PID# 116430 State Job # 528263

Scope of Services Meeting Date & Time: **10/28/24**

Approved Final Scope of Services Date:

Location ODOT District 2, Bowling Green, OH

CONSULTANT BRIDGE INSPECTION

Scope of Services

1. Bridge Identification

No.	District	Asset Name	SFN	Feature Under Bridge	Municipality
1	1	DEF-00015-1477	2000572	Maumee River	Defiance
2	1	DEF-00015-1515	2000598	Auglaize River	Defiance
3	1	DEF-00066-0444	2001500	Auglaize River	Defiance
4	1	DEF-00111-0119	2001896	Intermittent Waterway	
5	1	DEF-00281-0149	2002469	E. River Rd. and Maumee River	Defiance
6	1	HAN-00037-0729	3201694	Silver Creek	
7	1	PAU-00049-1470	6300391	Maumee River	
8	1	PAU-00066-0828	6300529	Auglaize River	
9	1	PAU-00111-2439	6300901	Six Mile Creek	
10	1	PAU-00613-2138	6301738	Little Auglaize River	
11	1	PAU-00637-1569	6302122	Auglaize River	
12	1	PUT-00634-1027	6901956	Auglaize River	
13	1	WYA-00023-2443	8801096	Spring Run	Carey
14	1	WYA-00103-0653	8802513	Spring Run	Carey
15	1	WYA-00103-1381	8802734	Sandusky River Overflow	
16	2	HEN-00006-1650	3500578	Maumee River	
17	2	HEN-00108-1561	3502384	Maumee River	Napoleon
18	2	HEN-00109-1820	3502392	Maumee River	
19	2	LUC-00024-2656	4801741	Ottawa River	Toledo
20	2	LUC-00065-0535	4805917	Maumee River and CSX Railroad	Toledo
21	2	LUC-00075-0536	4803736	120 in Storm Sewer	Toledo
22	2	LUC-00075-1013	4804686	Ottawa River	Toledo
23	2	LUC-00280-0346	4805909	Maumee River and NS Railroad	Toledo
24	2	LUC-00475-1503U	4808428	120 in Storm Sewer	Toledo
25	2	LUC-00475-1538	4808479	120 in Storm Sewer	Toledo
26	2	OTT-00002-0016	6200044	Crane Creek	

No.	District	Asset Name	SFN	Feature Under Bridge	Municipality

27	2	OTT-00002-0667	6200109	Turtle Creek	
28	2	OTT-00002-1079	6200133	Toussaint River	
29	2	OTT-00002-1312	6200184	Rusha Creek	
30	2	OTT-00002-1654	6200214	Lacarpe Creek	
31	2	OTT-00002-1810	6200303	Portage River Overflow	
32	2	OTT-00002-1830	6200338	Portage River	
33	2	OTT-00002-1853	6200362	Portage River Overflow	
34	2	OTT-00002-2757	6200753	Sandusky Bay Overflow	
35	2	OTT-00002-2839	6200788	Sandusky Bay	
36	2	OTT-00019-0323	6200885	Portage River	
37	2	OTT-00019-0811	6200931	Toussaint River	
38	2	OTT-00019-0833	6200966	Toussaint River	
39	2	OTT-00163-2511	6201628	Portage River	Port Clinton
40	2	OTT-00357-0016	6201776	Put-in-bay	
41	2	SAN-00006-1751	7200579	Sandusky River, NS Railroad, CR 53	
42	2	SAN-00053-1745	7202431	Muddy Creek	
43	2	SEN-00224-1207	7402910	Sandusky River	
44	2	WOO-00475-0386L	8706751	Maumee River, S. River Rd.	Perrysburg
45	2	WOO-00475-0386R	8706786	Maumee River, S. River Rd.	Perrysburg

2. Attendance (See Attached Sheet)

Consultant: TBD

Consultant Contracting Officer:

Consultant Project Manager: TBD

ODOT Project Manager: David Geckle

3. Available Plans and Inspection Reports:

	Yes	No
Original Construction Plans	X	
As-Built Plans		X
Shop Drawings		X
Repair or Rehabilitation Plans	X	
BR86 Inspection Field Reports	X	
BR87 Inventory Appraisal	X	
Physical Condition Reports	X	
Structural Analysis		X
Underwater Inspection Reports	X	

Maintenance Manual		X
FCM Inspection Procedure		X
UW Inspection Procedure	X	
Complex Bridge Inspection Procedure	X	

All existing information can be found on ODOT's FTP site at:

https://ftp.dot.state.oh.us/pub/Districts/D02/Programmatic/September 2024/116430 D01 D02 Underwater Inspection

Other: Contact David Geckle (419) 373-4377 for existing plans

4. Inspection Intent:

Activity	DEF-00015-1477	DEF-00015-1515	DEF-00066-0444	DEF-00111-0119	DEF-00281-0149	HAN-00037-0729	PAU-00049-1470	PAU-00066-0828	PAU-00111-2439
In-depth Element Level Inspection									
In-depth Inspection									
Routine Element Level Inspection									
Routine Inspection									
Update Bridge Inventory									
Scour Critical Evaluation									
Fracture Critical Inspection									
Underwater Inspection	X	X	X	X	X	X	X	X	X
Underwater Dive Inspection Procedure	X	X	X	X	X	X	X	X	X
Immediate Action Recommendations	X	X	X	X	X	X	X	X	X
Maintenance Recommendations & Repairs	X	X	X	X	X	X	X	X	X
Structural Measurements where plans are not available									
Benchmarking/Surveying									

Activity	PAU-00613-2138	PAU-00637-1569	PUT-00634-1027	WYA-00023-2443	WYA-00103-0653	WYA-00103-1381	HEN-00006-1650	HEN-00108-1561	HEN-00109-1820	LUC-00024-2656	LUC-00065-0535	LUC-00075-0536	LUC-00075-1013
In-depth Element Level Inspection													
In-depth Inspection													
Routine Element Level Inspection												X	

Activity	LUC-00280-0346	LUC-00475-1503U	LUC-00475-1538	OTT-00002-0016	OTT-00002-0667	OTT-00002-1079	OTT-00002-1312	OTT-00002-1654	OTT-00002-1810	OTT-00002-1830	OTT-00002-1853	OTT-00002-2757	OTT-00002-2839
Routine Inspection													
Update Bridge Inventory													
Scour Critical Evaluation													
Fracture Critical Inspection													
Underwater Inspection	X	X	X	X	X	X	X	X	X	X	X		X
Underwater Dive Inspection Procedure	X	X	X	X	X	X	X	X	X	X	X		X
Immediate Action Recommendations	X	X	X	X	X	X	X	X	X	X	X	X	X
Maintenance Recommendations & Repairs	X	X	X	X	X	X	X	X	X	X	X	X	X
Structural Measurements where plans are not available													
Benchmarking/Surveying													
In-depth Element Level Inspection													
In-depth Inspection													
Routine Element Level Inspection		X	X										
Routine Inspection													
Update Bridge Inventory													
Scour Critical Evaluation													
Fracture Critical Inspection													
Underwater Inspection	X			X	X	X	X	X	X	X	X	X	X
Underwater Dive Inspection Procedure	X			X	X	X	X	X	X	X	X	X	X
Immediate Action Recommendations	X	X	X	X	X	X	X	X	X	X	X	X	X
Maintenance Recommendations & Repairs	X	X	X	X	X	X	X	X	X	X	X	X	X
Structural Measurements where plans are not available													
Benchmarking/Surveying													

Activity	OTT-00019-0323	OTT-00019-0811	OTT-00019-0833	OTT-00163-2511	OTT-00357-0016	SAN-00006-1751	SAN-00053-1745	SEN-00224-1207	WOO-00475-0386L	WOO-00475-0386R
In-depth Element Level Inspection										
In-depth Inspection										
Routine Element Level Inspection										

Routine Inspection										
Update Bridge Inventory										
Scour Critical Evaluation										
Fracture Critical Inspection										
Underwater Inspection	X	X	X	X	X	X	X	X	X	X
Underwater Dive Inspection Procedure	X	X	X	X	X	X	X	X	X	X
Immediate Action Recommendations	X	X	X	X	X	X	X	X	X	X
Maintenance Recommendations & Repairs	X	X	X	X	X	X	X	X	X	X
Structural Measurements where plans are not available										
Benchmarking/Surveying										

Inspection Intent Requirement Details for Underwater Inspection

The underwater inspection consultant (diver) shall be one who is currently on the prequalified list maintained by the Office of Structural Engineering. All individuals performing dives shall be an NBIS-Qualified Inspector. All consultants shall have on-site and available for review, a Safe Practices Manual.

The consultant shall furnish all labor, materials, and equipment (including traffic control) necessary to perform an in-depth inspection from the waterline to the mud line of all bridge piers, abutments, fenders, dolphins, etc. A permit from the District will be required for any operations that will affect the flow of traffic. This will require a maintenance of traffic plan to be submitted and a 30 day review period prior to commencing.

These underwater inspections shall be Level II (10% cleaning and measurement). See Sections 17.3.2 and 17.9.7 of the October 2002 edition of the Bridge Inspector's Training Manual/ 02, Federal Highway Administration. (Available from the National Technical Information Service, Springfield, Virginia 22161) Additionally, these underwater inspections shall comply with page 76 of the ODOT's Manual of Bridge Inspection 2014.

Specific items to be inspected should include, but not limited to, the following:

- Steel, concrete, stone & timber abutments, piers, fenders, and dolphins.
- Identify and describe any scour in the stream bed adjacent to the above mentioned items.
- Identify the typical streambed material (rocks, rip-rap, silt, sand, gravel, bedrock, etc.) around each substructure.
- Identify and describe any damage to substructure items as may have been caused by ship collision, ice, debris, etc.
- Identify and describe any footer which may be exposed (also if bottoms of footers are exposed).
- If bottoms of footers are exposed, is piling evident (condition of piling)? Include measurements (size of void under footers).
- Condition of piling of all pile supported structures (waterline to mud line).
- Identify and describe the condition of any pile protection.
- Identify and describe any cracks or erosion of concrete or stone piers and

abutments.

< Identify the location and denote condition of underwater power cables and control cables for any movable bridge.

In addition to the above-mentioned requirements, soundings of the river bottom will be required. Soundings will be at 25' spacing parallel to and along the centerline of the bridge. Additional soundings around piers and abutments, both up and downstream shall be taken as necessary to accurately depict any areas of scour. River current direction shall be shown on the sounding diagram.

The diver shall make as many dives as necessary to obtain the required information, reporting all conditions observed, whether they are satisfactory or unsatisfactory.

All details of unsatisfactory structural conditions shall be reported in full detail giving all dimensions of size, shape, and exact location. Effective methods of testing and measuring sound or unsound concrete; sound or unsound timber in piles, bents, cribs, or other timber type construction; sound or unsound stone masonry; presence of stream bed scour, alteration, or other conditions; and/ or any other conditions that may affect the substructure units of the structure involved, shall be employed to assure accurate data.

The consultant shall provide voice communication between the diver and assistant capable of interpreting and recording conditions as they are being observed and reported.

The consultant shall notify the ODOT Project Manager in the event they have any questions concerning conditions at the site of the projects.

The consultant shall notify the ODOT Project Manager at least three days in advance of the proposed inspection date, and on the date that the diving inspection begins. In navigable areas, local authorities and the USCG will need to be advised with the same information.

The consultant shall be considered as an independent contractor and save the State of Ohio harmless in the event of any injuries or damage to any persons or property arising from performance of this proposed contact, by the contractor, his employees, or agents.

The consultant shall be in compliance with all State and Federal laws pertaining to the type of service requested, such as Workers Compensation.

All subconsultants used in the inspection shall be named in the proposal so that they can be approved as a sub-consultant at the time of the agreement.

The bridges to be inspected shall be completed by June 30, 2025. Inspection reports shall be submitted within two (2) months from the underwater inspection date.

5. Inspection Services

Item	Description
Target Date(s) for Inspection:	Inspections to be completed by June 30, 2025

Traffic Control by	Consultant
Lane Closure Requirements	No lane closures on holidays or holiday weekends.
Restrictions to Lane Closure	Lane Closures shall adhere to the Permitted Lane Closure Times
Property Owners Involved	ODOT
Right of Entry by	ODOT
RR Flaggers	N/A
Other (ex. Coast Guard)	US Coast Guard, Army Corps of Engineers
Special Equipment Anticipated for Access to remote areas • Snooper Rental • Rope Climbing • Bucket Truck • Man Lift	N/A
Other:	

6. Consultant Bridge Inspection Requirements

- Prior to submission to ODOT, the reports shall be given an independent review within the diving agency (and so documented) for clarity and completeness.
- Each bridge shall have its own stand-alone report. “Left” and “Right” bridges shall be considered separate bridges if they have their own structure file numbers.
- The consultant shall submit an electronic PDF version of the draft report to the District Bridge Engineer.
- Reports shall include any necessary scaled sketches describing any defects. All details of unsatisfactory structural conditions shall be reported in full detail giving all dimensions of size, shape, and exact location.
- An analysis of defects found is not necessary.
- Reports shall be 8.5" x 11". If necessary, foldout pages for sketches will be permitted as part of the report.
- The report shall include the diver’s name, a statement that the diver that conducted the inspection meets the qualifications of a Team Leader as defined by the National Bridge Inspection Standards, and how they meet these standards.
- Reports shall be signed and sealed by a Professional Engineer registered in the State of Ohio.
- Inspection of the entire bridge is not expected, except as noted in Section 4 above; however, the report shall provide numerical ratings for the items inspected in accordance with the ODOT Manual of Bridge Inspection. This shall include a rating using both the traditional scale, and the Element Level inspection scale. (Piers, scour, etc.)
- Minimum soil depth over footing as determined from plans.
- Provide a pier elevation of each water pier showing exposed footings, streambed sounding depths along footing, exposed piling, debris, direction of water flow, etc.
- Show measurement in a pier elevation from a known elevation on at least one pier per structure to establish a water surface elevation and depth at the time of inspection.
- Provide soundings at approximate 1/8 span points along the centerline of the bridge.
- Provide soundings at approximate 1/8 span points 15 ft. upstream and 15 ft.

downstream of the bridge, parallel to the centerline of the bridge.

- Substructure labeling (rear abutment, forward abutment, Pier 1, Pier 2, etc.) shall be with respect to route stationing and/or original construction plans. Plan views shall show a north arrow, direction of stationing, and direction of flow.

The Consultant shall be responsible for identifying and noting all visible defects in the bridge whether as a result of deterioration, original construction or original design. The Consultant shall also be responsible for identifying and noting areas of potential failure as a result of anticipated deterioration, past construction or maintenance practice and/or inadequate original design.

The Consultant will not be responsible for conditions which are not obvious through usual and customary visual inspection or through standard state-of-the-art testing. The Consultant will not be responsible for identifying and evaluating portions of the bridge which comprise of poor-quality materials and/or inadequate structural design unless obviously visible to a trained and experienced bridge inspector/engineer performing the inspection services in accordance with the customary standards of the profession.

The Consultant will not be responsible for structural conditions which occur after the date of the last site visit, providing the condition was not visibly evident at the time of the last visit and the Consultant used usual and customary procedures to inspect the bridge.

Notification:

a. The Consultant shall notify the District Bridge Engineer at least four weeks in advance of the start of the actual inspection to allow scheduling of the required traffic control operations at the periods mutually agreed upon by the Consultant and the District; to inform the local authorities involved of the dates of the inspection; and to obtain any necessary right of entry for the Consultant. In some cases, as noted in the special provisions, the Consultant may be required to provide traffic control, notify involved local authorities, and obtain the necessary right of entry.

b. The Consultant shall notify the District Bridge Engineer of any and all serious deficiencies immediately upon disclosure, in order that they may be observed by the Department from available scaffolding or access equipment.

The State of Ohio may delete or postpone the inspection of a bridge from the contract up until the time that the physical inspection begins.

The Consultant will be required to probe around all substructure units located in water. The consultant will be required to complete or revise the Underwater Dive Inspection Procedure Checklist on file such that all UW inspection elements are identified, the inspection frequency is identified, inspection procedures are identified, and all underwater elements are inspected according to those procedures.

Any additional destructive testing, other than that previously mentioned, shall not be done unless specifically stated in the S.O.S. meeting.

Where, in the judgment of the Consultant, it is necessary to remove some portion of the structure to achieve complete and adequate inspection, no action shall be taken without prior approval of the District Bridge Engineer.

All invoices for inspection services shall be submitted to the District Contract Manager for processing.

7. Dive Inspections

1. **DEF-15-1477, SFN 2000572 over Maumee River:**
   Constructed in 2019, the structure is a 5 span steel beam bridge supported in the channel by 4 cap and column piers with pointed upstream and downstream noses. The piers are on drilled shafts. The approximate water depth is 10'. Last underwater inspection was in 2021.

2. **DEF-15-1515, SFN 2000598 over Auglaize River:**
   Constructed in 1991, the structure is a 5 span concrete box girder bridge supported in the channel by 4 concrete hammerhead piers with pointed upstream and downstream noses. Pointed masonry block noses were added to widen the bridge. According to the plans, no piles support the pier footings. The approximate depth is 14'. Last underwater inspection was in 2021.

3. **DEF-66-0444, SFN 2001500 over Auglaize River:**
   Constructed in 1966, the structure is a 5 span steel girder bridge supported in channel by 4 concrete hammerhead piers with rounded upstream and downstream noses on rectangular spread footings. According to the plans, no piles support the spread footings. The approximate water depth is 7'. Last underwater inspection was in 2021.

4. **DEF-111-0119, SFN 2001896 along Auglaize River:**
   Constructed in 1960, the structure is composed of twin 8' circular concrete culverts with stone headwalls. Each culvert is 60' from inlet to outlet. The structure is typically 90% underwater year-round. Last underwater inspection was in 2021.

5. **DEF-281-0149, SFN 2002469 over E. River Rd. and Maumee River:**
   Constructed in 1969, the structure is a 7 span steel arch-girder bridge supported in the channel by 5 wall-type concrete piers with pointed upstream and rounded downstream noses on rectangular spread footings. According to the plans, the pier footings are not supported by piles. The approximate water depth is 13.5'. Last underwater inspection was in 2021.

6. **HAN-37-0729, SFN 3201694 over Silver Creek:**
   Constructed in 1984, the structure is an arched, multi-plate, steel box culvert on concrete footers. The dimensions of the culvert are 18'-10" wide by 5'-8" tall by 120'-0" long. According to the plans, the footings are not supported by piles. The approximate water depth is 2'. Last underwater inspection was in 2021.

7. **PAU-49-1470, SFN 6300391 over Maumee River:**
   Constructed in 1948, the structure is a 4 span steel girder bridge supported in the channel by 2 wall-type concrete piers with pointed upstream and downstream noses on rectangular spread footings. According to the plans, the pier footings are not supported by piles. The approximate water depth is 7'. Last underwater inspection was in 2021.

8. **PAU-66-0828, SFN 6300529 over Auglaize River:**
   Constructed in 1993, the structure is a 3 span steel girder bridge supported in the channel by 2 wall-type concrete piers with rounded upstream and downstream noses on rectangular spread footings. According to the plans, the pier footings are not supported by piles. The approximate water depth is 7'. Last underwater inspection was in 2021.

9. **PAU-111-2439, SFN 6300901 over Six Mile Creek along Auglaize River:**
   Constructed in 1960, the structure is a 3 span concrete slab bridge supported in the channel by 2 stub-capped pile piers. The H-piles have been encased. Last underwater inspection was in 2021.

10. **PAU-613-2138, SFN 6301738 over Little Auglaize River:**
    Constructed in 1993, the structure is a 3 span concrete box beam bridge supported in the channel by 2 concrete hammerhead piers with rounded upstream and downstream noses on rectangular spread footings. According to the plans, no piles support the pier footings. The approximate depth is 5'. Last underwater inspection was in 2021.

11. **PAU-637-1569, SFN 6302122 over Auglaize River:**
    Constructed in 1984, the structure is a 7 span steel girder bridge supported in the channel by 6 concrete hammerhead piers with pointed upstream and downstream noses on rectangular spread footings. According to the plans, the pier footings are not supported by piles. The approximate water depth is 18'. Last underwater inspection was in 2021.

12. **PUT-634-1027, SFN 6901956 over Auglaize River:**
    Constructed in 1971, the structure is a 4 span steel arch-girder bridge supported in the channel by 2 concrete hammerhead piers with rounded upstream and rounded downstream noses on rectangular spread footings. According to the plans, the pier footings are not supported by piles. The approximate water depth is 9'. Last underwater inspection was in 2021.

13. **WYA-23-2443, SFN 8801096 over Spring Run:**
    Constructed in 2006. The structure is a three-sided precast reinforced concrete culvert. The dimensions of the culvert are 21'-8" wide by 8'-0" tall by 65'-0" long. According to the plans, the footings are not supported by piles. The approximate water depth is 2'. Last underwater inspection was in 2021.

14. **WYA-103-0653, SFN 8802513 over Spring Run:**
    Constructed in 2008.The structure is a three-sided precast reinforced concrete culvert. The dimensions of the culvert are 22' wide by 5'-3" tall by 96' long. According to the plans, the footings are not supported by piles. The approximate water depth is 2'. Last underwater inspection was in 2021.

15. **WYA-103-1381, SFN 8802734 over Sandusky River Overflow:**
    Constructed in1962, the structure is a 13' single span steel culvert. The approximate water depth is 6.5'. Last underwater inspection was in 2021.

16. **HEN-6-1650, SFN 3500578 over Maumee River:**
    Constructed in 1968, the structure type is a 6 span continuous haunched steel girder bridge with reinforced concrete deck. There 5 piers in the channel. Each is wall type and supported on spread foundations with steel piles driven to rock. The approximate water depth is 12'. Last underwater inspection was in 2020.

17. **HEN-108-1561, SFN 3502384 over Maumee River:**

Constructed in 2005, the structure type is a 7 span continuous concrete prestressed and post tensioned haunched tee type girder. There are 6 wall type piers located in the channel. All are supported on reinforced concrete drilled shafts that are embedded into bedrock and located on old pier foundations from the previous 1928 structure. Water depth is approximately 9 feet. Last underwater inspection was in 2020.

18. **HEN-109-1820, SFN 3502392 over Maumee River:**
    Constructed in 2016, the structure type is a 12 span prestressed concrete I-beam bridge. There are 10 cap and column type piers located in the channel. All are supported on reinforced concrete drilled shafts that are embedded into bedrock. Water depth is approximately 14 feet. Last underwater inspection was in 2020.

19. **LUC-24-2656, SFN 4801741 over Ottawa River:**
    Constructed in 1971 the structure type is a 2 span continuous steel beam bridge with reinforced concrete deck. Substructures are cantilevered wall type abutments with counter forts and wall type pier. All are supported with spread foundations on cast in place concrete piles. Water depth is approximately 5 feet. The last underwater inspection was completed in 2020.

20. **LUC-65-0535, SFN 4805917 over Maumee River:**
    Constructed in 1956, the structure is a double leaf bascule span bridge with steel girders and steel grate deck. The approach spans are continuous steel beam with reinforced concrete deck. On the south approach there are 3 wall type piers located in the channel all supported with spread footing with steel piles. At the shipping channel there are two trunnion piers also supported with spread footing on steel pile. Trunnion piers are protected along the channel with wooden timber fenders. Water depths vary from 30' at the shipping channel to 10'. The last underwater inspection was in 2020.

    The consultant should be aware that the channel shall be maintained for commercial shipping at all times. The consultant will be required to maintain contact with the bridge tender at all times during the inspection.

21. **LUC-75-0536, SFN 4803736, 120" Storm Sewer:**
    Constructed in 1972, the structure type is a 120" storm sewer approximately 15' beneath the I-75 in the City of Toledo. This structure has never had an underwater inspection completed.

22. **LUC-75-1013, SFN 4804686 over Ottawa River:**
    Constructed in 1959 and widened in 1997, the structure is a five span continuous slab bridge supported on capped pile abutments and piers. There are 4 piers in the channel. The original piers are supported on 14" cast-in-place reinforced concrete piles encased in concrete, the widened piers are supported on 14" cast-in-place reinforced concrete piles. Water depth is approximately 8'. The last underwater inspection was in 2020.

23. **LUC-280-0346, SFN 4805909 over Maumee River:**
    Constructed in 2007, the structure type is a 2 span cable stay concrete segmental bridge with one pylon located in the channel. The pylon is supported on a reinforced concrete spread footing with 8' diameter reinforced concrete drilled shafts embedded into hardpan. Water depth is approximately 22 feet. The last underwater inspection was completed in 2020.

The consultant should be aware that the channel shall be maintained for commercial shipping at all times. The consultant will be required to maintain contact with the Craig Bridge (LUC-65-0535) tender at all times during the inspection.

24. LUC-475-1503U, SFN 4808428, 120" Storm Sewer:
Constructed in 1970, the structure type is a 120" storm sewer approximately 40' beneath the Eastbound I-475 ramp to Promedica Parkway.

25. LUC-475-1538, SFN 4808479, 120" Storm Sewer:
Constructed in 1970, the structure type is a 120" storm sewer approximately 40' beneath ramp from Promedica Parkway to Eastbound I-475.

26. OTT-2-0016, SFN 6200044, over Crane Creek:
Constructed in 2013, the structure type is a three span prestressed concrete box beam bridge with a reinforced concrete composite deck. Substructures are capped pile abutments and piers. All piles are steel, abutment pile are 10" and piers are 12" in size. Water depth is approximately 6'. The last underwater inspection was completed in 2020.

27. OTT-2-0667, SFN 6200109 over Turtle Creek:
Constructed in 2000, the structure type is a three span prestressed concrete box beam bridge with a reinforced concrete composite deck. There are two capped pile pier bents in the channel consisting of 16" diameter cast in place piles. Water depth is approximately 7 to 10 feet deep. The last underwater inspection was in 2020.

28. OTT-2-1079, SFN 6200133, over Toussaint River:
Constructed in 2000, the structure type is a six span prestressed concrete box beam bridge with a reinforced concrete composite deck. There are five piers in the channel all are capped reinforced concrete drilled shafts embedded into bedrock. Water depths vary from approximately 3 to 8 feet deep. The last underwater inspection was in 2020.

29. OTT-2-1312, SFN 6200184, over Rusha Creek:
Constructed in 1964, the structure type is a three span continuous concrete slab supported on capped pile abutments and wall type piers supported on spread footings located 7' below the channel flow line. Steel piles at the abutments a 10" steel. Water depth is approximately 4.5'. The last underwater inspection was in 2020.

30. OTT-2-1654, SFN 6200214, over LaCarpe Creek:
Constructed in 1967, the structure type is a three span continuous concrete slab supported on capped pile substructures. All piles are steel and 12" in size. The water depth is approximately 4'. The last underwater inspection was in 2020.

31. OTT-2- 1810, SFN 6200303, over Portage River overflow:
Constructed in 1968, the structure type is a simple span reinforced concrete slab bridge. Abutments are wall type supported on spread footings on steel pile driven to bedrock. Water depth along the abutments is approximately 6 feet deep. The last underwater inspection was in 2020.

32. OTT-2-1830, SFN 6200338, over Portage River:
Constructed in 1968 and widened in 1997, the structure type is a six span steel beam bridge with reinforced concrete deck. There are 5 piers in the channel. The 1968 pier No. 1 is supported on spread footing with steel piles to bedrock. The remaining 1968

piers are supported on spread footing founded into hard pan. The 1997 widen piers are all supported on reinforced concrete drilled shafts embedded into bedrock. Water depth is approximately 12 ft. The last underwater inspection was in 2020.

33. **OTT-2-1853, SFN 6200362, over Portage River overflow:**
    Constructed in 1967, the structure type is a simple span reinforced concrete slab bridge. Abutments are wall type supported on spread footings on steel pile driven to bedrock. Water depth along the abutments is approximately 6 feet deep. The last underwater inspection was in 2020.

34. **OTT-2-2757, SFN 6200753, over Sandusky Bay overflow:**
    Constructed in 1963, the bridge type is a 3 span steel beam bridge with reinforced concrete deck. There are 2 piers in the channel both are capped steel pile bents. Water depth is approximately 10 ft. deep. The last underwater inspection was in 2020.

35. **OTT-2-2839, SFN 6200788, over Sandusky Bay:**
    Constructed in 1965 and widened in 2007. The bridge type is a 23 span prestressed concrete I-beam bridge with a composite reinforced concrete deck. In the channel are 22 piers and all are reinforced concrete cap and column. The columns are all supported with drilled reinforced concrete shafts embedded into bedrock. The channel depth is approximately 8 to 10 ft deep. The last underwater inspection was in 2020.

36. **OTT-19-0323, SFN 6200885, over Portage River:**
    Constructed in 1993, the bridge type is a 5 span steel beam bridge with composite reinforced concrete deck. There are 4 tee type piers in the channel and all are supported on spread foundations with drilled reinforced concrete shafts embedded into bedrock. The channel depth varies from approximately 5 to 11 feet. The last underwater inspection was in 2020.

37. **OTT-19-0811, SFN 6200931, over Toussaint River:**
    Constructed in 1954, the bridge type is a 3 span continuous reinforced concrete span bridge. In the channel are two capped pier pile pier bents supported with reinforced concrete cast in place friction piles. The channel depth is approximately 5 ft. deep. The last underwater inspection was in 2020.

38. **OTT-19-0833, SFN 6200966, over Toussaint River:**
    Constructed in 1954, the bridge type is a 4 span continuous reinforced concrete span bridge In the channel are three capped pier pile pier bents supported with reinforced concrete cast in place friction piles. The channel depth is approximately 5 ft. deep. The last underwater inspection was in 2020.

39. **OTT-163-2511, SFN 6201628, over Portage River:**
    Constructed in 1933, the bridge type is double leaf bascule span bridge with steel girder and steel deck. Approach spans are simple span steel beam with reinforced concrete deck. Abutments are reinforced concrete walls on spread footings. Piers located each side of the shipping channel are trunnions and are also supported on spread footings. Fender walls along the shipping channel are reinforced concrete caps on steel piles that are encased in steel tubes. The channel depth varies approximately 4‘at the abutments to 15’ at the channel. The last underwater inspection was in 2020.

    River traffic is extremely heavy. The bridge is on a half hour opening schedule and on

demand for commercial shipping. The consultant will be required to be in contact with the bridge tender at all times during the inspection. Work should be scheduled to minimize the interference to bridge and river operations.

40. OTT-357-0016, SFN 6201776, over Put-In-Bay:
Constructed in 1966, the bridge type is a single span prestressed concrete beam. The abutments are capped pile supported on 14" cast-in-place reinforced concrete piles with sheet piling abutment walls. The channel depth is approximately 7 ft. The last underwater inspection was in 2020.

41. SAN-6-1751, SFN 7200579, over Sandusky River:
Constructed in 1957, the bridge type is a continuous steel beam bridge with reinforced concrete deck. In the channel are 2 sets of 2 reinforced concrete tee type piers that are supported on spread foundations excavated into rock. The channel depth is approximately 10 ft. deep. The last underwater inspection was in 2020.

42. SAN-53-1745, SFN 7202431, over Muddy Creek:
Constructed in 1962, the bridge type is a 4 span continuous reinforced concrete span bridge. In the channel are three capped pier pile pier bents supported with steel piles driven to bedrock. The channel depth is approximately 6 ft. deep. The last under inspection was in 2020.

43. SEN-224-1207, SFN 7402910, over Sandusky River:
Constructed in 1956, the bridge type is a 5 span steel beam bridge with reinforced concrete deck. In the channel are 4 reinforced concrete wall type piers supported on spread foundations with steel piles driven to bedrock. The channel depth is approximately 4 to 6 ft. deep. The last underwater inspection was in 2020.

44. WOO-475-0386L, SFN 8706751, over Maumee River:
Constructed in 1964, the bridge type is a 7 span haunched steel girder bridge with reinforced concrete deck. In the channel are 4 reinforced concrete tee type piers supported on spread foundations excavated into bedrock. The channel depth is approximately 3 to 5 ft. deep. The last underwater inspection was in 2020.

45. WOO-475-0386R, SFN 8706786, over Maumee River:
Constructed in 1964, the bridge type is a 7 span haunched steel girder bridge with reinforced concrete deck. In the channel are 4 reinforced concrete tee type piers supported on spread foundations excavated into bedrock. The channel depth is approximately 3 to 5 ft. deep. The last underwater inspection was in 2020.

8. Physical Condition Report

A formal report describing the physical condition of the bridge, using photographs, sketches and drawings and including evaluations and recommendations is required. The report shall follow the ODOT Manual of Bridge Inspection. Ratings, values, narrative and information shall be typed directly into AssetWise.

Items	**2025**	
Field Report with Element Level Data	X	
Field Report		
Construction and Maintenance History		
Specialized Inspection Procedures (required for complex, underwater dive and fracture critical bridge inspections)	X	
Plan view of bridge with mapped out deficiencies	X	
Updated deficiency map		
Damage and/or Deterioration Evaluation (Include narratives describing the physical conditions, digital photographs, drawings, tables, etc.)	X	
Updated damage and/or deterioration evaluation		
Maintenance/Rehabilitation Recommendations (Include a maintenance schedule and any rehabilitation recommendations)	X	
Updated recommendations		
Testing Report(s) if authorized		

Subreports:

Underwater	X	
Mechanical, Electrical		
Scour/Hydraulic/Stream Evaluation (cross channel profile etc.)		
Structural Analysis		
Pin/Hanger/Hinges Detailed Inspection		
Other		

9. Final Report

An electronic PDF copy of the Formal Report should be submitted to the District Bridge Engineer. The Final Report shall be sealed and stamped by a PE.

Number of Reports (1) Electronic Delivered to Mark Limbaugh, PE for District 1 bridges and David Geckle, PE for District 2 bridges.

10. Completion Time

The consultant shall complete each year's inspection, including submitting the final report, within 6 months from the date of authorization to proceed. The following dates are targets for report submittals:

A completed Inspection Report is due in AssetWise by August 31, 2025.

Draft due date for the Formal Report by September 30, 2025.

The Formal report is due by October 31, 2025.

A report shall not be considered complete until approved by the District Bridge Engineer.

11. Type of Agreement

- Lump sum compensations
- Actual costs plus fixed fee for testing items.
- Snooper or equipment Rental is if authorized.
- Traffic Control is included in lump sum fee.

12. Price Proposal

The consultant's price proposal shall conform to the current Requirements for Consultant Proposals found on Consultant Services website :
https://www.transportation.ohio.gov/working/engineering/consultant-services//manuals-and-contract-documents

13. Remarks / Special Instructions (Permits, Walkthroughs, etc.)

The consultant will be required to immediately communicate any change in project management, cost, scope or schedule to the Project Manager. The consultant and ODOT will develop a working schedule for the project. The consultant will be required to produce a recovery schedule if the project falls behind the agreed working schedule. Payment of all invoices will stop until a satisfactory recovery schedule is agreed upon.

No lane closures will be permitted on any of the structures unless approved through the District's permitting process.

Consultant to follow OBM guidelines.

14. Information Handouts Required by Consultant and Available within ODOT

It is the consultant's responsibility to obtain the information handouts necessary to complete their file. This is not an inclusive listing.

1) Audit Requirements, Definitions and Guidelines.

2) Office of Accounting and Auditing Supplemental Information for Consulting Engineering Firms.

3) Ohio Manual of Uniform Traffic Control Devices.

4) Guidelines for Proposals for Consulting Services.

5) ODOT DBE/EDGE Requirements for Consultant Agreements.

15. Reference Materials Required by Consultant

It is the consultant's responsibility to obtain the bridge inspection manuals necessary to complete their file. This is not an exhaustive listing.

- Complex Inspection Procedures on-file
- Specifications for the National Bridge Inventory, 2022
- National Bridge Inspection Program Metrics, rev. 2013 (Note: Report, Inspections and Personnel must meet the UW Metrics 5, 8, 9, 17)
- ODOT Manual for Bridge inspection, 2014
- Hydraulic Engineering Circular No. 18 “Evaluating Scour At Bridges” Fourth Edition Publication No. FHWA NHI 01-001, Date April 2012
- Hydraulic Engineering Circular No. 20 "Stream Stability at Highway Structures"
- Underwater Bridge Inspection, FHWA NHI 10-027, 2010
- The Manual for Bridge Evaluation, 2011, with 2016 Revisions, AASHTO Publication
- Bridge Inspector's Reference Manual, FHWA NHI 12-049, 2012
- ODOT Bridge Inventory Coding Guide

16. Underwater Dive Inspection Procedure Checklist

The Underwater Dive Inspection Procedure Checklist must be completed by the consultant while performing underwater inspections for each bridge. This can be found in Appendix F of the 2014 Manual of Bridge Inspection. Link provided below.

https://www.transportation.ohio.gov/working/engineering/structural/mbi

Scope of Services Meeting Attendance

Date: _____, Location:

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