required. The submerged approach area is cultivated agricultural land. Avg. depth of water 1.5m. | Proposed span is now 50.00m, than previous 40.00m. Approach road is required on one side about 30.00m. | Proposed bridge span is now 75.00m, than previous 65.00. Approach road of 30.00m length is required on one side. | Approach road of 30.00m length is required on one sides. | Existing structure is weak and needs to be replaced. Approach road of 30m length is required on both sides. |                      |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Dhaka

| Name of Upazila              |  | Dohar                        | Savar                        | Dhamrai                      |                              |                              |                              |                              |                              |
|------------------------------|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Serial Number                |  | 24                           | 25                           | 26                           | 28                           | 30                           | 31                           | 32                           |                              |
| Bridge Code                  |  | 01-04-08                     | 01-05-01                     | 01-06-01                     | 01-06-03                     | 01-06-05                     | 01-06-N1                     | 01-06-N2                     |                              |
| Road ID                      |  | 326183021                    | 326723001                    | 326144023                    | 326142007                    | 326143021/<br>326143015      | 326143020                    | 326143055                    |                              |
| Road Class                   |  | R1                           | R1                           | R2                           | FRB                          | R1                           | R1                           | R1                           |                              |
| Chainage (km)                |  | 0+650                        | 6+600                        | 0+000                        | 1+660                        | 0+050                        | 2+600                        | 4+000                        |                              |
| Condition of Existing Bridge | Existing or not                          | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 | Not Existing                 |                              |
|                              | Bridge Length (m)                        |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Bridge Width (m)                         |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Carriageway Width (m)                    |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Superstructure Type                      |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Abutment Type                            |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Pier Type                                |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Usage of Bridge                          |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Condition                                |                              |                              |                              |                              |                              |                              |                              |                              |
|                              | Present Navigation Clearance Height (m)  |                              |                              |                              |                              |                              |                              |                              |                              |
| River Condition              | Bank to Bank Width (m)                   | 50.00                        | 30.00                        | 30.00                        | 35.00                        | 140.00                       | 50.00                        | 70.00                        |                              |
|                              | Highest Flood Water Width (m)            | 55.00                        | 35.00                        | 30.00                        | 35.00                        | 150.00                       | 55.00                        | 75.00                        |                              |
|                              | Highest Flood Water Depth (m)            | 5.50                         | 5.50                         | 5.50                         | 4.00                         | 9.00                         | 5.00                         | 5.50                         |                              |
|                              | Normal Flood Water Width (m)             | 50.00                        | 30.00                        | 28.00                        | 33.00                        | 140.00                       | 52.00                        | 73.00                        |                              |
|                              | Normal Flood Water depth (m)             | 4.00                         | 3.00                         | 5.00                         | 3.00                         | 7.00                         | 4.00                         | 4.50                         |                              |
|                              | Dry Season Water Width (m)               | 0.00                         | 0.00                         | 2.00                         | 0.00                         | 5.00                         | 0.00                         | 0.00                         |                              |
|                              | Dry Season Water Depth (m)               | 0.00                         | 0.00                         | 0.20                         | 0.00                         | 1.00                         | 0.00                         | 0.00                         |                              |
|                              | Tidal Fluctuation (m)                    | 0.50                         | No                           | No                           | No                           | No                           | No                           | No                           |                              |
|                              | Water Velocity                           | Medium                       | Slow                         | Medium                       | Slow                         | Medium                       | Medium                       | Medium                       |                              |
|                              | Angle of Bridge to Stream (deg)          | 90                           | 90                           | 90                           | 90                           | 90                           | 90                           | 90                           |                              |
|                              | Ferry Services                           | No                           | No                           | No                           | No                           | No                           | No                           | No                           |                              |
|                              | Required Navigation Clearance Height (m) | 1.50                         | 1.50                         | 1.00                         | 1.50                         | 1.50                         | 1.50                         | 1.50                         |                              |
|                              | Type of River Traffic                    | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat |
|                              | Condition of Bank                        | Sound                        | Sound                        | Sound                        | Sound                        | Eroded                       | Sound                        | Sound                        |                              |
| Condition of Riverbed        | Sound                                    | Sound                        | Sound                        | Sound                        | Sound                        | Sound                        | Sound                        |                              |                              |
| Approach Road                | Total Road Width (m)                     | 3.66                         | 3.66                         | 5.50                         | 6.50                         | 5.00                         | 4.90                         | 4.00                         |                              |
|                              | Carriageway Width (m)                    | 2.20                         | 3.66                         | 5.50                         | 4.90                         | 5.00                         | 3.66                         | 4.00                         |                              |
|                              | Embankment Height (m)                    | 1.00                         | 1.50                         | 3.00                         | 2.50                         | 2.00                         | 2.00                         | 1.00                         |                              |
|                              | Surface Type                             | HBB/Earthen                  | Earthen                      | Earthen                      | HBB                          | Earthen                      | HBB                          | Earthen                      |                              |
|                              | Surface Condition                        | Bad                          | Bad                          | Bad                          | Good                         | Bad                          | Good                         | Good                         |                              |
|                              | Alternative Route (km)                   | No                           | No                           | 0.50                         | 3.00                         | No                           | No                           | 4.00                         |                              |

### BRIDGE SITE SURVEY DATA- 2

#### Zone-1

#### District: Dhaka

| Name of Upazila       |  | Dohar   | Savar             | Dhamrai                 |  |   |  |  |   |
|-----------------------|--|---|-------------------|-------------------------|--|---|--|--|---|
| Serial Number         |  | 24  | 25                | 26                      | 28   | 30  | 31   | 32   |   |
| Influence Area        | Population (thousand)                                  | 20  | 20                | 10                      | 13   | 10  | 15   | 10   |   |
|                       | Main Industry  | Agriculture, Textile  | Agriculture       | Agriculture             | Agriculture  | Agriculture   | Agriculture  | Agriculture  |   |
|                       | Major Agricultural Product                             | Rice, Jute  | Rice, Wheat, Jute | Rice, Jute, Wheat, Veg. | Rice, Jute, Wheat, Veg.  | Rice, Jute, Wheat   | Rice, Wheat, Jute, Veg.  | Rice, Wheat, Jute, Veg.  |   |
|                       | Number of Public Facilities                            | School  | 7                 | 4                       | 1  | 9   | 5  | 11   | 8 |
|                       |  | Clinic  | 2                 | 1                       | 1  | 1   | 3  | 2  | 1 |
|                       |  | Bazar   | 3                 | 2                       | 1  | 3   | 2  | 4  | 3 |
|                       |  | Mosque  | 12                | 4                       | 2  | 8   | 6  | 15   | 7 |
|                       |  | Gov't Office  | 2                 | 2                       | 1  | 4   | 2  | 4  | 2 |
| Others                |  | 5   | 2                 | 4                       | 5  | 4   | 5  | 4  |   |
| Total                 | 31   | 15  | 10                | 28                      | 22   | 41  | 25   |  |   |
| Traffic Volume        | Passenger Car  | 50  | 50                | 10                      | 10   | 50  | 20   | 5  |   |
|                       | Pickup/Truck   | 25  | 10                | 10                      | 20   | 25  | 20   | 20   |   |
|                       | Bus  | 15  | 100               | 5                       | 10   | 100   | 10   | 10   |   |
|                       | Motorcycle   | 50  | 20                | 30                      | 25   | 50  | 10   | 20   |   |
|                       | Rickshaw   | 200   | 75                | 100                     | 250  | 250   | 200  | 150  |   |
|                       | Autorickshaw   | 50  | 10                | 30                      | 20   | 100   | 25   | 20   |   |
|                       | Bullock Cart   | 5   | 15                | 1                       | 5  | 0   | 5  | 2  |   |
|                       | Pedestrian   | 3000  | 1000              | 500                     | 700  | 1000  | 1000   | 500  |   |
| Bridge Site Condition | Landuse  | Residence   | Farm              | Farm                    | Farm   | Farm  | Farm   | Farm   |   |
|                       | Topography   | Flat  | Flat              | Flat                    | Flat   | Flat  | Flat   | Flat   |   |
|                       | Necessity of Realignment of Approach Road              | No  | No                | No                      | No   | No  | No   | No   |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)      | No  | No                | No                      | No   | No  | No   | No   |   |
|                       | Number of Houses to be Relocated                       | No  | No                | No                      | No   | No  | No   | No   |   |
|                       | Other Obstruction to be Relocated                      | No  | No                | No                      | No   | No  | No   | No   |   |
| Proposed Bridge       | Bridge Length (m)                                      | 50.00   | 30.00             | 30.00                   | 35.00  | 140.00  | 50.00  | 70.00  |   |
|                       | Span Arrangement                                       | 15m+20m+15m   | 1x30m             | 1x30m                   | 10m+15m+10m  | 20m+4x25m+20m   | 15m+20m+15m  | 2x25m+20m  |   |
|                       | Abutment Height (m)                                    | 3.50  | 4.00              | 4.50                    | 3.50   | 5.00  | 4.50   | 5.00   |   |
|                       | Pier Height (m)  | 6.50  | -                 | -                       | 5.50   | 10.50   | 7.00   | 7.00   |   |
| Remarks               | Approach road of 50m length is required on both sides. | Proposed site completely submerged. Water width approx 300m at present condition. Bridge length of 30m as earlier proposed by LGED may be considered. |                   |                         | 30.00m & 25.00m approach is needed. Surrounding area is cultivate agricultural land. | River Banks on both sides are unstable. Proposed bridge length is 140.00m span instead of previous 105.00m. | 30.00m approach road is needed on both sides. Surrounding area is cultivated agricultural land. No land acquisition is required. | 50.00 m approach road is needed on both sides. Surrounding area is cultivate agricultural land. No land acquisition is required. |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1

District : Narayanganj

| Name of Upazila              |  | Sadar                        |              |              |                              |                              |
|------------------------------|--|------------------------------|--------------|--------------|------------------------------|------------------------------|
| Serial Number                |  | 1                            | 2            | 3            | 4                            | 5                            |
| Bridge Code                  |  | 03-01-01                     | 03-01-N1     | 03-01-N2     | 03-01-N3                     | 03-01-N4                     |
| Road ID                      |  | 367582007                    | 367583038    | 367583092    | 367583009                    | 367584049                    |
| Road Class                   |  | FRB                          | R1           | R1           | R1                           | R2                           |
| Chainage (km)                |  | 2+250                        | 0+000        | 1+100        | 0+800                        | 0+000                        |
| Condition of Existing Bridge | Existing or not                          | Not Existing                 | Not Existing | Not Existing | Not Existing                 | Not Existing                 |
|                              | Bridge Length (m)                        |                              |              |              |                              |                              |
|                              | Bridge Width (m)                         |                              |              |              |                              |                              |
|                              | Carriageway Width (m)                    |                              |              |              |                              |                              |
|                              | Superstructure Type                      |                              |              |              |                              |                              |
|                              | Abutment Type                            |                              |              |              |                              |                              |
|                              | Pier Type                                |                              |              |              |                              |                              |
|                              | Usage of Bridge                          |                              |              |              |                              |                              |
|                              | Condition                                |                              |              |              |                              |                              |
|                              | Present Navigation Clearance Height (m)  |                              |              |              |                              |                              |
| River Condition              | Bank to Bank Width (m)                   | 115.00                       | 40.00        | 30.00        | 30.00                        | 30.00                        |
|                              | Highest Flood Water Width (m)            | 120.00                       | 45.00        | 35.00        | 32.00                        | 38.00                        |
|                              | Highest Flood Water Depth (m)            | 7.00                         | 5.00         | 3.50         | 6.00                         | 5.00                         |
|                              | Normal Flood Water Width (m)             | 115.00                       | 40.00        | 30.00        | 30.00                        | 30.00                        |
|                              | Normal Flood Water depth (m)             | 6.00                         | 4.00         | 2.50         | 5.00                         | 4.00                         |
|                              | Dry Season Water Width (m)               | 40.00                        | 10.00        | 5.00         | 10.00                        | 10.00                        |
|                              | Dry Season Water Depth (m)               | 1.00                         | 1.00         | 1.00         | 0.75                         | 1.00                         |
|                              | Tidal Fluctuation (m)                    | 0.30                         | No           | No           | 0.30                         | 0.30                         |
|                              | Water Velocity                           | Slow                         | Slow         | Slow         | Slow                         | Slow                         |
|                              | Angle of Bridge to Stream (deg)          | 90                           | 90           | 90           | 90                           | 90                           |
|                              | Ferry Services                           | No                           | No           | No           | No                           | No                           |
|                              | Required Navigation Clearance Height (m) | 1.00                         | 1.00         | 1.00         | 1.00                         | 1.00                         |
|                              | Type of River Traffic                    | Engine Boat,<br>Country Boat | Country Boat | Country Boat | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat |
|                              | Condition of Bank                        | Sound                        | Sound        | Sound        | Sound                        | Sound                        |
| Condition of Riverbed        | Sound                                    | Sound                        | Sound        | Sound        | Sound                        |                              |
| Approach Road                | Total Road Width (m)                     | 5.20                         | 7.30         | 2.50         | 5.20                         | 5.20                         |
|                              | Carriageway Width (m)                    | 5.20                         | 6.50         | 2.50         | 5.20                         | 5.20                         |
|                              | Embankment Height (m)                    | 2.00                         | 3.00         | 1.00         | 3.00                         | 2.50                         |
|                              | Surface Type                             | Eathen                       | BC/Eathen    | Eathen       | Eathen                       | Eathen                       |
|                              | Surface Condition                        | Bad                          | Good         | Bad          | Bad                          | Bad                          |
|                              | Alternative Route (km)                   | No                           | 0.50         | No           | 0.50                         | 0.50                         |



### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Narayanganj**

| Name of Upazila       |   | Sadar            |   |  |   |                                  |   |
|-----------------------|---|------------------|---|--|---|----------------------------------|---|
| Serial Number         |   | 1                | 2   | 3  | 4   | 5                                |   |
| Influence Area        | Population (thousand)   | 15               | 17  | 12   | 20  | 20                               |   |
|                       | Main Industry   | Agriculture      | Agriculture, Textile, Paper Mill, Milk Mill   | Agriculture, Textile, Jute, Mill, Oil Mill | Agriculture, Textile, Dying Mill  | Agriculture, Textile, Dying Mill |   |
|                       | Major Agricultural Product  | Rice, Jute, Veg. | Rice, Veg.  | Rice, Veg.                                 | Rice, Jute, Veg.  | Rice, Jute, Veg.                 |   |
|                       | Number of Public Facilities   | School           | 4   | 6  | 5   | 10                               | 7 |
|                       |   | Clinic           | 2   | 4  | 2   | 1                                | 2 |
|                       |   | Bazar            | 4   | 4  | 3   | 4                                | 5 |
|                       |   | Mosque           | 8   | 8  | 8   | 7                                | 5 |
|                       |   | Gov't Office     | 2   | 8  | 4   | 2                                | 5 |
| Others                |   | 6                | 12  | 6  | 5   | 10                               |   |
| <b>Total</b>          |   | <b>26</b>        | <b>42</b>   | <b>28</b>                                  | <b>29</b>   | <b>34</b>                        |   |
| Traffic Volume        | Passenger Car   | 5                | 100   | 5  | 8   | 10                               |   |
|                       | Pickup/Truck  | 20               | 15  | 25   | 20  | 50                               |   |
|                       | Bus   | 20               | 10  | 1  | 5   | 20                               |   |
|                       | Motorcycle  | 25               | 30  | 5  | 20  | 25                               |   |
|                       | Rickshaw  | 150              | 150   | 50   | 150   | 200                              |   |
|                       | Autorickshaw  | 50               | 30  | 10   | 50  | 20                               |   |
|                       | Bullock Cart  | 0                | 0   | 0  | 0   | 0                                |   |
|                       | Pedestrian  | 2000             | 2000  | 1000                                       | 1000  | 2500                             |   |
| Bridge Site Condition | Landuse   | Farm             | Residence   | Residence                                  | Farm  | Residence                        |   |
|                       | Topography  | Flat             | Flat  | Flat                                       | Flat  | Flat                             |   |
|                       | Necessity of Realignment of Approach Road                               | No               | No  | No   | No  | No                               |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)                       | No               | No  | No   | No  | No                               |   |
|                       | Number of Houses to be Relocated  | No               | No  | No   | No  | No                               |   |
|                       | Other Obstruction to be Relocated                                       | 2 sheds          | No  | No   | No  | 2 boundary walls                 |   |
| Proposed Bridge       | Bridge Length (m)   | 115              | 40  | 30   | 30  | 30                               |   |
|                       | Span Arrangement  | 20m+3x25m+20m    | 10m+20m+10m   | 1x30m                                      | 1x30m   | 1x30m                            |   |
|                       | Abutment Height (m)   | 4.00             | 4.00  | 3.50                                       | 4.00  | 4.00                             |   |
|                       | Pier Height (m)   | 8.50             | 7.00  | -  | -   | -                                |   |
| Remarks               | Two temporary C.I. Sheet shed adjacent to riverbank need to be shifted. |                  | The proposed bridge is under process for tendering under special fund according to Honorable Prime Minister Commitment. |  | On right side one dying factory wall & another boundary wall should be shifted by 3.0' & 5.0' respectively. Owner of the factory agreed to do that. |                                  |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Narayanganj

| Name of Upazilla             |  | Araihazar                 |                           |                           |                                  |                           |
|------------------------------|--|---------------------------|---------------------------|---------------------------|----------------------------------|---------------------------|
| Serial Number                | 6  | 7                         | 9                         | 10                        | 11                               |                           |
| Bridge Code                  | 03-02-01                                 | 03-02-02                  | 03-02-04                  | 03-02-05                  | 03-02-06                         |                           |
| Road ID                      | 367023044                                | 367023006                 | 367022004                 | 367022004                 | 367023045                        |                           |
| Road Class                   | R1                                       | R1                        | FRB                       | FRB                       | R1                               |                           |
| Chainage (km)                | 1+800                                    | 0+000                     | 1+020                     | 10+240                    | 0+200                            |                           |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Not Existing              | Not Existing              | Not Existing                     |                           |
|                              | Bridge Length (m)                        |                           |                           |                           |                                  |                           |
|                              | Bridge Width (m)                         |                           |                           |                           |                                  |                           |
|                              | Carriageway Width (m)                    |                           |                           |                           |                                  |                           |
|                              | Superstructure Type                      |                           |                           |                           |                                  |                           |
|                              | Abutment Type                            |                           |                           |                           |                                  |                           |
|                              | Pier Type                                |                           |                           |                           |                                  |                           |
|                              | Usage of Bridge                          |                           |                           |                           |                                  |                           |
|                              | Condition                                |                           |                           |                           |                                  |                           |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           |                                  |                           |
| River Condition              | Bank to Bank Width (m)                   | 90.00                     | 60.00                     | 90.00                     | 142.00                           | 78.00                     |
|                              | Highest Flood Water Width (m)            | 98.00                     | 70.00                     | 100.00                    | 145.00                           | 90.00                     |
|                              | Highest Flood Water Depth (m)            | 6.50                      | 5.50                      | 6.00                      | 6.50                             | 6.00                      |
|                              | Normal Flood Water Width (m)             | 90.00                     | 58.00                     | 90.00                     | 140.00                           | 80.00                     |
|                              | Normal Flood Water depth (m)             | 5.00                      | 4.50                      | 5.00                      | 5.50                             | 5.00                      |
|                              | Dry Season Water Width (m)               | 15.00                     | 10.00                     | 20.00                     | 70.00                            | 20.00                     |
|                              | Dry Season Water Depth (m)               | 0.75                      | 0.20                      | 1.00                      | 1.00                             | 1.00                      |
|                              | Tidal Fluctuation (m)                    | 0.30                      | No                        | 0.30                      | 0.30                             | 0.20                      |
|                              | Water Velocity                           | Medium                    | Medium                    | Medium                    | Medium                           | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                               | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                               | No                        |
|                              | Required Navigation Clearance Height (m) | 1.50                      | 1.50                      | 1.50                      | 2.50                             | 1.50                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat, Cargo | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                     | Sound                     | Sound                     | Sound                            | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound                     | Sound                     | Scoured                          |                           |
| Approach Road                | Total Road Width (m)                     | 5.50                      | 5.00                      | 7.50                      | 4.80                             | 4.25                      |
|                              | Carriageway Width (m)                    | 3.68                      | 5.00                      | 7.50                      | 3.66                             | 3.66                      |
|                              | Embankment Height (m)                    | 2.00                      | 1.00                      | 2.00                      | 1.00                             | 0.50                      |
|                              | Surface Type                             | BC                        | Earthen                   | Earthen                   | BC/HBB                           | BC/Earthen                |
|                              | Surface Condition                        | Good                      | Bad                       | Bad                       | Good                             | Bad                       |
|                              | Alternative Route (km)                   | 3.50                      | No                        | No                        | 3.00                             | No                        |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Narayanganj**

| Name of Upazilla      |   | Araihazar                                   |                         |  |   |                         |   |
|-----------------------|---|---|-------------------------|--|---|-------------------------|---|
| Serial Number         |   | 8   | 7                       | 9  | 10  | 11                      |   |
| Influence Area        | Population (thousand)                             | 15  | 11                      | 15   | 20  | 12                      |   |
|                       | Main Industry                                     | Agriculture, Fishery, Textile, Poultry Farm | Agriculture, Textile    | Agriculture, Textile                               | Agriculture, Textile  | Agriculture, Textile    |   |
|                       | Major Agricultural Product                        | Rice, Jute, Wheat, Veg.                     | Rice, Jute, Wheat, Veg. | Rice, Jute, Wheat, Veg.                            | Rice, Jute, Wheat, Veg.   | Rice, Jute, Wheat, Veg. |   |
|                       | Number of Public Facilities                       | School                                      | 8                       | 7  | 3   | 10                      | 5 |
|                       |   | Clinic                                      | 3                       | 5  | 1   | 3                       | 2 |
|                       |   | Bazar                                       | 2                       | 2  | 2   | 4                       | 4 |
|                       |   | Mosque                                      | 8                       | 5  | 6   | 15                      | 7 |
|                       |   | Gov't Office                                | 5                       | 2  | 2   | 1                       | 1 |
|                       |   | Others                                      | 10                      | 5  | 6   | 4                       | 4 |
| Total                 |   | 34  | 26                      | 20   | 37  | 23                      |   |
| Traffic Volume        | Passenger Car                                     | 15  | 10                      | 15   | 20  | 20                      |   |
|                       | Pickup/Truck                                      | 20  | 20                      | 20   | 25  | 20                      |   |
|                       | Bus   | 10  | 4                       | 10   | 5   | 8                       |   |
|                       | Motorcycle  | 100   | 50                      | 50   | 100   | 50                      |   |
|                       | Rickshaw  | 200   | 70                      | 100  | 250   | 100                     |   |
|                       | Autorickshaw                                      | 50  | 20                      | 50   | 40  | 30                      |   |
|                       | Bullock Cart                                      | 0   | 0                       | 0  | 0   | 0                       |   |
|                       | Pedestrian  | 1200  | 1200                    | 1000   | 2000  | 1000                    |   |
| Bridge Site Condition | Landuse   | Farm  | Farm                    | Farm   | Farm  | Farm                    |   |
|                       | Topography  | Flat  | Flat                    | Flat   | Flat  | Flat                    |   |
|                       | Necessity of Realignment of Approach Road         | No  | No                      | No   | No  | No                      |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No  | No                      | No   | No  | No                      |   |
|                       | Number of Houses to be Relocated                  | No  | No                      | No   | No  | No                      |   |
|                       | Other Obstruction to be Relocated                 | No  | No                      | No   | No  | No                      |   |
| Proposed Bridge       | Bridge Length (m)                                 | 90  | 60                      | 90   | 140   | 80                      |   |
|                       | Span Arrangement                                  | 15m+3x20m+15m                               | 3x20m                   | 15m+3x20m+15m                                      | 20m+4x25m+20m   | 2x15m+20m+2x15m         |   |
|                       | Abutment Height (m)                               | 5.00  | 4.50                    | 5.00   | 5.50  | 5.50                    |   |
|                       | Pier Height (m)                                   | 7.50  | 6.00                    | 7.00   | 8.00  | 7.50                    |   |
| Remarks               |   |   |                         | A large GC Gopaldi Bazar stands on the north bank. | Shantibazar is an important GC stands on the bank of the Jangalla Khal. |                         |   |

**BRIDGE SITE SURVEY DATA- 1**

Zone No: 1

District : Narayanganj

| Name of Upazila              |  | Bandar              |                              |                              |              | Rupganj                     |
|------------------------------|--|---------------------|------------------------------|------------------------------|--------------|-----------------------------|
| Serial Number                | 12                                       | 13                  | 14                           | 15                           | 16           |                             |
| Bridge Code                  | 03-03-01                                 | 03-03-02            | 03-03-03                     | 03-03-04                     | 03-04-01     |                             |
| Road ID                      | 367083031                                | 367083025           | 367083025                    | 367083025                    | 367683041    |                             |
| Road Class                   | R1                                       | R1                  | R1                           | R1                           | R1           |                             |
| Chainage (km)                | 0+400                                    | 4+275               | 4+580                        | 5+470                        | 3+400        |                             |
| Condition of Existing Bridge | Existing or not                          | Existing            | Not Existing                 | Not Existing                 | Not Existing |                             |
|                              | Bridge Length (m)                        | 30                  |                              |                              |              |                             |
|                              | Bridge Width (m)                         | 3.05                |                              |                              |              |                             |
|                              | Carriageway Width (m)                    | 2.75                |                              |                              |              |                             |
|                              | Superstructure Type                      | RC girder           |                              |                              |              |                             |
|                              | Abutment Type                            | Masonry             |                              |                              |              |                             |
|                              | Pier Type                                | Masonry             |                              |                              |              |                             |
|                              | Usage of Bridge                          | Light vehicles only |                              |                              |              |                             |
|                              | Condition                                | Damaged             |                              |                              |              |                             |
|                              | Present Navigation Clearance Height (m)  | 0.50                |                              |                              |              |                             |
| River Condition              | Bank to Bank Width (m)                   | 30.00               | 60.00                        | 20.00                        | 30.00        | 30.00                       |
|                              | Highest Flood Water Width (m)            | 33.00               | 66.00                        | 22.00                        | 40.00        | 34.00                       |
|                              | Highest Flood Water Depth (m)            | 4.25                | 6.50                         | 5.00                         | 5.00         | 7.00                        |
|                              | Normal Flood Water Width (m)             | 30.00               | 60.00                        | 20.00                        | 30.00        | 30.00                       |
|                              | Normal Flood Water depth (m)             | 3.25                | 5.00                         | 4.00                         | 4.00         | 5.00                        |
|                              | Dry Season Water Width (m)               | 8.00                | 10.00                        | 10.00                        | 5.00         | 5.00                        |
|                              | Dry Season Water Depth (m)               | 1.00                | 1.00                         | 1.00                         | 1.00         | 0.30                        |
|                              | Tidal Fluctuation (m)                    | 0.30                | 0.30                         | 0.30                         | 0.30         | 0.30                        |
|                              | Water Velocity                           | Slow                | Slow                         | Slow                         | Medium       | Slow                        |
|                              | Angle of Bridge to Stream (deg)          | 90                  | 90                           | 90                           | 90           | 90                          |
|                              | Ferry Services                           | No                  | No                           | No                           | No           | No                          |
|                              | Required Navigation Clearance Height (m) | 1.00                | 1.50                         | 1.50                         | 1.00         | 1.50                        |
|                              | Type of River Traffic                    | Country Boat        | Engine Boat,<br>Country Boat | Engine Boat,<br>Country Boat | Country Boat | Country Boat,<br>Engine bat |
|                              | Condition of Bank                        | Sound               | Sound                        | Sound                        | Sound        | Sound                       |
| Condition of Riverbed        | Sound                                    | Sound               | Sound                        | Sound                        | Sound        |                             |
| Approach Road                | Total Road Width (m)                     | 5.20                | 3.90                         | 3.90                         | 5.50         | 3.66                        |
|                              | Carriageway Width (m)                    | 3.66                | 3.90                         | 3.90                         | 3.90         | 3.00                        |
|                              | Embankment Height (m)                    | 1.50                | 2.40                         | 2.40                         | 2.40         | 3.00                        |
|                              | Surface Type                             | BC                  | Earthen                      | Earthen                      | BC           | Earthen                     |
|                              | Surface Condition                        | Good                | Very bad                     | Very bad                     | Good         | Bad                         |
|                              | Alternative Route (km)                   | 1.00                | 0.50                         | 0.50                         | No           | No                          |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Narayanganj**

| Name of Upazlia       |  | Bandar                |                         |                         |  | Rupgonj                |    |
|-----------------------|--|-----------------------|-------------------------|-------------------------|--|------------------------|----|
| Serial Number         |  | 12                    | 13                      | 14                      | 15   | 16                     |    |
| Influence Area        | Population (thousand)  | 20                    | 10                      | 10                      | 15   | 20                     |    |
|                       | Main Industry  | Agriculture, Saw Mill | Agriculture, Rice Mill  | Agriculture, Rice Mill  | Agriculture  | Agriculture, Textile   |    |
|                       | Major Agricultural Product   | Rice, Jute, Veg.      | Rice, Jute, Wheat, Veg. | Rice, Jute, Wheat, Veg. | Rice, Jute, Veg., Wheat, S.Cane  | Rice, Jute, Weat, Veg. |    |
|                       | Number of Public Facilities  | School                | 10                      | 3                       | 5  | 5                      | 11 |
|                       |  | Clinic                | 3                       | 1                       | 1  | 2                      | 1  |
|                       |  | Bazar                 | 4                       | 2                       | 2  | 3                      | 5  |
|                       |  | Mosque                | 10                      | 7                       | 5  | 4                      | 15 |
|                       |  | Gov't Office          | 15                      | 2                       | 2  | 2                      | 8  |
|                       |  | Others                | 10                      | 2                       | 2  | 2                      | 10 |
| Total                 |  | 52                    | 17                      | 17                      | 18   | 50                     |    |
| Traffic Volume        | Passenger Car  | 30                    | 5                       | 6                       | 30   | 20                     |    |
|                       | Pickup/Truck   | 20                    | 5                       | 5                       | 15   | 25                     |    |
|                       | Bus  | 20                    | 0                       | 0                       | 10   | 20                     |    |
|                       | Motorcycle   | 30                    | 5                       | 5                       | 20   | 10                     |    |
|                       | Rickshaw   | 250                   | 100                     | 100                     | 100  | 150                    |    |
|                       | Autorickshaw   | 25                    | 5                       | 5                       | 10   | 10                     |    |
|                       | Bullock Cart   | 2                     | 0                       | 0                       | 2  | 1                      |    |
|                       | Pedestrian   | 2000                  | 2500                    | 2500                    | 2000   | 1500                   |    |
| Bridge Site Condition | Landuse  | Swamp, W.Land         | Farm                    | Farm                    | Swamp, W.Land  | Farm                   |    |
|                       | Topography   | Flat, Swampy          | Flat                    | Flat                    | Flat, Swampy   | Flat                   |    |
|                       | Necessity of Realignment of Approach Road                                | No                    | No                      | No                      | No   | No                     |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)                        | No                    | No                      | No                      | No   | No                     |    |
|                       | Number of Houses to be Relocated   | No                    | No                      | No                      | No   | No                     |    |
|                       | Other Obstruction to be Relocated  | No                    | No                      | No                      | No   | No                     |    |
| Proposed Bridge       | Bridge Length (m)  | 30                    | 60                      | 20                      | 30   | 30                     |    |
|                       | Span Arrangement   | 1x30m                 | 3x20m                   | 1x20m                   | 1x30m  | 1x30m                  |    |
|                       | Abutment Height (m)  | 4.00                  | 4.50                    | 4.00                    | 4.50   | 5.00                   |    |
|                       | Pier Height (m)  | -                     | 8.00                    | -                       | -  | -                      |    |
| Remarks               | Approach is not needed. Proposed side situated within Upazlia town area. |                       |                         |                         | Surrounding area is cultivated agricultural land. Very essential for village people. |                        |    |

**BRIDGE SITE SURVEY DATA- 1**

Zone No: 1  
District : Munshiganj

| Name of Upazila              |  | Sadar                     |                           |                           |                           |                           | Gazarla                   |                           |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Serial Number                |  | 2                         | 3                         | 4                         | 5                         | 6                         | 8                         | 9                         |
| Bridge Code                  |  | 04-01-N1                  | 04-01-N2                  | 04-01-N3                  | 04-01-N4                  | 04-01-N5                  | 04-02-02                  | 04-02-03                  |
| Road ID                      |  | 359035029                 | 359565046                 | 359565048                 | 359565048                 | 359563011                 | 359243005                 | 359243003                 |
| Road Class                   |  | R3                        | R3                        | R3                        | R3                        | R1                        | R1                        | R1                        |
| Chainage (km)                |  | 1+500                     | 2+500                     | 3+000                     | 4+000                     | 3+000                     | 3+500                     | 3+650                     |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Not Existing              |
|                              | Bridge Length (m)                        |                           |                           |                           |                           |                           |                           |                           |
|                              | Bridge Width (m)                         |                           |                           |                           |                           |                           |                           |                           |
|                              | Carriageway Width (m)                    |                           |                           |                           |                           |                           |                           |                           |
|                              | Superstructure Type                      |                           |                           |                           |                           |                           |                           |                           |
|                              | Abutment Type                            |                           |                           |                           |                           |                           |                           |                           |
|                              | Pier Type                                |                           |                           |                           |                           |                           |                           |                           |
|                              | Usage of Bridge                          |                           |                           |                           |                           |                           |                           |                           |
|                              | Condition                                |                           |                           |                           |                           |                           |                           |                           |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           |                           |                           |                           |                           |
| River Condition              | Bank to Bank Width (m)                   | 30.00                     | 30.00                     | 40.00                     | 50.00                     | 50.00                     | 30.00                     | 25.00                     |
|                              | Highest Flood Water Width (m)            | 35.00                     | 35.00                     | 45.00                     | 52.00                     | 55.00                     | 40.00                     | 28.00                     |
|                              | Highest Flood Water Depth (m)            | 5.50                      | 5.50                      | 6.00                      | 6.00                      | 5.00                      | 6.50                      | 5.00                      |
|                              | Normal Flood Water Width (m)             | 30.00                     | 32.00                     | 42.00                     | 50.00                     | 53.00                     | 30.00                     | 25.00                     |
|                              | Normal Flood Water depth (m)             | 4.50                      | 4.50                      | 5.00                      | 5.00                      | 4.00                      | 5.00                      | 4.00                      |
|                              | Dry Season Water Width (m)               | 5.00                      | 5.00                      | 8.00                      | 8.00                      | 5.00                      | 10.00                     | 5.00                      |
|                              | Dry Season Water Depth (m)               | 1.00                      | 0.30                      | 0.67                      | 0.75                      | 1.00                      | 1.20                      | 1.00                      |
|                              | Tidal Fluctuation (m)                    | No                        | 0.30                      | 0.30                      | 0.30                      | 0.20                      | 0.20                      | 0.30                      |
|                              | Water Velocity                           | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.00                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
| Condition of Bank            | Sound                                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |                           |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |                           |
| Approach Road                | Total Road Width (m)                     | 4.50                      | 3.00                      | 3.00                      | 3.00                      | 3.66                      | 3.66                      | 4.00                      |
|                              | Carriageway Width (m)                    | 4.50                      | 3.00                      | 3.00                      | 3.00                      | 3.66                      | 3.66                      | 4.00                      |
|                              | Embankment Height (m)                    | 2.00                      | 2.00                      | 2.00                      | 2.00                      | 1.00                      | 2.00                      | 2.00                      |
|                              | Surface Type                             | Earthen                   | Earthen                   | Earthen                   | Earthen                   | Earthen                   | Earthen                   | Earthen                   |
|                              | Surface Condition                        | Bad                       | Bad                       | Bad                       | Bad                       | Bad                       | Bad                       | Bad                       |
|                              | Alternative Route (km)                   | No                        | 2.00                      | 2.00                      | 2.00                      | No                        | No                        | No                        |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Munshiganj**

| Name of Upazila       |   | Sadar                     |                          |                        |                        |                           | Gazaria                    |                            |   |
|-----------------------|---|---------------------------|--------------------------|------------------------|------------------------|---------------------------|----------------------------|----------------------------|---|
| Serial Number         |   | 2                         | 3                        | 4                      | 5                      | 6                         | 8                          | 9                          |   |
| Influence Area        | Population (thousand)                             | 15                        | 15                       | 15                     | 15                     | 12                        | 12                         | 10                         |   |
|                       | Main Industry                                     | Agriculture, Cold Storage | Agriculture              | Agriculture            | Agriculture            | Agriculture, Cold Storage | Agriculture, Spinning mill | Agriculture, Spinning mill |   |
|                       | Major Agricultural Product                        | Rice, Potato, Veg.        | Rice, Jute, Potato, Veg. | Rice, Jute, Weat, Veg. | Rice, Jute, Weat, Veg. | Rice, Jute, Potato, Veg.  | Rice, Jute, Veg.           | Rice, Wheat, Jute, Veg.    |   |
|                       | Number of Public Facilities                       | School                    | 5                        | 3                      | 3                      | 3                         | 8                          | 8                          | 7 |
|                       |   | Clinic                    | 2                        | 1                      | 1                      | 1                         | 0                          | 2                          | 1 |
|                       |   | Bazar                     | 2                        | 2                      | 2                      | 2                         | 2                          | 4                          | 2 |
|                       |   | Mosque                    | 10                       | 10                     | 10                     | 8                         | 8                          | 7                          | 4 |
|                       |   | Gov't Office              | 1                        | 1                      | 2                      | 2                         | 3                          | 0                          | 2 |
| Others                |   | 2                         | 3                        | 4                      | 5                      | 2                         | 1                          | 4                          |   |
| <b>Total</b>          |   | <b>22</b>                 | <b>20</b>                | <b>22</b>              | <b>21</b>              | <b>23</b>                 | <b>22</b>                  | <b>20</b>                  |   |
| Traffic Volume        | Passenger Car                                     | 8                         | 5                        | 5                      | 5                      | 20                        | 20                         | 30                         |   |
|                       | Pickup/Truck                                      | 15                        | 10                       | 10                     | 10                     | 25                        | 25                         | 20                         |   |
|                       | Bus   | 10                        | 5                        | 5                      | 5                      | 12                        | 5                          | 0                          |   |
|                       | Motorcycle  | 40                        | 25                       | 25                     | 25                     | 80                        | 120                        | 20                         |   |
|                       | Rickshaw  | 150                       | 100                      | 100                    | 100                    | 150                       | 150                        | 150                        |   |
|                       | Autorickshaw                                      | 50                        | 30                       | 30                     | 30                     | 70                        | 20                         | 50                         |   |
|                       | Bullock Cart                                      | 0                         | 5                        | 5                      | 5                      | 0                         | 0                          | 0                          |   |
|                       | Pedestrian  | 1000                      | 1000                     | 1000                   | 1000                   | 1500                      | 1000                       | 2000                       |   |
| Bridge Site Condition | Landuse   | Farm                      | Farm                     | Farm                   | Farm                   | Farm                      | Farm                       | Farm                       |   |
|                       | Topography  | Flat                      | Flat                     | Flat                   | Flat                   | Flat                      | Flat                       | Flat                       |   |
|                       | Necessity of Realignment of Approach Road         | No                        | No                       | No                     | No                     | No                        | No                         | No                         |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                        | No                       | No                     | No                     | No                        | No                         | No                         |   |
|                       | Number of Houses to be Relocated                  | No                        | No                       | No                     | No                     | No                        | No                         | No                         |   |
|                       | Other Obstruction to be Relocated                 | No                        | No                       | No                     | No                     | No                        | No                         | No                         |   |
| Proposed Bridge       | Bridge Length (m)                                 | 30                        | 30                       | 40                     | 50                     | 50                        | 30                         | 25                         |   |
|                       | Span Arrangement                                  | 1x30m                     | 1x30m                    | 10m+20m+10m            | 15m+20m+15m            | 15m+20m+15m               | 1x30m                      | 1x25m                      |   |
|                       | Abutment Height (m)                               | 5.00                      | 4.00                     | 4.50                   | 4.50                   | 4.50                      | 4.50                       | 4.00                       |   |
|                       | Pier Height (m)                                   | -                         | -                        | 6.50                   | 7.00                   | 6.50                      | -                          | -                          |   |
| Remarks               |   |                           |                          |                        |                        |                           |                            |                            |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Munshiganj

| Name of Upazila              |  | Gazaria                   |                           |                           |                           |                           |                           |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Serial Number                | 10                                       | 11                        | 12                        | 13                        | 14                        | 15                        |                           |
| Bridge Code                  | 04-02-N1                                 | 04-02-N2                  | 04-02-N3                  | 04-02-N4                  | 04-02-N5                  | 04-02-N6                  |                           |
| Road ID                      | 359243007                                | 359244007                 | 359243007                 | 359244007                 | 359243003                 | 359243003                 |                           |
| Road Class                   | R1                                       | R2                        | R1                        | R2                        | R1                        | R1                        |                           |
| Chainage (km)                | 8+000                                    | 7+000                     | 0+800                     | 0+500                     | 3+450                     | 0+100                     |                           |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Existing                  |
|                              | Bridge Length (m)                        |                           |                           |                           |                           |                           | 11.00                     |
|                              | Bridge Width (m)                         |                           |                           |                           |                           |                           | 4.00                      |
|                              | Carriageway Width (m)                    |                           |                           |                           |                           |                           | 3.66                      |
|                              | Superstructure Type                      |                           |                           |                           |                           |                           | RC                        |
|                              | Abutment Type                            |                           |                           |                           |                           |                           | RC Reversed T.Type        |
|                              | Pier Type                                |                           |                           |                           |                           |                           | No                        |
|                              | Usage of Bridge                          |                           |                           |                           |                           |                           | All Vehicles              |
|                              | Condition                                |                           |                           |                           |                           |                           | Weak                      |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           |                           |                           | 0.15                      |
| River Condition              | Bank to Bank Width (m)                   | 45.00                     | 35.00                     | 50.00                     | 45.00                     | 10.00                     | 15.00                     |
|                              | Highest Flood Water Width (m)            | 50.00                     | 38.00                     | 60.00                     | 48.00                     | 12.00                     | 15.00                     |
|                              | Highest Flood Water Depth (m)            | 5.00                      | 5.00                      | 6.00                      | 6.50                      | 4.50                      | 5.00                      |
|                              | Normal Flood Water Width (m)             | 50.00                     | 35.00                     | 50.00                     | 45.00                     | 10.00                     | 15.00                     |
|                              | Normal Flood Water depth (m)             | 4.00                      | 4.50                      | 5.00                      | 5.50                      | 3.50                      | 4.00                      |
|                              | Dry Season Water Width (m)               | 8.00                      | 5.00                      | 10.00                     | 30.00                     | 5.00                      | 5.00                      |
|                              | Dry Season Water Depth (m)               | 1.20                      | 1.00                      | 1.00                      | 1.00                      | 0.30                      | 1.00                      |
|                              | Tidal Fluctuation (m)                    | 0.30                      | 0.33                      | 0.20                      | 0.25                      | 0.30                      | 0.30                      |
|                              | Water Velocity                           | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.00                      | 1.00                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |
|                              | Condition of Riverbed                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |
| Approach Road                | Total Road Width (m)                     | 4.00                      | 4.00                      | 3.66                      | 3.66                      | 4.00                      | 4.00                      |
|                              | Carriageway Width (m)                    | 4.00                      | 3.66                      | 3.66                      | 3.66                      | 4.00                      | 4.00                      |
|                              | Embankment Height (m)                    | 2.00                      | 2.00                      | 1.50                      | 1.50                      | 2.00                      | 2.00                      |
|                              | Surface Type                             | Earthen                   | BC                        | Earthen                   | Earthen                   | Earthen                   | Earthen                   |
|                              | Surface Condition                        | Bad                       | Good                      | Bad                       | Bad                       | Bad                       | Good                      |
|                              | Alternative Route (km)                   | No                        | No                        | No                        | No                        | No                        | No                        |



### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Munshiganj**

| Name of Upazilla      |   | Gazaria                    |             |                           |                           |                            |                            |   |
|-----------------------|---|----------------------------|-------------|---------------------------|---------------------------|----------------------------|----------------------------|---|
| Serial Number         |   | 10                         | 11          | 12                        | 13                        | 14                         | 15                         |   |
| Influence Area        | Population (thousand)                             | 15                         | 12          | 10                        | 10                        | 10                         | 12                         |   |
|                       | Main Industry                                     | Agriculture, Spinning mill | Agriculture | Agriculture, Cold Storage | Agriculture, Cold Storage | Agriculture, Spinning mill | Agriculture, Spinning mill |   |
|                       | Major Agricultural Product                        | Rice, Wheat, Veg.          | Rice, Jute  | Rice, Wheat, Jute, Veg.   | Rice, Wheat, Jute, Veg.   | Rice, Wheat, Jute, Veg.    | Rice, Wheat, Veg.          |   |
|                       | Number of Public Facilities                       | School                     | 5           | 5                         | 5                         | 6                          | 3                          | 5 |
|                       |   | Clinic                     | 2           | 2                         | 2                         | 1                          | 1                          | 1 |
|                       |   | Bazar                      | 3           | 3                         | 3                         | 2                          | 2                          | 2 |
|                       |   | Mosque                     | 6           | 6                         | 6                         | 7                          | 4                          | 5 |
|                       |   | Gov't Office               | 3           | 1                         | 1                         | 2                          | 2                          | 2 |
| Others                |   | 6                          | 5           | 2                         | 3                         | 4                          | 6                          |   |
|                       | <b>Total</b>                                      | <b>25</b>                  | <b>22</b>   | <b>19</b>                 | <b>21</b>                 | <b>18</b>                  | <b>21</b>                  |   |
| Traffic Volume        | Passenger Car                                     | 30                         | 30          | 10                        | 10                        | 30                         | 50                         |   |
|                       | Pickup/Truck                                      | 20                         | 20          | 12                        | 25                        | 20                         | 20                         |   |
|                       | Bus   | 0                          | 0           | 5                         | 5                         | 0                          | 0                          |   |
|                       | Motorcycle  | 25                         | 25          | 100                       | 100                       | 25                         | 30                         |   |
|                       | Rickshaw  | 200                        | 150         | 150                       | 150                       | 150                        | 200                        |   |
|                       | Auto-rickshaw                                     | 50                         | 50          | 25                        | 20                        | 50                         | 50                         |   |
|                       | Bullock Cart                                      | 0                          | 0           | 0                         | 0                         | 0                          | 0                          |   |
|                       | Pedestrian  | 2000                       | 1000        | 1000                      | 800                       | 2000                       | 2000                       |   |
| Bridge Site Condition | Landuse   | Farm                       | Farm        | Farm                      | Farm                      | Farm                       | Farm                       |   |
|                       | Topography  | Flat                       | Flat        | Flat                      | Flat                      | Flat                       | Flat                       |   |
|                       | Necessity of Realignment of Approach Road         | No                         | No          | No                        | No                        | No                         | No                         |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                         | No          | No                        | No                        | No                         | No                         |   |
|                       | Number of Houses to be Relocated                  | No                         | No          | No                        | No                        | No                         | No                         |   |
|                       | Other Obstruction to be Relocated                 | No                         | No          | No                        | No                        | No                         | No                         |   |
| Proposed Bridge       | Bridge Length (m)                                 | 45                         | 35          | 50                        | 45                        | 10                         | 15                         |   |
|                       | Span Arrangement                                  | 3x15m                      | 10m+15m+10m | 15m+20m+15m               | 3x15m                     | 1x10m                      | 1x15m                      |   |
|                       | Abutment Height (m)                               | 4.00                       | 4.00        | 4.50                      | 5.00                      | 3.50                       | 4.00                       |   |
|                       | Pier Height (m)                                   | 6.00                       | 6.50        | 6.50                      | 7.00                      | -                          | -                          |   |
| Remarks               |   |                            |             |                           |                           |                            |                            |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1

District : Munshiganj

| Name of Upazila              |  | Gazaria                   |                           |                           |                           | Tongibari                 |                           |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                              |  | 16                        | 17                        | 18                        | 19                        | 23                        | 24                        |
| Serial Number                |  | 04-02-N7                  | 04-02-N8                  | 04-02-N9                  | 04-02-N10                 | 04-03-04                  | 04-03-05                  |
| Bridge Code                  |  | 359243003                 | 359243003                 | 359243003                 | 359243003                 | 359945031                 | 359945037                 |
| Road ID                      |  | R1                        | R1                        | R1                        | R1                        | R3                        | R3                        |
| Road Class                   |  | 3+350                     | 3+726                     | 5+800                     | 4+920                     | 0+000                     | 0+750                     |
| Chainage (km)                |  | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Existing                  | Not Existing              |
| Condition of Existing Bridge | Existing or not                          |                           |                           |                           |                           |                           |                           |
|                              | Bridge Length (m)                        |                           |                           |                           |                           | 20.00                     |                           |
|                              | Bridge Width (m)                         |                           |                           |                           |                           | 2.00                      |                           |
|                              | Carriageway Width (m)                    |                           |                           |                           |                           | 1.75                      |                           |
|                              | Superstructure Type                      |                           |                           |                           |                           | Timber                    |                           |
|                              | Abutment Type                            |                           |                           |                           |                           | Wooden                    |                           |
|                              | Pier Type                                |                           |                           |                           |                           | Wooden                    |                           |
|                              | Usage of Bridge                          |                           |                           |                           |                           | Pedestrians only          |                           |
|                              | Condition                                |                           |                           |                           |                           | Fair                      |                           |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           |                           | 1.00                      |                           |
| River Condition              | Bank to Bank Width (m)                   | 25.00                     | 20.00                     | 300.00                    | 30.00                     | 20.00                     | 20.00                     |
|                              | Highest Flood Water Width (m)            | 27.00                     | 25.00                     | 300.00                    | 32.00                     | 25.00                     | 23.00                     |
|                              | Highest Flood Water Depth (m)            | 5.00                      | 5.00                      | 5.50                      | 5.00                      | 6.00                      | 6.00                      |
|                              | Normal Flood Water Width (m)             | 25.00                     | 20.00                     | 300.00                    | 30.00                     | 20.00                     | 20.00                     |
|                              | Normal Flood Water depth (m)             | 4.00                      | 4.00                      | 4.50                      | 4.00                      | 5.00                      | 5.00                      |
|                              | Dry Season Water Width (m)               | 6.00                      | 5.00                      | 20.00                     | 5.00                      | 5.00                      | 5.00                      |
|                              | Dry Season Water Depth (m)               | 1.00                      | 1.00                      | 2.20                      | 1.00                      | 0.50                      | 0.50                      |
|                              | Tidal Fluctuation (m)                    | 0.30                      | 0.30                      | 0.30                      | 0.30                      | 0.30                      | 0.30                      |
|                              | Water Velocity                           | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      | Slow                      |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.00                      | 1.00                      | 1.50                      | 1.00                      | 1.50                      | 1.50                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                     | Sound                     | Sound                     | Sound                     | Eroded                    | Sound                     |
|                              | Condition of Riverbed                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |
| Approach Road                | Total Road Width (m)                     | 4.00                      | 4.00                      | 4.00                      | 4.00                      | 3.00                      | 3.00                      |
|                              | Carriageway Width (m)                    | 4.00                      | 4.00                      | 4.00                      | 4.00                      | 3.00                      | 3.00                      |
|                              | Embankment Height (m)                    | 2.00                      | 2.00                      | 2.00                      | 2.00                      | 2.00                      | 2.00                      |
|                              | Surface Type                             | Earthen                   | Earthen                   | BC/Earthen                | Earthen                   | Earthen                   | Earthen                   |
|                              | Surface Condition                        | Bad                       | Bad                       | Bad                       | Bad                       | Bad                       | Bad                       |
|                              | Alternative Route (km)                   | No                        | No                        | No                        | No                        | No                        | No                        |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Munshiganj**

| Name of Upazila       |   | Gazaria                    |                            |  |                             | Tongibari                               |   |    |
|-----------------------|---|----------------------------|----------------------------|--|-----------------------------|---|---|----|
| Serial Number         |   | 16                         | 17                         | 18                                       | 19                          | 23                                      | 24                                      |    |
| Influence Area        | Population (thousand)                             | 10                         | 12                         | 15                                       | 12                          | 20                                      | 18                                      |    |
|                       | Main Industry                                     | Agriculture, Spinning mill | Agriculture, Spinning mill | Agriculture, Spinning mill, Power Plant, | Power Plant, Cement Factory | Agriculture, Cold Storage, Poultry Farm | Agriculture, Cold Storage, Poultry Farm |    |
|                       | Major Agricultural Product                        | Rice, Wheat, Veg.          | Rice, Wheat, Jute, Veg.    | Rice, Wheat, Veg.                        | Rice, Wheat, Veg.           | Rice, Wheat, Jute, Potato, Veg.         | Rice, Wheat, Jute, Veg.                 |    |
|                       | Number of Public Facilities                       | School                     | 6                          | 4  | 6                           | 4                                       | 10                                      | 10 |
|                       |   | Clinic                     | 2                          | 1  | 2                           | 1                                       | 4                                       | 4  |
|                       |   | Bazar                      | 3                          | 2  | 3                           | 3                                       | 2                                       | 2  |
|                       |   | Mosque                     | 8                          | 6  | 8                           | 8                                       | 10                                      | 8  |
|                       |   | Gov't Office               | 2                          | 2  | 2                           | 2                                       | 7                                       | 5  |
|                       |   | Others                     | 10                         | 6  | 6                           | 6                                       | 10                                      | 5  |
| Total                 |   | 31                         | 21                         | 27                                       | 22                          | 43                                      | 34                                      |    |
| Traffic Volume        | Passenger Car                                     | 30                         | 30                         | 30                                       | 30                          | 5                                       | 5                                       |    |
|                       | Pickup/Truck                                      | 20                         | 20                         | 20                                       | 20                          | 5                                       | 5                                       |    |
|                       | Bus   | 0                          | 0                          | 0  | 0                           | 5                                       | 5                                       |    |
|                       | Motorcycle  | 30                         | 30                         | 30                                       | 30                          | 30                                      | 30                                      |    |
|                       | Rickshaw  | 150                        | 150                        | 200                                      | 200                         | 150                                     | 150                                     |    |
|                       | Autorickshaw                                      | 50                         | 50                         | 50                                       | 50                          | 30                                      | 30                                      |    |
|                       | Bullock Cart                                      | 0                          | 0                          | 0  | 0                           | 0                                       | 0                                       |    |
|                       | Pedestrian  | 2000                       | 2000                       | 2500                                     | 2500                        | 2000                                    | 2000                                    |    |
| Bridge Site Condition | Landuse   | Farm                       | Farm                       | Farm                                     | Farm                        | Residence                               | Residence                               |    |
|                       | Topography  | Flat                       | Flat                       | Flat                                     | Flat                        | Flat                                    | Flat                                    |    |
|                       | Necessity of Realignment of Approach Road         | No                         | No                         | No                                       | No                          | No                                      | No                                      |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                         | No                         | No                                       | No                          | No                                      | No                                      |    |
|                       | Number of Houses to be Relocated                  | No                         | No                         | No                                       | No                          | No                                      | No                                      |    |
|                       | Other Obstruction to be Relocated                 | No                         | No                         | No                                       | No                          | No                                      | No                                      |    |
| Proposed Bridge       | Bridge Length (m)                                 | 25                         | 20                         | 300                                      | 30                          | 20                                      | 20                                      |    |
|                       | Span Arrangement                                  | 1x25m                      | 1x20m                      | 12x25m                                   | 1x30m                       | 1x20m                                   | 1x20m                                   |    |
|                       | Abutment Height (m)                               | 4.00                       | 4.00                       | 3.50                                     | 4.00                        | 4.00                                    | 4.00                                    |    |
|                       | Pier Height (m)                                   | -                          | -                          | 10.00                                    | -                           | -                                       | -                                       |    |
| Remarks               |   |                            |                            |  |                             |   |   |    |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Munshiganj

| Name of Upazila              |  | Tongibari                 |                           |                           | Sreenagar                 | Sirajdikhan               |                           |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Serial Number                | 25                                       | 26                        | 27                        | 28                        | 31                        | 32                        |                           |
| Bridge Code                  | 04-03-N1                                 | 04-03-N2                  | 04-03-N3                  | 04-04-01                  | 04-05-02                  | 04-05-03                  |                           |
| Road ID                      | 359943008                                | 359945028                 | Not Identified            | 359054001                 | 359744013                 | 359744022                 |                           |
| Road Class                   | R1                                       | R3                        | R1                        | R2                        | R2                        | R2                        |                           |
| Chainage (km)                | 0+400                                    | 0+150                     | 0+050                     | 2+200                     | 7+970                     | 2+500                     |                           |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Existing                  | Existing                  | Not Existing              | Not Existing              |                           |
|                              | Bridge Length (m)                        |                           | 20.00                     | 15.00                     |                           |                           |                           |
|                              | Bridge Width (m)                         |                           | 1.00                      | 1.00                      |                           |                           |                           |
|                              | Carriageway Width (m)                    |                           | 1.00                      | 1.00                      |                           |                           |                           |
|                              | Superstructure Type                      |                           | Timber                    | Timber                    |                           |                           |                           |
|                              | Abutment Type                            |                           | Wooden                    | Wooden                    |                           |                           |                           |
|                              | Pier Type                                |                           | Wooden                    | Wooden                    |                           |                           |                           |
|                              | Usage of Bridge                          |                           | Pedestrians only          | Pedestrians only          |                           |                           |                           |
|                              | Condition                                |                           | Fair                      | Fair                      |                           |                           |                           |
|                              | Present Navigation Clearance Height (m)  |                           | 0.50                      | 0.50                      |                           |                           |                           |
| River Condition              | Bank to Bank Width (m)                   | 40.00                     | 20.00                     | 15.00                     | 35.00                     | 80.00                     | 95.00                     |
|                              | Highest Flood Water Width (m)            | 42.00                     | 22.00                     | 15.00                     | 40.00                     | 90.00                     | 100.00                    |
|                              | Highest Flood Water Depth (m)            | 6.25                      | 6.50                      | 6.30                      | 6.50                      | 6.50                      | 6.50                      |
|                              | Normal Flood Water Width (m)             | 40.00                     | 20.00                     | 15.00                     | 35.00                     | 80.00                     | 100.00                    |
|                              | Normal Flood Water depth (m)             | 6.25                      | 5.50                      | 5.30                      | 4.50                      | 5.50                      | 5.50                      |
|                              | Dry Season Water Width (m)               | 10.00                     | 8.00                      | 5.00                      | 10.00                     | 20.00                     | 20.00                     |
|                              | Dry Season Water Depth (m)               | 0.50                      | 0.75                      | 0.50                      | 0.50                      | 1.20                      | 1.00                      |
|                              | Tidal Fluctuation (m)                    | 0.30                      | 0.33                      | 0.30                      | No                        | No                        | 0.33                      |
|                              | Water Velocity                           | Slow                      | Medlum                    | Slow                      | Slow                      | Medlum                    | Medlum                    |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.50                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                     | Eroded                    | Sound                     | Sound                     | Sound                     | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |                           |
| Approach Road                | Total Road Width (m)                     | 7.20                      | 2.00                      | 3.66                      | 3.66                      | 5.20                      | 4.20                      |
|                              | Carriageway Width (m)                    | 7.20                      | 2.00                      | 3.66                      | 3.66                      | 3.66                      | 4.20                      |
|                              | Embankment Height (m)                    | 2.50                      | 3.00                      | 2.25                      | 1.00                      | 3.00                      | 2.00                      |
|                              | Surface Type                             | Earthen                   | Earthen                   | Earthen                   | Earthen                   | BC                        | Earthen                   |
|                              | Surface Condition                        | Good                      | Very Bad                  | Good                      | Bad                       | Good                      | Good                      |
|                              | Alternative Route (km)                   | 1.50                      | 0.50                      | 1.00                      | No                        | No                        | No                        |

### BRIDGE SITE SURVEY DATA- 2

#### Zone-1

#### District: Munshiganj

| Name of Upazila       |   | Tongibari                 |                           |                         | Sreenagar  | Sirajdikhan                        |                         |    |
|-----------------------|---|---------------------------|---------------------------|-------------------------|--|------------------------------------|-------------------------|----|
| Serial Number         |   | 25                        | 26                        | 27                      | 28   | 31                                 | 32                      |    |
| Influence Area        | Population (thousand)                             | 20                        | 20                        | 20                      | 12   | 50                                 | 30                      |    |
|                       | Main Industry                                     | Agriculture, Cold Storage | Agriculture, Cold Storage | Agriculture             | Agriculture, Cold Storage  | Agriculture, Textile, Cold Storage | Agriculture             |    |
|                       | Major Agricultural Product                        | Rice, Wheat, Jute, Veg.   | Rice, Wheat, Jute, Veg.   | Rice, Wheat, Jute, Veg. | Rice, Jute, Veg.   | Rice, Wheat, Jute, Veg.            | Rice, Wheat, Jute, Veg. |    |
|                       | Number of Public Facilities                       | School                    | 4                         | 10                      | 4  | 3                                  | 14                      | 8  |
|                       |   | Clinic                    | 2                         | 4                       | 1  | 1                                  | 4                       | 3  |
|                       |   | Bazar                     | 2                         | 2                       | 2  | 2                                  | 5                       | 4  |
|                       |   | Mosque                    | 5                         | 10                      | 4  | 10                                 | 45                      | 10 |
|                       |   | Gov't Office              | 1                         | 7                       | 1  | 2                                  | 5                       | 2  |
| Others                |   | 3                         | 10                        | 3                       | 1  | 4                                  | 3                       |    |
| Total                 |   | 17                        | 43                        | 15                      | 19   | 77                                 | 30                      |    |
| Traffic Volume        | Passenger Car                                     | 10                        | 5                         | 5                       | 20   | 20                                 | 30                      |    |
|                       | Pickup/Truck                                      | 10                        | 10                        | 5                       | 15   | 30                                 | 30                      |    |
|                       | Bus   | 5                         | 0                         | 0                       | 5  | 100                                | 10                      |    |
|                       | Motorcycle  | 30                        | 20                        | 25                      | 60   | 50                                 | 20                      |    |
|                       | Rickshaw  | 100                       | 150                       | 100                     | 150  | 200                                | 200                     |    |
|                       | Autorickshaw                                      | 30                        | 30                        | 20                      | 30   | 100                                | 100                     |    |
|                       | Bullock Cart                                      | 0                         | 0                         | 0                       | 0  | 0                                  | 0                       |    |
|                       | Pedestrian  | 1000                      | 2000                      | 1000                    | 1100   | 3000                               | 2000                    |    |
| Bridge Site Condition | Landuse   | Farm                      | Residence                 | Farm                    | Farm   | Residence                          | Farm                    |    |
|                       | Topography  | Falt                      | Flat                      | Falt                    | Falt   | Flat                               | Flat                    |    |
|                       | Necessity of Realignment of Approach Road         | No                        | No                        | No                      | No   | No                                 | No                      |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                        | No                        | No                      | No   | No                                 | No                      |    |
|                       | Number of Houses to be Relocated                  | No                        | No                        | No                      | No   | No                                 | No                      |    |
|                       | Other Obstruction to be Relocated                 | No                        | No                        | No                      | No   | No                                 | No                      |    |
| Proposed Bridge       | Bridge Length (m)                                 | 40                        | 20                        | 15                      | 35   | 80                                 | 95                      |    |
|                       | Span Arrangement                                  | 10m+20m+10m               | 1x20m                     | 1x15m                   | 10m+15m+10m  | 2x15m+20m+2x15m                    | 15m+4x20m               |    |
|                       | Abutment Height (m)                               | 4.50                      | 4.50                      | 4.50                    | 4.50   | 5.00                               | 5.00                    |    |
|                       | Pier Height (m)                                   | 7.00                      | -                         | -                       | 6.50   | 8.00                               | 8.50                    |    |
| Remarks               |   |                           |                           |                         | 15m & 50m approach road is required. 80m bridge span is required than previous proposed 60m. |                                    |                         |    |

**BRIDGE SITE SURVEY DATA- 1**

Zone No: 1  
District : Munshiganj

| Name of Upazila              |  | Sirajdikhan               |                           |                           |                           | Louhajang                 |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Serial Number                | 33                                       | 35                        | 36                        | 37                        | 38                        |                           |
| Bridge Code                  | 04-05-04                                 | 04-05-N1                  | 04-05-N2                  | 04-05-N3                  | 04-06-01                  |                           |
| Road ID                      | 359744015                                | 359743009                 | 359742004                 | 359743009                 | 359443023                 |                           |
| Road Class                   | R2                                       | R1                        | FRB                       | R1                        | R1                        |                           |
| Chalnage (km)                | 0+000                                    | 1+200                     | 0+000                     | 0+900                     | 3+300                     |                           |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Not Existing              | Not Existing              | Not Existing              | Not Existing              |
|                              | Bridge Length (m)                        |                           |                           |                           |                           |                           |
|                              | Bridge Width (m)                         |                           |                           |                           |                           |                           |
|                              | Carriageway Width (m)                    |                           |                           |                           |                           |                           |
|                              | Superstructure Type                      |                           |                           |                           |                           |                           |
|                              | Abutment Type                            |                           |                           |                           |                           |                           |
|                              | Pier Type                                |                           |                           |                           |                           |                           |
|                              | Usage of Bridge                          |                           |                           |                           |                           |                           |
|                              | Condition                                |                           |                           |                           |                           |                           |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           |                           |                           |
| River Condition              | Bank to Bank Width (m)                   | 95.00                     | 20.00                     | 30.00                     | 25.00                     | 35.00                     |
|                              | Highest Flood Water Width (m)            | 100.00                    | 25.00                     | 35.00                     | 30.00                     | 38.00                     |
|                              | Highest Flood Water Depth (m)            | 5.50                      | 4.50                      | 6.00                      | 4.00                      | 6.00                      |
|                              | Normal Flood Water Width (m)             | 100.00                    | 20.00                     | 30.00                     | 25.00                     | 35.00                     |
|                              | Normal Flood Water depth (m)             | 4.50                      | 3.50                      | 5.00                      | 3.00                      | 5.00                      |
|                              | Dry Season Water Width (m)               | 10.00                     | 0.00                      | 5.00                      | 0.00                      | 10.00                     |
|                              | Dry Season Water Depth (m)               | 1.00                      | 0.00                      | 0.50                      | 0.00                      | 1.20                      |
|                              | Tidal Fluctuation (m)                    | No                        | No                        | No                        | No                        | 0.30                      |
|                              | Water Velocity                           | Medium                    | Slow                      | Slow                      | Slow                      | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90                        |
|                              | Ferry Services                           | No                        | No                        | No                        | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.50                      | 1.50                      | 1.50                      | 1.50                      | 1.00                      |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                     | Sound                     | Sound                     | Sound                     | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound                     | Sound                     | Scoured                   |                           |
| Approach Road                | Total Road Width (m)                     | 3.66                      | 3.66                      | 7.00                      | 3.66                      | 4.20                      |
|                              | Carriageway Width (m)                    | 3.66                      | 3.66                      | 7.00                      | 3.66                      | 3.66                      |
|                              | Embankment Height (m)                    | 2.00                      | 2.00                      | 2.00                      | 1.50                      | 2.00                      |
|                              | Surface Type                             | Earthen                   | Earthen                   | Earthen                   | Earthen                   | BC/HBB Earthen            |
|                              | Surface Condition                        | Good                      | Good                      | Good                      | Good                      | Good                      |
|                              | Alternative Route (km)                   | No                        | No                        | No                        | No                        | No                        |

## BRIDGE SITE SURVEY DATA- 2

### Zone-1

#### District: Munshiganj

| Name of Upazila       |   | Sirajdikhan             |                         |                         |                         | Louhajang                 |    |
|-----------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|----|
| Serial Number         |   | 33                      | 35                      | 36                      | 37                      | 38                        |    |
| Influence Area        | Population (thousand)                             | 55                      | 20                      | 20                      | 15                      | 20                        |    |
|                       | Main Industry                                     | Agriculture             | Agriculture             | Agriculture             | Agriculture             | Agriculture, Cold Storage |    |
|                       | Major Agricultural Product                        | Rice, Wheat, Jute, Veg. | Rice, Wheat, Jute, Veg. | Rice, Wheat, Jute, Veg. | Rice, Wheat, Jute, Veg. | Rice, Wheat, Jute, Veg.   |    |
|                       | Number of Public Facilities                       | School                  | 20                      | 8                       | 8                       | 7                         | 6  |
|                       |   | Clinic                  | 5                       | 2                       | 2                       | 2                         |    |
|                       |   | Bazar                   | 4                       | 4                       | 3                       | 4                         | 2  |
|                       |   | Mosque                  | 35                      | 15                      | 7                       | 15                        | 14 |
|                       |   | Gov't Office            | 2                       | 2                       | 3                       | 2                         |    |
| Others                |   | 10                      | 10                      | 10                      | 10                      | 1                         |    |
| Total                 |   | 76                      | 41                      | 33                      | 40                      | 23                        |    |
| Traffic Volume        | Passenger Car                                     | 10                      | 25                      | 20                      | 25                      | 20                        |    |
|                       | Pickup/Truck                                      | 20                      | 50                      | 30                      | 50                      | 20                        |    |
|                       | Bus   | 10                      | 10                      | 20                      | 10                      | 20                        |    |
|                       | Motorcycle  | 30                      | 50                      | 50                      | 50                      | 20                        |    |
|                       | Rickshaw  | 200                     | 200                     | 250                     | 200                     | 150                       |    |
|                       | Autorickshaw                                      | 100                     | 50                      | 100                     | 50                      | 50                        |    |
|                       | Bullock Cart                                      | 0                       | 0                       | 0                       | 0                       | 0                         |    |
|                       | Pedestrian  | 2000                    | 2000                    | 3000                    | 2000                    | 1500                      |    |
| Bridge Site Condition | Landuse   | Farm                    | Farm                    | Farm                    | Farm                    | Farm                      |    |
|                       | Topography  | Flat                    | Flat                    | Flat                    | Flat                    | Flat                      |    |
|                       | Necessity of Realignment of Approach Road         | No                      | No                      | No                      | No                      | No                        |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                      | No                      | No                      | No                      | No                        |    |
|                       | Number of Houses to be Relocated                  | No                      | No                      | No                      | No                      | No                        |    |
|                       | Other Obstruction to be Relocated                 | No                      | No                      | No                      | No                      | No                        |    |
| Proposed Bridge       | Bridge Length (m)                                 | 95                      | 20                      | 30                      | 25                      | 35                        |    |
|                       | Span Arrangement                                  | 15m+4x20m               | 1x20m                   | 1x30m                   | 1x25m                   | 10m+15m+10m               |    |
|                       | Abutment Height (m)                               | 4.00                    | 3.75                    | 5.00                    | 3.25                    | 4.50                      |    |
|                       | Pier Height (m)                                   | 7.00                    | -                       | -                       | -                       | 6.50                      |    |
| Remarks               |   |                         |                         |                         |                         |                           |    |

**BRIDGE SITE SURVEY DATA- 1**

**Zone No: 1**  
**District : Manikganj**

| Name of Upazila              |  | Singhair     |                  |              |                           |              |              |
|------------------------------|--|--------------|------------------|--------------|---------------------------|--------------|--------------|
| Serial Number                | 1  | 2            | 3                | 5            | 6                         | 7            |              |
| Bridge Code                  | 05-01-01                                 | 05-01-02     | 05-01-03         | 05-01-05     | 05-01-06                  | 05-01-07     |              |
| Road ID                      | 356823025                                | 356825015    | 356823025        | 356822005    | 356823019                 | 356823020    |              |
| Road Class                   | R1                                       | R3           | R1               | FRB          | R1                        | R1           |              |
| Chainage (km)                | 0+600                                    | 0+000        | 2+800            | 2+400        | 1+200                     | 2+100        |              |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Existing         | Not Existing | Existing                  | Not Existing | Not Existing |
|                              | Bridge Length (m)                        |              | 40.00            |              | 6.00                      |              |              |
|                              | Bridge Width (m)                         |              | 1.20             |              | 3.66                      |              |              |
|                              | Carriageway Width (m)                    |              | 1.00             |              | 3.40                      |              |              |
|                              | Superstructure Type                      |              | Bamboo           |              | Bamboo                    |              |              |
|                              | Abutment Type                            |              | Bamboo           |              | Masonry                   |              |              |
|                              | Pier Type                                |              | Bamboo           |              | No                        |              |              |
|                              | Usage of Bridge                          |              | Pedestrians only |              | Pedestrians only          |              |              |
|                              | Condition                                |              | Weak             |              | Collapsed                 |              |              |
|                              | Present Navigation Clearance Height (m)  |              | 1.00             |              | 0.80                      |              |              |
| River Condition              | Bank to Bank Width (m)                   | 50.00        | 35.00            | 60.00        | 46.00                     | 40.00        | 50.00        |
|                              | Highest Flood Water Width (m)            | 60.00        | 45.00            | 70.00        | 70.00                     | 55.00        | 65.00        |
|                              | Highest Flood Water Depth (m)            | 6.00         | 5.20             | 4.50         | 5.78                      | 8.12         | 5.75         |
|                              | Normal Flood Water Width (m)             | 55.00        | 40.00            | 40.00        | 60.00                     | 40.00        | 50.00        |
|                              | Normal Flood Water depth (m)             | 5.00         | 3.50             | 3.00         | 4.26                      | 6.75         | 4.25         |
|                              | Dry Season Water Width (m)               | 0.00         | 20.00            | 0.00         | 28.00                     | 22.00        | 0.00         |
|                              | Dry Season Water Depth (m)               | 0.00         | 1.75             | 0.00         | 0.58                      | 1.80         | 0.00         |
|                              | Tidal Fluctuation (m)                    | No           | No               | No           | No                        | No           | No           |
|                              | Water Velocity                           | Medium       | Slow             | Medium       | Medium                    | Medium       | Medium       |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90               | 90           | 90                        | 90           | 90           |
|                              | Ferry Services                           | No           | No               | No           | No                        | No           | No           |
|                              | Required Navigation Clearance Height (m) | 1.00         | 1.00             | 1.50         | 1.50                      | 1.00         | 1.50         |
|                              | Type of River Traffic                    | Country Boat | Country Boat     | Country Boat | Engine Boat, Country Boat | Country Boat | Country Boat |
|                              | Condition of Bank                        | Sound        | Sound            | Sound        | Eroded                    | Eroded       | Eroded       |
| Condition of Riverbed        | Sound                                    | Sound        | Sound            | Scoured      | Scoured                   | Scoured      |              |
| Approach Road                | Total Road Width (m)                     | 4.88         | 3.65             | 4.80         | 4.80                      | 4.80         | 4.80         |
|                              | Carriageway Width (m)                    | 3.05         | 3.05             | 3.05         | 3.66                      | 3.05         | 3.05         |
|                              | Embankment Height (m)                    | 2.40         | 1.65             | 1.50         | 2.85                      | 2.25         | 1.50         |
|                              | Surface Type                             | Earthen      | Earthen          | Earthen      | BC/WBM                    | BC/Earthen   | Earthen      |
|                              | Surface Condition                        | Good         | Fair             | Good         | Good                      | Fair         | Fair         |
|                              | Alternative Route (km)                   | No           | No               | No           | No                        | No           | No           |



### BRIDGE SITE SURVEY DATA- 2

Zone-1  
District: Manikganj

| Name of Upazila       |   | Singhair            |   |                    |   |                         |                                    |    |
|-----------------------|---|---------------------|---|--------------------|---|-------------------------|------------------------------------|----|
| Serial Number         |   | 1                   | 2   | 3                  | 5   | 6                       | 7                                  |    |
| Influence Area        | Population (thousand)                             | 5                   | 5   | 5                  | 8   | 6.5                     | 8                                  |    |
|                       | Main Industry                                     | Agriculture         | Agriculture   | Agriculture        | Agriculture   | Agriculture             | Agriculture                        |    |
|                       | Major Agricultural Product                        | Rice, S.Cane, Wheat | Rice, Jute, Wheat, Veg.   | Rice, Jute, S.Cane | Rice, Jute, Wheat, Veg.   | Rice, Jute, Wheat, Veg. | Rice, Jute, S.Cane, Patatoes, Veg. |    |
|                       | Number of Public Facilities                       | School              | 10  | 10                 | 10  | 12                      | 6                                  | 8  |
|                       |   | Clinic              | 2   | 2                  | 2   | 3                       | 2                                  | 2  |
|                       |   | Bazar               | 4   | 2                  | 4   | 5                       | 2                                  | 3  |
|                       |   | Mosque              | 8   | 7                  | 10  | 17                      | 12                                 | 12 |
|                       |   | Gov't Office        | 1   | 0                  | 2   | 2                       | 1                                  | 0  |
| Others                |   | 3                   | 3   | 4                  | 5   | 3                       | 3                                  |    |
| <b>Total</b>          |   | <b>28</b>           | <b>24</b>   | <b>32</b>          | <b>44</b>   | <b>28</b>               | <b>28</b>                          |    |
| Traffic Volume        | Passenger Car                                     | 10                  | 5   | 15                 | 28  | 6                       | 8                                  |    |
|                       | Pickup/Truck                                      | 100                 | 2   | 30                 | 18  | 12                      | 10                                 |    |
|                       | Bus   | 2                   | 2   | 0                  | 5   | 3                       | 2                                  |    |
|                       | Motorcycle  | 40                  | 7   | 25                 | 16  | 10                      | 10                                 |    |
|                       | Rickshaw  | 70                  | 12  | 50                 | 200   | 65                      | 40                                 |    |
|                       | Auto-rickshaw                                     | 20                  | 6   | 15                 | 5   | 8                       | 5                                  |    |
|                       | Bullock Cart                                      | 0                   | 0   | 0                  | 0   | 0                       | 0                                  |    |
|                       | Pedestrian  | 2000                | 700   | 500                | 1200  | 1170                    | 1500                               |    |
| Bridge Site Condition | Landuse   | Farm                | Farm  | Farm               | Farm  | Farm                    | Farm                               |    |
|                       | Topography  | Flat                | Flat  | Flat               | Flat  | Flat                    | Flat                               |    |
|                       | Necessity of Realignment of Approach Road         | No                  | No  | No                 | Yes   | No                      | No                                 |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                  | No  | No                 | No  | 400                     | No                                 |    |
|                       | Number of Houses to be Relocated                  | No                  | No  | No                 | No  | 2                       | No                                 |    |
|                       | Other Obstruction to be Relocated                 | No                  | No  | No                 | No  | No                      | No                                 |    |
| Proposed Bridge       | Bridge Length (m)                                 | 50                  | 40  | 60                 | 60  | 40                      | 50                                 |    |
|                       | Span Arrangement                                  | 15m+20m+15m         | 10m+20m+10m   | 3x20m              | 3x20m   | 10m+20m+10m             | 15m+20m+15m                        |    |
|                       | Abutment Height (m)                               | 4.00                | 4.00  | 4.00               | 4.50  | 4.00                    | 4.00                               |    |
|                       | Pier Height (m)                                   | 7.00                | 7.00  | 6.50               | 7.75  | 7.00                    | 6.75                               |    |
| Remarks               |   |                     | Scouring/erosion observed on the both sides of the canal which will need proper attention during detail design. |                    | Existing open foundation culvert is fully damaged due to smaller span length in comparison to required opening for discharge. |                         |                                    |    |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Manikganj

| Name of Upazila              |  | Singhalr     |                           |                           | Shibalay                  |              | Saturla      |              |
|------------------------------|--|--------------|---------------------------|---------------------------|---------------------------|--------------|--------------|--------------|
| Serial Number                | 8  | 9            | 10                        | 13                        | 20                        | 21           | 22           |              |
| Bridge Code                  | 05-01-08                                 | 05-01-N1     | 05-01-N2                  | 05-02-03                  | 05-02-N2                  | 05-03-01     | 05-03-02     |              |
| Road ID                      | 356823013                                | 356823031    | 356823045                 | 356783005                 | 356783004                 | 356702004    | 356702004    |              |
| Road Class                   | R1                                       | R1           | R1                        | R1                        | R1                        | FRB          | FRB          |              |
| Chainage (km)                | 3+900                                    | 4+320        | 3+590                     | 7+503                     | 2+982                     | 2+000        | 5+800        |              |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing              | Not Existing              | Not Existing              | Existing     | Not Existing | Existing     |
|                              | Bridge Length (m)                        |              |                           |                           |                           | 10.00        |              | 15.00        |
|                              | Bridge Width (m)                         |              |                           |                           |                           | 4.26         |              | 3.66         |
|                              | Carrageway Width (m)                     |              |                           |                           |                           | 4.00         |              | 3.42         |
|                              | Superstructure Type                      |              |                           |                           |                           | RC           |              | RC           |
|                              | Abutment Type                            |              |                           |                           |                           | Masonry      |              | Masonry      |
|                              | Pier Type                                |              |                           |                           |                           | No pier      |              | RC Column    |
|                              | Usage of Bridge                          |              |                           |                           |                           | All vehicles |              | All Vehicles |
|                              | Condition                                |              |                           |                           |                           | Damaged      |              | Collapsed    |
|                              | Present Navigation Clearance Height (m)  |              |                           |                           |                           | 1.00         |              | 2.00         |
| River Condition              | Bank to Bank Width (m)                   | 30.00        | 83.00                     | 80.00                     | 80.00                     | 17.00        | 85.00        | 40.00        |
|                              | Highest Flood Water Width (m)            | 50.00        | 110.00                    | 100.00                    | 100.00                    | 20.00        | 100.00       | 60.00        |
|                              | Highest Flood Water Depth (m)            | 6.00         | 6.30                      | 6.00                      | 6.10                      | 5.00         | 4.80         | 4.90         |
|                              | Normal Flood Water Width (m)             | 40.00        | 90.00                     | 80.00                     | 69.00                     | 15.00        | 85.00        | 40.00        |
|                              | Normal Flood Water depth (m)             | 3.80         | 5.50                      | 5.00                      | 5.40                      | 4.00         | 3.80         | 2.85         |
|                              | Dry Season Water Width (m)               | 18.00        | 11.50                     | 20.00                     | 28.00                     | 5.00         | 30.00        | 20.00        |
|                              | Dry Season Water Depth (m)               | 0.85         | 0.80                      | 1.00                      | 2.10                      | 1.00         | 1.05         | 1.50         |
|                              | Tidal Fluctuation (m)                    | No           | No                        | No                        | No                        | No           | No           | No           |
|                              | Water Velocity                           | Medium       | Medlum                    | Medium                    | Medium                    | Slow         | Medium       | Fast         |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90                        | 90                        | 90                        | 90           | 90           | 90           |
|                              | Ferry Services                           | No           | No                        | No                        | No                        | No           | No           | No           |
|                              | Required Navigation Clearance Height (m) | 1.00         | 1.50                      | 1.00                      | 1.00                      | 1.00         | 1.00         | 1.50         |
|                              | Type of River Traffic                    | Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Country Boat, Engine Boat | Country Boat | Country Boat | Country Boat |
|                              | Condition of Bank                        | Sound        | Eroded                    | Sound                     | Sound                     | Sound        | Sound        | Eroded       |
| Condition of Riverbed        | Sound                                    | Scoured      | Sound                     | Sound                     | Sound                     | Sound        | Sound        |              |
| Approach Road                | Total Road Width (m)                     | 4.80         | 4.65                      | 4.90                      | 3.66                      | 4.88         | 4.88         | 3.50         |
|                              | Carrageway Width (m)                     | 3.05         | 3.66                      | 3.05                      | 3.05                      | 3.66         | 3.05         | 3.10         |
|                              | Embankment Height (m)                    | 1.60         | 2.76                      | 1.50                      | 2.85                      | 2.00         | 2.25         | 2.00         |
|                              | Surface Type                             | BC/Earthen   | Earthen                   | HBB                       | BC/Earthen                | BC           | HBB/Earthen  | HBB          |
|                              | Surface Condition                        | Good         | Fair                      | Good                      | Bad                       | Good         | Good         | Fair         |
|                              | Alternative Route (km)                   | No           | No                        | No                        | No                        | No           | No           | No           |

## BRIDGE SITE SURVEY DATA- 2

### Zone-1

### District: Manikganj

| Name of Upazilla      |  | Singhair                               |                                |                  | Shibalay                            |   | Saturia                   |  |    |
|-----------------------|--|--|--------------------------------|------------------|-------------------------------------|---|---------------------------|--|----|
| Serial Number         |  | 8                                      | 9                              | 10               | 13                                  | 20  | 21                        | 22   |    |
| Influence Area        | Population (thousand)  | 7.5                                    | 6                              | 12               | 3                                   | 10  | 13                        | 7.8  |    |
|                       | Main Industry  | Agriculture                            | Agriculture                    | Agriculture      | Agriculture, Saw mill               | Agriculture, Commercial   | Agriculture               | Agriculture  |    |
|                       | Major Agricultural Product   | Rice, Jute, Wheat, Fruits, Veg. S.Cane | Rice, Jute, Wheat, Veg. S.Cane | Rice, Jute, Veg. | Rice, Jute, Veg. Onion, Green chill | Rice, Jute, Wheat, S.Cane, Onion                                      | Rice, Fruits, Veg. S.Cane | Rice, Jute, S.Cane, Veg.   |    |
|                       | Number of Public Facilities  | School                                 | 16                             | 10               | 8                                   | 18  | 10                        | 3  | 10 |
|                       |  | Clinic                                 | 3                              | 5                | 2                                   | 2   | 4                         | 2  | 2  |
|                       |  | Bazar                                  | 3                              | 2                | 3                                   | 5   | 3                         | 4  | 3  |
|                       |  | Mosque                                 | 15                             | 12               | 12                                  | 20  | 12                        | 3  | 15 |
|                       |  | Gov't Office                           | 2                              | 2                | 2                                   | 3   | 2                         | 0  | 0  |
| Others                |  | 7                                      | 6                              | 5                | 5                                   | 3   | 3                         | 6  |    |
| <b>Total</b>          |  | <b>46</b>                              | <b>37</b>                      | <b>32</b>        | <b>53</b>                           | <b>34</b>   | <b>15</b>                 | <b>36</b>  |    |
| Traffic Volume        | Passenger Car  | 5                                      | 12                             | 30               | 25                                  | 25  | 20                        | 6  |    |
|                       | Pickup/Truck   | 6                                      | 15                             | 20               | 15                                  | 40  | 30                        | 4  |    |
|                       | Bus  | 2                                      | 2                              | 0                | 18                                  | 50  | 0                         | 0  |    |
|                       | Motorcycle   | 8                                      | 8                              | 100              | 5                                   | 60  | 30                        | 10   |    |
|                       | Rickshaw   | 40                                     | 100                            | 150              | 60                                  | 450   | 100                       | 50   |    |
|                       | Autorickshaw   | 6                                      | 7                              | 15               | 10                                  | 35  | 10                        | 15   |    |
|                       | Bullock Cart   | 0                                      | 0                              | 0                | 0                                   | 10  | 0                         | 0  |    |
|                       | Pedestrian   | 1000                                   | 800                            | 1500             | 500                                 | 1200  | 1000                      | 1000   |    |
| Bridge Site Condition | Landuse  | Farm                                   | Farm                           | Farm, Meadow     | Farm                                | Residence   | Residence, Meadow         | Farm   |    |
|                       | Topography   | Flat                                   | Flat                           | Flat             | Flat                                | Flat  | Flat                      | Flat   |    |
|                       | Necessity of Realignment of Approach Road  | No                                     | No                             | No               | No                                  | No  | No                        | No   |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m)  | No                                     | No                             | No               | No                                  | No  | No                        | No   |    |
|                       | Number of Houses to be Relocated   | No                                     | No                             | No               | No                                  | No  | No                        | No   |    |
|                       | Other Obstruction to be Relocated  | No                                     | No                             | No               | No                                  | No  | No                        | No   |    |
| Proposed Bridge       | Bridge Length (m)  | 40                                     | 90                             | 60               | 60                                  | 20  | 90                        | 40   |    |
|                       | Span Arrangement   | 10m+20m+10m                            | 15m+3x20m+15m                  | 2x15m+20m+2x15m  | 15m+15m+20m+15m+15m                 | 1x20m   | 15m+3x20m+15m             | 10m+20m+10m  |    |
|                       | Abutment Height (m)  | 4.00                                   | 4.00                           | 4.50             | 4.50                                | 5.00  | 4.00                      | 4.00   |    |
|                       | Pier Height (m)  | 7.00                                   | 8.00                           | 8.00             | 8.50                                | -   | 7.00                      | 6.50   |    |
| Remarks               | This Bridge will connect FRA and Mitara Bus Stand. It also connects number of hat or bazar, school and madrasa. So the bridge will ease communication. |  |                                |                  |                                     | The existing bridge is fully damaged and needs immediate replacement. |                           | Existing structure is under water. It was damaged in 1998 flood. |    |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Manikganj

| Name of Upazila              |  | Saturfa      |              |              |              |                  |                           |              |
|------------------------------|--|--------------|--------------|--------------|--------------|------------------|---------------------------|--------------|
| Serial Number                | 23                                       | 25           | 26           | 27           | 28           | 29               | 30                        |              |
| Bridge Code                  | 05-03-03                                 | 05-03-05     | 05-03-08     | 05-03-07     | 05-03-N1     | 05-03-N2         | 05-03-N3                  |              |
| Road ID                      | 356703031                                | 356702004    | 356703005    | 356702005    | 356703037    | 356703003        | 356703006                 |              |
| Road Class                   | R1                                       | FRB          | R1           | FRB          | R1           | R1               | R1                        |              |
| Chainage (km)                | 7+200                                    | 0+500        | 4+200        | 3+100        | 0+950        | 3+000            | 8+300                     |              |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing | Not Existing | Existing     | Existing         | Not Existing              | Not Existing |
|                              | Bridge Length (m)                        |              |              |              | 14.00        | 8.00             |                           |              |
|                              | Bridge Width (m)                         |              |              |              | 4.27         | 3.00             |                           |              |
|                              | Carriageway Width (m)                    |              |              |              | 3.68         | 3.00             |                           |              |
|                              | Superstructure Type                      |              |              |              | RC           | RC               |                           |              |
|                              | Abutment Type                            |              |              |              | Masonry      | Masonry          |                           |              |
|                              | Pier Type                                |              |              |              | No           | No               |                           |              |
|                              | Usage of Bridge                          |              |              |              | All Vehicles | Pedestrians only |                           |              |
|                              | Condition                                |              |              |              | Damaged      | Collapsed        |                           |              |
|                              | Present Navigation Clearance Height (m)  |              |              |              | 0.60         | No               |                           |              |
| River Condition              | Bank to Bank Width (m)                   | 80.00        | 90.00        | 73.00        | 20.00        | 30.00            | 190.00                    | 190.00       |
|                              | Highest Flood Water Width (m)            | 90.00        | 100.00       | 86.00        | 25.00        | 40.00            | 200.00                    | 210.00       |
|                              | Highest Flood Water Depth (m)            | 5.20         | 6.00         | 4.85         | 7.00         | 4.00             | 6.70                      | 5.50         |
|                              | Normal Flood Water Width (m)             | 87.00        | 70.00        | 70.00        | 15.00        | 35.00            | 190.00                    | 190.00       |
|                              | Normal Flood Water depth (m)             | 3.50         | 5.50         | 3.50         | 6.00         | 3.00             | 5.00                      | 4.50         |
|                              | Dry Season Water Width (m)               | 25.00        | 20.00        | 25.00        | 12.00        | 15.00            | 100.00                    | 30.00        |
|                              | Dry Season Water Depth (m)               | 1.00         | 1.00         | 0.50         | 2.00         | 1.00             | 2.00                      | 1.80         |
|                              | Tidal Fluctuation (m)                    | No           | No           | No           | No           | No               | No                        | No           |
|                              | Water Velocity                           | Medium       | Medium       | Medium       | Slow         | Slow             | Fast                      | Medium       |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90           | 90           | 90           | 90               | 90                        | 90           |
|                              | Ferry Services                           | No           | No           | No           | No           | No               | No                        | No           |
|                              | Required Navigation Clearance Height (m) | 1.00         | 1.00         | 1.00         | 1.00         | No               | 3.00                      | 1.00         |
|                              | Type of River Traffic                    | Country Boat | Country Boat | Country Boat | Country Boat | No               | Engine Boat, Country Boat | Country Boat |
|                              | Condition of Bank                        | Sound        | Sound        | Sound        | Sound        | Sound            | Eroded                    | Eroded       |
| Condition of Riverbed        | Sound                                    | Sound        | Sound        | Sound        | Sound        | Scoured          | Scoured                   |              |
| Approach Road                | Total Road Width (m)                     | 3.90         | 4.00         | 3.10         | 4.88         | 4.50             | 4.50                      | 4.88         |
|                              | Carriageway Width (m)                    | 3.90         | 3.68         | 3.10         | 3.68         | 3.00             | 4.80                      | 3.68         |
|                              | Embankment Height (m)                    | 2.50         | 2.50         | 1.50         | 2.10         | 2.00             | 2.00                      | 2.15         |
|                              | Surface Type                             | Earthen      | Earthen      | Earthen      | WBM/HBB      | Earthen          | Earthen                   | Earthen      |
|                              | Surface Condition                        | Good         | Good         | Bad          | Fair         | Good             | Good                      | Good         |
|                              | Alternative Route (km)                   | No           | No           | No           | No           | No               | No                        | No           |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Manikganj**

| Name of Upazila       |   | Saturia                 |                         |                               |                                |                  |                  |                    |   |
|-----------------------|---|-------------------------|-------------------------|-------------------------------|--------------------------------|------------------|------------------|--------------------|---|
| Serial Number         |   | 23                      | 25                      | 26                            | 27                             | 28               | 29               | 30                 |   |
| Influence Area        | Population (thousand)                             | 18                      | 15                      | 5                             | 12                             | 20               | 40               | 30                 |   |
|                       | Main Industry                                     | Agriculture             | Agriculture             | Agriculture                   | Agriculture                    | Agriculture      | Agriculture      | Agriculture        |   |
|                       | Major Agricultural Product                        | Rice, Jute, Veg. S.Cane | Rice, Jute, Veg. S.Cane | Rice, Jute, Weat, S.Cane, Veg | Rice, Jute, Weat, S.Cane, Veg. | Rice, Jute, Veg. | Rice, Jute, Veg. | Rice, Jute, S.Cane |   |
|                       | Number of Public Facilities                       | School                  | 4                       | 8                             | 10                             | 5                | 8                | 8                  | 8 |
|                       |   | Clinic                  | 1                       | 3                             | 3                              | 2                | 3                | 3                  | 3 |
|                       |   | Bazar                   | 3                       | 3                             | 2                              | 2                | 5                | 5                  | 4 |
|                       |   | Mosque                  | 5                       | 10                            | 12                             | 2                | 7                | 8                  | 5 |
|                       |   | Gov't Office            | 2                       | 0                             | 0                              | 0                | 1                | 0                  | 0 |
|                       |   | Others                  | 3                       | 1                             | 2                              | 3                | 0                | 6                  | 3 |
| <b>Total</b>          |   | <b>18</b>               | <b>25</b>               | <b>29</b>                     | <b>14</b>                      | <b>24</b>        | <b>28</b>        | <b>23</b>          |   |
| Traffic Volume        | Passenger Car                                     | 60                      | 70                      | 200                           | 2                              | 10               | 10               | 20                 |   |
|                       | Pickup/Truck                                      | 30                      | 40                      | 5                             | 0                              | 15               | 15               | 5                  |   |
|                       | Bus   | 25                      | 30                      | 0                             | 0                              | 0                | 0                | 10                 |   |
|                       | Motorcycle  | 25                      | 30                      | 12                            | 12                             | 25               | 50               | 25                 |   |
|                       | Rickshaw  | 200                     | 200                     | 200                           | 5                              | 100              | 500              | 70                 |   |
|                       | Autorickshaw                                      | 150                     | 12                      | 25                            | 6                              | 20               | 25               | 8                  |   |
|                       | Bullock Cart                                      | 0                       | 0                       | 0                             | 0                              | 0                | 0                | 15                 |   |
|                       | Pedestrian  | 1000                    | 1000                    | 2000                          | 1200                           | 5000             | 5000             | 400                |   |
| Bridge Site Condition | Landuse   | Farm, Residence         | Farm                    | Residence                     | Farm                           | Farm             | Farm/Residence   | Meadow             |   |
|                       | Topography  | Flat                    | Flat                    | Flat                          | Flat                           | Flat             | Flat             | Flat               |   |
|                       | Necessity of Realignment of Approach Road         | No                      | No                      | No                            | No                             | No               | No               | No                 |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                      | No                      | No                            | No                             | No               | No               | No                 |   |
|                       | Number of Houses to be Relocated                  | No                      | No                      | No                            | No                             | No               | No               | No                 |   |
|                       | Other Obstruction to be Relocated                 | No                      | No                      | No                            | No                             | No               | No               | No                 |   |
| Proposed Bridge       | Bridge Length (m)                                 | 80                      | 90                      | 70                            | 20                             | 30               | 190              | 190                |   |
|                       | Span Arrangement                                  | 2x15m+20m+2x15m         | 15m+3x20m+15m           | 2x25m+20m                     | 1x20m                          | 1x30m            | 20m+6x25m+20m    | 20m+6x25m+20m      |   |
|                       | Abutment Height (m)                               | 5.00                    | 5.50                    | 4.00                          | 6.50                           | 6.00             | 6.00             | 5.00               |   |
|                       | Pier Height (m)                                   | 6.50                    | 7.00                    | 6.50                          | -                              | -                | 10.00            | 6.50               |   |
| Remarks               |   |                         |                         |                               |                                |                  |                  |                    |   |

**BRIDGE SITE SURVEY DATA- 1**

**Zone No: 1**  
**District : Manikganj**

| Name of Upazilla             |  | Doulatpur           |                           |              |              |              |              |                           |
|------------------------------|--|---------------------|---------------------------|--------------|--------------|--------------|--------------|---------------------------|
| Serial Number                | 34                                       | 35                  | 36                        | 37           | 38           | 39           | 40           |                           |
| Bridge Code                  | 05-04-02                                 | 05-04-03            | 05-04-04                  | 05-04-05     | 05-04-06     | 05-04-07     | 05-04-08     |                           |
| Road ID                      | 356104008                                | 356103008           | 356102002                 | 356102002    | 356102002    | 356102002    | 356103009    |                           |
| Road Class                   | R2                                       | R1                  | FRB                       | FRB          | FRB          | FRB          | R1           |                           |
| Chainage (km)                | 8+440                                    | 0+456               | 2+650                     | 3+089        | 3+352        | 3+913        | 1+030        |                           |
| Condition of Existing Bridge | Existing or not                          | Not Existing        | Not Existing              | Not Existing | Not Existing | Not Existing | Not Existing |                           |
|                              | Bridge Length (m)                        |                     |                           |              |              |              |              |                           |
|                              | Bridge Width (m)                         |                     |                           |              |              |              |              |                           |
|                              | Carriageway Width (m)                    |                     |                           |              |              |              |              |                           |
|                              | Superstructure Type                      |                     |                           |              |              |              |              |                           |
|                              | Abutment Type                            |                     |                           |              |              |              |              |                           |
|                              | Pier Type                                |                     |                           |              |              |              |              |                           |
|                              | Usage of Bridge                          |                     |                           |              |              |              |              |                           |
|                              | Condition                                |                     |                           |              |              |              |              |                           |
|                              | Present Navigation Clearance Height (m)  |                     |                           |              |              |              |              |                           |
| River Condition              | Bank to Bank Width (m)                   | 100.00              | 86.00                     | 46.00        | 25.00        | 46.00        | 41.00        | 50.00                     |
|                              | Highest Flood Water Width (m)            | 130.00              | 100.00                    | 70.00        | 40.00        | 60.00        | 60.00        | 65.00                     |
|                              | Highest Flood Water Depth (m)            | 6.50                | 7.00                      | 4.00         | 4.00         | 4.00         | 4.50         | 5.50                      |
|                              | Normal Flood Water Width (m)             | 100.00              | 90.00                     | 60.00        | 25.00        | 56.00        | 40.00        | 50.00                     |
|                              | Normal Flood Water depth (m)             | 5.50                | 6.00                      | 3.50         | 2.50         | 3.00         | 3.25         | 4.00                      |
|                              | Dry Season Water Width (m)               | 46.00               | 40.00                     | 0.00         | 0.00         | 0.00         | 0.00         | 12.00                     |
|                              | Dry Season Water Depth (m)               | 0.90                | 2.80                      | 0.00         | 0.00         | 0.00         | 0.00         | 0.75                      |
|                              | Tidal Fluctuation (m)                    | No                  | No                        | No           | No           | No           | No           | No                        |
|                              | Water Velocity                           | Medium              | Medium                    | Medium       | Medium       | Slow         | Slow         | Slow                      |
|                              | Angle of Bridge to Stream (deg)          | 90                  | 90                        | 90           | 90           | 90           | 90           | 90                        |
|                              | Ferry Services                           | No                  | No                        | No           | No           | No           | No           | No                        |
|                              | Required Navigation Clearance Height (m) | 2.00                | 1.00                      | 0.50         | 0.50         | 0.50         | 1.00         | 1.00                      |
|                              | Type of River Traffic                    | Cargo, Country Boat | Engine Boat, Country Boat | Country Boat | Country Boat | Country Boat | Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound               | Sound                     | Sound        | Sound        | Sound        | Sound        | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound               | Sound                     | Sound        | Sound        | Sound        | Sound        |                           |
| Approach Road                | Total Road Width (m)                     | 4.87                | 3.00                      | 3.65         | 3.00         | 3.65         | 3.65         | 4.25                      |
|                              | Carriageway Width (m)                    | 3.05                | 3.00                      | 3.65         | 3.00         | 3.65         | 3.65         | 3.05                      |
|                              | Embankment Height (m)                    | 1.87                | 2.50                      | 2.00         | 2.00         | 2.50         | 2.50         | 3.00                      |
|                              | Surface Type                             | Earthen             | Earthen                   | Earthen      | Earthen      | Earthen      | Earthen      | Earthen                   |
|                              | Surface Condition                        | Fair                | Good                      | Good         | Good         | Good         | Good         | Fair                      |
|                              | Alternative Route (km)                   | No                  | No                        | No           | No           | No           | No           | No                        |

## BRIDGE SITE SURVEY DATA- 2

Zone-1

District: Manikganj

| Name of Upazila       |   | Doulatpur         |                                |                         |  |  |                                |                        |    |
|-----------------------|---|-------------------|--------------------------------|-------------------------|--|--|--------------------------------|------------------------|----|
| Serial Number         |   | 34                | 35                             | 36                      | 37   | 38   | 39                             | 40                     |    |
| Influence Area        | Population (thousand)                             | 15                | 33                             | 25                      | 30   | 30   | 29                             | 9                      |    |
|                       | Main Industry                                     | Agriculture       | Agriculture, Commercial        | Agriculture             | Agriculture  | Agriculture  | Agriculture, Commercial        | Agriculture            |    |
|                       | Major Agricultural Product                        | Rice, Wheat, Jute | Rice, Jute, Fruits Veg. S.cane | Rice, Jute, Veg. S.cane | Rice, Jute, Veg. S.cane  | Rice, Veg. S.cane  | Rice, Jute, Fruits Veg. S.cane | Rice, Jute, Veg. Onion |    |
|                       | Number of Public Facilities                       | School            | 4                              | 5                       | 8  | 6  | 6                              | 6                      | 12 |
|                       |   | Clinic            | 2                              | 1                       | 1  | 1  | 1                              | 1                      | 3  |
|                       |   | Bazar             | 2                              | 2                       | 2  | 2  | 2                              | 2                      | 2  |
|                       |   | Mosque            | 10                             | 4                       | 4  | 4  | 6                              | 6                      | 10 |
|                       |   | Gov't Office      | 2                              | 1                       | 1  | 1  | 1                              | 1                      | 0  |
| Others                |   | 7                 | 3                              | 3                       | 3  | 3  | 3                              | 3                      |    |
| Total                 |   | 27                | 16                             | 17                      | 17   | 19   | 19                             | 30                     |    |
| Traffic Volume        | Passenger Car                                     | 6                 | 25                             | 10                      | 10   | 10   | 10                             | 4                      |    |
|                       | Pickup/Truck                                      | 2                 | 15                             | 20                      | 20   | 20   | 20                             | 2                      |    |
|                       | Bus   | 2                 | 0                              | 0                       | 0  | 0  | 0                              | 2                      |    |
|                       | Motorcycle  | 12                | 30                             | 50                      | 50   | 60   | 50                             | 8                      |    |
|                       | Rickshaw  | 130               | 150                            | 120                     | 120  | 120  | 120                            | 75                     |    |
|                       | Autorickshaw                                      | 6                 | 10                             | 20                      | 20   | 20   | 20                             | 20                     |    |
|                       | Bullock Cart                                      | 5                 | 70                             | 80                      | 80   | 80   | 80                             | 10                     |    |
|                       | Pedestrian  | 685               | 1000                           | 700                     | 700  | 700  | 800                            | 800                    |    |
| Bridge Site Condition | Landuse   | Residence         | Residence, Meadow              | Farm, Meadow            | Farm, Meadow   | Residence, Meadow  | Residence, Meadow              | Farm, Meadow           |    |
|                       | Topography  | Flat              | Flat                           | Flat                    | Flat   | Flat   | Flat                           | Flat                   |    |
|                       | Necessity of Realignment of Approach Road         | No                | No                             | No                      | No   | No   | No                             | No                     |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                | No                             | No                      | No   | No   | No                             | No                     |    |
|                       | Number of Houses to be Relocated                  | No                | No                             | No                      | No   | No   | No                             | No                     |    |
|                       | Other Obstruction to be Relocated                 | No                | No                             | No                      | No   | No   | No                             | No                     |    |
| Proposed Bridge       | Bridge Length (m)                                 | 100               | 90                             | 50                      | 30   | 50   | 40                             | 50                     |    |
|                       | Span Arrangement                                  | 5x20m             | 15m+3x20m+15m                  | 15m+20m+15m             | 1x30m  | 15m+20m+15m  | 10m+20m+10m                    | 15m+20m+15m            |    |
|                       | Abutment Height (m)                               | 5.00              | 5.00                           | 4.00                    | 3.00   | 3.50   | 4.50                           | 4.50                   |    |
|                       | Pier Height (m)                                   | 7.50              | 8.00                           | 8.00                    | -  | 5.00   | 6.00                           | 7.00                   |    |
| Remarks               |   |                   |                                |                         | After completion, the bridge will establish direct connection from Doulatpur Upazila H/Q to the Amtail Hat, Bachamara GCR. | After completion of BR direct connecting Sumatpur, Jointa, Gotabagh, Bonna village, Amtail bazar, Bachamara GE to the Upazila H/Q Doulatpur. |                                |                        |    |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Manikganj

| Name of Upazila                         |  | Doulatpur                 |                           |                       |              |              |                           |              |
|---|--|---------------------------|---------------------------|-----------------------|--------------|--------------|---------------------------|--------------|
| Serial Number                           | 42                                       | 43                        | 44                        | 46                    | 47           | 48           | 49                        |              |
| Bridge Code                             | 05-04-10                                 | 05-04-11                  | 05-04-12                  | 05-04-N1              | 05-04-N2     | 05-04-N3     | 05-04-N4                  |              |
| Road ID                                 | 356102003                                | 356102003                 | 356102001                 | 356104001             | 356104021    | 356104021    | 356103010                 |              |
| Road Class                              | FRB                                      | FRB                       | FRB                       | R2                    | R2           | R2           | R1                        |              |
| Chainage (km)                           | 5+250                                    | 6+520                     | 3+420                     | 0+550                 | 0+000        | 4+700        | 1+400                     |              |
| Condition of Existing Bridge            | Existing or not                          | Not Existing              | Not Existing              | Existing              | Not Existing | Not Existing | Existing                  | Not Existing |
|   | Bridge Length (m)                        |                           |                           | 12.00                 |              |              | 50.00                     |              |
|   | Bridge Width (m)                         |                           |                           | 4.25                  |              |              | 0.20                      |              |
|   | Carriageway Width (m)                    |                           |                           | 3.66                  |              |              | 0.20                      |              |
|   | Superstructure Type                      |                           |                           | RC slab girder bridge |              |              | Bamboo                    |              |
|   | Abutment Type                            |                           |                           | RC Returned           |              |              | Bamboo                    |              |
|   | Pier Type                                |                           |                           | No                    |              |              | Bamboo                    |              |
|   | Usage of Bridge                          |                           |                           | All Vehicles          |              |              | Pedestrians only          |              |
|   | Condition                                |                           |                           | Damaged               |              |              | Weak                      |              |
| Present Navigation Clearance Height (m) |  |                           | 1.50                      |                       |              | 1.00         |                           |              |
| River Condition                         | Bank to Bank Width (m)                   | 60.00                     | 45.00                     | 38.00                 | 60.00        | 60.00        | 50.00                     | 60.00        |
|   | Highest Flood Water Width (m)            | 78.00                     | 56.00                     | 48.00                 | 78.00        | 70.00        | 63.00                     | 69.00        |
|   | Highest Flood Water Depth (m)            | 6.20                      | 6.70                      | 5.50                  | 6.50         | 5.00         | 6.95                      | 6.80         |
|   | Normal Flood Water Width (m)             | 60.00                     | 38.00                     | 40.00                 | 60.00        | 60.00        | 50.00                     | 60.00        |
|   | Normal Flood Water depth (m)             | 5.60                      | 4.25                      | 5.00                  | 5.50         | 3.50         | 5.28                      | 5.35         |
|   | Dry Season Water Width (m)               | 16.00                     | 0.00                      | 30.00                 | 27.00        | 25.00        | 12.50                     | 25.00        |
|   | Dry Season Water Depth (m)               | 1.60                      | 0.00                      | 1.50                  | 0.50         | 1.00         | 0.45                      | 2.55         |
|   | Tidal Fluctuation (m)                    | No                        | No                        | No                    | No           | No           | No                        | No           |
|   | Water Velocity                           | Slow                      | Slow                      | Slow                  | Medlum       | Slow         | Slow                      | Slow         |
|   | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                    | 90           | 90           | 90                        | 90           |
|   | Ferry Services                           | No                        | No                        | No                    | No           | No           | No                        | No           |
|   | Required Navigation Clearance Height (m) | 1.00                      | 1.00                      | 1.50                  | 1.00         | 2.00         | 1.00                      | 1.00         |
|   | Type of River Traffic                    | Country Boat, Engine Boat | Country Boat, Engine Boat | Country Boat          | Country Boat | Country Boat | Country Boat, Engine Boat | Country Boat |
| Condition of Bank                       | Sound                                    | Sound                     | Sound                     | Sound                 | Sound        | Sound        | Eroded                    |              |
| Condition of Riverbed                   | Sound                                    | Sound                     | Sound                     | Sound                 | Sound        | Sound        | Scoured                   |              |
| Approach Road                           | Total Road Width (m)                     | 4.25                      | 4.87                      | 4.50                  | 3.50         | 3.15         | 3.45                      | 4.20         |
|   | Carriageway Width (m)                    | 3.66                      | 3.66                      | 3.66                  | 3.50         | 3.15         | 3.05                      | 3.05         |
|   | Embankment Height (m)                    | 1.78                      | 2.15                      | 3.00                  | 2.00         | 2.75         | 1.80                      | 2.10         |
|   | Surface Type                             | BC/Earthen                | BC/Earthen                | BC                    | Earthen      | Earthen      | Earthen                   | Earthen      |
|   | Surface Condition                        | Good                      | Fair                      | Good                  | Fair         | Fair         | Fair                      | Fair         |
|   | Alternative Route (km)                   | No                        | No                        | No                    | No           | No           | No                        | No           |



### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Manikganj**

| Name of Upazilla      |   | Doulatpur              |                   |                               |                  |   |  |                        |   |
|-----------------------|---|------------------------|-------------------|-------------------------------|------------------|---|--|------------------------|---|
| Serial Number         |   | 42                     | 43                | 44                            | 46               | 47  | 48   | 49                     |   |
| Influence Area        | Population (thousand)                             | 5.8                    | 6.8               | 9                             | 12               | 4   | 5.5  | 6.1                    |   |
|                       | Main Industry                                     | Agriculture            | Agriculture       | Agriculture                   | Agriculture      | Agriculture   | Agriculture                                      | Agriculture            |   |
|                       | Major Agricultural Product                        | Rice, Jute, Veg. Onion | Rice, Wheat, Veg. | Rice, Jute, Wheat, Veg, Onion | Rice, Jute, Veg. | Rice, Jute, Veg. Onion  | Rice, Wheat, Jute, Veg. Onion                    | Rice, Jute, Veg. Onion |   |
|                       | Number of Public Facilities                       | School                 | 6                 | 8                             | 10               | 5   | 6  | 5                      | 5 |
|                       |   | Clinic                 | 2                 | 1                             | 2                | 1   | 1  | 1                      | 2 |
|                       |   | Bazar                  | 2                 | 2                             | 2                | 2   | 1  | 1                      | 1 |
|                       |   | Mosque                 | 6                 | 5                             | 6                | 6   | 2  | 2                      | 1 |
|                       |   | Gov't Office           | 1                 | 0                             | 1                | 0   | 0  | 0                      | 0 |
| Others                |   | 3                      | 3                 | 6                             | 2                | 2   | 2  | 0                      |   |
| Total                 |   | 20                     | 19                | 26                            | 16               | 12  | 11   | 9                      |   |
| Traffic Volume        | Passenger Car                                     | 5                      | 6                 | 3                             | 4                | 5   | 5  | 6                      |   |
|                       | Pickup/Truck                                      | 0                      | 5                 | 5                             | 0                | 2   | 0  | 2                      |   |
|                       | Bus   | 0                      | 2                 | 3                             | 0                | 0   | 0  | 1                      |   |
|                       | Motorcycle  | 10                     | 10                | 20                            | 8                | 6   | 8  | 17                     |   |
|                       | Rickshaw  | 120                    | 125               | 150                           | 50               | 35  | 50   | 165                    |   |
|                       | Autorickshaw                                      | 8                      | 10                | 10                            | 3                | 3   | 6  | 5                      |   |
|                       | Bullock Cart                                      | 50                     | 100               | 0                             | 25               | 0   | 25   | 25                     |   |
|                       | Pedestrian  | 800                    | 680               | 700                           | 500              | 400   | 350  | 526                    |   |
| Bridge Site Condition | Landuse   | Residence              | Residence         | Farm, Meadow, Swamp           | Residence        | Farm  | Residence  | Residence              |   |
|                       | Topography  | Flat                   | Flat              | Flat                          | Flat             | Flat  | Flat   | Flat                   |   |
|                       | Necessity of Realignment of Approach Road         | No                     | No                | No                            | No               | No  | No   | No                     |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                     | No                | No                            | No               | No  | No   | No                     |   |
|                       | Number of Houses to be Relocated                  | No                     | No                | No                            | No               | No  | No   | No                     |   |
|                       | Other Obstruction to be Relocated                 | No                     | No                | No                            | No               | No  | No   | No                     |   |
| Proposed Bridge       | Bridge Length (m)                                 | 60                     | 60                | 40                            | 60               | 60  | 50   | 60                     |   |
|                       | Span Arrangement                                  | 3x20m                  | 15m+20m+15m       | 10m+20m+10m                   | 3x20m            | 3x20m   | 15m+20m+15m                                      | 3x20m                  |   |
|                       | Abutment Height (m)                               | 5.00                   | 4.00              | 4.60                          | 5.00             | 4.00  | 4.60   | 5.00                   |   |
|                       | Pier Height (m)                                   | 7.00                   | 6.00              | 7.00                          | 7.50             | 7.00  | 6.28   | 7.50                   |   |
| Remarks               |   |                        |                   |                               |                  | This road will connect Khalase UP, Khalase bazar and Thakurkandi. | This road will connect Rowha and Shamganj bazar. |                        |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Manikganj

| Name of Upazila              |  | Horirampur       |              |                  |                           |                  |              |                       |
|------------------------------|--|------------------|--------------|------------------|---------------------------|------------------|--------------|-----------------------|
| Serial Number                | 50                                       | 51               | 53           | 54               | 55                        | 56               | 57           |                       |
| Bridge Code                  | 05-05-01                                 | 05-05-02         | 05-05-04     | 05-05-N1         | 05-05-N2                  | 05-05-N3         | 05-05-N4     |                       |
| Road ID                      | 356283025                                | 356282001        | 356283006    | 356283005        | 356282002                 | 356283002        | 356283012    |                       |
| Road Class                   | R1                                       | FRB              | R1           | R1               | FRB                       | R1               | R1           |                       |
| Chainage (km)                | 3+750                                    | 0+675            | 1+560        | 3+450            | 7+780                     | 4+750            | 0+330        |                       |
| Condition of Existing Bridge | Existing or not                          | Existing         | Not Existing | Existing         | Not Existing              | Existing         | Not Existing | Existing              |
|                              | Bridge Length (m)                        | 40.00            |              | 40.00            |                           | 45.00            |              | 15.00                 |
|                              | Bridge Width (m)                         | 0.10             |              | 1.50             |                           | 0.30             |              | 3.05                  |
|                              | Carriageway Width (m)                    | 0.10             |              | 1.50             |                           | 0.30             |              | 2.75                  |
|                              | Superstructure Type                      | Bamboo           |              | Bamboo           |                           | Bamboo           |              | RC slab girder bridge |
|                              | Abutment Type                            | Bamboo           |              | Bamboo           |                           | Bamboo           |              | RC Reversed T. Type   |
|                              | Pier Type                                | Bamboo           |              | Bamboo           |                           | Bamboo           |              | No                    |
|                              | Usage of Bridge                          | Pedestrians only |              | Pedestrians only |                           | Pedestrians only |              | All Vehicles          |
|                              | Condition                                | Weak             |              | Weak             |                           | Weak             |              | Damaged               |
|                              | Present Navigation Clearance Height (m)  | 0.50             |              | 1.50             |                           | 0.70             |              | 0.80                  |
| River Condition              | Bank to Bank Width (m)                   | 45.00            | 80.00        | 50.00            | 55.00                     | 30.00            | 55.00        | 15.00                 |
|                              | Highest Flood Water Width (m)            | 70.00            | 80.00        | 70.00            | 70.00                     | 35.00            | 70.00        | 18.00                 |
|                              | Highest Flood Water Depth (m)            | 5.00             | 5.00         | 4.50             | 6.50                      | 5.00             | 6.00         | 5.00                  |
|                              | Normal Flood Water Width (m)             | 50.00            | 70.00        | 55.00            | 70.00                     | 30.00            | 60.00        | 15.00                 |
|                              | Normal Flood Water depth (m)             | 3.50             | 4.00         | 3.00             | 4.50                      | 4.00             | 5.00         | 3.00                  |
|                              | Dry Season Water Width (m)               | 0.00             | 20.00        | 30.00            | 10.00                     | 0.00             | 0.00         | 0.00                  |
|                              | Dry Season Water Depth (m)               | 0.00             | 1.00         | 0.50             | 0.50                      | 0.00             | 0.00         | 0.00                  |
|                              | Tidal Fluctuation (m)                    | No               | No           | No               | No                        | No               | No           | No                    |
|                              | Water Velocity                           | Slow             | Slow         | Medlum           | Medlum                    | Slow             | Slow         | Slow                  |
|                              | Angle of Bridge to Stream (deg)          | 90               | 90           | 90               | 90                        | 90               | 90           | 90                    |
|                              | Ferry Services                           | No               | No           | No               | No                        | No               | No           | No                    |
|                              | Required Navigation Clearance Height (m) | 1.50             | 2.00         | 1.50             | 1.50                      | 1.00             | 1.00         | 1.00                  |
|                              | Type of River Traffic                    | Engine Boat      | Engine Boat  | Country Boat     | Country Boat, Engine Boat | Country Boat     | Country Boat | Country Boat          |
|                              | Condition of Bank                        | Sound            | Sound        | Sound            | Sound                     | Sound            | Sound        | Sound                 |
| Condition of Riverbed        | Sound                                    | Sound            | Sound        | Sound            | Sound                     | Sound            | Sound        |                       |
| Approach Road                | Total Road Width (m)                     | 3.00             | 3.66         | 4.88             | 3.66                      | 3.66             | 3.66         | 4.88                  |
|                              | Carriageway Width (m)                    | 3.00             | 3.66         | 3.66             | 3.66                      | 3.66             | 3.66         | 3.05                  |
|                              | Embankment Height (m)                    | 2.50             | 2.50         | 3.00             | 2.00                      | 3.00             | 3.00         | 2.80                  |
|                              | Surface Type                             | Earthen          | Earthen      | BC               | Earthen                   | Earthen          | Earthen      | HBB                   |
|                              | Surface Condition                        | Bad              | Bad          | Good             | Fair                      | Fair             | Fair         | Fair                  |
|                              | Alternative Route (km)                   | No               | 0.65         | No               | No                        | No               | No           | No                    |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Manikganj**

| Name of Upazila       |   | Horirampur              |                         |                                  |                                       |                                |                         |                                |   |
|-----------------------|---|-------------------------|-------------------------|----------------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------|---|
| Serial Number         |   | 50                      | 51                      | 53                               | 54                                    | 55                             | 56                      | 57                             |   |
| Influence Area        | Population (thousand)                             | 15                      | 20                      | 8                                | 10                                    | 8                              | 9                       | 7                              |   |
|                       | Main Industry                                     | Agriculture, Commercial | Agriculture             | Agriculture                      | Agriculture, Commercial               | Agriculture                    | Agriculture             | Agriculture                    |   |
|                       | Major Agricultural Product                        | Rice, Jute, S.Cane      | Rice, Jute, Veg. S.Cane | Rice, Fruits, Veg. S.Cane, Onion | Rice, Wheat, Jute, Veg. S.Cane, Onion | Rice, Wheat, Jute, Veg. S.Cane | Rice, Jute, Veg. S.Cane | Rice, Wheat, Jute, Veg. S.Cane |   |
|                       | Number of Public Facilities                       | School                  | 5                       | 25                               | 4                                     | 7                              | 8                       | 6                              | 5 |
|                       |   | Clinic                  | 2                       | 8                                | 2                                     | 2                              | 2                       | 3                              | 1 |
|                       |   | Bazar                   | 2                       | 4                                | 2                                     | 3                              | 3                       | 3                              | 3 |
|                       |   | Mosque                  | 8                       | 10                               | 3                                     | 5                              | 10                      | 6                              | 8 |
|                       |   | Gov't Office            | 2                       | 4                                | 1                                     | 0                              | 0                       | 2                              | 1 |
| Others                |   | 4                       | 6                       | 3                                | 6                                     | 8                              | 6                       | 5                              |   |
| Total                 |   | 21                      | 55                      | 15                               | 22                                    | 31                             | 26                      | 23                             |   |
| Traffic Volume        | Passenger Car                                     | 7                       | 20                      | 20                               | 12                                    | 21                             | 8                       | 12                             |   |
|                       | Pickup/Truck                                      | 10                      | 10                      | 20                               | 15                                    | 10                             | 10                      | 10                             |   |
|                       | Bus   | 5                       | 25                      | 15                               | 20                                    | 12                             | 6                       | 15                             |   |
|                       | Motorcycle  | 20                      | 50                      | 40                               | 25                                    | 18                             | 8                       | 16                             |   |
|                       | Rickshaw  | 200                     | 200                     | 200                              | 75                                    | 125                            | 220                     | 200                            |   |
|                       | Auto Rickshaw                                     | 25                      | 30                      | 25                               | 30                                    | 8                              | 16                      | 5                              |   |
|                       | Bullock Cart                                      | 7                       | 3                       | 5                                | 7                                     | 2                              | 20                      | 0                              |   |
|                       | Pedestrian  | 1800                    | 700                     | 400                              | 1000                                  | 1200                           | 250                     | 800                            |   |
| Bridge Site Condition | Landuse   | Farm, Market Area       | Farm, Residence         | Farm, Residence                  | Farm, Meadow                          | Residence                      | Farm                    | Farm, Residence                |   |
|                       | Topography  | Flat                    | Flat                    | Flat                             | Flat                                  | Flat                           | Flat                    | Flat                           |   |
|                       | Necessity of Realignment of Approach Road         | No                      | No                      | No                               | No                                    | No                             | No                      | No                             |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                      | No                      | No                               | No                                    | No                             | No                      | No                             |   |
|                       | Number of Houses to be Relocated                  | No                      | No                      | 1                                | No                                    | No                             | No                      | No                             |   |
|                       | Other Obstruction to be Relocated                 | 1 Shop                  | No                      | No                               | No                                    | No                             | No                      | No                             |   |
| Proposed Bridge       | Bridge Length (m)                                 | 50                      | 60                      | 50                               | 60                                    | 30                             | 60                      | 15                             |   |
|                       | Span Arrangement                                  | 15m+20m+15m             | 3x20m                   | 15m+20m+15m                      | 3x20m                                 | 1x30m                          | 3x20m                   | 1x15m                          |   |
|                       | Abutment Height (m)                               | 4.50                    | 4.50                    | 4.50                             | 4.50                                  | 4.50                           | 4.50                    | 4.50                           |   |
|                       | Pier Height (m)                                   | 7.00                    | 7.00                    | 6.00                             | 6.00                                  | -                              | 7.00                    | -                              |   |
| Remarks               |   |                         |                         |                                  |                                       |                                |                         |                                |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1  
District : Manikganj

| Name of Upazila                         |  | Horirampur       |                  |              | Gheor                      |              |                  |              |
|---|--|------------------|------------------|--------------|----------------------------|--------------|------------------|--------------|
| Serial Number                           | 58                                       | 59               | 61               | 62           | 63                         | 64           | 65               |              |
| Bridge Code                             | 05-05-N5                                 | 05-05-N6         | 05-06-02         | 05-06-N1     | 05-06-N2                   | 05-06-N3     | 05-06-N4         |              |
| Road ID                                 | 356283009                                | 356283025        | 356223004        | 356222001    | 356223009                  | 356223009    | 356223007        |              |
| Road Class                              | R1                                       | R1               | R1               | FRB          | R1                         | R1           | R1               |              |
| Chainage (km)                           | 0+920                                    | 3+250            | 2+370            | 7+882        | 4+580                      | 6+870        | 4+910            |              |
| Condition of Existing Bridge            | Existing or not                          | Existing         | Existing         | Not Existing | Existing                   | Not Existing | Existing         | Not Existing |
|   | Bridge Length (m)                        | 20.00            | 20.00            |              | 27.00                      |              | 50.00            |              |
|   | Bridge Width (m)                         | 0.20             | 1.00             |              | 2.50                       |              | 0.30             |              |
|   | Carriageway Width (m)                    | 0.20             | 1.00             |              | 2.00                       |              | 0.30             |              |
|   | Superstructure Type                      | Bamboo           | Bamboo           |              | Timber                     |              | Bamboo           |              |
|   | Abutment Type                            | Bamboo           | Bamboo           |              | RC Reversed T. Type        |              | Bamboo           |              |
|   | Pier Type                                | Bamboo           | Bamboo           |              | RC pile bent               |              | Bamboo           |              |
|   | Usage of Bridge                          | Pedestrians only | Pedestrians only |              | Light vehicles, Pedestrian |              | Pedestrians only |              |
|   | Condition                                | Weak             | Weak             |              | Damaged                    |              | Weak             |              |
| Present Navigation Clearance Height (m) | 0.50                                     | 1.00             |                  | 0.60         |                            | 0.30         |                  |              |
| River Condition                         | Bank to Bank Width (m)                   | 25.00            | 25.00            | 30.00        | 30.00                      | 50.00        | 50.00            | 80.00        |
|   | Highest Flood Water Width (m)            | 50.00            | 25.00            | 50.00        | 30.00                      | 65.00        | 60.00            | 90.00        |
|   | Highest Flood Water Depth (m)            | 5.00             | 5.00             | 4.00         | 4.50                       | 5.00         | 5.25             | 8.00         |
|   | Normal Flood Water Width (m)             | 32.00            | 20.00            | 30.00        | 25.00                      | 50.00        | 45.00            | 85.00        |
|   | Normal Flood Water depth (m)             | 4.00             | 3.00             | 3.00         | 3.00                       | 3.50         | 4.50             | 6.00         |
|   | Dry Season Water Width (m)               | 20.00            | 0.00             | 10.00        | 0.00                       | 28.00        | 18.00            | 10.00        |
|   | Dry Season Water Depth (m)               | 1.50             | 0.00             | 1.00         | 0.50                       | 1.20         | 0.80             | 1.00         |
|   | Tidal Fluctuation (m)                    | No               | No               | No           | No                         | No           | No               | No           |
|   | Water Velocity                           | Medium           | Slow             | Slow         | Medium                     | Medium       | Medium           | Medium       |
|   | Angle of Bridge to Stream (deg)          | 90               | 90               | 90           | 90                         | 90           | 90               | 90           |
|   | Ferry Services                           | No               | No               | No           | No                         | No           | No               | No           |
|   | Required Navigation Clearance Height (m) | 1.00             | 1.00             | 1.00         | 0.60                       | 1.00         | 1.50             | 1.00         |
|   | Type of River Traffic                    | Country Boat     | Country Boat     | Country Boat | Country Boat               | Country Boat | Country Boat     | Country Boat |
| Condition of Bank                       | Eroded                                   | Sound            | Sound            | Sound        | Sound                      | Sound        | Sound            |              |
| Condition of Riverbed                   | Sound                                    | Sound            | Sound            | Sound        | Sound                      | Sound        | Sound            |              |
| Approach Road                           | Total Road Width (m)                     | 3.00             | 3.00             | 3.30         | 4.88                       | 4.27         | 4.65             | 3.88         |
|   | Carriageway Width (m)                    | 3.00             | 3.00             | 3.00         | 3.88                       | 3.05         | 3.05             | 3.05         |
|   | Embankment Height (m)                    | 2.00             | 2.50             | 1.50         | 1.50                       | 1.40         | 1.80             | 2.00         |
|   | Surface Type                             | Earthen          | Earthen          | Earthen      | BC                         | Earthen      | BC/Earthen       | Earthen      |
|   | Surface Condition                        | Bad              | Fair             | Good         | Good                       | Good         | Good             | Good         |
|   | Alternative Route (km)                   | No               | No               | No           | No                         | No           | No               | No           |

## BRIDGE SITE SURVEY DATA- 2

### Zone-1

### District: Manikganj

| Name of Upazila       |   | Horirampur                         |   | Gheor   |                        |                                 |                         |                         |   |
|-----------------------|---|------------------------------------|---|---|------------------------|---------------------------------|-------------------------|-------------------------|---|
| Serial Number         |   | 58                                 | 59  | 61  | 62                     | 63                              | 64                      | 65                      |   |
| Influence Area        | Population (thousand)                             | 40                                 | 25  | 15  | 50                     | 15                              | 5                       | 45                      |   |
|                       | Main Industry                                     | Agriculture                        | Agriculture   | Agriculture   | Agriculture            | Agriculture                     | Agriculture             | Agriculture             |   |
|                       | Major Agricultural Product                        | Rice, Jute, Veg. S.Cane            | Rice, Jute, Veg.  | Rice, Jute, Sugarcane, Onion  | Rice, Jute, Veg. Onion | Rice, Jute, Fruits, Veg. S.Cane | Rice, Jute, Veg. S.Cane | Rice, Jute, Veg. S.Cane |   |
|                       | Number of Public Facilities                       | School                             | 7   | 3   | 6                      | 8                               | 10                      | 10                      | 7 |
|                       |   | Clinic                             | 3   | 3   | 1                      | 4                               | 3                       | 3                       | 3 |
|                       |   | Bazar                              | 3   | 3   | 2                      | 4                               | 3                       | 4                       | 2 |
|                       |   | Mosque                             | 7   | 5   | 2                      | 6                               | 4                       | 9                       | 6 |
|                       |   | Gov't Office                       | 2   | 2   | 1                      | 7                               | 8                       | 3                       | 4 |
| Others                |   | 6                                  | 3   | 2   | 3                      | 4                               | 3                       | 5                       |   |
|                       | <b>Total</b>                                      | <b>28</b>                          | <b>19</b>   | <b>14</b>   | <b>32</b>              | <b>32</b>                       | <b>32</b>               | <b>27</b>               |   |
| Traffic Volume        | Passenger Car                                     | 12                                 | 10  | 40  | 60                     | 35                              | 30                      | 50                      |   |
|                       | Pickup/Truck                                      | 11                                 | 5   | 30  | 30                     | 28                              | 50                      | 30                      |   |
|                       | Bus   | 0                                  | 4   | 25  | 40                     | 8                               | 15                      | 20                      |   |
|                       | Motorcycle  | 15                                 | 20  | 150   | 100                    | 30                              | 30                      | 70                      |   |
|                       | Rickshaw  | 200                                | 100   | 200   | 250                    | 100                             | 150                     | 200                     |   |
|                       | Autorickshaw                                      | 13                                 | 3   | 25  | 30                     | 10                              | 20                      | 60                      |   |
|                       | Bullock Cart                                      | 2                                  | 3   | 50  | 50                     | 0                               | 0                       | 80                      |   |
|                       | Pedestrian  | 1500                               | 500   | 1500  | 5000                   | 1200                            | 500                     | 6000                    |   |
| Bridge Site Condition | Landuse   | Residence                          | Residence, Meadow   | Residence   | Residence              | Meadow                          | Meadow                  | Meadow                  |   |
|                       | Topography  | Flat                               | Flat  | Flat  | Flat                   | Flat                            | Flat                    | Flat                    |   |
|                       | Necessity of Realignment of Approach Road         | No                                 | No  | No  | No                     | No                              | No                      | No                      |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                                 | No  | No  | No                     | No                              | No                      | No                      |   |
|                       | Number of Houses to be Relocated                  | No                                 | No  | No  | No                     | No                              | No                      | No                      |   |
|                       | Other Obstruction to be Relocated                 | No                                 | No  | No  | No                     | No                              | No                      | No                      |   |
| Proposed Bridge       | Bridge Length (m)                                 | 30                                 | 25  | 30  | 30                     | 50                              | 50                      | 80                      |   |
|                       | Span Arrangement                                  | 1x30m                              | 1x25m   | 1x30m   | 1x30m                  | 15m+20m+15m                     | 15m+20m+15m             | 15m+15m+20m+15m+15m     |   |
|                       | Abutment Height (m)                               | 4.00                               | 4.00  | 4.50  | 5.00                   | 4.50                            | 4.00                    | 5.00                    |   |
|                       | Pier Height (m)                                   | -                                  | -   | -   | -                      | 7.00                            | 7.00                    | 9.00                    |   |
| Remarks               |   | Relocation of a House is required. | The proposed bridge will connect Dhaka - Aricha highway to Jabra UP, Gheor UP, Jabra hat. | The existing bridge is damaged and is not suitable for vehicular traffic. The bridge needs replacement. |                        |                                 |                         |                         |   |

**BRIDGE SITE SURVEY DATA- 1**

Zone No: 1  
District : Manikganj

| Name of Upazila                         |  | Gheor            |              |                  | Sadar        |              |              |                  |              |
|---|--|------------------|--------------|------------------|--------------|--------------|--------------|------------------|--------------|
|   |  | 66               | 67           | 69               | 70           | 72           | 73           | 74               | 75           |
| Serial Number                           |  | 05-08-N5         | 05-08-N6     | 05-07-02         | 05-07-03     | 05-07-05     | 05-07-N1     | 05-07-N2         | 05-07-N3     |
| Bridge Code                             |  | 358223005        | 358223014    | 358462008        | 358463025    | 358463034    | 358465029    | 358463023        | 358464007    |
| Road ID                                 |  | R1               | R1           | FRB              | R1           | R1           | R3           | R1               | R2           |
| Chainage (km)                           |  | 4+500            | 0+050        | 0+000            | 5+100        | 1+650        | 0+800        | 0+800            | 1+700        |
| Condition of Existing Bridge            | Existing or not                          | Existing         | Not Existing | Existing         | Not Existing | Not Existing | Not Existing | Existing         | Not Existing |
|   | Bridge Length (m)                        | 40.00            |              | 70.00            |              |              |              | 19.50            |              |
|   | Bridge Width (m)                         | 0.30             |              | 0.30             |              |              |              | 1.75             |              |
|   | Carriageway Width (m)                    | 0.30             |              | 0.30             |              |              |              | 1.75             |              |
|   | Superstructure Type                      | Bamboo           |              | Bamboo           |              |              |              | Bamboo           |              |
|   | Abutment Type                            | Bamboo           |              | Bamboo           |              |              |              | Bamboo           |              |
|   | Pier Type                                | Bamboo           |              | Bamboo           |              |              |              | Bamboo           |              |
|   | Usage of Bridge                          | Pedestrians only |              | Pedestrians only |              |              |              | Pedestrians only |              |
|   | Condition                                | Weak             |              | Damaged          |              |              |              | Weak             |              |
| Present Navigation Clearance Height (m) | No                                       |                  | 1.00         |                  |              |              | No           |                  |              |
| River Condition                         | Bank to Bank Width (m)                   | 40.00            | 70.00        | 75.00            | 160.00       | 50.00        | 50.00        | 30.00            | 75.00        |
|   | Highest Flood Water Width (m)            | 65.00            | 85.00        | 75.00            | 200.00       | 60.00        | 65.00        | 38.00            | 85.00        |
|   | Highest Flood Water Depth (m)            | 6.00             | 6.00         | 5.82             | 7.50         | 7.00         | 4.93         | 6.83             | 5.46         |
|   | Normal Flood Water Width (m)             | 40.00            | 70.00        | 60.00            | 160.00       | 50.00        | 40.00        | 30.00            | 60.00        |
|   | Normal Flood Water depth (m)             | 5.00             | 3.50         | 3.97             | 6.59         | 5.50         | 3.65         | 3.35             | 3.67         |
|   | Dry Season Water Width (m)               | 25.00            | 10.00        | 20.00            | 10.00        | 10.00        | 0.00         | 12.65            | 20.00        |
|   | Dry Season Water Depth (m)               | 0.60             | 1.00         | 0.55             | 0.80         | 0.60         | 0.00         | 1.12             | 0.40         |
|   | Tidal Fluctuation (m)                    | No               | No           | No               | No           | No           | No           | No               | No           |
|   | Water Velocity                           | Slow             | Fast         | Medium           | Medium       | Medium       | Medium       | Medium           | Slow         |
|   | Angle of Bridge to Stream (deg)          | 90               | 90           | 90               | 90           | 90           | 90           | 90               | 90           |
|   | Ferry Services                           | No               | No           | No               | No           | No           | No           | No               | No           |
|   | Required Navigation Clearance Height (m) | 1.00             | 2.00         | 1.00             | 2.00         | 1.00         | 1.00         | 1.00             | 1.00         |
|   | Type of River Traffic                    | Country Boat     | Country Boat | Country Boat     | Country Boat | Country Boat | Country Boat | Country Boat     | Country Boat |
| Condition of Bank                       | Sound                                    | Sound            | Sound        | Sound            | Sound        | Eroded       | Sound        | Eroded           |              |
| Condition of Riverbed                   | Sound                                    | Sound            | Sound        | Sound            | Sound        | Scoured      | Sound        | Sound            |              |
| Approach Road                           | Total Road Width (m)                     | 3.10             | 3.00         | 7.32             | 4.88         | 4.88         | 3.60         | 3.65             | 3.68         |
|   | Carriageway Width (m)                    | 3.05             | 2.50         | 3.68             | 3.05         | 3.05         | 3.05         | 3.05             | 3.68         |
|   | Embankment Height (m)                    | 1.50             | 2.50         | 2.00             | 2.50         | 2.00         | 1.65         | 2.35             | 2.50         |
|   | Surface Type                             | Earthen          | Earthen      | Earthen          | Earthen      | Earthen      | BC/Earthen   | Earthen          | Earthen      |
|   | Surface Condition                        | Good             | Good         | Good             | Good         | Bad          | Fair         | Bad              | Good         |
|   | Alternative Route (km)                   | No               | No           | No               | No           | No           | No           | No               | No           |

### BRIDGE SITE SURVEY DATA- 2

**Zone-1**

**District: Manikganj**

| Name of Upazila       |   | Gheor                           |   |   | Sadar                   |                         |                                |  |                                  |   |
|-----------------------|---|---------------------------------|---|---|-------------------------|-------------------------|--------------------------------|--|----------------------------------|---|
| Serial Number         |   | 66                              | 67  | 69                                      | 70                      | 72                      | 73                             | 74   | 75                               |   |
| Influence Area        | Population (thousand)                             | 5                               | 50  | 10                                      | 10                      | 15                      | 7                              | 7  | 8                                |   |
|                       | Main Industry                                     | Agriculture                     | Agriculture, Commercial                             | Agriculture                             | Agriculture, Commercial | Agriculture, Commercial | Agriculture, Manufacturing     | Agriculture  | Agriculture                      |   |
|                       | Major Agricultural Product                        | Rice, Jute, Fruits, Veg. S.Cane | Rice, Jute, Veg. S.Cane                             | Rice, Wheat, Jute, S.Cane, Veg. Tobacco | Rice, Jute, S.Cane      | Rice, Jute, Veg. S.Cane | Rice, Jute, Wheat, Veg. S.Cane | Rice, Jute, Veg. S.Cane, Bamboo  | Rice, Jute, Veg. S.Cane, Tobacco |   |
|                       | Number of Public Facilities                       | School                          | 4   | 7                                       | 4                       | 10                      | 2                              | 7  | 4                                | 7 |
|                       |   | Clinic                          | 2   | 3                                       | 1                       | 2                       | 1                              | 1  | 2                                | 1 |
|                       |   | Bazar                           | 3   | 3                                       | 2                       | 2                       | 2                              | 3  | 3                                | 2 |
|                       |   | Mosque                          | 7   | 5                                       | 3                       | 5                       | 2                              | 12   | 10                               | 5 |
|                       |   | Gov't Office                    | 1   | 5                                       | 4                       | 2                       | 0                              | 0  | 2                                | 1 |
| Others                |   | 3                               | 5   | 3                                       | 2                       | 3                       | 3                              | 3  | 2                                |   |
| <b>Total</b>          | <b>20</b>   | <b>28</b>                       | <b>17</b>   | <b>23</b>                               | <b>10</b>               | <b>26</b>               | <b>24</b>                      | <b>18</b>  |                                  |   |
| Traffic Volume        | Passenger Car                                     | 5                               | 40  | 20                                      | 10                      | 30                      | 5                              | 5  | 12                               |   |
|                       | Pickup/Truck                                      | 8                               | 30  | 15                                      | 30                      | 5                       | 2                              | 15   | 15                               |   |
|                       | Bus   | 0                               | 20  | 10                                      | 15                      | 8                       | 2                              | 2  | 17                               |   |
|                       | Motorcycle  | 30                              | 100   | 10                                      | 40                      | 25                      | 3                              | 12   | 18                               |   |
|                       | Rickshaw  | 100                             | 300   | 200                                     | 150                     | 50                      | 50                             | 24   | 110                              |   |
|                       | Autorickshaw                                      | 20                              | 80  | 15                                      | 25                      | 15                      | 12                             | 11   | 12                               |   |
|                       | Bullock Cart                                      | 0                               | 20  | 0                                       | 0                       | 0                       | 0                              | 0  | 0                                |   |
|                       | Pedestrian  | 500                             | 8000  | 500                                     | 500                     | 300                     | 1100                           | 800  | 650                              |   |
| Bridge Site Condition | Landuse   | Farm, Meadow                    | Meadow  | Residence                               | Farm, Meadow            | Residence               | Farm                           | Farm   | Residence                        |   |
|                       | Topography  | Flat                            | Flat  | Flat                                    | Flat                    | Flat                    | Flat                           | Flat   | Flat                             |   |
|                       | Necessity of Realignment of Approach Road         | No                              | No  | No                                      | No                      | No                      | No                             | No   | No                               |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                              | No  | No                                      | No                      | No                      | No                             | No   | No                               |   |
|                       | Number of Houses to be Relocated                  | No                              | No  | No                                      | No                      | No                      | No                             | No   | No                               |   |
|                       | Other Obstruction to be Relocated                 | No                              | No  | No                                      | No                      | No                      | No                             | No   | No                               |   |
| Proposed Bridge       | Bridge Length (m)                                 | 40                              | 70  | 75                                      | 160                     | 50                      | 50                             | 30   | 75                               |   |
|                       | Span Arrangement                                  | 10m+20m+10m                     | 20m+2x25m   | 3x25m                                   | 20m+4x25m+2x20m         | 15m+20m+15m             | 15m+20m+15m                    | 1x30m  | 3x25m                            |   |
|                       | Abutment Height (m)                               | 4.00                            | 5.00  | 4.50                                    | 4.50                    | 4.50                    | 4.00                           | 4.50   | 5.00                             |   |
|                       | Pier Height (m)                                   | 7.00                            | 9.00  | 7.50                                    | 9.50                    | 7.00                    | 7.00                           | -  | 7.50                             |   |
| Remarks               |   |                                 | The proposed bridge will connect Daula GC with FRA. |   |                         |                         |                                | Connecting Sadar Upazila (Bangladesh hat) to Sauria Upazila via Tilla Hat. |                                  |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 1

District : Narsingdi

| Name of Upazila              |  | Raipura      | Balabo       | Shibpur      |
|------------------------------|--|--------------|--------------|--------------|
| Serial Number                |  | 3            | 11           | 14           |
| Bridge Code                  |  | 06-02-01     | 06-03-01     | 06-03-N1     |
| Road ID                      |  | 368643008    | 368073014    | 368073020    |
| Road Class                   |  | R1           | R1           | R1           |
| Chainage (km)                |  | 0+446        | 9+400        | 0+010        |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing | Not Existing |
|                              | Bridge Length (m)                        |              |              |              |
|                              | Bridge Width (m)                         |              |              |              |
|                              | Carriageway Width (m)                    |              |              |              |
|                              | Superstructure Type                      |              |              |              |
|                              | Abutment Type                            |              |              |              |
|                              | Pier Type                                |              |              |              |
|                              | Usage of Bridge                          |              |              |              |
|                              | Condition                                |              |              |              |
|                              | Present Navigation Clearance Height (m)  |              |              |              |
| River Condition              | Bank to Bank Width (m)                   | 80.00        | 130.00       | 130.00       |
|                              | Highest Flood Water Width (m)            | 90.00        | 140.00       | 140.00       |
|                              | Highest Flood Water Depth (m)            | 5.50         | 6.10         | 5.50         |
|                              | Normal Flood Water Width (m)             | 80.00        | 130.00       | 130.00       |
|                              | Normal Flood Water depth (m)             | 4.50         | 5.00         | 4.50         |
|                              | Dry Season Water Width (m)               | 10.00        | 80.00        | 38.00        |
|                              | Dry Season Water Depth (m)               | 0.80         | 1.00         | 1.00         |
|                              | Tidal Fluctuation (m)                    | No           | No           | No           |
|                              | Water Velocity                           | Medlrm       | Medlum       | Medlum       |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90           | 90           |
|                              | Ferry Services                           | No           | No           | No           |
|                              | Required Navigation Clearance Height (m) | 1.50         | 1.50         | 1.50         |
|                              | Type of River Traffic                    | Country Boat | Country Boat | Country Boat |
|                              | Condition of Bank                        | Sound        | Sound        | Eroded       |
| Condition of Riverbed        | Sound                                    | Sound        | Scoured      |              |
| Approach Road                | Total Road Width (m)                     | 4.26         | 3.05         | 4.27         |
|                              | Carriageway Width (m)                    | 3.00         | 3.05         | 3.05         |
|                              | Embankment Height (m)                    | 1.85         | 0.90         | 2.00         |
|                              | Surface Type                             | WBM/Earthen  | Earthen      | Earthen      |
|                              | Surface Condition                        | Fair         | Fair         | Fair         |
|                              | Alternative Route (km)                   | No           | No           | No           |



## BRIDGE SITE SURVEY DATA- 2

### Zone-1

### District: Narsingdi

| Name of Upazila       |   | Raipura                                | Balabo             |                                   | Shibpur            |   |
|-----------------------|---|--|--------------------|-----------------------------------|--------------------|---|
| Serial Number         |   | 3                                      | 11                 | 14                                | 19                 |   |
| Influence Area        | Population (thousand)                             | 12                                     | 8.5                | 8.5                               | 7                  |   |
|                       | Main Industry                                     | Agriculture, Commercial, Manufacturing | Agriculture        | Agriculture                       | Agriculture        |   |
|                       | Major Agricultural Product                        | Rice, Wheat, Ju te, Veg.               | Rice, Fruits, Veg. | Rice, Wheat, Jute, Fruits, Veg.   | Rice, Fruits, Veg. |   |
|                       | Number of Public Facilities                       | School                                 | 5                  | 5                                 | 6                  | 5 |
|                       |   | Clinic                                 | 2                  | 2                                 | 3                  | 1 |
|                       |   | Bazar                                  | 4                  | 4                                 | 3                  | 2 |
|                       |   | Mosque                                 | 6                  | 15                                | 7                  | 4 |
|                       |   | Gov't Office                           | 3                  | 2                                 | 2                  | 0 |
| Others                |   | 4                                      | 4                  | 3                                 | 3                  |   |
| Total                 |   | 24                                     | 32                 | 24                                | 15                 |   |
| Traffic Volume        | Passenger Car                                     | 5                                      | 8                  | 6                                 | 5                  |   |
|                       | Pickup/Truck                                      | 12                                     | 6                  | 30                                | 5                  |   |
|                       | Bus   | 15                                     | 0                  | 0                                 | 3                  |   |
|                       | Motorcycle  | 30                                     | 15                 | 6                                 | 20                 |   |
|                       | Rickshaw  | 120                                    | 150                | 150                               | 75                 |   |
|                       | Autorickshaw                                      | 15                                     | 25                 | 5                                 | 10                 |   |
|                       | Bullock Cart                                      | 0                                      | 0                  | 0                                 | 10                 |   |
|                       | Pedestrian  | 3000                                   | 1500               | 600                               | 600                |   |
| Bridge Site Condition | Landuse   | Farm                                   | Residence          | Residence                         | Residence, Meadow  |   |
|                       | Topography  | Flat                                   | Flat               | Flat                              | Flat               |   |
|                       | Necessity of Realignment of Approach Road         | No                                     | No                 | No                                | No                 |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                                     | No                 | No                                | No                 |   |
|                       | Number of Houses to be Relocated                  | No                                     | No                 | No                                | No                 |   |
|                       | Other Obstruction to be Relocated                 | No                                     | No                 | No                                | No                 |   |
| Proposed Bridge       | Bridge Length (m)                                 | 80                                     | 130                | 130                               | 30                 |   |
|                       | Span Arrangement                                  | 2x15m+20m+2x15m                        | 4x20m+2x25m        | 4x20m+2x25m                       | 1x30m              |   |
|                       | Abutment Height (m)                               | 4.00                                   | 5.00               | 5.00                              | 4.50               |   |
|                       | Pier Height (m)                                   | 7.00                                   | 8.00               | 7.00                              | -                  |   |
| Remarks               |   |  |                    | Tender invited under RTIP project |                    |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 4

District : Rajbari

| Name of Upazila              |  | Baliakandi      |                 |                   | Pangsha          | Ghoyalondo   |
|------------------------------|--|-----------------|-----------------|-------------------|------------------|--------------|
| Serial Number                | 8  | 10              | 11              | 12                | 13               |              |
| Bridge Code                  | 11-02-02                                 | 11-02-N1        | 11-02-N2        | 11-03-01          | 11-04-01         |              |
| Road ID                      | 382073015                                | 382073004       | 382073046       | 368033033         | 382295055        |              |
| Road Class                   | R1                                       | R1              | R1              | R1                | R3               |              |
| Chainage (km)                | 3+250                                    | 0+830           | 0+960           | 5+520             | 0+740            |              |
| Condition of Existing Bridge | Existing or not                          | Existing        | Existing        | Existing          | Existing         | Not Existing |
|                              | Bridge Length (m)                        | 52.00           | 53.00           | 38.00             | 31.00            |              |
|                              | Bridge Width (m)                         | 0.20            | 0.20            | 0.20              | 1.45             |              |
|                              | Carriageway Width (m)                    | 0.20            | 0.20            | 0.20              | 1.20             |              |
|                              | Superstructure Type                      | Bamboo          | Bamboo          | Bamboo            | Bamboo           |              |
|                              | Abutment Type                            | Bamboo          | Bamboo          | Bamboo            | Bamboo           |              |
|                              | Pier Type                                | Bamboo          | Bamboo          | Bamboo            | Bamboo           |              |
|                              | Usage of Bridge                          | Pedestrian only | Pedestrian only | Pedestrian only   | Pedestrian/R.Van |              |
|                              | Condition                                | Weak            | Weak            | Weak              | Weak             |              |
|                              | Present Navigation Clearance Height (m)  | 2.10            | 3.00            | 2.30              | 0.70             |              |
| River Condition              | Bank to Bank Width (m)                   | 46.00           | 54.00           | 41.00             | 127.00           | 64.00        |
|                              | Highest Flood Water Width (m)            | 55.00           | 58.00           | 50.00             | 127.00           | 70.00        |
|                              | Highest Flood Water Depth (m)            | 6.10            | 5.80            | 6.60              | 5.80             | 6.80         |
|                              | Normal Flood Water Width (m)             | 48.00           | 43.00           | 35.00             | 35.00            | 42.00        |
|                              | Normal Flood Water depth (m)             | 3.20            | 3.40            | 5.30              | 3.60             | 3.00         |
|                              | Dry Season Water Width (m)               | 10.00           | 25.00           | 20.00             | 20.00            | 10.00        |
|                              | Dry Season Water Depth (m)               | 0.80            | 0.65            | 0.80              | 0.80             | 0.20         |
|                              | Tidal Fluctuation (m)                    | No              | No              | No                | No               | No           |
|                              | Water Velocity                           | Fast            | Medium          | Medium            | Medium           | Medium       |
|                              | Angle of Bridge to Stream (deg)          | 90              | 90              | 90                | 90               | 90           |
|                              | Ferry Services                           | No              | No              | No                | No               | No           |
|                              | Required Navigation Clearance Height (m) | 1.80            | 1.00            | 2.00              | 0.80             | 1.00         |
|                              | Type of River Traffic                    | Country boat    | Country boat    | Cargo Engine boat | Country boat     | Country boat |
|                              | Condition of Bank                        | Sound           | Sound           | Sound             | Sound            | Sound        |
| Condition of Riverbed        | Sound                                    | Sound           | Sound           | Sound             | Sound            |              |
| Approach Road                | Total Road Width (m)                     | 6.15            | 6.30            | 4.80              | 5.80             | 6.30         |
|                              | Carriageway Width (m)                    | 6.15            | 6.30            | 4.80              | 3.66             | 6.30         |
|                              | Embankment Height (m)                    | 2.14            | 2.15            | 0.70              | 4.10             | 7.85         |
|                              | Surface Type                             | Earthen         | Earthen         | Earthen           | BC/Earthen       | Earthen      |
|                              | Surface Condition                        | Good            | Good            | Good              | Good             | Good         |
|                              | Alternative Route (km)                   | No              | No              | 4.00              | No               | No           |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 4  
District : Rajbari

| Name of Thana         |   | Ballakandi   |  |  | Pangsha   | Ghoyalondo         |   |
|-----------------------|---|--|--|--|---|--------------------|---|
| Serial Number         |   | 8  | 10   | 11   | 12  | 13                 |   |
| Influence Area        | Population (thousand)                             | 20   | 20   | 15   | 25  | 5                  |   |
|                       | Main Industry                                     | Agriculture  | Agriculture  | Agriculture  | Agriculture   | Agriculture        |   |
|                       | Major Agricultural Product                        | Rice, Jute, Veg., S.Cane   | Rice, Wheat, Jute, S.Cane  | Rice, Jute, S.Cane   | Rice, Wheat, S.Cane   | Rice, Jute, S.Cane |   |
|                       | Number of Public Facilities                       | School   | 6  | 8  | 5   | 8                  | 3 |
|                       |   | Clinic   | 1  | 2  | 1   | 2                  | 1 |
|                       |   | Bazar  | 2  | 2  | 2   | 2                  | 2 |
|                       |   | Mosque   | 8  | 10   | 8   | 10                 | 3 |
|                       |   | Gov't Office   | 1  | 2  | 1   | 3                  | 0 |
| Others                |   | 2  | 4  | 4  | 4   | 3                  |   |
| Total                 |   | 20   | 28   | 21   | 29  | 12                 |   |
| Traffic Volume        | Passenger Car                                     | 4  | 4  | 3  | 12  | 2                  |   |
|                       | Pickup/Truck                                      | 2/8  | 8/5  | 4/6  | 8/12  | 2/2                |   |
|                       | Bus   | 4  | 4  | 4  | 4   | 2                  |   |
|                       | Motorcycle  | 20   | 25   | 25   | 30  | 4                  |   |
|                       | Rickshaw  | 130  | 150  | 150  | 180   | 50                 |   |
|                       | Autorickshaw                                      | 12   | 16   | 12   | 16  | 8                  |   |
|                       | Bullock Cart                                      | 8  | 8  | 8  | 8   | 5                  |   |
|                       | Pedestrian  | 1200   | 2500   | 2000   | 3000  | 600                |   |
| Bridge Site Condition | Landuse   | Farm   | Farm   | Farm   | Farm  | Farm               |   |
|                       | Topography  | Flat   | Flat   | Flat   | Flat  | Flat               |   |
|                       | Necessity of Realignment of Approach Road         | No   | No   | Yes  | No  | No                 |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No   | No   | 850  | No  | No                 |   |
|                       | Number of Houses to be Relocated                  | No   | No   | No   | No  | No                 |   |
|                       | Other Obstruction to be Relocated                 | 12 Trees, 2 shops  | No   | 8 Trees, 1 shop  | No  | No                 |   |
| Proposed Bridge       | Bridge Length (m)                                 | 50   | 55   | 50   | 125   | 65                 |   |
|                       | Span Arrangement                                  | 15m+20m+15m  | 15m+25m+15m  | 15m+20m+15m  | 5x25m   | 20m+25m+20m        |   |
|                       | Abutment Height (m)                               | 4.40   | 5.00   | 4.00   | 4.50  | 7.80               |   |
|                       | Pier Height (m)                                   | 7.00   | 7.00   | 9.00   | 9.10  | 10.00              |   |
| Remarks               |   | 80m bank protection work is required along the east bank at the meeting point of Sonapur Khal. | The bank of the Khal is almost vertical, so necessary bank protection work may be considered during detail design. | The South bank of the river is almost vertical, so bank protection work may be required. | The North approach at Shahaj Uddin Para is low and flat like surrounding paddy field. |                    |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 4

District : Gopalganj

| Name of Upazilla             |  | Kasiani                |                        |                        | Mukseedpur             |                        |                        |
|------------------------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Serial Number                |  | 7                      | 9                      | 10                     | 12                     | 13                     | 16                     |
| Bridge Code                  |  | 12-02-06               | 12-02-N1               | 12-02-N2               | 12-03-02               | 12-03-03               | 12-03-06               |
| Road ID                      |  | 345433019              | 345434016              | 345434009              | 345583020              | 345584005              | 345543011              |
| Road Class                   |  | R1                     | R2                     | R2                     | R1                     | R2                     | R1                     |
| Chainage (km)                |  | 2+460                  | 0+000                  | 0+000                  | 2+380                  | 2+830                  | 7+900                  |
| Condition of Existing Bridge | Existing or not                          | Existing               | Existing               | Not Existing           | Existing               | Existing               | Not Existing           |
|                              | Bridge Length (m)                        | 42.00                  | 50.00                  |                        | 50.00                  | 54.00                  |                        |
|                              | Bridge Width (m)                         | 1.90                   | 0.20                   |                        | 0.20                   | 0.20                   |                        |
|                              | Carriageway Width (m)                    | 1.70                   | 0.20                   |                        | 0.20                   | 0.20                   |                        |
|                              | Superstructure Type                      | Bamboo                 | Bamboo                 |                        | Bamboo                 | Bamboo                 |                        |
|                              | Abutment Type                            | Bamboo                 | Bamboo                 |                        | Bamboo                 | Bamboo                 |                        |
|                              | Pier Type                                | Bamboo                 | Bamboo                 |                        | Bamboo                 | Bamboo                 |                        |
|                              | Usage of Bridge                          | Pedestrians, R.Van     | Pedestrians only       |                        | Pedestrians only       | Pedestrians only       |                        |
|                              | Condition                                | Fair                   | Weak                   |                        | Weak                   | Weak                   |                        |
|                              | Present Navigation Clearance Height (m)  | 2.10                   | 2.80                   |                        | 1.30                   | 1.80                   |                        |
| River Condition              | Bank to Bank Width (m)                   | 43.00                  | 52.00                  | 45.00                  | 46.00                  | 55.00                  | 40.00                  |
|                              | Highest Flood Water Width (m)            | 55.00                  | 58.00                  | 60.00                  | 53.00                  | 58.00                  | 43.00                  |
|                              | Highest Flood Water Depth (m)            | 5.90                   | 6.20                   | 6.30                   | 5.70                   | 5.30                   | 5.29                   |
|                              | Normal Flood Water Width (m)             | 45.00                  | 49.00                  | 45.00                  | 51.00                  | 53.00                  | 42.00                  |
|                              | Normal Flood Water depth (m)             | 4.30                   | 3.80                   | 3.90                   | 3.80                   | 3.80                   | 3.80                   |
|                              | Dry Season Water Width (m)               | 10.00                  | 40.00                  | 15.00                  | 30.00                  | 42.00                  | 20.00                  |
|                              | Dry Season Water Depth (m)               | 0.90                   | 2.80                   | 0.80                   | 0.80                   | 0.90                   | 0.90                   |
|                              | Tidal Fluctuation (m)                    | 0.70                   | 1.20                   | 1.10                   | 1.10                   | 0.80                   | 0.90                   |
|                              | Water Velocity                           | Medium                 | Medium                 | Fast                   | Fast                   | Medium                 | Fast                   |
|                              | Angle of Bridge to Stream (deg)          | 90                     | 90                     | 90                     | 90                     | 90                     | 90                     |
|                              | Ferry Services                           | No                     | No                     | No                     | No                     | No                     | No                     |
|                              | Required Navigation Clearance Height (m) | 3.00                   | 3.00                   | 3.00                   | 3.00                   | 2.80                   | 3.00                   |
|                              | Type of River Traffic                    | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Big Cargo, Engine Boat |
|                              | Condition of Bank                        | Sound                  | Sound                  | Sound                  | Sound                  | Sound                  | Sound                  |
| Condition of Riverbed        | Sound                                    | Sound                  | Sound                  | Sound                  | Sound                  | Sound                  |                        |
| Approach Road                | Total Road Width (m)                     | 4.88                   | 4.80                   | 4.90                   | 4.30                   | 4.80                   | 3.90                   |
|                              | Carriageway Width (m)                    | 2.70                   | 3.08                   | 3.66                   | 3.95                   | 4.80                   | 3.90                   |
|                              | Embankment Height (m)                    | 2.65                   | 3.40                   | 3.40                   | 2.85                   | 2.90                   | 1.90                   |
|                              | Surface Type                             | Earthen                | BC/Earthen             | BC/Earthen             | Earthen                | HBB/Earthen            | Earthen                |
|                              | Surface Condition                        | Good                   | Good                   | Good                   | Good                   | Good                   | Fair                   |
|                              | Alternative Route (km)                   | No                     | No                     | No                     | No                     | No                     | No                     |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 4  
District : Gopalganj

| Name of Thana         |   | Kasiani  |   |  | Mukseedpur        |  |                   |   |
|-----------------------|---|--|---|--|-------------------|--|-------------------|---|
| Serial Number         |   | 7  | 9   | 10   | 12                | 13   | 18                |   |
| Influence Area        | Population (thousand)                             | 15   | 25  | 15   | 20                | 20   | 20                |   |
|                       | Main Industry                                     | Agriculture                                      | Agriculture   | Agriculture  | Agriculture       | Agriculture  | Agriculture       |   |
|                       | Major Agricultural Product                        | Rice, Fishery                                    | Rice, Jute, S.Cane  | Rice, Jute, Pulse, Tobacco   | Rice, Jute, Pulse | Rice, Jute, Pulse  | Rice, Jute, Pulse |   |
|                       | Number of Public Facilities                       | School   | 6   | 6  | 5                 | 6  | 6                 | 6 |
|                       |   | Clinic   | 2   | 2  | 2                 | 2  | 1                 | 1 |
|                       |   | Bazar  | 2   | 1  | 2                 | 2  | 2                 | 2 |
|                       |   | Mosque   | 3   | 10   | 10                | 10   | 8                 | 8 |
|                       |   | Gov't Office                                     | 2   | 3  | 1                 | 2  | 2                 | 1 |
| Others                |   | 3  | 4   | 4  | 4                 | 2  | 3                 |   |
|                       | Total   | 18   | 28  | 24   | 26                | 21   | 21                |   |
| Traffic Volume        | Passenger Car                                     | 4  | 6   | 3  | 5                 | 3  | 3                 |   |
|                       | Pickup/Truck                                      | 6/8  | 6/9   | 5/7  | 6/8               | 6/8  | 4/8               |   |
|                       | Bus   | 6  | 4   | 5  | 6                 | 4  | 4                 |   |
|                       | Motorcycle  | 25   | 25  | 20   | 18                | 25   | 16                |   |
|                       | Rickshaw  | 130  | 150   | 130  | 120               | 140  | 90                |   |
|                       | Autorickshaw                                      | 16   | 16  | 12   | 16                | 16   | 18                |   |
|                       | Bullock Cart                                      | 6  | 8   | 6  | 6                 | 6  | 3                 |   |
|                       | Pedestrian  | 1500   | 1500  | 1200   | 1200              | 1200   | 1000              |   |
| Bridge Site Condition | Landuse   | Farm   | Residence, Commercial   | Farm, Commercial   | Farm              | Farm   | Farm              |   |
|                       | Topography  | Swampy   | Flat  | Flat   | Flat              | Flat   | Flat              |   |
|                       | Necessity of Realignment of Approach Road         | No   | Yes   | Yes  | No                | No   | No                |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | 540  | 400   | 2160   | No                | No   | No                |   |
|                       | Number of Houses to be Relocated                  | No   | 1   | No   | No                | No   | No                |   |
|                       | Other Obstruction to be Relocated                 | 16 shops   | 10 Trees  | No   | No                | No   | 6 Trees           |   |
| Proposed Bridge       | Bridge Length (m)                                 | 60   | 55  | 50   | 50                | 55   | 40                |   |
|                       | Span Arrangement                                  | 15m+20m+15m                                      | 15m+25m+15m   | 15m+20m+15m  | 15m+20m+15m       | 15m+25m+15m  | 10m+20m+10m       |   |
|                       | Abutment Height (m)                               | 5.50   | 5.80  | 6.00   | 6.10              | 4.00   | 3.90              |   |
|                       | Pier Height (m)                                   | 8.90   | 9.00  | 8.80   | 8.70              | 7.30   | 6.30              |   |
| Remarks               |   | At Bhatlapara end BC road, other end is earthen. | Land acquisition of 100mx12m will be required at Dighorghati end. | This is not duplicate of St. No. 13 as earlier mentioned. Have included in the list. |                   | Earlier, the bridge was deleted. Now included in the list. |                   |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 4

District : Gopalganj

| Name of Upazila              |  | Muksepur               |                        |                        | Tongipara          |                   | Kotalipara   |                    |
|------------------------------|--|------------------------|------------------------|------------------------|--------------------|-------------------|--------------|--------------------|
| Serial Number                |  | 19                     | 20                     | 21                     | 25                 | 26                | 28           | 29                 |
| Bridge Code                  |  | 12-03-N1               | 12-03-N2               | 12-03-N3               | 12-04-N1           | 12-04-N2          | 12-05-02     | 12-05-03           |
| Road ID                      |  | 345583008              | 345583008              | 345584029              | 345913011          | 345913016         | 345514046    | 345514046          |
| Road Class                   |  | R1                     | R1                     | R2                     | R1                 | R1                | R2           | R2                 |
| Chainage (km)                |  | 0+000                  | 2+050                  | 2+350                  | 7+550              | 3+000             | 0+650        | 1+060              |
| Condition of Existing Bridge | Existing or not                          | Existing               | Not Existing           | Existing               | Existing           | Not Existing      | Not Existing | Existing           |
|                              | Bridge Length (m)                        | 32.00                  |                        | 40.00                  | 22.00              |                   |              | 24.00              |
|                              | Bridge Width (m)                         | 0.20                   |                        | 0.20                   | 2.80               |                   |              | 1.90               |
|                              | Carriageway Width (m)                    | 0.20                   |                        | 0.20                   | 2.40               |                   |              | 1.70               |
|                              | Superstructure Type                      | Bamboo                 |                        | Bamboo                 | RC                 |                   |              | RC                 |
|                              | Abutment Type                            | Bamboo                 |                        | Bamboo                 | Brick Masonary     |                   |              | Bamboo             |
|                              | Pier Type                                | Bamboo                 |                        | Bamboo                 | RC Column          |                   |              | Steel              |
|                              | Usage of Bridge                          | Pedestrians only       |                        | Pedestrians only       | Light Vehicles     |                   |              | Pedestrians, R.Van |
|                              | Condition                                | Weak                   |                        | Weak                   | Damaged            |                   |              | Fair               |
|                              | Present Navigation Clearance Height (m)  | 1.90                   |                        | 1.28                   | 5.30               |                   |              | 2.10               |
| River Condition              | Bank to Bank Width (m)                   | 34.00                  | 50.00                  | 42.00                  | 22.00              | 34.00             | 21.00        | 24.00              |
|                              | Highest Flood Water Width (m)            | 48.00                  | 58.00                  | 55.00                  | 25.00              | 36.00             | 23.00        | 25.00              |
|                              | Highest Flood Water Depth (m)            | 4.95                   | 8.40                   | 5.30                   | 2.80               | 7.10              | 3.63         | 3.10               |
|                              | Normal Flood Water Width (m)             | 32.00                  | 58.00                  | 38.00                  | 22.00              | 32.00             | 20.00        | 24.00              |
|                              | Normal Flood Water depth (m)             | 2.80                   | 6.85                   | 3.50                   | 1.10               | 5.20              | 2.85         | 2.00               |
|                              | Dry Season Water Width (m)               | 10.00                  | 13.00                  | 12.00                  | 5.00               | 15.00             | 10.00        | 8.00               |
|                              | Dry Season Water Depth (m)               | 0.30                   | 0.95                   | 0.90                   | 0.30               | 0.90              | 0.80         | 0.90               |
|                              | Tidal Fluctuation (m)                    | No                     | 0.50                   | 0.80                   | No                 | 0.75              | 0.40         | 0.40               |
|                              | Water Velocity                           | Medium                 | Medium                 | Medium                 | Slow               | Fast              | Slow         | Slow               |
|                              | Angle of Bridge to Stream (deg)          | 90                     | 90                     | 90                     | 90                 | 90                | 90           | 90                 |
|                              | Ferry Services                           | No                     | No                     | No                     | No                 | No                | No           | No                 |
|                              | Required Navigation Clearance Height (m) | 3.00                   | 2.98                   | 3.00                   | 1.20               | 2.60              | 1.25         | 1.00               |
|                              | Type of River Traffic                    | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Big Cargo, Engine Boat | Small Country Boat | Cargo Engine Boat | Country Boat | Country Boat       |
|                              | Condition of Bank                        | Sound                  | Sound                  | Sound                  | Sound              | Sound             | Sound        | Sound              |
| Condition of Riverbed        | Sound                                    | Sound                  | Sound                  | Sound                  | Sound              | Sound             | Sound        |                    |
| Approach Road                | Total Road Width (m)                     | 4.80                   | 5.38                   | 4.60                   | 4.35               | 4.00              | 3.60         | 3.80               |
|                              | Carriageway Width (m)                    | 4.80                   | 3.29                   | 4.25                   | 3.08               | 4.00              | 3.60         | 3.80               |
|                              | Embankment Height (m)                    | 2.80                   | 2.98                   | 2.14                   | 0.70               | 1.80              | 1.50         | 1.70               |
|                              | Surface Type                             | BC/Earthen             | Earthen                | Earthen                | BC                 | BC/HBB/Earthen    | Earthen      | Earthen            |
|                              | Surface Condition                        | Good                   | Good                   | Good                   | Good               | Good              | Good         | Good               |
|                              | Alternative Route (km)                   | No                     | No                     | No                     | No                 | No                | 3.00         | 4.00               |

### BRIDGE SITE SURVEY DATA-2

Zone No: 4  
District : Gopalganj

| Name of Thana         |   | Muksedpur         |                   |                       | Tongipara                             |                    | Kotalipara        |  |   |
|-----------------------|---|-------------------|-------------------|-----------------------|---------------------------------------|--------------------|-------------------|--|---|
| Serial Number         |   | 19                | 20                | 21                    | 25                                    | 28                 | 28                | 29   |   |
| Influence Area        | Population (thousand)                             | 13                | 12                | 20                    | 20                                    | 15                 | 10                | 12   |   |
|                       | Main Industry                                     | Agriculture       | Agriculture       | Agriculture           | Agriculture                           | Agriculture        | Agriculture       | Agriculture                                |   |
|                       | Major Agricultural Product                        | Rice, Jute, Pulse | Rice, Jute, Pulse | Rice, Jute, Pulse     | Rice, Jute, S.Cane                    | Rice, Jute, S.Cane | Rice, Jute, Pulse | Rice, Jute, Pulse, S.Cane                  |   |
|                       | Number of Public Facilities                       | School            | 7                 | 6                     | 8                                     | 8                  | 3                 | 4  | 4 |
|                       |   | Clinic            | 4                 | 2                     | 2                                     | 2                  | 1                 | 1  | 1 |
|                       |   | Bazar             | 4                 | 3                     | 4                                     | 3                  | 2                 | 1  | 1 |
|                       |   | Mosque            | 8                 | 8                     | 8                                     | 6                  | 3                 | 5  | 8 |
|                       |   | Gov't Office      | 2                 | 2                     | 5                                     | 4                  | 2                 | 1  | 1 |
|                       |   | Others            | 5                 | 4                     | 3                                     | 4                  | 6                 | 4  | 3 |
| Total                 |   | 30                | 25                | 30                    | 25                                    | 17                 | 16                | 16   |   |
| Traffic Volume        | Passenger Car                                     | 5                 | 5                 | 10                    | 7                                     | 9                  | 3                 | 3  |   |
|                       | Pickup/Truck                                      | 6/8               | 6/8               | 4/12                  | 3/7                                   | 7/12               | 3/4               | 2/4  |   |
|                       | Bus   | 8                 | 8                 | 6                     | 4                                     | 6                  | 4                 | 4  |   |
|                       | Motorcycle  | 28                | 20                | 30                    | 30                                    | 30                 | 20                | 18   |   |
|                       | Rickshaw  | 200               | 300               | 250                   | 135                                   | 130                | 85                | 70   |   |
|                       | Autorickshaw                                      | 13                | 13                | 18                    | 9                                     | 18                 | 18                | 18   |   |
|                       | Bullock Cart                                      | 30                | 50                | 25                    | 25                                    | 8                  | 4                 | 3  |   |
|                       | Pedestrian  | 6000              | 6000              | 2200                  | 1350                                  | 1400               | 600               | 700  |   |
| Bridge Site Condition | Landuse   | Farm              | Farm              | Residence, Commercial | Residence                             | Farm               | Farm              | Farm                                       |   |
|                       | Topography  | Flat              | Swampy            | Flat                  | Flat                                  | Flat               | Flat              | Flat                                       |   |
|                       | Necessity of Realignment of Approach Road         | No                | Yes               | No                    | No                                    | Yes                | No                | No   |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                | 1050              | No                    | No                                    | 1392               | No                | No   |   |
|                       | Number of Houses to be Relocated                  | No                | No                | No                    | No                                    | No                 | No                | No   |   |
|                       | Other Obstruction to be Relocated                 | 8 shops           | 8 Trees           | 10 Trees              | No                                    | 21 Trees           | 8 Trees           | No   |   |
| Proposed Bridge       | Bridge Length (m)                                 | 40                | 50                | 45                    | 20                                    | 35                 | 20                | 25   |   |
|                       | Span Arrangement                                  | 10m+20m+10m       | 15m+20m+15m       | 3x15m                 | 1x20m                                 | 10m+15m+10m        | 1x20m             | 1x25m                                      |   |
|                       | Abutment Height (m)                               | 6.30              | 6.20              | 4.80                  | 1.80                                  | 5.70               | 2.95              | 2.80                                       |   |
|                       | Pier Height (m)                                   | 8.00              | 9.50              | 8.30                  | -                                     | 7.50               | -                 | -  |   |
| Remarks               |   |                   |                   |                       | The existing bridge is fully damaged. |                    |                   | Existing damaged structure to be replaced. |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 4  
District : Faridpur

| Name of Upazila              |  | Sadar            |                  |              |              |              |              |                  |
|------------------------------|--|------------------|------------------|--------------|--------------|--------------|--------------|------------------|
| Serial Number                | 5  | 6                | 7                | 8            | 9            | 10           | 11           |                  |
| Bridge Code                  | 16-01-N1                                 | 16-01-N2         | 16-01-N3         | 16-01-N4     | 16-01-N5     | 16-01-N6     | 16-01-N7     |                  |
| Road ID                      | 329475029                                | 329473031        | 329473015        | 329474002    | 329473027    | 329475120    | 329475055    |                  |
| Road Class                   | R3                                       | R1               | R1               | R2           | R1           | R3           | R3           |                  |
| Chainage (km)                | 0+450                                    | 3+050            | 0+500            | 0+500        | 2+200        | 1+000        | 0+850        |                  |
| Condition of Existing Bridge | Existing or not                          | Existing         | Existing         | Not Existing | Not Existing | Not Existing | Not Existing | Existing         |
|                              | Bridge Length (m)                        | 23.00            | 22.00            |              |              |              |              | 28.00            |
|                              | Bridge Width (m)                         | 0.20             | 0.20             |              |              |              |              | 0.20             |
|                              | Carriageway Width (m)                    | 0.20             | 0.20             |              |              |              |              | 0.20             |
|                              | Superstructure Type                      | Bamboo           | Bamboo           |              |              |              |              | Bamboo           |
|                              | Abutment Type                            | Bamboo           | Bamboo           |              |              |              |              | Bamboo           |
|                              | Pier Type                                | Bamboo           | Bamboo           |              |              |              |              | Bamboo           |
|                              | Usage of Bridge                          | Pedestrians only | Pedestrians only |              |              |              |              | Pedestrians only |
|                              | Condition                                | Weak             | Weak             |              |              |              |              | Weak             |
|                              | Present Navigation Clearance Height (m)  | 1.40             | 1.70             |              |              |              |              | 0.80             |
| River Condition              | Bank to Bank Width (m)                   | 24.00            | 24.00            | 68.00        | 36.00        | 32.00        | 42.00        | 32.00            |
|                              | Highest Flood Water Width (m)            | 28.00            | 28.00            | 70.00        | 40.00        | 35.00        | 45.00        | 38.00            |
|                              | Highest Flood Water Depth (m)            | 3.90             | 4.90             | 3.80         | 3.90         | 2.00         | 4.10         | 4.10             |
|                              | Normal Flood Water Width (m)             | 21.00            | 22.00            | 68.00        | 35.00        | 28.00        | 24.00        | 27.00            |
|                              | Normal Flood Water depth (m)             | 2.30             | 3.20             | 2.50         | 2.90         | 1.30         | 2.00         | 2.40             |
|                              | Dry Season Water Width (m)               | 8.00             | 8.00             | 45.00        | 20.00        | 0.00         | 8.00         | 8.00             |
|                              | Dry Season Water Depth (m)               | 0.30             | 0.30             | 0.60         | 0.30         | 0.00         | 0.90         | 0.30             |
|                              | Tidal Fluctuation (m)                    | No               | No               | No           | No           | No           | No           | No               |
|                              | Water Velocity                           | Medlum           | Medium           | Medium       | Medium       | Slow         | Slow         | Slow             |
|                              | Angle of Bridge to Stream (deg)          | 90               | 90               | 90           | 90           | 90           | 90           | 90               |
|                              | Ferry Services                           | No               | No               | No           | No           | No           | No           | No               |
|                              | Required Navigation Clearance Height (m) | 1.00             | 1.00             | 1.00         | 1.00         | 1.00         | 1.00         | 1.00             |
|                              | Type of River Traffic                    | Country Boat     | Country Boat     | Country Boat | Country Boat | Country Boat | Country Boat | Country Boat     |
|                              | Condition of Bank                        | Sound            | Sound            | Sound        | Sound        | Sound        | Sound        | Sound            |
| Condition of Riverbed        | Sound                                    | Sound            | Sound            | Sound        | Sound        | Sound        | Sound        |                  |
| Approach Road                | Total Road Width (m)                     | 3.80             | 4.25             | 3.66         | 3.66         | 3.66         | 4.00         | 4.10             |
|                              | Carriageway Width (m)                    | 3.80             | 4.25             | 2.80         | 3.00         | 2.80         | 4.00         | 4.10             |
|                              | Embankment Height (m)                    | 1.20             | 1.80             | 3.20         | 2.80         | 1.90         | 1.30         | 1.10             |
|                              | Surface Type                             | Earthen          | BC/Earthen       | Earthen      | Earthen      | Earthen      | Earthen      | Earthen          |
|                              | Surface Condition                        | Good             | Good             | Good         | Good         | Good         | Good         | Good             |
|                              | Alternative Route (km)                   | No               | No               | No           | No           | No           | No           | 4.00             |



### BRIDGE SITE SURVEY DATA- 2

Zone No: 4  
District : Faridpur

| Name of Thana         |   | Sadar                      |                                  |                          |                  |                          |                          |  |   |
|-----------------------|---|----------------------------|----------------------------------|--------------------------|------------------|--------------------------|--------------------------|--|---|
| Serial Number         |   | 5                          | 6                                | 7                        | 8                | 9                        | 10                       | 11   |   |
| Influence Area        | Population (thousand)                             | 8                          | 15                               | 12                       | 12               | 10                       | 10                       | 20   |   |
|                       | Main Industry                                     | Agriculture                | Agriculture                      | Agriculture              | Agriculture      | Agriculture              | Agriculture              | Agriculture  |   |
|                       | Major Agricultural Product                        | Rice, Wheat, Onion, Garlic | Rice, Jute, Onion, Pulse, S.Cane | Rice, Jute, S.Cane, Veg. | Rice, Jute, Veg. | Rice, Jute, S.Cane, Veg. | Rice, Jute, Onion, Pulse | Rice, Jute, S.Cane, Pulse, Onion   |   |
|                       | Number of Public Facilities                       | School                     | 7                                | 4                        | 3                | 2                        | 2                        | 6  | 6 |
|                       |   | Clinic                     | 1                                | 1                        | 2                | 0                        | 1                        | 1  | 1 |
|                       |   | Bazar                      | 2                                | 2                        | 2                | 4                        | 1                        | 2  | 2 |
|                       |   | Mosque                     | 8                                | 6                        | 6                | 10                       | 5                        | 5  | 8 |
|                       |   | Gov't Office               | 0                                | 2                        | 2                | 1                        | 1                        | 0  | 1 |
| Others                |   | 4                          | 4                                | 0                        | 3                | 0                        | 4                        | 4  |   |
| Total                 |   | 22                         | 19                               | 15                       | 20               | 10                       | 18                       | 22   |   |
| Traffic Volume        | Passenger Car                                     | 1                          | 7                                | 3                        | 3                | 4                        | 4                        | 4  |   |
|                       | Pickup/Truck                                      | 3/4                        | 6/8                              | 3/5                      | 2/7              | 4/7                      | 3/6                      | 6/8  |   |
|                       | Bus   | 2                          | 4                                | 4                        | 2                | 6                        | 4                        | 2  |   |
|                       | Motorcycle  | 8                          | 25                               | 20                       | 12               | 25                       | 12                       | 12   |   |
|                       | Rickshaw  | 75                         | 130                              | 120                      | 85               | 125                      | 90                       | 130  |   |
|                       | Autorickshaw                                      | 10                         | 15                               | 15                       | 12               | 12                       | 16                       | 12   |   |
|                       | Bullock Cart                                      | 0                          | 8                                | 6                        | 7                | 3                        | 0                        | 5  |   |
|                       | Pedestrian  | 500                        | 1200                             | 900                      | 1100             | 700                      | 1000                     | 1200   |   |
| Bridge Site Condition | Landuse   | Farm                       | Farm                             | Farm                     | Farm             | Farm                     | Farm                     | Farm   |   |
|                       | Topography  | Flat                       | Flat                             | Flat                     | Flat             | Flat                     | Flat                     | Flat   |   |
|                       | Necessity of Realignment of Approach Road         | No                         | No                               | No                       | No               | No                       | No                       | No   |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                         | No                               | No                       | No               | No                       | No                       | No   |   |
|                       | Number of Houses to be Relocated                  | No                         | No                               | No                       | No               | No                       | No                       | No   |   |
|                       | Other Obstruction to be Relocated                 | No                         | 4 Trees                          | No                       | No               | No                       | No                       | 6 Trees  |   |
| Proposed Bridge       | Bridge Length (m)                                 | 25                         | 25                               | 65                       | 35               | 30                       | 40                       | 30   |   |
|                       | Span Arrangement                                  | 1x25m                      | 1x25m                            | 20m+25m+20m              | 10m+15m+10m      | 1x30m                    | 10m+20m+10m              | 1x30m  |   |
|                       | Abutment Haight (m)                               | 3.80                       | 3.50                             | 3.20                     | 3.50             | 1.80                     | 3.90                     | 2.70   |   |
|                       | Pier Height (m)                                   | -                          | -                                | 4.80                     | 4.70             | -                        | 5.00                     | -  |   |
| Remarks               |   |                            |                                  |                          |                  |                          |                          | Now the river is dead due to construction of sluice gate, there is no flow in the river. |   |

### BRIDGE SITE SURVEY DATA- 1

Zone No: 4  
District : Faridpur

| Name of Upazila              |  | Boalmari                  | Charvadrason       | Bangha             | Sadarpur         |                  |                    |                  |
|------------------------------|--|---------------------------|--------------------|--------------------|------------------|------------------|--------------------|------------------|
| Serial Number                | 18                                       | 27                        | 28                 | 29                 | 31               | 32               | 33                 |                  |
| Bridge Code                  | 16-02-05                                 | 16-05-01                  | 16-05-02           | 16-06-01           | 16-07-01         | 16-07-02         | 16-07-N1           |                  |
| Road ID                      | 329184029                                | 329214017                 | 329212001          | 329103018          | 329842010        | 329842003        | 329843011          |                  |
| Road Class                   | R2                                       | R2                        | FRB                | R1                 | FRB              | FRB              | R1                 |                  |
| Chainage (km)                | 4+200                                    | 0+450                     | 6+620              | 0+000              | 0+000            | 0+000            | 1+950              |                  |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Existing           | Not Existing       | Existing         | Not Existing     | Existing           | Not Existing     |
|                              | Bridge Length (m)                        |                           | 68.00              |                    | 22.00            |                  | 23.00              |                  |
|                              | Bridge Width (m)                         |                           | 0.20               |                    | 1.00             |                  | 0.20               |                  |
|                              | Carriageway Width (m)                    |                           | 0.20               |                    | 1.00             |                  | 0.20               |                  |
|                              | Superstructure Type                      |                           | Bamboo             |                    | Bamboo           |                  | Bamboo             |                  |
|                              | Abutment Type                            |                           | Bamboo             |                    | Bamboo           |                  | Bamboo             |                  |
|                              | Pier Type                                |                           | Bamboo             |                    | Bamboo           |                  | Bamboo             |                  |
|                              | Usage of Bridge                          |                           | Pedestrians only   |                    | Pedestrians only |                  | Pedestrians only   |                  |
|                              | Condition                                |                           | Weak               |                    | Weak             |                  | Weak               |                  |
|                              | Present Navigation Clearance Height (m)  |                           | 0.60               |                    | 1.30             |                  | 3.20               |                  |
| River Condition              | Bank to Bank Width (m)                   | 50.00                     | 67.00              | 67.00              | 25.00            | 80.00            | 25.00              | 20.00            |
|                              | Highest Flood Water Width (m)            | 64.00                     | 65.00              | 63.00              | 21.00            | 85.00            | 27.00              | 24.00            |
|                              | Highest Flood Water Depth (m)            | 4.80                      | 4.00               | 3.50               | 3.90             | 2.80             | 2.10               | 4.50             |
|                              | Normal Flood Water Width (m)             | 49.00                     | 60.00              | 57.00              | 20.00            | 63.00            | 17.00              | 20.00            |
|                              | Normal Flood Water depth (m)             | 3.70                      | 2.80               | 2.08               | 2.60             | 1.30             | 1.20               | 2.80             |
|                              | Dry Season Water Width (m)               | 10.00                     | 16.00              | 0.00               | 4.00             | 15.00            | 4.00               | 6.00             |
|                              | Dry Season Water Depth (m)               | 0.80                      | 0.80               | 0.00               | 0.30             | 0.15             | 0.80               | 0.80             |
|                              | Tidal Fluctuation (m)                    | 0.2                       | No                 | No                 | No               | No               | No                 | No               |
|                              | Water Velocity                           | Fast                      | Slow               | Slow               | Fast             | Fast             | Medium             | Fast             |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                 | 90                 | 90               | 90               | 90                 | 90               |
|                              | Ferry Services                           | No                        | No                 | No                 | No               | No               | No                 | No               |
|                              | Required Navigation Clearance Height (m) | 2.00                      | 1.00               | 1.00               | 1.20             | 1.80             | 1.20               | 2.00             |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Small Country Boat | Small Country Boat | Country Boat     | Big Country Boat | Small Country Boat | Big Country Boat |
|                              | Condition of Bank                        | Sound                     | Sound              | Sound              | Sound            | Sound            | Sound              | Sound            |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound              | Sound              | Sound            | Sound            | Sound              |                  |
| Approach Road                | Total Road Width (m)                     | 4.30                      | 5.80               | 4.30               | 3.90             | 4.20             | 4.30               | 4.90             |
|                              | Carriageway Width (m)                    | 4.30                      | 5.80               | 4.30               | 3.90             | 4.20             | 4.00               | 3.06             |
|                              | Embankment Height (m)                    | 1.60                      | 1.70               | 1.90               | 1.80             | 1.20             | 1.50               | 2.80             |
|                              | Surface Type                             | Earthen                   | Earthen            | BC/Earthen         | Earthen          | Earthen          | Earthen            | HBB              |
|                              | Surface Condition                        | Good                      | Good               | Good               | Good             | Good             | Good               | Good             |
|                              | Alternative Route (km)                   | No                        | No                 | No                 | No               | No               | No                 | No               |

**BRIDGE SITE SURVEY DATA- 2**

**Zone No: 4**  
**District : Faridpur**

| Name of Thana         |   | Boalmari                        | Charvadrason                             |                                  | Bangha                          | Sadarpur                               |                          |                          |   |
|-----------------------|---|---------------------------------|--|----------------------------------|---------------------------------|--|--------------------------|--------------------------|---|
| Serial Number         |   | 16                              | 27                                       | 28                               | 29                              | 31                                     | 32                       | 33                       |   |
| Influence Area        | Population (thousand)                             | 20                              | 12                                       | 15                               | 20                              | 12                                     | 18                       | 15                       |   |
|                       | Main industry                                     | Agriculture                     | Agriculture                              | Agriculture                      | Agriculture, Commercial         | Agriculture                            | Agriculture              | Agriculture              |   |
|                       | Major Agricultural Product                        | Rice, Wheat, Jute, Pulse, Onion | Rice, Wheat, Jute, Onion, Garlic, S.Cane | Rice, Wheat, Jute, Onion, Garlic | Rice, Wheat, Jute, Onion, Pulse | Rice, Jute, Wheat, Onion, Garlic, Veg. | Rice, Jute, Onion, Pulse | Rice, Jute, Onion, Pulse |   |
|                       | Number of Public Facilities                       | School                          | 8  | 2                                | 4                               | 8                                      | 4                        | 6                        | 5 |
|                       |   | Clinic                          | 1  | 1                                | 1                               | 2                                      | 1                        | 2                        | 1 |
|                       |   | Bazar                           | 2  | 1                                | 2                               | 2                                      | 2                        | 3                        | 2 |
|                       |   | Mosque                          | 8  | 5                                | 7                               | 10                                     | 6                        | 8                        | 8 |
|                       |   | Gov't Office                    | 2  | 2                                | 2                               | 3                                      | 1                        | 3                        | 2 |
| Others                |   | 3                               | 4  | 2                                | 4                               | 3                                      | 4                        | 4                        |   |
| Total                 |   | 24                              | 15                                       | 18                               | 29                              | 17                                     | 26                       | 22                       |   |
| Traffic Volume        | Passenger Car                                     | 5                               | 2  | 2                                | 4                               | 5                                      | 8                        | 12                       |   |
|                       | Pickup/Truck                                      | 4/9                             | 2/3                                      | 3/2                              | 6/15                            | 2/5                                    | 6/11                     | 8/13                     |   |
|                       | Bus   | 8                               | 2  | 4                                | 6                               | 4                                      | 6                        | 4                        |   |
|                       | Motorcycle  | 20                              | 10                                       | 16                               | 20                              | 16                                     | 30                       | 50                       |   |
|                       | Rickshaw  | 140                             | 50                                       | 80                               | 135                             | 120                                    | 150                      | 160                      |   |
|                       | Auto Rickshaw                                     | 16                              | 10                                       | 8                                | 16                              | 10                                     | 22                       | 20                       |   |
|                       | Bullock Cart                                      | 8                               | 6  | 5                                | 8                               | 9                                      | 6                        | 6                        |   |
|                       | Pedestrian  | 1700                            | 1000                                     | 1200                             | 1800                            | 1100                                   | 2200                     | 1700                     |   |
| Bridge Site Condition | Landuse   | Farm                            | Farm                                     | Farm                             | Residence, Commercial           | Farm                                   | Residence                | Farm                     |   |
|                       | Topography  | Flat                            | Flat                                     | Flat                             | Flat                            | Flat                                   | Flat                     | Flat                     |   |
|                       | Necessity of Realignment of Approach Road         | No                              | No                                       | Yes                              | No                              | No                                     | No                       | No                       |   |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                              | No                                       | 1320                             | 90                              | 680                                    | No                       | No                       |   |
|                       | Number of Houses to be Relocated                  | No                              | No                                       | No                               | No                              | No                                     | No                       | No                       |   |
|                       | Other Obstruction to be Relocated                 | 3 shops                         | No                                       | 1 shop, 35 trees                 | 1 electric pole, 8 trees        | 3 Trees                                | 3 shops                  | No                       |   |
| Proposed Bridge       | Bridge Length (m)                                 | 50                              | 70                                       | 70                               | 25                              | 80                                     | 25                       | 20                       |   |
|                       | Span Arrangement                                  | 15m+20m+15m                     | 20m+2x25m                                | 20m+2x25m                        | 1x25m                           | 15m+20m+2x15                           | 1x25m                    | 1x20m                    |   |
|                       | Abutment Height (m)                               | 3.20                            | 3.00                                     | 3.10                             | 3.10                            | 3.30                                   | 4.60                     | 4.80                     |   |
|                       | Pier Height (m)                                   | 6.60                            | 5.00                                     | 4.40                             | -                               | 4.60                                   | -                        | -                        |   |
| Remarks               |   |                                 |  |                                  |                                 |  |                          |                          |   |

Zone No: 6  
District : Comilla

BRIDGE SITE SURVEY DATA- 1

| Name of Upazila              |  | Laksam             | Dautkandi          |                      | Brahmanpara  |                           |              |
|------------------------------|--|--------------------|--------------------|----------------------|--------------|---------------------------|--------------|
| Serial Number                | 9  | 10                 | 21                 | 26                   | 27           | 28                        |              |
| Bridge Code                  | 19-02-09                                 | 19-03-01           | 19-03-12           | 19-04-03             | 19-04-04     | 19-04-05                  |              |
| Road ID                      | 419723054                                | 419363038          | 419363004          | 419152001            | 419153003    | 419153017                 |              |
| Road Class                   | R1                                       | R1                 | R1                 | FRB                  | R1           | R1                        |              |
| Chainage (km)                | 0+000                                    | 2+000              | 3+140              | 3+252                | 4+287        | 1+585                     |              |
| Condition of Existing Bridge | Existing or not                          | Existing           | Not Existing       | Not Existing         | Existing     | Existing                  | Not Existing |
|                              | Bridge Length (m)                        | 41.00              |                    |                      | 21.00        | 21.00                     |              |
|                              | Bridge Width (m)                         | 3.05               |                    |                      | 4.26         | 3.05                      |              |
|                              | Carriageway Width (m)                    | 2.60               |                    |                      | 3.66         | 2.67                      |              |
|                              | Superstructure Type                      | RC                 |                    |                      | RC           | RC                        |              |
|                              | Abutment Type                            | Masonry            |                    |                      | Masonry      | Masonry                   |              |
|                              | Pier Type                                | Masonry            |                    |                      | RCC Coloum   | Masonry                   |              |
|                              | Usage of Bridge                          | Pedestrians only   |                    |                      | All vehicles | All vehicles              |              |
|                              | Condition                                | Damaged            |                    |                      | Damaged      | Collapsed                 |              |
|                              | Present Navigation Clearance Height (m)  | 0.60               |                    |                      | 2.10         | 1.20                      |              |
| River Condition              | Bank to Bank Width (m)                   | 50.00              | 270.00             | 60.00                | 24.00        | 25.00                     | 30.00        |
|                              | Highest Flood Water Width (m)            | 60.00              | 380.00             | 60.00                | 24.00        | 25.00                     | 32.00        |
|                              | Highest Flood Water Depth (m)            | 7.20               | 7.50               | 6.50                 | 5.00         | 6.00                      | 6.20         |
|                              | Normal Flood Water Width (m)             | 49.00              | 350.00             | 64.00                | 18.00        | 18.00                     | 28.00        |
|                              | Normal Flood Water depth (m)             | 5.00               | 6.50               | 7.00                 | 4.00         | 4.50                      | 4.50         |
|                              | Dry Season Water Width (m)               | 41.00              | 240.00             | 32.00                | 12.00        | 12.00                     | 22.00        |
|                              | Dry Season Water Depth (m)               | 0.60               | 2.25               | 3.25                 | 0.33         | 0.80                      | 0.30         |
|                              | Tidal Fluctuation (m)                    | No                 | 1.00               | 0.80                 | No           | No                        | No           |
|                              | Water Velocity                           | Medium             | Medium             | Fast                 | Medium       | Medium                    | Medium       |
|                              | Angle of Bridge to Stream (deg)          | 90                 | 90                 | 90                   | 90           | 90                        | 90           |
|                              | Ferry Services                           | No                 | No                 | No                   | No           | No                        | No           |
|                              | Required Navigation Clearance Height (m) | 1.80               | 2.00               | 1.80                 | 1.60         | 1.60                      | 1.00         |
|                              | Type of River Traffic                    | Burge, CountryBoat | Burge, CountryBoat | Country Boat, Launch | Country Boat | Engine Boat, Country Boat | Country Boat |
| Condition of Bank            | Sound                                    | Eroded             | Heavily eroded     | Sound                | Sound        | Sound                     |              |
| Condition of Riverbed        | Sound                                    | Sound              | Scoured            | Sound                | Sound        | Sound                     |              |
| Approach Road                | Total Road Width (m)                     | 3.66               | 4.80               | 4.50                 | 7.00         | 3.66                      | 2.40         |
|                              | Carriageway Width (m)                    | 2.44               | 4.00               | 2.67                 | 3.66         | 3.25                      | 2.00         |
|                              | Embankment Height (m)                    | 2.00               | 2.50               | 3.50                 | 2.50         | 2.50                      | 2.75         |
|                              | Surface Type                             | BC                 | Earthen            | Earthen              | BC           | BC/Earthen                | Earthen      |
|                              | Surface Condition                        | Good               | Bad                | Bad                  | Good         | Good                      | Very bad     |
|                              | Alternative Route (km)                   | No                 | No                 | No                   | No           | No                        | No           |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Comilla

| Name of Thana         |   | Laksam               | Dautkandi  |   | Brahmanpara      |  |   |    |
|-----------------------|---|----------------------|--|---|------------------|--|---|----|
| Serial Number         |   | 9                    | 10   | 21  | 26               | 27   | 28  |    |
| Influence Area        | Population (thousand)                             | 30                   | 45   | 60  | 65               | 40   | 30  |    |
|                       | Main Industry                                     | Fishery, Agriculture | Agriculture  | Agriculture   | Agriculture      | Fishery, Agriculture                           | Fishery, Agriculture  |    |
|                       | Major Agricultural Product                        | Rice, Jute, Veg.     | Rice, Wheat, Veg.  | Rice  | Rice, Jute, Veg. | Rice, Jute, Veg.                               | Rice, Jute, Veg.  |    |
|                       | Number of Public Facilities                       | School               | 18   | 8   | 24               | 11   | 7   | 6  |
|                       |   | Clinic               | 2  | 4   | 7                | 3  | 3   | 3  |
|                       |   | Bazar                | 16   | 5   | 6                | 3  | 3   | 4  |
|                       |   | Mosque               | 50   | 25  | 30               | 8  | 12  | 12 |
|                       |   | Gov't Office         | 10   | 2   | 5                | 16   | 3   | 5  |
| Others                |   | 10                   | 0  | 0   | 4                | 2  | 2   |    |
| Total                 |   | 106                  | 44   | 72  | 45               | 30   | 32  |    |
| Traffic Volume        | Passenger Car                                     | 40                   | 10   | 50  | 20               | 14   | 6   |    |
|                       | Pickup/Truck                                      | 30/60                | 15/8   | 30/20   | 18/15            | 15/8   | 10/4  |    |
|                       | Bus   | 80                   | 20   | 20  | 25               | 20   | 20  |    |
|                       | Motorcycle  | 120                  | 25   | 130   | 150              | 70   | 80  |    |
|                       | Rickshaw  | 400                  | 100  | 500   | 300              | 250  | 250   |    |
|                       | Autorickshaw                                      | 125                  | 55   | 300   | 125              | 60   | 100   |    |
|                       | Bullock Cart                                      | 0                    | 0  | 0   | 0                | 0  | 0   |    |
|                       | Pedestrian  | 6000                 | 3000   | 8000  | 5500             | 3000   | 2500  |    |
| Bridge Site Condition | Landuse   | Farm                 | Swamp  | Other   | Farm             | Farm   | Farm  |    |
|                       | Topography  | Flat                 | Flat   | Flat  | Flat             | Flat   | Flat  |    |
|                       | Necessity of Realignment of Approach Road         | No                   | No   | Yes   | No               | No   | Yes   |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                   | 3000   | No  | No               | No   | 500   |    |
|                       | Number of Houses to be Relocated                  | No                   | 10   | No  | No               | 7  | No  |    |
|                       | Other Obstruction to be Relocated                 | No                   | No   | 20 nos Trees  | 6 nos trees      | No   | 10 nos trees  |    |
| Proposed Bridge       | Bridge Length (m)                                 | 50                   | 300  | 75  | 25               | 25   | 30  |    |
|                       | Span Arrangement                                  | 15m+20m+15m          | 12x25m   | 3x25m   | 1x25m            | 1x25m  | 1x30m   |    |
|                       | Abutment Height (m)                               | 3.50                 | 5.00   | 4.80  | 5.00             | 6.00   | 3.00  |    |
|                       | Pier Height (m)                                   | 7.50                 | 7.50   | 8.50  | -                | -  | -   |    |
| Remarks               |   |                      | Land acquisition of 3000 sq.m and relocation of 10 nos of houses will be required. | Relocation of 20 nos of temporary shops will be required. |                  | Relocation of 7 nos of shops will be required. | Land acquisition of 500 sq.m and removal of 10 nos of trees will be required. |    |

Zone No: 6

BRIDGE SITE SURVEY DATA- 1

District : Comilla

| Name of Upazilla             |  | Brahmanpara  |                           | Muradnagar                |                           | Chowddogram  | Nangalkot                 |
|------------------------------|--|--------------|---------------------------|---------------------------|---------------------------|--------------|---------------------------|
| Serial Number                |  | 29           | 30                        | 33                        | 36                        | 39           | 41                        |
| Bridge Code                  |  | 19-04-06     | 19-04-07                  | 19-05-03                  | 19-05-06                  | 19-06-03     | 19-07-02                  |
| Road ID                      |  | 419153011    | 419154016                 | 419812003                 | 419813011                 | 419313034    | 419873007                 |
| Road Class                   |  | R1           | R2                        | FRB                       | R1                        | R1           | R1                        |
| Chainage (km)                |  | 4+399        | 2+460                     | 3+122                     | 3+900                     | 6+700        | 5+100                     |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing              | Not Existing              | Not Existing              | Existing     | Not Existing              |
|                              | Bridge Length (m)                        |              |                           |                           |                           | 10.20        |                           |
|                              | Bridge Width (m)                         |              |                           |                           |                           | 4.05         |                           |
|                              | Carriageway Width (m)                    |              |                           |                           |                           | 3.67         |                           |
|                              | Superstructure Type                      |              |                           |                           |                           | RC           |                           |
|                              | Abutment Type                            |              |                           |                           |                           | Masonry      |                           |
|                              | Pier Type                                |              |                           |                           |                           | -            |                           |
|                              | Usage of Bridge                          |              |                           |                           |                           | All vehicles |                           |
|                              | Condition                                |              |                           |                           |                           | Collapsed    |                           |
|                              | Present Navigation Clearance Height (m)  |              |                           |                           |                           | 0.60         |                           |
| River Condition              | Bank to Bank Width (m)                   | 32.00        | 50.00                     | 32.00                     | 30.00                     | 43.00        | 105.00                    |
|                              | Highest Flood Water Width (m)            | 34.00        | 57.00                     | 64.00                     | 33.00                     | 49.00        | 130.00                    |
|                              | Highest Flood Water Depth (m)            | 6.00         | 6.20                      | 6.20                      | 6.50                      | 6.00         | 6.50                      |
|                              | Normal Flood Water Width (m)             | 26.00        | 33.00                     | 38.00                     | 25.00                     | 30.00        | 115.00                    |
|                              | Normal Flood Water depth (m)             | 4.50         | 4.10                      | 4.70                      | 5.00                      | 5.50         | 5.00                      |
|                              | Dry Season Water Width (m)               | 20.00        | 25.00                     | 28.00                     | 16.00                     | 20.00        | 105.00                    |
|                              | Dry Season Water Depth (m)               | 0.80         | 1.20                      | 1.20                      | 1.00                      | 1.20         | 1.00                      |
|                              | Tidal Fluctuation (m)                    | No           | No                        | 1.00                      | No                        | No           | No                        |
|                              | Water Velocity                           | Medium       | Fast                      | Slow                      | Slow                      | Medium       | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90                        | 90                        | 90                        | 90           | 90                        |
|                              | Ferry Services                           | No           | No                        | No                        | No                        | No           | No                        |
|                              | Required Navigation Clearance Height (m) | 1.30         | 2.50                      | 0.60                      | 1.80                      | 1.20         | 1.40                      |
|                              | Type of River Traffic                    | Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound        | Eroded                    | Sound                     | Sound                     | Sound        | sound                     |
| Condition of Riverbed        | Sound                                    | Scoure       | Sound                     | Sound                     | Scoured                   | Sound        |                           |
| Approach Road                | Total Road Width (m)                     | 3.00         | 3.66                      | 5.48                      | 3.50                      | 4.50         | 3.68                      |
|                              | Carriageway Width (m)                    | 2.30         | 3.05                      | 2.67                      | 3.00                      | 3.05         | 2.67                      |
|                              | Embankment Height (m)                    | 2.70         | 2.20                      | 2.50                      | 3.00                      | 2.00         | 2.10                      |
|                              | Surface Type                             | HBB/Earthen  | Earthen                   | BC/Earthen                | BC/Earthen                | BC/Earthen   | BC/Earthen                |
|                              | Surface Condition                        | Fair         | Bad                       | Fair                      | Fair                      | Good         | Good                      |
|                              | Alternative Route (km)                   | No           | No                        | No                        | No                        | No           | No                        |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Comilla

| Name of Thana         |   | Brahmanpara          |                  | Muradnagar                                     |                      | Chowddogram                 | Nangalkot                |    |
|-----------------------|---|----------------------|------------------|--|----------------------|-----------------------------|--------------------------|----|
| Serial Number         |   | 29                   | 30               | 33   | 36                   | 39                          | 41                       |    |
| Influence Area        | Population (thousand)                             | 30                   | 100              | 60   | 35                   | 40                          | 40                       |    |
|                       | Main Industry                                     | Fishery, Agriculture | Agriculture      | Fishery, Agriculture                           | Fishery, Agriculture | Fishery, Agriculture        | Fishery, Agriculture     |    |
|                       | Major Agricultural Product                        | Rice, Jute, Veg.     | Rice, Jute, Veg. | Rice, Jute, Veg.                               | Rice, Jute, Veg.     | Rice, Jute, Veg., Sugarcane | Rice, Jute, Wheat & Veg. |    |
|                       | Number of Public Facilities                       | School               | 6                | 10   | 7                    | 14                          | 6                        | 10 |
|                       |   | Clinic               | 3                | 4  | 4                    | 2                           | 2                        | 2  |
|                       |   | Bazar                | 3                | 7  | 4                    | 4                           | 3                        | 3  |
|                       |   | Mosque               | 10               | 18   | 10                   | 15                          | 7                        | 20 |
|                       |   | Gov't Office         | 5                | 2  | 4                    | 4                           | 2                        | 3  |
|                       |   | Others               | 1                | 10   | 5                    | 3                           | 1                        | 6  |
| Total                 |   | 28                   | 51               | 34   | 42                   | 21                          | 44                       |    |
| Traffic Volume        | Passenger Car                                     | 10                   | 20               | 10   | 10                   | 20                          | 10                       |    |
|                       | Pickup/Truck                                      | 15/8                 | 15/10            | 15/6   | 20/6                 | 5/5                         | 20/8                     |    |
|                       | Bus   | 20                   | 25               | 20   | 30                   | 30                          | 30                       |    |
|                       | Motorcycle  | 70                   | 70               | 75   | 80                   | 50                          | 70                       |    |
|                       | Rickshaw  | 200                  | 350              | 425  | 250                  | 250                         | 500                      |    |
|                       | Autorickshaw                                      | 100                  | 75               | 100  | 55                   | 100                         | 170                      |    |
|                       | Bullock Cart                                      | 0                    | 0                | 0  | 0                    | 0                           | 0                        |    |
|                       | Pedestrian  | 2000                 | 5500             | 2500   | 2400                 | 4000                        | 3500                     |    |
| Bridge Site Condition | Landuse   | Farm                 | Farm             | Farm   | Farm                 | Farm                        | Farm                     |    |
|                       | Topography  | Flat                 | Flat             | Flat   | Flat                 | Flat                        | Flat                     |    |
|                       | Necessity of Realignment of Approach Road         | No                   | No               | No   | No                   | No                          | No                       |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                   | No               | 300  | No                   | No                          | No                       |    |
|                       | Number of Houses to be Relocated                  | No                   | No               | No   | No                   | No                          | No                       |    |
|                       | Other Obstruction to be Relocated                 | No                   | No               | 4 nos trees                                    | No                   | 2 nos trees                 | No                       |    |
| Proposed Bridge       | Bridge Length (m)                                 | 30                   | 50               | 35   | 30                   | 45                          | 110                      |    |
|                       | Span Arrangement                                  | 1x30m                | 15m+20m+16m      | 10m+15m+10m                                    | 1x30m                | 3x15m                       | 20m+2x25m+2x20m          |    |
|                       | Abutment Height (m)                               | 5.50                 | 4.50             | 7.50   | 6.80                 | 4.00                        | 4.50                     |    |
|                       | Pier Height (m)                                   | -                    | 7.00             | 6.50   | -                    | 6.00                        | 7.00                     |    |
| Remarks               |   |                      |                  | Land acquisition of 300 sq.m will be required. |                      |                             |                          |    |

Zone No: 6  
District : Comilla

BRIDGE SITE SURVEY DATA- 1

| Name of Upazila              |  | Burichong            | Debidar              |                      | Homna                     |                           |
|------------------------------|--|----------------------|----------------------|----------------------|---------------------------|---------------------------|
| Serial Number                |  | 42                   | 47                   | 48                   | 50                        | 51                        |
| Bridge Code                  |  | 19-08-01             | 19-09-02             | 19-09-N1             | 19-10-02                  | 19-10-N1                  |
| Road ID                      |  | 419182001            | 419404006            | 419403018            | 419543008                 | 419543022                 |
| Road Class                   |  | FRB                  | R2                   | R1                   | R1                        | R1                        |
| Chainage (km)                |  | 0+000                | 0+000                | 0+000                | 0+000                     | 4+500                     |
| Condition of Existing Bridge | Existing or not                          | Not Existing         | Not Existing         | Not Existing         | Not Existing              | Not Existing              |
|                              | Bridge Length (m)                        |                      |                      |                      |                           |                           |
|                              | Bridge Width (m)                         |                      |                      |                      |                           |                           |
|                              | Carriageway Width (m)                    |                      |                      |                      |                           |                           |
|                              | Superstructure Type                      |                      |                      |                      |                           |                           |
|                              | Abutment Type                            |                      |                      |                      |                           |                           |
|                              | Pier Type                                |                      |                      |                      |                           |                           |
|                              | Usage of Bridge                          |                      |                      |                      |                           |                           |
|                              | Condition                                |                      |                      |                      |                           |                           |
|                              | Present Navigation Clearance Height (m)  |                      |                      |                      |                           |                           |
| River Condition              | Bank to Bank Width (m)                   | 94.00                | 88.00                | 84.00                | 84.00                     | 81.00                     |
|                              | Highest Flood Water Width (m)            | 150.00               | 150.00               | 130.00               | 96.00                     | 100.00                    |
|                              | Highest Flood Water Depth (m)            | 7.20                 | 6.80                 | 7.50                 | 7.20                      | 7.00                      |
|                              | Normal Flood Water Width (m)             | 90.00                | 86.00                | 84.00                | 84.00                     | 85.00                     |
|                              | Normal Flood Water depth (m)             | 6.30                 | 6.40                 | 6.50                 | 6.00                      | 5.50                      |
|                              | Dry Season Water Width (m)               | 64.00                | 65.00                | 60.00                | 60.00                     | 60.00                     |
|                              | Dry Season Water Depth (m)               | 2.20                 | 2.00                 | 2.50                 | 1.30                      | 1.10                      |
|                              | Tidal Fluctuation (m)                    | 1.10                 | 1.00                 | 1.00                 | 0.6                       | 0.6                       |
|                              | Water Velocity                           | Fast                 | Fast                 | Fast                 | Medium                    | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                   | 90                   | 90                   | 90                        | 90                        |
|                              | Ferry Services                           | No                   | No                   | No                   | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.40                 | 1.40                 | 1.20                 | 2.00                      | 2.00                      |
|                              | Type of River Traffic                    | Country Boat, Launch | Country Boat, Launch | Country Boat, Launch | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Heavy eroded         | Heavy eroded         | Heavy eroded         | Sound                     | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                | Scoured              | Sound                | Sound                     |                           |
| Approach Road                | Total Road Width (m)                     | 7.30                 | 4.50                 | 4.00                 | 4.88                      | 4.88                      |
|                              | Carriageway Width (m)                    | 6.50                 | 3.05                 | 3.00                 | 3.05                      | 3.67                      |
|                              | Embankment Height (m)                    | 5.20                 | 5.00                 | 6.50                 | 2.60                      | 2.50                      |
|                              | Surface Type                             | BC/Earthen           | Earthen              | Earthen              | BC                        | Earthen                   |
|                              | Surface Condition                        | Fair                 | Bad                  | Bad                  | Good                      | Good                      |
|                              | Alternative Route (km)                   | No                   | No                   | No                   | No                        | No                        |



### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Comilla

| Name of Thana         |   | Burichong    | Debidar   |             | Homna                       |                  |    |
|-----------------------|---|--------------|---|-------------|-----------------------------|------------------|----|
| Serial Number         |   | 42           | 47  | 48          | 50                          | 51               |    |
| Influence Area        | Population (thousand)                             | 65           | 100   | 80          | 30                          | 25               |    |
|                       | Main Industry                                     | Agriculture  | Agriculture   | Agriculture | Fishery, Agriculture        | Agriculture      |    |
|                       | Major Agricultural Product                        | Rice, Veg.   | Rice, Veg.  | Rice, Veg.  | Rice, Jute, Veg., Sugarcane | Rice, Jute, Veg. |    |
|                       | Number of Public Facilities                       | School       | 10  | 10          | 5                           | 25               | 8  |
|                       |   | Clinic       | 4   | 3           | 2                           | 5                | 2  |
|                       |   | Bazar        | 6   | 5           | 2                           | 6                | 5  |
|                       |   | Mosque       | 18  | 12          | 10                          | 20               | 15 |
|                       |   | Gov't Office | 2   | 3           | 1                           | 5                | 2  |
|                       |   | Others       | 1   | 1           | 2                           | 10               | 5  |
| Total                 |   | 41           | 34  | 22          | 71                          | 37               |    |
| Traffic Volume        | Passenger Car                                     | 15           | 15  | 10          | 10                          | 5                |    |
|                       | Pickup/Truck                                      | 20/12        | 30/10   | 12/5        | 5/20                        | 5/5              |    |
|                       | Bus   | 10           | 25  | 20          | 35                          | 10               |    |
|                       | Motorcycle  | 125          | 75  | 100         | 75                          | 25               |    |
|                       | Rickshaw  | 300          | 300   | 250         | 300                         | 150              |    |
|                       | Autorickshaw                                      | 50           | 70  | 60          | 110                         | 50               |    |
|                       | Bullock Cart                                      | 0            | 0   | 0           | 0                           | 0                |    |
|                       | Pedestrian  | 3500         | 6000  | 4000        | 3000                        | 500              |    |
| Bridge Site Condition | Landuse   | Waste        | Waste land  | Waste land  | Farm                        | Swamp            |    |
|                       | Topography  | Flat         | Flat  | Flat        | Flat                        | Flat             |    |
|                       | Necessity of Realignment of Approach Road         | No           | No  | No          | Yes                         | No               |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No           | No  | No          | 3000                        | No               |    |
|                       | Number of Houses to be Relocated                  | No           | No  | No          | No                          | No               |    |
|                       | Other Obstruction to be Relocated                 | No           | No  | No          | No                          | No               |    |
| Proposed Bridge       | Bridge Length (m)                                 | 120          | 120   | 150         | 110                         | 80               |    |
|                       | Span Arrangement                                  | 20m+4x25m    | 20m+4x25m   | 6x25m       | 20m+2x25m+2x20m             | 2x15m+20m+2x15m  |    |
|                       | Abutment Height (m)                               | 5.50         | 6.50  | 6.80        | 3.75                        | 8.00             |    |
|                       | Pier Height (m)                                   | 7.80         | 8.00  | 8.00        | 8.00                        | 7.50             |    |
| Remarks               |   |              | Earlier dated but at the request of XEN, LGED visited & included in the list. |             |                             |                  |    |

Zone No: 6

**BRIDGE SITE SURVEY DATA- 1**

District : B-Baria

| Name of Upazilla             |  | Bancharampur |                     |                     | Nabirnagar          |              | Akhaura        |
|------------------------------|--|--------------|---------------------|---------------------|---------------------|--------------|----------------|
| Serial Number                |  | 24           | 25                  | 26                  | 27                  | 31           | 37             |
| Bridge Code                  |  | 20-04-N1     | 20-04-N2            | 20-04-N3            | 20-05-01            | 20-05-05     | 20-07-01       |
| Road ID                      |  | 412043020    | 412043005           | 412043009           | 412852002           | 412852004    | 412023002      |
| Road Class                   |  | R1           | R1                  | R1                  | FRB                 | FRB          | R1             |
| Chainage (km)                |  | 4+250        | 0+150               | 9+313               | 2+383               | 3+680        | 6+180          |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing        | Not Existing        | Not Existing        | Not Existing | Not Existing   |
|                              | Bridge Length (m)                        |              |                     |                     |                     |              |                |
|                              | Bridge Width (m)                         |              |                     |                     |                     |              |                |
|                              | Carriageway Width (m)                    |              |                     |                     |                     |              |                |
|                              | Superstructure Type                      |              |                     |                     |                     |              |                |
|                              | Abutment Type                            |              |                     |                     |                     |              |                |
|                              | Pier Type                                |              |                     |                     |                     |              |                |
|                              | Usage of Bridge                          |              |                     |                     |                     |              |                |
|                              | Condition                                |              |                     |                     |                     |              |                |
|                              | Present Navigation Clearance Height (m)  |              |                     |                     |                     |              |                |
| River Condition              | Bank to Bank Width (m)                   | 130.00       | 114.00              | 85.00               | 55.00               | 68.00        | 165.00         |
|                              | Highest Flood Water Width (m)            | 145.00       | 145.00              | 125.00              | 75.00               | 88.00        | 188.00         |
|                              | Highest Flood Water Depth (m)            | 7.00         | 9.00                | 7.00                | 6.00                | 5.50         | 5.50           |
|                              | Normal Flood Water Width (m)             | 130.00       | 130.00              | 90.00               | 60.00               | 60.00        | 160.00         |
|                              | Normal Flood Water depth (m)             | 6.00         | 8.00                | 6.00                | 5.50                | 4.50         | 4.70           |
|                              | Dry Season Water Width (m)               | 22.00        | 48.00               | 35.00               | 25.00               | 40.00        | 25.00          |
|                              | Dry Season Water Depth (m)               | 2.00         | 3.00                | 1.50                | 1.25                | 1.00         | 1.00           |
|                              | Tidal Fluctuation (m)                    | No           | No                  | No                  | No                  | No           | No             |
|                              | Water Velocity                           | Medium       | Medium              | Slow                | Medium              | Medium       | Slow           |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90                  | 90                  | 90                  | 90           | 90             |
|                              | Ferry Services                           | No           | No                  | No                  | No                  | No           | No             |
|                              | Required Navigation Clearance Height (m) | 1.00         | 2.00                | 1.00                | 1.00                | 1.00         | 1.00           |
|                              | Type of River Traffic                    | Country Boat | Country Boat, Cargo | Country Boat, Cargo | Country Boat, Cargo | Country Boat | Country Boat   |
|                              | Condition of Bank                        | Sound        | Sound               | Sound               | Sound               | Sound        | Sound          |
| Condition of Riverbed        | Sound                                    | Sound        | Sound               | Sound               | Sound               | Sound        |                |
| Approach Road                | Total Road Width (m)                     | 4.26         | 4.80                | 4.27                | 4.87                | 4.87         | 4.27           |
|                              | Carriageway Width (m)                    | 3.86         | 3.05                | 3.05                | 3.86                | 3.86         | 3.05           |
|                              | Embankment Height (m)                    | 2.50         | 2.50                | 2.50                | 2.25                | 2.50         | 2.10           |
|                              | Surface Type                             | BC/Earthen   | HBB/BC              | BC/WBM/HBB          | HBB/Earthen         | WBM/Earthen  | BC/WBM/Earthen |
|                              | Surface Condition                        | Fair         | Good                | Good                | Bad                 | Fair         | Fair           |
|                              | Alternative Route (km)                   | No           | No                  | No                  | No                  | No           | No             |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : B-Baria

| Name of Thana         |   | Bancharampur      |                   |                   | Nabirnagar  |             | Akhaura         |    |
|-----------------------|---|-------------------|-------------------|-------------------|-------------|-------------|-----------------|----|
| Serial Number         |   | 24                | 25                | 26                | 27          | 31          | 37              |    |
| Influence Area        | Population (thousand)                             | 40                | 35                | 18                | 22          | 15          | 25              |    |
|                       | Main Industry                                     | Agriculture       | Agriculture       | Agriculture       | Agriculture | Agriculture | Agriculture     |    |
|                       | Major Agricultural Product                        | Rice, Jute        | Rice, Jute        | Rice, Wheat, Jute | Rice, Wheat | Rice, Jute  | Rice, Wheat     |    |
|                       | Number of Public Facilities                       | School            | 5                 | 11                | 5           | 4           | 13              | 10 |
|                       |   | Clinic            | 2                 | 2                 | 2           | 2           | 2               | 2  |
|                       |   | Bazar             | 2                 | 5                 | 2           | 5           | 2               | 3  |
|                       |   | Mosque            | 8                 | 12                | 6           | 4           | 12              | 12 |
|                       |   | Gov't Office      | 1                 | 1                 | 1           | 2           | 3               | 0  |
| Others                |   | 5                 | 6                 | 6                 | 2           | 0           | 2               |    |
| Total                 |   | 23                | 37                | 22                | 19          | 32          | 29              |    |
| Traffic Volume        | Passenger Car                                     | 10                | 20                | 15                | 25          | 35          | 30              |    |
|                       | Pickup/Truck                                      | 15                | 15                | 20                | 20          | 30          | 12              |    |
|                       | Bus   | 0                 | 0                 | 8                 | 5           | 20          | 6               |    |
|                       | Motorcycle  | 20                | 25                | 25                | 15          | 25          | 15              |    |
|                       | Rickshaw  | 130               | 175               | 180               | 40          | 220         | 120             |    |
|                       | Autorickshaw                                      | 3                 | 30                | 15                | 12          | 18          | 20              |    |
|                       | Bullock Cart                                      | 0                 | 0                 | 0                 | 30          | 10          | 10              |    |
|                       | Pedestrian  | 1500              | 2000              | 1500              | 2500        | 500         | 750             |    |
| Bridge Site Condition | Landuse   | Farm              | Farm              | Farm              | Farm        | Farm        | Farm            |    |
|                       | Topography  | Flat              | Flat              | Flat              | Flat        | Flat        | Flat            |    |
|                       | Necessity of Realignment of Approach Road         | No                | No                | No                | No          | No          | No              |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                | No                | No                | No          | No          | No              |    |
|                       | Number of Houses to be Relocated                  | No                | No                | No                | No          | No          | No              |    |
|                       | Other Obstruction to be Relocated                 | No                | No                | No                | No          | No          | No              |    |
| Proposed Bridge       | Bridge Length (m)                                 | 130               | 130               | 90                | 60          | 75          | 160             |    |
|                       | Span Arrangement                                  | 2x20m+2x25m+2x20m | 2x20m+2x25m+2x20m | 15m+3x20m+15m     | 3x20m       | 3x25m       | 20m+4x25m+2x20m |    |
|                       | Abutment Height (m)                               | 8.50              | 8.50              | 8.50              | 5.50        | 5.00        | 5.00            |    |
|                       | Pier Height (m)                                   | 8.00              | 10.00             | 8.00              | 7.00        | 8.50        | 8.50            |    |
| Remarks               |   |                   |                   |                   |             |             |                 |    |

Zone No: 6

BRIDGE SITE SURVEY DATA- 1

District : Chandpur

| Name of Upazila              |  | Sadar                |                           |              |                      | Hajiganj                  |              |                           |
|------------------------------|--|----------------------|---------------------------|--------------|----------------------|---------------------------|--------------|---------------------------|
| Serial Number                |  | 2                    | 3                         | 4            | 5                    | 6                         | 11           | 12                        |
| Bridge Code                  |  | 21-01-N1             | 21-01-N2                  | 21-01-N3     | 21-01-N4             | 21-02-01                  | 21-02-N1     | 21-02-N2                  |
| Road ID                      |  | 413013002            | 413013002                 | 413013002    | 413013002            | 413485005                 | 413484007    | 413494003                 |
| Road Class                   |  | R1                   | R1                        | R1           | R1                   | R3                        | R2           | R2                        |
| Chainage (km)                |  | 0+520                | 1+670                     | 2+591        | 3+531                | 0+600                     | 0+925        | 1+500                     |
| Condition of Existing Bridge | Existing or not                          | Existing             | Not Existing              | Not Existing | Existing             | Not Existing              | Not Existing | Not Existing              |
|                              | Bridge Length (m)                        | 16.00                |                           |              | 16.00                |                           |              |                           |
|                              | Bridge Width (m)                         | 1.90                 |                           |              | 1.90                 |                           |              |                           |
|                              | Carriageway Width (m)                    | 1.45                 |                           |              | 1.45                 |                           |              |                           |
|                              | Superstructure Type                      | Timber/Bamboo        |                           |              | Timber               |                           |              |                           |
|                              | Abutment Type                            | No                   |                           |              | No                   |                           |              |                           |
|                              | Pier Type                                | Temporary RCC Column |                           |              | Temporary RCC Pillar |                           |              |                           |
|                              | Usage of Bridge                          | Pedestrians only     |                           |              | Pedestrians only     |                           |              |                           |
|                              | Condition                                | Collapsed            |                           |              | Collapsed            |                           |              |                           |
|                              | Present Navigation Clearance Height (m)  | No                   |                           |              | No                   |                           |              |                           |
| River Condition              | Bank to Bank Width (m)                   | 16.00                | 26.00                     | 30.00        | 16.00                | 50.00                     | 22.00        | 112.00                    |
|                              | Highest Flood Water Width (m)            | 20.00                | 30.00                     | 36.00        | 22.00                | 65.00                     | 25.00        | 135.00                    |
|                              | Highest Flood Water Depth (m)            | 4.50                 | 6.20                      | 4.00         | 4.00                 | 5.00                      | 4.50         | 8.50                      |
|                              | Normal Flood Water Width (m)             | 12.00                | 24.00                     | 20.00        | 12.00                | 48.00                     | 20.00        | 120.00                    |
|                              | Normal Flood Water depth (m)             | 3.80                 | 5.00                      | 2.50         | 2.50                 | 4.00                      | 3.75         | 6.50                      |
|                              | Dry Season Water Width (m)               | 8.00                 | 20.00                     | 16.00        | 10.00                | 30.00                     | 10.00        | 80.00                     |
|                              | Dry Season Water Depth (m)               | 0.20                 | 1.20                      | 1.00         | 0.60                 | 1.10                      | 0.60         | 2.00                      |
|                              | Tidal Fluctuation (m)                    | 1.00                 | 1.00                      | 0.60         | 0.60                 | 0.50                      | 0.00         | 0.50                      |
|                              | Water Velocity                           | Medium               | Medium                    | Medium       | Medium               | Medium                    | Slow         | Medium                    |
|                              | Angle of Bridge to Stream (deg)          | 90                   | 90                        | 90           | 90                   | 90                        | 90           | 90                        |
|                              | Ferry Services                           | No                   | No                        | No           | No                   | No                        | No           | No                        |
|                              | Required Navigation Clearance Height (m) | 1.20                 | 1.60                      | 1.00         | 0.60                 | 1.60                      | 0.60         | 3.50                      |
|                              | Type of River Traffic                    | Country Boat         | Engine Boat, Country Boat | Country Boat | Country Boat         | Engine Boat, Country Boat | Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound                | Sound                     | Sound        | Sound                | Sound                     | Sound        | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound                | Sound                     | Sound        | Sound                | Sound                     | Sound        |                           |
| Approach Road                | Total Road Width (m)                     | 3.20                 | 2.67                      | 3.20         | 3.20                 | 4.88                      | 2.10         | 3.67                      |
|                              | Carriageway Width (m)                    | 2.67                 | 2.40                      | 2.67         | 2.67                 | 3.05                      | 1.80         | 3.05                      |
|                              | Embankment Height (m)                    | 2.00                 | 2.00                      | 2.00         | 2.00                 | 2.00                      | 1.80         | 2.50                      |
|                              | Surface Type                             | Earthen              | Earthen                   | Earthen      | Earthen              | Earthen                   | Earthen      | Earthen                   |
|                              | Surface Condition                        | Fair                 | Bad                       | Fair         | Fair                 | Fair                      | Bad          | Fair                      |
|                              | Alternative Route (km)                   | No                   | No                        | No           | No                   | No                        | No           | No                        |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Chandpur

| Name of Thana         |   | Sadar  |                      |                      |                      | Hajiganj                              |   |                                       |    |
|-----------------------|---|--|----------------------|----------------------|----------------------|---------------------------------------|---|---------------------------------------|----|
| Serial Number         |   | 2  | 3                    | 4                    | 5                    | 6                                     | 11  | 12                                    |    |
| Influence Area        | Population (thousand)                             | 22   | 30                   | 22                   | 22                   | 40                                    | 15  | 30                                    |    |
|                       | Main Industry                                     | Agriculture, Fishery   | Agriculture, Fishery | Agriculture, Fishery | Agriculture, Fishery | Agriculture, Fishery                  | Agriculture, Fishery  | Agriculture, Fishery, Commercial      |    |
|                       | Major Agricultural Product                        | Rice, Jute, Veg.   | Rice, Jute, Veg.     | Rice, Jute, Veg.     | Rice, Jute, Veg.     | Rice, Jute, S.Cane, Veg.              | Rice, Veg.  | Rice, Jute, Veg.                      |    |
|                       | Number of Public Facilities                       | School   | 8                    | 8                    | 6                    | 6                                     | 12  | 5                                     | 8  |
|                       |   | Clinic   | 2                    | 2                    | 1                    | 1                                     | 4   | 2                                     | 2  |
|                       |   | Bazar  | 6                    | 6                    | 3                    | 3                                     | 10  | 5                                     | 4  |
|                       |   | Mosque   | 12                   | 15                   | 13                   | 13                                    | 25  | 10                                    | 30 |
|                       |   | Gov't Office   | 2                    | 2                    | 2                    | 2                                     | 5   | 1                                     | 50 |
|                       |   | Others   | 6                    | 8                    | 10                   | 10                                    | 12  | 2                                     | 30 |
| <b>Total</b>          |   | <b>36</b>  | <b>41</b>            | <b>35</b>            | <b>35</b>            | <b>68</b>                             | <b>25</b>   | <b>124</b>                            |    |
| Traffic Volume        | Passenger Car                                     | 5  | 5                    | 5                    | 5                    | 15                                    | 5   | 40                                    |    |
|                       | Pickup/Truck                                      | 10/5   | 10/5                 | 10/5                 | 10/5                 | 15/30                                 | 5/10  | 30/15                                 |    |
|                       | Bus   | 20   | 20                   | 20                   | 0                    | 40                                    | 10  | 50                                    |    |
|                       | Motorcycle  | 80   | 80                   | 80                   | 70                   | 75                                    | 30  | 110                                   |    |
|                       | Rickshaw  | 250  | 250                  | 250                  | 120                  | 350                                   | 100   | 450                                   |    |
|                       | Autorickshaw                                      | 40   | 40                   | 40                   | 25                   | 80                                    | 20  | 100                                   |    |
|                       | Bullock Cart                                      | 0  | 0                    | 0                    | 0                    | 0                                     | 0   | 0                                     |    |
|                       | Pedestrian  | 3000   | 3000                 | 3000                 | 2500                 | 8000                                  | 2000  | 8000                                  |    |
| Bridge Site Condition | Landuse   | Farm   | Farm                 | Farm                 | Farm                 | Farm                                  | Farm  | Farm                                  |    |
|                       | Topography  | Flat   | Flat                 | Flat                 | Flat                 | Flat                                  | Flat  | Flat                                  |    |
|                       | Necessity of Realignment of Approach Road         | No   | Yes                  | No                   | No                   | No                                    | No  | No                                    |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No   | No                   | No                   | No                   | No                                    | No  | No                                    |    |
|                       | Number of Houses to be Relocated                  | No   | No                   | No                   | No                   | No                                    | No  | No                                    |    |
|                       | Other Obstruction to be Relocated                 | No   | No                   | No                   | No                   | No                                    | No  | 1 electric pole                       |    |
| Proposed Bridge       | Bridge Length (m)                                 | 20   | 30                   | 30                   | 20                   | 50                                    | 25  | 120                                   |    |
|                       | Span Arrangement                                  | 1x20m  | 1x30m                | 1x30m                | 1x20m                | 15m+20m+15m                           | 1x25m   | 20m+4x25m                             |    |
|                       | Abutment Height (m)                               | 4.80   | 6.50                 | 4.50                 | 4.50                 | 3.50                                  | 4.00  | 4.00                                  |    |
|                       | Pier Height (m)                                   | -  | -                    | -                    | -                    | 6.00                                  | -   | 9.00                                  |    |
| Remarks               |   | Land acquisition (20mx10m) will be required for realignment of approach shown on site plan. The previous road ID No. was wrong. The corrected road ID No. is 413013002 |                      |                      |                      | Tender under process under Agradicare | Tender for construction of bridge is on process under Agradicare. | One electric pole is to be relocated. |    |

Zone No: 6  
District : Chandpur

BRIDGE SITE SURVEY DATA- 1

| Name of Upazila              |  | Hajiganj                  |                           | Matlab                    |                           |              |                    |
|------------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|--------------|--------------------|
| Serial Number                | 13                                       | 14                        | 15                        | 18                        | 19                        | 21           |                    |
| Bridge Code                  | 21-02-N3                                 | 21-02-N4                  | 21-03-01                  | 21-03-04                  | 21-03-05                  | 21-03-07     |                    |
| Road ID                      | 413495001                                | 413493002                 | 413732003                 | 413783011                 | 413782007                 | 413765038    |                    |
| Road Class                   | R3                                       | R1                        | FRB                       | R1                        | FRB                       | R3           |                    |
| Chainage (km)                | 4+950                                    | 4+880                     | 0+000                     | 0+243                     | 3+165                     | 0+000        |                    |
| Condition of Existing Bridge | Existing or not                          | Not Existing              | Not Existing              | Not Existing              | Existing                  | Not Existing | Existing           |
|                              | Bridge Length (m)                        |                           |                           |                           | 38.00                     |              | 20.00              |
|                              | Bridge Width (m)                         |                           |                           |                           | 2.00                      |              | 1.30               |
|                              | Carriageway Width (m)                    |                           |                           |                           | 1.50                      |              | 1.00               |
|                              | Superstructure Type                      |                           |                           |                           | Bamboo                    |              | Timber             |
|                              | Abutment Type                            |                           |                           |                           | No                        |              | No                 |
|                              | Pier Type                                |                           |                           |                           | Temporary Bamboo pile     |              | Temporary RCC Pier |
|                              | Usage of Bridge                          |                           |                           |                           | Pedestrians only          |              | Pedestrians only   |
|                              | Condition                                |                           |                           |                           | Collapsed                 |              | Collapsed          |
|                              | Present Navigation Clearance Height (m)  |                           |                           |                           | 2.00                      |              | 0.60               |
| River Condition              | Bank to Bank Width (m)                   | 27.00                     | 132.00                    | 248.00                    | 40.00                     | 15.00        | 22.00              |
|                              | Highest Flood Water Width (m)            | 35.00                     | 145.00                    | 400.00                    | 50.00                     | 20.00        | 30.00              |
|                              | Highest Flood Water Depth (m)            | 4.00                      | 16.00                     | 13.00                     | 6.50                      | 4.50         | 5.60               |
|                              | Normal Flood Water Width (m)             | 28.00                     | 132.00                    | 240.00                    | 35.00                     | 15.00        | 20.00              |
|                              | Normal Flood Water depth (m)             | 3.50                      | 8.50                      | 12.00                     | 5.00                      | 4.00         | 4.50               |
|                              | Dry Season Water Width (m)               | 20.00                     | 80.00                     | 200.00                    | 28.00                     | 12.00        | 18.00              |
|                              | Dry Season Water Depth (m)               | 0.80                      | 4.50                      | 8.50                      | 3.50                      | 1.00         | 0.80               |
|                              | Tidal Fluctuation (m)                    | 0.00                      | 0.60                      | 1.00                      | 0.80                      | 0.60         | 0.40               |
|                              | Water Velocity                           | Slow                      | Medium                    | Medium                    | Medium                    | Slow         | Medium             |
|                              | Angle of Bridge to Stream (deg)          | 90                        | 90                        | 90                        | 90                        | 90           | 90                 |
|                              | Ferry Services                           | No                        | No                        | Yes                       | No                        | No           | No                 |
|                              | Required Navigation Clearance Height (m) | 1.20                      | 3.50                      | 7.00                      | 2.20                      | 1.00         | 1.00               |
|                              | Type of River Traffic                    | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat | Country Boat | Country Boat       |
|                              | Condition of Bank                        | Sound                     | Sound                     | Sound                     | Sound                     | Sound        | Sound              |
| Condition of Riverbed        | Sound                                    | Sound                     | Sound                     | Sound                     | Sound                     | Sound        |                    |
| Approach Road                | Total Road Width (m)                     | 3.05                      | 4.88                      | 4.88                      | 4.88                      | 7.30         | 4.00               |
|                              | Carriageway Width (m)                    | 2.50                      | 3.05                      | 3.05                      | 3.05                      | 6.50         | 3.05               |
|                              | Embankment Height (m)                    | 1.70                      | 2.10                      | 2.00                      | 1.80                      | 2.00         | 2.00               |
|                              | Surface Type                             | Earthen                   | BC/Earthen                | BC/HBB                    | BC/HBB                    | Earthen      | Earthen            |
|                              | Surface Condition                        | Fair                      | Good                      | Good                      | Good                      | Fair         | Fair               |
|                              | Alternative Route (km)                   | No                        | No                        | No                        | No                        | No           | No                 |

### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Chandpur

| Name of Thana         |   | Hajiganj             |   | Matlab                           |                         |                                     |                      |    |
|-----------------------|---|----------------------|---|----------------------------------|-------------------------|-------------------------------------|----------------------|----|
| Serial Number         |   | 13                   | 14  | 15                               | 18                      | 19                                  | 21                   |    |
| Influence Area        | Population (thousand)                             | 30                   | 50  | 35                               | 50                      | 50                                  | 20                   |    |
|                       | Main Industry                                     | Agriculture, Fishery | Agriculture, Fishery  | Agriculture, Fishery, Commercial | Agriculture, Commercial | Agriculture, Fishery                | Agriculture, Fishery |    |
|                       | Major Agricultural Product                        | Rice, Jute, Veg.     | Rice, Jute, S.Cane  | Rice, Jute, Veg.                 | Rice, Jute, Veg.        | Rice, Jute, Veg.                    | Rice, Jute, Veg.     |    |
|                       | Number of Public Facilities                       | School               | 8   | 8                                | 14                      | 15                                  | 18                   | 25 |
|                       |   | Clinic               | 3   | 1                                | 2                       | 2                                   | 3                    | 2  |
|                       |   | Bazar                | 10  | 6                                | 4                       | 12                                  | 10                   | 4  |
|                       |   | Mosque               | 15  | 10                               | 30                      | 40                                  | 20                   | 10 |
|                       |   | Gov't Office         | 3   | 3                                | 40                      | 10                                  | 30                   | 25 |
| Others                |   | 15                   | 5   | 30                               | 15                      | 20                                  | 40                   |    |
| Total                 |   | 54                   | 33  | 120                              | 94                      | 101                                 | 108                  |    |
| Traffic Volume        | Passenger Car                                     | 10                   | 15  | 40                               | 20                      | 30                                  | 30                   |    |
|                       | Pickup/Truck                                      | 15/35                | 15/20   | 30/45                            | 15/30                   | 15/20                               | 10/15                |    |
|                       | Bus   | 25                   | 30  | 50                               | 30                      | 30                                  | 30                   |    |
|                       | Motorcycle  | 80                   | 100   | 100                              | 100                     | 80                                  | 100                  |    |
|                       | Rickshaw  | 350                  | 425   | 400                              | 350                     | 400                                 | 500                  |    |
|                       | Auto Rickshaw                                     | 100                  | 110   | 110                              | 110                     | 100                                 | 80                   |    |
|                       | Bullock Cart                                      | 0                    | 0   | 0                                | 0                       | 0                                   | 0                    |    |
|                       | Pedestrian  | 5000                 | 7000  | 8000                             | 6000                    | 6000                                | 4000                 |    |
| Bridge Site Condition | Landuse   | Farm                 | Farm  | Farm                             | Farm                    | Farm                                | Farm                 |    |
|                       | Topography  | Flat                 | Flat  | Flat                             | Flat                    | Flat                                | Flat                 |    |
|                       | Necessity of Realignment of Approach Road         | No                   | No  | Yes                              | No                      | No                                  | No                   |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                   | No  | No                               | No                      | No                                  | No                   |    |
|                       | Number of Houses to be Relocated                  | No                   | No  | No                               | No                      | No                                  | No                   |    |
|                       | Other Obstruction to be Relocated                 | 5 nos Trees          | 4 nos shops   | No                               | No                      | No                                  | 6 nos Trees          |    |
| Proposed Bridge       | Bridge Length (m)                                 | 30                   | 140   | 260                              | 40                      | 15                                  | 25                   |    |
|                       | Span Arrangement                                  | 1x30m                | 20m+4x25m+20m   | 3x20m+8x25m                      | 10m+20m+10m             | 1x15m                               | 1x25m                |    |
|                       | Abutment Height (m)                               | 3.20                 | 4.50  | 7.50                             | 3.00                    | 2.20                                | 3.50                 |    |
|                       | Pier Height (m)                                   | -                    | 10.00   | 10.00                            | 8.20                    | -                                   | -                    |    |
| Remarks               |   |                      | Approach on the north side of the proposed bridge is yet to be completed. |                                  |                         | The corrected road ID is 413765036. |                      |    |

Zone No: 6  
District : Chandpur

BRIDGE SITE SURVEY DATA- 1

| Name of Upazila              |  | Kachua       |                           |              |              |              |                            |
|------------------------------|--|--------------|---------------------------|--------------|--------------|--------------|----------------------------|
| Serial Number                | 25                                       | 28           | 30                        | 32           | 33           | 34           | 35                         |
| Bridge Code                  | 21-04-04                                 | 21-04-05     | 21-04-09                  | 21-04-11     | 21-04-12     | 21-04-N1     | 21-04-N2                   |
| Road ID                      | 413585098                                | 413585328    | 413584010                 | 413584028    | 413585194    | 413584003    | 413585298                  |
| Road Class                   | R3                                       | R3           | R2                        | R2           | R3           | R2           | R3                         |
| Chainage (km)                | 0+250                                    | 0+125        | 5+593                     | 1+432        | 1+200        | 6+680        | 4+435                      |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing              | Not Existing | Not Existing | Not Existing | Not Existing               |
|                              | Bridge Length (m)                        |              |                           |              |              |              |                            |
|                              | Bridge Width (m)                         |              |                           |              |              |              |                            |
|                              | Carriageway Width (m)                    |              |                           |              |              |              |                            |
|                              | Superstructure Type                      |              |                           |              |              |              |                            |
|                              | Abutment Type                            |              |                           |              |              |              |                            |
|                              | Pier Type                                |              |                           |              |              |              |                            |
|                              | Usage of Bridge                          |              |                           |              |              |              |                            |
|                              | Condition                                |              |                           |              |              |              |                            |
|                              | Present Navigation Clearance Height (m)  |              |                           |              |              |              |                            |
| River Condition              | Bank to Bank Width (m)                   | 15.00        | 21.00                     | 18.00        | 13.00        | 12.00        | 21.00                      |
|                              | Highest Flood Water Width (m)            | 22.00        | 35.00                     | 20.00        | 18.00        | 15.00        | 30.00                      |
|                              | Highest Flood Water Depth (m)            | 5.00         | 5.00                      | 5.00         | 4.50         | 3.20         | 5.80                       |
|                              | Normal Flood Water Width (m)             | 15.00        | 25.00                     | 18.00        | 13.00        | 12.00        | 25.00                      |
|                              | Normal Flood Water depth (m)             | 3.75         | 4.50                      | 4.50         | 3.80         | 2.80         | 4.50                       |
|                              | Dry Season Water Width (m)               | 10.00        | 15.00                     | 12.00        | 8.00         | 10.00        | 10.00                      |
|                              | Dry Season Water Depth (m)               | 0.50         | 0.40                      | 0.80         | 0.30         | 0.60         | 0.20                       |
|                              | Tidal Fluctuation (m)                    | 0.00         | 0.00                      | 0.40         | 0.00         | 0.00         | 0.30                       |
|                              | Water Velocity                           | Slow         | Slow                      | Medium       | Medium       | Medium       | Medium                     |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90                        | 90           | 90           | 90           | 90                         |
|                              | Ferry Services                           | No           | No                        | No           | No           | No           | No                         |
|                              | Required Navigation Clearance Height (m) | 1.40         | 1.80                      | 1.20         | 0.60         | 0.60         | 1.60                       |
|                              | Type of River Traffic                    | Country Boat | Engine Boat, Country Boat | Country Boat | Country Boat | Country Boat | Engine, Boat, Country Boat |
|                              | Condition of Bank                        | Sound        | Sound                     | Sound        | Sound        | Sound        | Sound                      |
| Condition of Riverbed        | Sound                                    | Sound        | Sound                     | Sound        | Sound        | Sound        |                            |
| Approach Road                | Total Road Width (m)                     | 3.60         | 2.67                      | 4.00         | 3.67         | 3.67         | 4.88                       |
|                              | Carriageway Width (m)                    | 2.67         | 1.60                      | 2.67         | 3.05         | 3.05         | 2.60                       |
|                              | Embankment Height (m)                    | 2.00         | 3.00                      | 2.20         | 1.75         | 2.00         | 2.50                       |
|                              | Surface Type                             | Earthen      | Earthen                   | Earthen      | Earthen      | BC/Earthen   | BC/WBM/ Earthen            |
|                              | Surface Condition                        | Fair         | Bad                       | Bad          | Fair         | Fair         | Good                       |
|                              | Alternative Route (km)                   | No           | No                        | No           | No           | No           | No                         |



### BRIDGE SITE SURVEY DATA- 2

Zone No: 6  
District : Chandpur

| Name of Thana         |   | Kachua               |  |                      |                      |                      |                      |                      |    |
|-----------------------|---|----------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----|
| Serial Number         |   | 25                   | 26   | 30                   | 32                   | 33                   | 34                   | 35                   |    |
| Influence Area        | Population (thousand)                             | 12                   | 30   | 25                   | 20                   | 15                   | 20                   | 25                   |    |
|                       | Main Industry                                     | Agriculture, Fishery | Agriculture, Fishery   | Agriculture, Fishery | Agriculture, Fishery | Agriculture, Fishery | Agriculture, Fishery | Agriculture, Fishery |    |
|                       | Major Agricultural Product                        | Rice, Jute, Veg.     | Rice, Jute, Veg.   | Rice, Jute, Veg.     | Rice, Jute, Veg.     | Rice, Veg.           | Rice, Jute, Veg.     | Rice, Jute, Veg.     |    |
|                       | Number of Public Facilities                       | School               | 7  | 7                    | 7                    | 7                    | 4                    | 7                    | 10 |
|                       |   | Clinic               | 1  | 2                    | 1                    | 2                    | 1                    | 1                    | 1  |
|                       |   | Bazar                | 8  | 12                   | 12                   | 8                    | 3                    | 4                    | 3  |
|                       |   | Mosque               | 12   | 15                   | 15                   | 15                   | 14                   | 18                   | 11 |
|                       |   | Gov't Office         | 2  | 2                    | 1                    | 2                    | 2                    | 2                    | 0  |
| Others                |   | 6                    | 10   | 5                    | 8                    | 5                    | 6                    | 5                    |    |
| Total                 |   | 36                   | 48   | 41                   | 42                   | 29                   | 38                   | 30                   |    |
| Traffic Volume        | Passenger Car                                     | 10                   | 5  | 10                   | 10                   | 5                    | 10                   | 10                   |    |
|                       | Pickup/Truck                                      | 5/20                 | 15/20  | 15/20                | 8/15                 | 5/10                 | 10/20                | 10/15                |    |
|                       | Bus   | 25                   | 5  | 25                   | 20                   | 15                   | 30                   | 25                   |    |
|                       | Motorcycle  | 80                   | 70   | 70                   | 70                   | 70                   | 60                   | 75                   |    |
|                       | Rickshaw  | 280                  | 200  | 250                  | 250                  | 200                  | 300                  | 300                  |    |
|                       | Autorickshaw                                      | 55                   | 65   | 80                   | 90                   | 50                   | 45                   | 45                   |    |
|                       | Bullock Cart                                      | 0                    | 0  | 0                    | 0                    | 0                    | 0                    | 0                    |    |
|                       | Pedestrian  | 3000                 | 3500   | 4500                 | 2500                 | 1500                 | 5500                 | 5000                 |    |
| Bridge Site Condition | Landuse   | Farm                 | Farm   | Farm                 | Farm                 | Farm                 | Farm                 | Farm                 |    |
|                       | Topography  | Flat                 | Flat   | Flat                 | Flat                 | Flat                 | Flat                 | Flat                 |    |
|                       | Necessity of Realignment of Approach Road         | No                   | No   | No                   | No                   | Yes                  | No                   | No                   |    |
| Environmental Issue   | Necessary Land to be Additionally Acquired (sq.m) | No                   | No   | No                   | No                   | No                   | No                   | No                   |    |
|                       | Number of Houses to be Relocated                  | No                   | No   | No                   | No                   | No                   | No                   | No                   |    |
|                       | Other Obstruction to be Relocated                 | No                   | No   | No                   | No                   | No                   | 10 nos shops         | 8 nos Trees          |    |
| Proposed Bridge       | Bridge Length (m)                                 | 15                   | 25   | 20                   | 15                   | 15                   | 25                   | 25                   |    |
|                       | Span Arrangement                                  | 1x15m                | 1x25m  | 1x20m                | 1x15m                | 1x15m                | 1x25m                | 1x25m                |    |
|                       | Abutment Height (m)                               | 4.20                 | 4.50   | 4.50                 | 3.80                 | 3.50                 | 4.50                 | 4.50                 |    |
|                       | Pier Height (m)                                   | -                    | -  | -                    | -                    | -                    | -                    | -                    |    |
| Remarks               |   |                      | The previous road ID NO was wrong but the name of the road, location of the bridge are the same as previous one. |                      |                      |                      |                      |                      |    |

Zone No: 6  
District : Chandpur

**BRIDGE SITE SURVEY DATA- 1**

| Name of Upazila              |  | Kachua       |                            |              | Faridganj    |                           | Shahrashti                |
|------------------------------|--|--------------|----------------------------|--------------|--------------|---------------------------|---------------------------|
| Serial Number                |  | 37           | 38                         | 39           | 40           | 41                        | 44                        |
| Bridge Code                  |  | 21-04-N4     | 21-04-N5                   | 21-04-N6     | 21-05-01     | 21-05-02                  | 21-06-03                  |
| Road ID                      |  | 413583023    | 413585173                  | 413585080    | 413453009    | 413453014                 | 413953017                 |
| Road Class                   |  | R1           | R3                         | R3           | R1           | R1                        | R1                        |
| Chainage (km)                |  | 4+470        | 0+100                      | 0+487        | 5+200        | 0+000                     | 3+900                     |
| Condition of Existing Bridge | Existing or not                          | Not Existing | Not Existing               | Not Existing | Not Existing | Not Existing              | Existing                  |
|                              | Bridge Length (m)                        |              |                            |              |              |                           | 15.00                     |
|                              | Bridge Width (m)                         |              |                            |              |              |                           | 3.55                      |
|                              | Carriageway Width (m)                    |              |                            |              |              |                           | 3.05                      |
|                              | Superstructure Type                      |              |                            |              |              |                           | RC                        |
|                              | Abutment Type                            |              |                            |              |              |                           | Masonry                   |
|                              | Pier Type                                |              |                            |              |              |                           | Masonry                   |
|                              | Usage of Bridge                          |              |                            |              |              |                           | All Vehicles              |
|                              | Condition                                |              |                            |              |              |                           | Collapsed                 |
|                              | Present Navigation Clearance Height (m)  |              |                            |              |              |                           | 1.60                      |
| River Condition              | Bank to Bank Width (m)                   | 18.00        | 25.00                      | 15.00        | 133.00       | 100.00                    | 18.00                     |
|                              | Highest Flood Water Width (m)            | 20.00        | 40.00                      | 20.00        | 133.00       | 110.00                    | 22.00                     |
|                              | Highest Flood Water Depth (m)            | 5.00         | 4.00                       | 4.30         | 6.50         | 7.50                      | 3.50                      |
|                              | Normal Flood Water Width (m)             | 18.00        | 25.00                      | 14.00        | 100.00       | 100.00                    | 18.00                     |
|                              | Normal Flood Water depth (m)             | 3.50         | 3.50                       | 3.50         | 5.50         | 6.50                      | 2.20                      |
|                              | Dry Season Water Width (m)               | 10.00        | 12.00                      | 10.00        | 80.00        | 80.00                     | 10.00                     |
|                              | Dry Season Water Depth (m)               | 0.60         | 0.20                       | 0.40         | 1.00         | 6.00                      | 0.60                      |
|                              | Tidal Fluctuation (m)                    | 0.00         | 0.40                       | 0.00         | 0.00         | 0.00                      | 0.00                      |
|                              | Water Velocity                           | Slow         | Medium                     | Slow         | Slow         | Slow                      | Slow                      |
|                              | Angle of Bridge to Stream (deg)          | 90           | 90                         | 90           | 90           | 90                        | 90                        |
|                              | Ferry Services                           | No           | No                         | No           | No           | No                        | No                        |
|                              | Required Navigation Clearance Height (m) | 1.20         | 1.20                       | 0.60         | 1.20         | 1.80                      | 1.60                      |
|                              | Type of River Traffic                    | Country Boat | Engine, Boat, Country Boat | Country Boat | Country Boat | Engine Boat, Country Boat | Engine Boat, Country Boat |
|                              | Condition of Bank                        | Sound        | Sound                      | Sound        | Sound        | Sound                     | Sound                     |
| Condition of Riverbed        | Sound                                    | Sound        | Sound                      | Sound        | Sound        | Sound                     |                           |
| Approach Road                | Total Road Width (m)                     | 4.00         | 3.60                       | 4.00         | 3.60         | 4.88                      | 4.88                      |
|                              | Carriageway Width (m)                    | 2.67         | 2.67                       | 3.05         | 2.75         | 3.05                      | 3.67                      |
|                              | Embankment Height (m)                    | 2.50         | 2.50                       | 2.10         | 1.50         | 1.80                      | 2.00                      |
|                              | Surface Type                             | Earthen      | Earthen                    | Earthen      | BC/Earthen   | BC/Earthen                | BC/Earthen                |
|                              | Surface Condition                        | Bad          | Fair                       | Fair         | Good         | Good                      | Good                      |
|                              | Alternative Route (km)                   | No           | No                         | No           | No           | No                        | No                        |