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| **BRIDGE SCOUR ASSESSMENT** | | | |
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| **STRUCTURE NO:** | ­­     ­­ | **INSPECTION DATE:** |  |

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| **SOIL TYPE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **CHANNEL – BANK:** | | | | | | |  | | | | SAND & GRAVEL | | | | | | | | | | | | | | | | | |  | | | |  | | | | | | | SANDY SILT | | | | | | | | | | | | | | | |  |  | | | SILT | | | | | | | | |  |  | | | | | SILTY CLAY | | | | | | | | | | | | |  | | |  | | | | | | | | CLAY | | | | | | |  |  | | | SHALE | | | | | | | | |  |  | | | | | | ROCK | | |
| **CHANNEL – BED:** | | | | | | |  | | | | SAND & GRAVEL | | | | | | | | | | | | | | | | | |  | | | |  | | | | | | | SANDY SILT | | | | | | | | | | | | | | | |  |  | | | SILT | | | | | | | | |  |  | | | | | SILTY CLAY | | | | | | | | | | | | |  | | |  | | | | | | | | CLAY | | | | | | |  |  | | | SHALE | | | | | | | | |  |  | | | | | | ROCK | | |
| **ABUTMENT FOUNDATION** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **TYPE:** | | | | | | |  | | | | CONCRETE PILE | | | | | | | | | | | | | | | |  | | | | STEEL PILE | | | | | | | | | | | | | | | |  | | | | | TIMBER PILE | | | | | | | | | | | | | | |  | | | | | | SPREAD FOOTING | | | | | | | | | | | | | | | | | | |  | | | | | | DRILLED SHAFT | | | | | | | | | | | | |  | | | UNKNOWN | | | | | | | | | | | | | | |
| **DEPTH:** | | | | | | |  | | | | KNOWN | | | | | | | | | | | | | | | |  | | | | UNKNOWN | | | | | | | | | | | | | | | |  | | | | | **ADEQUACY:** | | | | | | | | | | | | | | |  | | | | | | STABLE | | | | | | | | | | | | | | | | | | |  | | | | | | AT RISK | | | | | | | | | | | | |  | | | UNSTABLE | | | | | | | | | | | | | | |
| **ABUTMENT BACKWALL** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **BACKWALL TYPE:** | | | | | | | | | | | | | | |  | | | STEEL SHEET | | | | | | | | | | | | | | | | | | | | | | | |  | | CONCRETE SHEET | | | | | | | | | | | | | | | | | | | | |  | |  | | | | | | CONCRETE WALL | | | | | | | | | | | | | | | | | | | |  | | | | |  | | | TIMBERPLANK | | | | | | | | | | | | | |  | |  | | | | | STUB | | | | | | |
| **BACKWALL ADEQUACY:** | | | | | | | | | | | | | | |  | | | STABLE | | | | | | | | | | | | | | | | | | | | | | | |  | | AT RISK | | | | | | | | | | | | | | | | | | | | |  | |  | | | | | | FAILURE IMMINENT | | | | | | | | | | | | | | | | | | | |  | | | | |  | | | FAILED | | | | | | | | | | | | | |  | |  | | | | |  | | | | | | |
| **BACKWALL STRUCTURAL DETERIORATION:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | YES | | | | | | | |  | | NO | | | | | | | | | | | **DECK TO BOTTOM OF BACKWALL:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ABUT 1 | | | | | | | ft. | | | | | | | | ABUT 2 | | | | | | | | | | | ft. | | | | | |
| **APPROACH SLAB?** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | YES | | | | | | | |  | | NO | | | | | | | | | | | **ABUTMENT SCOUR ESTIMATE/PROBED:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ABUT 1 | | | | | | | ft. | | | | | | | | ABUT 2 | | | | | | | | | | | ft. | | | | | |
| **APPROACH FILL:** | | | | | | |  | | | | SOLID | | | | | |  | | | | | SMALL VOIDS | | | | | | | | | | | | | | | | | | | |  | | LARGE VOIDS | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | FAILED | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **BERM ADEQUACY:** | | | | | | |  | | | | STABLE | | | | | |  | | | | | AT RISK | | | | | | | | | | | | | | | | | | | |  | | INEFFECTIVE | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | NONEXISTENT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **PIER/BENT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **TYPE:** | | | | | | | | | | |  | |  | | OPEN | | | | | | | | | | | | | | | |  | | | | | | ENCASED | | | | | | | | | | | | | | | | | | | |  | | | | | DRILLED SHAFT | | | | | | | | | | | | | | |  | | | NONE | | | | | | | | | | | | | | | | | | | |
| **FOUNDATION TYPE:** | | | | | | | | | | |  | |  | | STEEL PILE | | | | | | | | | | | | | | | |  | | | | | | CONCRETE PILE | | | | | | | | | | | | | | | | | | | |  | | | | | TIMBER PILE | | | | | | | | | | | | | | |  | | | SPREAD FOOTING | | | | | | | | | | | | | | | | | | | |
| **FOUNDATION DEPTH:** | | | | | | | | | | |  | |  | | KNOWN | | | | | | | | | | | | | | | |  | | | | | | UNKNOWN | | | | | | | | | | | | | | | | | | | |  | | | | |  | | | | | | | | | | | | | | |  | | |  | | | | | | | | | | | | | | | | | | | |
| **STABILITY:** | | | | | | | | | | |  | |  | | STABLE | | | | | | | | | | | | | | | |  | | | | | | AT RISK | | | | | | | | | | | | | | | | | | | |  | | | | | UNSTABLE | | | | | | | | | | | | | | |  | | |  | | | | | | | | | | | | | | | | | | | |
| **DECK TO BOTTOM OF ENCASEMENT / FOOTING:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ft. | | | | | | | | | | | **SCOUR ESTIMATED / PROBED:***(U.S. SIDE)* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ft. | | | | | | | | | | | | | | | |
| **CALCULATED SCOUR:** | | | | | | | | | CONTRACTION | | | | | | | | | | | | | | ft. | | | | | | | | | | | | | | | | LOCAL | | | | | | | | | | | | | | ft. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **CHANNEL EVOLUTION AND BEHAVIOR** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **STAGE:** | | | | | |  | | | | PREMODIFIED | | | | | | | | | | | | | | |  | | | CONSTRUCTED | | | | | | | | | | | | | | | | | | | |  | | | DEGRADATION | | | | | | | | | | | | | | |  | | | | | THRESHOLD | | | | | | | | | | | | | | | | | |  | | | | | AGGRADATION | | | | | | | | | | | | | | |  | | | | RESTABILIZATION | | | | | | | | | | | | | | | |
| **CHARACTERISTICS:** | | | | | |  | | | | HEAD-CUTTING | | | | | | | | | | | | | | |  | | | STEEP BANKS | | | | | | | | | | | | | | | | | | | |  | | | BANK SEEPAGE | | | | | | | | | | | | | | |  | | | | | ALTERNATE BARS | | | | | | | | | | | | | | | | | |  | | | | | MEANDERING | | | | | | | | | | | | | | |  | | | | VEGETATED BANKS | | | | | | | | | | | | | | | |
| **BANK FAILURE:** | | | | | |  | | | | ROTATION | | | | | | | | | |  | | | | | POPOUT | | | | | | | | | | |  | | | | | SLAB MOVEMENT | | | | | | | | | | | | | | | | | |  | | | | SLOUGHING | | | | | | | | | | |  | | | | EROSION | | | | | | | |  | | | | OTHER: | | | | | | | | | | | |  | | | | | | | | | | | | | | | |  | | | | | | | NONE | | | |
| **BANK BUFFER ZONE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LEFT BANK:** | | | ft. | | | | | | | | | (width) | | | | | | | | |  | | | | | TREE LINED | | | | | | | | | | | | | | | | |  | | | | | | | GRASSED | | | | | | | | | | | | | |  | | | | CULTIVATED | | | | | | | | | | | | | | | | | | | | |  | | | | | | OTHER: | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
| **RIGHT BANK:** | | | ft. | | | | | | | | | (width) | | | | | | | | |  | | | | | TREE LINED | | | | | | | | | | | | | | | | |  | | | | | | | GRASSED | | | | | | | | | | | | | |  | | | | CULTIVATED | | | | | | | | | | | | | | | | | | | | |  | | | | | | OTHER: | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
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| **300 SERIES SCOUR ITEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | YES | | | | | | | | NO | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | YES | | | | | | | NO |
| **326** | ROADWAY EMBANKMENT EROSION (9-0) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | |  | | | **352** | | | | | | | FLOOD OVERTOPS ROAD/BRIDGE RELIEF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **344** | ABUTMENT WALLS UNDERMINED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **353** | | | | | | | POTENTIAL DEBRIS UPSTREAM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **344A** | APPROACHES SETTLED/WASHED OUT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **354** | | | | | | | BENTS/PIERS IN CHANNEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **346** | STREAM BED DEGRADED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **354A** | | | | | | | STREAM FLOW ABAINST ABUTMENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ­­ | | | | | | |  |
| **347** | CONTRACTED STREAM/ABUTS INSIDE HB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **355** | | | | | | | BRIDGE ALIGNMENT WITH FLOW (9-0) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |
| **348** | SCOUR AT:  A (ABUT), B (BENT/PIER), C (A & B), N (NO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | |  | | | **356** | | | | | | | DEBRIS BLOCKING CHANNEL AT BRIDGE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **357** | | | | | | | DROP FROM UPSTREAM DECK TO GROUND: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **349** | BANK EROSION IN PROGRESS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | ABUT 1 - | | | | | | | | | | |  | | | | | | | | FLOWLINE - | | | | | | | | | | | | | | | |  | | | | | ABUT 2 - | | | | | | | | | | | | |  | | | | | | | |
| **350** | STREAM SHIFTED FROM BRIDGE CENTER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **358** | | | | | | | OPINION SCOUR PROBLEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **351** | FLOODWATER REACHES LOW STRUCTURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **358B** | | | | | | | SCOUR INCREASED IN LAST TWO YEARS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |  |
| **351A** | LOW ROAD ELEV. ABOVE LOW STRUCTURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | |  | | | **358C** | | | | | | | SCOUR PLAN OF ACTION EFFECTIVE DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |
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| **NBIS Item – 113 Rating** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | **9:** FOUNDATION SAFELY ABOVE FLOODWATER **8:** STABLE, FOUNDATIONS RESISTS SCOUR **7:** SCOUR PROBLEM MITIGATED  **5:** LOW RISK **4:** ACTION REQUIRED **3:** UNSTABLE FOUNDATION **2:** UNSTABLE – EXTENSIVE SCOUR **1:** FAILURE IMMINENT, CLOSED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **JUSTIFICATION:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ACTION** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **POA REQUIRED:** | | | | |  | | | YES | | | | | |  | | NO | | |  | | | | | **ADDITIONAL STUDY REQUIRED:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | YES | | | | | | | |  | | | | NO | | | | |  | | | | **MAINTANANCE REQUIRED:** | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | YES | | | | | | | |  | | | NO | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WRITTEN BY: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | QC BY: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | QA BY: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE: | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |