

ATTACHMENT A

DESIGN AND CONSTRUCTION REQUIREMENTS: STRUCTURES

- 1 Design and Construction Requirements of Structure: SUM-8-0023S [Ramp S (SB8 to EB76), Structure File Number 7700040]
- 2 Design and Construction Requirements of Structure: SUM-8-0038 [Under Johnston St CR702, Structure File Number 7700067]
- 3 Design and Construction Requirements of Structure: SUM-8-0064 [Over Beacon Street, Structure File Number 7700091]
- 4 Design and Construction Requirements of Structure: SUM-8-0086 [Over E Exchange St (CR627), Structure File Number 7700156]
- 5 Design and Construction Requirements of Structure: SUM-8-0117 [Under Carrol St (CR651), Structure File Number 7700180]
- 6 Design and Construction Requirements of Structure: SUM-8-0125 [Under Buchtel St (CR645), Structure File Number 7700210]
- 7 Design and Construction Requirements of Structure: SUM-8-0160 [Under Forge St, Structure File Number 7700245]
- 8 Design and Construction Requirements of Structure: SUM-59-0341 [Over SUM-8-1.76, Structure File Number 7700334]
- 9 Design and Construction Requirements of Structure: SUM-76-0824L [Over Morse St, Structure File Number 7705859]
- 10 Design and Construction Requirements of Structure: SUM-76-0824UR [Ramp U (EB76) Over Morse St, Structure File Number 7705883]
- 11 Design and Construction Requirements of Structure: SUM-76-0831L [76 WB over 77, Structure File Number 7703570]
- 12 Design and Construction Requirements of Structure: SUM-76-0876 [Under East Ave CR668, Structure File Number 7703546]
- 13 Design and Construction Requirements of Structure: SUM-76-0894 [Under Ped Bridge, Structure File Number 7703511]
- 14 Design and Construction Requirements of Structure: SUM-76-0914 [Over Manchester Rd SR93, Structure File Number 7703481]
- 15 Design and Construction Requirements of Structure: SUM-76-0954 [Over Bowery St & Ohio Canal, Structure File Number 7703457]
- 16 Design and Construction Requirements of Structure: SUM-76-0964 [Over Lakeshore Blvd CR600, Structure File Number 7703392]
- 17 Design and Construction Requirements of Structure: SUM-76-0994 [Under Princeton St, Structure File Number 7703368]
- 18 Design and Construction Requirements of Structure: SUM-76-1035N [Under Main St CR50, Structure File Number 7703317]
- 19 Design and Construction Requirements of Structure: SUM-76-1042N [Over Broadway, Sweitzer & CSXT, Structure File Number 7703252]
- 20 Design and Construction Requirements of Structure: SUM-76-1043 [On Ramp Over CSXT & Sweitzer Ave to 76 EB, Structure File Number 7703163]
- 21 Design and Construction Requirements of Structure: SUM-76-1044 [76 WB Off Ramp over CSXT & Sweitzer Ave to Main St, Structure File Number 7703287]
- 22 Design and Construction Requirements of Structure: SUM-76-1048N [76 WB off Ramp over W5, Sweitzer & CSXT to S Broadway St, Structure File Number 7703597]
- 23 Design and Construction Requirements of Structure: SUM-76-1077N [Under Wolf Ledges CR648, Structure File Number 7703139]

- 24 Design and Construction Requirements of Structure: SUM-76-1085 [Under Grant St, Structure File Number 7703104]
- 25 Design and Construction Requirements of Structure: SUM-76-1102 [Under Ped Bridge, Structure File Number 7705891]
- 26 Design and Construction Requirements of Structure: SUM-76-1151L [76WB Over 77NB & 8, Structure File Number 7706006]
- 27 Design and Construction Requirements of Structure: SUM-76-1154R [76EB Over 77NB & 8, Structure File Number 7706030]
- 28 Design and Construction Requirements of Structure: SUM-76-1179R [Over Inman St, Structure File Number 7706189]
- 29 Design and Construction Requirements of Structure: SUM-76-1200 [Under Ped Bridge, Structure File Number 7706219]
- 30 Design and Construction Requirements of Structure: SUM-77-0974R [Over Waterloo Rd CR672, Structure File Number 7702736]
- 31 Design and Construction Requirements of Structure: SUM-77-0975L [Over Waterloo Rd CR672, Structure File Number 7702701]
- 32 Design and Construction Requirements of Structure: SUM-77-1022 [Under Catawba Ave, Structure File Number 7702760]
- 33 Design and Construction Requirements of Structure: SUM-77-1082 [Over Firestone Blvd, Structure File Number 7702795]
- 34 Design and Construction Requirements of Structure: SUM-77-1096 [Over Archwood Ave, Structure File Number 7702884]
- 35 Design and Construction Requirements of Structure: SUM-77-1132 [Under Cole Ave, Structure File Number 7702825]
- 36 Design and Construction Requirements of Structure: SUM-77-1152 [Under Lovers Lane, Structure File Number 7702914]
- 37 Design and Construction Requirements of Structure: SUM-77-1201 [77NB Over SUM-8-0.21, Structure File Number 7702973]
- 38 Design and Construction Requirements of Structure: SUM-77-1543 [Over Hawkins Ave CR625, Structure File Number 7703600]
- 39 Design and Construction Requirements of Structure: SUM-77-1570 [Over SUM-261-6.25, Structure File Number 7703635]
- 40 Design and Construction Requirements of Structure: SUM-764-0214 [Over SUM-77-10.50, Structure File Number 7711220]

1 Design and Construction Requirements of Structure: SUM-8-0023S [Ramp S (SB8 to EB76), Structure File Number 7700040]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	153'-4 5/8" ±
Width o/o:	40'-0"±
Design Loading:	CF2000
Type:	Two Span Continuous Rolled Beam with Reinforced Concrete Deck & Substructure
Spans:	72'-1 5/16"± --- 72'-1 5/16"± (measured along chord)
Date Built:	1960± / Rehabilitated 2002±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approach Slabs: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Fascia Beams (exterior and bottom flanges only) of the existing Structural Steel as per CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 6. Repair the parapet at the rear left of the Structure. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Repair the erosion at the rear left of the Structure. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

2 Design and Construction Requirements of Structure: SUM-8-0038 [Under Johnston St CR702, Structure File Number 7700067]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	308.64' ±
Width o/o:	46'-0"±
Design Loading:	HS20
Type:	Four Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	67'-5 3/4"± --- 74'-9 5/8"± --- 77'-5 7/8"± --- 80'-10 9/16"±
Date Built:	1955± / Rehabilitated 1990±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Repair Paint the existing metal curb plates and sidewalk joint armor as per CMS 514.22.
 5. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
 6. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

3 Design and Construction Requirements of Structure: SUM-8-0064 [Over Beacon Street, Structure File Number 7700091]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	133.06' ±
Width o/o:	129'-0"±
Design Loading:	HS-20-44 (Case I) and the Alternate Military Loading
Type:	Two Span Continuous Steel Beam with Composite Reinforced Concrete Deck & Substructure
Spans:	63'-6"± --- 63'-6"±
Date Built:	1962± / Rehabilitated 1982±, 2002±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Perform a Concrete Overlay to the Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the current elevation of existing Concrete Overlay the per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The overlay will be variable thickness to adjust the crown location on the bridge to align with the approach roadway.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Repair the erosion at the forward right of the Structure. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.

- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

4 Design and Construction Requirements of Structure: SUM-8-0086 [Over E Exchange St (CR627), Structure File Number 7700156]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	91.50' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Single Span Non Composite Steel Girder with Reinforced Concrete Deck & Substructure
Spans:	86'-6"±
Date Built:	1962± / Rehabilitated 1982±, 1992±, 2002

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Perform a Concrete Overlay to the Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the current elevation of existing Concrete Overlay the per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The overlay will be variable thickness to adjust the crown location on the bridge to align with the approach roadway.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]

- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

5 Design and Construction Requirements of Structure: SUM-8-0117 [Under Carrol St (CR651), Structure File Number 7700180]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	119.66' ±
Width o/o:	62'-6 1/2" ±
Design Loading:	HS20
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	57'-4" ± --- 57'-4" ±
Date Built:	1962 ± / Rehabilitated 2002 ±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 3. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer

within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

6 Design and Construction Requirements of Structure: SUM-8-0125 [Under Buchtel St (CR645), Structure File Number 7700210]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	119.68' ±
Width o/o:	62'-6 1/2" ±
Design Loading:	HS20
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	57'-4" ± --- 57'-4" ±
Date Built:	1962 ± / Rehabilitated 1986 ±, 2002 ±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. The Engineer will designate portions of the approach sidewalk to be removed and replaced based upon condition. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]

- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

7 Design and Construction Requirements of Structure: SUM-8-0160 [Under Forge St, Structure File Number 7700245]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	216.97' ±
Width o/o:	68'-0"±
Design Loading:	HS25
Type:	Two Span Continuous Steel Beam with Composite Reinforced Concrete Deck & Substructure
Spans:	102'-1"± --- 112'-7"±
Date Built:	2002±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approach Slabs: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 3. Remove and replace the existing asphalt from the Pressure Relief Joints at each end of the Structure.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]

- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

8 Design and Construction Requirements of Structure: SUM-59-0341 [Over SUM-8-1.76, Structure File Number 7700334]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	120.52' ±
Width o/o:	66'-6"±
Design Loading:	HS20
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	57'-8 7/8"± --- 57'-8 7/8"±
Date Built:	1962± / Rehabilitated 1986±, 2002±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. The Engineer will designate portions of the approach sidewalk to be removed and replaced based upon condition. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer

within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

9 Design and Construction Requirements of Structure: SUM-76-0824L [Over Morse St, Structure File Number 7705859]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	151.62' ±
Width o/o:	Varies
Design Loading:	CF2000(57)
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	45'-0" ± --- 57'-0" ± --- 45'-0" ±
Date Built:	1964± / Rehabilitated 1986

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Rear Bridge Approaches (Southern Ends)
 1. Remove the existing asphalt from the top of the Approach Slabs
 2. Mill and remove asphalt to a depth of at least 1½" beyond the ends of the Approach Slabs for a distance of 25'
 3. Place ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M and ITEM 407 - NON-TRACKING TACK COAT on the Approach Slabs the area milled
- B. Concrete Sealing
 1. Bridge Deck: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- C. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 4. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1)

5. Remove existing Cathodic Protection System, this includes disconnecting the power service, removal of cabinet, conduit, wiring, etc.
- D. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
 - F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

10 Design and Construction Requirements of Structure: SUM-76-0824UR [Ramp U (EB76) Over Morse St, Structure File Number 7705883]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	118.59' ±
Width o/o:	44'-4"±
Design Loading:	CF2000(57)
Type:	Three Span Continuous Concrete Slab
Spans:	45'-0" ± --- 57'-0"± --- 45'-0"±
Date Built:	1964± / Rehabilitated 1986

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove Asphalt from Bridge Deck and Approach Slabs
 3. Repair the bottom of the deck at the locations determined by the Project Engineer per the Bridge Design Manual Section 403.2.2 with Composite Fiber Wrap System over safety sensitive areas. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. Work to be performed after the existing asphalt has been removed from the deck.
 5. Remove existing Cathodic Protection System, this includes disconnecting the power service, removal of cabinet, conduit, wiring, etc.
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove the existing guardrail (on both the left and right of the ramp) at the trailing end of the structure and replace with Single Slope Barrier, Type D at the same offset as the existing guardrail (including appropriate transitions and end anchorages)
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

11 Design and Construction Requirements of Structure: SUM-76-0831L [76 WB over 77, Structure File Number 7703570]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	197.16' ±
Width o/o:	78'-4"±
Design Loading:	CF2000(57)
Type:	Four Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	35'-0" ± --- 51'-0"± --- 62'-6"± --- 44'-0"±
Date Built:	1964± / Rehabilitated 1986

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Fascia Beams (exterior and bottom flanges only) of the existing Structural Steel as per CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1)
 6. Replace missing or damaged Parapet Expansion Plates.
 7. Replace Forward Right Scupper
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Repair the erosion at the forward right of the Structure. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

12 Design and Construction Requirements of Structure: SUM-76-0876 [Under East Ave CR668, Structure File Number 7703546]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	295.03' ±
Width o/o:	78'-4"±
Design Loading:	HS20
Type:	Four Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	55'-0" ± --- 78'-0"± --- 92'-4"± --- 64'-0"±
Date Built:	1964± / Rehabilitated 1989

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Repair Paint the existing metal curb plates and sidewalk joint armor as per CMS 514.22.
 5. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 6. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1)
 7. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)

8. Install Scuppers in the three (3) drilled holes in the deck on the left side near the forward abutment.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

13 Design and Construction Requirements of Structure: SUM-76-0894 [Under Ped Bridge, Structure File Number 7703511]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	262.12' ±
Width o/o:	10'-4"±
Design Loading:	85 PSF
Type:	Four Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	55'-0" ± --- 78'-0"± --- 92'-4"± --- 64'-0"±
Date Built:	1964± / Rehabilitated 1989

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
 6. Remove and replace the Compression Seals at the Forward and Rear Approach
 7. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Curved Fence) with the top of the fence being a minimum of 12'-0" high above bridge deck. The color of the Fence Fabric, Rails, Posts,

Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)

- C. Substructure
 - 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

14 Design and Construction Requirements of Structure: SUM-76-0914 [Over Manchester Rd SR93, Structure File Number 7703481]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	160.10'±
Width o/o:	142'-0"±
Design Loading:	CF2000(57)
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	45'-6"± --- 64'-6"± --- 45'-6"±
Date Built:	1964±, Rehabilitated 1983±, 2015±

Alignment & Profile:

Alignment:	<input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Relocated	<input type="checkbox"/> By ODOT	<input checked="" type="checkbox"/> By DBT
Profile:	<input type="checkbox"/> Existing	<input checked="" type="checkbox"/> Relocated	<input type="checkbox"/> Feathered (Adjustment) <input type="checkbox"/> By ODOT	<input checked="" type="checkbox"/> By DBT

Transverse Sections:

Roadway Width:	Each Direction → 67'-8 5/8" t/t barrier (8'-2 1/2" Inside Shoulder, 4 x 12'-0" Lanes, 11'-6 1/8" Outside Shoulder)		
Railing:	Type:	SBR-1-20 (Outside)	Height: 42" (Outside)
		SBR-2-20 (Median) (1" Gap)	57" (Median)
Fence:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Height / Configuration: N/A
Sidewalks:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Width: N/A

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

Foundation exploration information, performed by DLZ Ohio, is provided in Attachment P. If additional field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. The Structure Type Study prepared by DLZ (dated 08/30/2019) is provided as Attachment I of the Scope of Services. The Structure Type Study is provided for reference only.
- B. Remove and replace the existing bridge superstructure (bridge deck, beams, bearings, etc.)
- C. Vertical Clearance
 1. The minimum acceptable vertical clearance is 15'-6"
 2. The existing vertical clearance is 14'-9"± (measurements were taken by ODOT D04 and are provided in Attachment J), DBT must verify this prior to starting construction beginning.
 3. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken by the DBT. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]
- D. Perform Structure Load Rating as per the Bridge Design Manual Section 900
- E. Structure Loading Requirement shall follow the Bridge Design Manual Section 303
- F. Superstructure

1. Remove existing Superstructure and provide new Superstructure including Reinforced Composite Concrete Bridge Deck, Beams, etc.
 2. The new Beams will meet the following requirements
 - a. Concrete Box Beams will not be permitted
 - b. Un-Coated Weathering Steel will not be permitted
 - c. If Structural Steel is provided it will be painted according to CMS 514
 - d. If Prestressed Concrete I-Beams are provided seal as per the Bridge Design Manual using Epoxy-Urethane Sealer.
 3. Proposed Railing
 - a. The outside railing will be SBR-1-20, 42" Single Slope Concrete Bridge Railing with one 3" conduit in each run of the railing (structure grounding will be required). This conduit shall not be used for lighting circuits.
 - b. The median railing will be SBR-2-20, 57" Single Slope Concrete Median Bridge Railing with two empty 4" multicell conduit for future ITS in addition to conduits required for Lighting Circuits (structure grounding will be required)
 4. Perform calculations (as per the Bridge Design Manual and the Location and Design Manual) to determine if Scuppers are required and provide if required.
 5. Stay in Place forms will not be permitted
- G. Substructure
1. Analyze the Substructure (Pier Columns and Pier Caps) with the required Loading and if required provide retrofits to meet the Loading Requirements.
 2. Remove Existing Pier Bearings and replace with new Elastomeric Bearings
 3. Inspect the concrete substructure, mark areas to be patched and perform the required patching. **Payment for this item of work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.**
 4. Remove and replace the existing porous backfill and install new porous backfill with filter fabric and drainage pipe behind the abutment. Plug existing weep holes if they exist. The limits of the removal and replacement shall extend the top of the existing footer.
 5. Abutments
 - a. Convert the existing abutments to Semi-Integral Abutments including Elastomeric Bearings.
 - b. Remove the existing backwall and abutment to a point at least 1'-0" below the existing Beam Seat.
 6. Concrete Slope Protection damaged during construction will be replaced at the expense of the DBT.
- H. Provide details for and construct new full width approach slabs (25'-0" long). Provide for parapet transition on the Approach Slab. Provide the appropriate Approach Slab Installation as per Standard Drawing AS-2-15. An asphalt wearing course on the Approach Slab will not be permitted.
- I. Concrete Sealing
1. Superstructure: Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- J. The Asbestos Inspection Report prepared by Lawhon & Associates (dated 11/28/2018) is Attachment M of the Scope of Services. The DBT will include all appropriate notes and address Asbestos Containing Material if present.
- K. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]

15 Design and Construction Requirements of Structure: SUM-76-0954 [Over Bowery St & Ohio Canal, Structure File Number 7703457]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	425.80'±
Width o/o:	Varies
Design Loading:	HS20
Type:	Six Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	43'-0"± --- 61'-0"± --- 3 @ 85'-6"± --- 60'-0"±
Date Built:	1964± / Rehabilitated 1983

Alignment & Profile:

Alignment:	<input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Relocated	<input type="checkbox"/> By ODOT	<input checked="" type="checkbox"/> By DBT
Profile:	<input type="checkbox"/> Existing	<input checked="" type="checkbox"/> Relocated	<input type="checkbox"/> Feathered (Adjustment) By ODOT	<input checked="" type="checkbox"/> By DBT

Transverse Sections:

Roadway Width:	East Bound → 54'-2 ½" t/t barrier (8'-2 ½" Inside Shoulder, 3 x 12'-0" Lanes, 10'-0" Outside Shoulder)		
	West Bound → 8'-2 ½" Inside Shoulder, 3 x 12'-0" Lanes, Variable Gore Area, 2 x 12'-0" Lanes, 10'-0" Outside Shoulder (Proposed Lane Line locations shall match the existing Lane Line Locations)		
Railing:	Type: SBR-1-20 (Outside)	Height:	42" (Outside)
	SBR-2-20 (Median) (1" Gap)		57" (Median)
Fence:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Height / Configuration: N/A
Sidewalks:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Width: N/A

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

Foundation exploration information, performed by DLZ Ohio, is provided in Attachment P. If additional field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. The Structure Type Study prepared by EL Robinson Engineering (dated 08/2019) is provided as Attachment I of the Scope of Services. The Structure Type Study is provided for reference only.
- B. Remove and replace the existing bridge superstructure (bridge deck, beams, bearings, etc.) and Abutments.
- C. Vertical Clearance
 1. The existing vertical clearance over Bowery Street, Ohio Erie Canal and the Ohio Erie Canal Towpath shall not be reduced.
 2. The existing vertical clearance is 15'-1"± over Bowery Street (measurements were taken by ODOT D04 and are provided in Attachment J), DBT must verify this prior to starting construction beginning.

3. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements (Bowery Street, Ohio Erie Canal and the Ohio Erie Canal Towpath) will be taken by the DBT. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]
- D. Perform Structure Load Rating as per the Bridge Design Manual Section 900
- E. Structure Loading Requirement shall follow the Bridge Design Manual Section 303
- F. Superstructure
 1. Remove existing Superstructure and provide new Superstructure including Reinforced Composite Concrete Bridge Deck, Beams, etc.
 2. The new Beams will meet the following requirements
 - a. Concrete Box Beams will not be permitted
 - b. Un-Coated Weathering Steel will not be permitted
 - c. If Structural Steel is provided it will be painted according to CMS 514
 - d. If Prestressed Concrete I-Beams are provided seal as per the Bridge Design Manual using Epoxy-Urethane Sealer.
 3. Proposed Railing
 - a. The outside railing will be SBR-1-20, 42" Single Slope Concrete Bridge Railing with one 3" conduit in each run of the railing (structure grounding will be required). This conduit shall not be used for lighting circuits.
 - b. The median railing will be SBR-2-20, 57" Single Slope Concrete Median Bridge Railing with two empty 4" multicell conduit for future ITS in addition to conduits required for Lighting Circuits (structure grounding will be required)
 4. Perform calculations (as per the Bridge Design Manual and the Location and Design Manual) to determine if Scuppers are required and provide if required.
 5. Stay in Place forms will not be permitted
- G. Substructure
 1. Pier Columns and Caps
 - a. The existing Piers shall not be replaced
 - b. Analyze the Substructure (Pier Columns and Pier Caps) with the required Loading and if required provide retrofits to meet the Loading Requirements.
 - c. Remove Existing Pier Bearings and replace with new Elastomeric Bearings
 2. Inspect the concrete substructure, mark areas to be patched and perform the required patching. **Payment for this item of work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.**
 3. Abutments
 - a. Remove and replace the existing abutments at the same location as the existing abutments
 - b. Foundation for the abutments will be a deep foundation
 - c. The new abutments shall be Semi-Integral
 - d. Remove and replace the existing porous backfill and install new porous backfill with filter fabric and drainage pipe behind the abutment. The new porous backfill shall extend from the top of the footing to the bottom of the aggregate under the approach slab.
 4. Concrete Slope Protection
 - a. The Project Engineer will identify broken Concrete Slope Protection to be replaced prior to construction activities to be replaced. **Payment for this item of work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.**
 - b. Concrete Slope Protection damaged during construction will be replaced at the expense of the DBT.
- H. Provide details for and construct new full width approach slabs (25'-0" long). Provide for parapet transition on the Approach Slab. Provide the appropriate Approach Slab Installation as per Standard Drawing AS-2-15. An asphalt wearing course on the Approach Slab will not be permitted.

- I. Concrete Sealing
 - 1. Superstructure: Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- J. The Asbestos Inspection Report prepared by Lawhon & Associates (dated 11/28/2018) is Attachment M of the Scope of Services. The DBT will include all appropriate notes and address Asbestos Containing Material if present.
- K. The DBT will develop, submit for approval and implement a plan to protect and not impact the adjacent structure (IR-76 EB / IR-77 SB to SR-59 NB, SUM-59-0007R, SFN 7701799)
- L. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- M. The Structure is located within a FEMA Floodplain, therefore the waterway opening shall not be reduced and fill shall not be placed or removed within the Floodplain.

16 Design and Construction Requirements of Structure: SUM-76-0964 [Over Lakeshore Blvd CR600, Structure File Number 7703392]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	172.50'±
Width o/o:	118'-4"±
Design Loading:	CF2000(57)
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	49'-0"± --- 70'-0"± --- 49'-0"±
Date Built:	1964±

Alignment & Profile:

Alignment:	<input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Relocated	<input type="checkbox"/> By ODOT	<input checked="" type="checkbox"/> By DBT
Profile:	<input type="checkbox"/> Existing	<input checked="" type="checkbox"/> Relocated	<input type="checkbox"/> Feathered (Adjustment) <input type="checkbox"/> By ODOT	<input checked="" type="checkbox"/> By DBT

Transverse Sections:

Roadway Width:	Each Direction →55'-8 7/8" t/t barrier (8'-2 1/2" Inside Shoulder, 3 x 12'-0" Lanes, 11'-5 15/16" Outside Shoulder)		
Railing:	Type:	SBR-1-20 (Outside)	Height: 42" (Outside)
		SBR-2-20 (Median) (1" Gap)	57" (Median)
Fence:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Height / Configuration: N/A
Sidewalks:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Width: N/A

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

Foundation exploration information, performed by DLZ Ohio, is provided in Attachment P. If additional field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. The Structure Type Study prepared by EL Robinson Engineering (dated 08/2019) is provided as Attachment I of the Scope of Services. The Structure Type Study is provided for reference only.
- B. Remove and replace the existing bridge superstructure (bridge deck, beams, bearings, etc.) and Abutments.
- C. Vertical Clearance
 1. The minimum acceptable vertical clearance shall be the existing vertical clearance.
 2. The existing vertical clearance is 16'-8" ± (measurements were taken by ODOT D04 and are provided in Attachment J), DBT must verify this prior to starting construction beginning.
 3. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken by the DBT. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]
- D. Perform Structure Load Rating as per the Bridge Design Manual Section 900

- E. Structure Loading Requirement shall follow the Bridge Design Manual Section 303
- F. Superstructure
 - 1. Remove existing Superstructure and provide new Superstructure including Reinforced Composite Concrete Bridge Deck, Beams, etc.
 - 2. The new Beams will meet the following requirements
 - a. Concrete Box Beams will not be permitted
 - b. Un-Coated Weathering Steel will not be permitted
 - c. If Structural Steel is provided it will be painted according to CMS 514
 - d. If Prestressed Concrete I-Beams are provided seal as per the Bridge Design Manual using Epoxy-Urethane Sealer.
 - 3. Proposed Railing
 - a. The outside railing will be SBR-1-20, 42" Single Slope Concrete Bridge Railing with one 3" conduit in each run of the railing (structure grounding will be required). This conduit shall not be used for lighting circuits.
 - b. The median railing will be SBR-2-20, 57" Single Slope Concrete Median Bridge Railing with two empty 4" multicell conduit for future ITS in addition to conduits required for Lighting Circuits (structure grounding will be required)
 - 4. Perform calculations (as per the Bridge Design Manual and the Location and Design Manual) to determine if Scuppers are required and provide if required.
 - 5. Stay in Place forms will not be permitted
- G. Substructure
 - 1. Pier Columns and Caps
 - a. Analyze the Substructure (Pier Columns and Pier Caps) with the required Loading and if required provide retrofits to meet the Loading Requirements.
 - b. Remove Existing Pier Bearings and replace with new Elastomeric Bearings
 - 2. Inspect the concrete substructure, mark areas to be patched and perform the required patching. **Payment for this item of work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.**
 - 3. Abutments
 - a. Remove and replace the existing abutments at the same location as the existing abutments
 - b. Foundation for the abutments will be a deep foundation
 - c. The new abutments shall be Integral
 - d. Remove and replace the existing porous backfill and install new porous backfill with filter fabric and drainage pipe behind the abutment. The new porous backfill shall extend from the top of the footing to the bottom of the aggregate under the approach slab.
 - 4. Concrete Slope Protection
 - a. The Project Engineer will identify broken Concrete Slope Protection to be replaced prior to construction activities to be replaced. **Payment for this item of work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.**
 - b. Concrete Slope Protection damaged during construction will be replaced at the expense of the DBT.
- H. Provide details for and construct new full width approach slabs (25'-0" long). Provide for parapet transition on the Approach Slab. Provide the appropriate Approach Slab Installation as per Standard Drawing AS-2-15. An asphalt wearing course on the Approach Slab will not be permitted.
- I. Concrete Sealing
 - 1. Superstructure: Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- J. The Asbestos Inspection Report prepared by Lawhon & Associates (dated 11/28/2018) is Attachment M of the Scope of Services. The DBT will include all appropriate notes and address Asbestos Containing Material if present.

- K. The DBT will develop, submit for approval and implement a plan to protect and not impact the adjacent structures (IR-76 EB / IR-77 SB to SR-59 NB, SUM-59-0007R, SFN 7701799 & SR-59 SB to IR-76 WB / IR-77 NB, SUM-59-0019L, SFN 7701802)
- L. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]

17 Design and Construction Requirements of Structure: SUM-76-0994 [Under Princeton St, Structure File Number 7703368]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	156.12' ±
Width o/o:	62'-4"±
Design Loading:	HS20
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	75'-6" ± --- 75'-6"±
Date Built:	1964± / Rehabilitated 1989

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Repair Paint the existing sidewalk joint armor as per CMS 514.22.
 5. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 6. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 7. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
 8. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Scope Attachment H.

9. Widen the existing sidewalk (to the inside) on both sides of the Structure by 5'-0" and extend the widened sidewalk to the adjacent street with the same centerline offset (both north and south of the bridge), install new Curb Ramps as per BP-7.1 meeting all ADA Requirements, including any and all items necessary to complete this work.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
 - E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]
 - F. Existing Light Pole mounted on Structure
 1. Replace the Luminaire with an LED Luminaire
 2. Paint the Light Pole using the Repair Painting Procedure according to CMS 514.22. The final color shall be Federal Color No. 27038.

18 Design and Construction Requirements of Structure: SUM-76-1035N [Under Main St CR50, Structure File Number 7703317]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	167.33' ±
Width o/o:	Varies
Design Loading:	HL93
Type:	Single Span Plate Girder with Reinforced Concrete Deck & Substructure
Spans:	165'-2" ±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

19 Design and Construction Requirements of Structure: SUM-76-1042N [Over Broadway, Sweitzer & CSXT, Structure File Number 7703252]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	215.43' ±
Width o/o:	Varies
Design Loading:	HL93
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	64'-0" ± --- 80'-0"± --- 81'-8¼"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]. Do not take measurements over the Railroad Tracks.

20 Design and Construction Requirements of Structure: SUM-76-1043 [On Ramp Over CSXT & Sweitzer Ave to 76 EB, Structure File Number 7703163]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	247.10' ±
Width o/o:	33'-4"±
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	67'-0" ± --- 91'-6"± --- 86'-4 5/16"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note] . Do not take measurements over the Railroad Tracks.

21 Design and Construction Requirements of Structure: SUM-76-1044 [76 WB Off Ramp over CSXT & Sweitzer Ave to Main St, Structure File Number 7703287]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	209.77' ±
Width o/o:	45'-4"±
Design Loading:	HL93
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	62'-3 9/16" ± --- 77'-10 7/16"± --- 67'-5 9/16"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note] . Do not take measurements over the Railroad Tracks.

22 Design and Construction Requirements of Structure: SUM-76-1048N [76 WB off Ramp over W5, Sweitzer & CSXT to S Broadway St, Structure File Number 7703597]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	330.29' ±
Width o/o:	55'-7"±
Design Loading:	HL93
Type:	Three Span Continuous Plate Girder with Reinforced Concrete Deck & Substructure
Spans:	96'-1 7/8" ± --- 101'-10 5/8"± --- 114'-11"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]. Do not take measurements over the Railroad Tracks.

23 Design and Construction Requirements of Structure: SUM-76-1077N [Under Wolf Ledges CR648, Structure File Number 7703139]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	261.04' ±
Width o/o:	51'-0"±
Design Loading:	HL93
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	111'-6" ± --- 147'-1"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

24 Design and Construction Requirements of Structure: SUM-76-1085 [Under Grant St, Structure File Number 7703104]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	187.59' ±
Width o/o:	51'-0"±
Design Loading:	HL93
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	91'-2" ± --- 94'-5"±
Date Built:	2018±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck: Seal with Soluble Reactive Silicate (SRS)
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

25 Design and Construction Requirements of Structure: SUM-76-1102 [Under Ped Bridge, Structure File Number 7705891]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	171'-1 ¼" ±
Width o/o:	9'-6" ±
Design Loading:	85 PSF
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	84'-10 ½" ± --- 84'-10 ½" ±
Date Built:	1964± / Rehabilitated 1983±, 2005±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approaches: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Curved Fence) with the top of the fence being a minimum of 12'-0" high above bridge deck. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

26 Design and Construction Requirements of Structure: SUM-76-1151L [76WB Over 77NB & 8, Structure File Number 7706006]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	354.42' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Four Span Continuous Steel Girder with Reinforced Concrete Deck & Substructure
Spans:	84'-2 3/4" ± --- 104'-4 13/16" ± --- 96'-1 11/16" ± --- 63'-8 1/2" ±
Date Built:	1964± / Rehabilitated 1990

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove Asphalt from Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the original Deck Elevation per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The Micro-Silica Concrete Overlay is to be installed prior to the installation of the Barrier being installed on this Structure as detailed in Attachment K to the Scope of Services. The limits of the removal of the asphalt overlay and the limits of the new MSC overlay in Attachment K are incorrect, this work shall be performed for the entire existing bridge deck and approach slabs.
 3. Perform the work shown in Attachment K to the Scope of Services
 4. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 5. Paint Structure Steel according to CMS 514

6. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 7. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
- C. Substructure
1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

27 Design and Construction Requirements of Structure: SUM-76-1154R [76EB Over 77NB & 8, Structure File Number 7706030]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	466.98' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Five Span Continuous Steel Girder with Reinforced Concrete Deck & Substructure
Spans:	86'-10 13/16" ± --- 102'-9 5/8"± --- 71'-7 13/16"± --- 105'-3 15/16"± --- 91'-0 1/8"±
Date Built:	1964± / Rehabilitated 1990

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove Asphalt from Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the original Deck Elevation per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The Micro-Silica Concrete Overlay is to be installed prior to the installation of the Barrier being installed on this Structure as detailed in Attachment K to the Scope of Services. The limits of the removal of the asphalt overlay and the limits of the new MSC overlay in Attachment K are incorrect, this work shall be performed for the entire existing bridge deck and approach slabs.
 3. Perform the work shown in Attachment K to the Scope of Services
 4. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC

5. Paint Structure Steel according to CMS 514
 6. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 7. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
- C. Substructure
1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

28 Design and Construction Requirements of Structure: SUM-76-1179R [Over Inman St, Structure File Number 7706189]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	62.44' ±
Width o/o:	68'-5"
Design Loading:	HS20
Type:	Single Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	57'-0 1/8" ±
Date Built:	1964± / Rehabilitated 1979±, 1992±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approaches: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

29 Design and Construction Requirements of Structure: SUM-76-1200 [Under Ped Bridge, Structure File Number 7706219]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	206'-1/4" ±
Width o/o:	18'-2 1/2" ±
Design Loading:	CF130
Type:	Simple End Spans, Continuous Mid Spans - Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	75'-0" ± --- 77'-6" ± --- 24'-0" ± --- 24'-0" ±
Date Built:	1964 ± / Rehabilitated 2015 ±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approaches: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Structure Steel according to CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Curved Fence) with the top of the fence being a minimum of 12'-0" high above bridge deck. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
 6. Remove and dispose of the original handrail (located on the outside of the existing Vandal Protection Fence) along each edge of the bridge deck

- C. Substructure
 - 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

30 Design and Construction Requirements of Structure: SUM-77-0974R [Over Waterloo Rd CR672, Structure File Number 7702736]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	206.29' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	59'-3 1/2" ± --- 84'-0 3/8"± --- 58'-3 9/16"±
Date Built:	1964± / Rehabilitated 1990±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove and replace the Forward and Rear Approach Slabs (North & South Side of Structure).
 - a. The new Approach Slabs will be the full width and the same length as the existing. Provide the Parapet Transitions on the Approach Slabs (modifications to the existing Parapet on the Bridge maybe required).
 - b. Provide the appropriate Approach Slab Installation as per Standard Drawing AS-2-15. An asphalt wearing course on the Approach Slab will not be permitted.
 - 3. all a Micro-Silica Concrete Overlay matching the current existing Deck Elevation per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 4. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 - 5. Remove and replace the Expansion Joints at the Forward and Rear Abutments

6. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
7. Remove and replace all end Cross Frames at the Rear Abutment
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

31 Design and Construction Requirements of Structure: SUM-77-0975L [Over Waterloo Rd CR672, Structure File Number 7702701]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	202.30'±
Width o/o:	Varies
Design Loading:	HS20
Type:	Four Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	57'-10 7/8" ± --- 82'-4 15/16"± --- 57'-4 15/16"±
Date Built:	1964± / Rehabilitated 1990±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove and replace the Forward and Rear Approach Slabs (North & South Side of Structure).
 - a. The new Approach Slabs will be the full width and the same length as the existing. Provide the Parapet Transitions on the Approach Slabs (modifications to the existing Parapet on the Bridge maybe required).
 - b. Provide the appropriate Approach Slab Installation as per Standard Drawing AS-2-15. An asphalt wearing course on the Approach Slab will not be permitted.
 3. Install a Micro-Silica Concrete Overlay matching the current existing Deck Elevation per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 4. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 5. Remove and replace the Expansion Joints at the Forward and Rear Abutments

6. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

32 Design and Construction Requirements of Structure: SUM-77-1022 [Under Catawba Ave, Structure File Number 7702760]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	162.86'±
Width o/o:	42'-8"±
Design Loading:	HS20
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	78'-9" ± --- 78'-9"±
Date Built:	1964± / Rehabilitated 1986±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer

within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

33 Design and Construction Requirements of Structure: SUM-77-1082 [Over Firestone Blvd, Structure File Number 7702795]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	156.76' ±
Width o/o:	119'-0" ±
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	44'-6" ± --- 63'-3" ± --- 44'-6" ±
Date Built:	1964± / Rehabilitated 1989±

Alignment & Profile:

- Alignment: Existing Relocated By ODOT By DBT
- Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove existing Concrete Overlay and existing Asphalt Overlay from Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the current elevation of existing Concrete Overlay the per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The overlay will be variable thickness to adjust the crown location on the bridge to align with the approach roadway.
 - 3. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
- C. Substructure
 - 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.

- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

34 Design and Construction Requirements of Structure: SUM-77-1096 [Over Archwood Ave, Structure File Number 7702884]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	157.08' ±
Width o/o:	119'-0" ±
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	44'-6" ± --- 63'-7" ± --- 44'-6" ±
Date Built:	1964± / Rehabilitated 1989±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove existing Concrete Overlay and existing Asphalt Overlay from Bridge Deck and Approach Slabs and replace with a new Micro-Silica Concrete Overlay matching the current elevation of existing Concrete Overlay the per Supplemental Specification 848 [Refer to Attachment F for Plan Note]. Payment for Hand Chipping, Full Depth Repair and Variable Thickness (Material Only) will be made on a unit cost basis and an estimated quantity has been provided in the Proposal. The overlay will be variable thickness to adjust the crown location on the bridge to align with the approach roadway.
 - 3. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
 - 4. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

35 Design and Construction Requirements of Structure: SUM-77-1132 [Under Cole Ave, Structure File Number 7702825]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	158.00' ±
Width o/o:	60'-8"±
Design Loading:	CF400(57)
Type:	Two Span Continuous Rolled Beam with Reinforced Concrete Deck & Substructure
Spans:	73'-6"± --- 73'-6"±
Date Built:	1964±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
 - 3. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 - 4. Remove existing Cathodic Protection System, this includes disconnecting the power service, removal of cabinet, conduit, wiring, etc.
 - 5. The Engineer will designate areas of the curb to be repaired [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

36 Design and Construction Requirements of Structure: SUM-77-1152 [Under Lovers Lane, Structure File Number 7702914]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	158.00' ±
Width o/o:	60'-8"±
Design Loading:	CF400(57)
Type:	Two Span Continuous Rolled Beam with Reinforced Concrete Deck & Substructure
Spans:	73'-6"± --- 73'-6"±
Date Built:	1964±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Non-Epoxy Sealer on the sidewalk and Epoxy-Urethane Sealer on the remainder.
 - 2. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove the existing Vandal Protection Fence and install new Vandal Protection Fence as per Standard Drawing VPF-1-90 (Straight Fence) and Scope Attachment G. The color of the Fence Fabric, Rails, Posts, Plates, Tie Wires, Nuts, Bolts, Caulk, and any other visual hardware will be coated Black (Federal Color No. 27038)
 - 3. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 - 4. Remove existing Cathodic Protection System, this includes disconnecting the power service, removal of cabinet, conduit, wiring, etc.
 - 5. Replace the missing top railing on the southern parapet
 - 6. The Engineer will designate areas of the curb to be repaired [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

37 Design and Construction Requirements of Structure: SUM-77-1201 [77NB Over SUM-8-0.21, Structure File Number 7702973]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	145.97' ±
Width o/o:	60'-8"±
Design Loading:	HS25
Type:	Two Span Continuous Rolled Beam with Reinforced Concrete Deck & Substructure
Spans:	68'-7 9/16"± --- 68'-7 9/16"±
Date Built:	1964± / Rehabilitated 2002±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 1. Bridge Deck and Approach Slabs: Seal with Gravity Fed Resin
 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 2. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 3. Paint Fascia Beams (exterior and bottom flanges only) of the existing Structural Steel as per CMS 514
 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 5. Remove and replace the Expansion Joint Strip Seals at the Forward and Rear Approach
- C. Substructure
 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.

- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

38 Design and Construction Requirements of Structure: SUM-77-1543 [Over Hawkins Ave CR625, Structure File Number 7703600]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	162.63' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	45'-0" ± --- 58'-0"± --- 40'-0"±
Date Built:	1964± / Rehabilitated 1990±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Bridge Deck: Seal with Gravity Fed Resin
 - 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove and replace the Approach Slabs. The new Approach Slabs will be the full width and the same length as the existing. Provide the Parapet Transitions on the Approach Slabs (modifications to the existing Parapet on the Bridge maybe required)
 - 3. Remove all dirt and debris from the Beam Seats, Drainage Systems (if present), and Bridge Joints as per Plan Insert Sheet BC
 - 4. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 5. Remove and replace the Expansion Joint Strip Seals at the Forward Abutment, Rear Abutment, and Hinge Points.
- C. Substructure

1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- D. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- E. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

39 Design and Construction Requirements of Structure: SUM-77-1570 [Over SUM-261-6.25, Structure File Number 7703635]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	148.58' ±
Width o/o:	Varies
Design Loading:	HS20
Type:	Three Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	42'-0" ± --- 60'-0"± --- 42'-0"±
Date Built:	1964± / Rehabilitated 1990±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure:** Yes No

Investigate the need for **Retaining Walls:** Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Concrete Sealing
 - 1. Bridge Deck: Seal with Gravity Fed Resin
 - 2. Superstructure: Remove existing sealer (if present) and Seal as per the Bridge Design Manual using Epoxy-Urethane Sealer
 - 3. Substructure: Remove existing sealer (if present) and Seal all exposed concrete surfaces except for the tops of the Pier Caps using Epoxy-Urethane Sealer
- B. Superstructure
 - 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 2. Remove and replace the Approach Slabs. The new Approach Slabs will be the full width and the same length as the existing. Provide the Parapet Transitions on the Approach Slabs (modifications to the existing Parapet on the Bridge maybe required)
 - 3. Inspect Bridge Deck, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
 - 4. Refurbish all Bearings (per Bridge Design Manual Note 610.4-1) at the Rear and Forward Abutments
 - 5. Replace the missing Cross Frame
- C. Substructure
 - 1. Inspect substructure, mark the areas to be patched and perform required patching. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.

- D. Repair the erosion at the forward and rear right of the Structure. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- E. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- F. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]

40 Design and Construction Requirements of Structure: SUM-764-0214 [Over SUM-77-10.50, Structure File Number 7711220]

in addition to the Governing Regulations listed in section 8.1 of the Scope of Services:

Existing Structure Data:

Length:	128.00' ±
Width o/o:	60'-8" ±
Design Loading:	CF400(57)
Type:	Two Span Continuous Steel Beam with Reinforced Concrete Deck & Substructure
Spans:	61'-6" ± --- 61'-6" ±
Date Built:	1964± / Rehabilitated 1987±

Alignment & Profile:

Alignment: Existing Relocated By ODOT By DBT

Profile: Existing Relocated Feathered (Adjustment)
 By ODOT By DBT

Investigate the need for **Prefabricated Structure**: Yes No

Investigate the need for **Retaining Walls**: Yes No

The Department will NOT provide foundation investigation. If field information is required the DBT will be responsible for collecting the data.

All **Shop Drawings** will comply with Item 501.

Additional Description of Required Work and Special Provisions:

- A. Superstructure
 1. Remove Spalls and Delamination over Safety Sensitive Areas (Pavement, Shoulders, Sidewalks, etc.) from the Floor (bottom of Bridge Deck), do not patch these areas. Apply Epoxy-Urethane Sealer to the areas of the removals [Refer to Attachment F for Plan Note]. Payment for this work will be made on a unit cost basis and an estimated quantity has been provided in the Proposal.
- B. Remove existing Structure Identification Signs (if present) and install new Structure Identification Signs in the approach direction(s) [Refer to Attachment F for Plan Note]
- C. Prior to the start of construction and at the completion of construction Vertical Clearance Measurements will be taken. This information will be supplied to the Project Engineer within 48 hours of the time the measurements are taken. [Refer to Attachment F for Plan Note]