



**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

ADDENDUM NO. 1
ISSUED: OCTOBER 24, 2024

To

LOI NO. 24-2024

**REQUEST FOR LETTERS OF INTEREST (LOIs) FOR PROFESSIONAL ENGINEERING
DESIGN SERVICES FOR THE PAVEMENT REPLACEMENT PROGRAM
PROJECT NOS. 71-24-17(18)**

ISSUED: OCTOBER 15, 2024

LETTERS OF INTEREST DUE DATE: 5:00 P.M. (Eastern) NOVEMBER 5, 2024

ATTENTION OF RESPONDENTS IS DIRECTED TO:

ANSWERS TO QUESTIONS RECEIVED THROUGH 5:00 PM ON OCTOBER 23, 2024:

AND

**PR PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST
PR PLAN DEVELOPMENT STAGE 2 PLAN SUBMITTAL CHECKLIST
PR PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST
(ATTACHED)**

Issued by the Ohio Turnpike and Infrastructure Commission through Aimee W. Lane, Esq., Director of
Contracts Administration

Aimee W. Lane

Aimee W. Lane, Esq.,
Director of Contracts Administration

OCTOBER 24, 2024
Date

ANSWERS TO QUESTIONS RECEIVED THROUGH 5:00 P.M. ON OCTOBER 23, 2024:

Q#1 As per Appendix B, is the completion date a typo error?

APPENDIX B

**ARTICLE 3
TIME FOR COMPLETION**

3.1 Time for Completion. Time is the essence of this Contract. The Consultant is to complete its work on or before [April 1, 2025 for Project No. 71-24-17/May 1, 2025 for Project No. 71-24-18], unless the Chief Engineer/Deputy Executive Director grants a request for an extension from the Consultant. Such extension request must be made in writing to the Chief Engineer/Deputy Executive Director no later than seven (7) days following the date upon which any event occurs that gives rise to the need for additional time. The extension request must include a description of the event, the reasons why that event justifies an extension, the duration of the extension sought, and any other documentation requested by the Chief Engineer/Deputy Executive Director.

A#1 Please disregard the completion dates in the form contract - Appendix B. Those dates will be finalized as part of the contract award process.

Q#2 The overall RFP is 63 pages in total. A potential discrepancy regarding lighting. On 20/63, and again on 21/63, Lighting plans and General Notes are to be included with Stage 2 and Stage Plans. On 24/63 Work not included; #4 Highway lighting is not included in this contract.

A#2 This is a general scope of service that will be tailored to each of the projects. The Commission is not installing new lighting on either of these projects. However, when Ramp widening occurs at an interchange or Service Plaza, existing lighting usually needs to be relocated due to the Ramp geometry modifications.

Q#3 Can the OTIC Design Directive (18/63) that defines the Stage 1 level of design and plan development be posted/shared?

A#3 Yes, the Pavement Replacement Program (PR) Plan Development Stage 1, 2 And 3 Plan Submittal Checklists are included with this addendum.

END OF ADDENDUM NO. 1

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 1 PLAN SUBMITTAL CHECKLIST

This checklist will aid in providing a consistent appearance of the Construction Documents, information provided, quantity calculations, and general design guidance between all designers. This checklist contains bullet items that should be included in the Stage 1 plan review submittal (if applicable). This “checklist” should be considered as a starting point for each Stage 1 plan review. Each Pavement Replacement Project will contain anomalies specific to that site and should be reviewed/analyzed accordingly.

BASEMAPPING FROM 3RD LANE DRAWINGS

1. Generally, the 3rd Lane basemap can be either in one basemap or could be provided in a plan sheet format. Which means, the Plan sheets need to be blocked out of the 3rd Lane plan sheets and inserted into the Project basemap drawing in the correct Coordinate system. Create PR plan sheets from the new basemap drawing. The Profile would also need to be blocked out and inserted into the new PR basemap with all the layers.
2. The PR Basemap should look like the sample plans.
3. All 3rd lane proposed work needs to be placed on the correct existing layer. All existing lines and features that don't exist need to be erased.
4. All text shall be changed to the OTIC Font.
5. All mainline bridges need to be drawn correctly to the median wall at the centerline.
6. Existing lines should be connected and made into p-lines. For example, R/W lines, R/W fence, median barrier, EOP, EOS, centerline, guardrail, ditches, streams, utilities, etc.
7. Show and label the centerline and its geometry. i.e., stationing, station equations, PC, PT, bearings (one per sheet), curve data, etc. The centerline is called the “Reestablished Survey Baseline”.
8. Show and label all Governmental boundaries (State, County, City, Village, Township, etc.).
9. Show all bridges, piers, parapets, local roads, and their utilities. Provide the road name and the milepost (MP) callouts. See the sample plans.
10. Show all creeks, streams, rivers, ditches, culverts, and pipes with flow arrows. Label the names of all creeks, streams and/or rivers. Show all adjacent ponds and lakes that are within the plan view.
11. Show all pipes with headwalls or Flared End Sections (FES). Label all existing (ex.) pipes, for example “EX. 12” CMP”, “EX. 12” RCP”, “EX. 12” PLASTIC”, “EX. 48” CMP WITH 36” PLASTIC LINER”.
12. Show and label all storm sewers, inlets, manholes, and catch basins.
13. Show and label all concrete channels.
14. Show all existing 3rd lane underdrains.
15. Show and label all utilities. Provide the company name of the gas lines and overhead electric (OHE) lines and show their easements if applicable. GAS should show the pressure for the utility (MP, HP, etc.). OHE transmission lines should show the voltage for the utility. (138 kV, 345 kV, etc.)
16. Show all cantilever and gantry sign structures and foundations.
17. Show Vertical Monuments in plan view, i.e. Feno Monuments or Temporary Monuments. Label FENO##)
18. Show Median Monuments and label MON##.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 1 PLAN SUBMITTAL CHECKLIST

PROFILE FROM 3RD LANE DRAWINGS

1. The PR Profile should look like the sample plans.
2. Block each profile from the existing 3rd Lane P&P Sheet drawings and build one continuous base Profile that can be used in the new P&P Sheets.
3. Profile grades are generally set at 40' Lt. and Rt. of the re-established survey baseline.
4. Utilize existing record elevations at the 40' Lt. and Rt. profile grade point.
5. If lidar is part of the scope of services, use the lidar elevations at the 40' Lt. and Rt. of the re-established survey baseline.
6. If lidar is not part of the scope of services, do the following:
 - a. Adjust all existing record profile elevations due to the change in elevation datum.
 - b. The elevation adjustment between NGVD29 and NAVD88 is approximately 0.67' (9" +/-) but needs to be determined by the surveyor for each Project.
7. The Surveyor / Designer will need to perform some elevation checks that they have for their survey control versus record information or check other elevations that they have shot in the field to confirm the project adjustment factor to existing elevations is correct.
8. The PR Profile should look like the 3rd Lane Profile except all proposed 3rd Lane work will become existing and all elevations should be updated to the new datum.
9. All existing and proposed 3rd lane lines and text should be placed on the correct OTIC Layer. All text shall be changed to the OTIC Font.
10. All drainage and bridges should be shown in the Profile.
11. Show all vertical curve data and existing elevations.

TITLE SHEET

1. Utilize the sample title sheet in "OTIC Sheet Templet.dwt".
2. Update project specific items.
3. The Contract number listed on the title sheet is the Construction Contract Number (i.e. 39-25-01), not the design contract number (i.e. 71-23-04).
4. Use a location Map which clearly shows adjacent major roadways. Utilize ODOT's title sheet application from OpenRoads to produce a location map.
5. Follow the index of sheets order as provided in the Templet drawing. During different design stages, the sheets that are not required for that stage can be ~~striketrough~~.

SCHEMATIC PLAN

1. At a minimum, the Schematic Plans limits shall cover the Project from the first MOT crossover to the last MOT crossover and any work that is required outside of the Project limits at 100 Scale. Work Limits are the extreme limits of the contractor's responsibility on a project, including all temporary and incidental construction, with the exception of work zone traffic control devices required for MOT.
2. Show and Label the Re-established Survey Baseline
3. Stationing ticks shall be shown every 100 feet, stationing every 500 feet and all bearings along the baselines.
4. Show all curve locations and station equations. Show all Labels including stationing and coordinates.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

5. Show all curve data for the Re-established Survey Baseline
6. Show Mileposts every tenth of a mile across the top of each plan view. Provide the Legend on each page as per sample plans. The Legend Milepost should match the Milepost for that Sheet.
7. Show an "Existing Centerline Monument" Table on each sheet.
8. Show the proposed edge of pavement at 16' and 52' and the shoulder at 62' only. Turn off all existing mainline roadway features including existing pavement lines, guardrail, drainage features, signs, etc.
9. Show the existing median wall.
10. Shade the pavement that is being replaced. The hatching is a solid hatch, color 254. Send hatching to the back using the 'draworder ACAD command'.
11. Hatch the 3rd Lane pavement that is being resurfaced if applicable. The hatching is a a hatch, color 254. Send hatching to the back using the 'draworder ACAD command'.
12. Show all Streams and large Culverts. Label stream and add direction arrows, size of culvert, station and M.P. (Utilize the Station and M.P. from the OTIC annual Inspection Report). Turn off all other drainage features.
13. Show all corporations and county limits. Label all counties, cities, townships.
14. Show all crossroads with their bridge outlined. Label the road, station of OT and MP. Show edges of local roads along with the bridge.
15. Show local roads that are close to the Turnpike if it is in the page or plot window limits. Label all local roads.
16. Show all Turnpike properties and features should include Maintenance Buildings, Interchanges, Service plazas and access/service roads. Label all Turnpike features described above.
17. Show the Ohio Turnpike right of way lines and easements.
18. Show all Transmission lines with its voltage labeled, all gas lines and other utilities crossing the Turnpike. Show all utility and drainage easements.
19. Show all Fiber Optic Cable (FOC) along the Turnpike. Generally, the FOC is along the north right of way line of the Turnpike. There are other FOCs located along the south right of way in some areas.
20. Show the Location of the existing median opening and emergency parking areas.
21. Show the Begin and End Project and Begin and End Work Flags. Label adjacent previous PR Project numbers, if applicable. See sample Plans.
22. Show the north arrow.
23. Show the Horizontal scale (1" = 200')
24. Provide a cross reference to the Survey General Note and Interchange Geometry Plan if applicable.
25. Confirm that all geometry information matches the Plan and Profile sheets.
26. Show the location of all bodies of water and wetlands adjacent to the R/W.
27. Show the location of all proposed waste sites if applicable.

TYPICAL SECTIONS

1. AutoCAD drawing of OTIC Standard Typical Sections should be utilized for this project. (PR Typical Section Year-Month-day.dwg)
2. Modify all Station-to-Station Limits and variable width by station labels to define the Project.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

3. Modify the ramp sections as necessary to match existing conditions.
4. In general, there should be no reason to modify the normal and superelevated typical sections.
5. Modify existing sections if they don't match the conditions.
6. Item Legend
 - a. The legend should only be provided on the first sheet of the typical sections.
 - b. Do not change Item Legend numbers or the order of the Item Legend.
 - c. Legend names should match the Pay items exactly.
 - d. At Stage 2, Remove unused labels descriptions and replace them with "Not Used".
7. The Typical Sections shall be in the following order:
 - a. Normal section
 - b. Superelevated sections
 - c. Ramp sections
 - d. Edge sections
 - e. Resurfacing sections
 - f. Approach slab sections
 - g. Existing sections
8. If the Designer finds any errors or mislabeling on these typical sections, notify the OTIC PM by email.

GENERAL NOTES

1. Utilize the OTIC Standard General Notes and Modify.
2. For Stage 1 plans, Provide the Utilities Contacts and Survey Control and Elevation General Notes.

Maintenance of Traffic Plans (MOT)

The design intent for the MOT Plans for the Stage 1 Submittal is to depict the location of proposed median crossovers for the contra-flow traffic pattern along with lead-in signing and lane closures into the work zone. It is not required to show the entire proposed contra-flow work zone as part of the Stage 1 Submittal.

OTIC would also like to see preliminary details on lane shifts and lane closures near Interchange or Service Plaza ramps. It is preferred that this preliminary information be provided at the Stage 1 Submittal so that lane shifts, lane tapers and lane closures can be reviewed prior to being detailed further as part of the Stage 2 Submittal.

MOT Plan View Phase Details can be provided on a roll plot as part the Stage 1 Submittal to depict lead-in signing, lane closures and transition into the contra-flow work zone.

The following is a list of key items to be provided with the Stage 1 Submittal for Preliminary MOT Plans:

MOT GENERAL NOTES

1. Provide a sequence of construction.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

2. OTIC will provide a word document which will include a sample Sequence of Construction general note for use by Designer. The Designer shall utilize this word document as a guide for the preparation of the Sequence of Construction general note. The OTIC PM will provide which side of the road will be constructed in the first year. The Designer will be required to modify the Sequence of Construction general note to pertain to the Project.

MOT TYPICAL SECTIONS

1. OTIC will provide the Consultant an AutoCAD drawing which will include the OTIC Standard MOT Typical Sections.
2. The Designer shall modify these MOT typical sections as needed to meet their specific project, but it is anticipated the only minor modifications will be required to these MOT typical sections.

A Proposed Maintenance of Traffic Crossover Typical Section will also be provided as part to the sample MOT AutoCAD. This typical section is for the situation when the contra-flow crossovers are constructed by the Contractor.

MOT LEGEND

1. OTIC will provide an AutoCAD drawing of the MOT Legend Sheet to the Consultant.
2. There generally should be no reason to modify this MOT Legend Sheet. Update the sheet information.

MOT PLANS

1. The MOT Plan view is generally 1200 or 1300 feet per view. (Horizontal 1" = 50'). If possible, 2 views may be provided on one sheet. As noted previously in this document, the designer does not need to include detailed MOT plan view drawings at this scale as part of Stage 1 Submittal. They may choose to provide a roll plot of the preliminary MOT plans for review. This decision is solely at the discretion of the Designer.
2. Provide a north arrow, scale, and mileposts and tenth mileposts on each sheet. Please note that milepost references are the key item that OTIC utilizes to determine the location of plan items on a project.
3. Show lead-in signing in accordance with the Lead-In Signing Directive that will be provided as an AutoCAD drawing to the Consultant. This design directive reflects the required MOT signing and spacing of signing leading into the contra-flow work zone. The Designer may need to adjust the sign locations if there is a conflict with existing signs or overhead structures.
4. Generally, there will be 2 main phases of construction, one for reconstruction of eastbound pavement and one for the reconstruction of westbound pavement. OTIC PM will inform the Consultant which side of the roadway will be reconstructed as part of the first construction season. This decision is generally based on the condition of existing pavement.
5. Detail signing and striping drums, barricades, barriers, etc. and layout of crossovers for each phase, as well as any shifts or tapers that may be necessary within the zone for each phase. OTIC is generally only looking to see proposed line work for lane shifts and closure limits for the

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

Stage 1 Submittal. All MOT information does not need to be stationed or labeled as part of Stage 1 Submittal.

6. Detail signing, striping drums, barricades, barriers, etc. and layout for phased construction at ramps. Generally, OTIC is only looking to see proposed line work to reflect the phase construction limits of the ramps. OTIC prefers that the entire ramp lane be reconstructed under one phase and not a part-width operation.
7. OTIC does not want a pavement joint along the centerline of the ramp lane. Temporary pavement near the existing ramp nose is usually required to accomplish requirement. The first phase of ramp reconstruction would be to maintain ramp traffic on temporary pavement that is placed just beyond the existing ramp nose. A typical ramp layout is shown in the sample plans.
8. It is preferred that the Designer utilize the existing pavement marking locations for the MOT plans and not the edge of pavements from the record third lane plans. The Designer can utilize the re-established survey baseline and offset this line to set up the locations of the existing lane markings.
9. At Interchanges and Service Plazas, OTIC requires the Contractor to build the entire lane or shoulder in phase construction. When a lane cannot be constructed in its full width, a perpendicular joint shall be introduced between the two MOT Phases. (i.e. Phase 2 and Phase 2A. The gore area is constructed with the mainline pavement.
10. If the gore area is in poor condition, the designer may need to resurface a portion of the gore area when the MOT temporary pavement is being constructed. Only resurface what is needed to maintain traffic.

General SWPPP Guidance

1. For Stage I, use ODOT Post BMP calculation spreadsheet. First, identify all areas that meet the filter strip criteria. If feasible locations fulfill the minimum requirements, no further BMPs will be required.

Plan and Profiles – Mainline

PLAN VIEW

1. Show a minimum of 500 ft. before and after the project limits. Plan view is generally 1200 or 1300 feet per sheet. (Horizontal 1" = 50, Vertical 1" = 5)
2. Provide a north arrow, Scale, Legend, and Cross Reference Notes.
3. Show Vertical Monuments, i.e. Feno Monuments or Temporary Monuments. Provide a benchmark reference block.
4. Provide mileposts and tenth mile posts on each sheet.
5. Show Median Monuments with their Monument ID. (i.e. MON12)
6. Shade the pavement that is being replaced. The hatching is solid hatch, color 254. Send hatching to the back.
7. Provide these labels once per sheet: SAWCUT LINE, EDGE OF PROPOSED PVM'T, 52', 10', 26.75', 25.25', and RE-ESTABLISHED SURVEY BASELINE.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

8. Utilize Balloons for proposed work: GR-# Guardrail, B-# Barrier wall, C-# Curb, UD-# Underdrain, DR-# Drainage, DC-# ditch cleanout, ER-# Erosion Repair, SF-# Slope Failure, CC-# Channel Cleanout, and F-# Fence.
9. Label guardrail: Beginning and ends with station "(+xx.xx)", label end treatments, i.e. "MGS BTA TYPE (1 OR 2)", "TYPE T" or "ANCHOR ASSEMBLY", "MGS TYPE E (ET-31)" and radii.
10. Show Ditch clean out hatch with DC-# callout, and label "DITCH CLEANOUT (L')"
11. Show erosion repair hatch with ER-# callout, and label "EROSION REPAIR APPROX. AREA (W' X L')"
12. Show channel cleanout hatch with CC-# callout, and label "Channel Cleanout (W' X L')"
13. Show slope failure hatch with SF-# callout, and label "SLOPE FAILURE APPROX. AREA (W' X L')"
14. Show concrete barrier with B-# callout, label "CONCRETE BARRIER, SINGLE SLOPE TYPE D, AS PER PLAN" and label the begin and end stationing.
15. Show curb with C-# callout and label the begin and end stationing. Note: 19'-2" of Type 4_ Curb is required at every "MGS Bridge Terminal Assembly, Type 1" per ODOT Std. Drw – MGS -3.1.
16. Show fence with F-# callout, label "PROPOSED FENCE TYPE 47" or PROPOSED FENCE TYPE CLT (X')"
17. Show all proposed overhead gantries / cantilever signs and foundations. Label and provide the Proposed Sign Structure Number.

PROFILE

18. Update all elevations from the 3rd Lane NGVD 29 to NAVD 88.
19. The existing Profile Grade (40' LT and RT) should be updated to NAVD 88 and should match the Pavement Elevation Table.
20. Show all vertical curves with curve data.
21. Show Tie-in elevations at the beginning and end of Project and at all Interchange / service plaza ramps.
22. Show Proposed Outside Shoulder Catch Basins with their data.
23. Show minimum vertical clearance for EB and WB at all overhead bridges.
24. Show all drainage from the 3rd Lane Plans and show as existing.
25. Show Proposed 30" underdrains and label the outlets: Underdrain Outlet, LT. or RT., Station, Elevation.

Plan and Profiles – Ramps

1. Provide plan and profile sheets for ramps if significant regrading is necessary.
2. Follow the standards of the mainline plan and profile sheets.
3. Generally, ramp work will tie to existing at the end of the pavement gore. Most work will involve an increase in acceleration length and will be parallel to the mainline and follow the mainline profile. Therefore, separate sheets are usually not necessary.

Cross Sections - Ramps

1. Cross sections may be necessary at ramps if there is significant earthwork associated with lengthening the acceleration lanes. Identify if they are necessary at Stage 1 but don't create them.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 1 PLAN SUBMITTAL CHECKLIST

Pavement Elevation Tables

1. The Designer will need to adjust all existing profile grade elevations by this adjustment factor to establish the “proposed” profile grade elevation at 40’ Lt. and 40’ Rt. if the scope of services does not have survey or lidar picking up the cutline elevations.
2. The Designer will also need to make similar adjustments to the “proposed” elevations shown in the Pavement Elevation Tables.
 - a. Record superelevation transition limits were generally retained in developing pavement elevation transition lengths.
 - b. Record superelevation transition lengths may be longer than current design standards. Use the record superelevation transition lengths if longer than current design standards. If the superelevation transition lengths do not meet the current ODOT Standard, notify the OTIC PM by Email.
 - c. Designer to utilize adjusted “proposed” profile elevations to establish all other proposed elevations shown in the Pavement Elevation Table.
 - d. OTIC has not had any issues with the existing superelevation rates being below current design standards. Therefore, existing superelevation rates should be retained and not modified from the 3rd Lane Plans. If the superelevation rate does not meet the current ODOT Standard, notify the OTIC PM by Email.

Field investigation Report

1. The intent of the Field Investigation is to verify the 3rd lane basemapping to the PR basemapping, inspecting all culverts, pipes, streams, ditches, guardrail safety, signs trusses and cantilevers, slope failures and erosion issues, anything that doesn’t look right or has failed, Median wall damage or failure, Bridge deck,
2. The Consultant will provide a few ArcGIS online user credentials to be used to document the Field investigation and basemapping review. ArcGIS Collector app can be downloaded to a mobile device. An Apple iPad is recommended. The Commission will provide a brief Teams training on the use of all ArcGIS application and mapping for the Project. The ArcGIS <https://www.esri.com/en-us/arcgis/products/arcgis-collector/resources>
3. The basemapping should be complete prior to performing the Field investigation. Part of the intent of the Field work is to verify the basemapping is correct. The basemapping should be submitted to the Commission so the linework can be incorporated into the GIS mapping for field use.
4. The Consultant shall provide a recommendation for all repairs.
5. Use ODOT APP to locate miscellaneous features by Milepost.
6. Culvert and pipe outlets, take photos in all directions and inside the barrel.

The Commission has assembled this checklist that can be used as an aid in the preparation of detailed construction plans for the Pavement Replacement Program. While this checklist was prepared based on current policy at the time of development, the Commission assumes no responsibility for any errors, mistakes or inaccuracies that may occur while using the information contained in the checklist or from a change in policy that may not be reflected in the checklist. This checklist is intended to be used only as a

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 1 PLAN SUBMITTAL CHECKLIST

general guide, or reminder, to the designer, checker and reviewer and is not intended to be a replacement for the user's own professional judgment based on sound engineering principles.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 2 PLAN SUBMITTAL CHECKLIST

This checklist will aid in providing a consistent appearance of the Construction Documents, information provided, quantity calculations, and general design guidance between all designers. This checklist contains bullet items that should be included in the Stage 2 plan review submittal (if applicable). This “checklist” should be considered as a starting point for each Stage 3 plan review. Each Pavement Replacement Project will contain anomalies specific to that site and should be reviewed/analyzed accordingly.

TITLE SHEET

1. Address all Stage 1 comments.
2. Provide all Standard drawings required for the Project, 100% Complete.
3. Update sheet index for Stage 2 Plans and leave future sheets in with XX for the sheet number.
4. Provide all Standard Drawings required for the Project.

SCHEMATIC PLAN

1. Address all Stage 1 comments.

TYPICAL SECTIONS

1. Address all Stage 1 comments.
2. Remove unused labels descriptions and replace them with “Not Used”.

GENERAL NOTES

1. Utilize the OTIC Standard General Notes word document which will be provided by OTIC and modify as necessary.
2. Add additional General Notes as needed to complete plans.
3. Any notes that need to be modified for a specific project, Italicize the entire note so the reviewer knows if the note has been modified or not. After the stage 3 review, all Italicized notes will be changed to normal text.

MOT GENERAL NOTES

1. Address all Stage 1 comments.
2. Utilize the OTIC Standard MOT General Notes word document which will be provided by OTIC and modify as necessary.
3. Add additional General Notes as needed to complete plans.
4. Any notes that need to be modified for a specific project, Italicize the entire note so the reviewer knows if the note has been modified or not. After the stage 3 review, all Italicized notes will be changed to normal text.

MOT TYPICAL SECTIONS

1. Start with OTIC Standard MOT Typical Sections.
2. Modify the Construction Phasing.

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STAGE 2 PLAN SUBMITTAL CHECKLIST

MOT DETOUR PLANS (IF APPLICABLE)

1. Provide a map which illustrates the detour route as well as the placement of all additional ground mounted detour sign assemblies. Provide details for each sign assembly.
2. Provide a sheet with details of all existing truss mounted, cantilever and beam mounted guide signs as well as the overlays (such as "Exit Closed", or entire sign covered with an overlay) and detour sign assemblies to be added to existing guide signs.

MOT LEGEND

1. OTIC will provide an AutoCAD drawing of the MOT Legend Sheet to the consultant.
2. There generally should be no reason to modify this MOT Legend Sheet.

MOT PLANS

1. Address all Stage 1 comments.
2. Plan view is generally 1200 or 1300 feet per view. (Horizontal 1" = 50'). If possible, 2 views may be provided on one sheet.
3. Provide a north arrow, scale, and mileposts and tenth mileposts on each sheet.
4. Detail lead-in signing, zone signing, striping, drums, barricades, barriers, etc. for all pre-phases (construction of temporary pavement, crossovers, etc.), main construction phases, and winter shut down phases.
5. If existing signs are to remain, label as "no work."
6. At Interchanges and Service Plazas, OTIC requires the Contractor to build the entire lane or shoulder in phase construction. When a lane can not be constructed in its full width, a perpendicular joint shall be introduced between the two MOT Phases. (i.e. Phase 2 and Phase 2A. The gore area is constructed with the mainline pavement.

MOT TYPICAL CONSTRUCTION ACCESS POINT DETAIL

1. OTIC will provide an AutoCAD drawing of the MOT Typical Construction Access Point Detail to the consultant.
2. There should be no reason to modify this MOT Typical Construction Access Point Detail.

MOT CROSSOVER DETAILS

1. OTIC will provide a sample AutoCAD drawing of the MOT Crossover Sheet to the consultant.
2. Modify the stationing, grading and trench drain to meet the requirements of the specific site.

MOT TEMPORARY PAVEMENT FOR RAMPS DETAILS

1. Provide grading details for temporary pavement necessary to facilitate phased construction of ramps.
2. The temporary pavement is typically constructed in the grass area behind the ramp nose.
3. Provide any temporary drainage which may be required.

MOT SIGNING DETAILS

1. Provide Sign CAD files for all custom MOT guide signs and nonstandard signs.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 2 PLAN SUBMITTAL CHECKLIST

SWPPP Title Sheet

1. Use OTIC provided and update project specific items.

SWPPP General Note Sheet

1. Use SWPPP general notes provided and update project specific items.

SWPPP Plan Sheets

1. Copy and use the Schematic Plan base drawing and sheet layout for the SWPPP sheets, 200 Scale.
2. Remove all unneeded text.
3. Add the Soil Type Map from USDS. <https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
4. Add Contours from the project or use ODOT Lidar data. <https://gis1.oit.ohio.gov/geodatadownload/>
5. Show all drainage features: Culverts, storm sewers, median drains, ditches and identify discharge points from ROW. Show all ditch and channel flow arrows.
6. Identify and show all drainage areas.
7. Show post Construction BMP locations which includes filter strips, Vegetated Biofilter Ditches, Detention Ponds or other ODOT BMPs. For filter strips, show rectangular boxes. Label the Filter Strip (FS-1, 2...), location (MP to MP), area in acres, steepest slope (3:1 or 4:1):
8. Generally, prepare SWPPP to match the ODOT sample plans.

General SWPPP Guidance

1. Provide SP 113 for all PR projects (OTIC PM to Provide in Special Provisions)
- 2.

Plan and Profiles – Mainline

PLAN VIEW

1. Address all Stage 1 comments.
2. Show all Proposed work and label as shown on the Sample Plans. Generally, the proposed balloons will identify the proposed work.
3. Utilize Balloons for proposed work: GR-# Guardrail, B-# Barrier wall, C-# Curb, UD-# Underdrain, DR-# Drainage, DC-# ditch cleanout, ER-# Erosion Repair, SF-# Slope Failure, CC-# Channel Cleanout, and F-# Fence.
4. Label guardrail: Beginning and ends with station “(+xx.xx)”, label end treatments, i.e. “MGS BTA TYPE (1 OR 2)”, “TYPE T” or “ANCHOR ASSEMBLY”, “MGS TYPE E (ET-31)” and radii.
5. Show Ditch clean out hatch with DC-# callout, and label “DITCH CLEANOUT (L’)”
6. Show erosion repair hatch with ER-# callout, and label “EROSION REPAIR APPROX. AREA (W’ X L’)”
7. Show channel cleanout hatch with CC-# callout, and label “Channel Cleanout (W’ X L’)”
8. Show slope failure hatch with SF-# callout, and label “SLOPE FAILURE APPROX. AREA (W’ X L’)”
9. Show concrete barrier with B-# callout, label “CONCRETE BARRIER, SINGLE SLOPE TYPE D, AS PER PLAN” and label the begin and end stationing.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 2 PLAN SUBMITTAL CHECKLIST

10. Show curb with C-# callout and label the begin and end stationing. Note: 19'-2" of Type 4_ Curb is required at every "MGS Bridge Terminal Assembly, Type 1" per ODOT Std. Drw – MGS -3.1.
11. Show fence with F-# callout, label "PROPOSED FENCE TYPE 47" or PROPOSED FENCE TYPE CLT (X)"
12. Show all proposed overhead gantries / cantilever signs and foundations. Label and provide the Proposed Sign Structure Number.

PROFILE

13. Show Proposed Outside Shoulder Catch Basins with their Data.
14. Show proposed drainage outlets and label station, offset and invert.
15. Show Proposed 30" underdrains and label the outlets: Underdrain Outlet, LT. or RT., Station, Invert of Outlet, 30" UD at EOP and 18" UD at EOS.

Plan and Profiles – Ramps

1. If necessary, provide a plan and profile to illustrate ramp geometry.
2. Follow the standards of the plan and profile sheets.

Cross Sections - Ramps

1. If cross sections were determined to be necessary at ramps, provide them with Stage 2.
2. Scale 1" = 10'
3. Three or four sections per sheet.
4. Provide flow arrows for ditches between sections and ditch elevations if applicable.
5. Label slopes.
6. Show and label all drainage and underdrain outlets.

Pavement Elevation Tables

1. Address all Stage 1 comments.

Pavement Details - Ramps

1. Two views of the same ramp per sheet is permissible. Scale to be 1" = 20'
2. Show all mainline stationing, ramp stationing, curve geometry bearings, lane widths, shoulder widths, taper points, etc.
3. Provide elevations along the ramp at 25' intervals along the EOP of the mainline lane, as well as EOP and shoulders of the ramp.
4. Where cross slopes vary or are different from normal, show them at 25' intervals throughout the ramp as well as the pavement gore.
5. Review existing gore areas for a swale that drains back to the grass area. These drainage swales are preferred to reduce water and snow melt crossing the ramp.

Culvert Repairs

1. Most culvert and channel repairs are generally shown on the Plan and Profile sheets.
2. Plans for culvert repairs will be provided on an as-need basis, depending on the type of repair required.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 2 PLAN SUBMITTAL CHECKLIST

3. Requirements will be determined when the repair is determined.

Underdrain Details

1. OTIC will provide an AutoCAD drawing of the Underdrain Details to the Consultant.
2. There generally should be no reason to modify this Underdrain Details Sheet.
3. Update the title block.

Traffic Control General Notes

1. Utilize the OTIC Standard Traffic Control General Notes. Modify as required.
2. Add additional General Notes as needed to Complete plans.
3. Any notes that need to be modified for a specific project, Italicize the entire note so the reviewer knows if the note has been modified or not. After the stage 3 review, all Italicized notes will be changed to normal text.

Traffic Control Typical Sections

1. OTIC will provide an AutoCAD drawing of the Traffic Control Typical Section Sheet to the Consultant.
2. There generally should be no reason to modify this Typical Section Sheet.

Traffic Control Legend

1. OTIC will provide an AutoCAD drawing of the Traffic Control Legend Sheet to the consultant.
2. There generally should be no reason to modify this Legend Sheet.

Traffic Control - Signing and Pavement Marking Plan

1. Copy and use the MOT base drawing and created sheets for the Signing and Pavement Marking Plan sheets, 50 Scale.
2. Provide a north arrow, scale, and mileposts and tenth mileposts on each sheet.
3. Detail signing, striping, and raised pavement markers and delineators.
4. If existing signs are to remain, label as "no work."

Traffic Control - Sign Elevation Views

1. A Sign Elevation Drawings is only required when new supports are proposed.
2. Provide elevation views of all proposed major overhead, cantilever, and beam support mounted signs.

Lighting General Notes

1. Sample general notes will be provided by OTIC.

Lighting Plans

1. Lighting plans are generally only necessary where acceleration and deceleration ramps need to be lengthened. Only that portion which is disturbed shall be replaced. Limits are typically the theoretical gore point for an acceleration lane and the end of the 100' taper for a deceleration lane.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 2 PLAN SUBMITTAL CHECKLIST

2. Prepare lighting plans in accordance with ODOT sample plans.

Approach Slab Plans

1. Follow the format as shown in the sample plans.
2. Provide one approach slab per sheet.
3. Provide elevations along the outside edges, edge lines and lane lines on both the forward and rear sides of the slab.
4. The intention is to provide a smooth transition from the proposed and existing third lane pavement to the existing abutment slab. In order to facilitate this, additional resurfacing of existing third lane pavement not being reconstructed may be necessary for minor profile adjustments.

Waste Site Plans

1. Waste sites are locations suitable for the disposal of all or a portion of existing pavement removed and excavation from the project, such as interchange infields, abandoned rest areas or other areas within OTIC right-of-way. The locations are within the project limits. Potential waste sites, if any, shall be identified by the consultant.
2. Existing drainage channels and patterns shall not be disturbed.
3. Waste site plans are aerial photographs and contour data from ODOT Lidar data.
<https://gis1.oit.ohio.gov/geodatadownload/> Scale is 1" =50'
4. Waste sites are represented by top and bottoms of embankments and slope lines. Height of waste embankments are generally limited to 25' above the surface of the adjacent OTIC roadway.
5. General notes will be provided by OTIC.

The Commission has assembled this checklist that can be used as an aid in the preparation of detailed construction plans for the Pavement Replacement Program. While this checklist was prepared based on current policy at the time of development, the Commission assumes no responsibility for any errors, mistakes or inaccuracies that may occur while using the information contained in the checklist or from a change in policy that may not be reflected in the checklist. This checklist is intended to be used only as a general guide, or reminder, to the designer, checker and reviewer and is not intended to be a replacement for the user's own professional judgment based on sound engineering principles.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT

STAGE 3 PLAN SUBMITTAL CHECKLIST

This checklist will aid in providing a consistent appearance of the Construction Documents, information provided, quantity calculations, and general design guidance between all designers. This checklist contains bullet items that should be included in the Stage 2 plan review submittal (if applicable). This “checklist” should be considered as a starting point for each Stage 3 plan review. Each Pavement Replacement Project will contain anomalies specific to that site and should be reviewed/analyzed accordingly.

TITLE SHEET

1. Address all Stage 1 comments.
2. Provide all Standard drawings required for the Project.
3. Update sheet index.

SCHEMATIC PLAN

1. Address all Stage 1 comments.

TYPICAL SECTIONS

1. Address all Stage 1 comments.
2. Remove unused labels descriptions and replace them with “Not Used”.

GENERAL NOTES

1. Utilize the OTIC Standard General Notes word document which will be provide by OTIC and modify as necessary.
2. Add additional General Notes as needed to complete plans.
3. Any notes that need to be modified for a specific project, Italicize the entire note so the reviewer knows if the note has been modified or not. After the stage 3 review, all Italicized notes will be changed to normal text.

MOT GENERAL NOTES

1. Address all Stage 1 comments.
2. Utilize the OTIC Standard MOT General Notes word document which will be provided by OTIC and modify as necessary.
3. Add additional General Notes as needed to complete plans.
4. Any notes that need to be modified for a specific project, Italicize the entire note so the reviewer knows if the note has been modified or not. After the stage 3 review, all Italicized notes will be changed to normal text.

MOT TYPICAL SECTIONS

1. Start with OTIC Standard MOT Typical Sections.
2. Modify the Construction Phasing.

MOT DETOUR PLANS (IF APPLICABLE)

1. Provide a map which illustrates the detour route as well as the placement of all additional ground mounted detour assign assemblies. Provide details for each sign assembly.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST

2. Provide a sheet with details of all existing truss mounted, cantilever and beam mounted guide signs as well as the overlays (such as "Exit Closed", or entire sign covered with an overlay) and detour sign assemblies to be added to existing guide signs.

MOT LEGEND

1. OTIC will provide an AutoCAD drawing of the MOT Legend Sheet to the consultant.
2. There generally should be no reason to modify this MOT Legend Sheet.

MOT PLANS

1. Address all Stage 1 comments.
2. Plan view is generally 1200 or 1300 feet per view. (Horizontal 1" = 50'). If possible, 2 views may be provided on one sheet.
3. Provide a north arrow, scale, and mileposts and tenth mileposts on each sheet.
4. Detail lead-in signing, zone signing, striping, drums, barricades, barriers, etc. for all pre-phases (construction of temporary pavement, crossovers, etc.), main construction phases, and winter shut down phases.
5. If existing signs are to remain, label as "no work."

MOT TYPICAL CONSTRUCTION ACCESS POINT DETAIL

1. OTIC will provide an AutoCAD drawing of the MOT Typical Construction Access Point Detail to the consultant.
2. There should be no reason to modify this MOT Typical Construction Access Point Detail.

MOT CROSSOVER DETAILS

1. OTIC will provide a sample AutoCAD drawing of the MOT Crossover Sheet to the consultant.
2. Modify the stationing, grading and trench drain to meet the requirements of the specific site.

MOT TEMPORARY PAVEMENT FOR RAMPS DETAILS

1. Provide grading details for temporary pavement necessary to facilitate phased construction of ramps.
2. The temporary pavement is typically constructed in the grass area behind the ramp nose.
3. Provide any temporary drainage which may be required.

MOT SIGNING DETAILS

1. Provide Sign CAD files for all custom MOT guide signs and nonstandard signs.

SWPPP Title Sheet

1. Use OTIC provided and update project specific items.

SWPPP General Note Sheet

1. Use SWPPP general notes provided and update project specific items.

SWPPP Plan Sheets

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST

1. Copy and use the Schematic Plan base drawing and sheet layout for the SWPPP sheets, 200 Scale.
2. Remove all unneeded text.
3. Add the Soil Type Map from USDS. <https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
4. Add Contours from the project or use ODOT Lidar data.
<https://gis1.oit.ohio.gov/geodatadownload/>
5. Show all drainage features: Culverts, storm sewers, median drains, ditches and identify discharge points from ROW. Show all ditch and channel flow arrows.
6. Identify and show all drainage areas.
7. Show post Construction BMP locations which includes filter strips, Vegetated Biofilter Ditches, Detention Ponds or other ODOT BMPs. For filter strips, show rectangular boxes. Label the Filter Strip (FS-1, 2...), location (MP to MP), area in acres, steepest slope (3:1 or 4:1):
8. Generally, prepare SWPPP to match the ODOT sample plans.

General SWPPP Guidance

1. Provide SP 113 for all PR projects (OTIC PM to Provide in Special Provisions)

Plan and Profiles – Mainline

PLAN VIEW

1. Address all Stage 1 comments.
2. Show all Proposed work and label as shown on the Sample Plans. Generally, the proposed balloons will identify the proposed work.
3. Utilize Balloons for proposed work: GR-# Guardrail, B-# Barrier wall, C-# Curb, UD-# Underdrain, DR-# Drainage, DC-# ditch cleanout, ER-# Erosion Repair, SF-# Slope Failure, CC-# Channel Cleanout, and F-# Fence.
4. Label guardrail: Beginning and ends with station “(+xx.xx)”, label end treatments, i.e. “MGS BTA TYPE (1 OR 2)”, “TYPE T” or “ANCHOR ASSEMBLY”, “MGS TYPE E (ET-31)” and radii.
5. Show Ditch clean out hatch with DC-# callout, and label “DITCH CLEANOUT (L’)”
6. Show erosion repair hatch with ER-# callout, and label “EROSION REPAIR APPROX. AREA (W’ X L’)”
7. Show channel cleanout hatch with CC-# callout, and label “Channel Cleanout (W’ X L’)”
8. Show slope failure hatch with SF-# callout, and label “SLOPE FAILURE APPROX. AREA (W’ X L’)”
9. Show concrete barrier with B-# callout, label “CONCRETE BARRIER, SINGLE SLOPE TYPE D, AS PER PLAN” and label the begin and end stationing.
10. Show curb with C-# callout and label the begin and end stationing. Note: 19’-2” of Type 4_ Curb is required at every “MGS Bridge Terminal Assembly, Type 1” per ODOT Std. Drw – MGS -3.1.
11. Show fence with F-# callout, label “PROPOSED FENCE TYPE 47” or PROPOSED FENCE TYPE CLT (X’)”
12. Show all proposed overhead gantries / cantilever signs and foundations. Label and provide the Proposed Sign Structure Number.

PROFILE

13. Show Proposed Outside Shoulder Catch Basins with their Data.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST

14. Show proposed drainage outlets and label station, offset and invert.
15. Show Proposed 30" underdrains and label the outlets: Underdrain Outlet, LT. or RT., Station, Invert of Outlet, 30" UD at EOP and 18" UD at EOS.

Plan and Profiles – Ramps

1. If necessary, provide a plan and profile to illustrate ramp geometry.
2. Follow the standards of the plan and profile sheets.

Cross Sections - Ramps

1. If cross sections were determined to be necessary at ramps, provide them with Stage 2.
2. Scale 1" = 10'
3. Three or four sections per sheet.
4. Provide flow arrows for ditches between sections and ditch elevations if applicable.
5. Label slopes.
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Pavement Elevation Tables

1. Address all Stage 1 comments.

Pavement Details - Ramps

1. Two views of the same ramp per sheet is permissible. Scale to be 1" = 20'
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3. Update the title block.

Traffic Control General Notes

1. Utilize the OTIC Standard Traffic Control General Notes. Modify as required.

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST

2. Add additional General Notes as needed to Complete plans.
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4. If existing signs are to remain, label as "no work."

Traffic Control - Sign Elevation Views

1. Provide elevation view of all major overhead, cantilever, and beam support mounted signs.
2. Provide

Lighting General Notes

1. Sample general notes will be provided by OTIC.

Lighting Plans

1. Lighting plans are generally only necessary where acceleration and deceleration ramps need to be lengthened. Only that portion which is disturbed shall be replaced. Limits are typically the theoretical gore point for an acceleration lane and the end of the 100' taper for a deceleration lane.
2. Prepare lighting plans in accordance with ODOT sample plans.

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1. Follow the format as shown in the sample plans.
2. Provide one approach slab per sheet.
3. Provide elevations along the outside edges, edge lines and lane lines on both the forward and rear sides of the slab.
4. The intention is to provide a smooth transition from the proposed and existing third lane pavement to the existing abutment slab. In order to facilitate this, additional resurfacing of

OTIC PAVEMENT REPLACEMENT (PR) PLAN DEVELOPMENT STAGE 3 PLAN SUBMITTAL CHECKLIST

existing third lane pavement not being reconstructed may be necessary for minor profile adjustments.

Waste Site Plans

1. Waste sites are locations suitable for the disposal of all or a portion of existing pavement removed and excavation from the project, such as interchange infields, abandoned rest areas or other areas within OTIC right-of-way. The locations are within the project limits. Potential waste sites, if any, shall be identified by the consultant.
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