# *LOR-90-10.76 PID 107714*
# *MAINTENANCE OF TRAFFIC ALTERNATIVES ANALYSIS (MOTAA)*

*Prepared for:*

*Ohio Department of Transportation*
*906 Clark Avenue*
*Ashland, Ohio 44805*

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# 1.0 INTRODUCTION

This Maintenance of Traffic Alternative Analysis (MOTAA) has been prepared at the request of the Ohio Department of Transportation (ODOT) District 3 as a part of the programmed widening and pavement replacement of Interstate Route (IR) 90, LOR-90-10.76 - PID 107714 located from State Route (SR) 611 in the City of Avon to the Turnpike Plaza in Elyria Township. The purpose of this MOTAA is to provide ODOT with information for use in determining the preferred means of maintaining traffic on IR 90 and affected ramps during construction. This MOTAA also identifies constraints for both MOT alternatives considered—part-width and crossover construction.

This MOTAA has been prepared per applicable guidelines set forward in the ODOT Traffic Engineering Manual (TEM), specifically laid out in Section 630-5.

# 2.0 BACKGROUND INFORMATION

The scope of this MOTAA was to compare two MOT alternatives.

Alternative 1 – Part-Width construction with two lanes maintained in each direction.
Alternative 2 – Crossover construction with two lanes maintained in each direction.

# 3.0 PERMITTED LANE CLOSURES

Permitted Lane Closure Schedules (PLCS) are used to indicate the hours when at least one (1) lane of traffic can be closed in a work zone without in-depth investigation. Permitted Lane Closures (PLC) vary throughout the work zone on IR-90 and SR-2.

IR-90 has three (3) different PLCS within the project limits: Turnpike to SR-2, SR-2 to SR-57, and SR-57 to SR-611. The span of IR-90 between the Ohio Turnpike Gate and SR-2 allows one (1) lane to be maintained year-round. From SR-2 to SR-57 and from SR-57 to SR-611 on IR-90, no lanes are permitted to be closed during peak hours, but overnight lane reductions are permitted.

SR-2 has one (1) PLCS within the project limits: from Oak Point Road to IR-90. During the week, no lane closures are permitted on SR-2. However, on weekends from 9AM to 2PM, lanes may be reduced to one (1) lane. Due to the limited pavement width on SR-2, only one (1) lane of traffic can be maintained in each direction. Temporary pavement is used in conjunction with portable concrete barrier in order to maintain two (2) eastbound lanes of traffic, and one (1) westbound lane of traffic.

Permitted Lane Closure Tables showing the aforementioned information can be found in **Appendix H**.

# 4.0 DESCRIPTION OF ALTERNATIVES

## 4.1 Introduction

Options to maintain traffic included Part-Width (Alternative 1) and Crossover (Alternative 2) Construction. Detours for SR-611, SR-254 and SR-57 exit and entrance ramps and the SR-2 to westbound IR-90 movement are described in more depth in Section 6.0. The closing of the westbound SR-2 to westbound IR-90 system interchange ramp in both alternatives will require MOTEC approval.

## 4.2 Alternative 1 - Part-Width Construction

Alternative 1 – Part-Width construction will maintain two lanes of traffic in each direction on IR-90 during the main phases of construction with westbound and eastbound ramp detours where necessary prior to the IR-90 and SR-2 split. Beyond the split, a singular lane of traffic can be maintained westbound on, and two lanes can be maintained eastbound via temporary pavement and splitting the lanes under the IR-90 underpass and the SR-2 westbound diverging lane. However, only maintaining one (1) lane westbound on SR-2 violates the PLCS as discussed in Section 3.0.

Advantages of Alternative 1 include easier design and does not include crossovers apart from the SR-2 eastbound lane split.

The primary disadvantage of part-width construction is the amount of temporary pavement required to maintain the required number of lanes during construction. The existing outside shoulder does not satisfy the requirements for constant traffic loading and will need to be replaced with temporary pavement prior to the mainline construction. In addition to the outside shoulder needing to be replaced with temporary pavement, additional temporary pavement is required on the inside shoulder and in some areas like SR-2 after the IR-90 split, in the median as well. Other disadvantages include difficulty constructing due to the number of MOT phases.

## 4.3 Alternative 2 - Crossover Construction

Alternative 2 – Crossover construction will maintain two lanes in each direction on IR-90 with westbound and eastbound ramp detours where necessary prior to the IR-90 and SR-2 split. Beyond the split, there are phases on SR-2 which can only maintain one (1) lane of traffic in the westbound direction and violate PLCS as discussed in Section 3.0.

Advantages of Alternative 2 include limited temporary pavement required during construction, more space for work to be performed, reduced number of phases for construction, easier and higher quality construction and the safest work zone for construction workers and the travelling public.
The primary disadvantage of crossover construction would be the construction and removal of crossovers during MOT phasing and the need to shift ramps at least once during construction phasing where they cross over the mainline.

# 5.0 SEQUENCE OF CONSTRUCTION

Both alternatives must be constructed across two and a half (2.5) years beginning in March of 2025 and ending in July of 2027. The existing roadway alignments will be maintained. Any ramp and gore work must maintain the ramps part-width with evening closures permissible.

Due to the length of the project (8 miles) it may be beneficial to break the project up into two phases to mitigate the potential for excessive delays or provide relief points. The first phase would start at SR-611 and end at SR-254, and the second phase would continue from SR-254 and end at Middle Ridge Road on SR-2 and the Turnpike Plaza on IR-90.

## 5.1 Alternative 1 – Part-Width Construction

Alternative 1 is comprised of two (2) to four (4) MOT Phases. East of the IR-90 and SR-2 split, the MOT scheme requires four (4) phases. On SR-2 west of the IR-90 and SR-2 split, the MOT scheme requires three (3) phases for bridge work, and four (4) phases for pavement work. On IR-90 west of the IR-90 and SR-2 split, the MOT scheme requires two (2) phases for pavement and bridge work.

Phase 1 – Due to the substandard pavement on the shoulder throughout the project length, the existing outside shoulder must be removed and replaced with temporary pavement that can withstand long-term traffic loading. The outside shoulder is 10’ wide for a majority of the corridor. Replacing the existing outside shoulder reduces the amount of temporary pavement used in the graded median. On SR-2 west of the IR-90 and SR-2 split, the eastbound lanes will have 13’ of additional temporary pavement placed adjacent to the outside shoulder to assist in maintaining two (2) lanes of traffic.

East of the IR-90 and SR-2 split on both eastbound and westbound lanes, there will be part-width ramp work and outside lane closures. Due to the PLCS, the outside lane closures and shoulder replacement will need to be done in the evening.

On IR-90 west of the SR-2 split, the westbound shoulder does not need to be replaced. Traffic will be reduced to one (1) 11’ lane in each direction with 4’ inside shoulders and 2’ outside shoulders. The existing pavement will be sawcut 2’ off the face of the portable barrier (PB). The exiting pavement inside of the PB will be removed and replaced with 17’ of permanent pavement.

Phase 2 – East of the IR-90 and SR-2 split, both eastbound and westbound directions will have two (2) lanes with reduced lane widths of 11’ and reduced shoulder widths of varying sizes. The existing pavement will be sawcut 2’ off the face of the placed portable barrier (PB). The existing pavement inside of the PB will be removed and replaced with 26’ of permanent pavement and 4’ of additional temporary pavement. Temporary grading for a singular ditch will be maintained during construction to allow for positive drainage away from the roadway.
On IR-90 west of the SR-2 split, westbound and eastbound traffic will follow the detours outlined in Sections 6.10 and 6.11. The remaining existing pavement will be removed and replaced in both directions. Additionally, the eastbound and westbound IR-90 bridge decks and railings over Murray Ridge Road will be removed and replaced.

On SR-2 west of the IR-90 split, westbound traffic will be reduced to a single 11’ lane and eastbound traffic will maintain two (2) 11’ lanes with 2’ shoulders on either side. Additionally, the two (2) lanes of eastbound traffic will be split ahead of the LOR-02-10.46 Bridge. One (1) lane will remain on the SR-2 eastbound pavement and one (1) will be crossed over to the SR-2 westbound pavement. Traffic will utilize the outside pavement and PB will be placed to the inside shoulders and existing pavement sawcut 2’ from the inside face of the PB. 19’ of existing pavement to the inside of the PB will be removed and replaced and an additional 11’ of temporary pavement will be placed along the permanent pavement in the eastbound direction. Existing and temporary grading will be maintained for positive drainage away from the roadway.

Reducing westbound SR-2 to one lane violates the PLCS (see **Appendix I**). Temporary pavement could be added to the inside shoulder or SR-2 to fit an additional lane. However, due to the lane reduction being less than a mile and the median only having 32’ of clearance, additional temporary pavement does not appear feasible.

Phase 3 – East of the IR-90 and SR-2 split, both directions of traffic will shift to the inside lanes upon completion of the inside permanent and temporary pavement. During this phase, reduced lane widths of 11’ and shoulders will continue to be maintained. The remaining existing pavement and temporary pavement placed in Phase 1 will be removed and replaced with 30’ of permanent pavement. The temporary ditch constructed in Phase 2 will continue to be maintained.

On IR-90 west of the SR-2 split, the westbound lanes will be re-opened and operating at their final condition with two (2) 12’ lanes, a 10’ outside shoulder and a 4’ inside shoulder.

On SR-2 west of the IR-90 split, eastbound and westbound traffic will be moved to the inside pavement constructed in Phase 2 and will continue to have a reduced lane width of 11’ and 2’ shoulders. The temporary pavement placed during Phase 1 will be removed and the remaining pavement in both directions will be removed and replaced with 17’ of permanent pavement. The eastbound lane split described in Phase 2 will continue to be utilized through the IR-90 and SR-2 split in this phase.

Phase 4 – During the last phase of construction, both eastbound and westbound directions east of the IR-90 and SR-2 split, will increase to three lanes, and return to a normal width of 12’. The outside shoulders will also be returned to normal width. Construction barrels will be placed in the inside shoulders 2’ off the edge of the inside lane in both directions to allow for removal of the remaining temporary pavement and for permanent grading to be performed in the median.

On SR-2 west of the IR-90 SR-2 split, both eastbound and westbound directions return to two lanes with a normal width of 12’. The outside shoulder westbound is 10’ and eastbound is 8’. The eastbound and westbound inside shoulders have a width of 4’. Construction barrels will be placed in the inside shoulders 2’ off the edge of the inside lane in both directions to allow for removal of the remaining temporary pavement and for permanent grading to be performed in the median.

## 5.2 Alternative 2 – Crossover Construction

Alternative 2 is comprised of two (2) to three (3) MOT Phases. However, due to SR-2 not being widened there is a phase prior to mainline construction which needs to be completed to replace the outside shoulder with temporary—similarly to Alternative 1. There are also seven (7) crossover locations across the span of the work zone. The crossover locations and descriptions of their uses can be found in **Appendix G**.

Pre-Phase 1 – On SR-2 west of the IR-90 split, in the eastbound direction the outside 8’ shoulder needs to be replaced with temporary pavement due to existing substandard pavement, an additional 13’ of temporary shoulder will be placed beyond the shoulder. Eastbound traffic will be reduced to one (1) 12’ lane and a construction barrel will be placed 2’ off the lane line. Due to the PLCS, the outside lane closure and shoulder replacement will need to be done in the evening.

Phase 1 – For both eastbound and westbound directions east of the IR-90 and SR-2 split, two lanes of traffic will be maintained with reduced lane widths of 11'. In the westbound direction, the existing outside shoulder width will be maintained. On the inside shoulder, portable barrier (PB) will be placed along the edge of shoulder to protect work occurring in the median within the clear zone. In the eastbound direction, the existing outside shoulder will also be maintained. PB will be placed 2' off the edge of the inside lane and existing pavement sawcut 2' off the inside face of the PB. Existing pavement will be removed and replaced with 18' of permanent pavement and 6' of temporary pavement. Temporary grading for a singular ditch will be maintained during construction to allow for positive drainage away from the roadway.

On IR-90 west of the SR-2 split, the westbound shoulder does not need to be replaced. Traffic will be reduced to one (1) 11' lane in each direction with 4' inside shoulders and 2' outside shoulders. The existing pavement will be sawcut 2' off the face of the portable barrier (PB). The exiting pavement outside of the PB will be removed and replaced with 17' of permanent pavement.

On SR-2 west of the IR-90 split, the both directions will maintain two (2) lanes of traffic reduced to 11' lanes. On the westbound inside shoulder, PB will be placed along the edge of shoulder to protect work occurring in the median. In the eastbound direction, PB will be placed to the inside of the lane and 19' of pavement will be removed and replaced.

Phase 2 – Upon completion of the widening of the pavement in the eastbound direction, westbound traffic will be crossed over to the eastbound pavement. Crossover points can be seen in **Appendix G**. All lanes of traffic will maintain widths of 11'. The median will be protected with construction barrels offset 2' from the edge of the inside shoulder.

East of the IR-90 and SR-2 split, two lanes of traffic in each direction will be maintained and the existing westbound pavement will be removed and replaced with 56' of permanent pavement with permanent grading will be performed where appropriate in the median. During this phase, there may be periodic ramp closures. However, for the majority of construction, ramps will be able to access all points via crossovers as outlined in **Appendix G**.

On IR-90 west of the SR-2 split, westbound and eastbound traffic will follow the detours outlined in Sections 6.10 and 6.11. The remaining 21' of pavement will be removed and replaced. Additionally, the IR-90 bridge decks and railing will be removed and replaced.

On SR-2 west of the IR-90 split, one (1) 11' lane will be maintained in the westbound direction and two (2) 11' lanes will be maintained in the eastbound direction. Additionally, the two (2) lanes of eastbound traffic will be split ahead of the LOR-02-10.46 Bridge. One (1) lane will remain on the SR-2 eastbound pavement and one (1) will be crossed over to the SR-2 westbound pavement. Similar to Alternative 1, the PLCS does not allow any lane closures on SR-2. Additional temporary pavement could be placed, but due to the lane reduction length spanning less than a mile and a reduced median, it does not seem feasible. 38' of westbound pavement will be completely removed and replaced.

Phase 3 – After completion of the permanent pavement in the westbound lanes, both directions of traffic will crossover to the new westbound pavement. All lanes of traffic will continue to maintain widths of 11'. The median will be protected with construction barrels placed along the inside of the edge of shoulder.

East of the IR-90 and SR-2 split, the existing pavement and temporary pavement in the eastbound direction will be removed and permanent pavement will be placed with a width of 38' to the outside of the permanent pavement previously placed in Phase 1 and any remaining permanent grading will be performed.

On IR-90 west of the SR-2 split, the westbound lanes will be re-opened and operating at their final condition with two (2) 12' lanes, a 10' outside shoulder and a 4' inside shoulder.

On SR-2 west of the IR-90 split, one (1) 11' lane with 2' shoulders can be maintained in each direction on the westbound pavement and one (1) 11' eastbound lane with minimum 2' shoulders can be maintained on the eastbound pavement. The eastbound lane split described in Phase 2 will continue to be utilized through the IR-90 and SR-2 split in this phase. As before in Phases 1 and 2, the westbound lane reduction violates the PLCS. 21' of temporary pavement and 5' of existing pavement will be removed and replaced with 17' of permanent pavement.

# 6.0 DETOURS

## 6.1 SR 611 Westbound Entrance Ramp

The SR-611 westbound entrance ramp will not have any pavement work during this project apart from where proposed work needs to tie into existing conditions. For both the part-width and crossover alternatives, if a closure is needed it shall be an overnight closure. While the SR-611 westbound entrance ramp is closed, the SR-254 westbound entrance ramp must remain open.

The proposed detour for the IR-90 westbound entrance ramp at SR-611 continues to follow SR-611 west until the SR-301 intersection. At the SR-301 intersection, the detour turns left and heads south on SR-301. The detour then continues south until it encounters the SR-254 intersection. At the SR-254 intersection, the detour turns right and heads west on SR-254. The detour route will turn left onto IR-90 westbound. This detour route is 4.5 miles and 9 minutes long.

## 6.2 SR 254 Eastbound Exit Ramp

The SR-254 eastbound exit ramp will have existing pavement removed and replaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days and take place during Phase 3. While the SR-254 eastbound exit ramp is closed, the SR-57 eastbound exit ramp must remain open.

The proposed detour for the IR-90 eastbound exit ramp at SR-254 will leave IR-90 at the eastbound SR-611 exit ramp. At the SR-611 exit, the detour will turn left and head north on SR-611. The detour then turns left onto IR-90 westbound from SR-611 and continues to the westbound SR-254 exit. This detour route is 6.8 miles and 8 minutes long.

## 6.3 SR 254 Eastbound Entrance Ramp

The SR-254 eastbound entrance ramp will have the existing pavement removed and replaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width alternative, this work would take place during Phase 3 and for the crossover alternative would take place during Phase 2.

The proposed detour for the IR-90 eastbound entrance ramp at SR-254 will continue to travel eastbound on SR-254 until the SR-611 intersection. At the SR-611 intersection, the detour turns left and heads north on SR-611. The detour then turns right on IR-90 eastbound. This detour is 4.5 miles and 8 minutes long.

## 6.4 SR 254 Westbound Exit Ramp

The SR-254 westbound exit ramp will have the existing pavement removed and replaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width alternative, this work would take place during Phase 3 and for the crossover alternative would take place during Phase 2. While the SR-254 westbound exit ramp is closed, the SR-611 westbound exit ramp must remain open.

The proposed detour for the IR-90 westbound exit ramp at SR-254 will leave IR-90 at the westbound SR-57 exit ramp. The detour will turn left onto SR-57 traveling south. The detour then turns left onto IR-90 eastbound. The detour will travel east on IR-90 until the SR-254 exit. This detour is 5.4 miles and 7 minutes long.

## 6.5 SR 254 Westbound Entrance Ramp

The SR-254 westbound entrance ramp will have the existing pavement removed and replaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width alternative, this work would take place during Phase 3 and for the crossover alternative would take place during Phase 2. While the SR-254 eastbound entrance ramp is closed, the SR-57 westbound entrance ramp must remain open.

The proposed detour for the IR-90 westbound entrance ramp at SR-254 will continue to travel westbound on SR-254 until the SR-57 intersection. At the SR-57 intersection, the detour turns left and heads south on SR-57 until arriving at the westbound SR-57 entrance ramp to IR-90. The detour will turn right on IR-90. This detour is 3.1 miles and 7 minutes long.

## 6.6 SR 57 Eastbound Exit Ramp

The asphalt portion of the SR-57 eastbound exit ramp will be resurfaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width and crossover alternatives, this work would take place during Phase 2. While the SR-57 eastbound exit ramp is closed, the SR-254 eastbound exit ramp must remain open.

The proposed detour for the IR-90 eastbound exit ramp at SR-57 will depart IR-90 at the eastbound SR-254 exit ramp. At the SR-254 intersection, the detour will turn left and head west on SR-254. The detour will turn left onto IR-90 westbound. The detour will head west on IR-90 until the SR-57 exit. This detour is 5.4 miles and 7 minutes long.

## 6.7 SR 57 Eastbound Entrance Ramp

The asphalt portion of the SR-57 eastbound entrance ramp will be resurfaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width alternative, this work would take place during Phase 2 and for the crossover alternative would take place during Phase 3. While the SR-57 eastbound entrance ramp is closed, the SR-254 eastbound entrance ramp must remain open.

The proposed detour for the IR-90 eastbound entrance ramp at SR-57 will follow SR-57 north until the SR-254 intersection. At the SR-254 intersection, the detour turns right and heads east on SR-254. The detour then continues east until it encounters the SR-254 eastbound entrance ramp to IR-90. The detour route will turn left onto IR-90 eastbound. This detour is 3.1 miles and 7 minutes long.

## 6.8 SR 57 Westbound Exit Ramp

The asphalt portion of the SR-57 westbound exit ramp will be resurfaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width and crossover alternatives, this work would take place during Phase 2. While the SR-57 westbound exit ramp is closed, the SR-254 westbound exit ramp must remain open.

The proposed detour for the IR-90 westbound exit ramp at SR-57 will continue on IR-90 beyond SR-57 and continue onto SR-2. The detour will depart SR-2 at the westbound SR-58 exit ramp. At the SR-58 exit, the detour will make a left and travel south on SR-58. The detour will then turn left onto SR-2 eastbound and continue onto IR-90 eastbound until the SR-57 exit. This detour is 10.3 miles and 10 minutes long.

## 6.9 SR 57 Westbound Entrance Ramp

The SR-57 westbound entrance ramp will have the existing asphalt pavement removed and replaced during this project. This work is expected to be performed utilizing a part-width construction method. For the part-width and crossover alternatives, if a short-term closure is needed it shall be a maximum of 14 days. For the part-width alternative, this work would take place during Phase 2 and for the crossover alternative would take place during Phase 3. While the SR-57 westbound entrance ramp is closed, the SR-254 westbound entrance ramp must remain open.

The proposed detour for the IR-90 westbound entrance ramp at SR-57 will follow SR-57 north until the SR-254 intersection. At the SR-254 intersection, the detour turns right and heads east on SR-254. The detour then continues east until it encounters the SR-254 westbound entrance ramp to IR-90. The detour route will turn right onto IR-90 westbound. This detour is 2.7 miles and 6 minutes long.

### 6.10 Westbound SR 2 to Westbound IR-90

The westbound SR-2 ramp to westbound IR-90 ramp will have the existing pavement removed and replaced during this project. This work is expected to be performed utilizing a 90-day closure. While this movement is closed, the SR-57 westbound exit ramp must remain open.

The proposed detour for SR-2 westbound to IR-90 westbound split will depart SR-2/IR-90 at the westbound SR-57 exit ramp. At the SR-57 intersection, the detour will turn left and head south on SR-57. The detour will continue south until it encounters the IR-80 entrance ramp. The detour route will turn right onto the IR-80 entrance ramp and enter IR-80 westbound. This detour is 4.6 miles and 7 minutes long.

### 6.11 Eastbound IR-80 to Eastbound IR-90

Eastbound IR-80/90 ramp to eastbound IR-90 will have the existing pavement removed and replaced during this project. This work is expected to be performed utilizing a 90-day closure. While this movement is closed, the SR-57 westbound exit ramp must remain open.

The proposed detour for IR-80/90 eastbound to IR-90 eastbound movement will continue east on the IR-80 until the SR-57 exit ramp. At the SR-57 intersection, the detour will turn right and head north on SR-57. The detour will continue north until it encounters the IR-90 entrance ramp. The detour route will turn right onto the IR-80 entrance ramp and enter IR-90 westbound. This detour is 4.6 miles and 7 minutes long.

## 7.0 COST COMPARISON

The cost differences between the part-width alternative and the crossover alternative are substantial. Part-width construction alternative will cost approximately $20,492,000 to construct and the crossover construction alternative will cost approximately $9,945,000. Many of the costs between the alternatives are the same or similar. However, the temporary pavement needed to construct the part-width alternative is the primary difference between the two costs. The temporary pavement cost for part-width construction is roughly $10.5 million, whereas the temporary pavement cost for the crossover alternative is only $2.9 million. There are other incurred costs with the crossover alternative such as additional pavement marking, impact attenuators, and lighting costs, but not enough to make a substantial dent in the temporary pavement needed for part-width construction. See **Appendix D** for the Cost Comparison Table.

# 8.0 ROAD USER COST WORKSHEETS

## 8.1 SR 611 Westbound Entrance Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **4,498** | **593** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **9** | **9** |
| **Duration of Closure (Days):** | **1** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 8 | 8 |
| Delay (Hours): | 0.133 | 0.133 |
| Delay Cost per Vehicle: | $3.42 | $9.24 |
| Delay Cost per Day: | $15,395.12 | $5,478.54 |
| Delay Cost for Closure Duration: | $15,395 | $5,479 |
| **Total Delay Cost for Closure Duration:** | **$20,874** | |
| **Average Delay Cost per Day:** | **$20,874** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 611 WB Entrance Ramp detour using WB SR 611 to SB SR 301 to WB SR 254. Diverted this route instead of SR 83 due to higher traffic volume at SR 83 and due to potential active construction zone along SR 83/SR 254. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.2 SR 254 Eastbound Exit Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **5,272** | **180** |
| **Time to Drive Normal Route (Min):** | **3** | **3** |
| **Time to Drive Detour Route (Min):** | **8** | **8** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 5 | 5 |
| Delay (Hours): | 0.083 | 0.083 |
| Delay Cost per Vehicle: | $2.14 | $5.77 |
| Delay Cost per Day: | $11,277.66 | $1,039.35 |
| Delay Cost for Closure Duration: | $157,887 | $14,551 |
| **Total Delay Cost for Closure Duration:** | **$172,438** | |
| **Average Delay Cost per Day:** | **$12,317** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 254 EB Exit Ramp detour using EB IR 90 to WB SR 611 to WB IR 90. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.3 SR 254 Eastbound Entrance Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **6,503** | **163** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **8** | **8** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 7 | 7 |
| Delay (Hours): | 0.117 | 0.117 |
| Delay Cost per Vehicle: | $2.99 | $8.08 |
| Delay Cost per Day: | $19,475.36 | $1,317.67 |
| Delay Cost for Closure Duration: | $272,655 | $18,447 |
| **Total Delay Cost for Closure Duration:** | **$291,102** | |
| **Average Delay Cost per Day:** | **$20,793** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 254 EB Entrance Ramp detour using SR 254 EB to SR 611 WB to IR 90 interchange at SR 611. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.4 SR 254 Westbound Exit Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **7,315** | **117** |
| **Time to Drive Normal Route (Min):** | **3** | **3** |
| **Time to Drive Detour Route (Min):** | **7** | **7** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 4 | 4 |
| Delay (Hours): | 0.067 | 0.067 |
| Delay Cost per Vehicle: | $1.71 | $4.62 |
| Delay Cost per Day: | $12,518.38 | $540.46 |
| Delay Cost for Closure Duration: | $175,257 | $7,566 |
| **Total Delay Cost for Closure Duration:** | **$182,824** | |
| **Average Delay Cost per Day:** | **$13,059** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 254 WB Exit Ramp detour using WB IR 90 to SB SR 57 to EB IR 90. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.5 SR 254 Westbound Entrance Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **4,479** | **135** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **7** | **7** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 6 | 6 |
| Delay (Hours): | 0.100 | 0.100 |
| Delay Cost per Vehicle: | $2.57 | $6.93 |
| Delay Cost per Day: | $11,497.57 | $935.42 |
| Delay Cost for Closure Duration: | $160,966 | $13,096 |
| **Total Delay Cost for Closure Duration:** | **$174,062** | |
| **Average Delay Cost per Day:** | **$12,433** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 254 WB Entrance Ramp detour using WB SR 254 to SB SR 57. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.6 SR 57 Eastbound Exit Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **9,131** | **509** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **7** | **7** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 6 | 6 |
| Delay (Hours): | 0.100 | 0.100 |
| Delay Cost per Vehicle: | $2.57 | $6.93 |
| Delay Cost per Day: | $23,439.23 | $3,526.87 |
| Delay Cost for Closure Duration: | $328,149 | $49,376 |
| **Total Delay Cost for Closure Duration:** | **$377,525** | |
| **Average Delay Cost per Day:** | **$26,966** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 57 EB Exit Ramp detour using EB IR 90 to WB SR 254 to WB IR 90. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.7 SR 57 Eastbound Entrance Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **6,545** | **373** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **7** | **7** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 6 | 6 |
| Delay (Hours): | 0.100 | 0.100 |
| Delay Cost per Vehicle: | $2.57 | $6.93 |
| Delay Cost per Day: | $16,800.98 | $2,584.52 |
| Delay Cost for Closure Duration: | $235,214 | $36,183 |
| **Total Delay Cost for Closure Duration:** | **$271,397** | |
| **Average Delay Cost per Day:** | **$19,386** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 57 EB Entrance Ramp detour using NB SR 57 to EB SR 254. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.8 SR 57 Westbound Exit Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **5,087** | **353** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **10** | **10** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 9 | 9 |
| Delay (Hours): | 0.150 | 0.150 |
| Delay Cost per Vehicle: | $3.85 | $10.39 |
| Delay Cost per Day: | $19,587.46 | $3,668.91 |
| Delay Cost for Closure Duration: | $274,224 | $51,365 |
| **Total Delay Cost for Closure Duration:** | **$325,589** | |
| **Average Delay Cost per Day:** | **$23,256** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| SR 57 WB Exit Ramp detour using WB SR 2 to SB SR 58 to EB SR 2. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.9 SR 57 Westbound Entrance Ramp

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **8,861** | **516** |
| **Time to Drive Normal Route (Min):** | **1** | **1** |
| **Time to Drive Detour Route (Min):** | **6** | **6** |
| **Duration of Closure (Days):** | **14** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 5 | 5 |
| Delay (Hours): | 0.083 | 0.083 |
| Delay Cost per Vehicle: | $2.14 | $5.77 |
| Delay Cost per Day: | $18,955.12 | $2,979.48 |
| Delay Cost for Closure Duration: | $265,372 | $41,713 |
| **Total Delay Cost for Closure Duration:** | **$307,084** | |
| **Average Delay Cost per Day:** | **$21,935** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)*: |
|---|
| SR 57 WB Entrance Ramp detour using NB SR 57 to EB SR 254. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.10 SR 2 Westbound to IR-90 Westbound

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | **107714** | |
| **County-Route-Section:** | **LOR-90-10.76** | |
| **User Input:** | | |
| **Construction Calendar Year:** | **2025** | |
| | **Car** | **B/C Truck** |
| **ADT of Detoured Section:** | **2,355** | **1,451** |
| **Time to Drive Normal Route (Min):** | **4** | **4** |
| **Time to Drive Detour Route (Min):** | **7** | **7** |
| **Duration of Closure (Days):** | **90** | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 3 | 3 |
| Delay (Hours): | 0.050 | 0.050 |
| Delay Cost per Vehicle: | $1.28 | $3.46 |
| Delay Cost per Day: | $3,022.64 | $5,027.00 |
| Delay Cost for Closure Duration: | $272,037 | $452,430 |
| **Total Delay Cost for Closure Duration:** | **$724,467** | |
| **Average Delay Cost per Day:** | **$8,050** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)*: |
|---|
| SR 2 WB to IR 90 WB detour using SB SR 57 to WB IR-80/90. Traffic from 2022 TIMS count. |

*Form Version Date: 2/9/2022*

## 8.11 IR-80/90 Eastbound to IR-90 Eastbound

| Work Zone User Cost Calculations | | |
|---|---|---|
| Detour (Using Actual Drive Time) | | |
| **Project ID:** | 107714 | |
| **County-Route-Section:** | LOR-90-10.76 | |
| **User Input:** | | |
| **Construction Calendar Year:** | 2025 | |
| | Car | B/C Truck |
| **ADT of Detoured Section:** | 4,478 | 2,740 |
| **Time to Drive Normal Route (Min):** | 5 | 5 |
| **Time to Drive Detour Route (Min):** | 7 | 7 |
| **Duration of Closure (Days):** | 90 | |
| **Calculated Values:** | | |
| User Cost per Vehicle per Hour: | $25.67 | $69.29 |
| Delay (Min): | 2 | 2 |
| Delay (Hours): | 0.033 | 0.033 |
| Delay Cost per Vehicle: | $0.86 | $2.31 |
| Delay Cost per Day: | $3,831.67 | $6,328.50 |
| Delay Cost for Closure Duration: | $344,850 | $569,565 |
| **Total Delay Cost for Closure Duration:** | **$914,415** | |
| **Average Delay Cost per Day:** | **$10,160** | |

| **Notes** *(description, detour route, project phase reference, etc, as applicable)* **:** |
|---|
| IR 80 EB to IR 90 EB detour using NB SR 57 to EB IR 90 |

*Form Version Date: 2/9/2022*

## 9.0 Summary

In summary, the following information was determined from this MOTAA:

- Part-width construction will require a great deal of temporary pavement in the median and outside shoulders to construct, which will severely impact costs.
- Part-width construction will require two (2) to four (4) phases to construct.
- Crossover construction will require two (2) to three (3) phases to construct.
- Crossover construction will require some additional pavement and lighting throughout the work zone.
- The Crossover alternative offers the safest work zone between the two alternatives.
- Both Crossover and Part-With alternatives require MOTEC approval for westbound lane closures on SR-2 and the westbound SR-2 to westbound IR-90 system interchange ramp.
- Both Crossover and Part-Width alternatives have similar PB requirements.

# Appendices

## Appendix A: Work Zone Constraints (Form 696-1a)

| Work Zone Constraints | | |
|---|---|---|
| **Constraint** | **Work Zone Alternatives** | |
| | **Part-Width** | **Crossover** |
| Ability to meet Work Zone Policy | **Impact: Medium**<br>Some lane closures (SR-2) violate PLCS due to a limited pavement width of 36'--MOTEC approval will be required. During Phase 1, nightly lane closures will need to occur to place temporary pavement. Additionally, the westbound SR-2 to westbound IR-90 system interchange ramp will be closed for a portion of construction and already has MOTEC approval. | **Impact: Medium**<br>Some lane closures (SR-2) violate PLCS due to limited pavement quantities--MOTEC approval will be required. Additionally, the westbound SR-2 to westbound IR-90 system interchange ramp will be closed for a portion of construction and construction already has MOTEC approval. |
| Ability to Maintain All Accesses | **Impact: Medium**<br>While ramps are open for a majority of construction phases, there are ramp closures throughout the work zone as listed in the Ramp Information Table. Due to these closures, detours are described in Section 6 and shown in **Appendix H**. Ramp closures will need to be sequenced such that there are not successive ramps closed at the same time to ensure efficient emergency vehicle access. | **Impact: Medium**<br>Apart from the westbound SR-2 to IR-90 and eastbound IR-80/90 system interchange ramps, all ramps will remain open throughout all phases of construction via crossovers. However, in order to construct mainline pavement where ramp crosses, ramps will need to be shifted at least once. Any service ramp work that needs to be performed will be done within the allowed closure window in the Ramp Information Table or via part-width construction to maintain access. |
| Ability to Provide Required On-Ramp Merge Decision Sight Distance | **Impact: Medium**<br>Ramp widths will be reduced to ensure there is enough horizontal clearance on the mainline for two (2) lanes to be maintained. Given the design of the ramps and MOT standards, Decision Sight Distance may not be sufficient in the all work zones per SCD MT-98 Series. | **Impact: Low**<br>Ramp widths will be reduced to ensure there is enough horizontal clearance on the mainline for two (2) lanes to be maintained. Given the design of the ramps and MOT standards, Decision Sight Distance will be sufficient in the work zones. Additionally, in phases where traffic is on the opposite side of the ramp and must utilize a crossover, Decision Sight Distance will be sufficient. |
| Right-of-Way Impacts | **Impact: None**<br>No Right-of-Way impacts are expected on this project | **Impact: None**<br>No Right-of-Way impacts are expected on this project |
| Environmental Impacts | **Impact: None**<br>No environmental impacts are expected on this project | **Impact: None**<br>No environmental impacts are expected on this project |
| Bridge Widths | **Impact: None**<br>Bridge widths will not be impacted by this project | **Impact: None**<br>Bridge widths will not be impacted by this project |
| Significant Impacts for Construction Duration and/or Construction Costs | **Impact: High**<br>High quantities of temporary pavement add extra phases and significant costs to this alternative. Temporary pavement alone adds millions of dollars to the cost. Due to the amount of temporary pavement being placed and removed, there is a significant amount of time being spent in early phasing that may cause delays on mainline permanent pavement placement. | **Impact: Low**<br>Work zone requires a total of 7 crossovers adding almost $350,000 to the cost of the project in addition to extra impact attenuators. However, the crossovers should not add additional time to the construction timeline. |

## Appendix A: Work Zone Constraints (Form 696-1a) (Cont'd)

| | | |
|---|---|---|
| Significant impacts to earthwork, retaining walls, shoulder buildup, pier clearances, profile differences, etc. | **Impact: Medium**<br>Due to the nature of this project and adding an additional lane to the inside, the existing mounded median with two ditches is no longer feasible and will need to be replaced with new median grading and a singular ditch | **Impact: Medium**<br>Due to the nature of this project and adding an additional lane to the inside, the existing mounded median with two ditches is no longer feasible and will need to be replaced with new median grading and a singular ditch |
| Ability to Maintain Existing Drainage and Lighting Systems | **Impact: Medium**<br>Existing lighting systems should not be impacted by this project. Existing drainage systems will be modified from two (2) ditches to a singular ditch in the median | **Impact: Medium**<br>Existing lighting systems should not be impacted by this project. However, in the areas where crossovers occur, temporary lighting will be placed. Existing drainage systems will be modified from two (2) ditches to a singular ditch in the median |
| Constructability; and Construction Equipment Access | **Impact: Medium**<br>Due to the amount of temporary pavement required, constructability for this alternative is a bit more difficult. Additionally, equipment is restricted to the median only and outside shoulders only at any given time. Because of this, if equipment needs to be moved from one side to another it could be more difficult or require extra equipment on site. | **Impact: Low**<br>Crossover construction prior to construction may be challenging. However, due to having unrestricted access on one side of the roadway at any time, crossover construction allows more flexibility and ease of access for construction equipment and more seamless construction. |
| Location of Crossovers (e.g., Can crossovers be located near the project?) | **Impact: None**<br>Part-width construction does not require crossovers | **Impact: Medium**<br>There are seven (7) crossovers suggested for this project. **Appendix G** contains a crossover location map |
| What are the Access Impacts to Important Traffic Generators such as Hospitals, Fire Departments, Industries, Sports Arenas, etc. | **Impact: Medium**<br>All major hospitals are to the east of the project and would be minimally impacted by ramp closures. Lorain County Community College would be impacted by SR-254 ramp closures. There is a fire department and Elyria Hospital located off of SR-57 which would be impacted by ramp closures. The Lake Erie Crushers' Stadium is located off of SR-611 and would be minimally impacted by ramp closures | **Impact: Medium**<br>All major hospitals are to the east of the project and would be minimally impacted by ramp closures. Lorain County Community College would be impacted by SR-254 ramp closures. There is a fire department and Elyria Hospital located off of SR-57 which would be impacted by ramp closures. The Lake Erie Crushers' Stadium is located off of SR-611 and would be minimally impacted by ramp closures |
| For Concrete Pavements, the Longitudinal Joints must be Located at the Lane Lines. | **Impact: None**<br>Not applicable to this project | **Impact: None**<br>Not applicable to this project |
| Exit Ramps - Can the existing number of ramp lanes be maintained? | **Impact: None**<br>When ramps are under construction, part-width access must be maintained at all times to maintain one (1) lane, plus turn lanes at ramp termini where feasible. | **Impact: None**<br>When ramps are under construction, part-width access must be maintained at all times to maintain one (1) lane, plus turn lanes at ramp termini where feasible. |

* All constraints that require any additions need to have a cost estimate associated with the alternative.

## Appendix B: Bridge Information (Form 696-2a)

| Description | | | | | | | | Part-Width Construction | | | Crossover Construction | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRIDGE NAME | STATION (APPROX.) | EXTENT OF WORK | TYPE OF BRIDGE | LENGTH OF BRIDGE (FT) | EXISTING PIER SPACING | EXISTING BRIDGE WIDTH (FT) | FUTURE BRIDGE WIDTH (FT) | WIDTH NEEDED FOR PART-WIDTH (FT) | COST OF 32" PCB BRIDGE MOUNTED | COST OF ADDITIONAL BRIDGE WIDENING | WIDTH NEEDED FOR CROSSOVER (FT) | COST OF 32" PCB BRIDGE MOUNTED | COST OF ADDITIONAL BRIDGE WIDENING |
| French Creek (L) | 967+00 | Deck Sealing | Overpass | 105 | 32-40-32 | 87.65' - 89.90' | 87.65' - 89.90' | 87.65' - 89.90' | $5,670 | N/A | 87.65' - 89.90' | $5,670 | N/A |
| French Creek (R) | 967+00 | Deck Sealing | Overpass | 105 | 32-40-32 | 72.58' - 76.21' | 72.58' - 76.21' | 72.58' - 76.21' | $2,835 | N/A | 72.58' - 76.21' | $2,835 | N/A |
| NS Railroad (L) | 928+00 | N/A | Overpass | 160.75 | 48-66.75-48 | 60' | 60' | 60' | $8,681 | N/A | 60' | $8,681 | N/A |
| NS Railroad (R) | 928+00 | N/A | Overpass | 173.8 | 50.5-69.25-50.5 | 60' | 60' | 60' | $9,385 | N/A | 60' | $9,385 | N/A |
| Ford Road (L) | 746+50 | Deck Sealing & Rail Repair | Overpass | 151.5 | 43.75-64-43.75 | 62' | 62' | 62' | $8,181 | N/A | 62' | $8,181 | N/A |
| Ford Road (R) | 746+50 | Deck Sealing & Rail Repair | Overpass | 179 | 52.5-73.5-53 | 62' | 62' | 62' | $9,666 | N/A | 62' | $9,666 | N/A |
| Black River (L) | 737+50 | Deck Sealing & Rail Repair | Overpass | 363 | 122.17-140-101.17 | 64' | 64' | 64' | $19,602 | N/A | 64' | $19,602 | N/A |
| Black River (R) | 737+50 | Deck Sealing & Rail Repair | Overpass | 363 | 122.17-140-101.17 | 64' | 64' | 64' | $19,602 | N/A | 64' | $19,602 | N/A |
| West River Road (L) | 700+00 | Deck Sealing | Overpass | 98 | 93.5 | 68' | 68' | 68' | $5,292 | N/A | 68' | $5,292 | N/A |
| West River Road (R) | 700+00 | Deck Sealing | Overpass | 98.1 | 93.5 | 68' | 68' | 68' | $5,297 | N/A | 68' | $5,297 | N/A |
| SR-57 (L) | 682+00 | Deck Sealing | Overpass | 182 | 88.5-88.5 | 60' | 60' | 60' | $9,828 | N/A | 60' | $9,828 | N/A |
| SR-57 (R) | 682+00 | Deck Sealing | Overpass | 182 | 88.5-88.5 | 60' | 60' | 60' | $9,828 | N/A | 60' | $9,828 | N/A |
| CSX Railroad (L) | 619+50 | Deck Sealing & Rail Repair | Overpass | 145 | 43-57-43 | 60' | 60' | 60' | $7,830 | N/A | 60' | $7,830 | N/A |
| CSX Railroad (R) | 619+50 | Deck Sealing & Rail Repair | Overpass | 145 | 43-57-43 | 60' | 60' | 60' | $7,830 | N/A | 60' | $7,830 | N/A |
| Lake Avenue (L) | 613+25 | Deck Sealing & Rail Repair | Overpass | 166.6 | 48-68.5-48 | 60' | 60' | 60' | $8,996 | N/A | 60' | $8,996 | N/A |
| Lake Avenue (R) | 613+25 | Deck Sealing & Rail Repair | Overpass | 163 | 47-67-47 | 60' | 60' | 60' | $8,802 | N/A | 60' | $8,802 | N/A |
| SR-2 | 577+50 | N/A | Overpass | 227 | 60.47-93-64.96 | 41' | 41' | 41' | $6,129 | N/A | 41' | $6,129 | N/A |
| Murray Ridge Road (L) | 565+85 | Deck Replacement | Overpass | 129 | 35.5-51-40.5 | 42' | 42' | 42' | $3,483 | N/A | 42' | $3,483 | N/A |
| Murray Ridge Road (R) | 565+60 | Deck Replacement | Overpass | 122 | 35-50-35 | 42' | 42' | 42' | $3,294 | N/A | 42' | $3,294 | N/A |
| Murray Ridge Road (L) (SR 2) | 564+30 | N/A | Overpass | 166.8 | 49-68.5-49 | 50' | 50' | 50' | $18,014 | N/A | 50' | $18,014 | N/A |
| Murray Ridge Road (R) (SR 2) | 564+50 | N/A | Overpass | 170.4 | 49-68.5-49 | 50' | 50' | 50' | $9,202 | N/A | 50' | $9,202 | N/A |
| LOR-02-10.46 (L) | 552+50 | N/A | Overpass | 178.4 | 54-68-54 | 50' | 50' | 50' | $19,267 | N/A | 50' | $19,267 | N/A |
| LOR-02-10.46 (R) | 552+50 | N/A | Overpass | 178.4 | 54-68-54 | 40' | 40' | 40' | $9,634 | N/A | 40' | $9,634 | N/A |
| | | | | | | | | Total PCB Costs | $216,348 | | Total PCB Costs | $216,348 | |

## Appendix C: Ramp Information (Form 696-3a)

| RAMP DESIGNATION | NUMBER OF LANES | RAMP VOLUME (% TRUCKS) | RAMP CLOSURE | | | | | | | | | | | | | | DETOUR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | PART-WIDTH | | | | | | | | CROSSOVER | | | | | | |
| | | | PHASE 1 | | PHASE 2 | | PHASE 3 | | PHASE 4 | | PHASE 1 | | PHASE 2 | | PHASE 3 | | |
| | | | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | DURATION OF CLOSURE | DECISION SIGHT DISTANCE (FT) | |
| IR-90 WB Entrance Ramp from SR 611 | 1 | 5091 (12%) | Overnight | 1220' | Overnight | 1220' | Overnight | 1220' | Overnight | 1220' | Overnight | 1220' | Overnight | 1220' | Overnight | 1220' | WB SR 611 to SB SR 301 to WB SR 254 |
| IR-90 EB Exit Ramp to SR 254 | 1 | 5452 (3%) | N/A | 800' | N/A | 800' | 14 | 800' | N/A | 800' | N/A | 800' | N/A | 800' | 14 | 800' | EB IR 90 to WB SR 611 to WB IR 90 |
| IR-90 EB Entrance Ramp from SR 254 | 1 | 6666 (2%) | N/A | 1220' | N/A | 1220' | 14 | 1220' | N/A | 1220' | N/A | 1220' | 14 | 1220' | N/A | 1220' | EB SR 254 to WB SR 611 to EB IR 90 |
| IR-90 WB Exit Ramp to SR 254 | 1 | 7431 (2%) | N/A | 800' | N/A | 800' | 14 | 800' | N/A | 800' | N/A | 800' | 14 | 800' | N/A | 800' | WB IR 90 to SB SR 57 to EB IR 90 |
| IR-90 WB Entrance Ramp from SR 254 | 1 | 4614 (3%) | N/A | 1220' | N/A | 1220' | 14 | 1220' | N/A | 1220' | N/A | 1220' | 14 | 1220' | N/A | 1220' | WB SR 254 to SB SR 57 |
| IR-90 EB Exit Ramp to SR 57 | 1 | 9640 (5%) | N/A | 800' | 14 | 800' | N/A | 800' | N/A | 800' | N/A | 800' | 14 | 800' | N/A | 800' | EB IR 90 to WB SR 254 to WB IR 90 |
| IR-90 EB Entrance Ramp from SR 57 | 1 | 6918 (5%) | N/A | 1220' | 14 | 1220' | N/A | 1220' | N/A | 1220' | N/A | 1220' | N/A | 1220' | 14 | 1220' | NB SR 57 to EB SR 254 |
| IR-90 WB Exit Ramp to SR 57 | 1 | 5440 (6%) | N/A | 800' | 14 | 800' | N/A | 800' | N/A | 800' | N/A | 800' | 14 | 800' | N/A | 800' | WB SR 2 to SB SR 58 to EB SR 2 |
| IR-90 WB Entrance ramp from SR 57 | 1 | 9337 (6%) | N/A | 1220' | 14 | 1220' | N/A | 1220' | N/A | 1220' | N/A | 1220' | N/A | 1220' | 14 | 1220' | NB SR 57 to EB SR 254 |

## Appendix D: Cost Comparison Table (Form 696-4a)

| Part-Width Construction | | | | |
|---|---|---|---|---|
| **Item** | **Quantity** | **Unit** | **Unit Price** | **Total** |
| Work Zone Traffic Signals | 1 | Each | $20,000.00 | $20,000.00 |
| Work Zone Lane Line, Class I, 6", 642 Paint | 30.45 | Mile | $760.00 | $23,145.45 |
| **Mainline IR-90** | **27.27** | **Mile** | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 13.64 | Mile | | |
| Phase 3 | 13.64 | Mile | | |
| Phase 4 | 0.00 | Mile | | |
| **SR-2 after IR-90 Split** | **2.42** | **Mile** | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 1.21 | Mile | | |
| Phase 3 | 1.21 | Mile | | |
| Phase 4 | 0.00 | Mile | | |
| **IR-90 after SR-2 Split** | **0.00** | **Mile** | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 0.00 | Mile | | |
| Phase 3 | 0.00 | Mile | | |
| Phase 4 | 0.00 | Mile | | |
| **Crossover Lane Lines** | **0.76** | **Mile** | | |
| Work Zone Edge Line, Class I, 6", 642 Paint | 68.22 | Mile | $1,500.00 | $102,329.55 |
| **Mainline IR-90** | **54.55** | **Mile** | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 27.27 | Mile | | |
| Phase 3 | 27.27 | Mile | | |
| Phase 4 | 0.00 | Mile | | |
| **SR-2 after IR-90 Split** | **9.70** | **Mile** | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 4.85 | Mile | | |
| Phase 3 | 4.85 | Mile | | |
| Phase 4 | 0.00 | Mile | | |
| **IR-90 after SR-2 Split** | **2.46** | **Mile** | | |
| Phase 1 | 2.46 | Mile | | |
| Phase 2 | 0.00 | Mile | | |
| Phase 3 | 0.00 | Mile | | |
| Phase 4 | 1.00 | Mile | | |
| **Crossover Edge Lines** | **1.52** | **Mile** | | |
| Crossover with Lighting | 2 | Each | $46,000.00 | $92,000.00 |
| Law Enforcement Officer with Patrol Car for Assistance | 112 | Hour | $80.00 | $8,960.00 |
| Temporary Pavement | 45,859 | Cu Yd | $230.00 | $10,547,570.00 |
| **Mainline IR-90** | **35,296** | **Cu Yd** | | |
| **IR-90 after SR-2 Split** | **0** | **Cu Yd** | | |
| **SR-2 after IR-90 Split** | **10,267** | **Cu Yd** | | |
| **Pavement already widened** | **296** | **Cu Yd** | | |
| **Crossover** | **296** | **Cu Yd** | | |
| Portable Barrier, Unanchored | 189,451 | Feet | $15.00 | $2,841,757.50 |
| **Mainline IR-90** | **144,000** | **Feet** | | |
| Phase 1 | 0 | Feet | | |
| Phase 2 | 72,000 | Feet | | |
| Phase 3 | 72,000 | Feet | | |
| Phase 4 | 0 | | | |
| **SR-2 after IR-90 Split** | **32,000** | **Feet** | | |
| Phase 1 | 0 | Feet | | |
| Phase 2 | 12,800 | Feet | | |
| Phase 3 | 19,200 | Feet | | |
| Phase 4 | 0 | Feet | | |
| **IR-90 after SR-2 Split** | **13,000** | **Feet** | | |
| Phase 1 | 13,000 | Feet | | |
| Phase 2 | 0 | Feet | | |
| Phase 3 | 0 | Feet | | |
| Phase 4 | 1 | Feet | | |
| **Crossover** | **8,000** | **Feet** | | |
| Portable Barrier, Anchored | 7,550 | Feet | $27.00 | $203,836.50 |
| Phase 1 | 0 | Feet | | |
| Phase 2 | 3,597 | Feet | | |
| Phase 3 | 3,953 | Feet | | |
| Phase 4 | 0 | Feet | | |
| Work Zone Impact Attenuator | 10 | Each | $2,300.00 | $23,000.00 |
| | | | Subtotal | $13,863,000 |
| | | | 30% Contingency | $4,159,000 |
| | | | Subtotal | $18,022,000 |
| | | | 13.70% Inflation for 2025-2027 construction | $2,470,000 |
| | | | Total | $20,492,000 |
| | | | Construction Duration | 28 Months |

| Cross Over Construction | | | | |
|---|---|---|---|---|
| **Item** | **Quantity** | **Unit** | **Unit Price** | **Total** |
| Work Zone Traffic Signals | 1 | Each | $20,000.00 | $20,000.00 |
| Work Zone Lane Line, Class I, 6", 642 Paint | 31.14 | Mile | $760.00 | $23,663.64 |
| **Mainline IR-90** | 27.27 | Mile | | |
| Phase 1 | 6.82 | Mile | | |
| Phase 2 | 6.82 | Mile | | |
| Phase 3 | 13.64 | Mile | | |
| **SR-2 after IR-90 Split** | 1.21 | Mile | | |
| Phase 1 | 1.21 | Mile | | |
| Phase 2 | 0.00 | Mile | | |
| Phase 3 | 0.00 | Mile | | |
| **IR-90 after SR-2 Split** | 0.00 | Mile | | |
| Phase 1 | 0.00 | Mile | | |
| Phase 2 | 0.00 | Mile | | |
| Phase 3 | 0.00 | Mile | | |
| **Crossover Lane Lines** | 2.65 | Mile | | |
| Work Zone Edge Line, Class I, 6", 642 Paint | 72.92 | Mile | $1,500.00 | $109,375.00 |
| **Mainline IR-90** | 47.73 | Mile | | |
| Phase 1 | 6.82 | Mile | | |
| Phase 2 | 13.64 | Mile | | |
| Phase 3 | 27.27 | Mile | | |
| **SR-2 after IR-90 Split** | 12.12 | Mile | | |
| Phase 1 | 2.42 | Mile | | |
| Phase 2 | 2.42 | Mile | | |
| Phase 3 | 7.27 | Mile | | |
| **IR-90 after SR-2 Split** | 2.46 | Mile | | |
| Phase 1 | 2.46 | Mile | | |
| Phase 2 | 0.00 | Mile | | |
| Phase 3 | 0.00 | Mile | | |
| **Crossover Edge Lines** | 10.61 | Mile | | |
| Crossover with Lighting | 7 | Each | $46,000.00 | $322,000.00 |
| Law Enforcement Officer with Patrol Car for Assistance | 108 | Hour | $80.00 | $8,640.00 |
| Temporary Pavement | 12,465 | Cu Yd | $230.00 | $2,866,881.85 |
| **Mainline IR-90** | 7,331 | Cu Yd | | |
| **IR-90 after SR-2 Split** | 0 | Cu Yd | | |
| **SR-2 after IR-90 Split** | 5,134 | Cu Yd | | |
| **Pavement already widened** | 296 | Cu Yd | | |
| **Crossover** | 1,037 | Cu Yd | | |
| Portable Barrier, Unanchored | 210,156 | Feet | $15.00 | $3,152,332.50 |
| **Mainline IR-90** | 144,000 | Feet | | |
| Phase 1 | 72,000 | Feet | | |
| Phase 2 | 36,000 | Feet | | |
| Phase 3 | 36,000 | Feet | | |
| **SR-2 after IR-90 Split** | 32,000 | Feet | | |
| Phase 1 | 12,800 | Feet | | |
| Phase 2 | 6,400 | Feet | | |
| Phase 3 | 12,800 | Feet | | |
| **IR-90 after SR-2 Split** | 13,000 | Feet | | |
| Phase 1 | 13,000 | Feet | | |
| Phase 2 | 0 | Feet | | |
| Phase 3 | 0 | Feet | | |
| **Crossover** | 28,000 | Feet | | |
| Portable Barrier, Anchored | 6,845 | Feet | $27.00 | $184,801.50 |
| Phase 1 | 3,370 | Feet | | |
| Phase 2 | 1,758 | Feet | | |
| Phase 3 | 1,717 | Feet | | |
| Work Zone Impact Attenuator | 17 | Each | $2,300.00 | $39,100.00 |
| | | | Subtotal | $6,727,000 |
| | | | 30% Contingency | $2,019,000 |
| | | | Subtotal | $8,746,000 |
| | | | 13.70% Inflation for 2025-2027 construction | $1,199,000 |
| | | | Total | $9,945,000 |
| | | | Construction Duration | 26 Months |

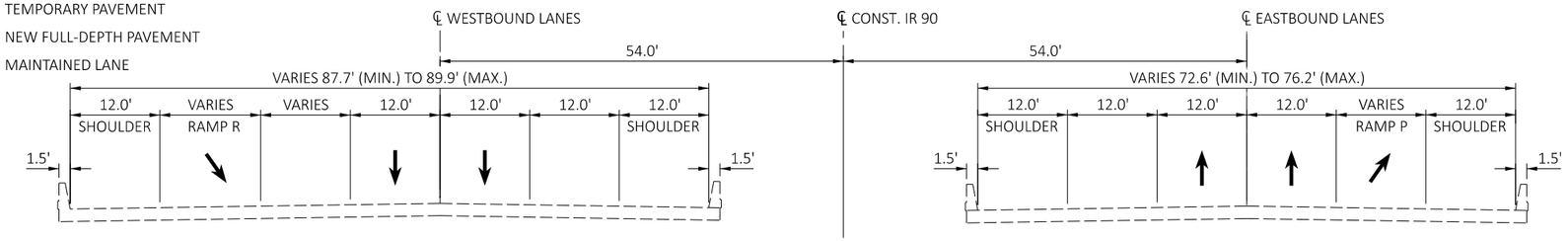
# Appendix E: Part-Width MOT Typical Sections

LEGEND

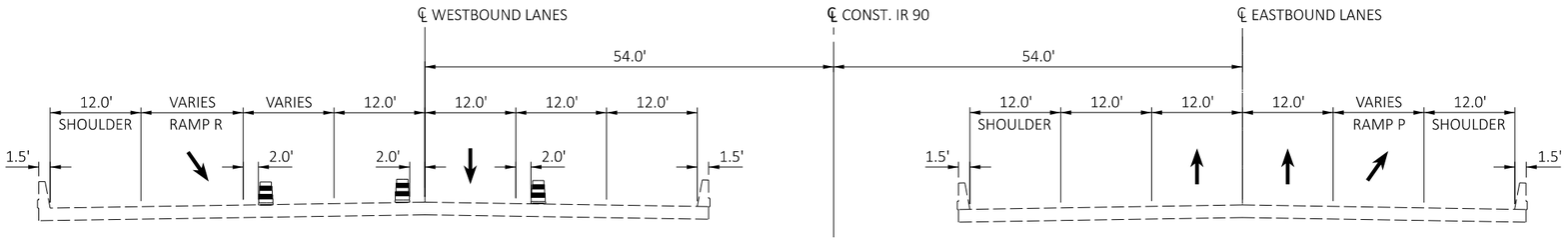
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

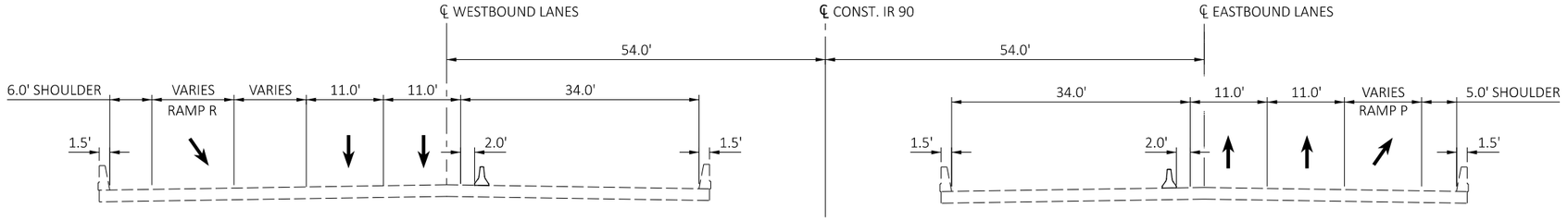
MAINTAINED LANE



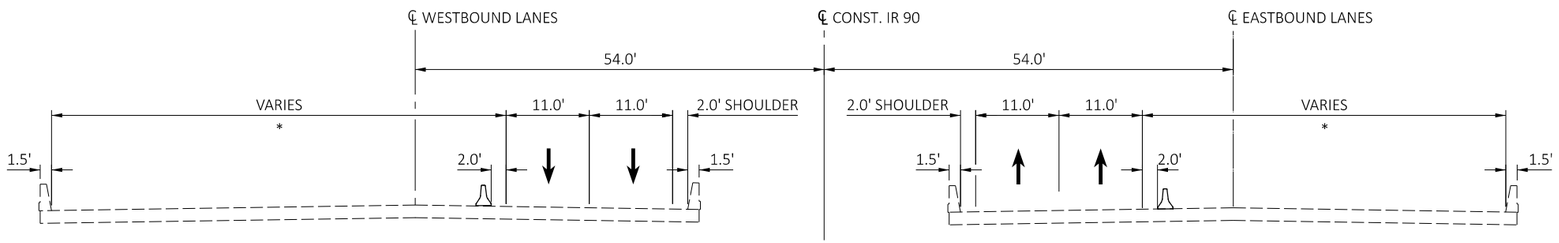

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER FRENCH CREEK




MOT PHASE 1 - IR 90 - EVENING CLOSURE - IR 90 - BRIDGE OVER FRENCH CREEK
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



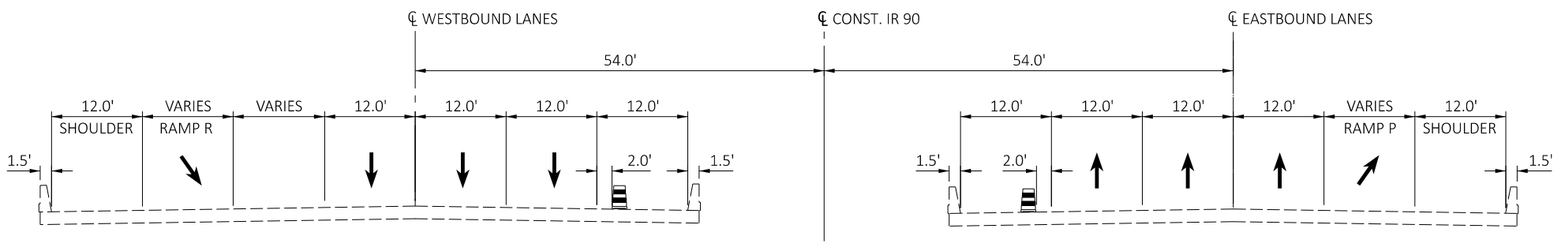

MOT PHASE 2 - IR 90 - BRIDGE OVER FRENCH CREEK
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,
AND TEMPORARY GRADING



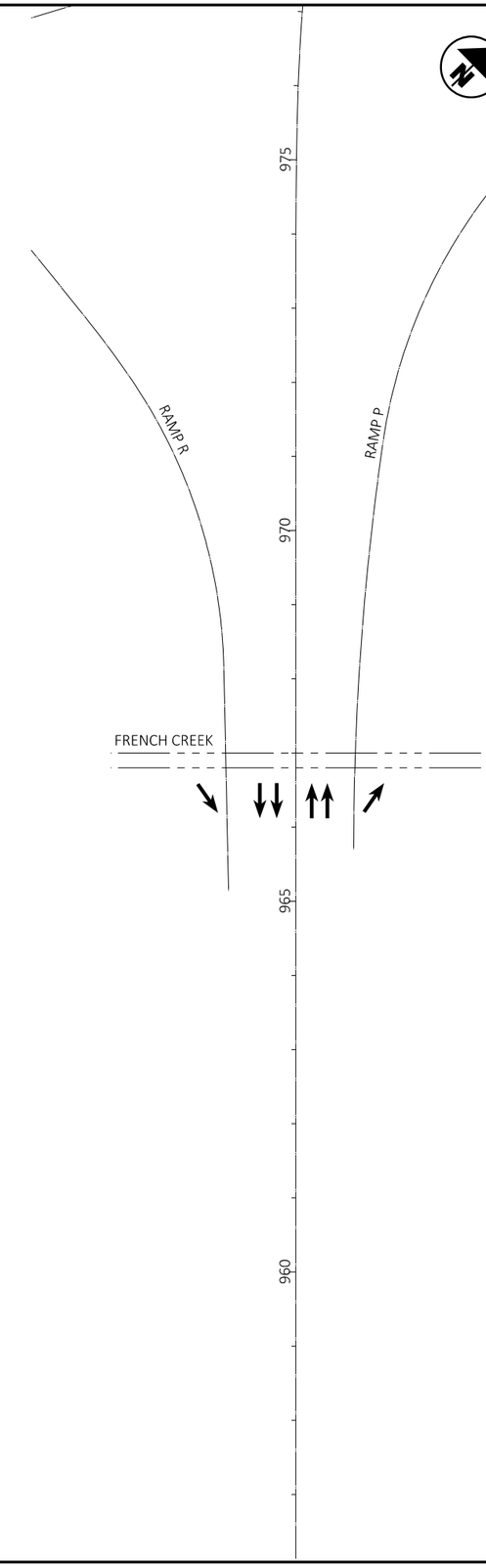

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.

MOT PHASE 3 - IR 90 - BRIDGE OVER FRENCH CREEK
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.




MOT PHASE 4 - IR 90 - BRIDGE OVER FRENCH CREEK
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER FRENCH CREEK

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:22 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY001.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

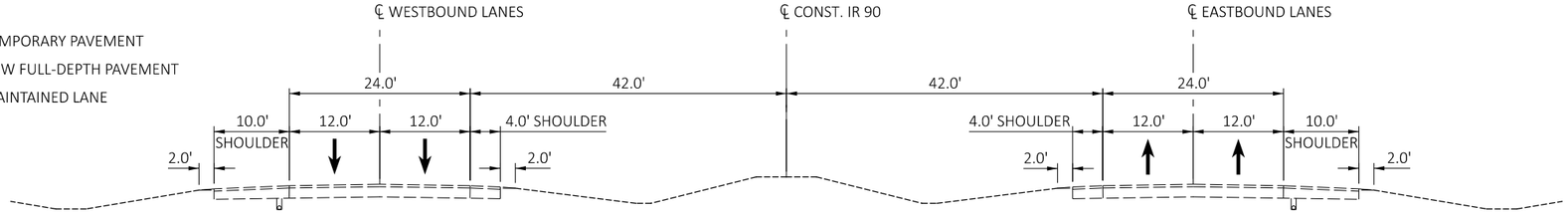
SHEET P.01 TOTAL 26

LEGEND

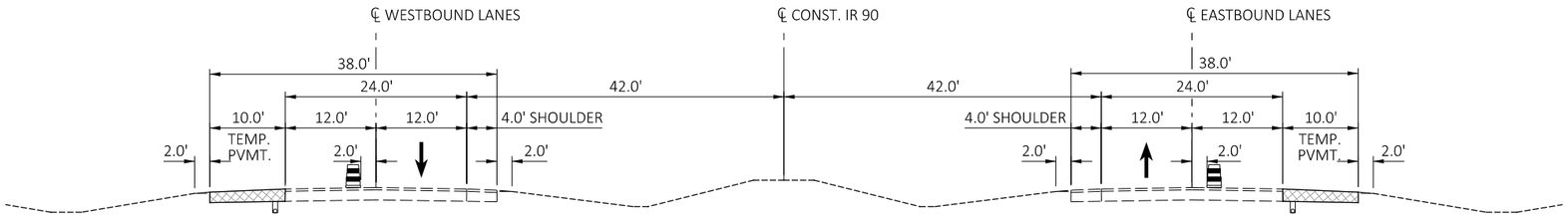
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

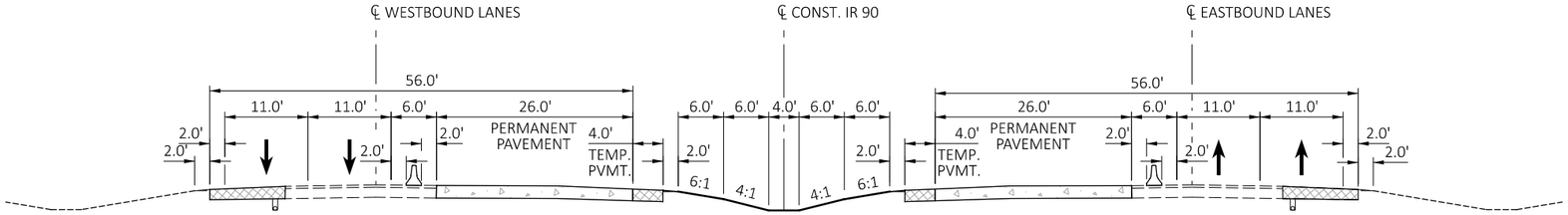
MAINTAINED LANE



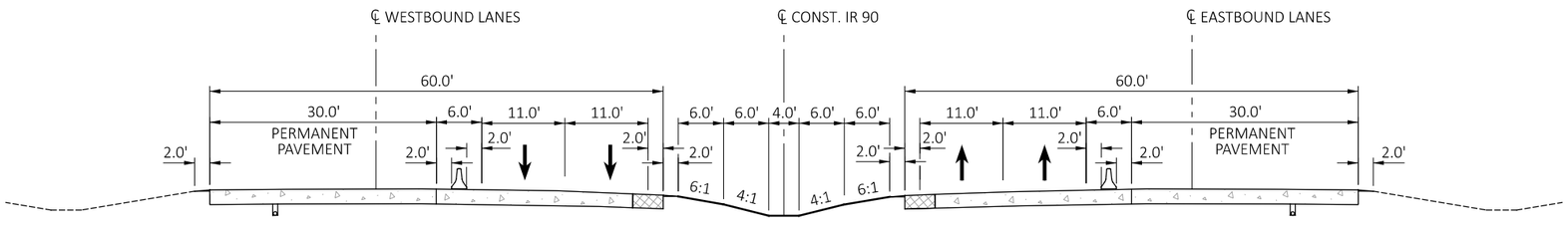

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 254 AND SR 611



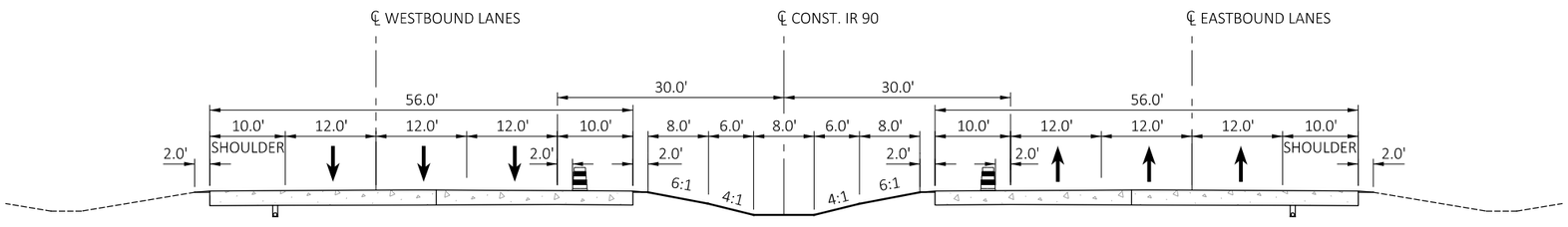

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



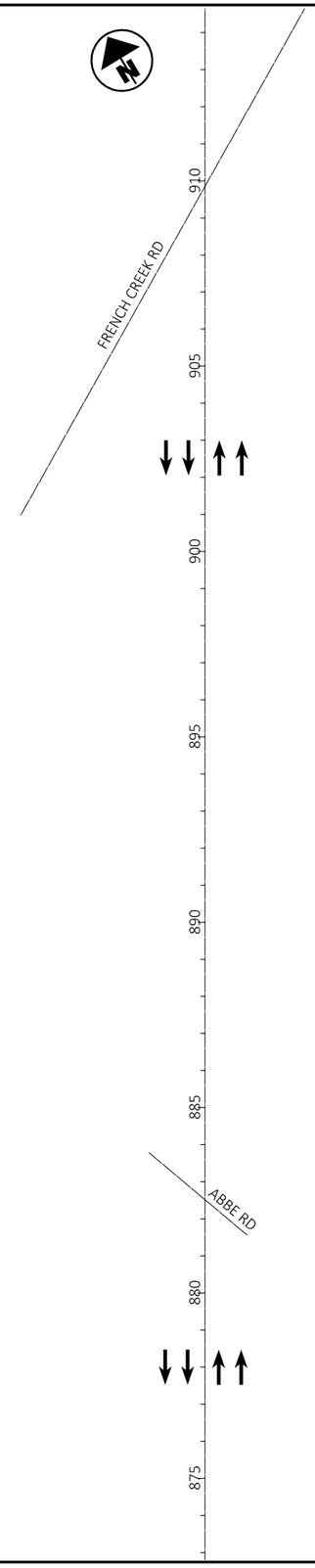

MOT PHASE 2 - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BETWEEN SR 254 AND SR 611

LOR-90-10.76 MOTAA

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DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

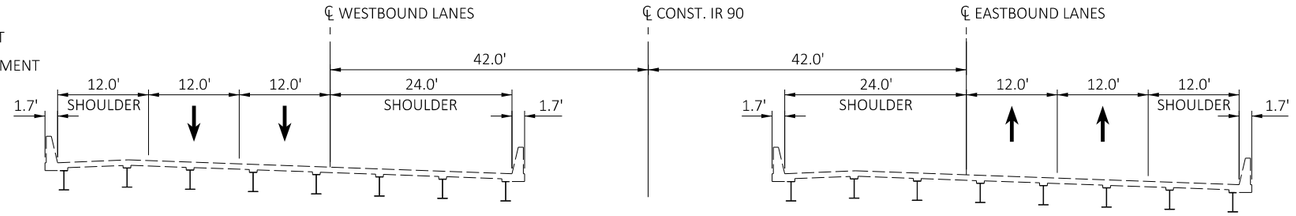
REVIEWER CWP 11/10/23

PROJECT ID 107714

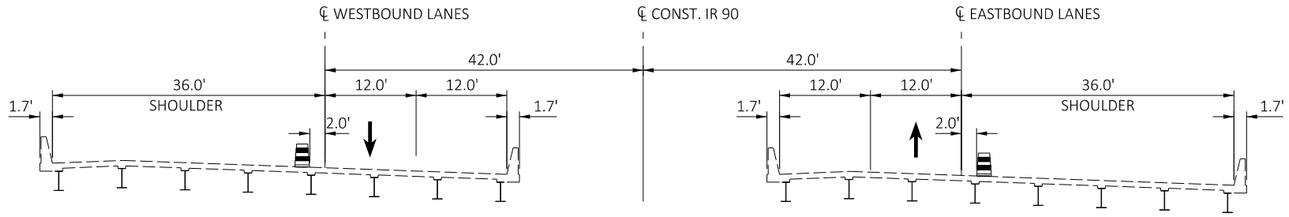
SHEET P.02 | TOTAL 26

LEGEND

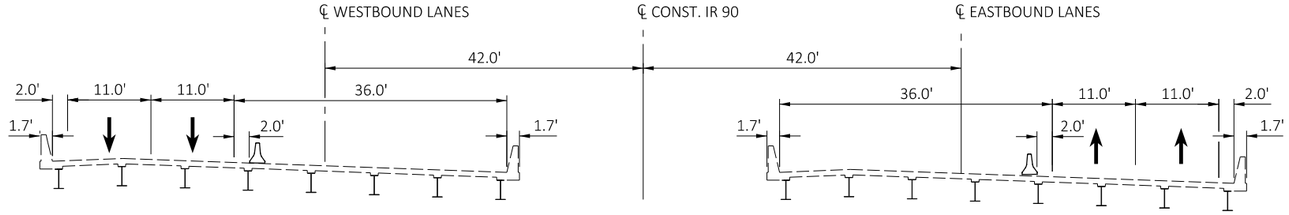
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



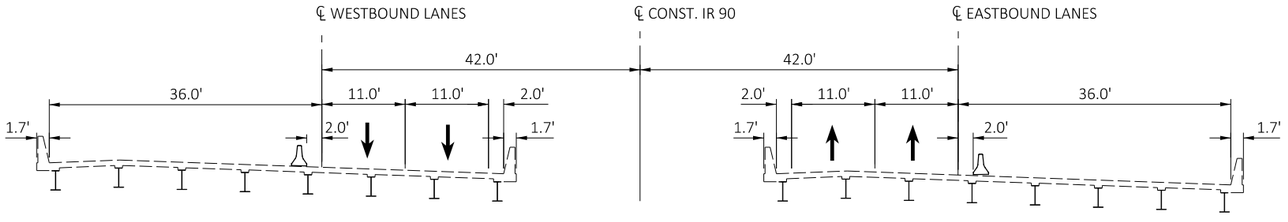

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER NS RAILROAD



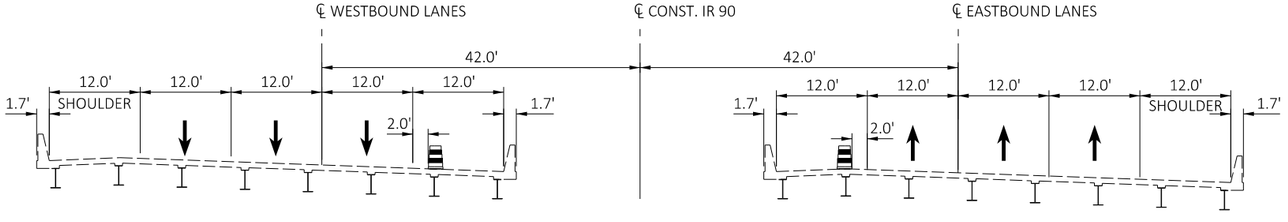

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BRIDGE OVER NS RAILROAD
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



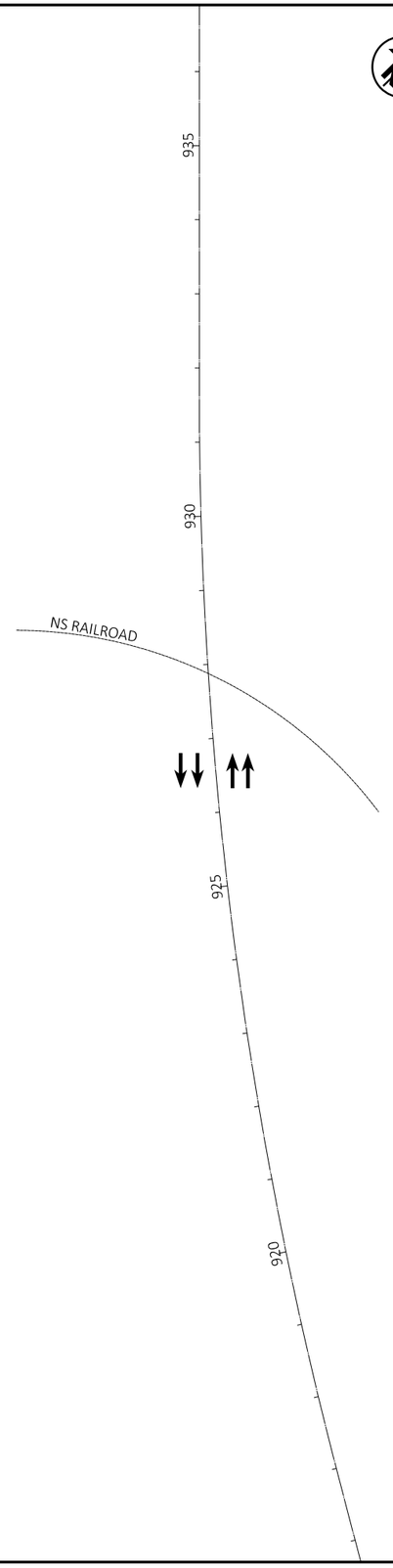

MOT PHASE 2 - IR 90 - BRIDGE OVER NS RAILROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND
REPLACEMENT, TEMPORARY PAVEMENT AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BRIDGE OVER NS RAILROAD
PART- WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BRIDGE OVER NS RAILROAD
PART- WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




LOR-90-10.76 MOTAA

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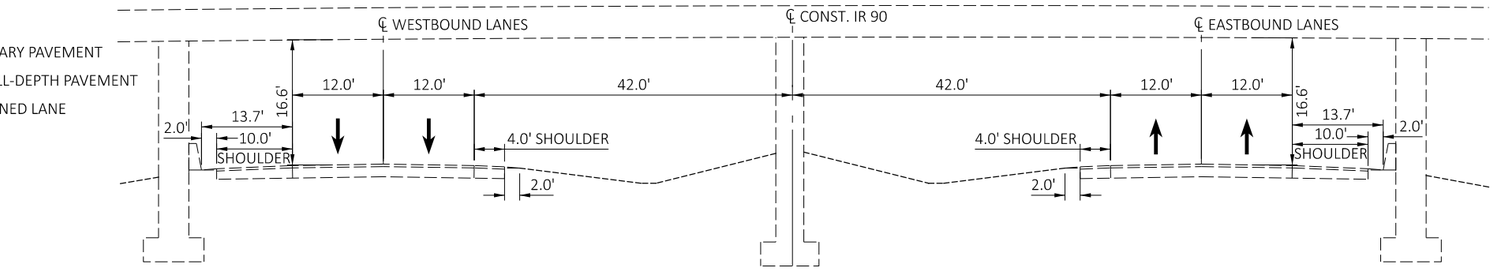
MOTAA - TYPICAL SECTIONS - IR 90
PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER NS RAILROAD

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

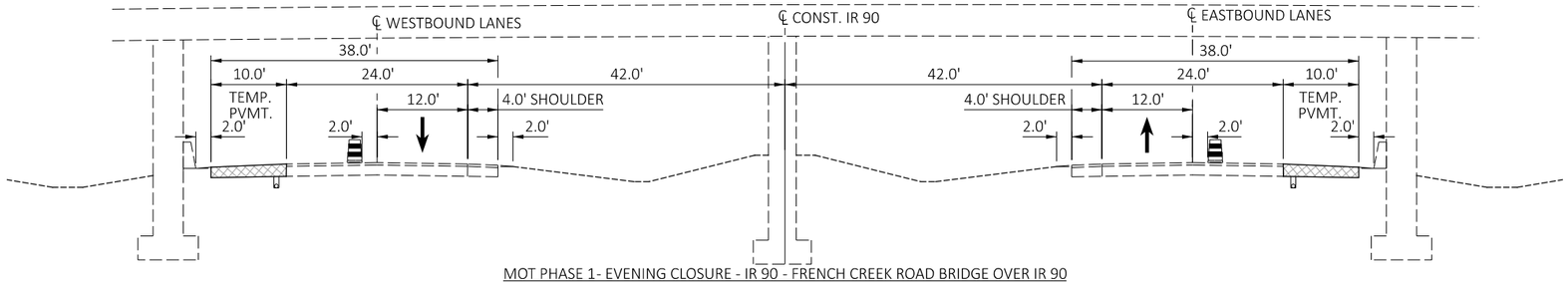
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.03 |
| TOTAL | 26 |

LEGEND

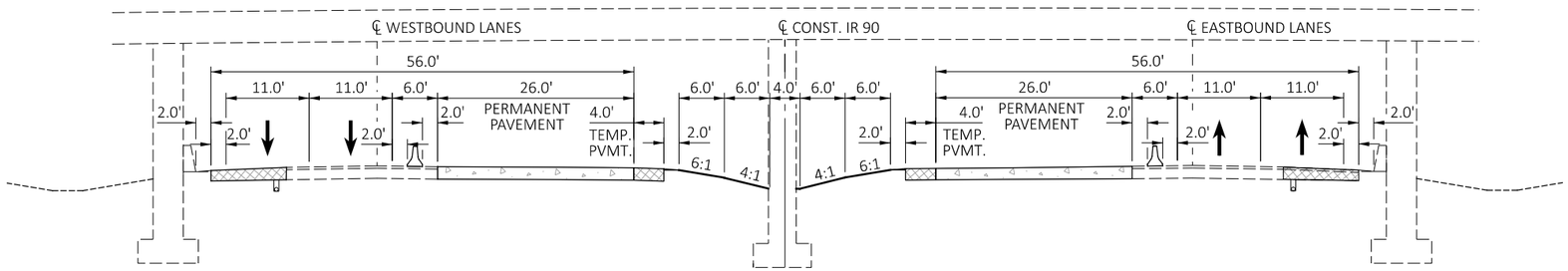
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



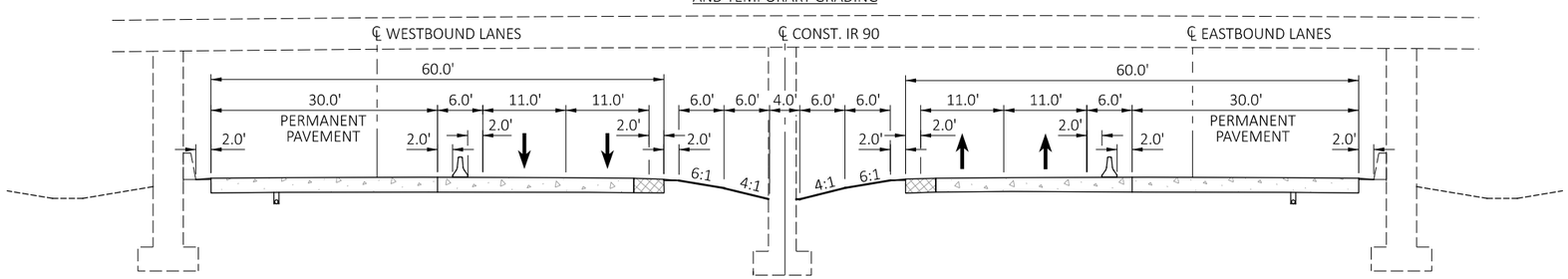

EXISTING TYPICAL SECTION - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90



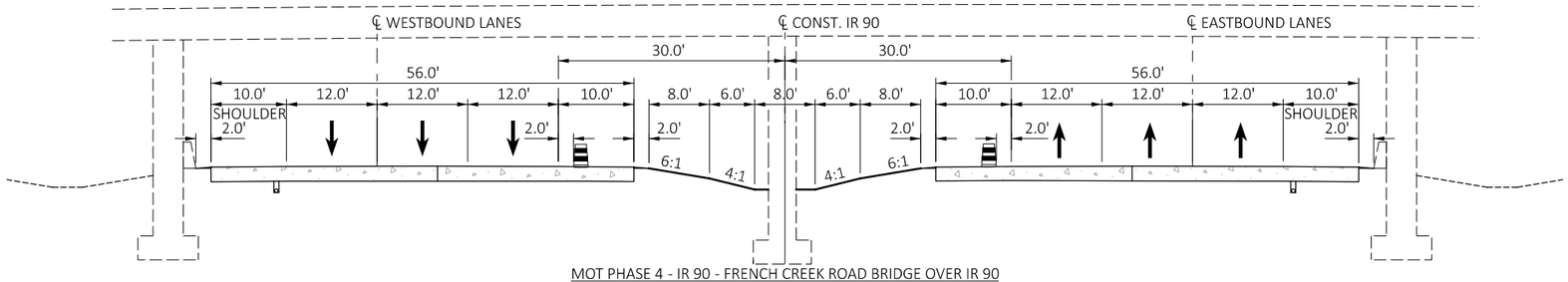

MOT PHASE 1- EVENING CLOSURE - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



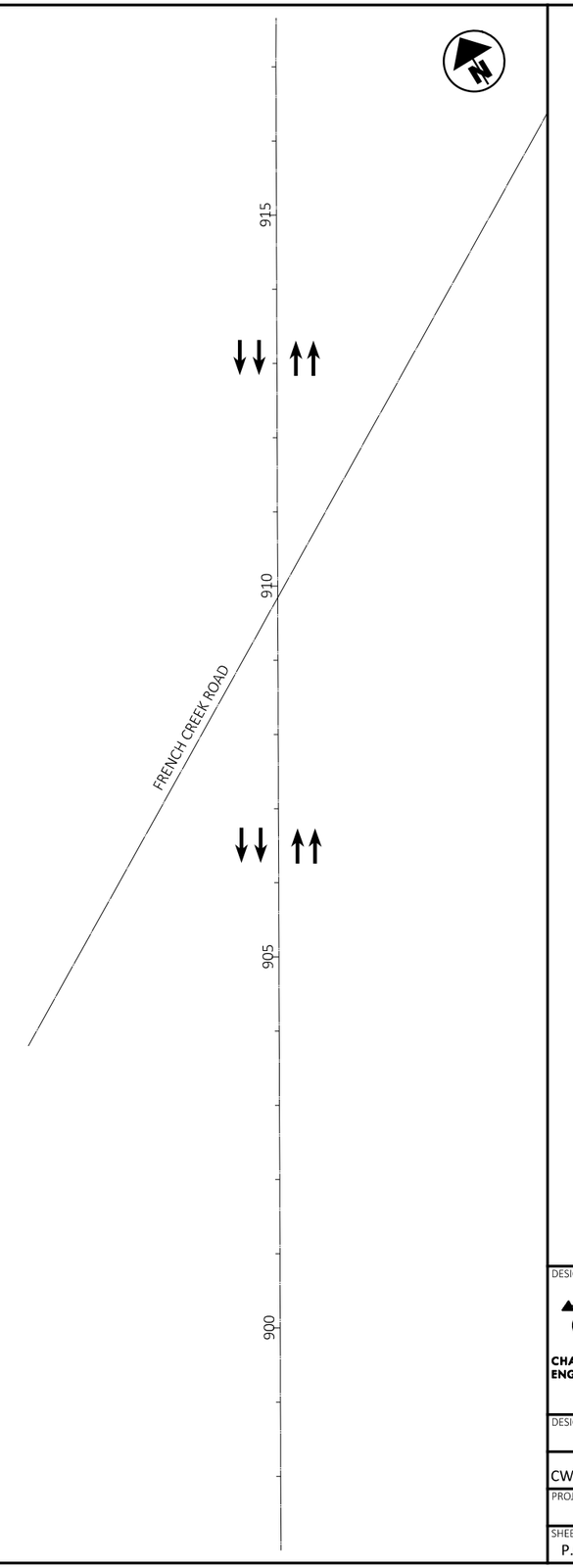

MOT PHASE 2 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT
AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - FRENCH CREEK ROAD BRIDGE OVER IR 90

LOR-90-10.76 MOTAA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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

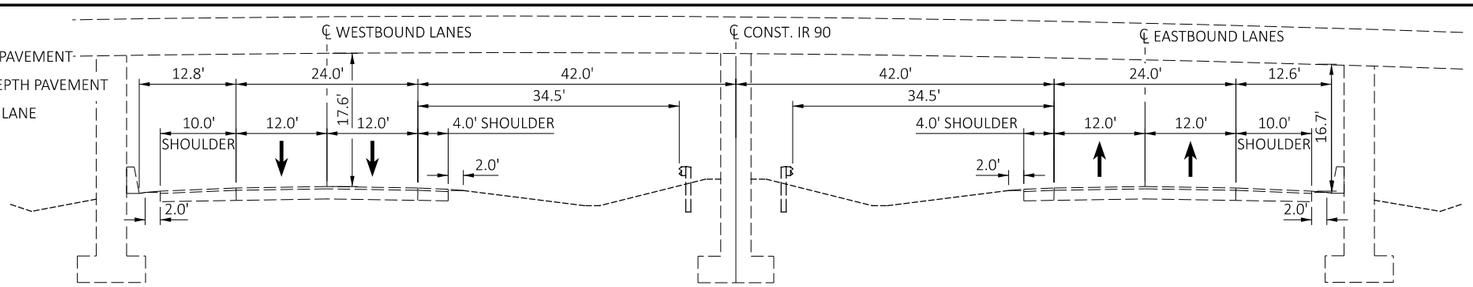
DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.04 TOTAL 26

LEGEND

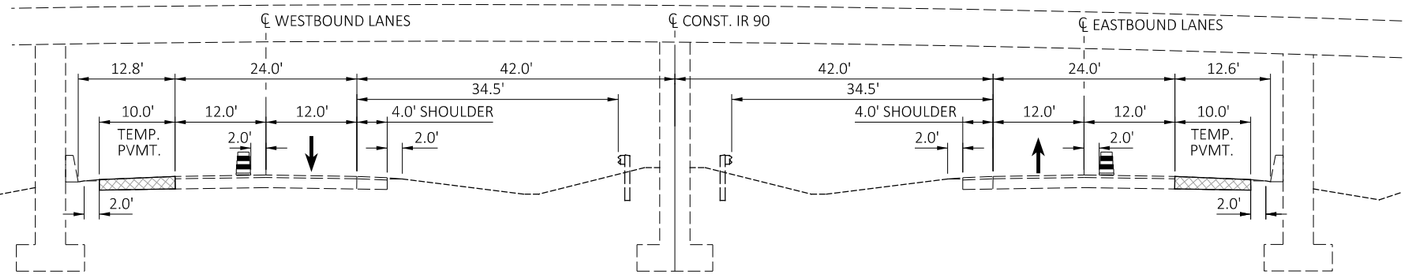
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

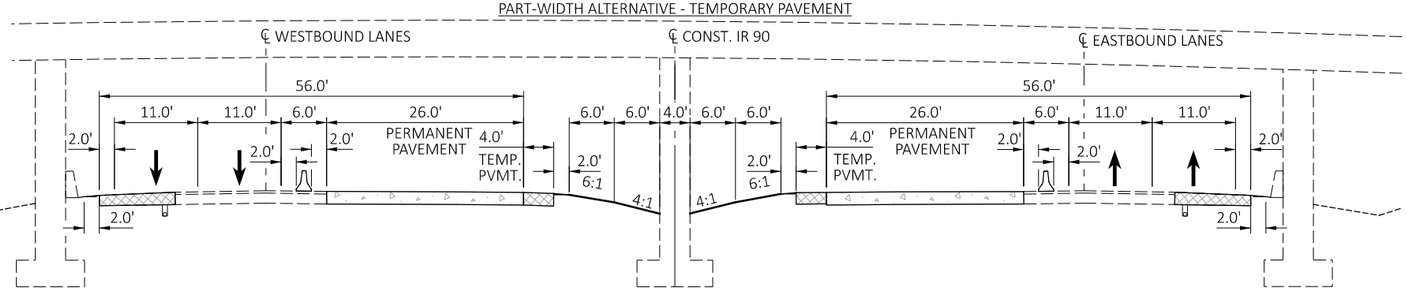
MAINTAINED LANE



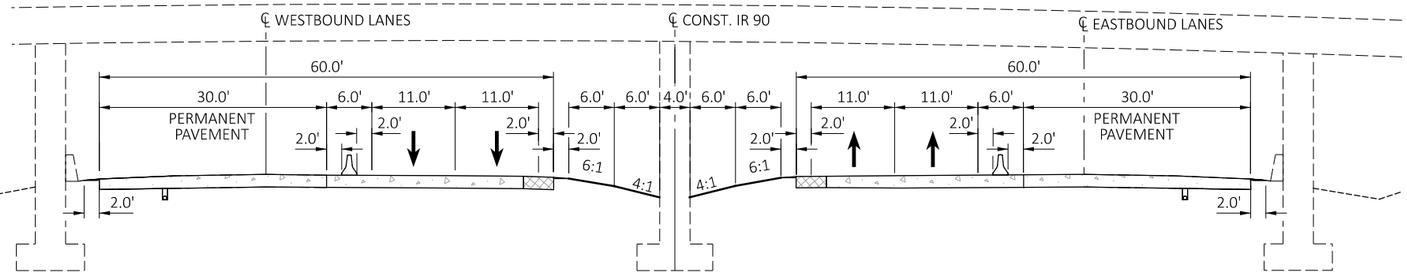

EXISTING TYPICAL SECTION - IR 90 - ABBE ROAD BRIDGE OVER IR 90



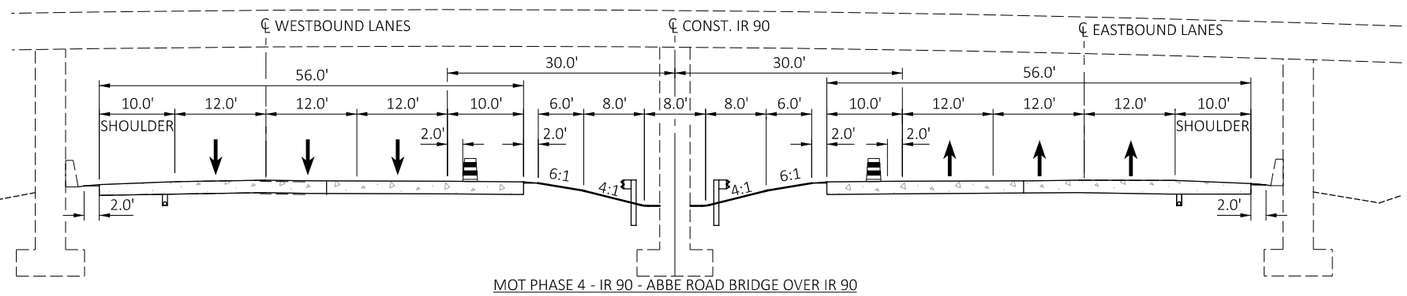

MOT PHASE 1 - EVENING CLOSURE - IR 90 - ABBE ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



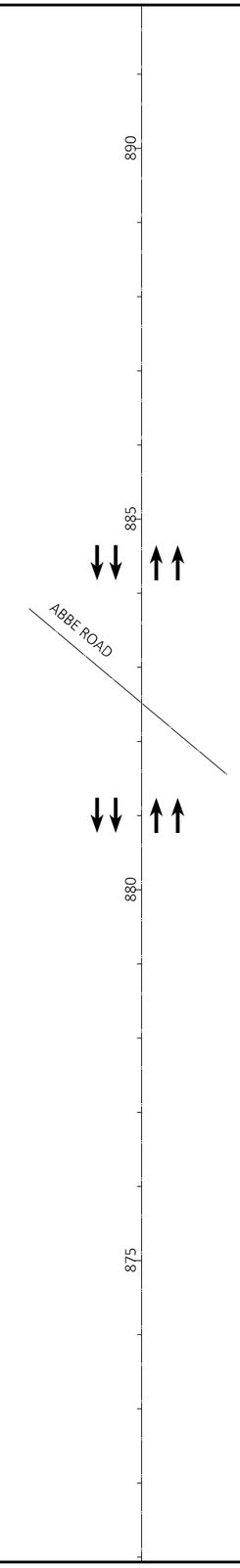

MOT PHASE 2 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
## PART-WIDTH ALTERNATIVE - ABBE ROAD BRIDGE OVER IR 90

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SHT

REVIEWER: CWP 11/10/23

PROJECT ID: 107714

SHEET: P.05 | TOTAL: 26

LOR-90-10.76 MOTAA

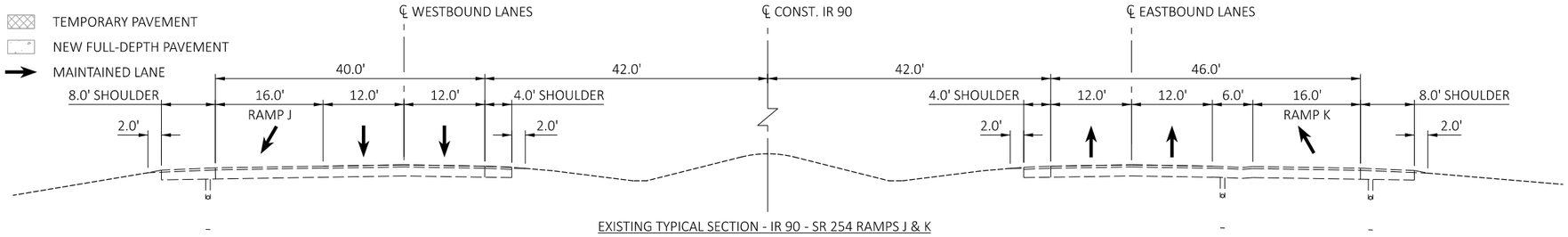
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:26 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\V00-Engineering\Roadway\Sheets\107714_GY005.dgn

LEGEND

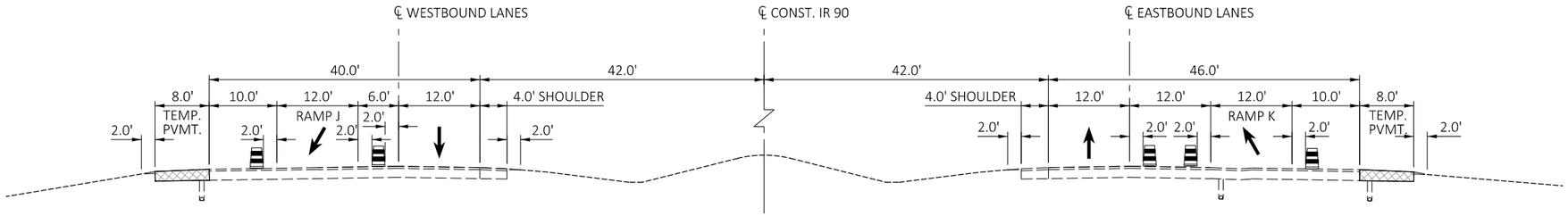
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

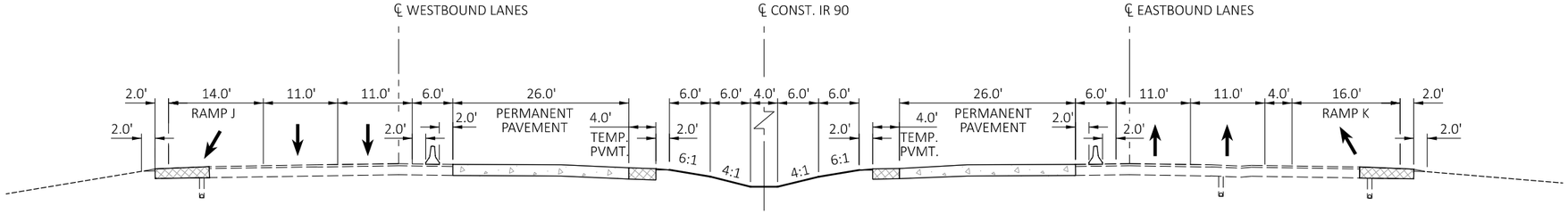
MAINTAINED LANE



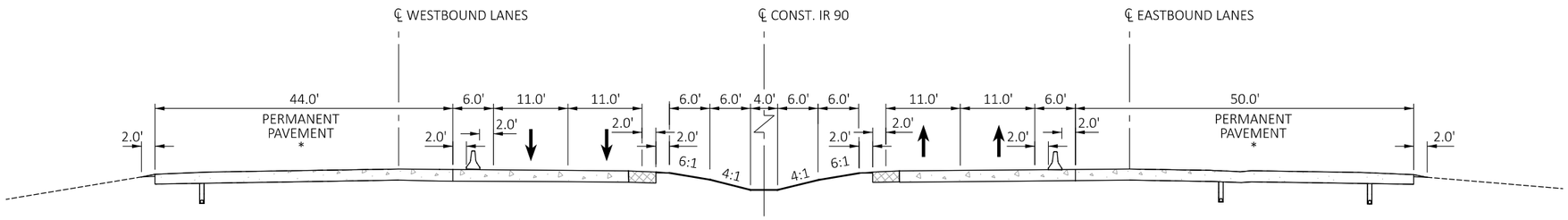

EXISTING TYPICAL SECTION - IR 90 - SR 254 RAMPS J & K




MOT PHASE 1 - EVENING CLOSURE - IR 90 - SR 254 RAMPS J & K
PART - WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



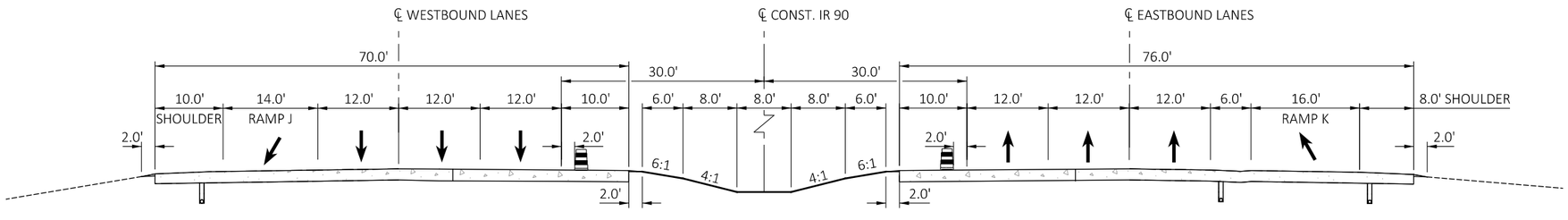

MOT PHASE 2 - IR 90 - SR 254 RAMPS J & K
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT, AND TEMPORARY GRADING



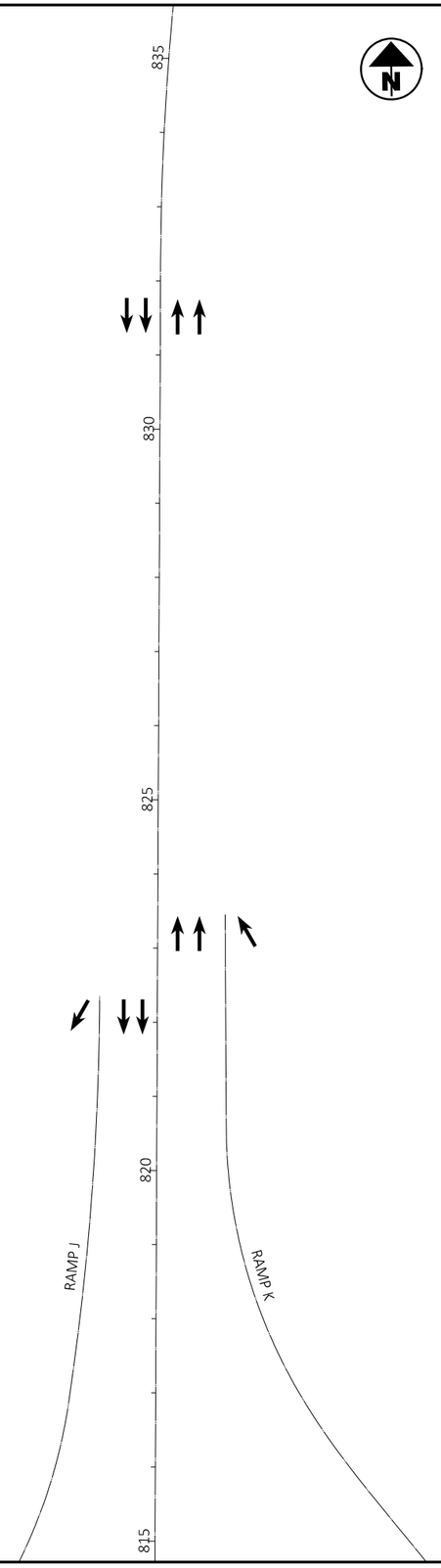

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.

MOT PHASE 3 - IR 90 - SR 254 RAMPS J & K
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.




MOT PHASE 4 - IR 90 - SR 254 RAMPS J & K
PART - WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - SR 254 RAMPS J & K

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:27 PM USER: thomas
P:\23075 ODOT D3-D12 GES\11727\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY006.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

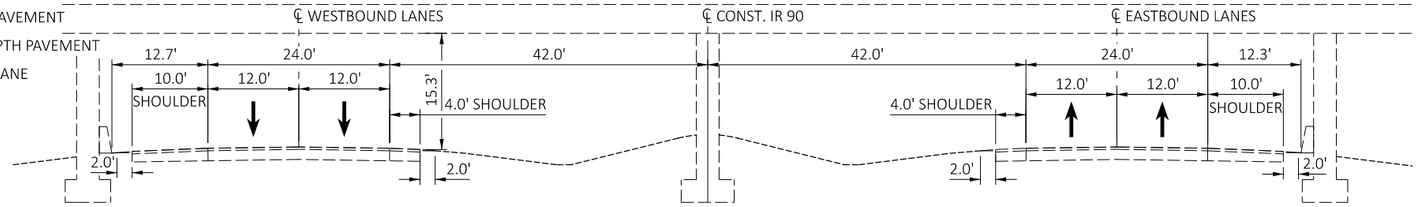
SHEET P.06 TOTAL 26

LEGEND

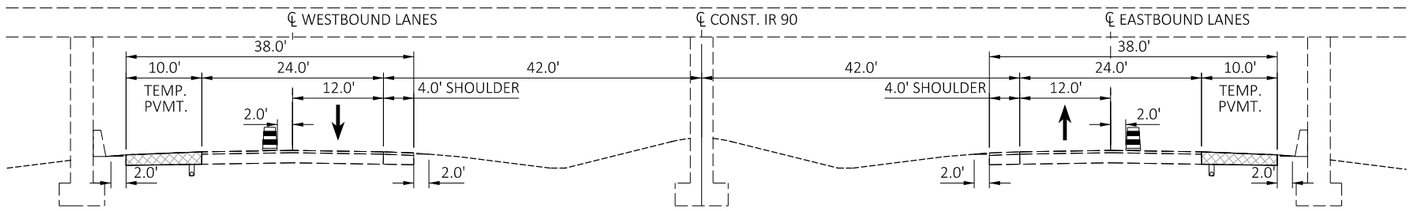
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

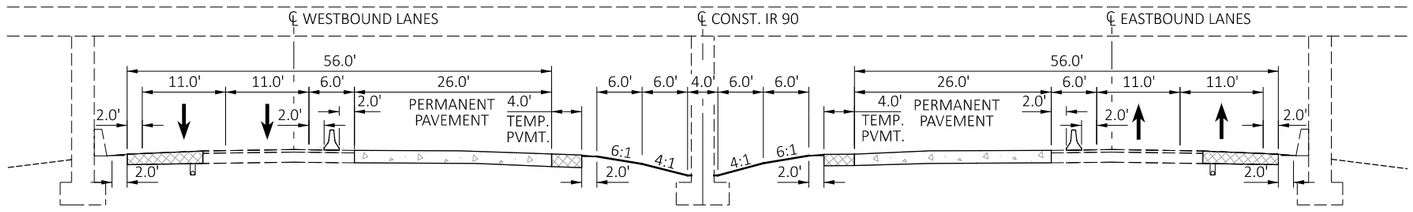
MAINTAINED LANE



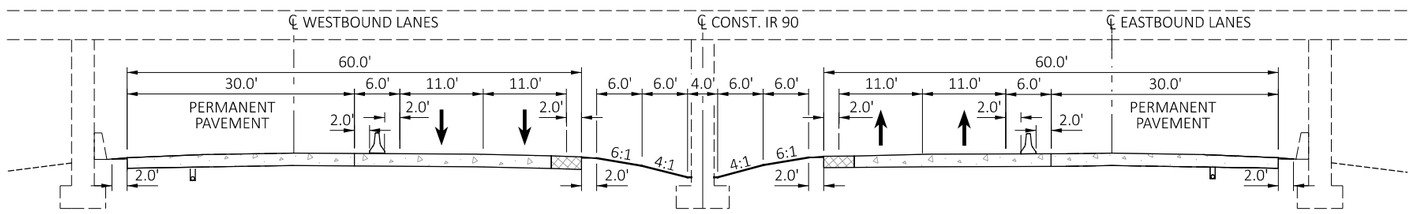

EXISTING TYPICAL SECTION - IR 90 - SR 254 BRIDGE OVER IR 90



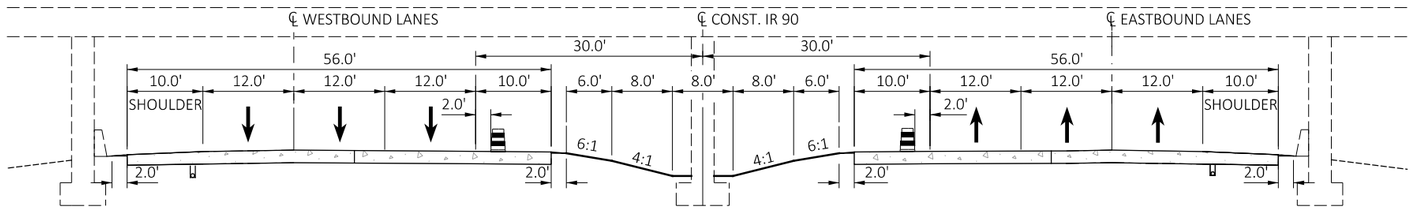

MOT PHASE 1 - EVENING CLOSURE - IR 90 - SR 254 BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



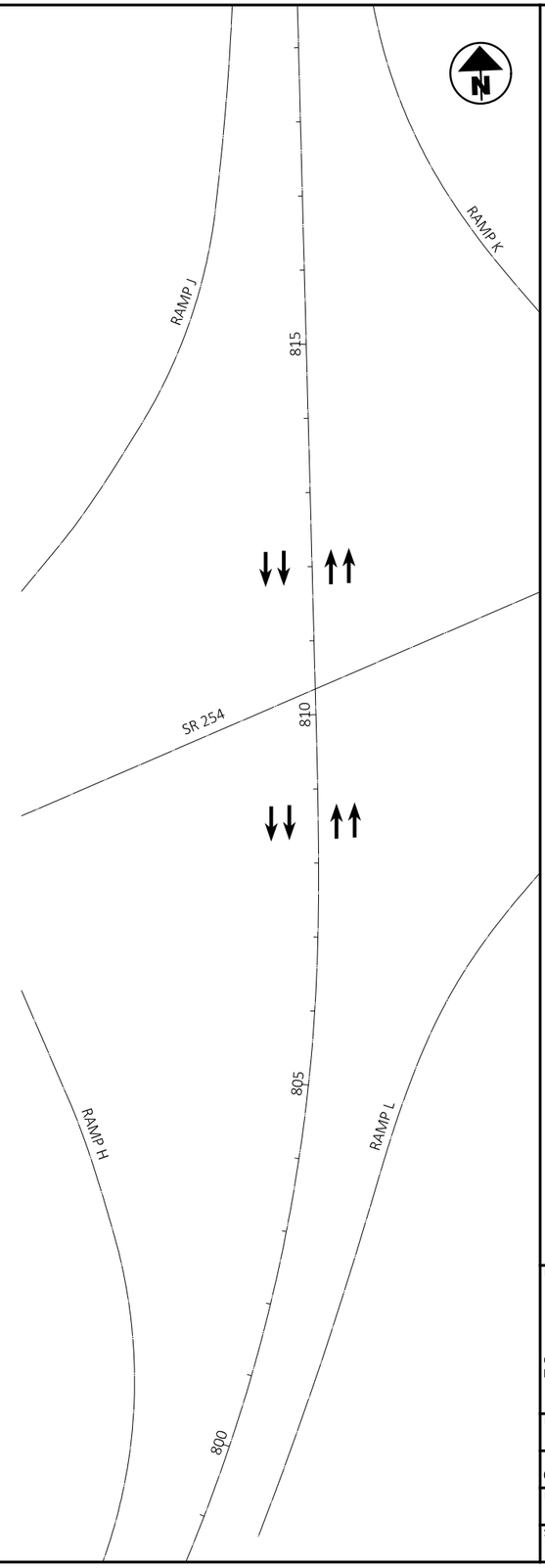

MOT PHASE 2 - IR 90 - SR 254 BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - SR 254 BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - SR 254 BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - SR 254 BRIDGE OVER IR 90

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.07 |
| TOTAL | 26 |

LOR-90-10.76 MOTAA

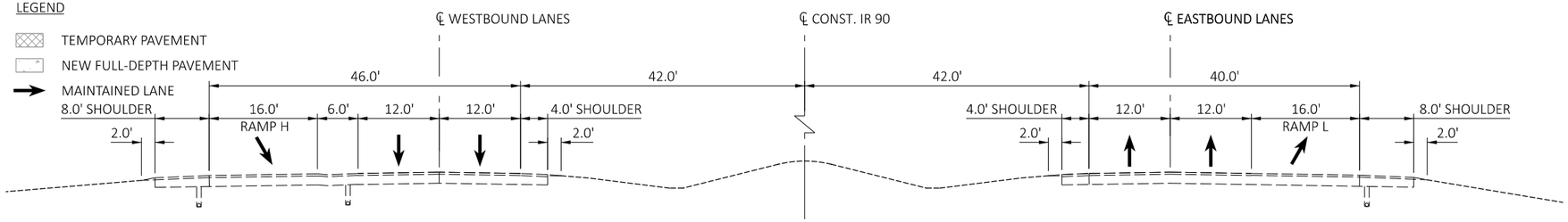
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:29 PM USER: thomas
P:\23075 ODOT D3-D12 GE\S\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY007.dgn

LEGEND

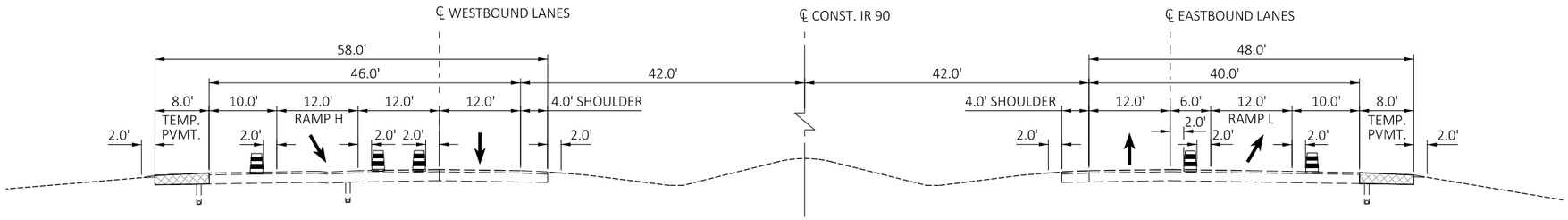
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

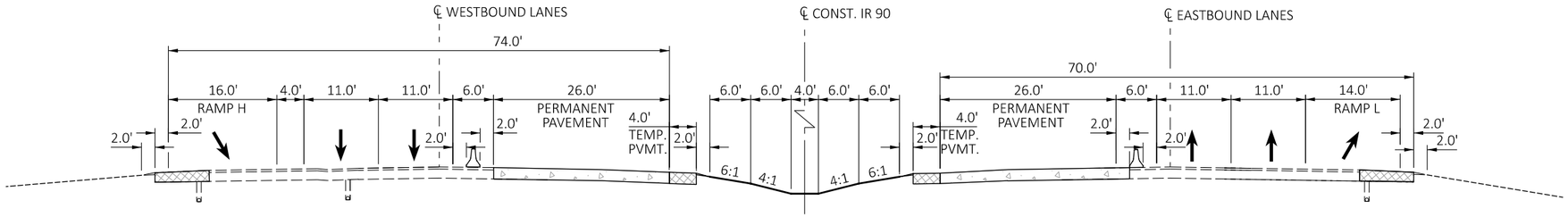
MAINTAINED LANE



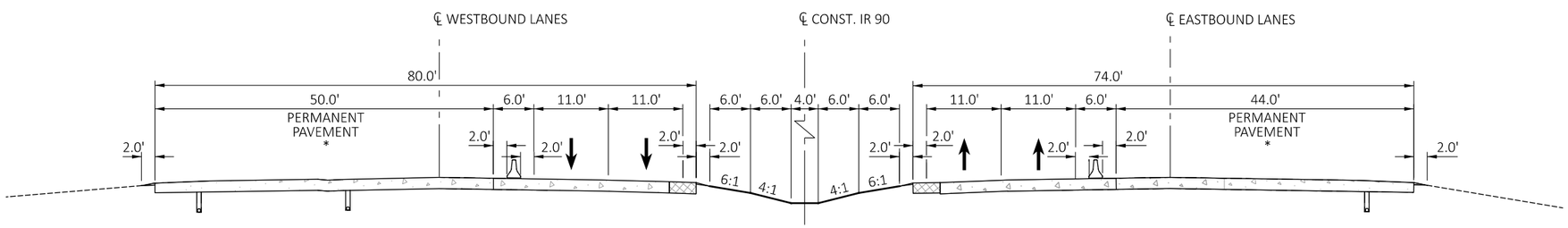

EXISTING TYPICAL SECTION - IR 90 - SR 254 RAMPS H & L




MOT PHASE 1- EVENING CLOSURE - IR 90 - SR 254 RAMPS H & L
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



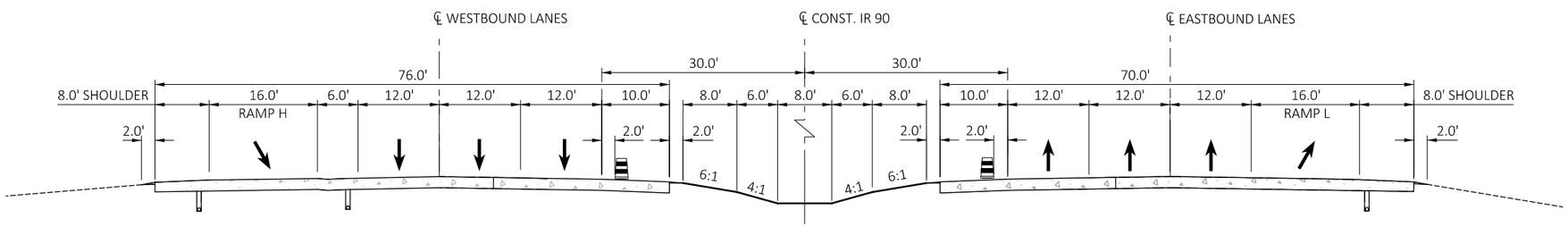

MOT PHASE 2 - IR 90 - RAMP CLOSURE - SR 254 RAMPS H & L
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT, AND TEMPORARY GRADING



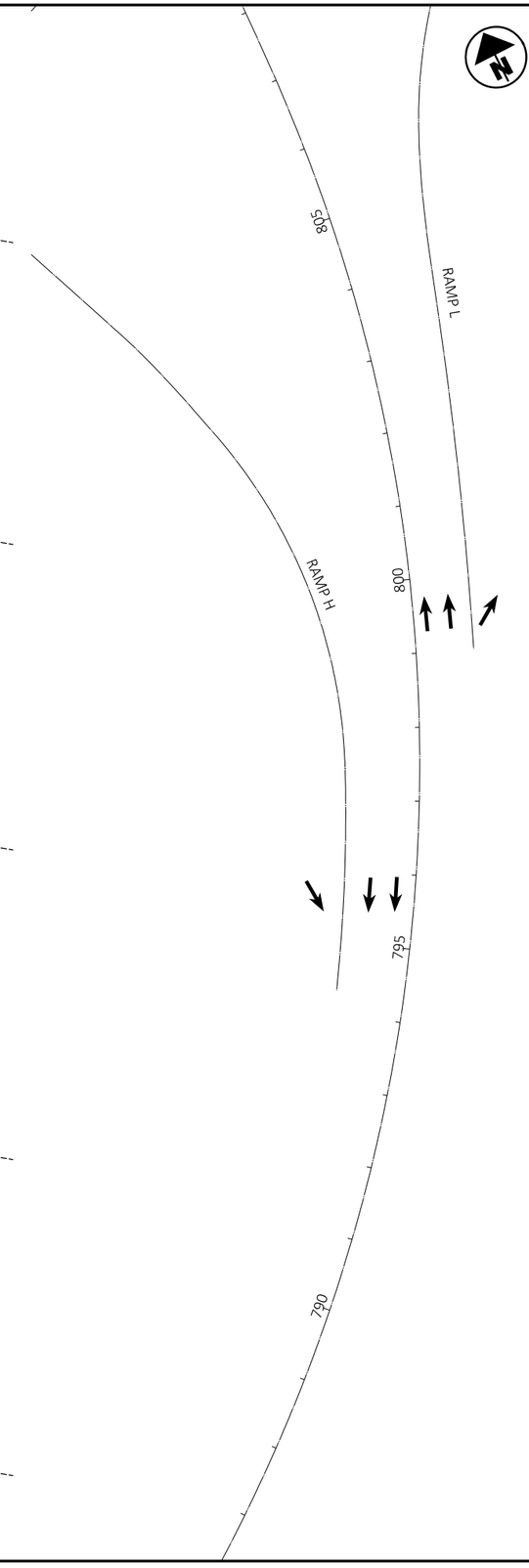

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C

MOT PHASE 3 - IR 90 - SR 254 RAMPS H & L
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C




MOT PHASE 4 - IR 90 - SR 254 RAMPS H & L
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - SR 254 RAMPS H & L

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:30 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-10714\107714\V00-Engineering\Roadway\Sheets\107714_GY008.dgn

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

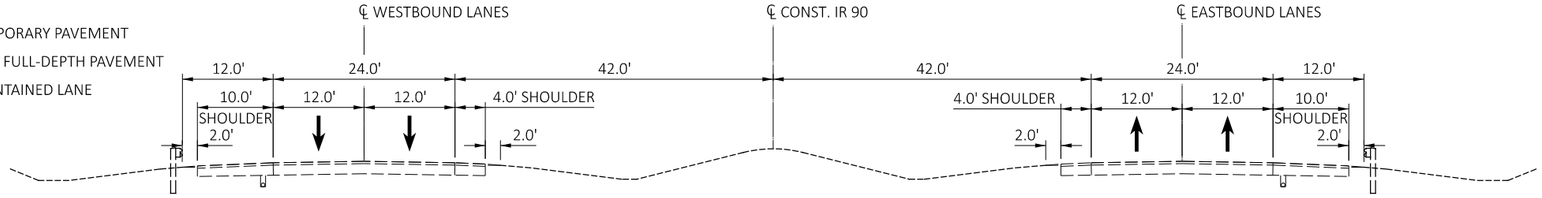
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.08 |
| TOTAL | 26 |

LEGEND

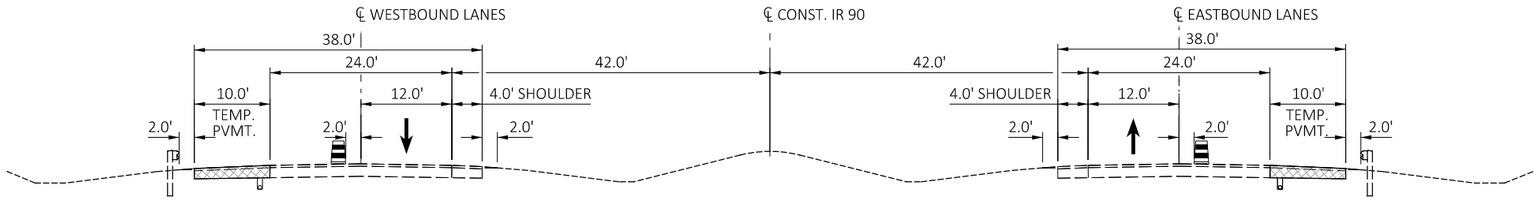
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

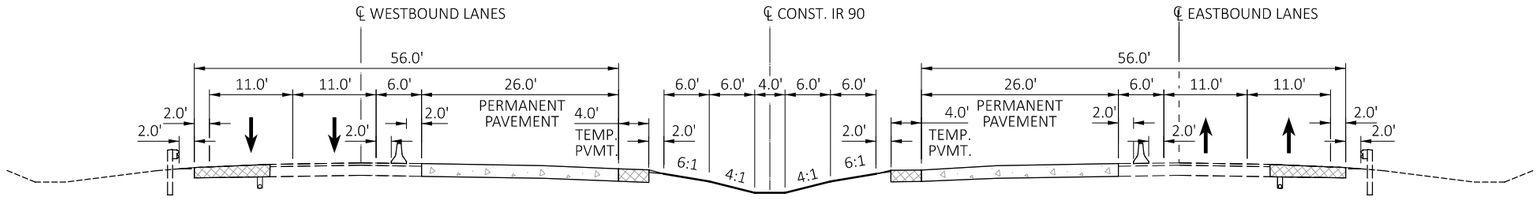
MAINTAINED LANE



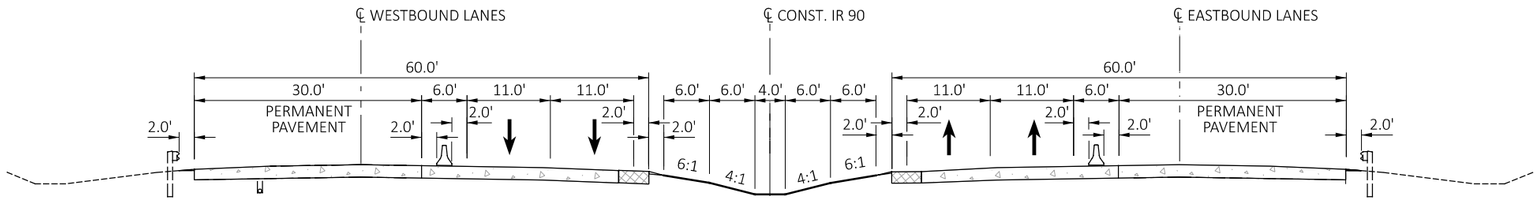

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 57 AND SR 254



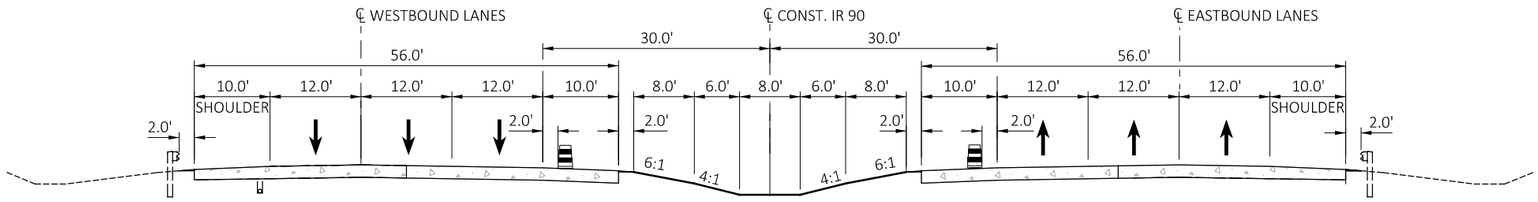

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BETWEEN SR 57 AND SR 254
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



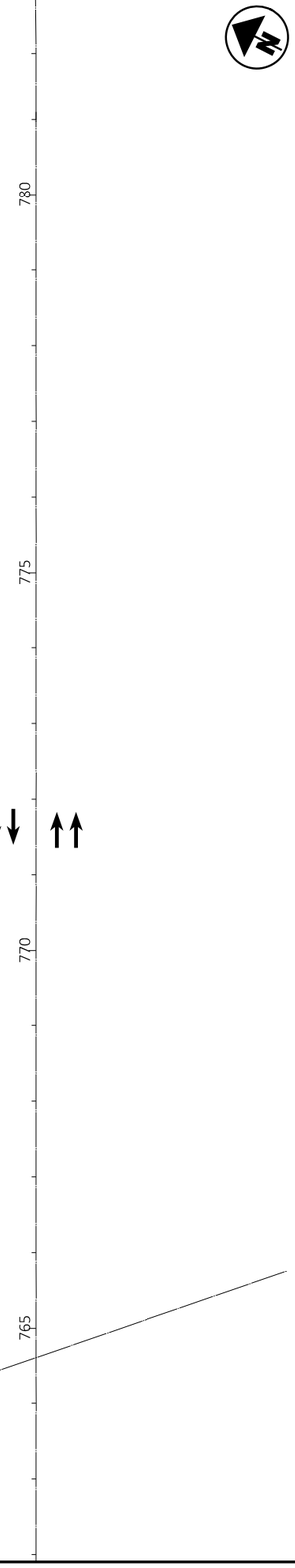

MOT PHASE 2 - IR 90 - BETWEEN SR 57 AND SR 254
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,TEMPORARY PAVEMENT
AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BETWEEN SR 57 AND SR 254
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BETWEEN SR 57 AND SR 254
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADNG




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BETWEEN SR 57 AND SR 254

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.09 TOTAL 26

LOR-90-10.76 MOTAA

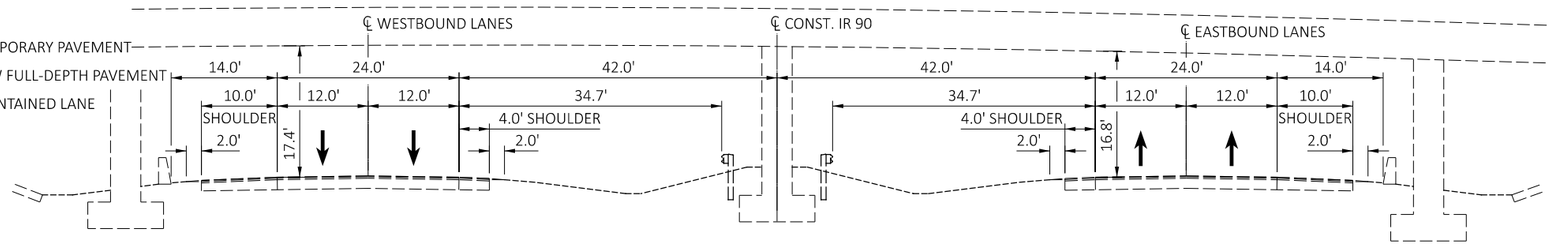
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:31 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\V00-Engineering\Roadway\Sheets\107714_GV009.dgn

LEGEND

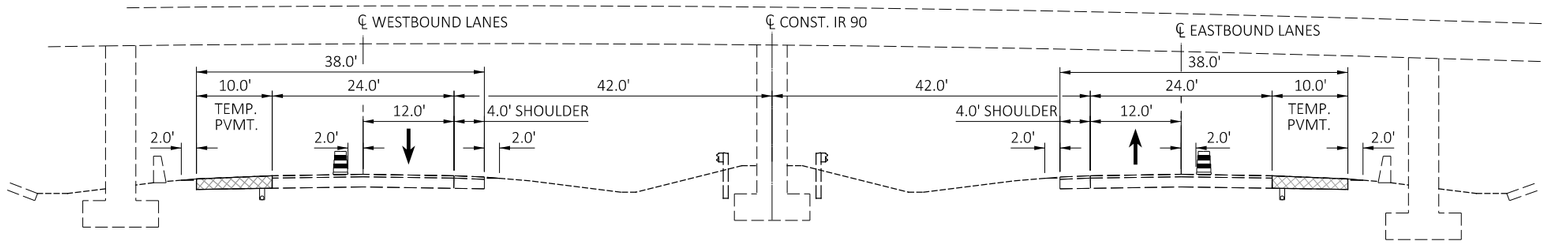
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

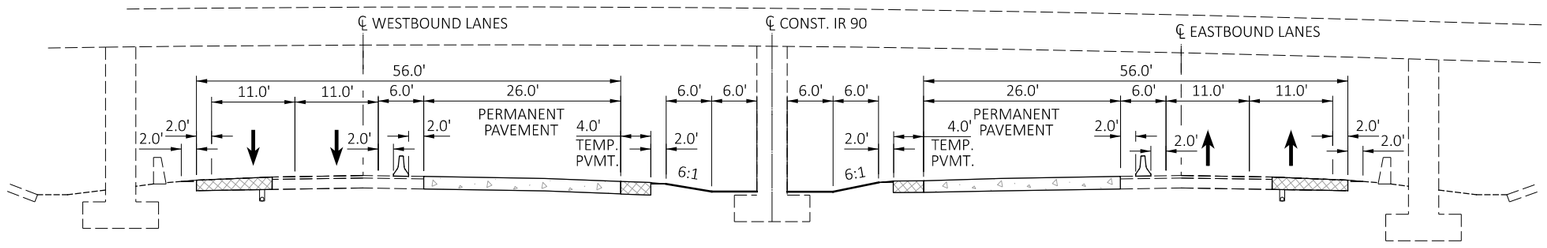
MAINTAINED LANE



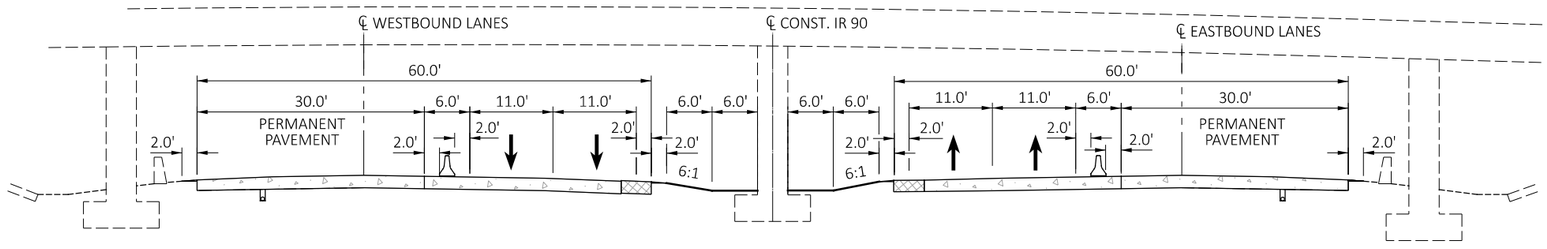

EXISTING TYPICAL SECTION - IR 90 - GULF ROAD BRIDGE OVER IR 90



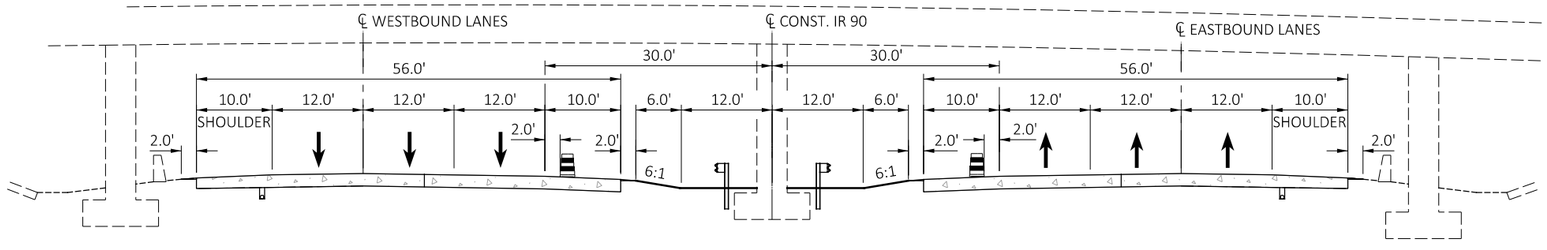

MOT PHASE 1 - EVENING CLOSURE - IR 90 - GULF ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



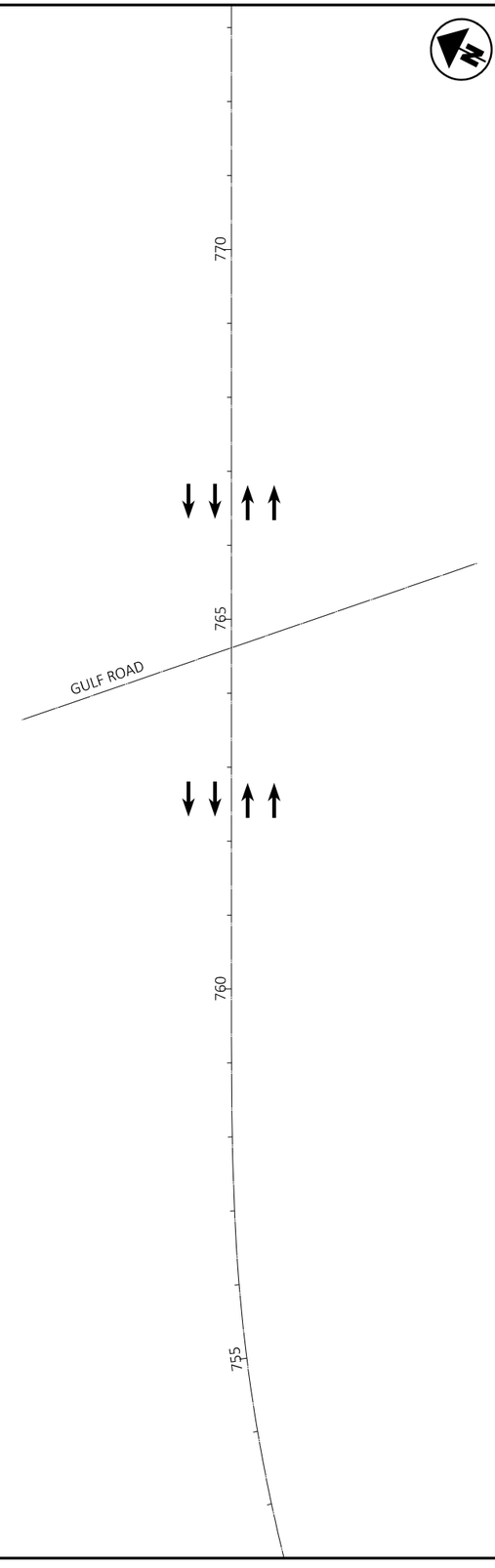

MOT PHASE 2 - IR 90 - GULF ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - GULF ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - GULF ROAD BRIDGE OVER IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - GULF ROAD BRIDGE OVER IR 90

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:32 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\V400-Engineering\Roadway\Sheets\107714_GV010.dgn


DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

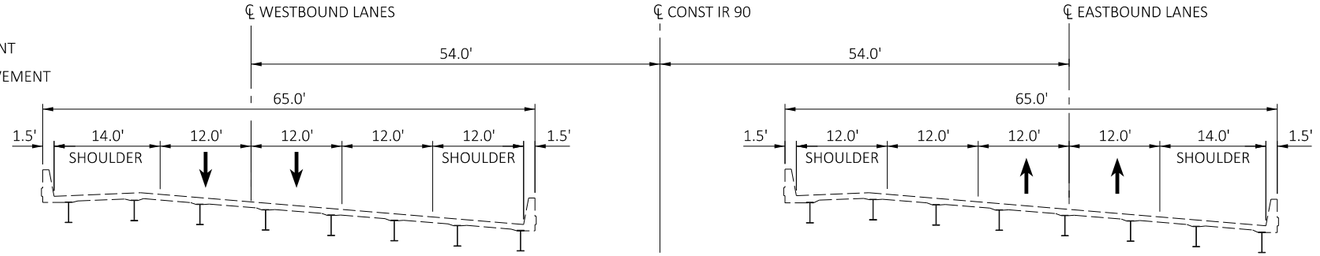
SHEET P.10 TOTAL 26

LEGEND

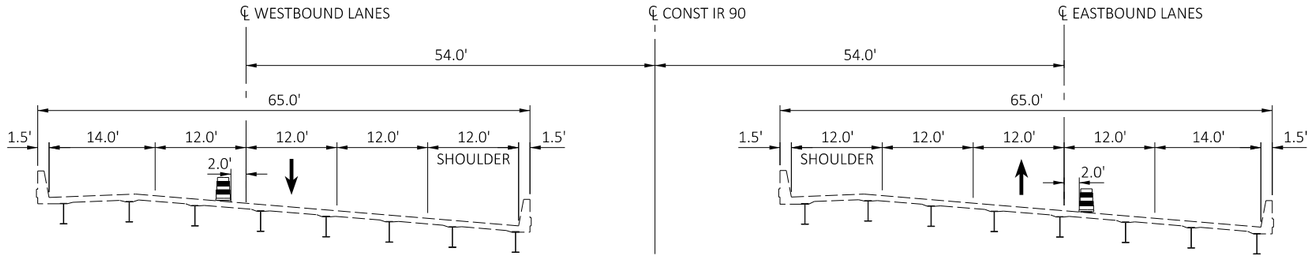
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

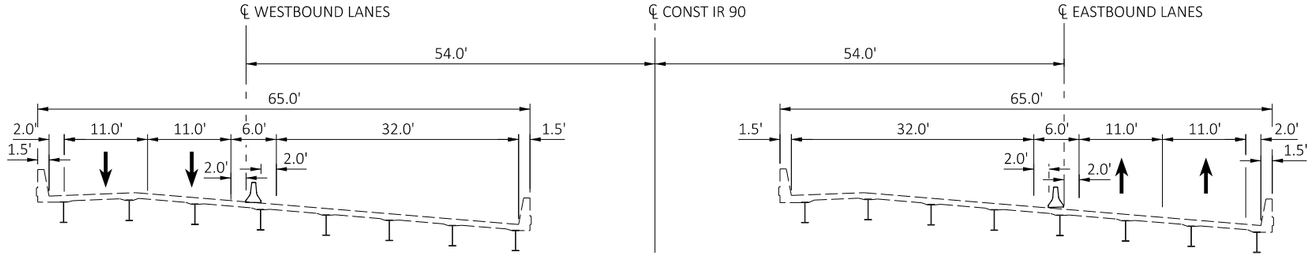
MAINTAINED LANE



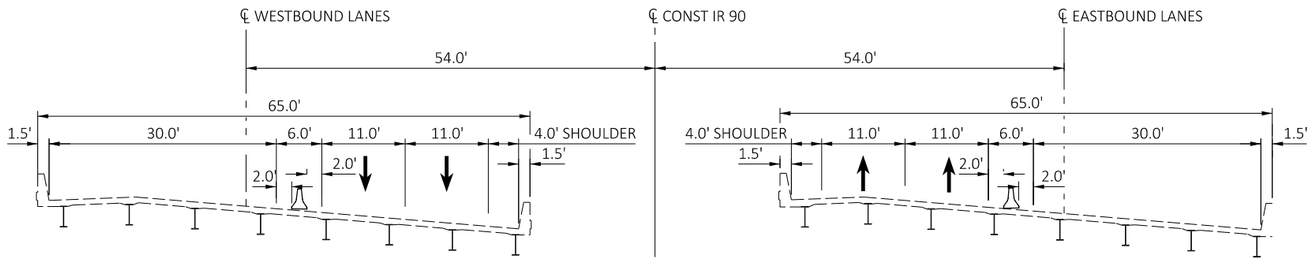

EXISTING TYPICAL SECTION- IR 90 - BRIDGE OVER FORD ROAD



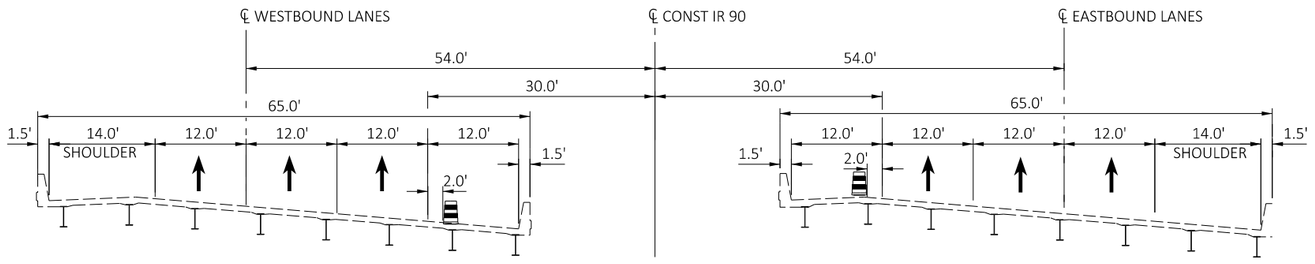

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BRIDGE OVER FORD ROAD
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT CLOSURE



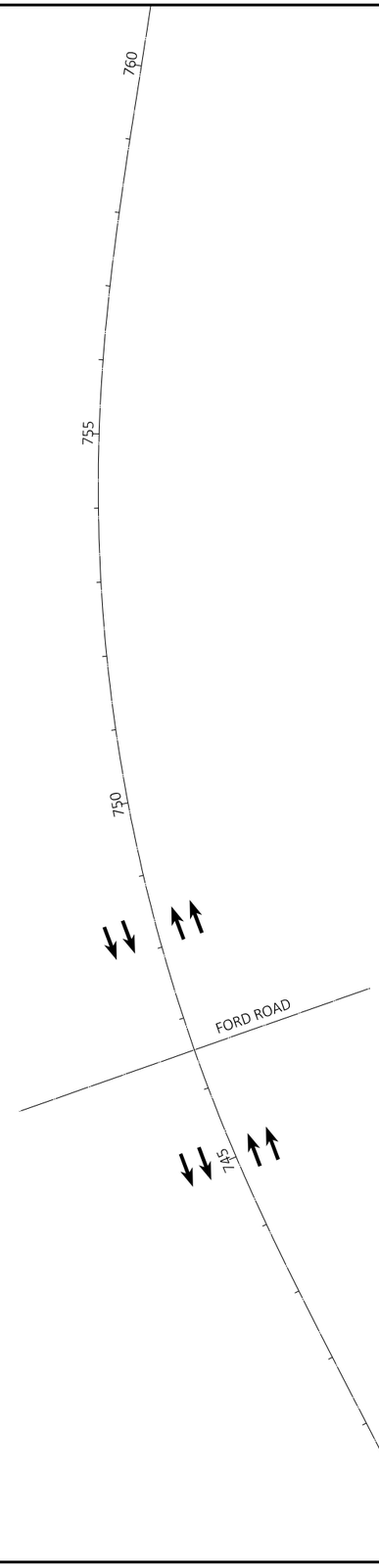

MOT PHASE 2 - IR 90 - BRIDGE OVER FORD ROAD
FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BRIDGE OVER FORD ROAD
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BRIDGE OVER FORD ROAD
PART - WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER FORD ROAD

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:33 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

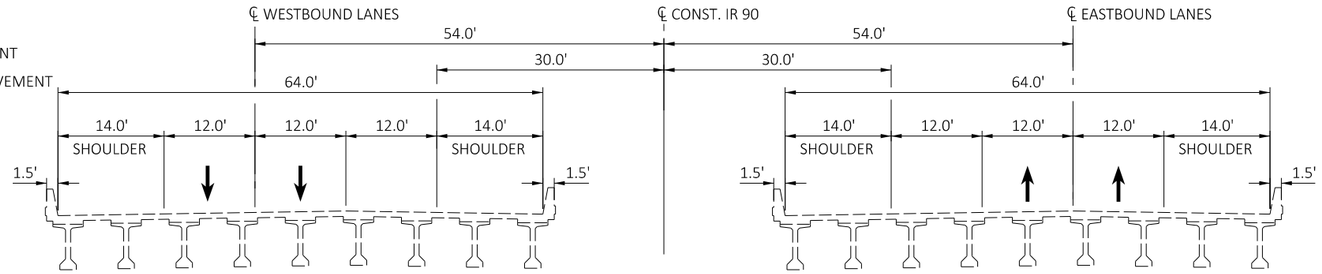
REVIEWER
CWP 11/10/23

PROJECT ID
107714

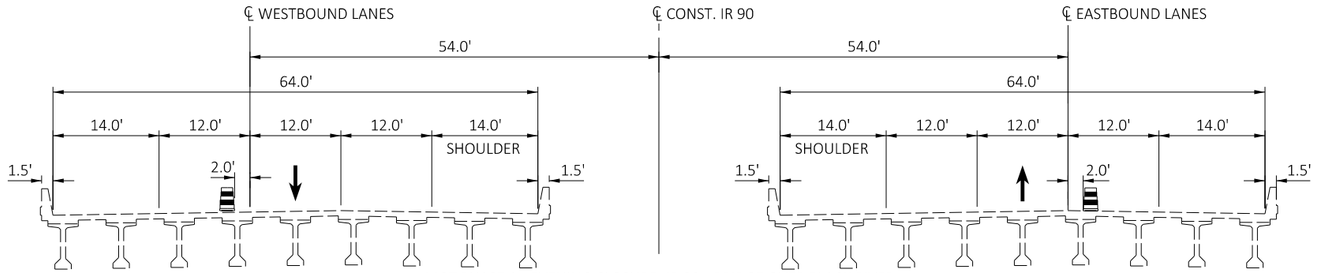
SHEET P.11 TOTAL 26

LEGEND

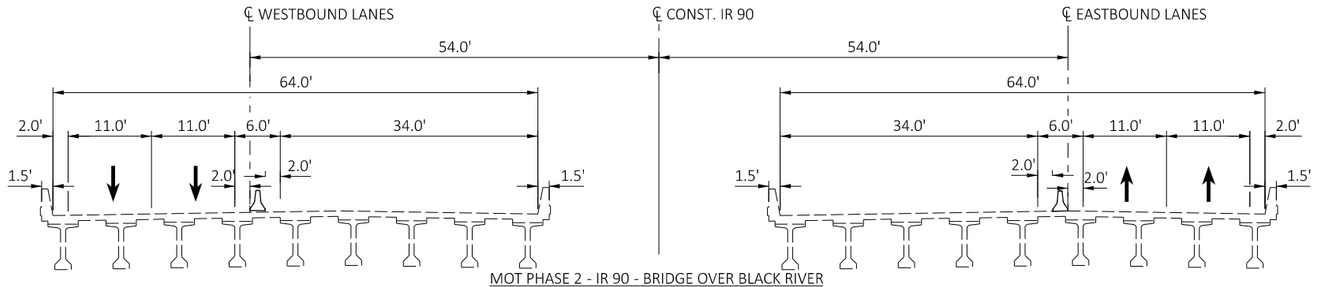
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



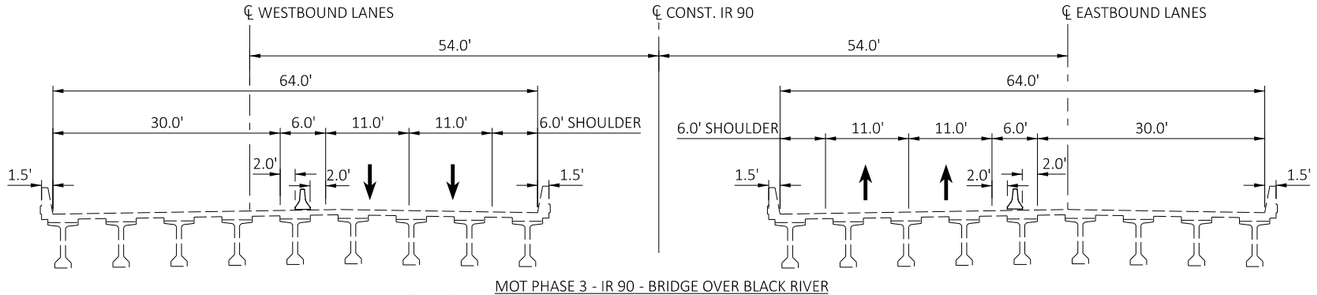

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER BLACK RIVER



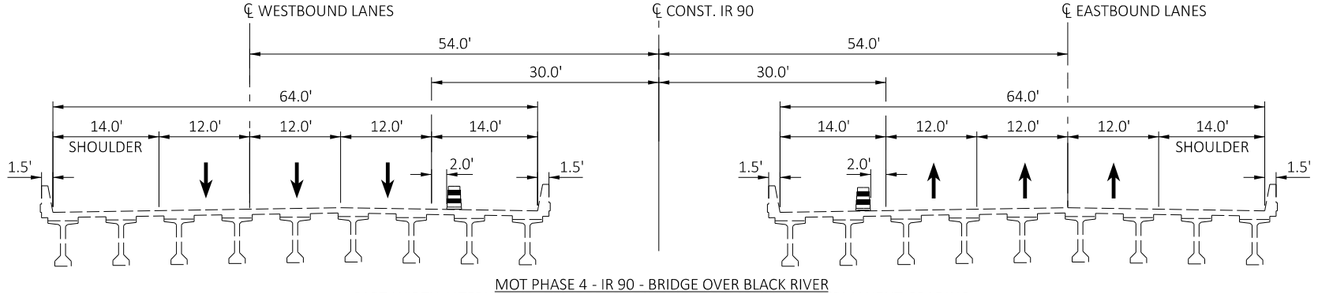

MOT PHASE 1 - EVENING CLOSURE- IR 90 - BRIDGE OVER BLACK RIVER
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



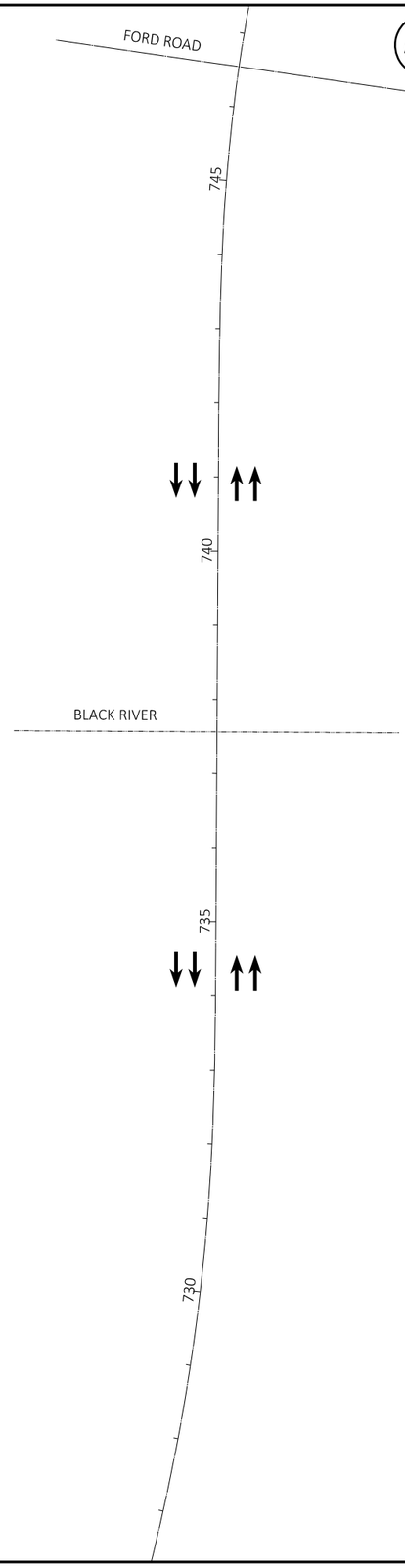

MOT PHASE 2 - IR 90 - BRIDGE OVER BLACK RIVER
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,
AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BRIDGE OVER BLACK RIVER
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BRIDGE OVER BLACK RIVER
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER BLACK RIVER

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:34 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY012.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

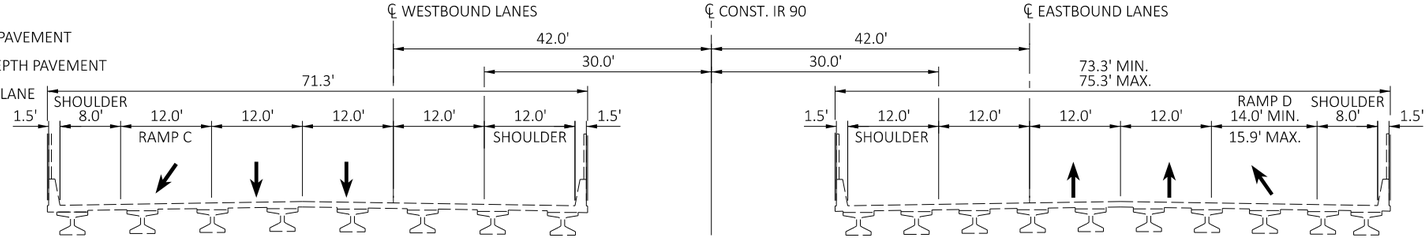
SHEET P.12 TOTAL 26

LEGEND

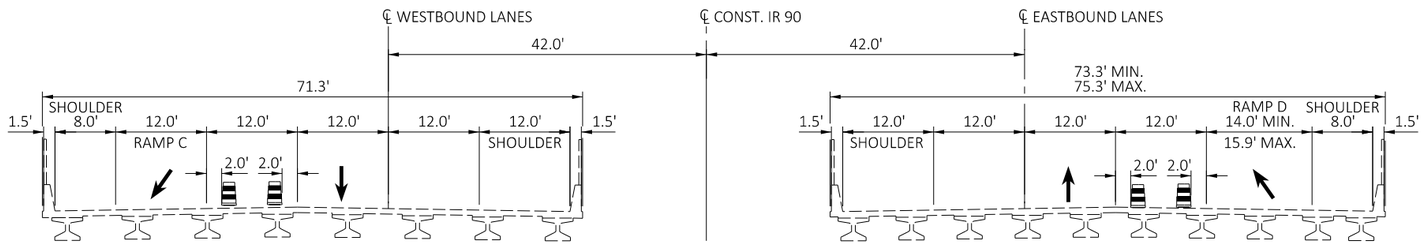
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

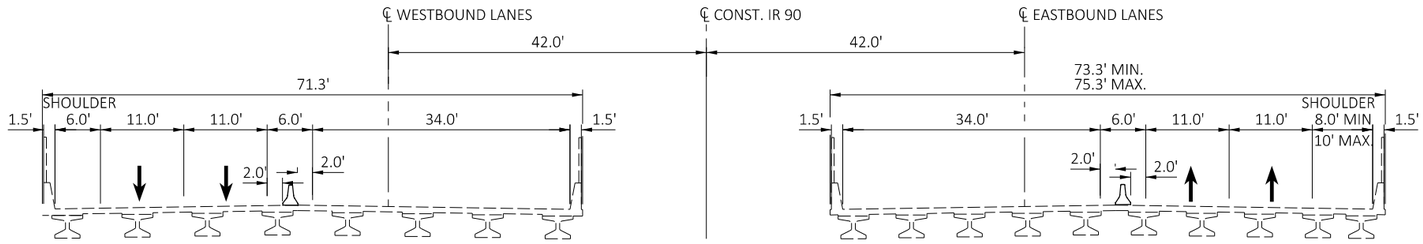
MAINTAINED LANE



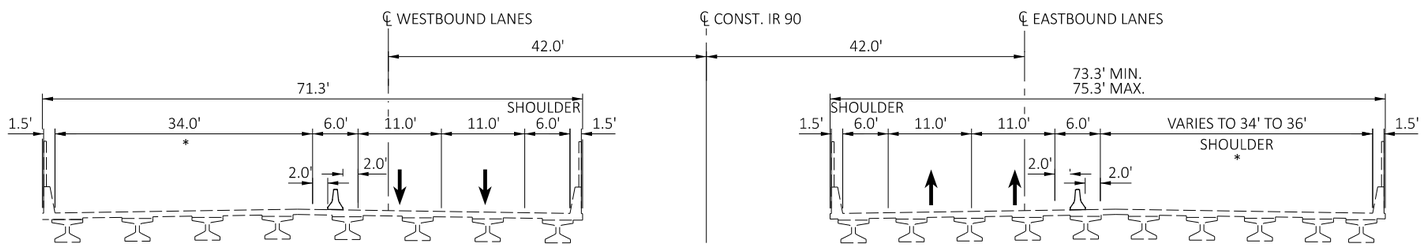

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER WEST RIVER ROAD




MOT PHASE 1 - IR 90 - BRIDGE OVER WEST RIVER ROAD
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



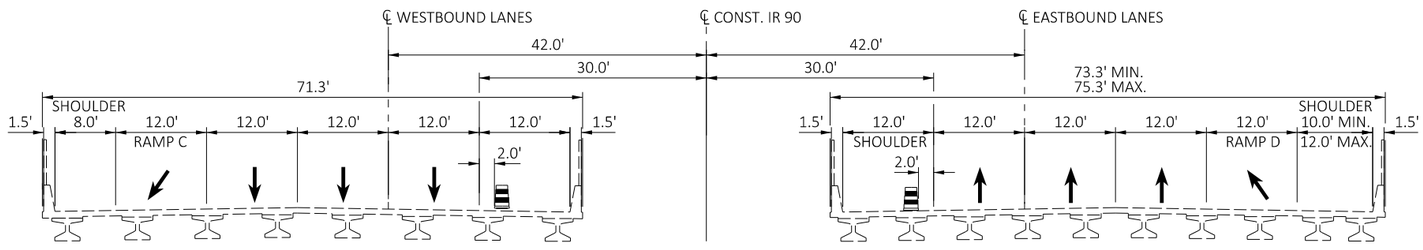

MOT PHASE 2 - IR 90 - BRIDGE OVER WEST RIVER ROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT
AND TEMPORARY GRADING



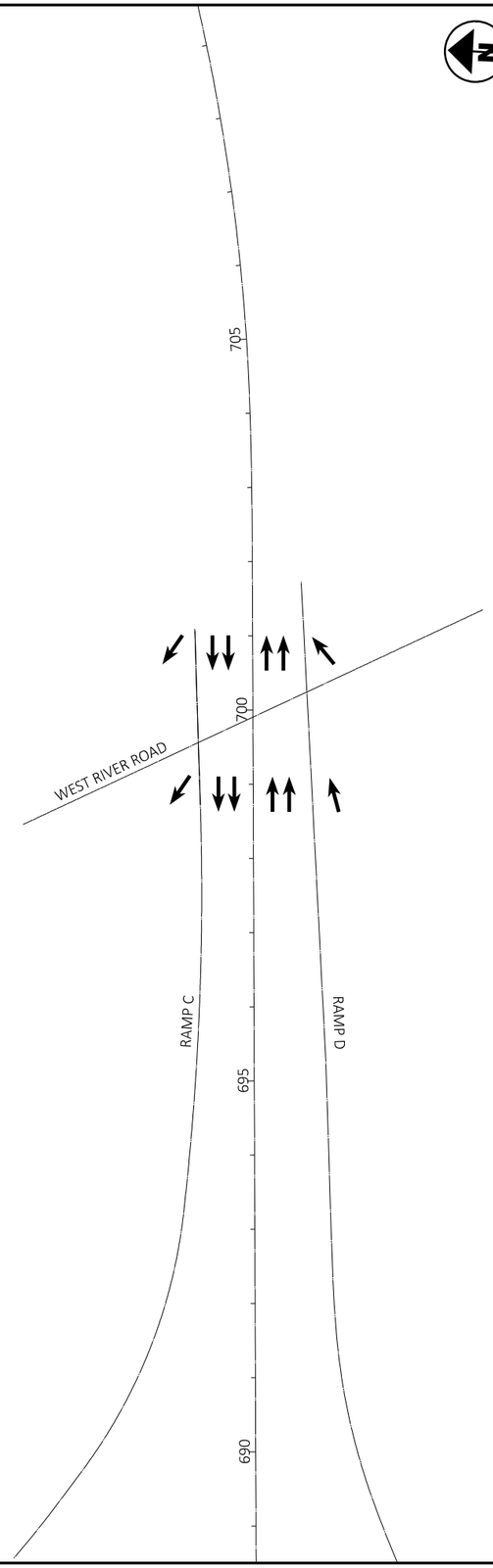

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.

MOT PHASE 3 - IR 90 - BRIDGE OVER WEST RIVER ROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.




MOT PHASE 4 - IR 90 - BRIDGE OVER WEST RIVER ROAD
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER WEST RIVER ROAD

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.13 TOTAL: 26

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:35 PM USER: thomas
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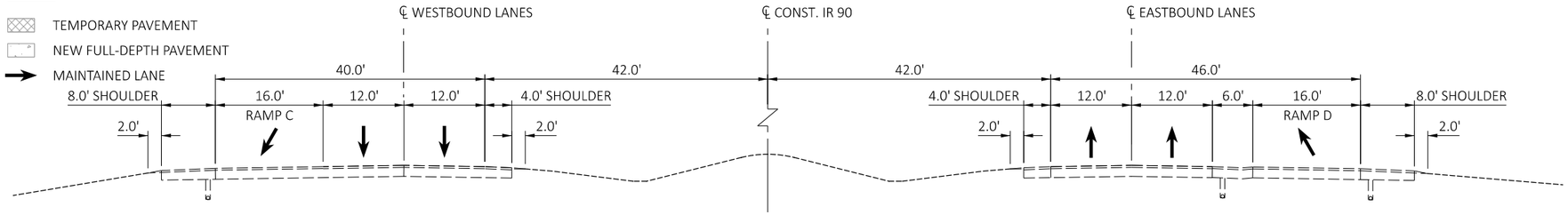
LEGEND

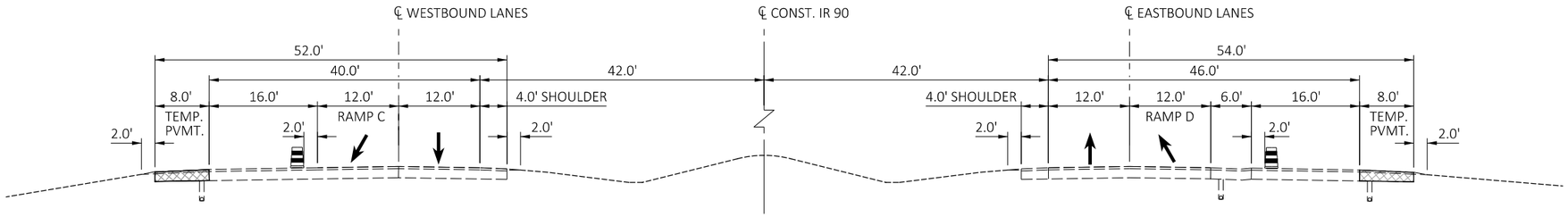
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

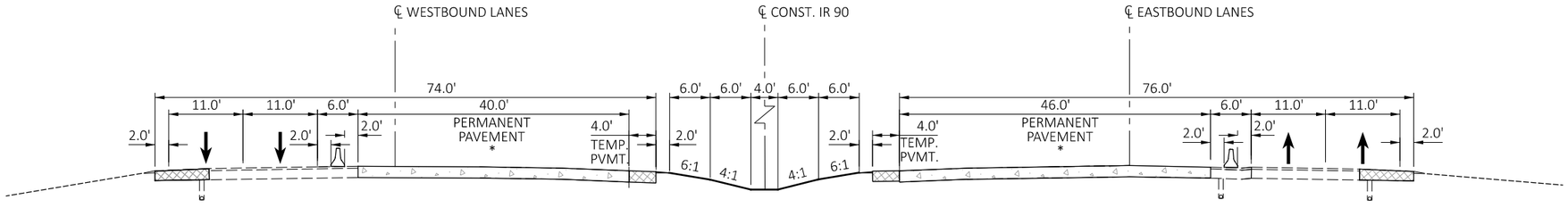
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 57 RAMPS C & D



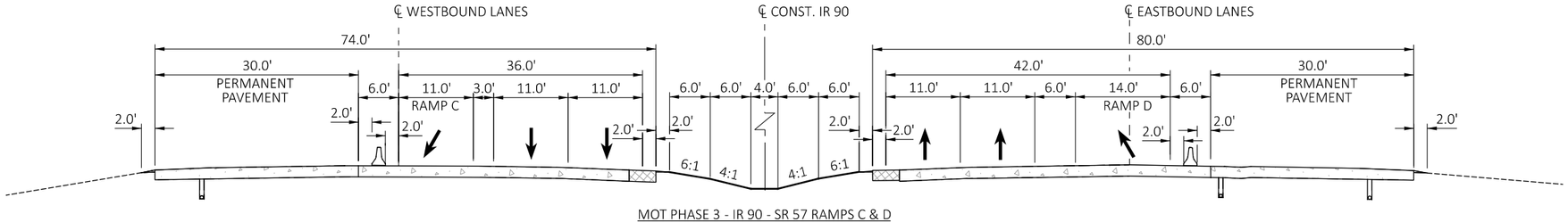

MOT PHASE 1- EVENING CLOSURE - IR 90 - SR 57 RAMPS C & D
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



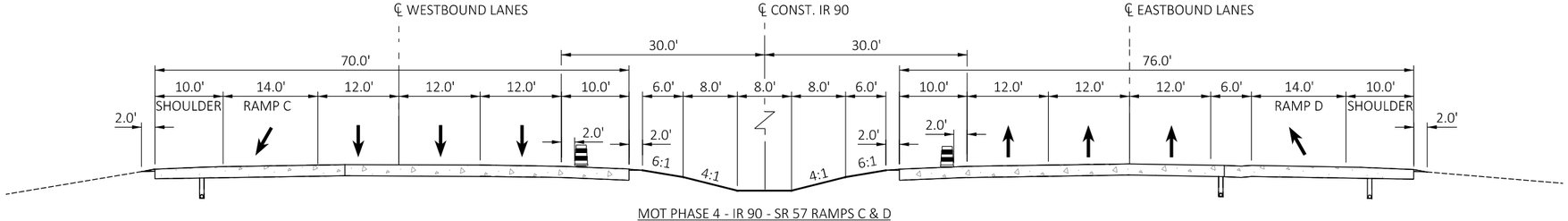

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C

MOT PHASE 2- IR 90 - RAMP CLOSURE - SR 57 RAMPS C & D
PART- WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT AND TEMPORARY GRADING

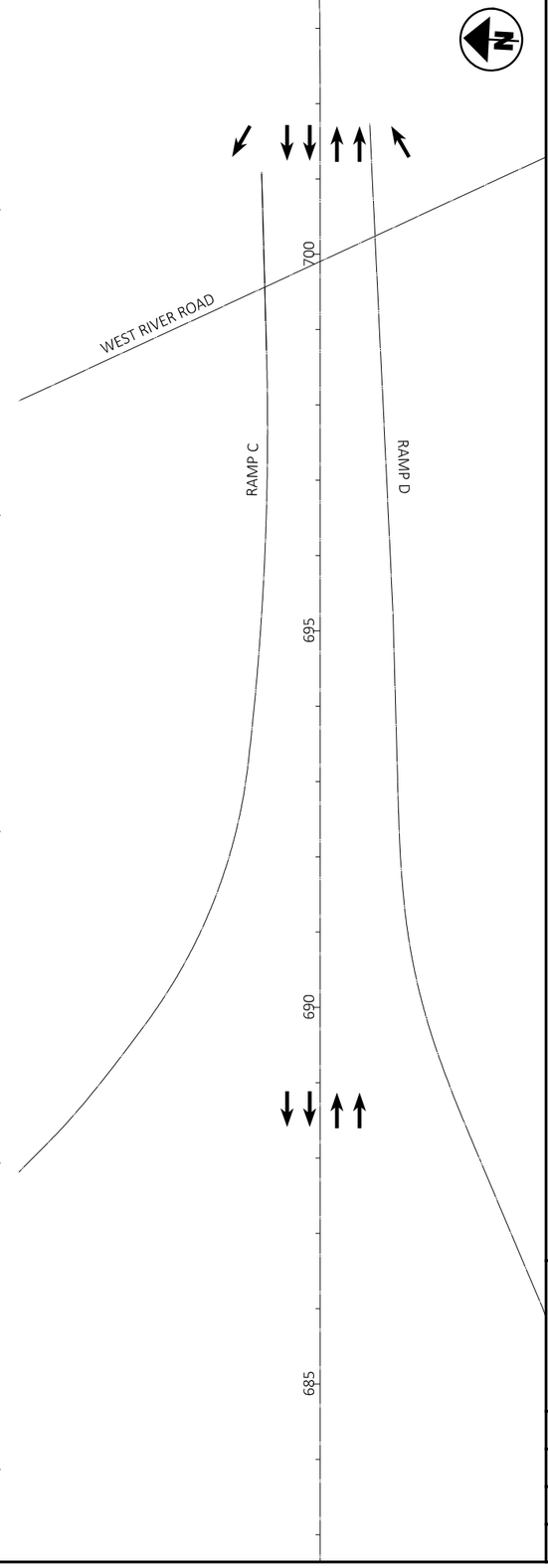
*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C




MOT PHASE 3 - IR 90 - SR 57 RAMPS C & D
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - SR 57 RAMPS C & D
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - SR 57 RAMPS C & D

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:36 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

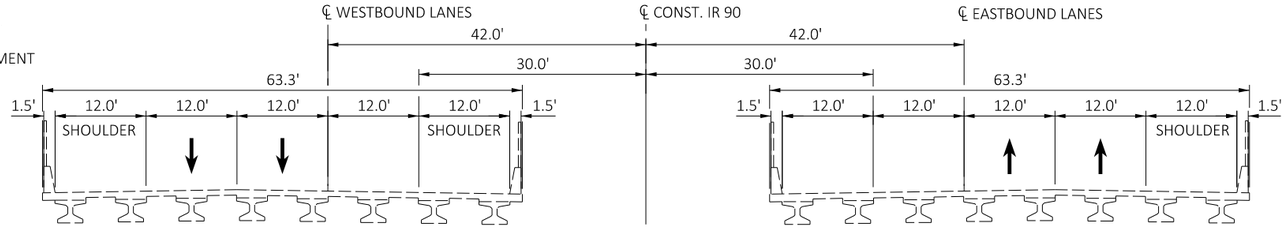
REVIEWER
CWP 11/10/23

PROJECT ID
107714

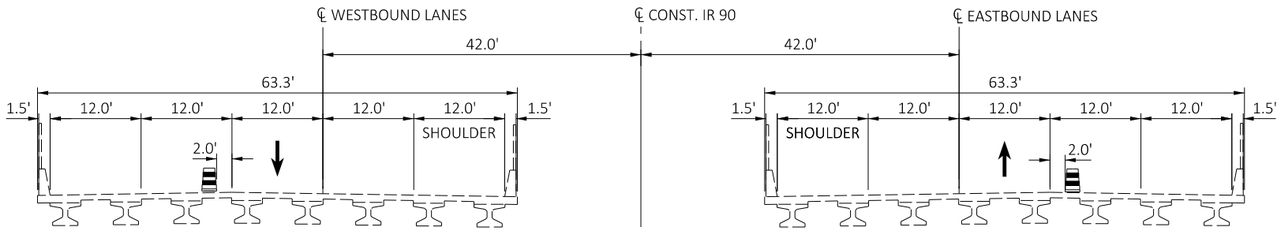
SHEET P.14 TOTAL 26

LEGEND

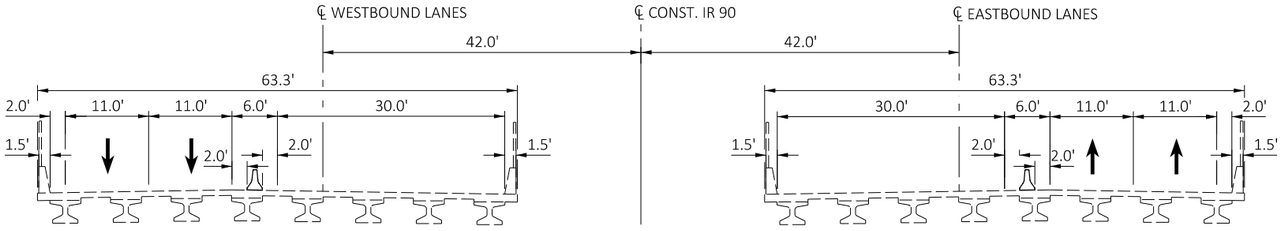
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



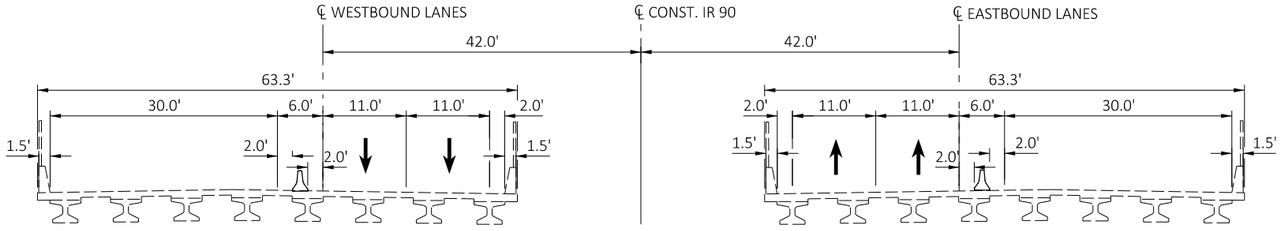

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER SR 57



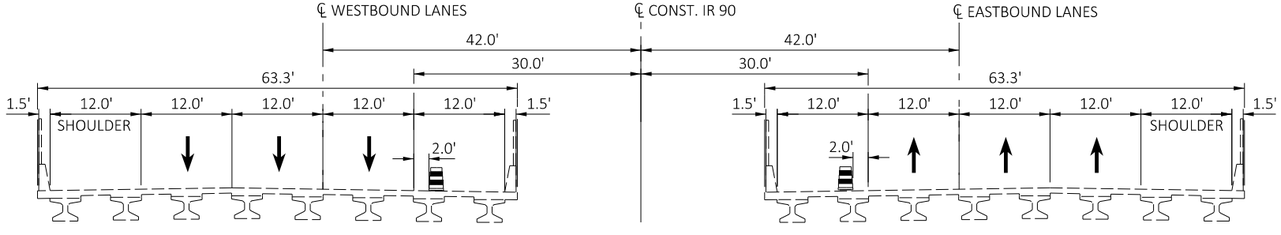

MOT PHASE 1 - EVENING CLOSURE- IR 90 - BRIDGE OVER SR 57
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



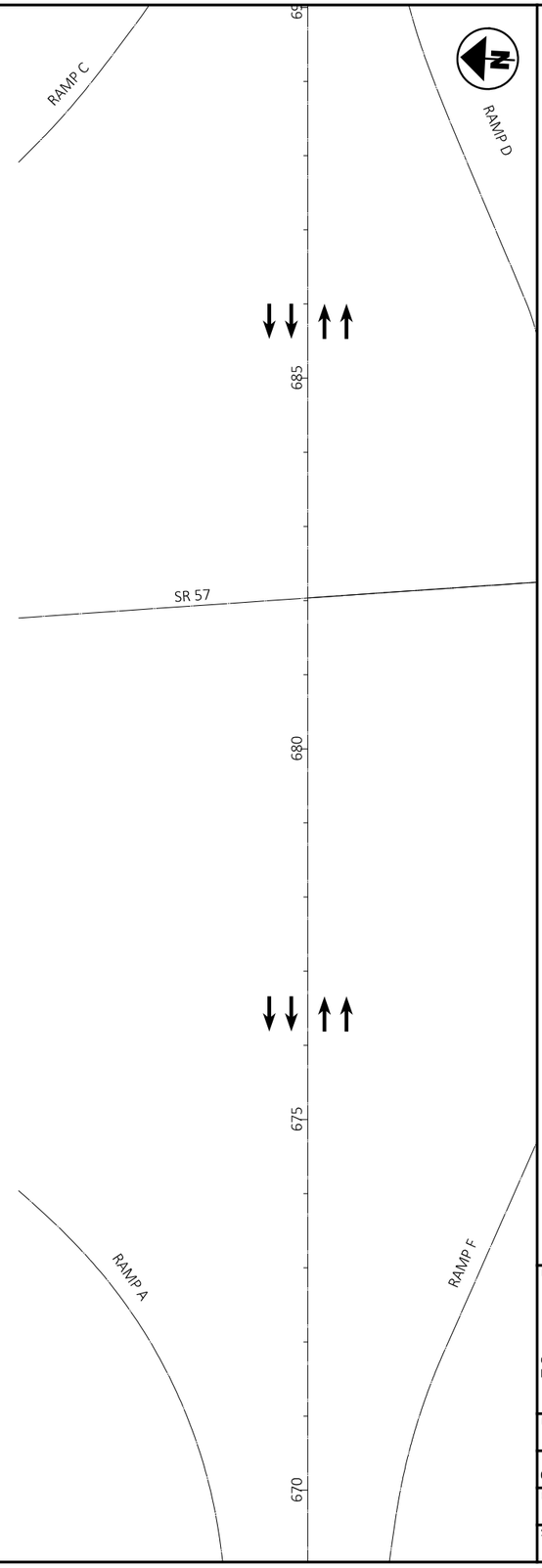

MOT PHASE 2 - IR 90 - BRIDGE OVER SR 57
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,
TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BRIDGE OVER SR 57
PART-WIDTH ALTERATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BRIDGE OVER SR 57
PART-WIDTH ALTERATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER SR 57

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.15 TOTAL: 26

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:37 PM USER: thomas
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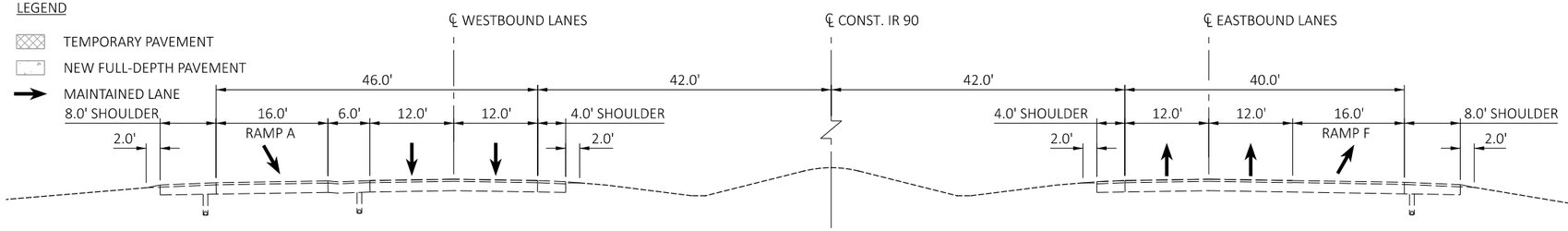
LEGEND

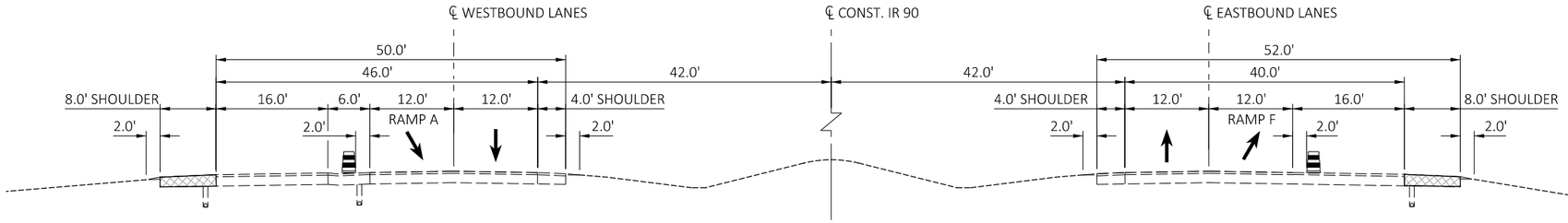
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

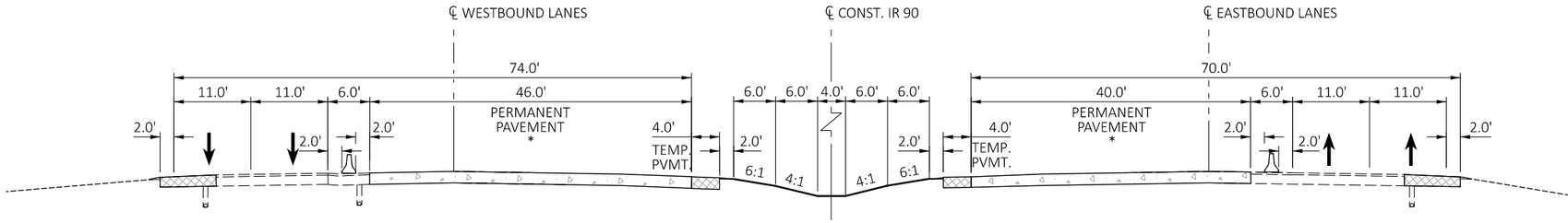
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 57 RAMPS A & F



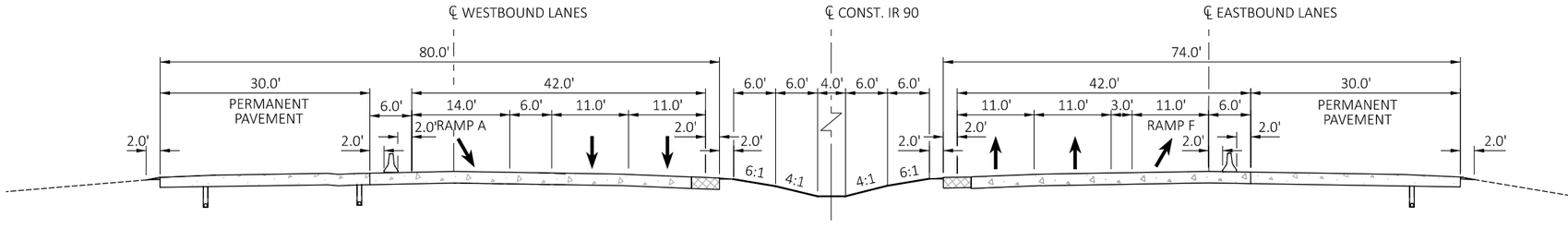

MOT PHASE 1 - EVENING CLOSURE - IR 90 - SR 57 RAMPS A & F
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



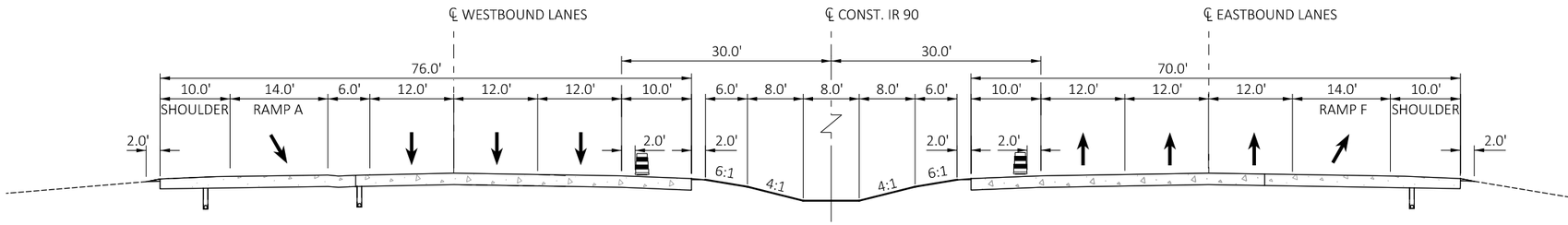

*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.

MOT PHASE 2 - IR 90 - RAMP CLOSURE - SR 57 RAMPS A & F
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT, AND TEMPORARY GRADING

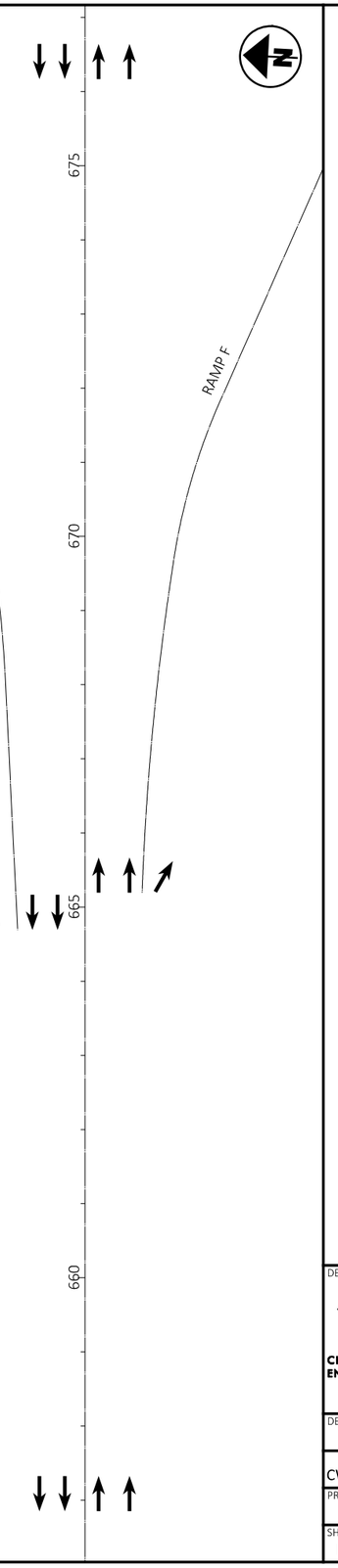
*- RAMP TO REMAIN OPEN UNLESS OTHERWISE SHOWN IN THE RAMP INFORMATION TABLE IN APPENDIX C.




MOT PHASE 3 - IR 90 - SR 57 RAMPS A & F
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - SR 57 RAMPS A & F
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - SR 57 RAMPS A & F

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:38 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

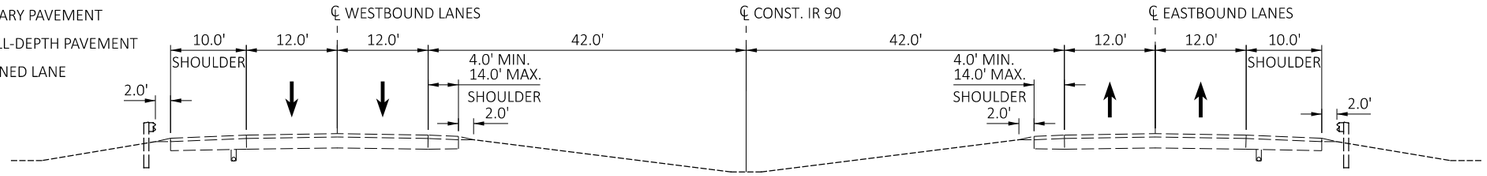
SHEET P.16 TOTAL 26

LEGEND

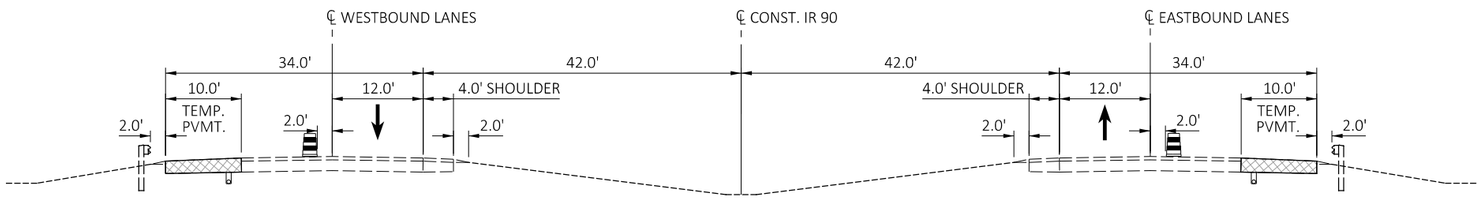
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

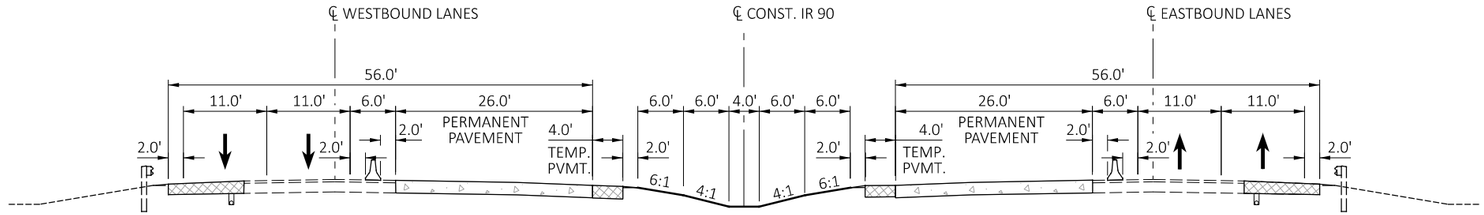
MAINTAINED LANE



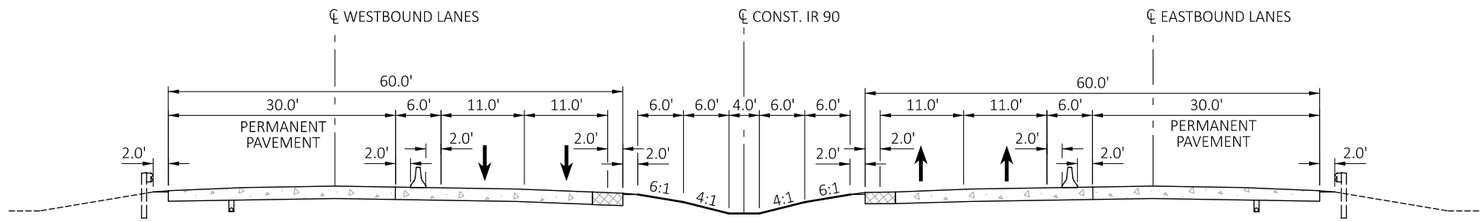

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 2 AND SR 57



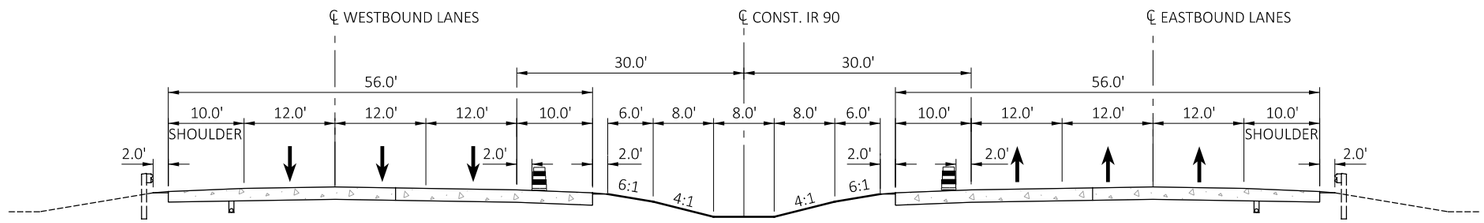

MOT PHASE 1- EVENING CLOSURE - IR 90 - BETWEEN SR 2 AND SR 57
PART- WIDTH ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2 - IR 90 - BETWEEN SR 2 AND SR 57
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT,
AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BETWEEN SR 2 AND SR 57
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BETWEEN SR 2 AND SR 57
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING

645

640

635

630

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:39 PM USER: thomas
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# MOTAA - TYPICAL SECTIONS - IR 90 PART-WIDTH ALTERNATIVE - IR 90 BETWEEN SR 2 AND SR 57

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

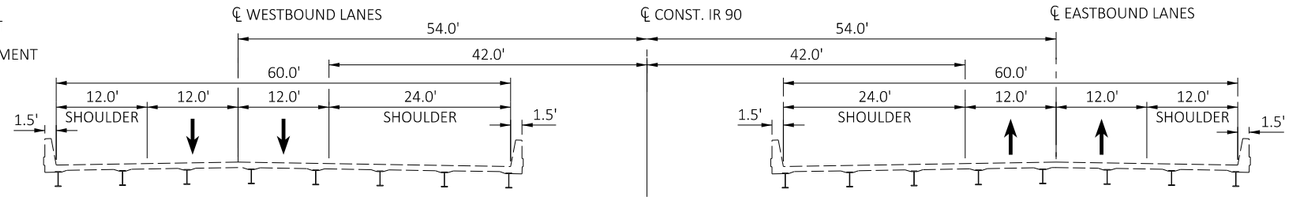
REVIEWER
CWP 11/10/23

PROJECT ID
107714

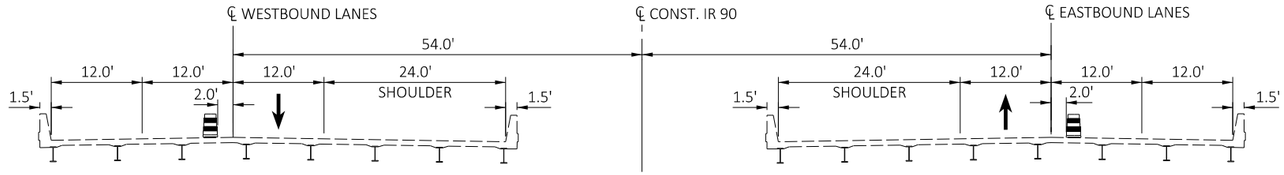
SHEET P.17 TOTAL 26

LEGEND

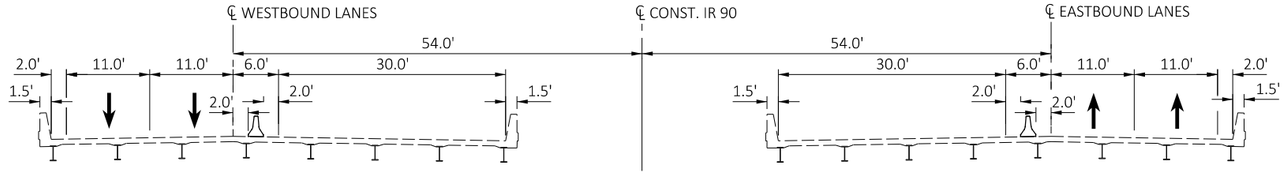
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



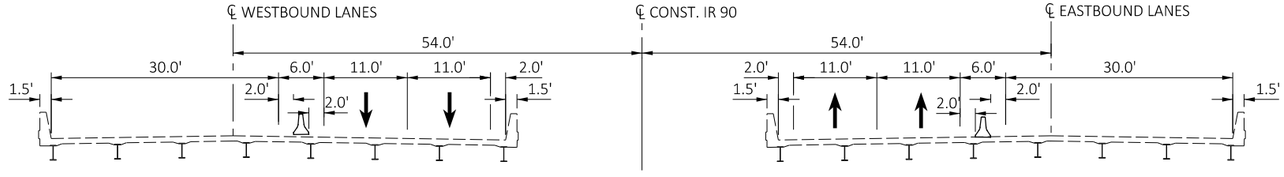

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER CSX RAILROAD



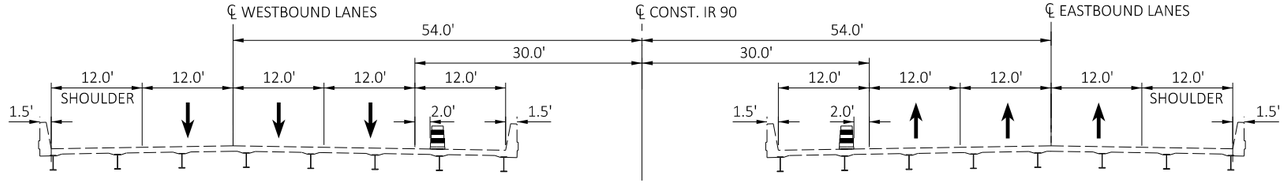

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BRIDGE OVER CSX RAILROAD
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



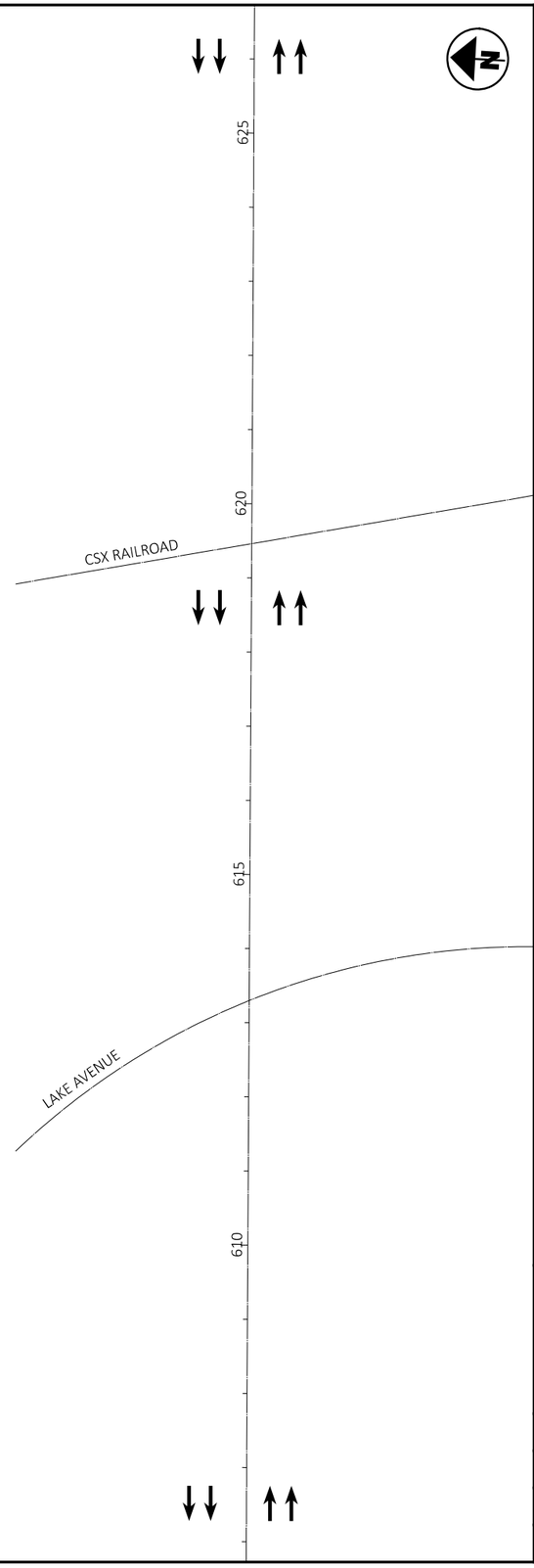

MOT PHASE 2 - IR 90 - BRIDGE OVER CSX RAILROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMET REMOVAL AND REPLACEMENT, TEMPORARY PAVEMENT AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BETWEEN SR 254 AND SR 611
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER CSX RAILROAD

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:40 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

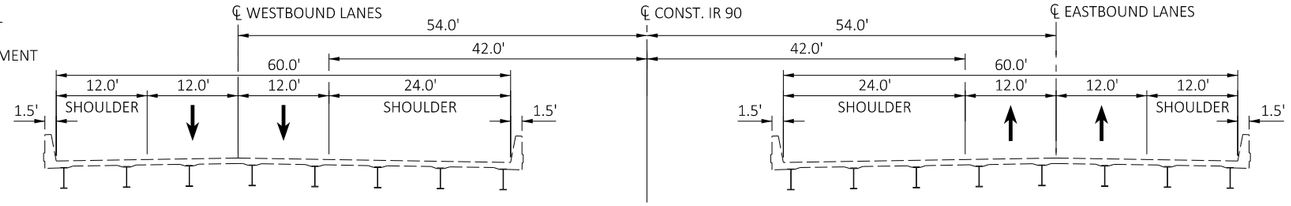
REVIEWER
CWP 11/10/23

PROJECT ID
107714

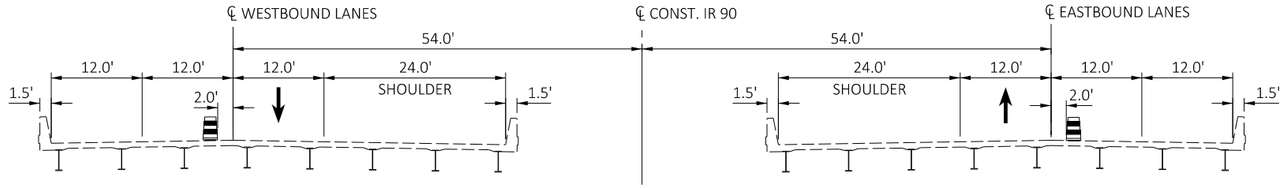
SHEET P.18 TOTAL 26

LEGEND

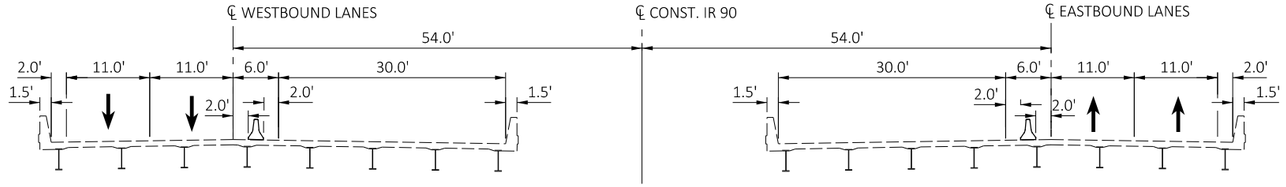
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



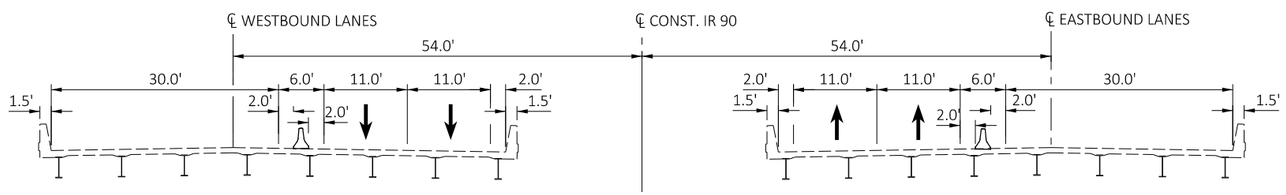

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER LAKE AVENUE



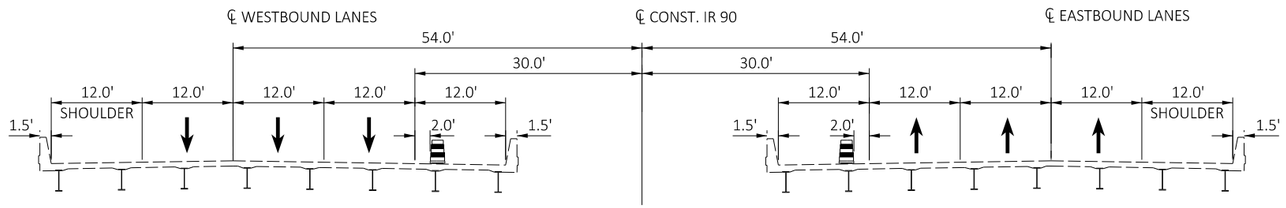

MOT PHASE 1 - EVENING CLOSURE - IR 90 - BRIDGE OVER LAKE AVENUE
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



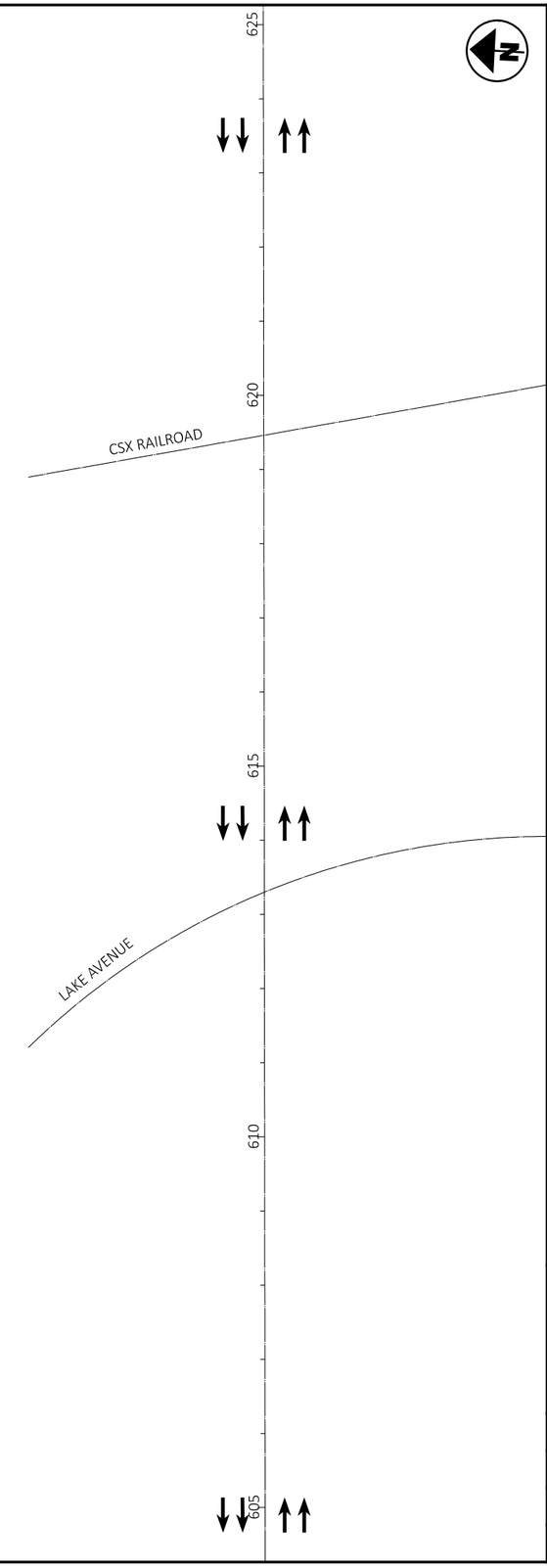

MOT PHASE 2 - IR 90 - BRIDGE OVER LAKE AVENUE
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,TEMPORARY PAVEMENT,
AND TEMPORARY GRADING




MOT PHASE 3 - IR 90 - BRIDGE OVER LAKE AVENUE
PART-WIDH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 4 - IR 90 - BRIDGE OVER LAKE AVENUE
PART-WIDH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER LAKE AVENUE

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:41 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

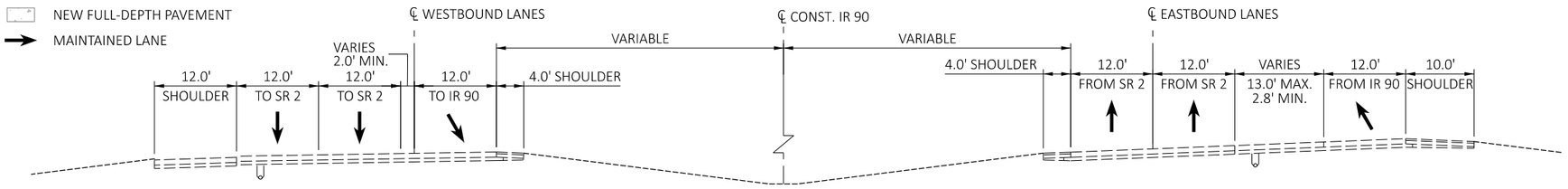
DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.19 TOTAL 26

LEGEND

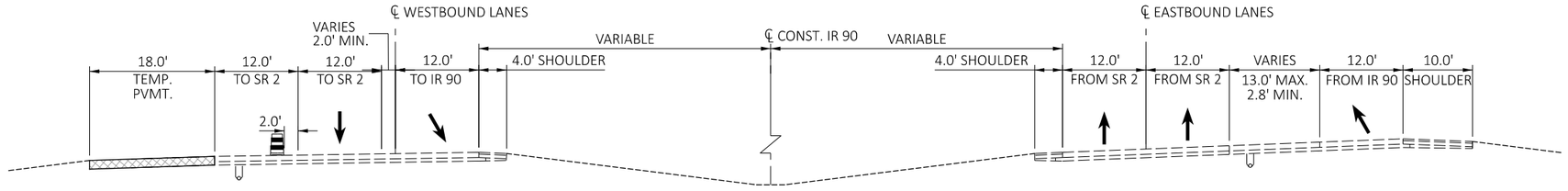
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

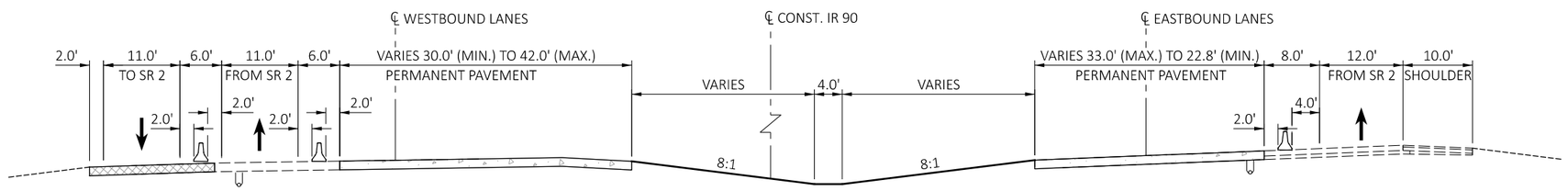
MAINTAINED LANE



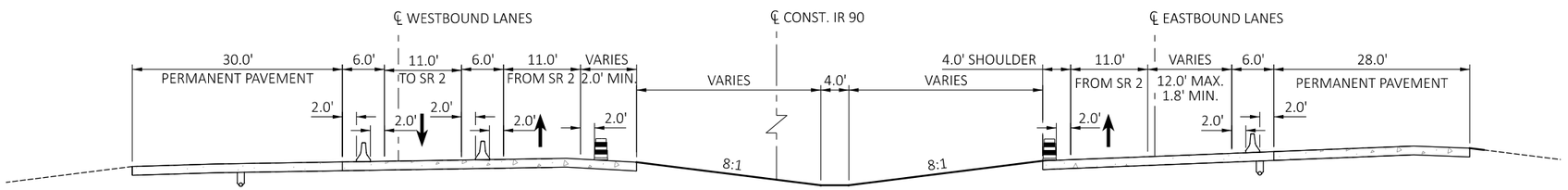

EXISTING TYPICAL SECTION - IR 90 & SR 2 - MERGE AND DIVERGE POINTS



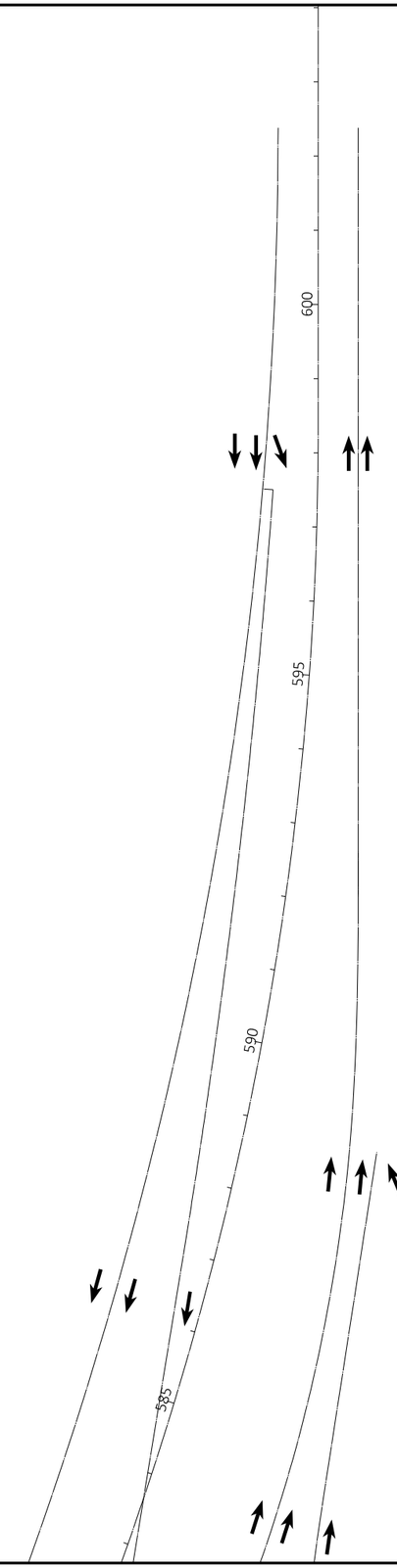

MOT PHASE 1 - IR 90 & SR 2 - MERGE AND DIVERGE POINTS
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2 - IR 90 & SR 2 - MERGE AND DIVERGE POINTS
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL
AND REPLACEMENT AND PERMANENT GRADING




MOT PHASE 3 - IR 90 & SR 2 - MERGE AND DIVERGE POINTS
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOTAA - TYPICAL SECTIONS - IR 90
PART-WIDTH ALTERNATIVE - IR 90 - SR 2 MERGE & DIVERGE LANES

DESIGN AGENCY
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REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.20 TOTAL 26

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:41 PM USER: thomas
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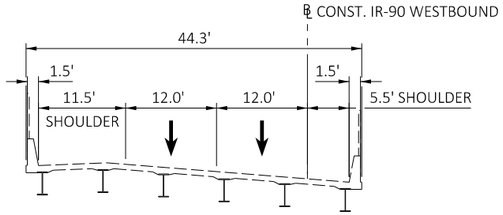
LEGEND

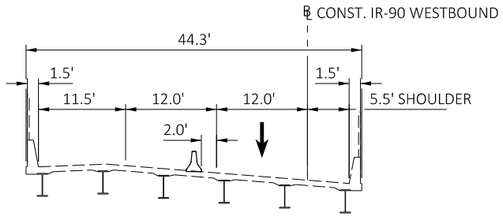
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

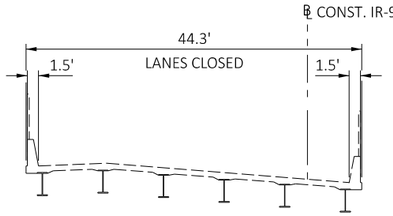
MAINTAINED LANE



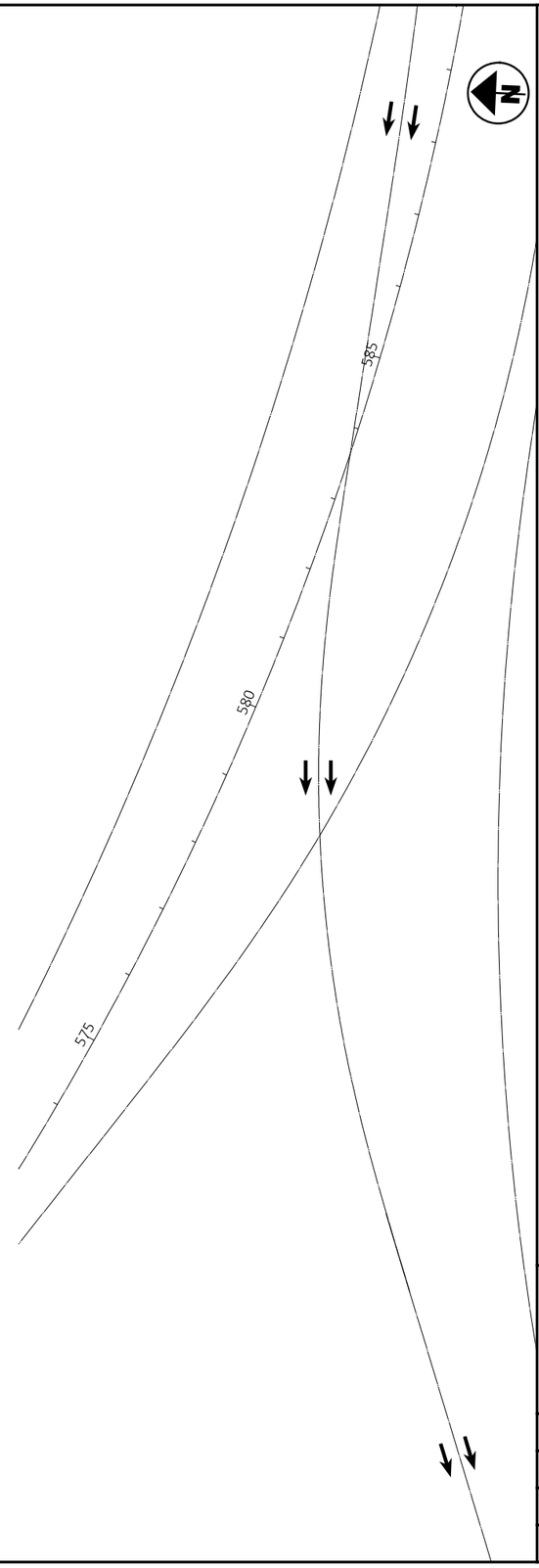

EXISTING TYPICAL SECTION - IR 90 WB - BRIDGE OVER SR 2




MOT PHASE 1 - IR 90 WB - BRIDGE OVER SR 2
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2 - IR 90 WB - BRIDGE OVER SR 2
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - IR 90
# ALTERNATIVE - IR 90 WESTBOUND BRIDGE OVER SR 2
# PART-WIDTH ALTERNATIVE

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

SHEET P.21 TOTAL 26

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:42 PM USER: thomas
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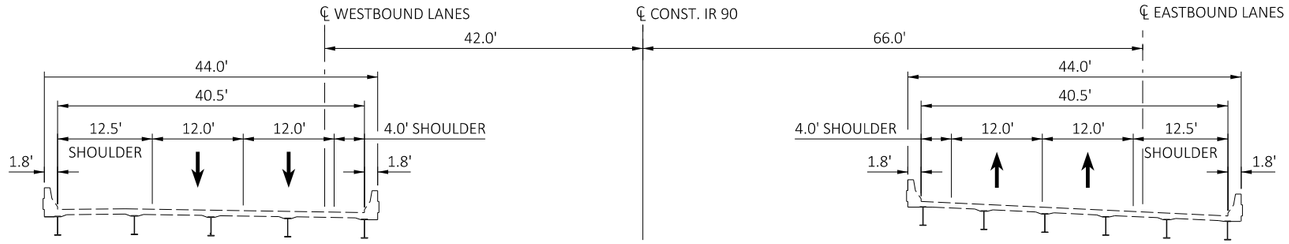
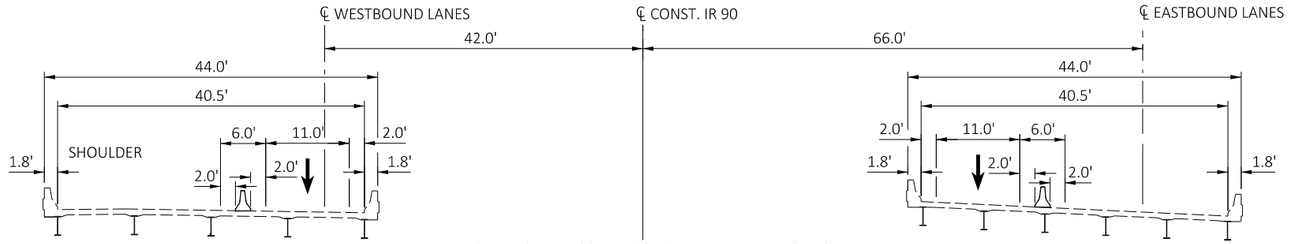
LEGEND

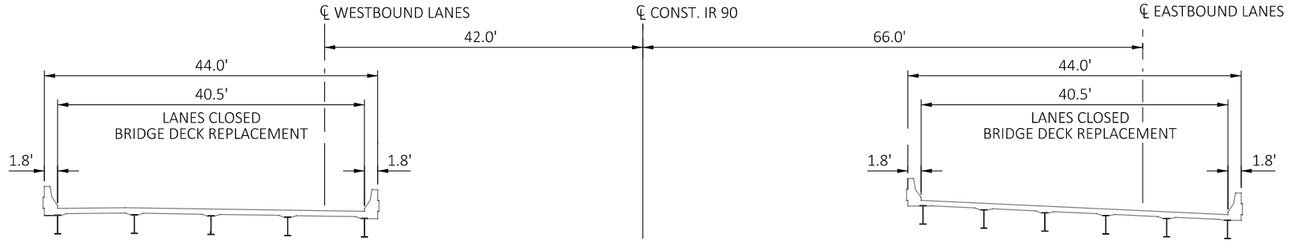
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



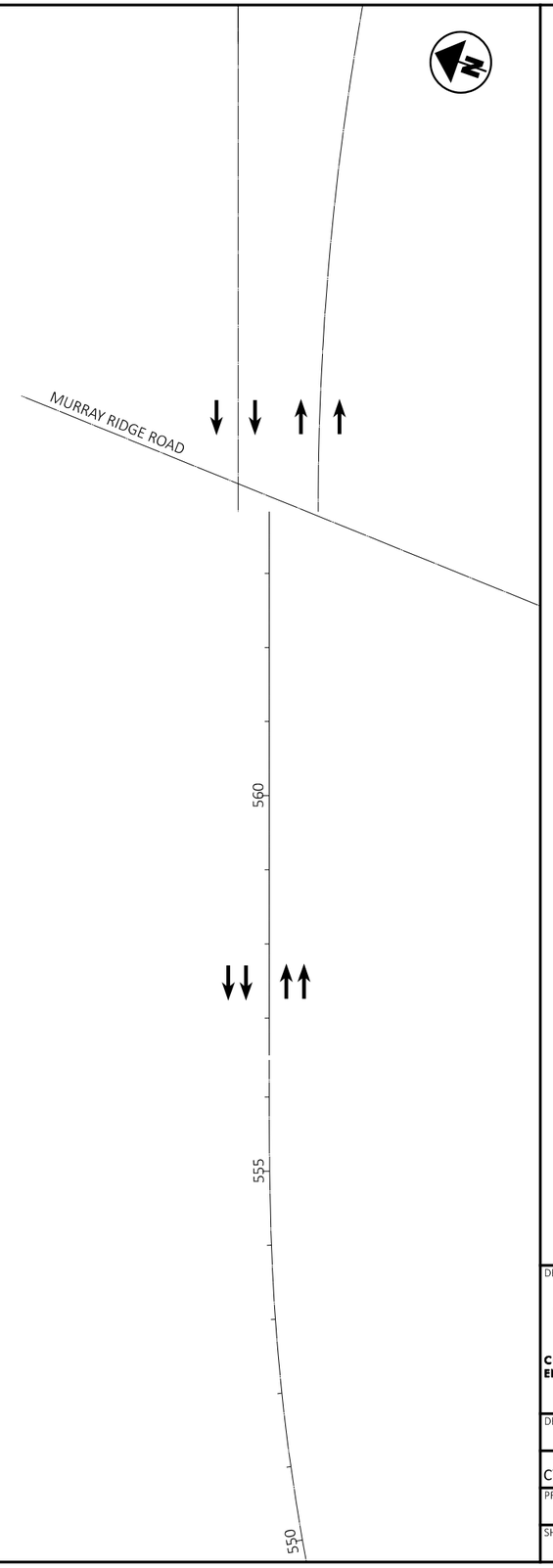

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER MURRAY RIDGE ROAD




MOT PHASE 1- IR 90 - BRIDGE OVER MURRAY RIDGE ROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2- IR 90 - BRIDGE OVER MURRAY RIDGE ROAD
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT
AND BRIDGE DECK REPLACEMENT




# MOTAA - TYPICAL SECTIONS - IR 90
## PART-WIDTH ALTERNATIVE - IR 90 BRIDGE OVER MURRAY RIDGE ROAD

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:43 PM USER: thomas
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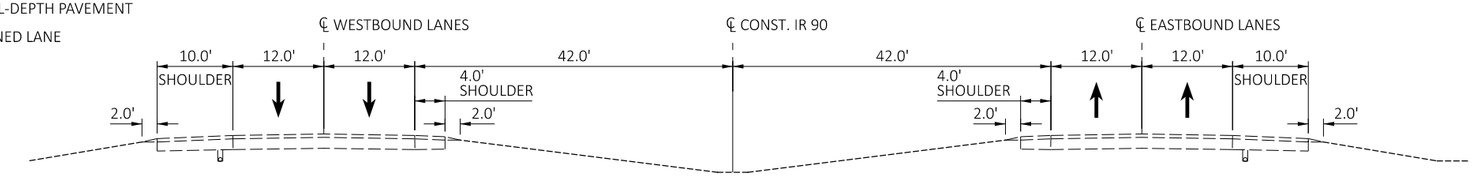
DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

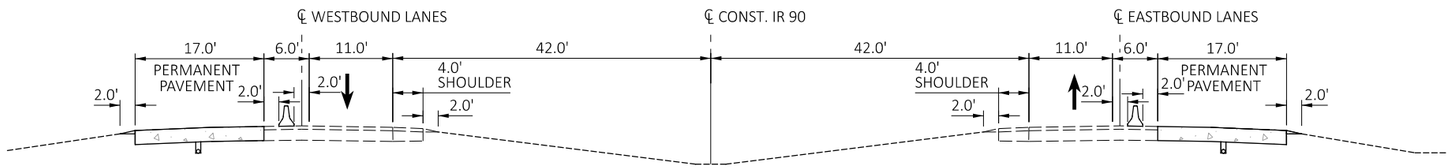
DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.22 TOTAL: 26

LEGEND

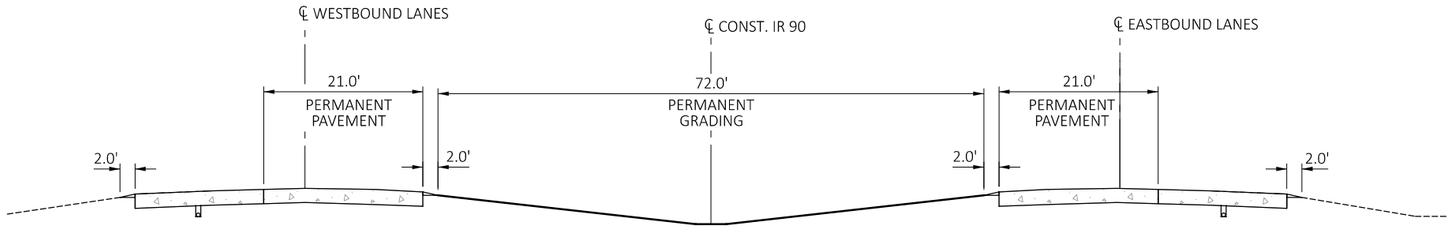
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



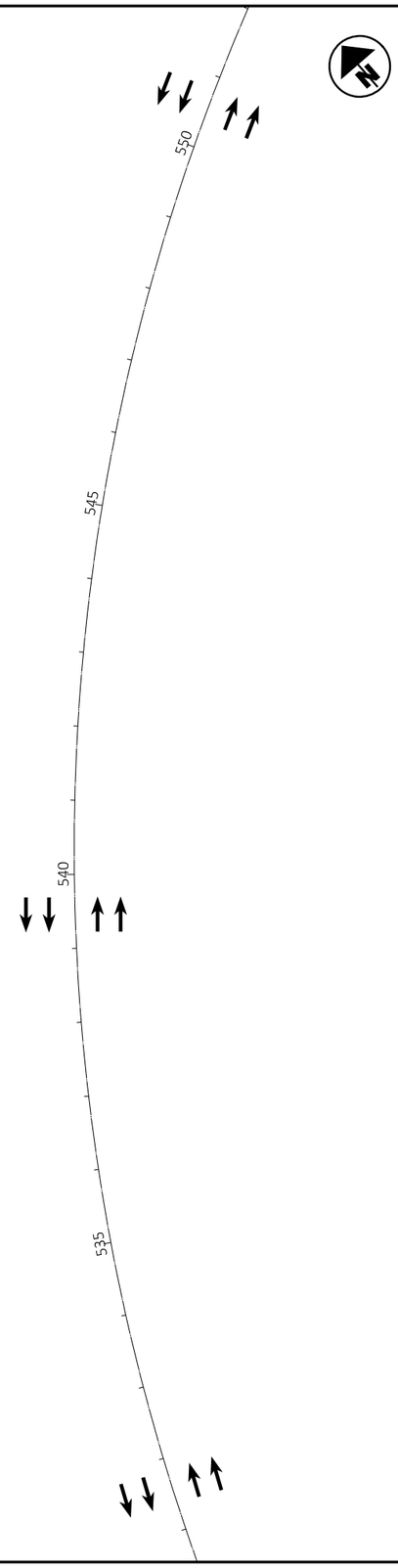

EXISTING TYPICAL - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA




MOT PHASE 1 - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2 - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA
PART-WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT
AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# PART-WIDTH ALTERNATIVE - IR 90 BETWEEN TURNPIKE PLAZA AND SR 2

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PROJECT ID 107714
SHEET P.23 TOTAL 26

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:43 PM USER: thomas
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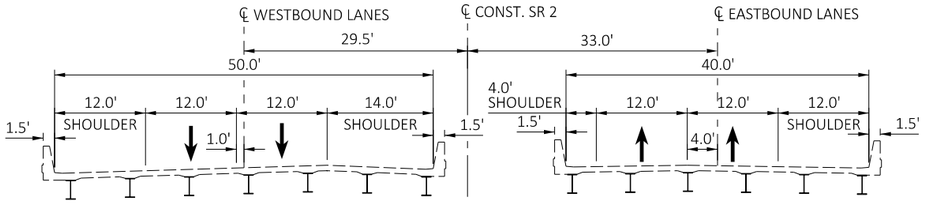
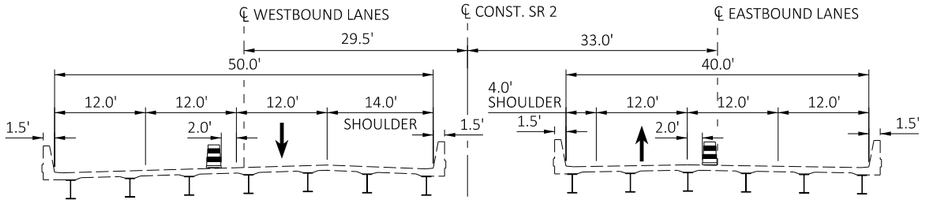
LEGEND

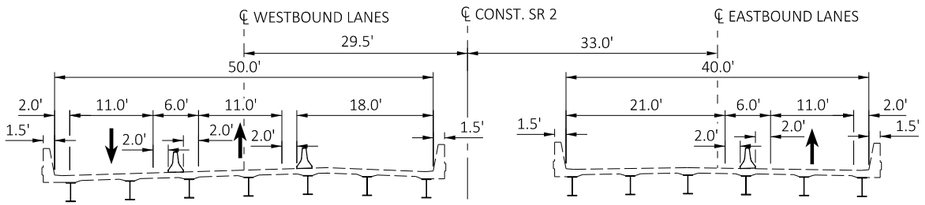
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



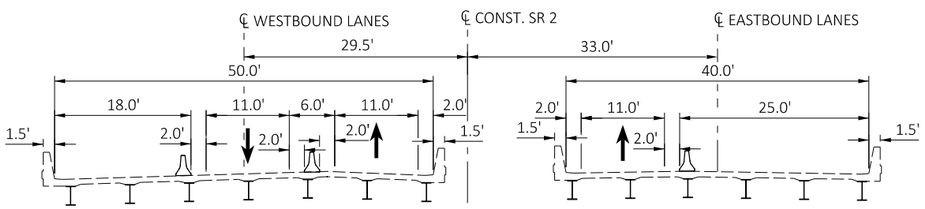

EXISTING TYPICAL SECTION - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD



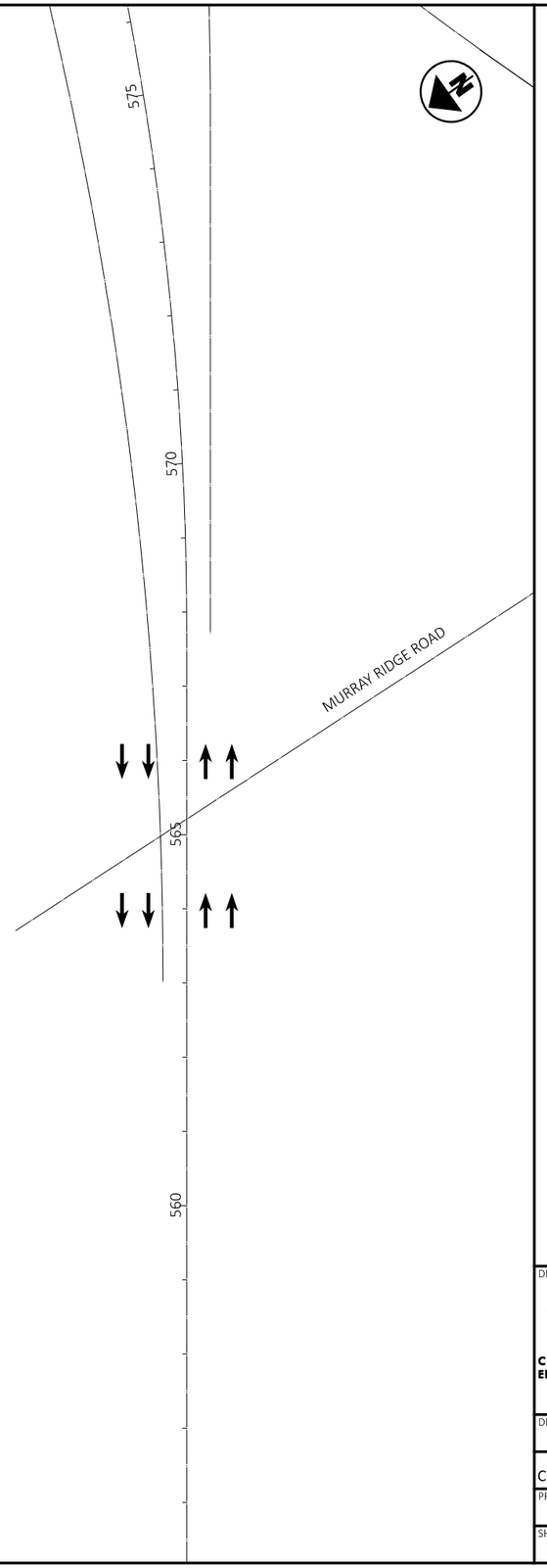

MOT PHASE 1- EVENING CLOSURE - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
PART - WIDTH ALTERNATIVE - TEMPORAR PAVEMENT




MOT PHASE 2 - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3- SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - SR 2
# PART-WIDTH ALTERNATIVE - SR 2 BRIDGE OVER MURRAY RIDGE ROAD

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:44 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

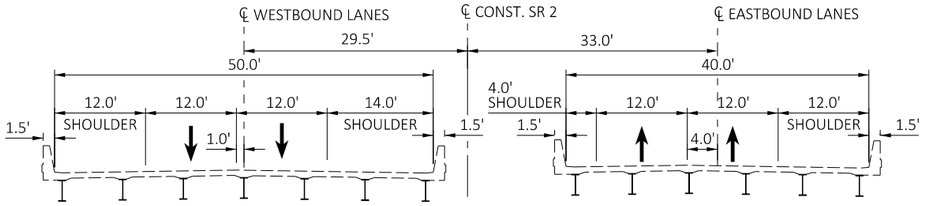
REVIEWER
CWP 11/10/23

PROJECT ID
107714

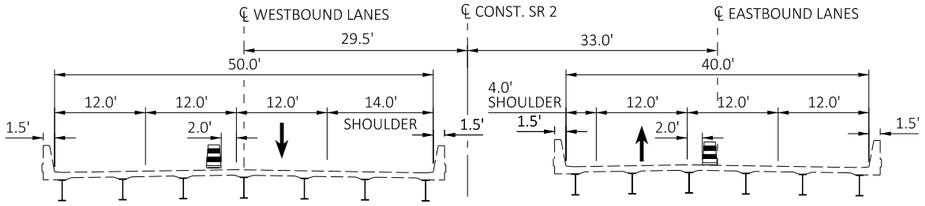
SHEET P.24 | TOTAL 26

LEGEND

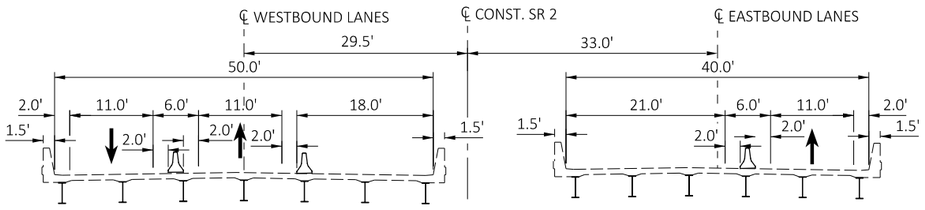
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



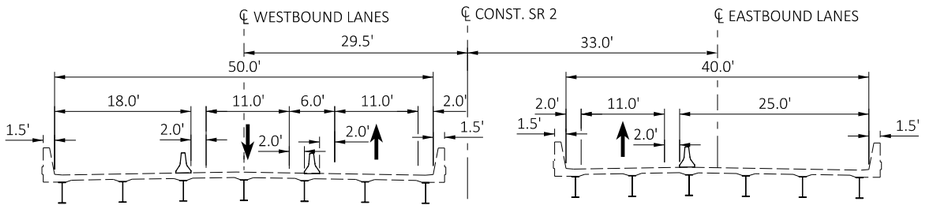

EXISTING TYPICAL SECTION - SR 2 - BRIDGE LOR-02-10.46



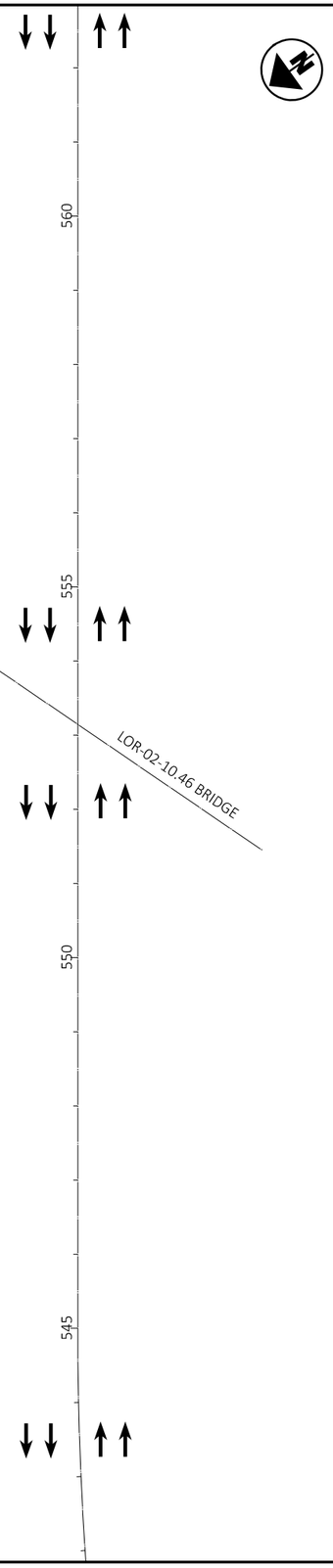

MOT PHASE 1- EVENING CLOSURE - SR 2 - BRIDGE LOR-02-10.46
PART - WIDTH ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2- SR 2 - BRIDGE LOR-02-10.46
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - SR 2 - BRIDGE LOR-02-10.46
PART - WIDTH ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - SR 2
## PART-WIDTH ALTERNATIVE - SR 2 BRIDGE LOR-2-10.46

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

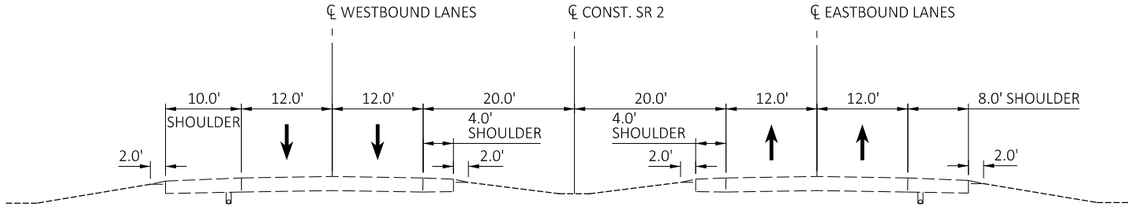
DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.25 TOTAL 26

LOR-90-10.76 MOTAA

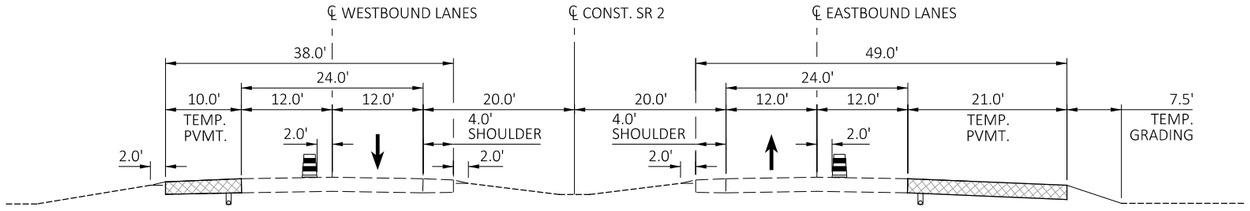
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:45 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\A00-Engineering\Roadway\Sheets\107714_GY025.dgn

LEGEND

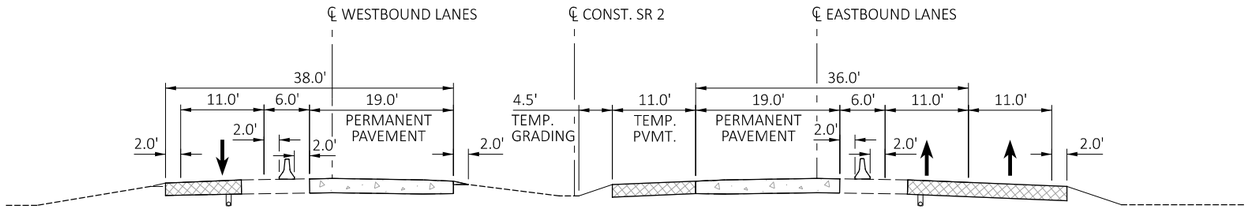
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



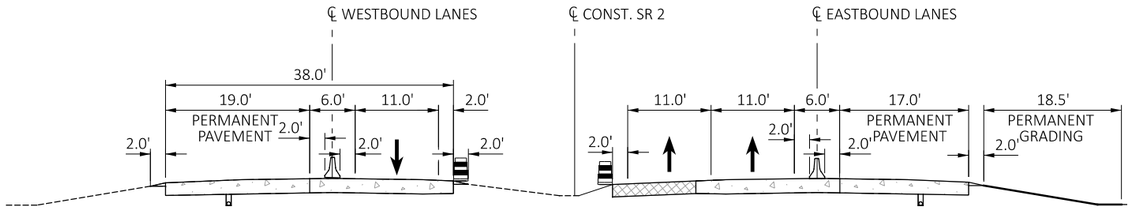

EXISTING TYPICAL - SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90



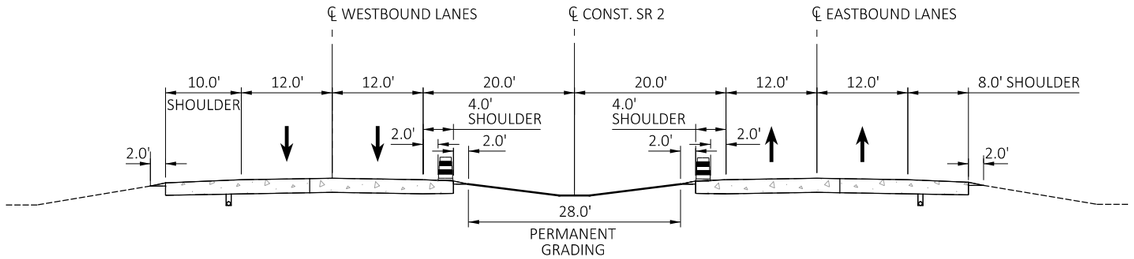

MOT PHASE 1- EVENING CLOSURE - SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT



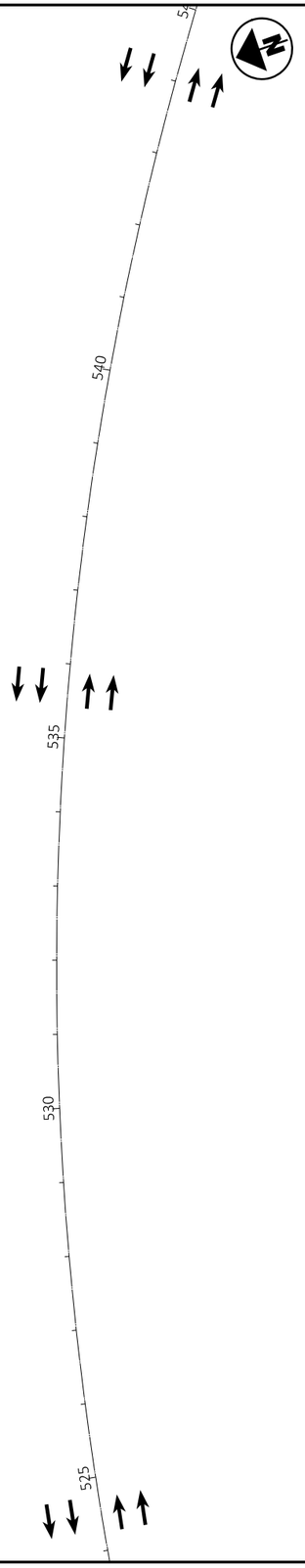

MOT PHASE 2- SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT AND
FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3- SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY AND FULL DEPTH PAVEMENT REMOVAL
AND REPLACEMENT AND PERMANENT GRADING




MOT PHASE 4 - SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
PART-WIDTH ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - SR 2
# PART-WIDTH ALTERNATIVE - SR 2 BETWEEN MIDDLE RIDGE ROAD & IR 90

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.26 | TOTAL: 26

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:45 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY026.dgn

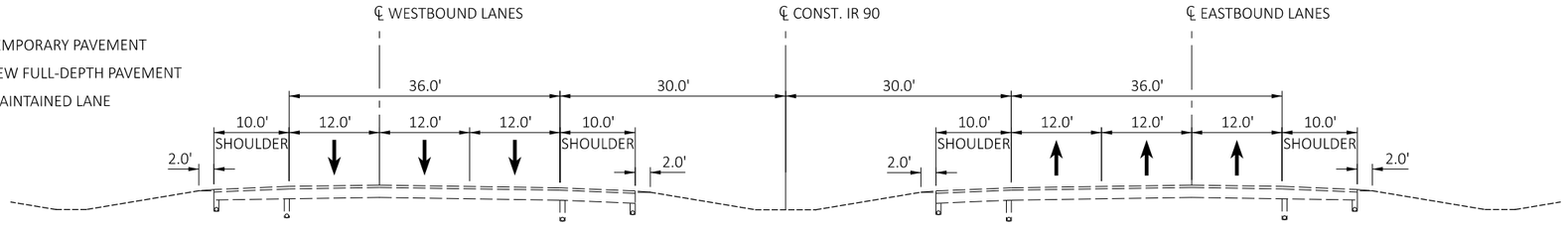
# Appendix F: Crossover MOT Typical Sections

LEGEND

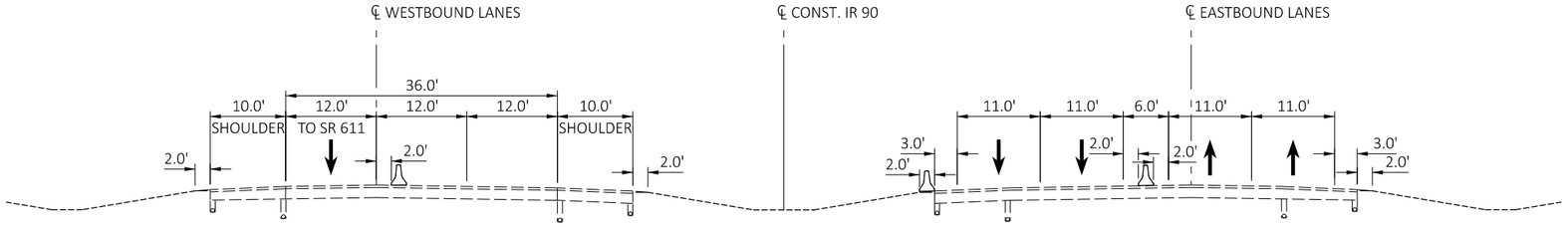
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

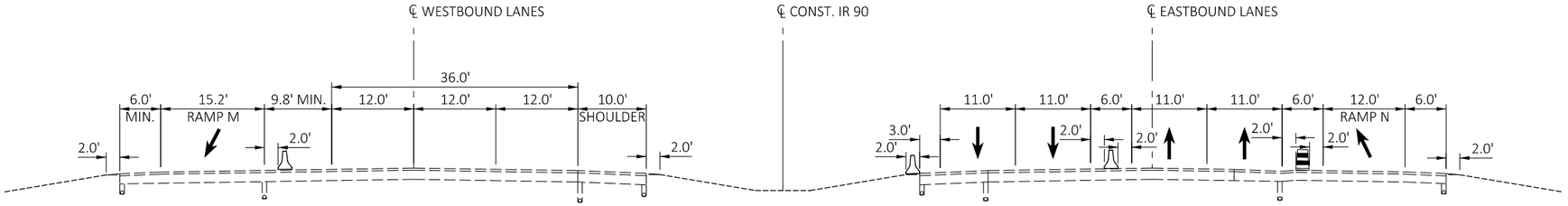
MAINTAINED LANE



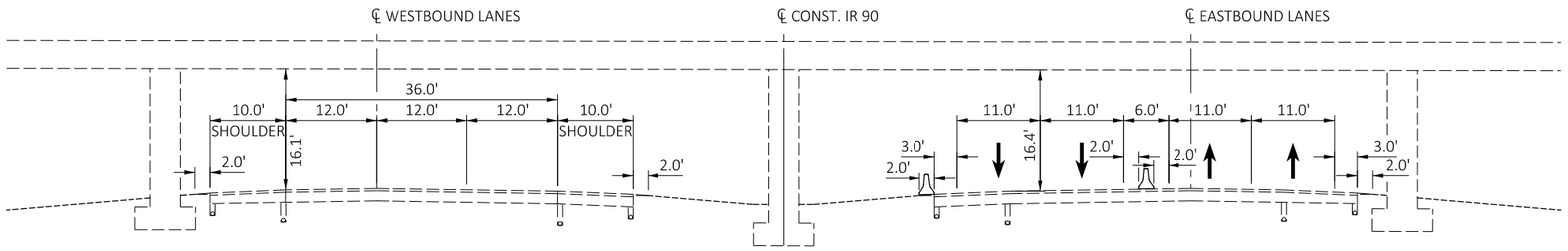

EXISTING TYPICAL SECTION - IR 90 - EAST OF SR 611



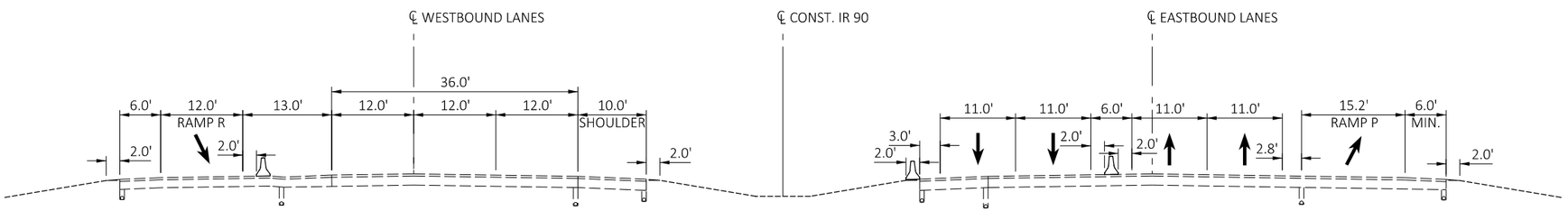

CROSSOVER - IR 90-WESTBOUND TO EASTBOUND CROSSOVER



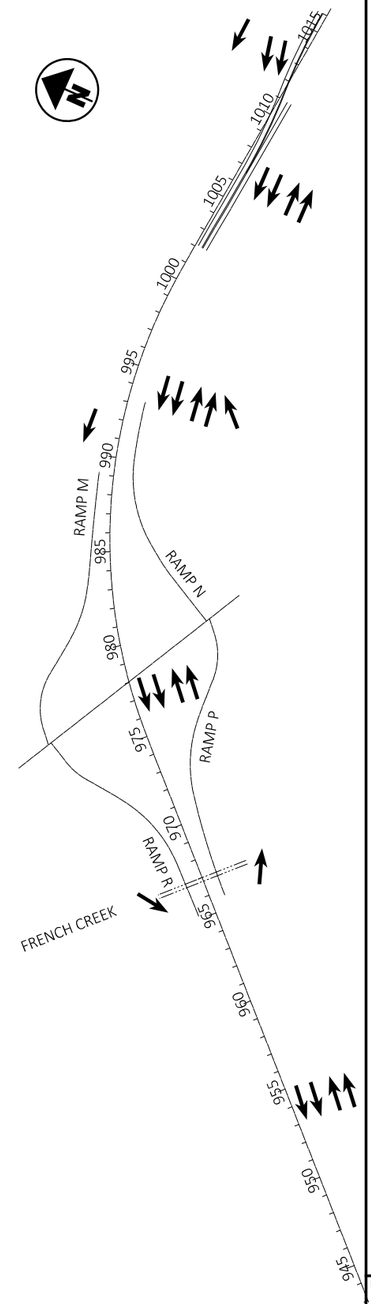

CROSSOVER - IR 90 - WESTBOUND TO EASTBOUND CROSSOVER AT RAMPS M AND N




CROSSOVER - IR 90 - WESTBOUND TO EASTBOUND CROSSOVER UNDER SR 611




CROSSOVER - IR 90 - WESTBOUND TO EASTBOUND CROSSOVER AT RAMPS R AND P




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - WESTBOUND CROSSOVER - IR 90 AND SR 611

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:48 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\107714\400-Engineering\Roadway\Sheets\107714_GY0XO1.dgn

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

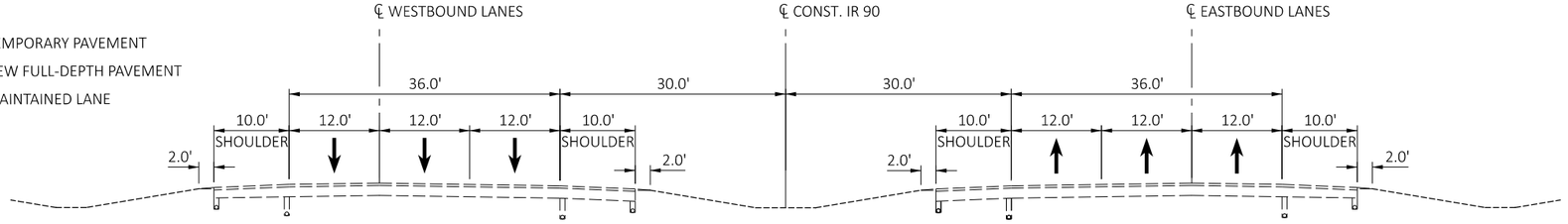
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.01 |
| TOTAL | 28 |

LEGEND

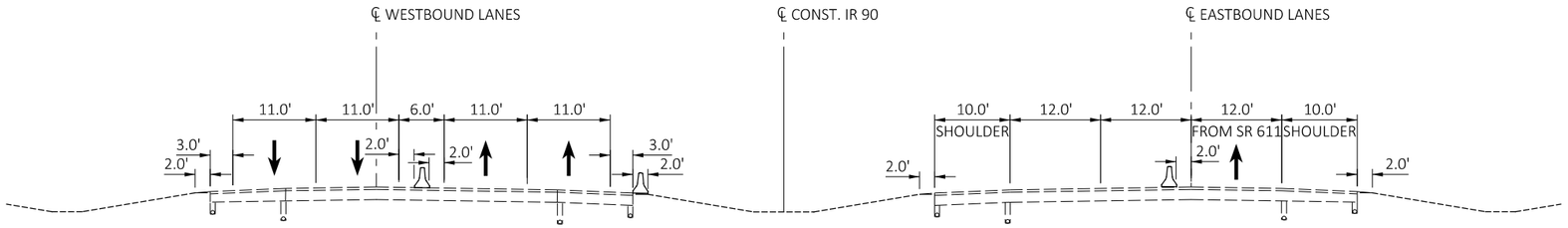
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

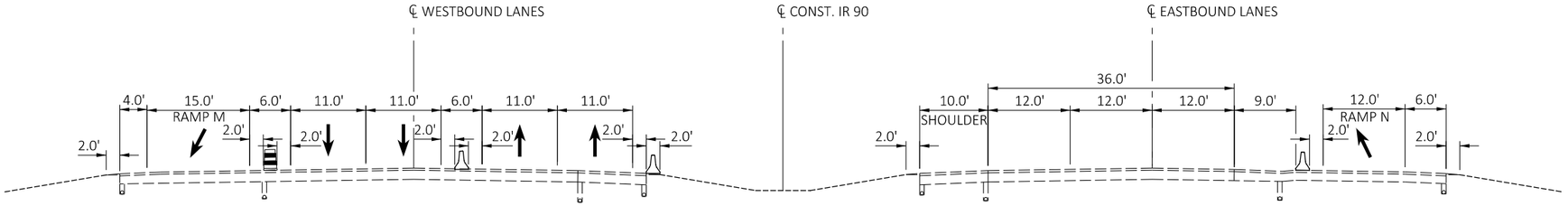
MAINTAINED LANE



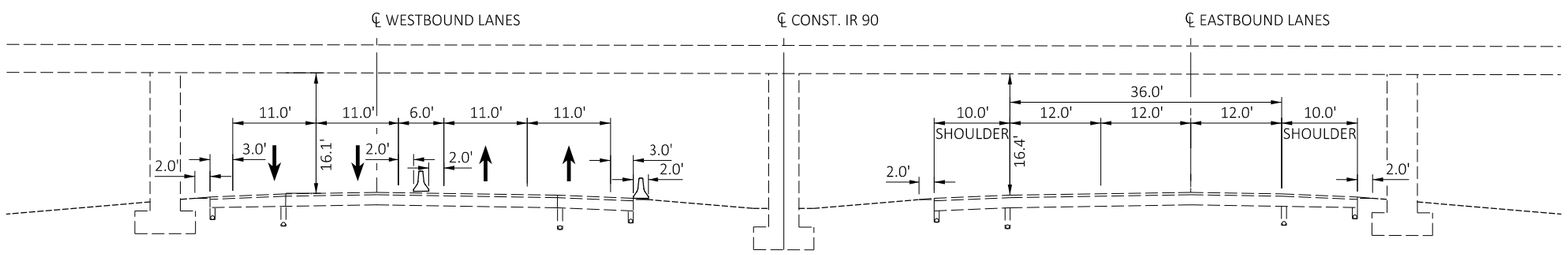

EXISTING TYPICAL SECTION - IR 90 - EAST OF SR 611



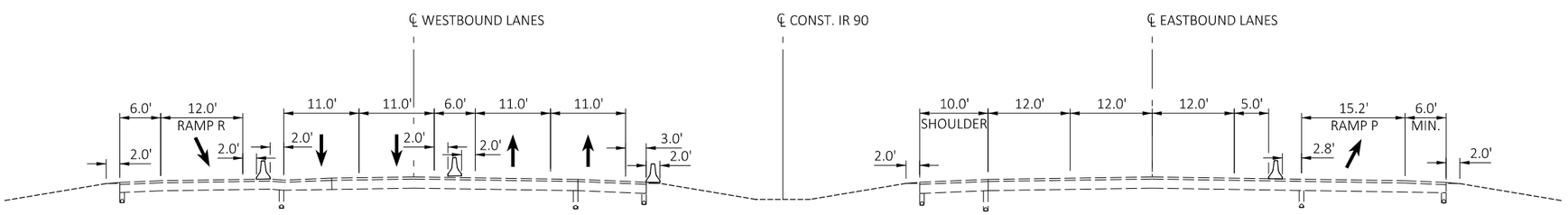

CROSSOVER - IR 90-EASTBOUND TO WESTBOUND CROSSOVER



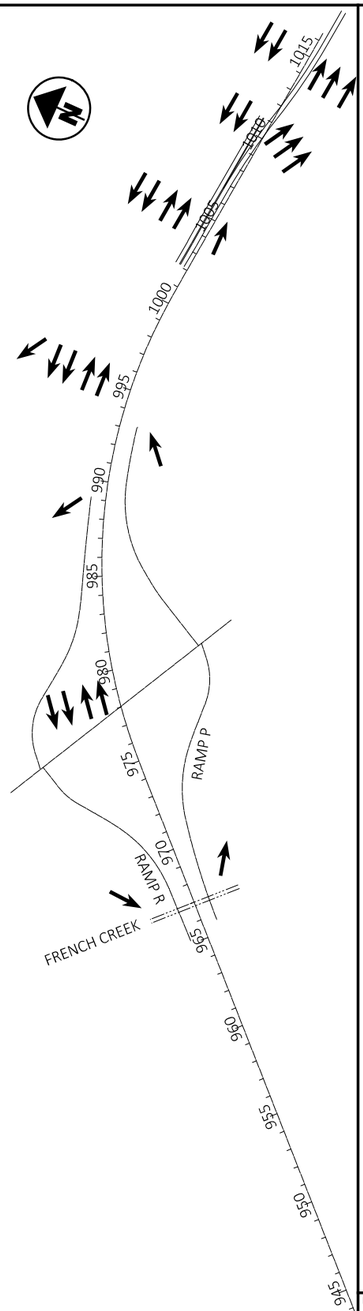

CROSSOVER - IR 90 - EASTBOUND TO WESTBOUND CROSSOVER AT RAMPS M AND N




CROSSOVER - IR 90 - EASTBOUND TO WESTBOUND CROSSOVER UNDER SR 611




CROSSOVER - IR 90 - EASTBOUND TO WESTBOUND CROSSOVER AT RAMPS R AND P




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - EASTBOUND CROSSOVER - IR 90 AND SR 611

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.02 |
| TOTAL | 28 |

LOR-90-10.76 MOTAA

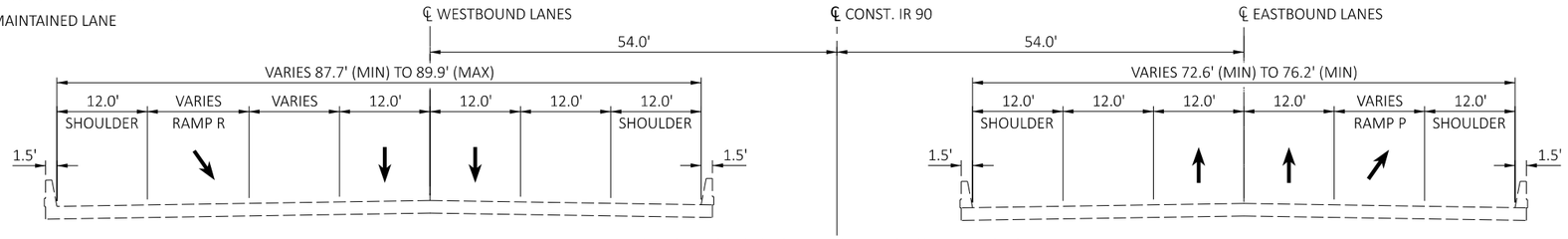

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:49 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY0XO2.dgn

LEGEND

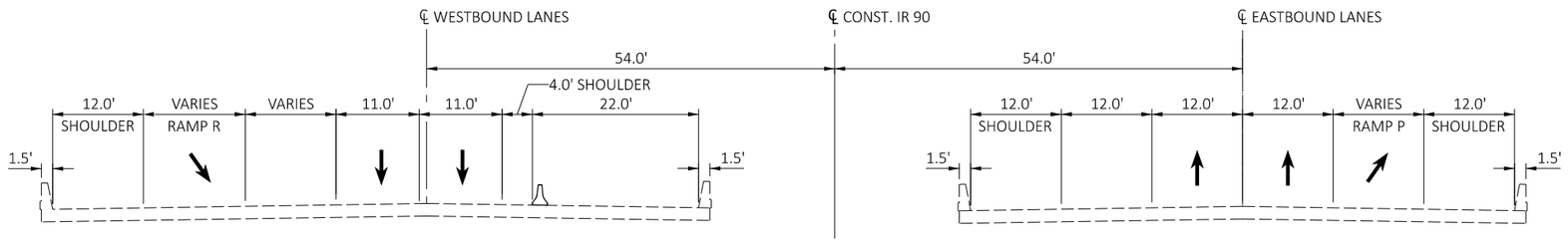
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

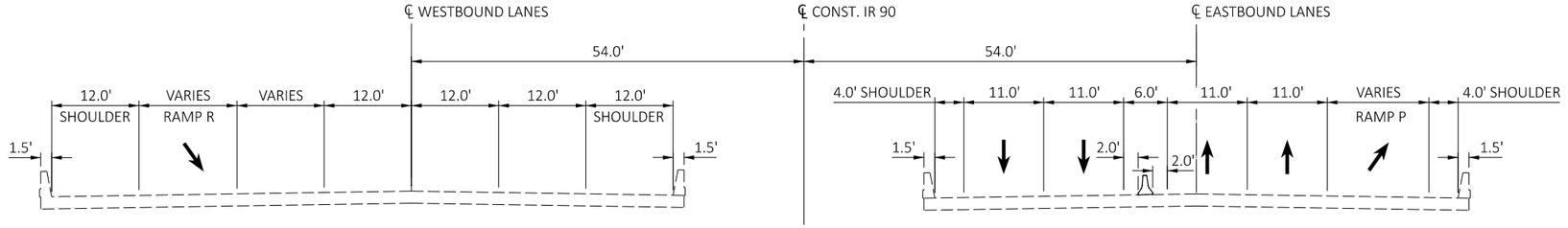
MAINTAINED LANE



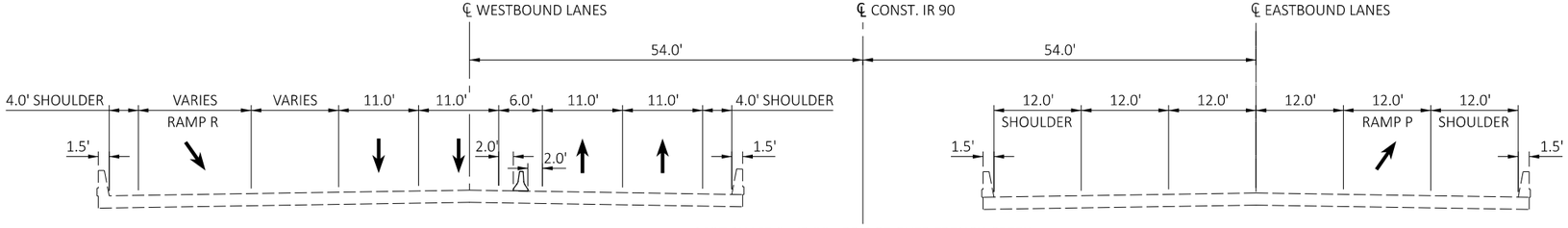

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER FRENCH CREEK



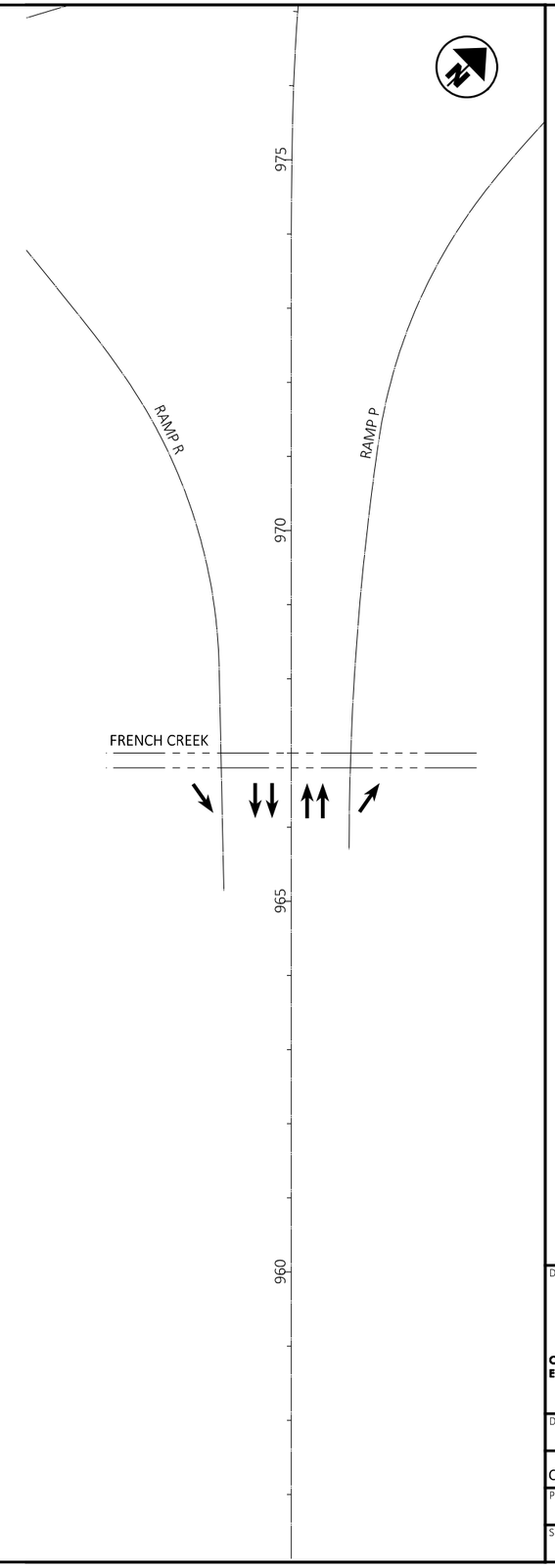

MOT PHASE 1 - IR 90 - BRIDGE OVER FRENCH CREEK
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER FRENCH CREEK
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER FRENCH CREEK
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPT PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER FRENCH CREEK

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:49 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

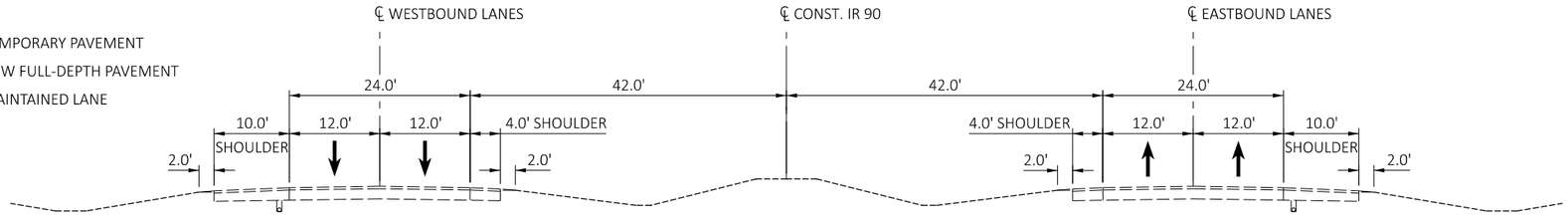
REVIEWER
CWP 11/10/23

PROJECT ID
107714

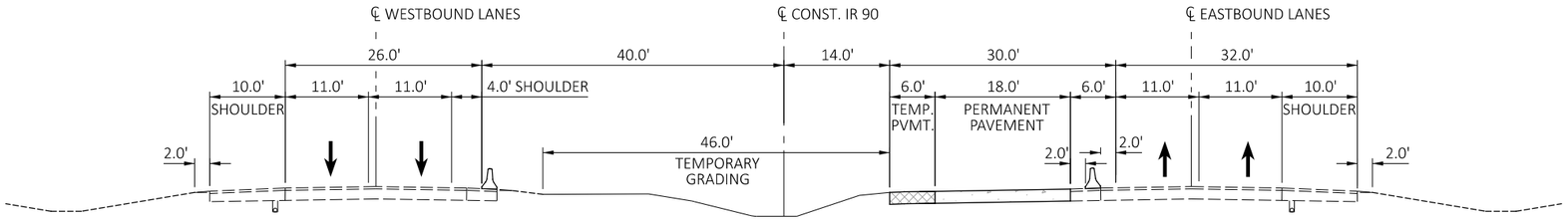
SHEET P.03 TOTAL 28

LEGEND

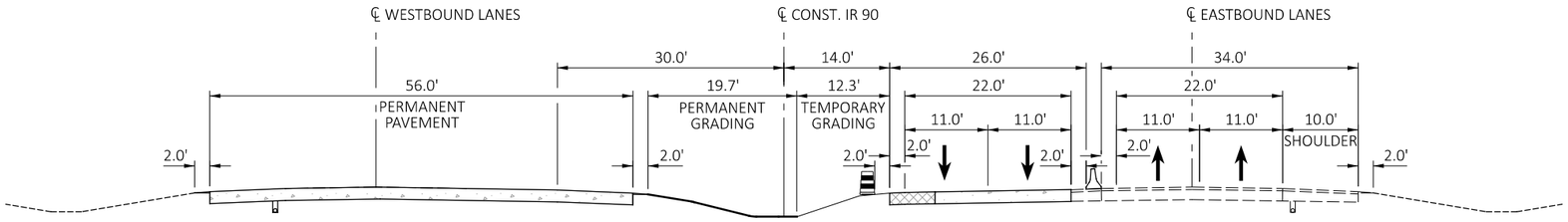
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



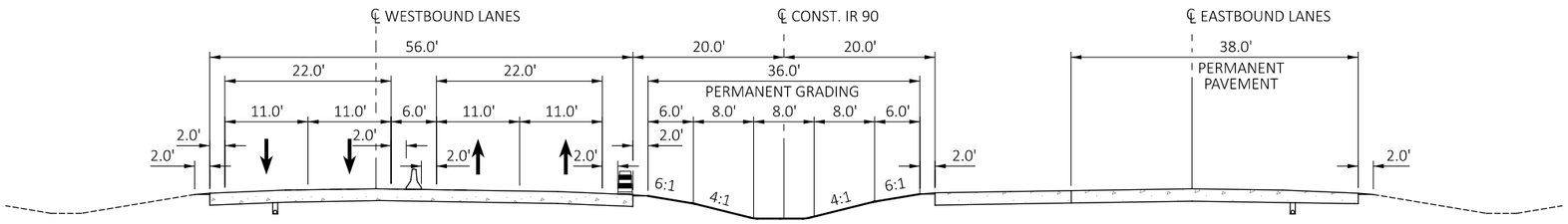

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 254 AND SR 611



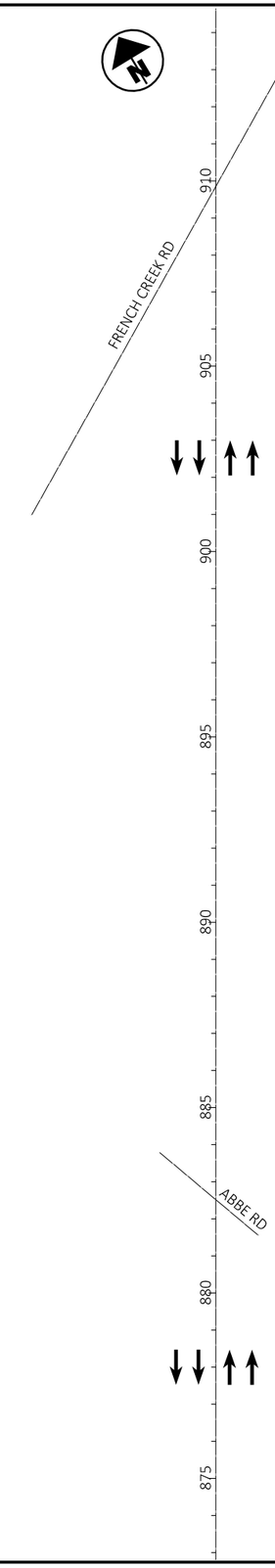

MOT PHASE 1 - IR 90 - BETWEEN SR 254 AND SR 611
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BETWEEN SR 254 AND SR 611
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BETWEEN SR 254 AND SR 611
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 BETWEEN SR 254 AND SR 611

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:50 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

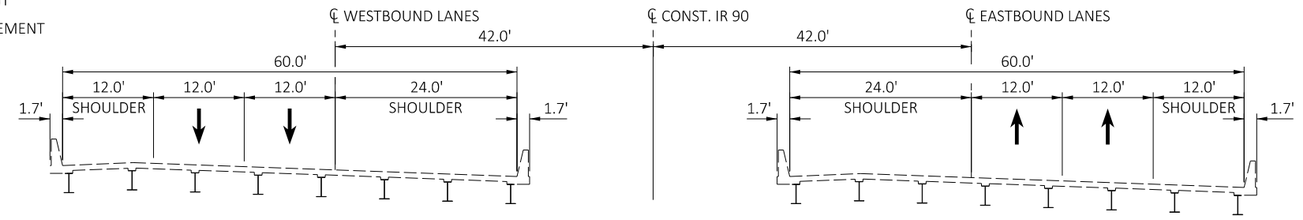
DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.04 TOTAL 28

LEGEND

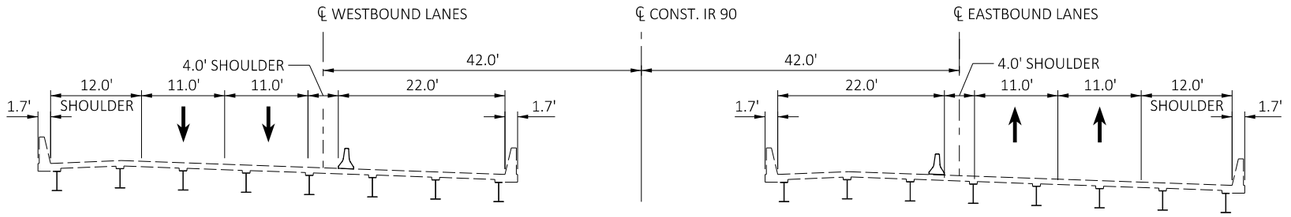
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

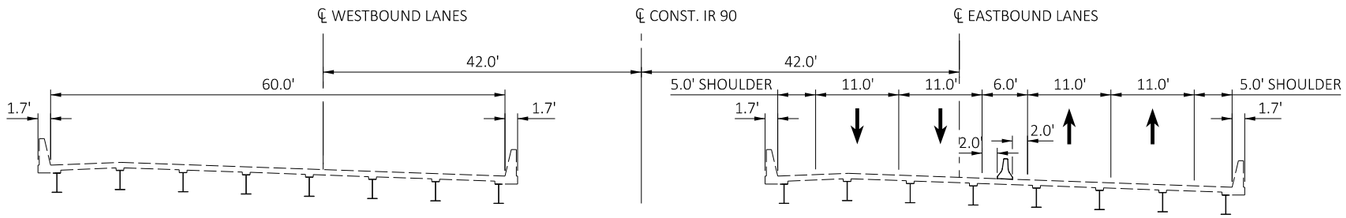
MAINTAINED LANE



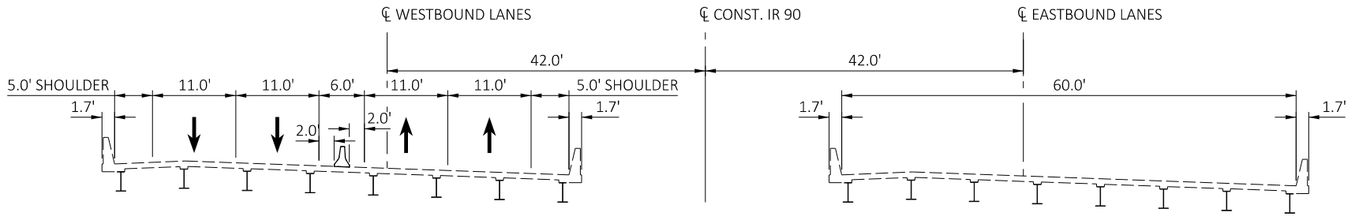

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER NS RAILROAD



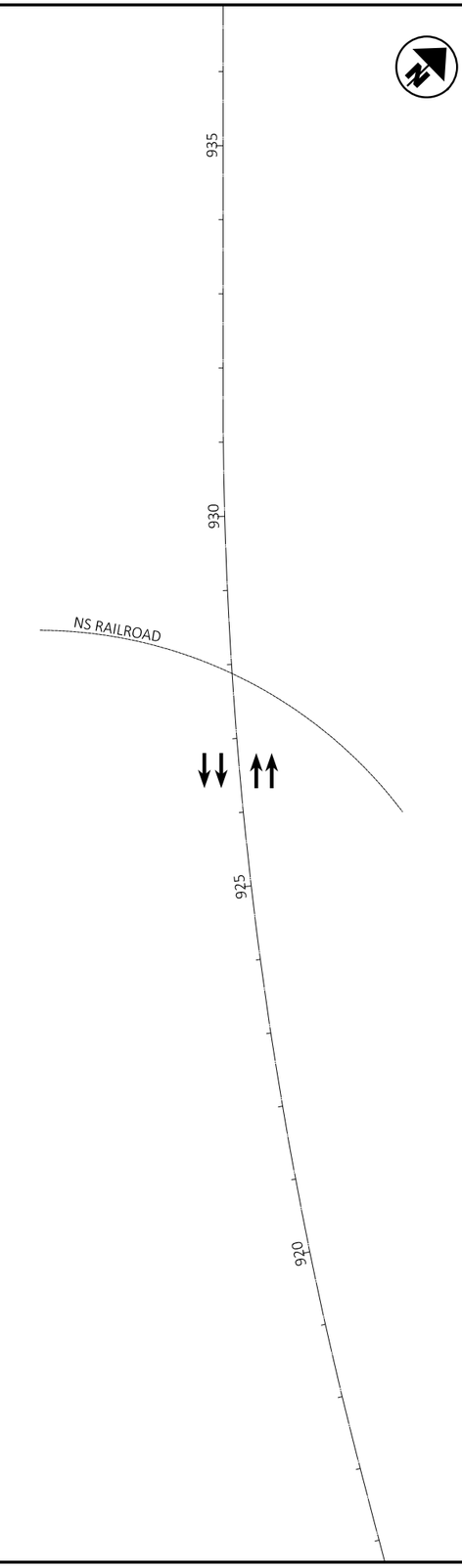

MOT PHASE 1- IR 90 - BRIDGE OVER NS RAILROAD
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER NS RAILROAD
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER NS RAILROAD
CROSSOVER ALTERNATIVE -TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER NS RAILROAD

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:51 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY029.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

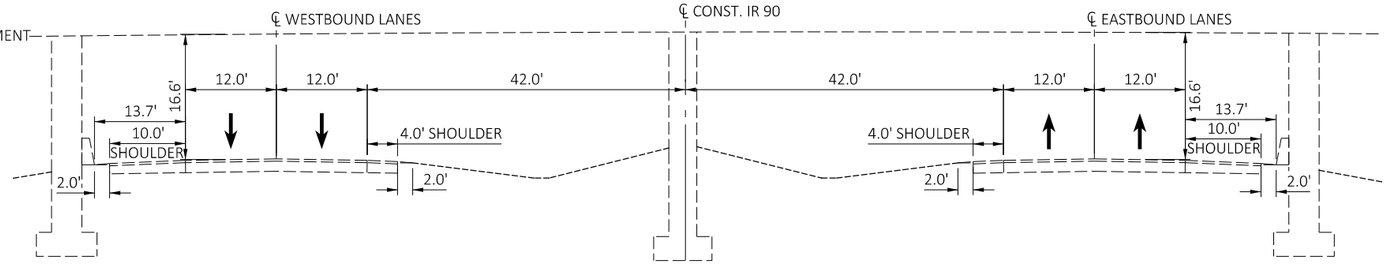
SHEET P.05 TOTAL 28

LEGEND

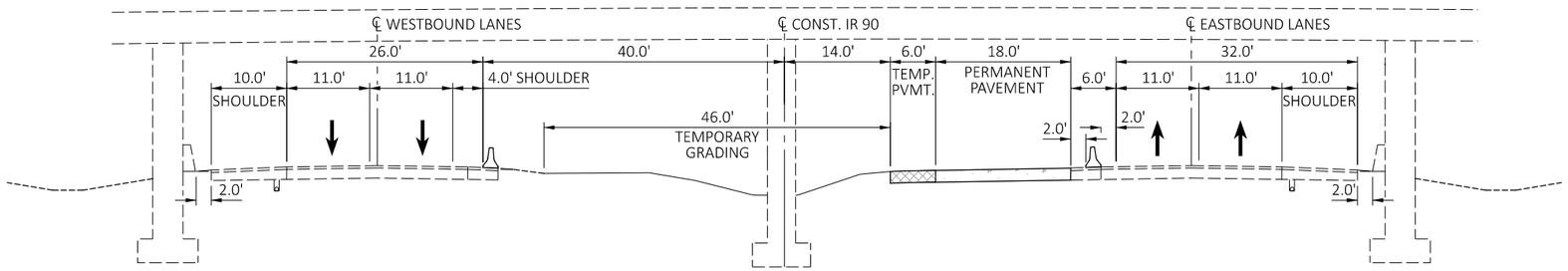
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

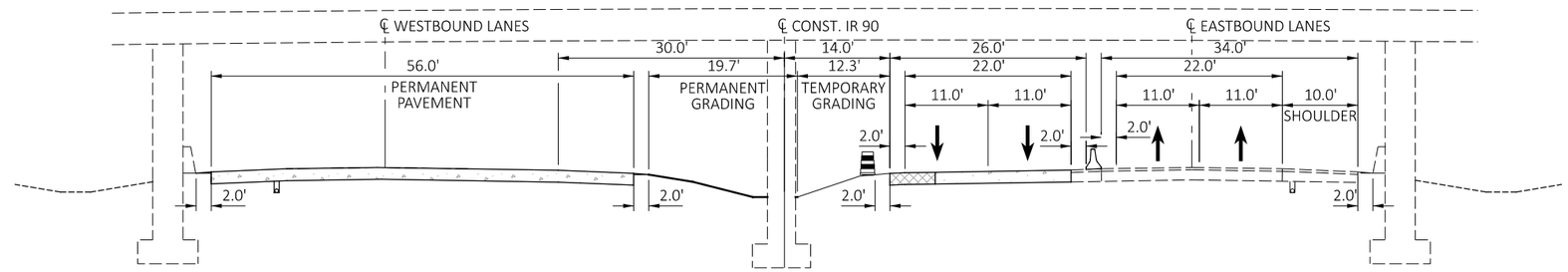
MAINTAINED LANE



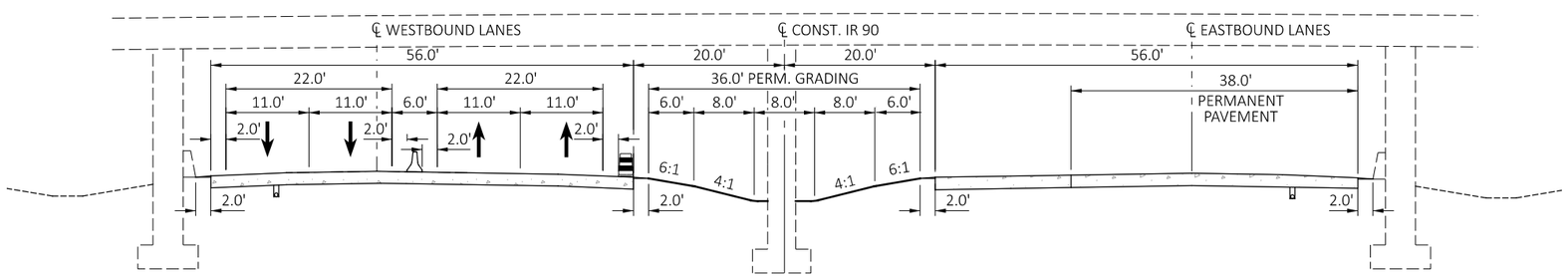

EXISTING TYPICAL SECTION - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90



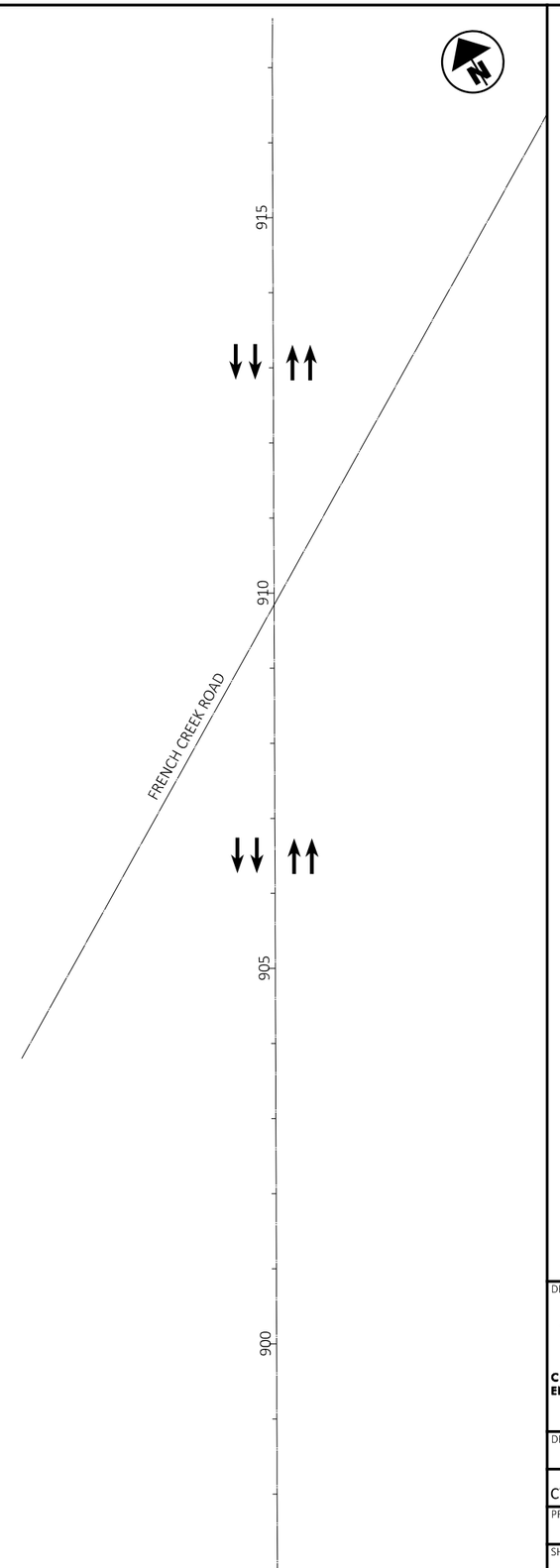

MOT PHASE 1 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - FRENCH CREEK ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




MOTAA - TYPICAL SECTIONS - IR 90
CROSSOVER ALTERNATIVE - FRENCH CREEK ROAD BRIDGE OVER IR 90

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:52 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY030.dgn


DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

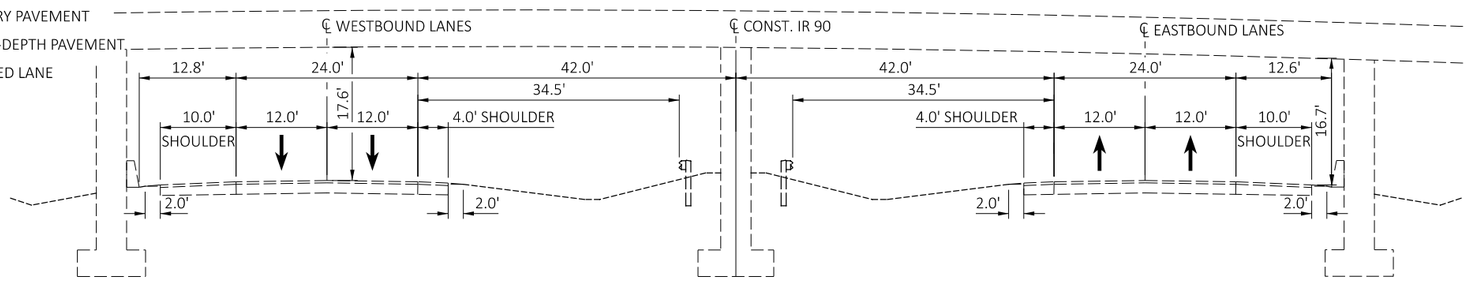
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.06 |
| TOTAL | 28 |

LEGEND

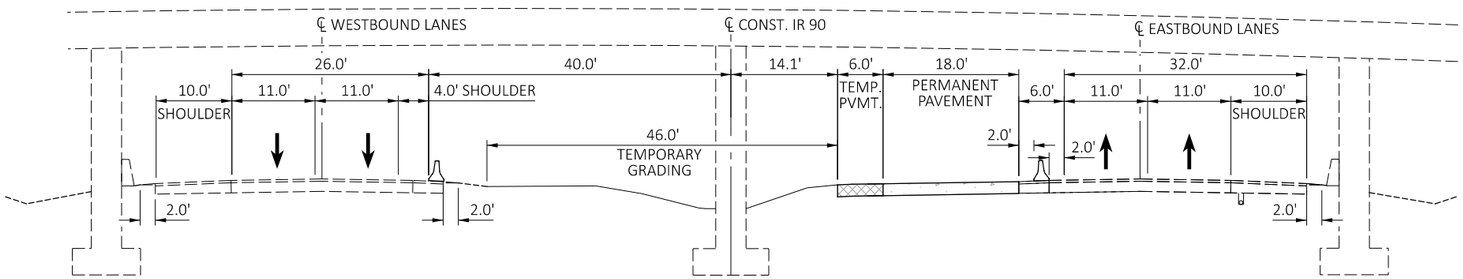
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

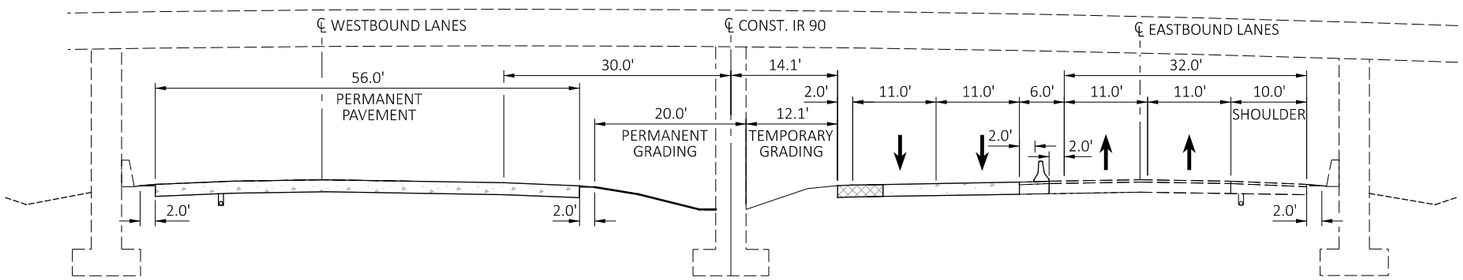
MAINTAINED LANE



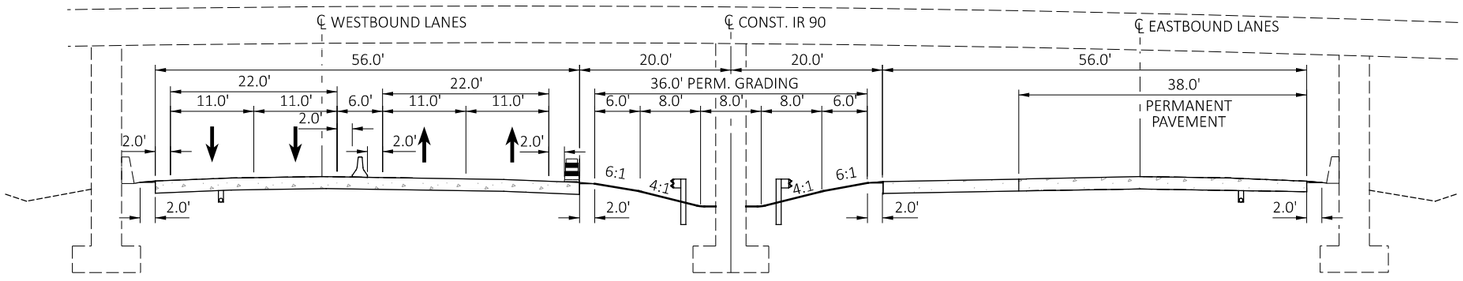

EXISTING TYPICAL SECTION - IR 90 - ABBE ROAD BRIDGE OVER IR 90



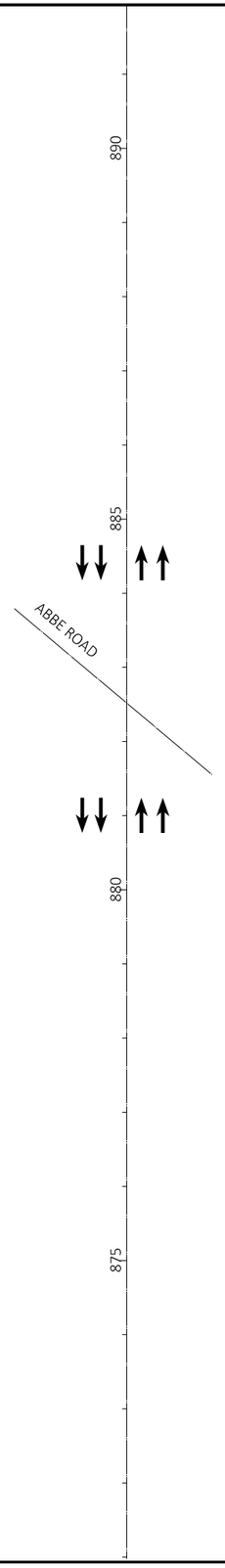

MOT PHASE 1 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - ABBE ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - ABBE ROAD BRIDGE OVER IR 90

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

SHEET P.07 TOTAL 28

LOR-90-10.76 MOTAA

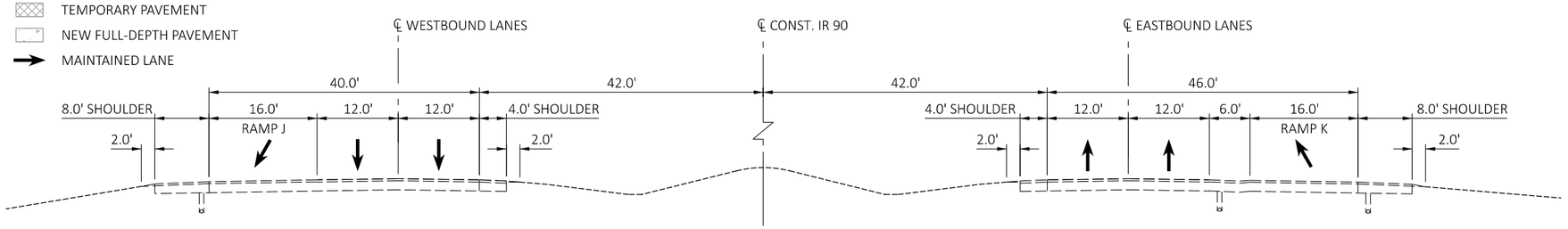
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:52 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\V00-Engineering\Roadway\Sheets\107714_GY031.dgn

LEGEND

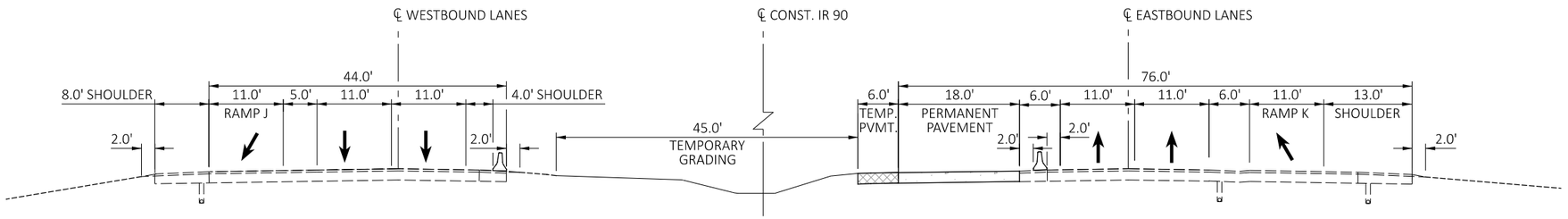
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

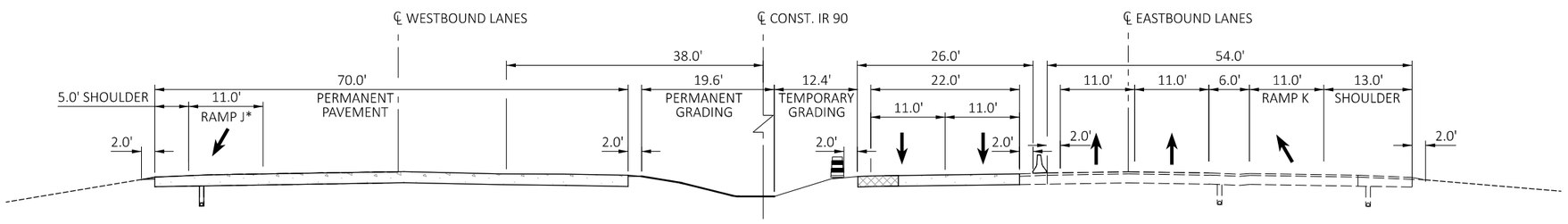
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 254 RAMPS J & K

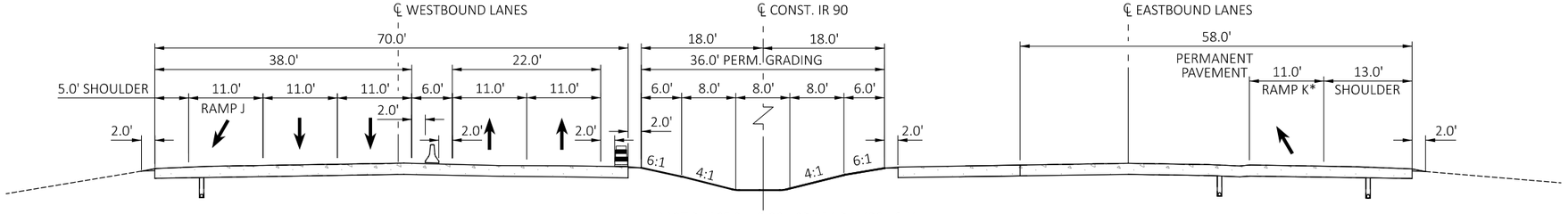



MOT PHASE 1 - IR 90 - SR 254 RAMPS J & K
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING



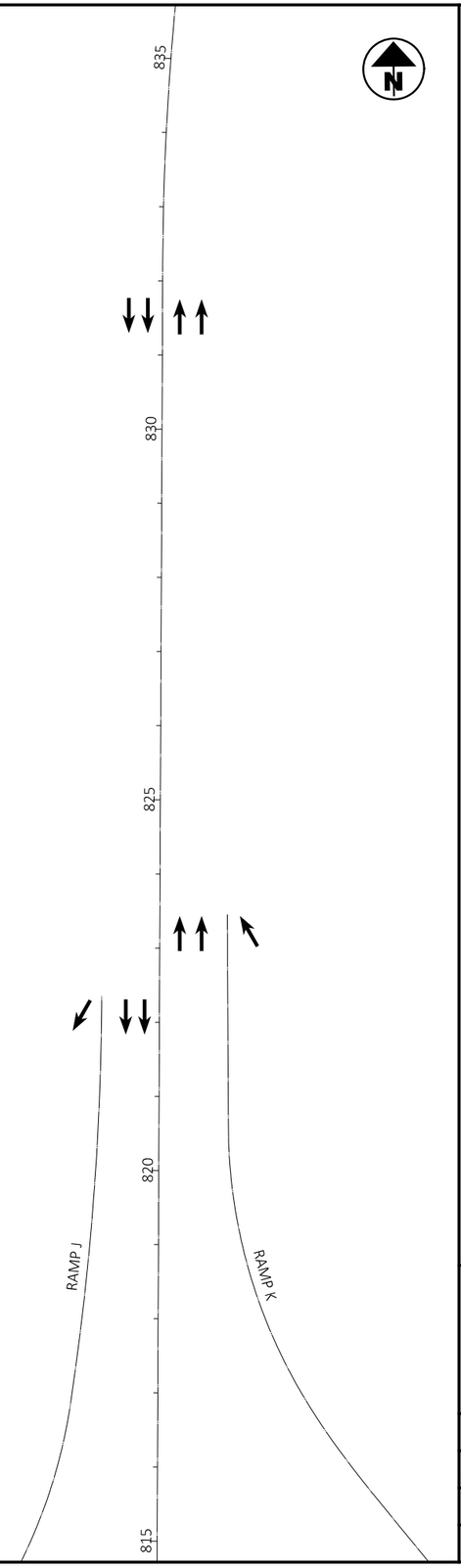

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.

MOT PHASE 2 - IR 90 - SR 254 RAMPS J & K
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - SR 254 RAMPS J & K
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - SR 254 RAMPS J & K

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:53 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GV032.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

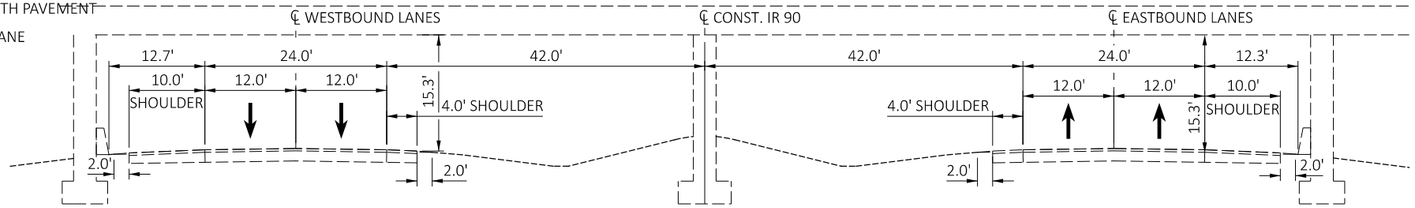
SHEET P.08 TOTAL 28

LEGEND

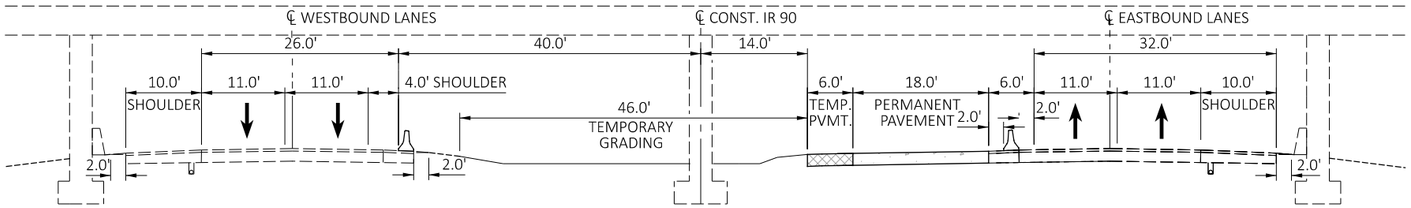
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

MAINTAINED LANE



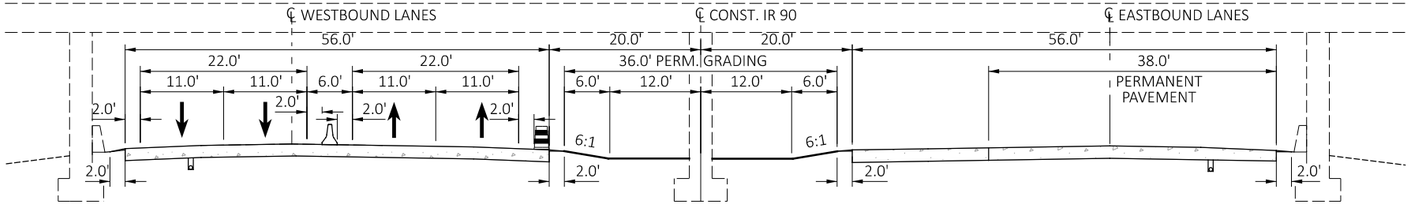

EXISTING TYPICAL SECTION - IR 90 - SR 254 BRIDGE OVER IR 90



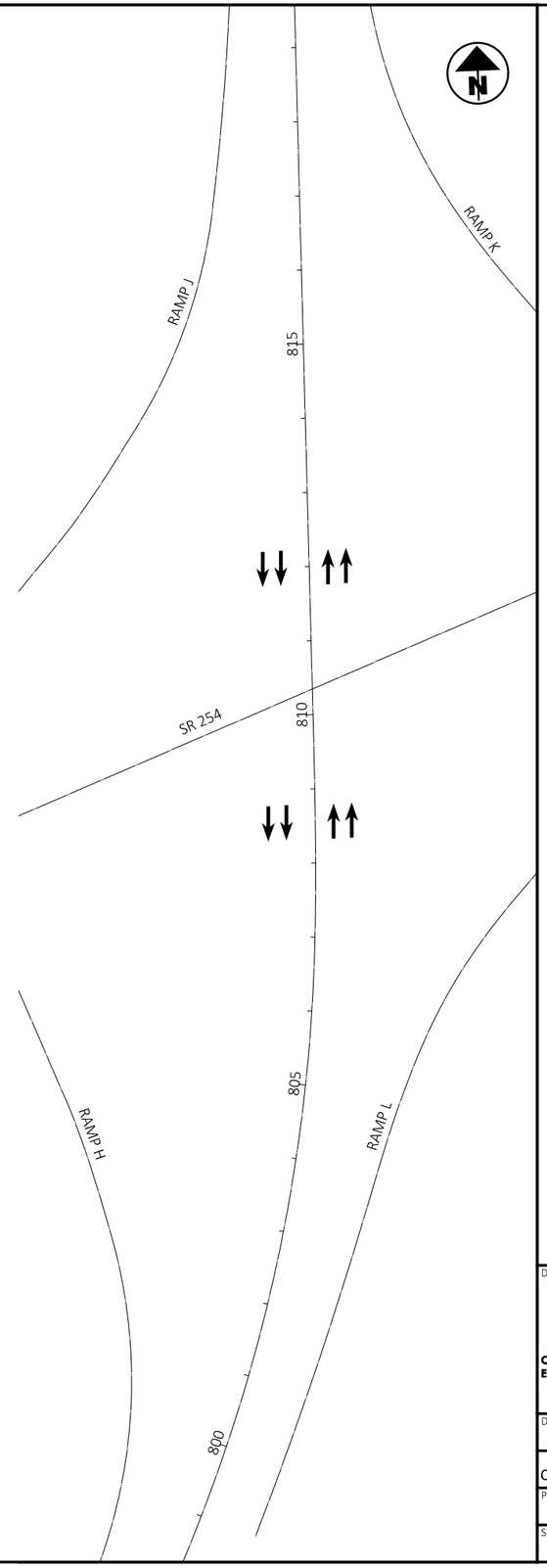

MOT PHASE 1- IR 90 - SR 254 BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - SR 254 BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - SR 254 BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - SR 254 BRIDGE OVER IR 90

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:54 PM USER: thomas
P:\23075 ODOT D3-D12 GE\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY033.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

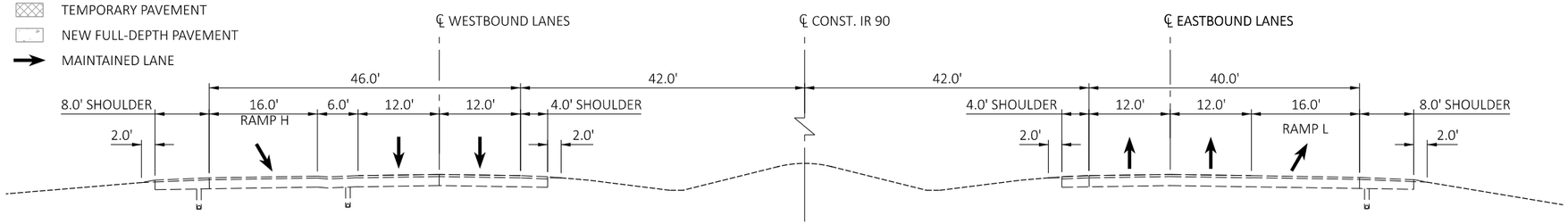
SHEET P.09 | TOTAL 28

LEGEND

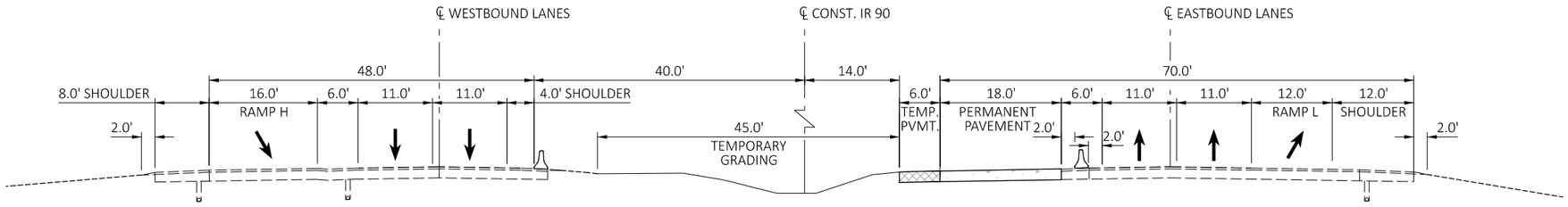
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

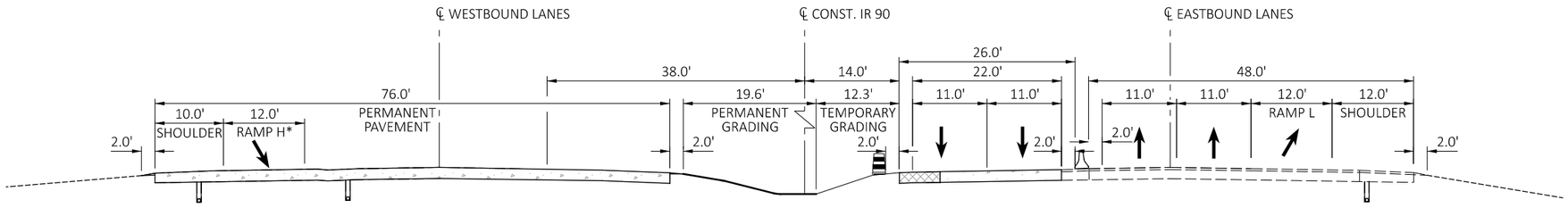
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 254 RAMPS H & L

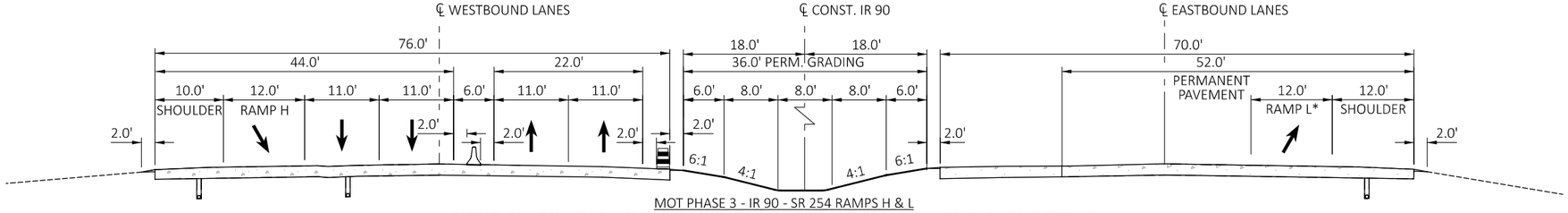



MOT PHASE 1 - IR 90 - SR 254 RAMPS H & L
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING



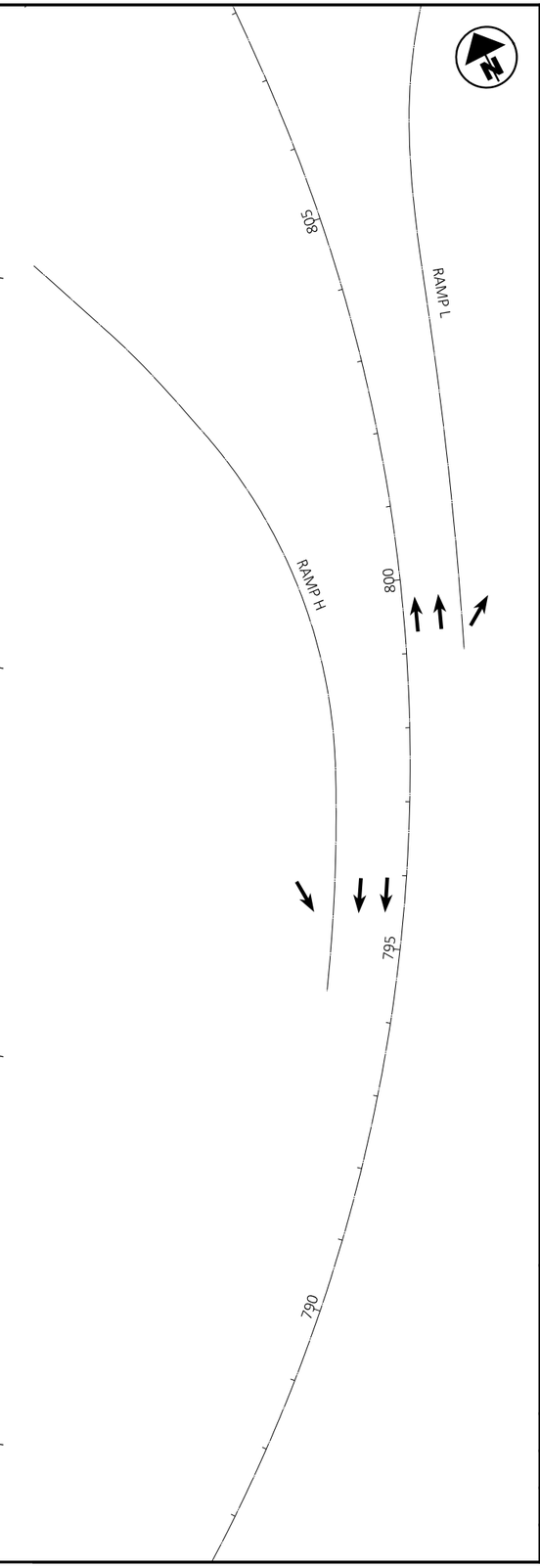

MOT PHASE 2 - IR 90 - SR 254 RAMPS H & L
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




MOT PHASE 3 - IR 90 - SR 254 RAMPS H & L
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - SR 254 RAMPS H & L

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT

REVIEWER CWP 11/10/23

PROJECT ID 107714

SHEET P.10 TOTAL 28

LOR-90-10.76 MOTAA

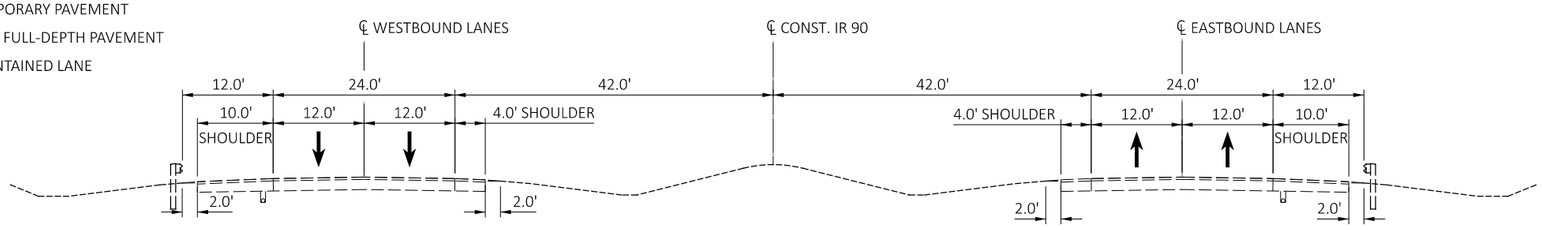
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:55 PM USER: thomas
P:\23075 ODOT D3-D12 GES\11727\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY034.dgn

LEGEND

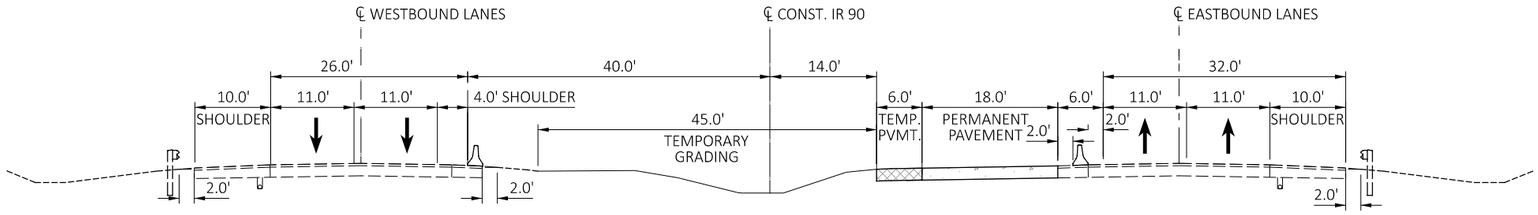
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

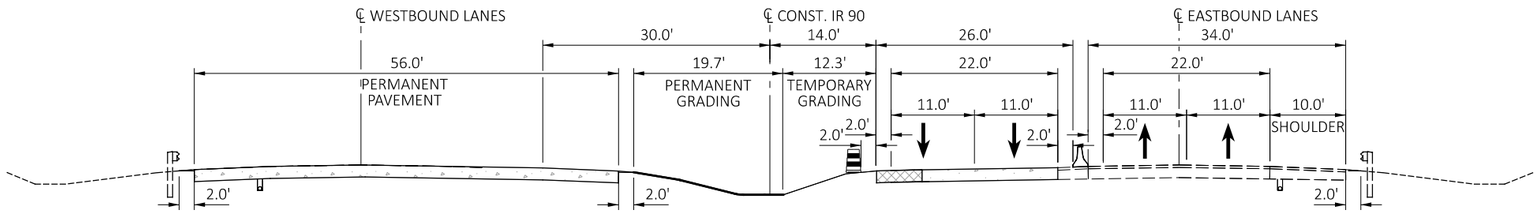
MAINTAINED LANE



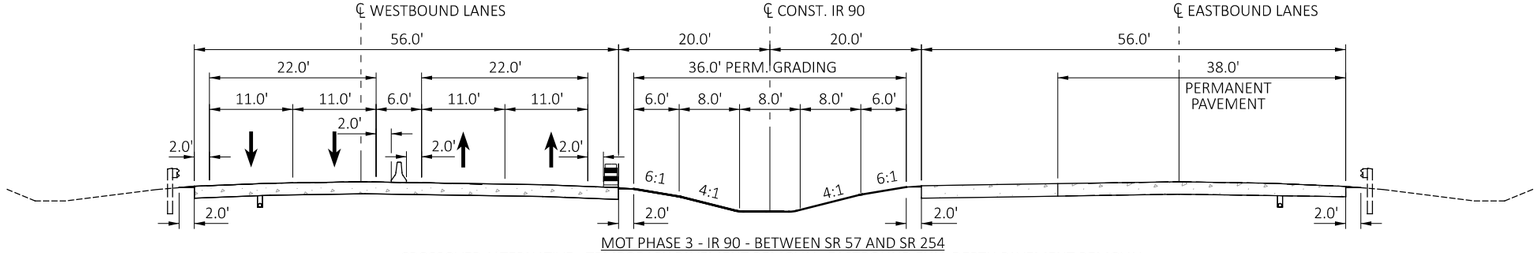

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 57 AND SR 254



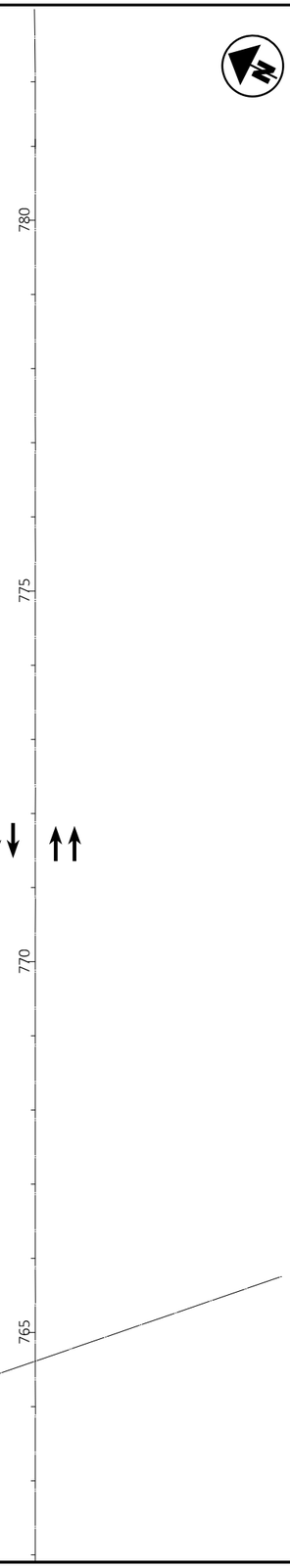

MOT PHASE 1 - IR 90 - BETWEEN SR 57 AND SR 254
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BETWEEN SR 57 AND SR 254
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BETWEEN SR 57 AND SR 254
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BETWEEN SR 57 AND SR 254

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:56 PM USER: thomas
P:\23075 ODOT D3-D12 GE\S\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GV035.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

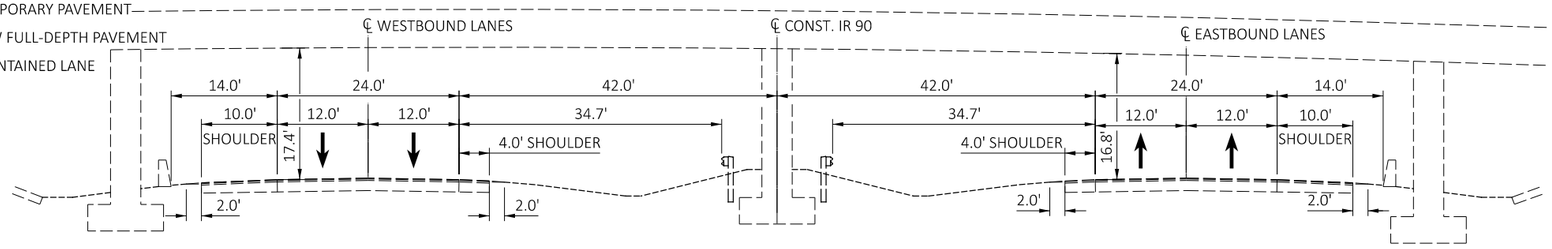
SHEET P.11 TOTAL 28

LEGEND

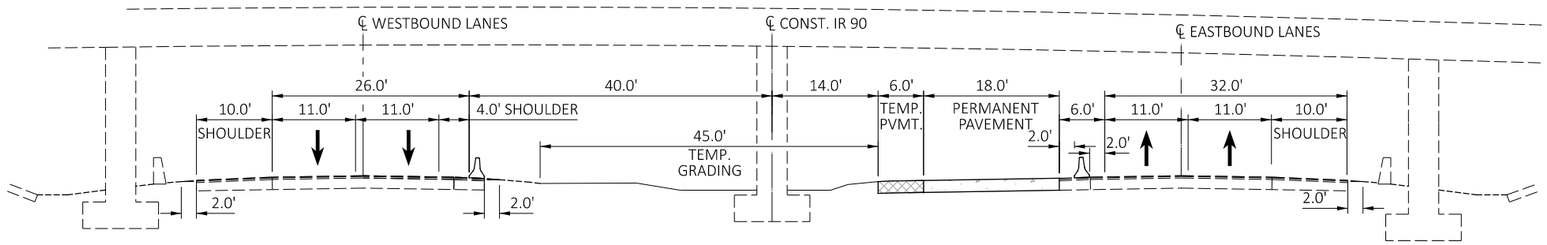
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

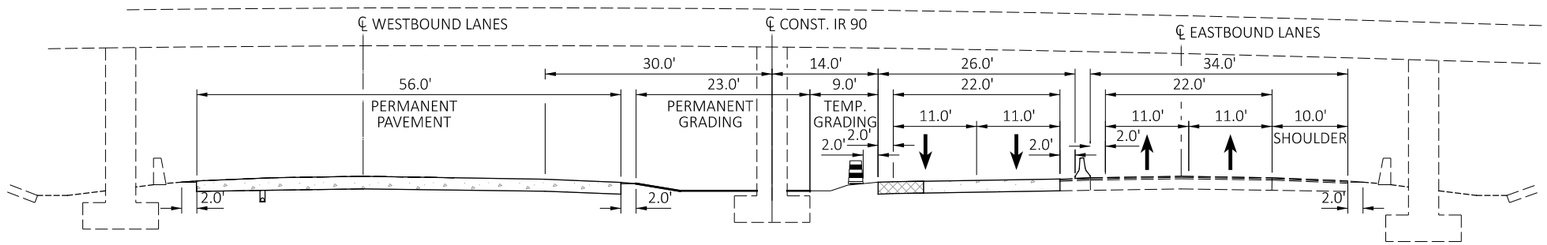
MAINTAINED LANE



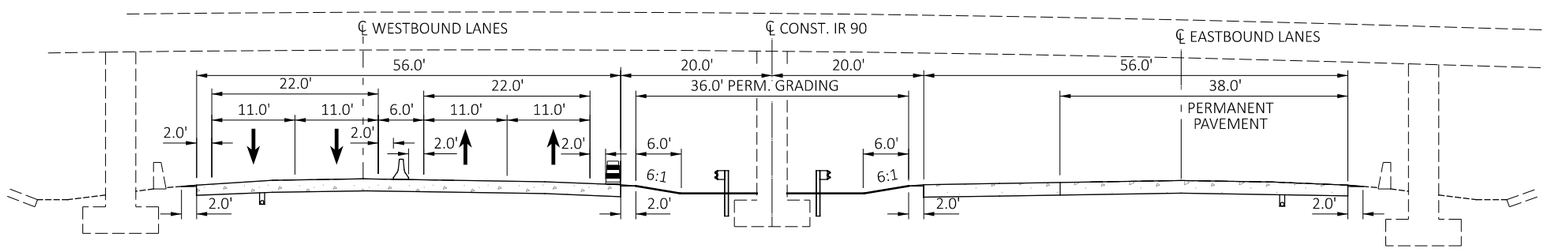

EXISTING TYPICAL SECTION - IR 90 - GULF ROAD BRIDGE OVER IR 90



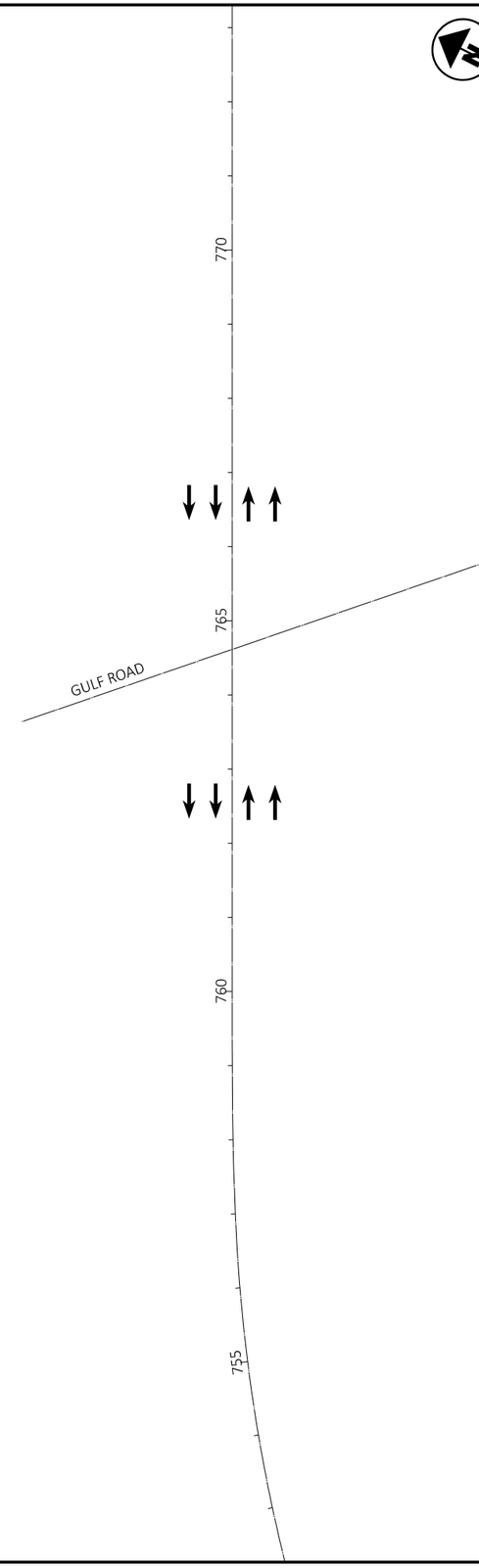

MOT PHASE 1- IR 90 - GULF ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - EASTBOUND PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2- IR 90 - GULF ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - GULF ROAD BRIDGE OVER IR 90
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - GULF ROAD BRIDGE OVER IR 90

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.12 |
| TOTAL | 28 |

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:57 PM USER: thomas
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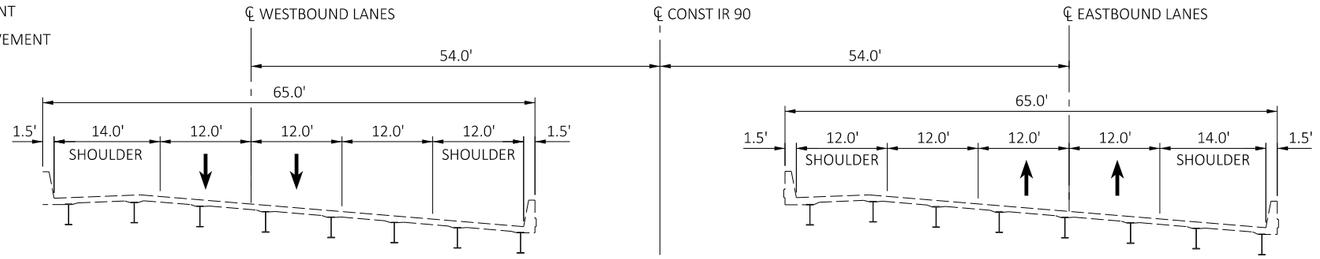
LEGEND

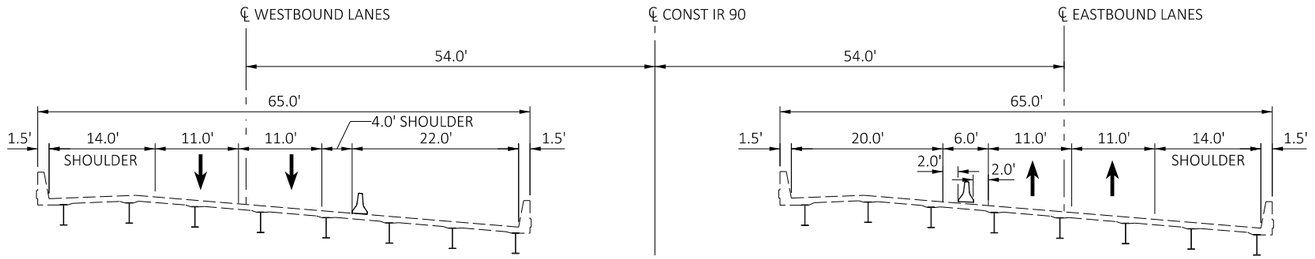
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

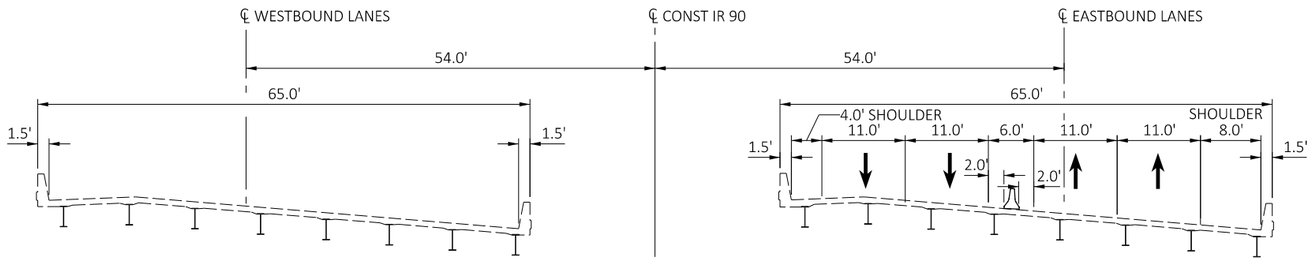
MAINTAINED LANE



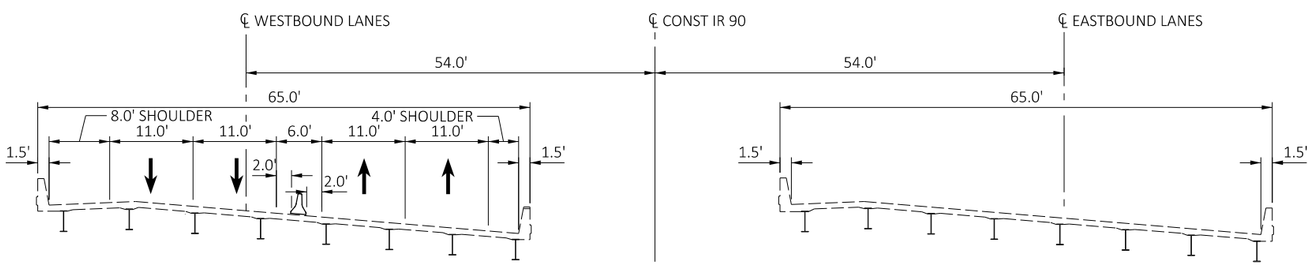

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER FORD ROAD



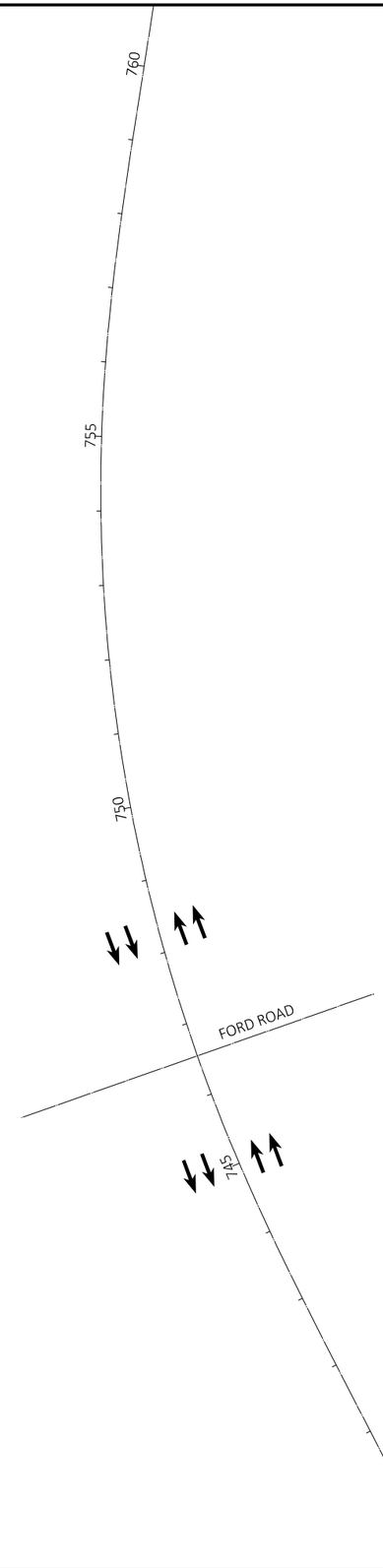

MOT PHASE 1 - IR 90 - BRIDGE OVER FORD ROAD
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER FORD ROAD
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER FORD ROAD
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




MOTAA - TYPICAL SECTIONS - IR 90
CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER FORD ROAD

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.13 TOTAL 28

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:58 PM USER: thomas
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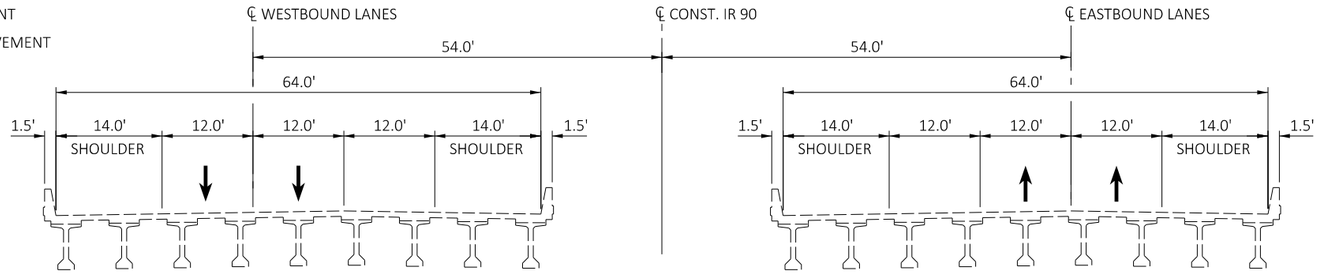
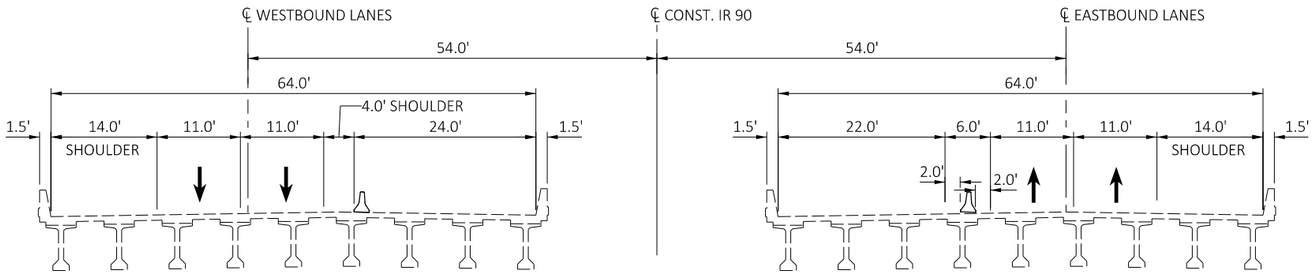
LEGEND

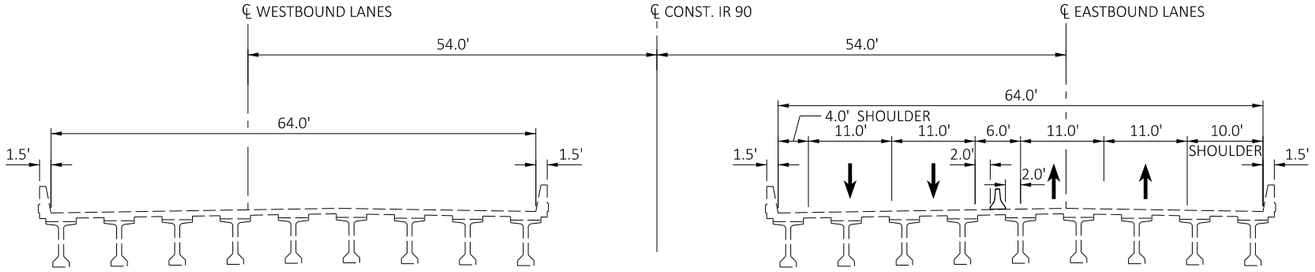
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



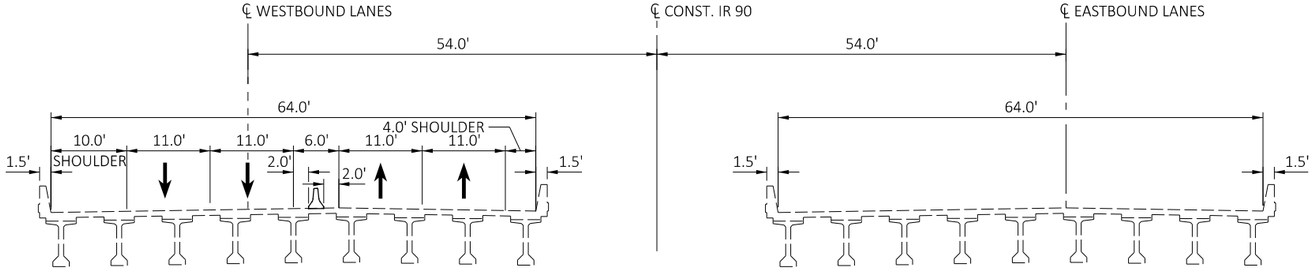

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER BLACK RIVER



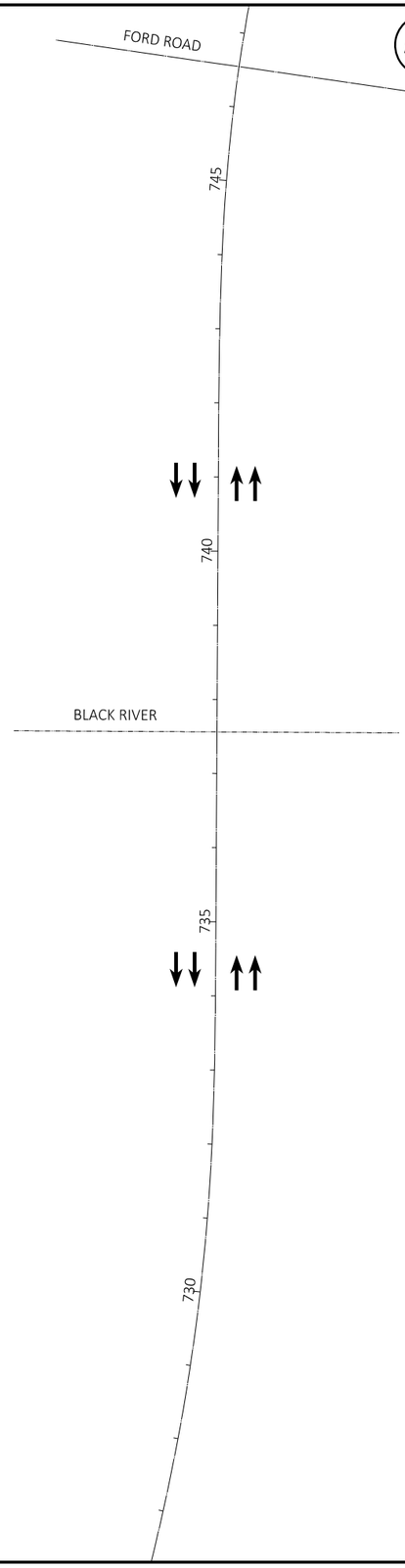

MOT PHASE 1 - IR 90 - BRIDGE OVER BLACK RIVER
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER BLACK RIVER
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER BLACK RIVER
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER BLACK RIVER

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.14 TOTAL: 28

LOR-90-10.76 MOTAA

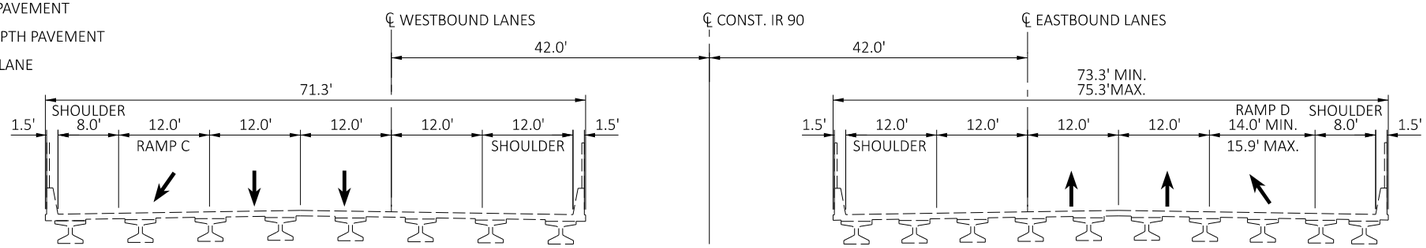
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:38:59 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY038.dgn

LEGEND

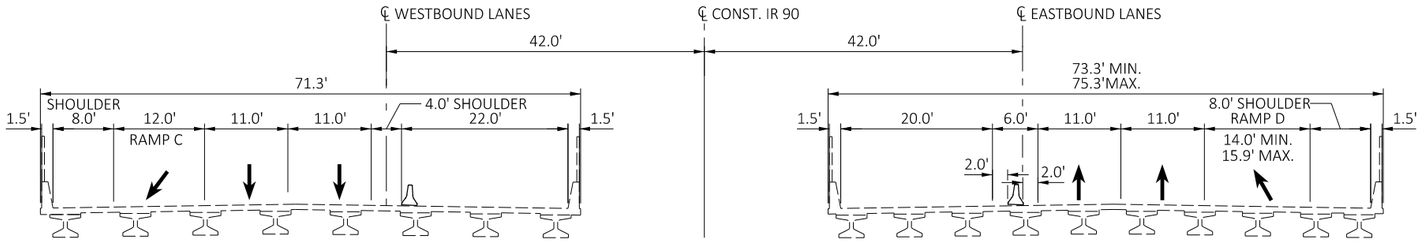
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

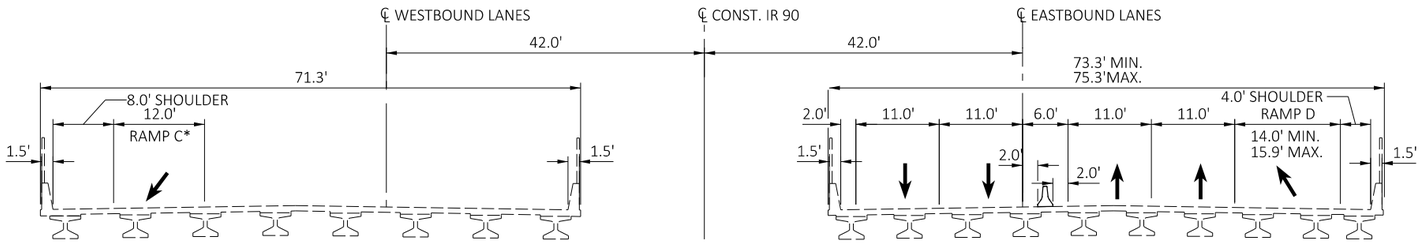
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER WEST RIVER ROAD

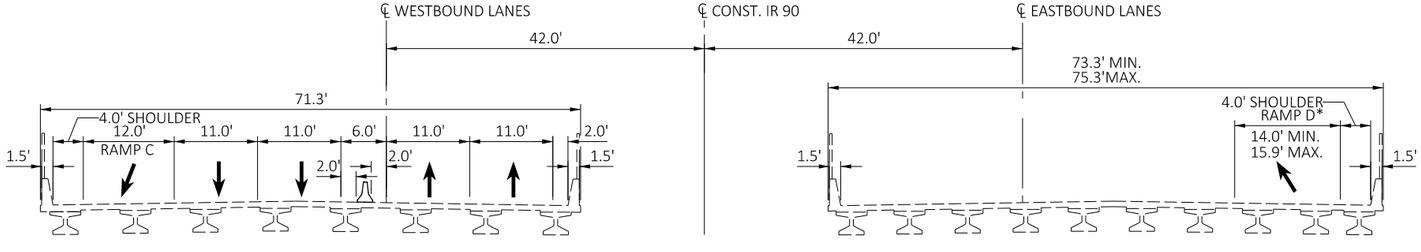



MOT PHASE 1 - IR 90 - BRIDGE OVER WEST RIVER ROAD
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING



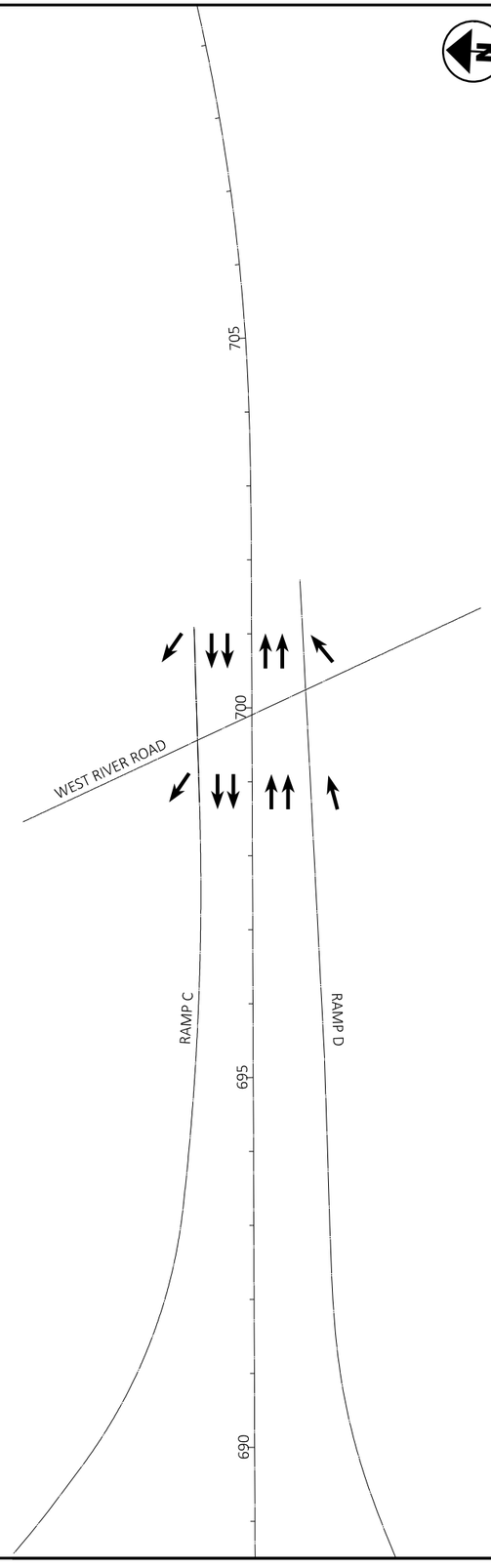

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.

MOT PHASE 2 - IR 90 - BRIDGE OVER WEST RIVER ROAD
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER WEST RIVER ROAD
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER WEST RIVER ROAD

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

SHEET P.15 TOTAL 28

LOR-90-10.76 MOTAA

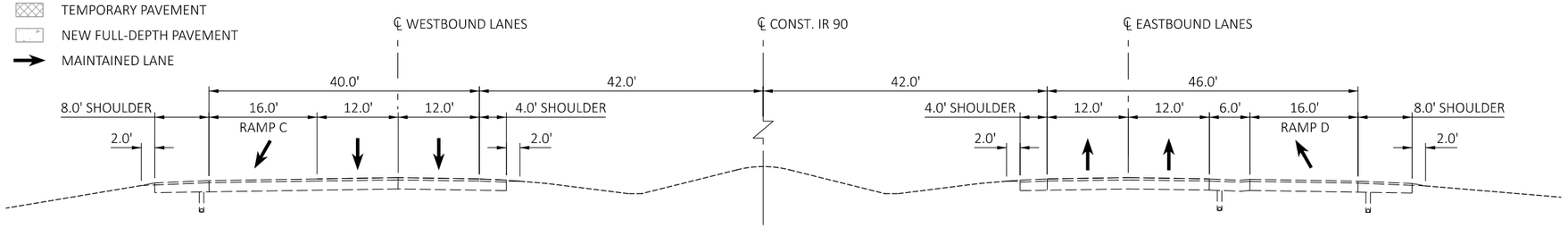
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:00 PM USER: thomas
P:\23075 ODOT D3-D12 GE5\117277\Task 1 - LOR-90-10.76-107714\107714\V400-Engineering\Roadway\Sheets\107714_GY039.dgn

LEGEND

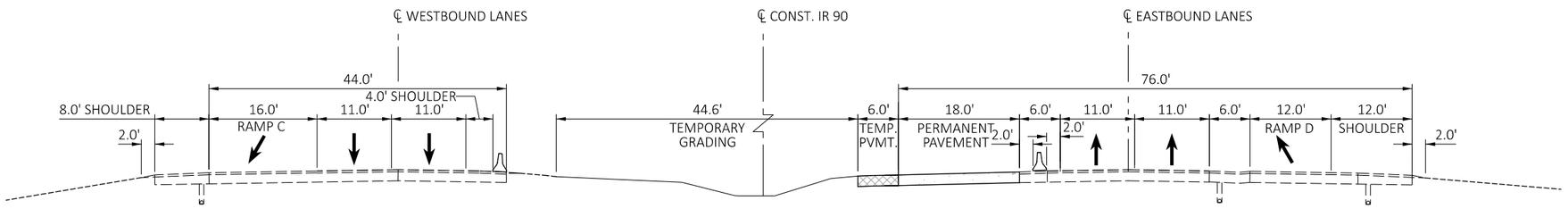
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

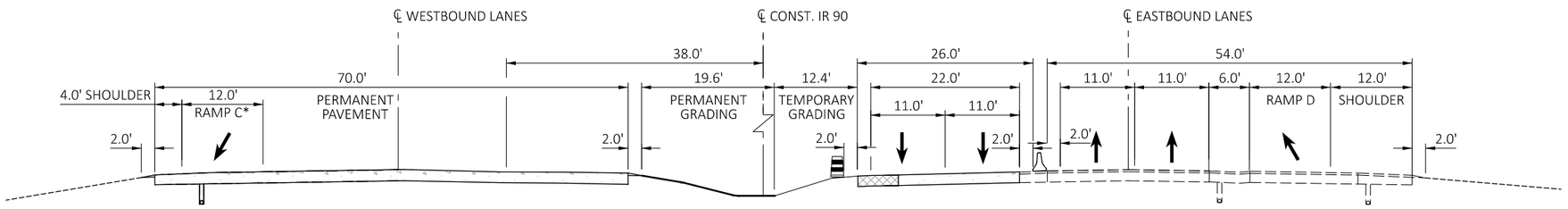
MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 57 RAMPS C & D

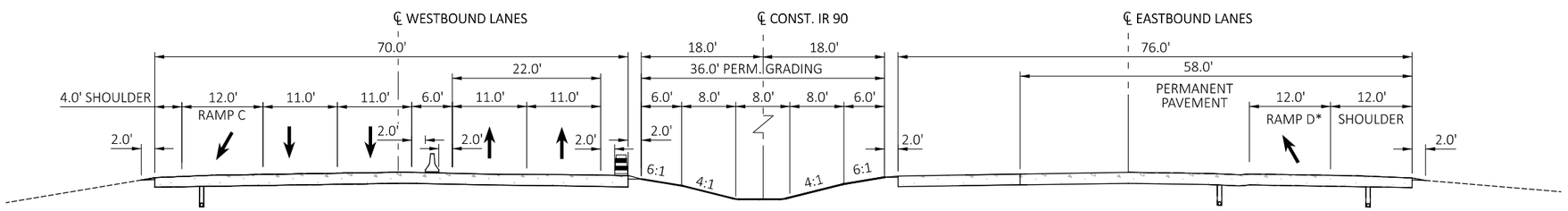



MOT PHASE 1 - IR 90 - SR 57 RAMPS C & D
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING



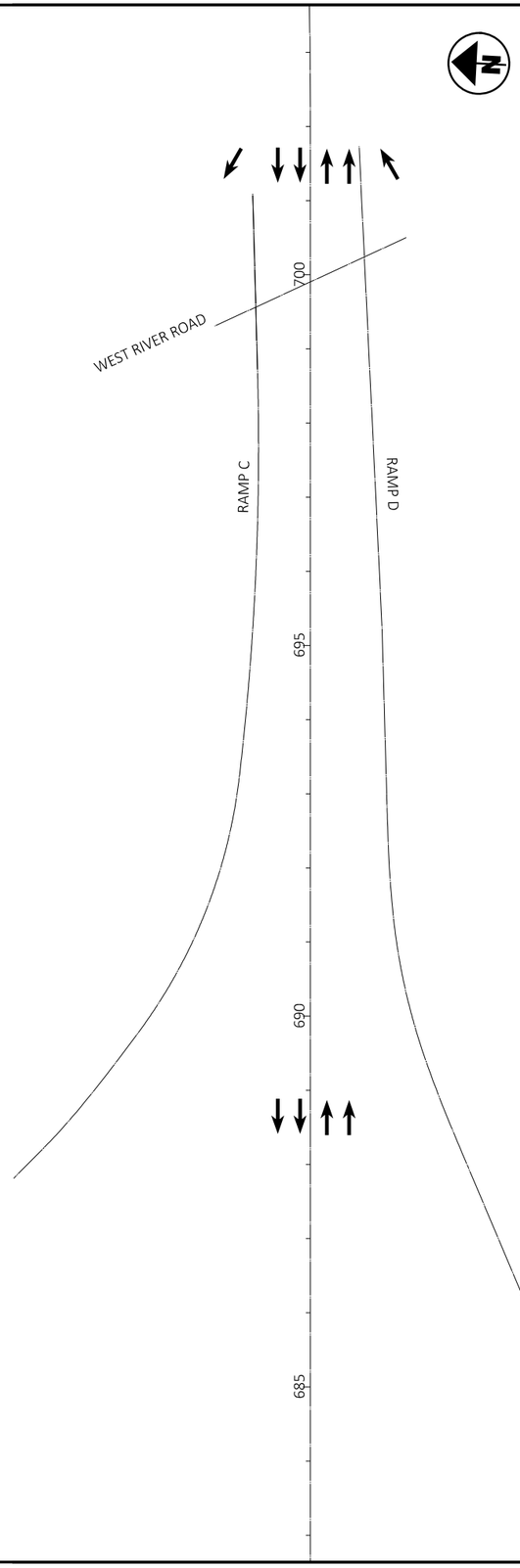

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.

MOT PHASE 2 - IR 90 - SR 57 RAMPS C & D
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - SR 57 RAMPS C & D
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - SR 57 RAMPS C & D

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

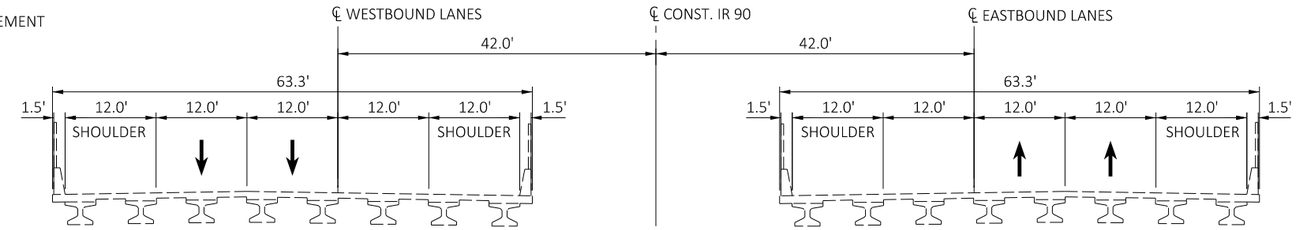
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.16 |
| TOTAL | 28 |

LOR-90-10.76 MOTAA

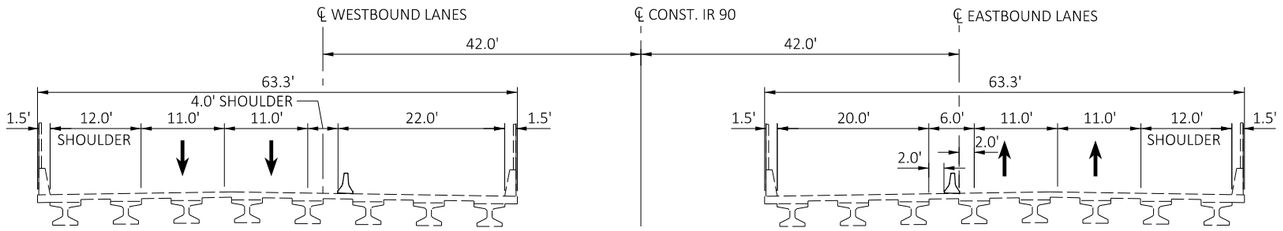
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:01 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY040.dgn

LEGEND

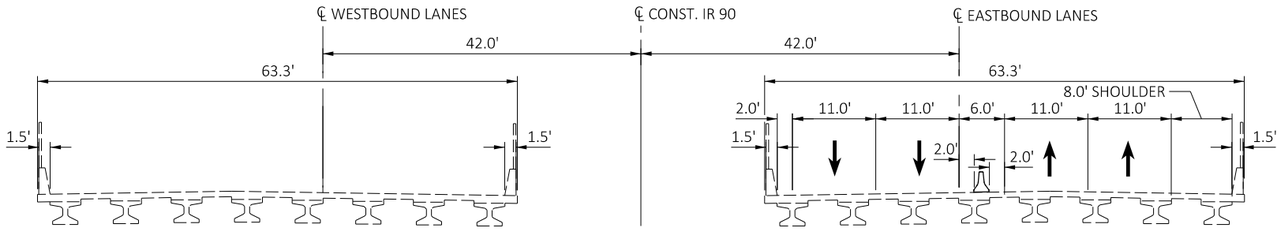
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



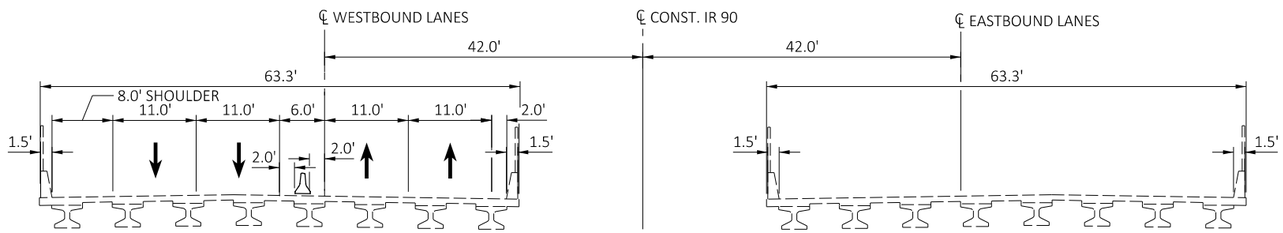

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER SR 57



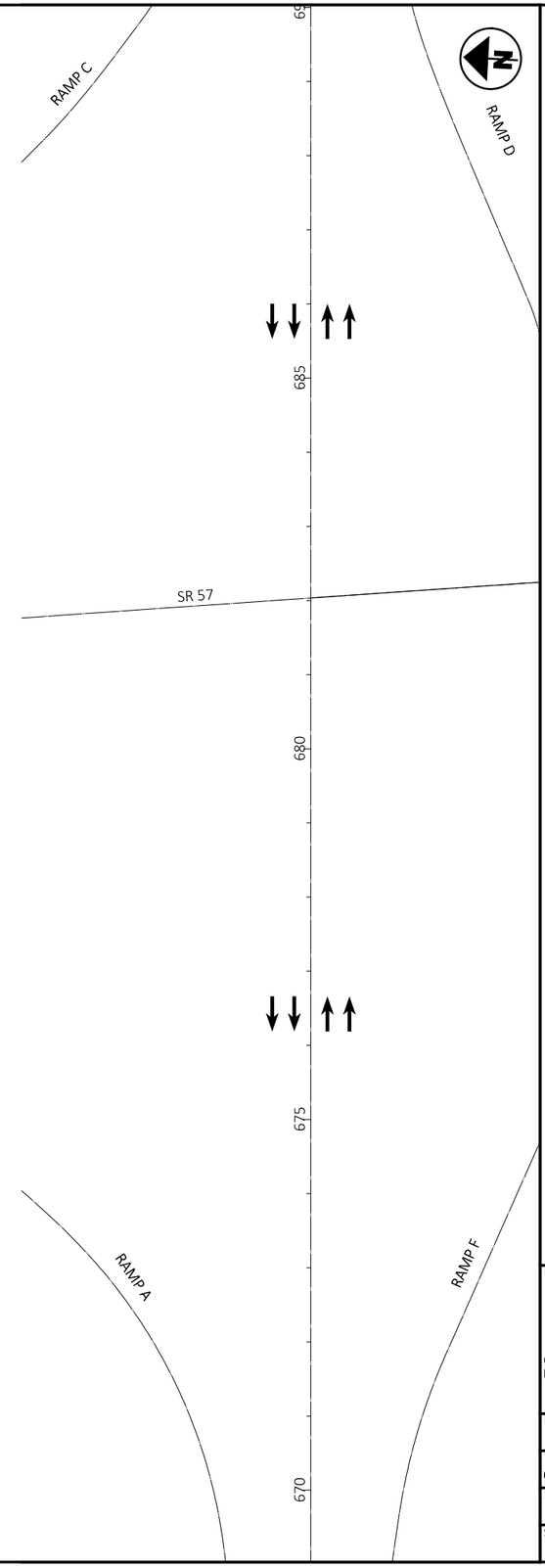

MOT PHASE 1 - IR 90 - BRIDGE OVER SR 57
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER SR 57
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER SR 57
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER SR 57

LOR-90-10.76 MOTAA

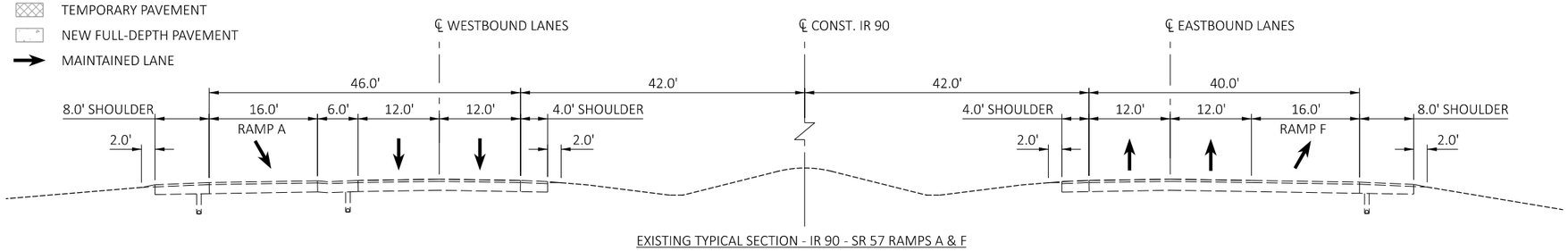
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:02 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GV041.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

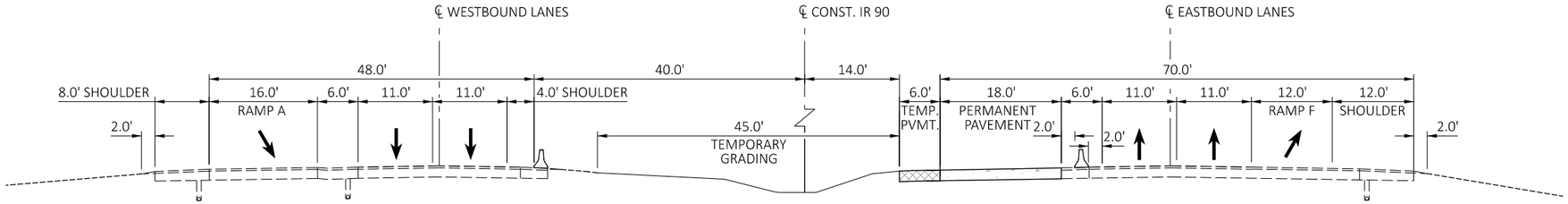
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.17 |
| TOTAL | 28 |

LEGEND

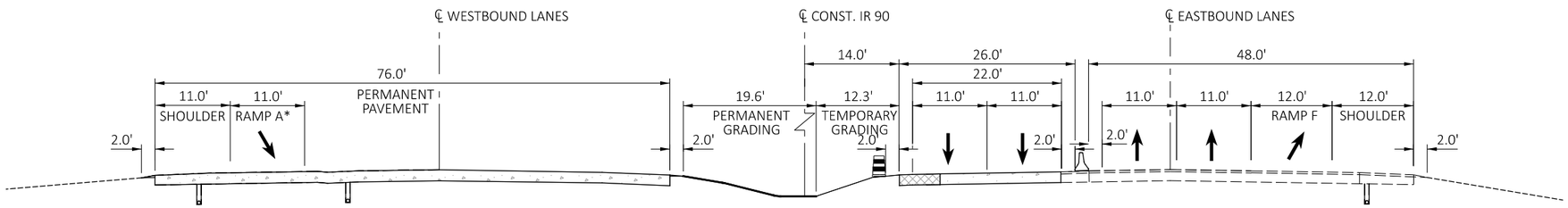
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE




EXISTING TYPICAL SECTION - IR 90 - SR 57 RAMPS A & F

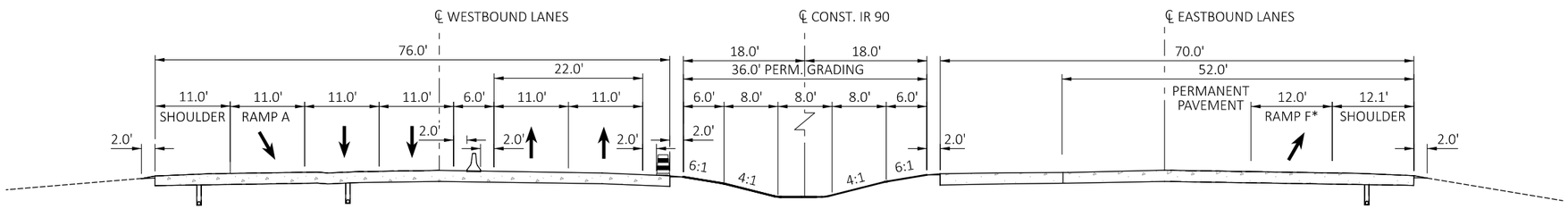



MOT PHASE 1 - IR 90 - SR 57 RAMPS A & F
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING



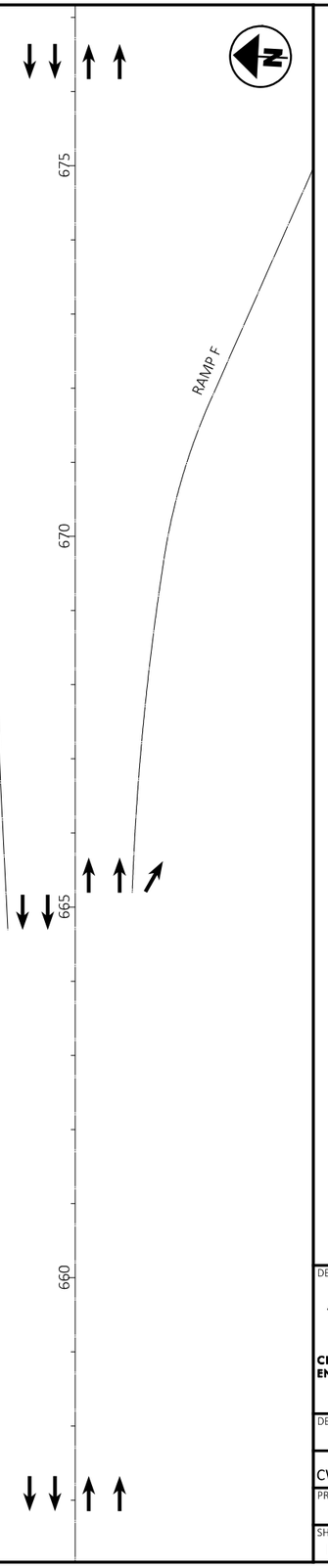

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.

MOT PHASE 2 - IR 90 - SR 57 RAMPS A & F
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - SR 57 RAMPS A & F
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING

*- RAMP TO BE CLOSED FOR A LIMITED TIME WHEN RAMP PAVEMENT AND/OR GORE PAVEMENT IS BEING REPLACED.




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - SR 57 RAMPS A & F

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:03 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY042.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

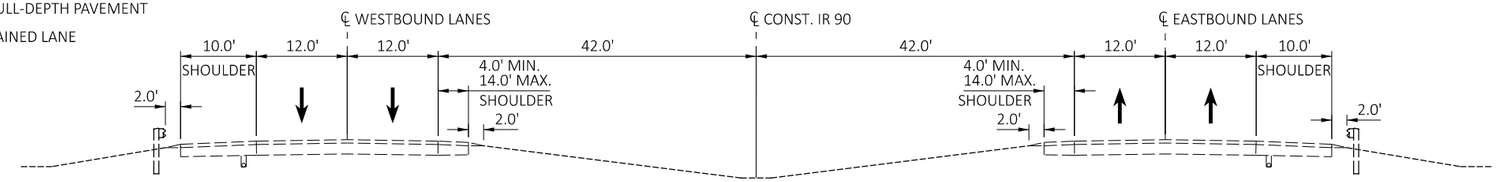
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.18 |
| TOTAL | 28 |

LEGEND

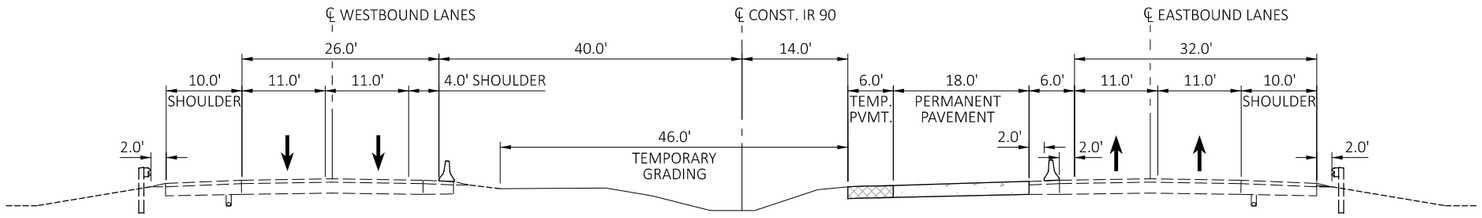
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

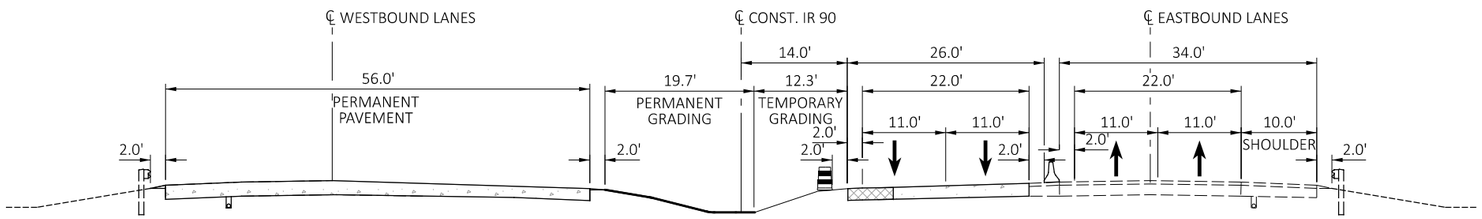
MAINTAINED LANE



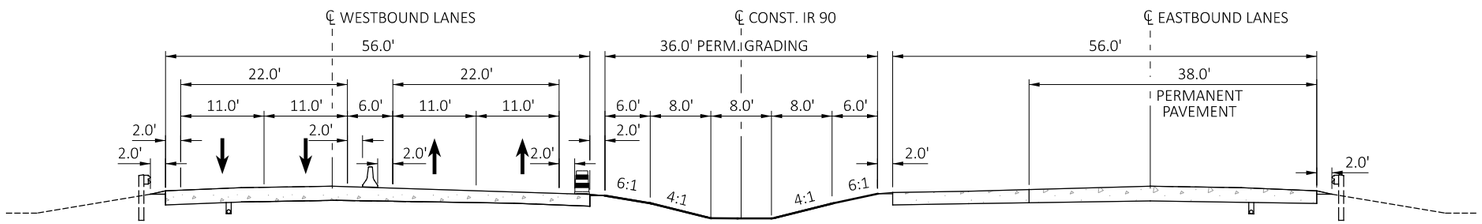

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 2 AND SR 57




MOT PHASE 1 - IR 90 - BETWEEN SR 2 AND SR 57
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BETWEEN SR 2 AND SR 57
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BETWEEN SR 2 AND SR 57
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING

645

640

635

630

MOTAA - TYPICAL SECTIONS - IR 90
CROSSOVER ALTERNATIVE - IR 90 BETWEEN SR 2 AND SR 57

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

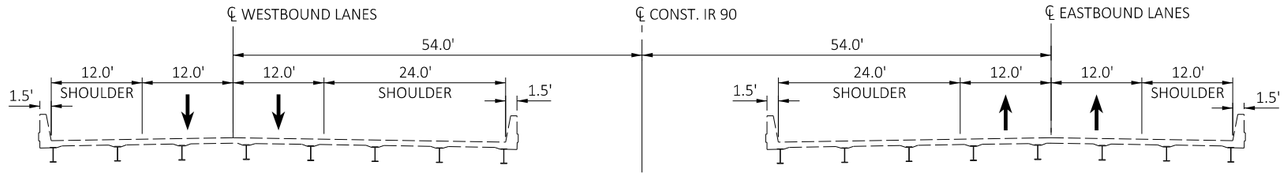
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.19 |
| TOTAL | 28 |

LOR-90-10.76 MOTAA

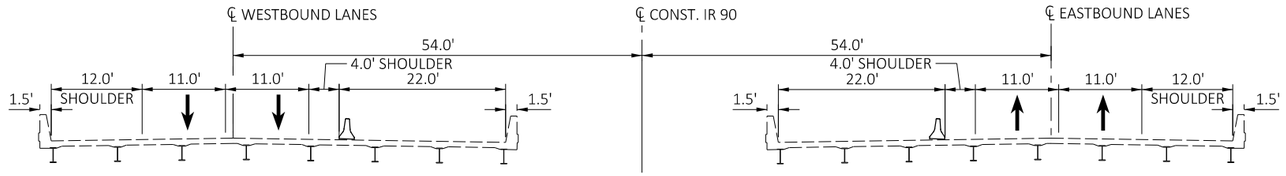
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:04 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY043.dgn

LEGEND

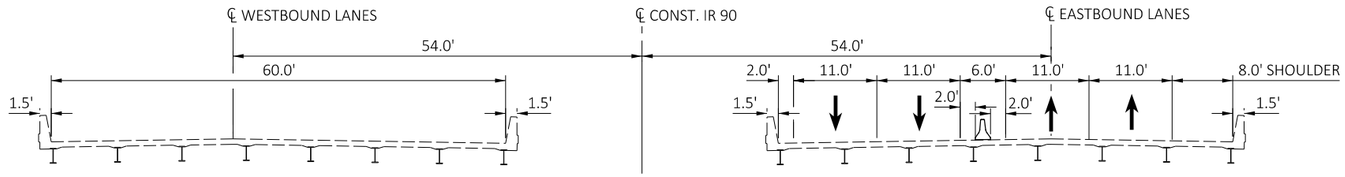
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



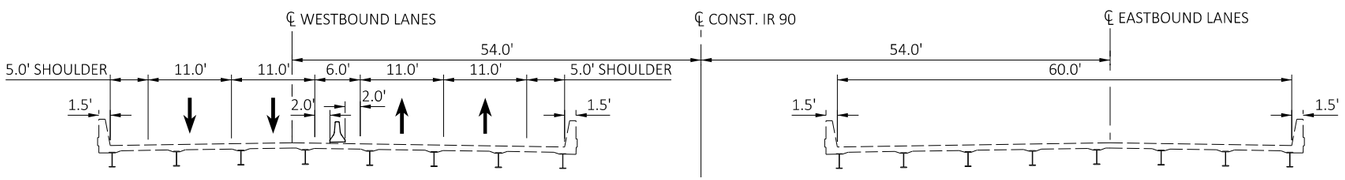

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER CSX RAILROAD



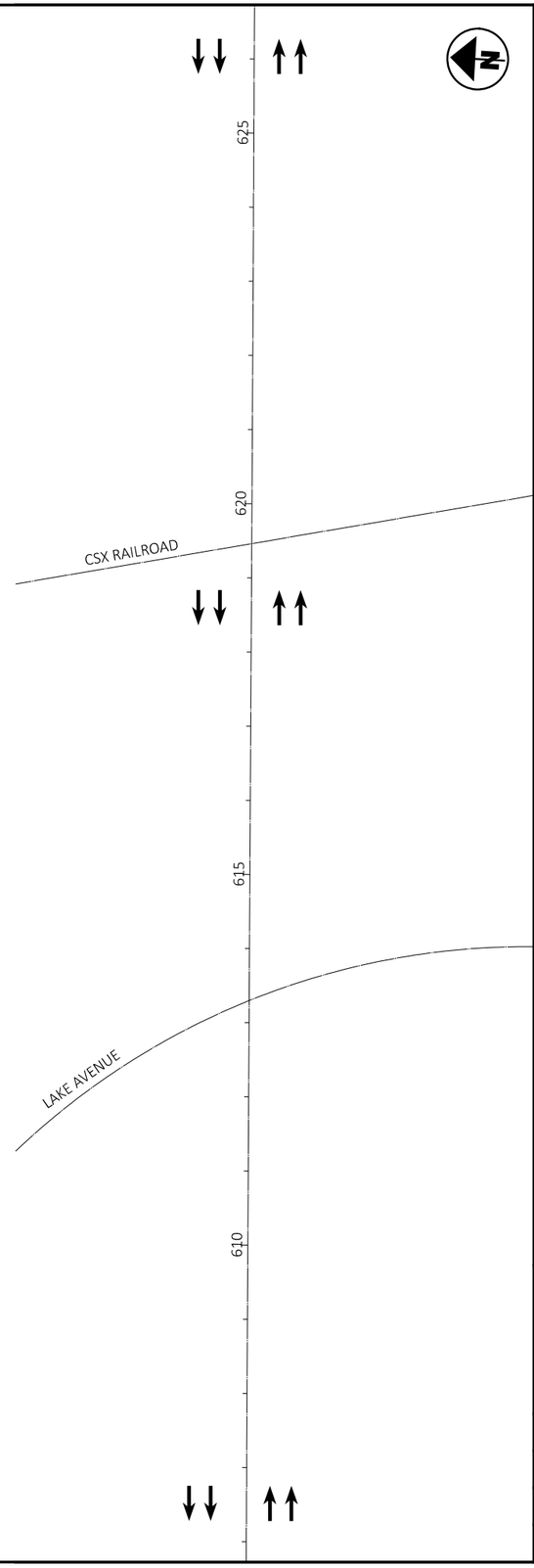

MOT PHASE 1 - IR 90 - BRIDGE OVER CSX RAILROAD
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER CSX RAILROAD
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER CSX RAILROAD
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT,AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER CSX RAILROAD

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:05 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY044.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

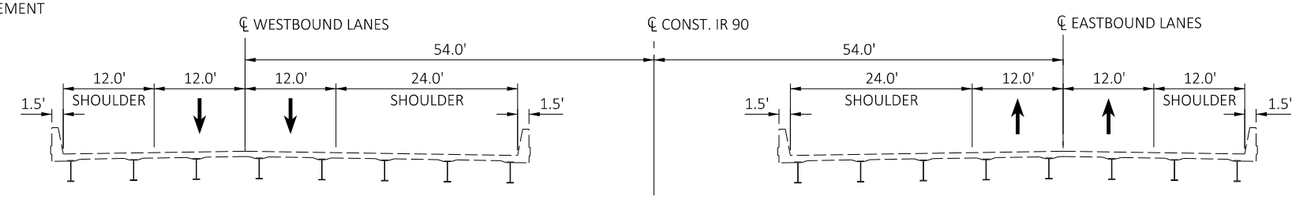
SHEET P.20 TOTAL 28

LEGEND

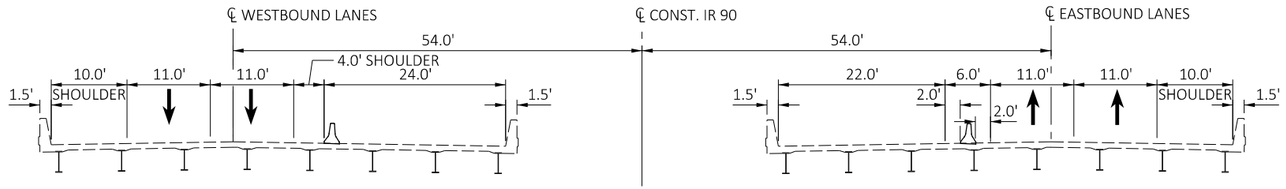
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

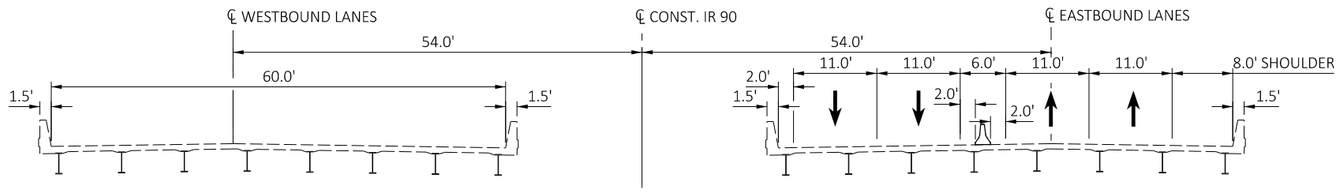
MAINTAINED LANE



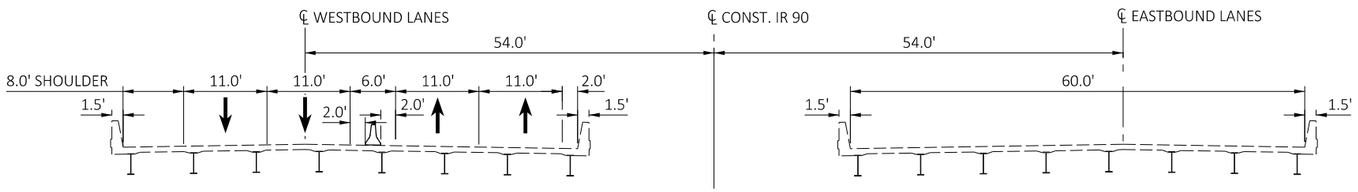

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER LAKE AVENUE



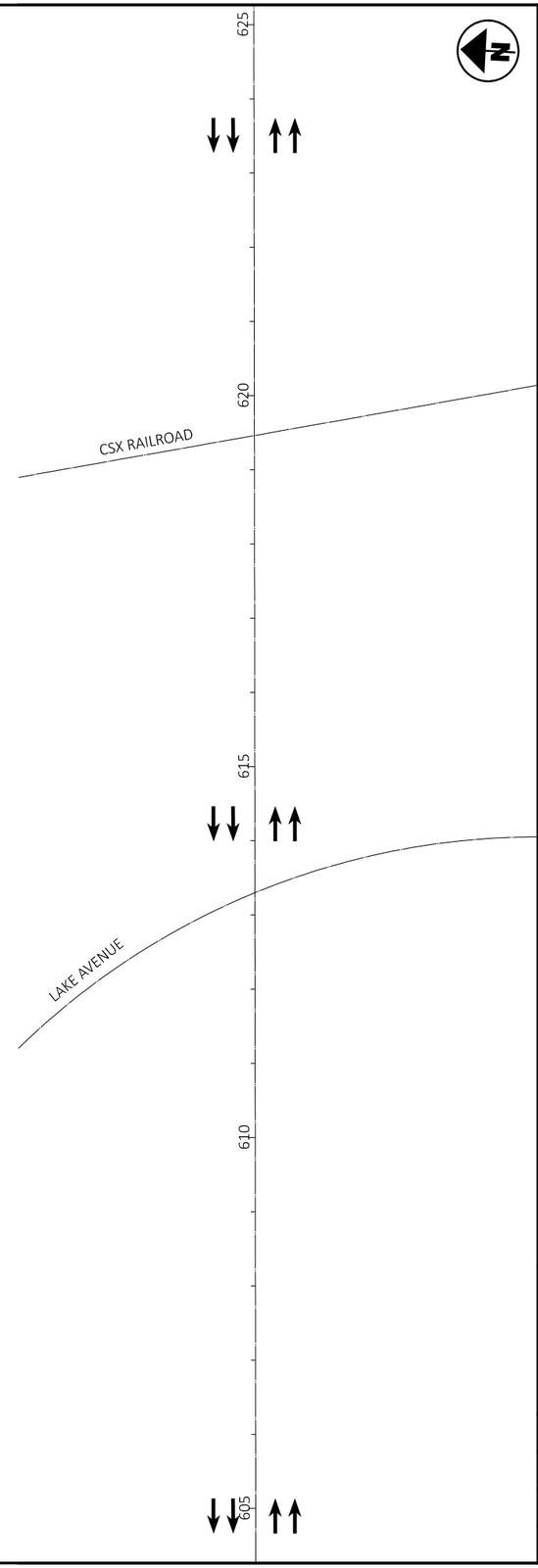

MOT PHASE 1 - IR 90 - BRIDGE OVER LAKE AVENUE
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT AND TEMPORARY PAVEMENT, AND TEMPORARY GRADING




MOT PHASE 2 - IR 90 - BRIDGE OVER LAKE AVENUE
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - IR 90 - BRIDGE OVER LAKE AVENUE
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER LAKE AVENUE

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:05 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\00-Engineering\Roadway\Sheets\107714_GY045.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

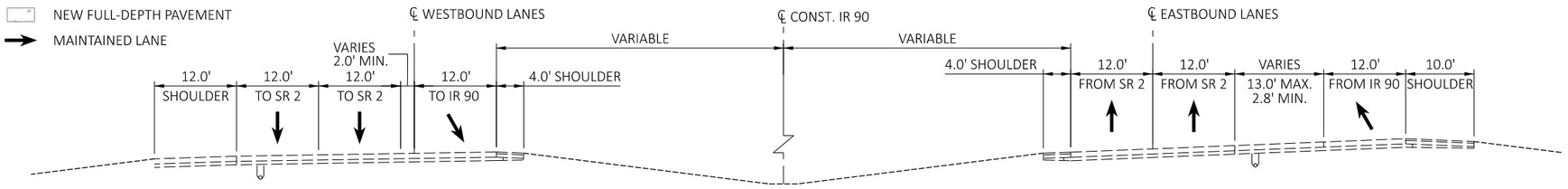
SHEET P.21 TOTAL 28

LEGEND

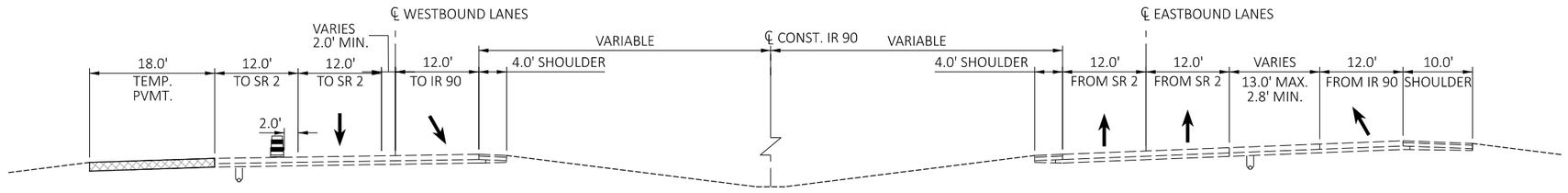
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

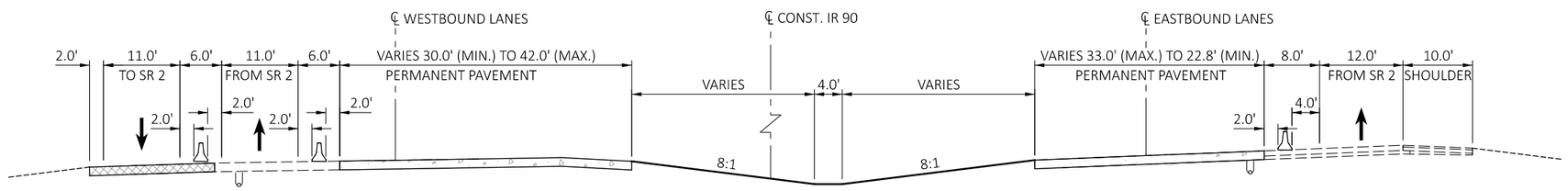
MAINTAINED LANE



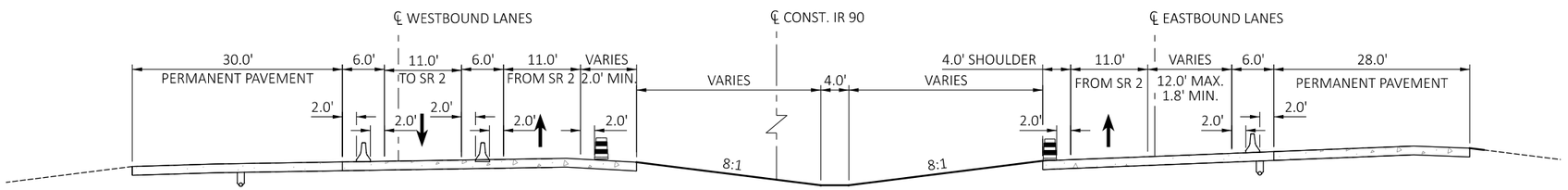

EXISTING TYPICAL SECTION - IR 90 & SR 2- MERGE AND DIVERGE POINTS



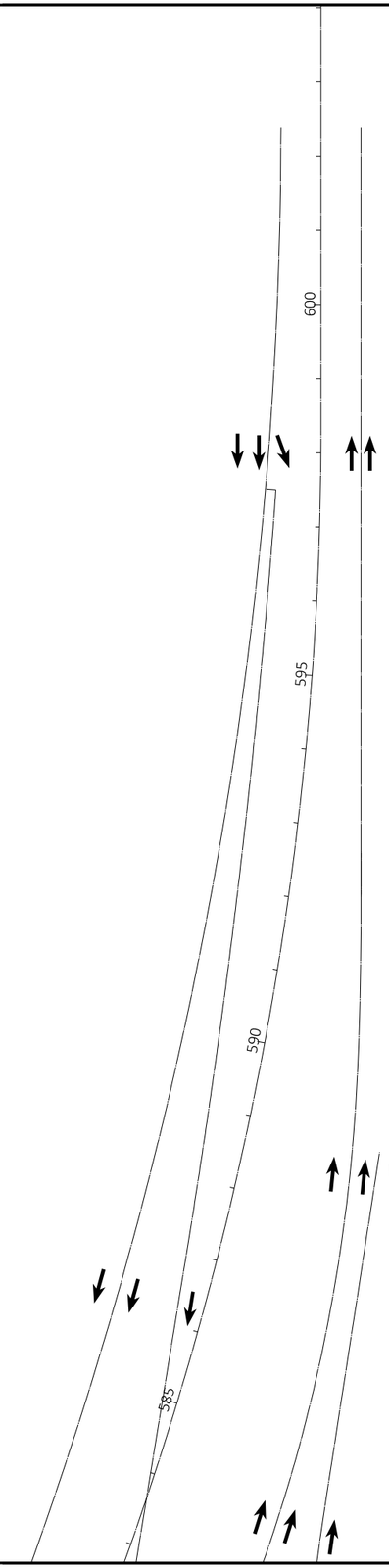

MOT PHASE 1 - IR 90 & SR 2 - MERGE AND DIVERGE POINTS
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2 - IR 90 & SR 2 - MERGE AND DIVERGE POINTS
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL
AND REPLACEMENT AND PERMANENT GRADING




MOT PHASE 3 - IR 90 & SR 2- MERGE AND DIVERGE POINTS
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT REMOVAL, EASTBOUND FULL DEPTH PAVEMENT REMOVAL
AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 - SR 2 MERGE & DIVERGE LANES

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.

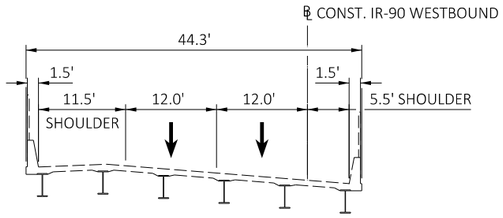
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.22 |
| TOTAL | 28 |

LOR-90-10.76 MOTAA

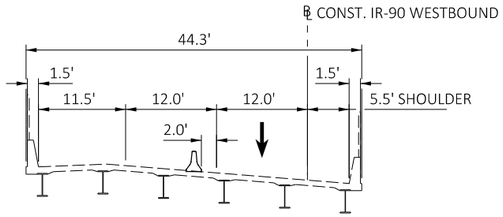
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:06 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY046.dgn

LEGEND

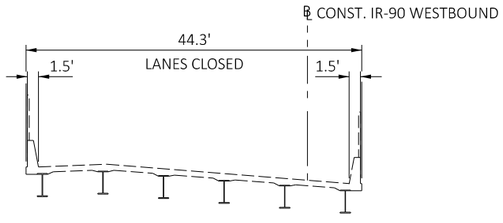
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



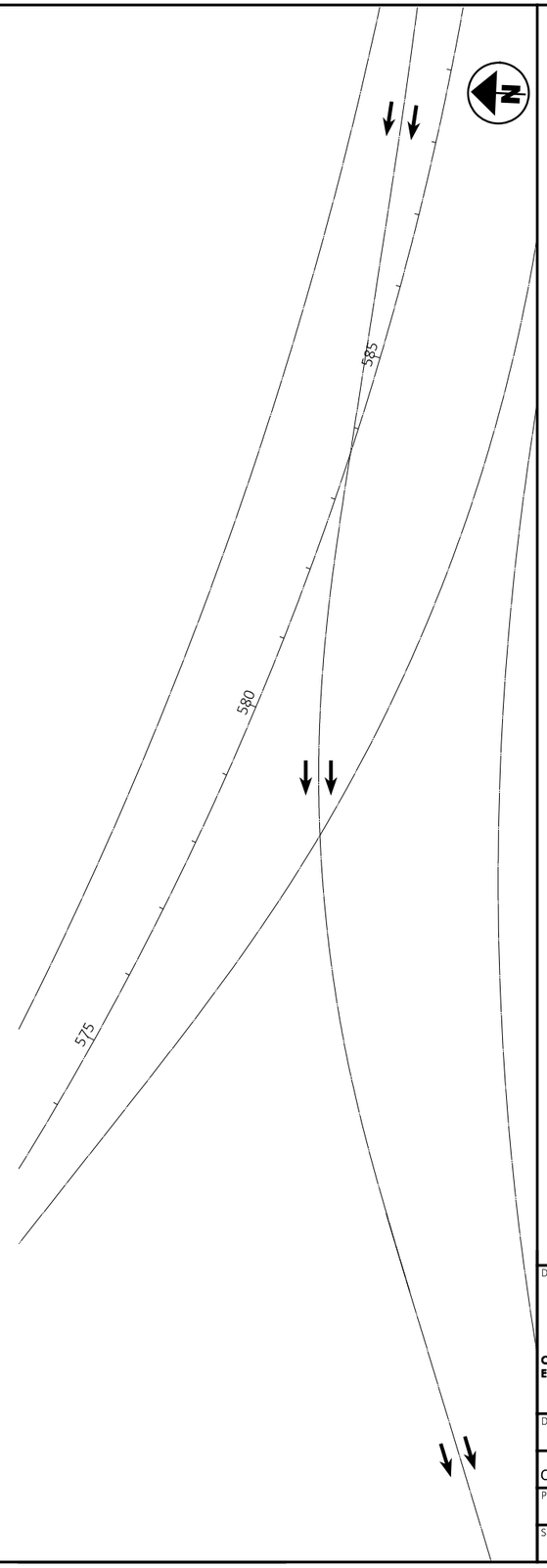

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER SR 2




MOT PHASE 1 - IR 90 WB - BRIDGE OVER SR 2
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2 - IR 90 WB - BRIDGE OVER SR 2
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - IR 90 CROSSOVER ALTERNATIVE - IR 90 WESTBOUND BRIDGE OVER SR 2

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

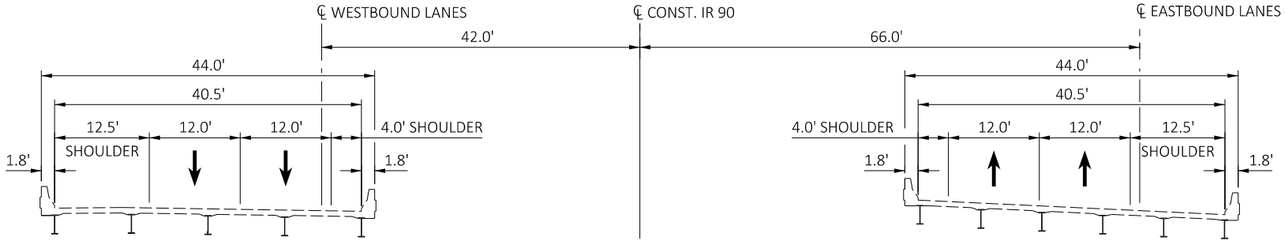
DESIGNER: SHT
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P.23 TOTAL: 28

LOR-90-10.76 MOTAA

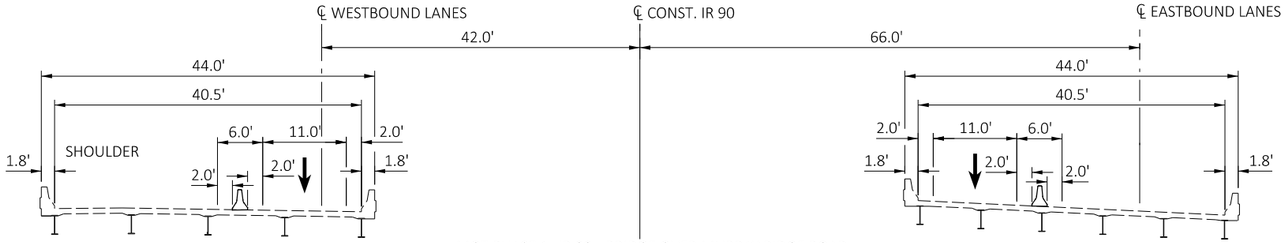
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:07 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY047.dgn

LEGEND

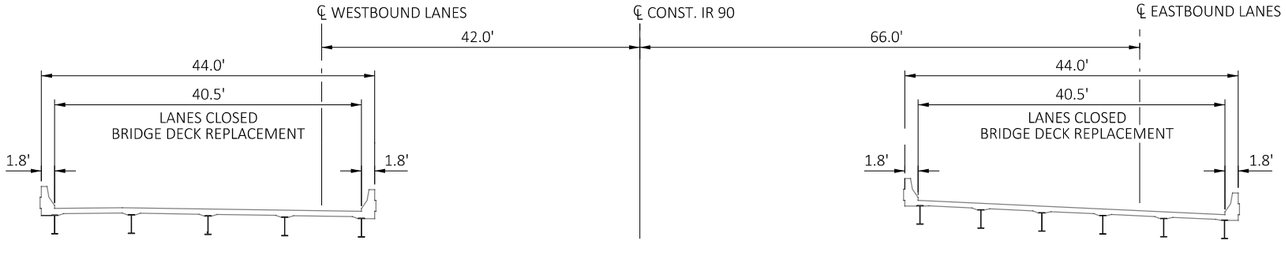
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



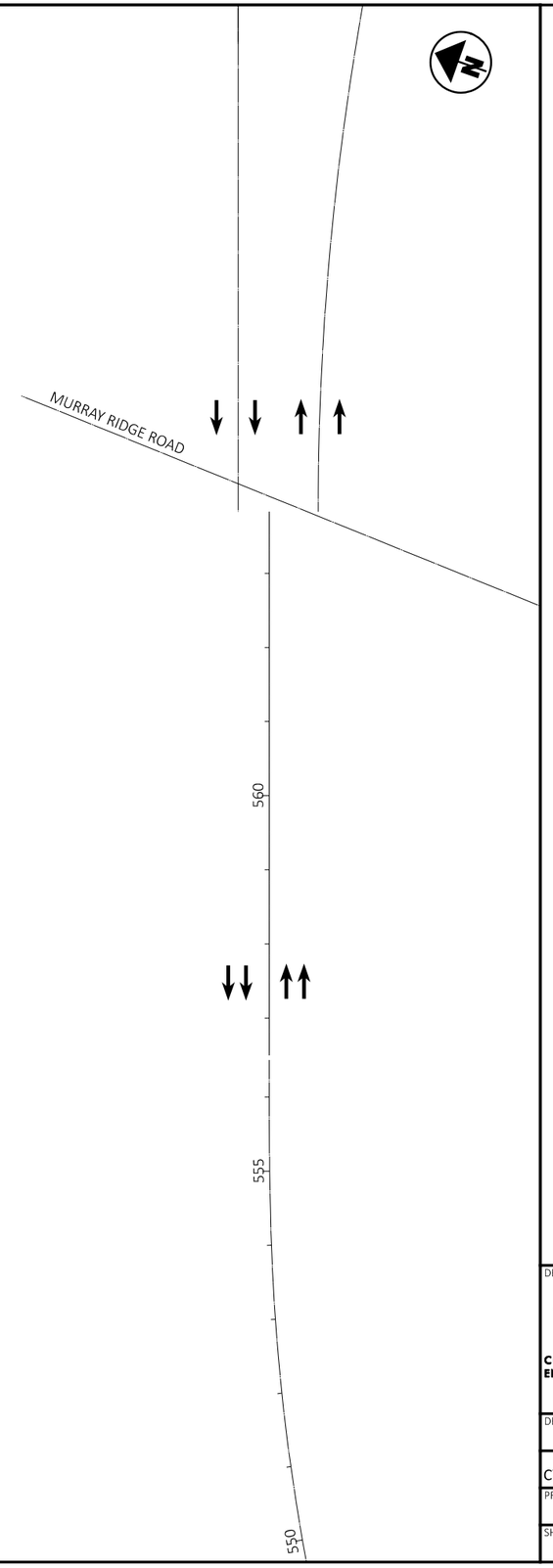

EXISTING TYPICAL SECTION - IR 90 - BRIDGE OVER MURRAY RIDGE ROAD




MOT PHASE 1- IR 90 - BRIDGE OVER MURRAY RIDGE ROAD
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2- IR 90 - BRIDGE OVER MURRAY RIDGE ROAD
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT
AND BRIDGE DECK REPLACEMENT




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BRIDGE OVER MURRAY RIDGE ROAD

LOR-90-10.76 MOTAA


MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:08 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY048.dgn


DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

REVIEWER
CWP 11/10/23

PROJECT ID
107714

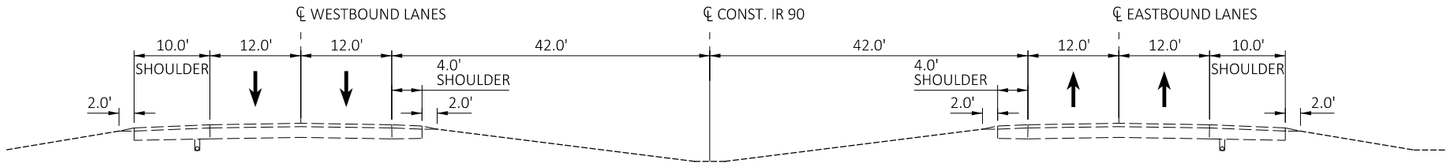
SHEET P.24 TOTAL 28

LEGEND

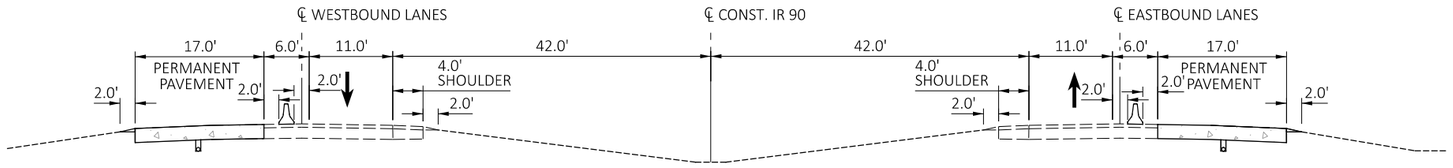
TEMPORARY PAVEMENT

NEW FULL-DEPTH PAVEMENT

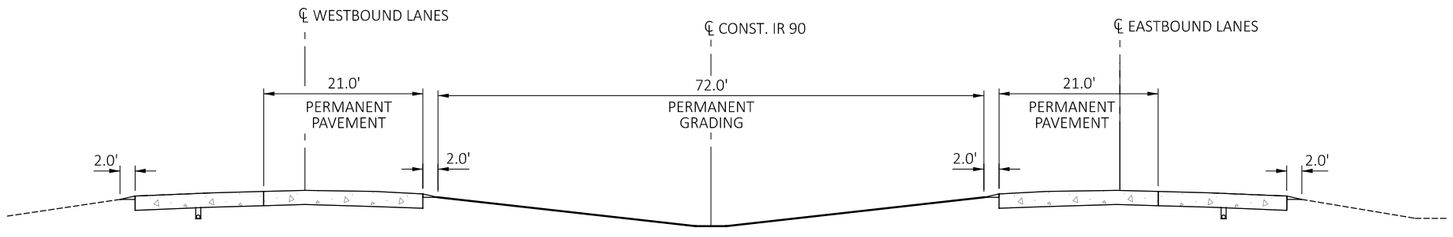
MAINTAINED LANE



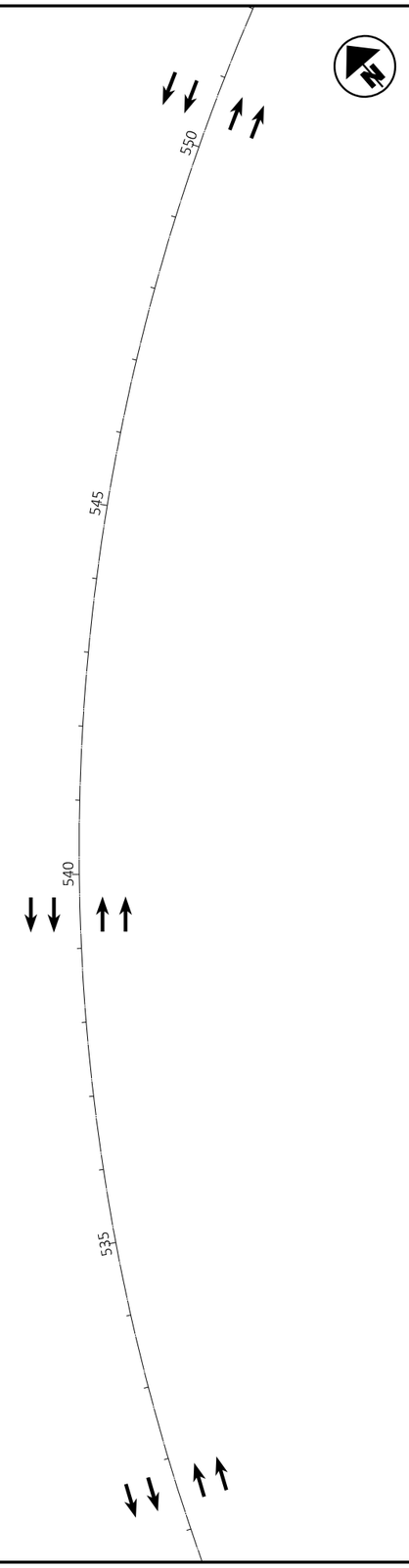

EXISTING TYPICAL SECTION - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA




MOT PHASE 1 - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 2 - IR 90 - BETWEEN SR 2 AND TURNPIKE PLAZA
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT
AND PERMANENT GRADING




# MOTAA - TYPICAL SECTIONS - IR 90
# CROSSOVER ALTERNATIVE - IR 90 BETWEEN TURNPIKE PLAZA AND SR 2

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:08 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GY049.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER
SHT

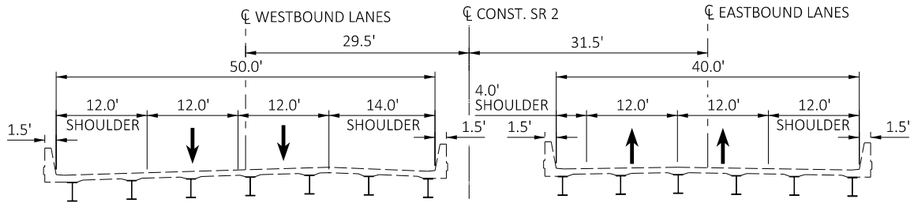
REVIEWER
CWP 11/10/23

PROJECT ID
107714

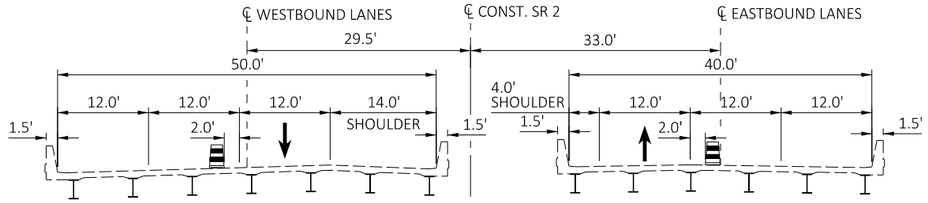
SHEET P.25 TOTAL 28

LEGEND

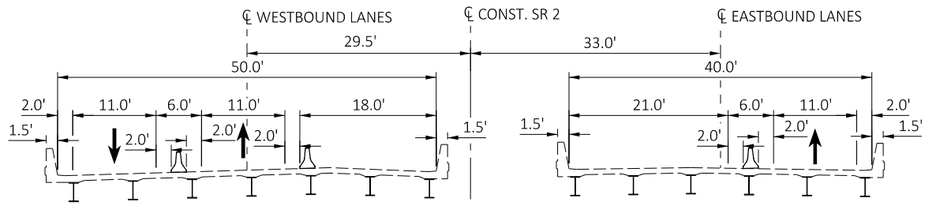
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



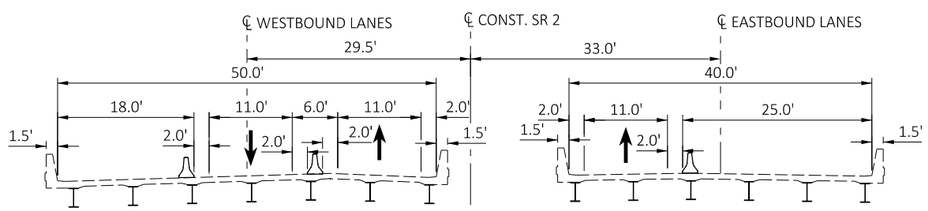

EXISTING TYPICAL SECTION - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD



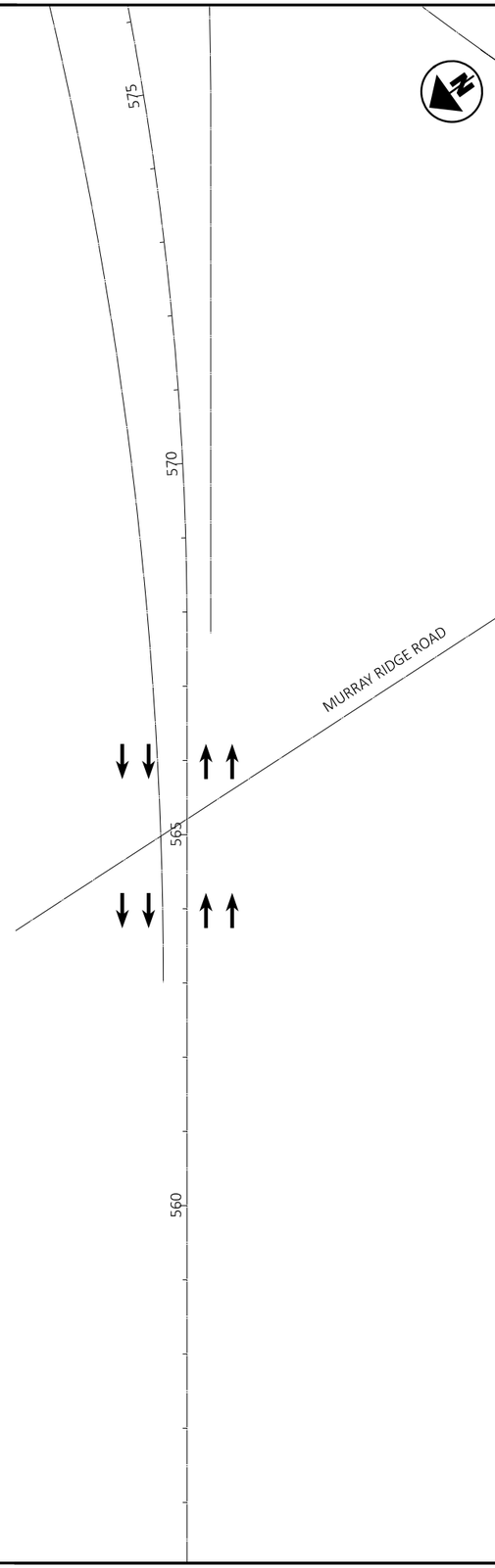

MOT PHASE 1- EVENING CLOSURE - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2 - SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3- SR 2 - BRIDGE OVER MURRAY RIDGE ROAD
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - SR 2
# CROSSOVER ALTERNATIVE - SR 2 BRIDGE OVER MURRAY RIDGE ROAD

LOR-90-10.76 MOTAA

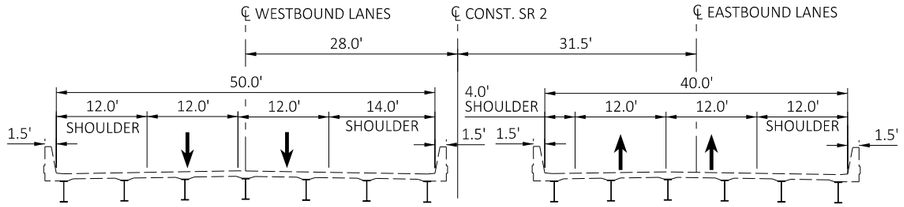
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:09 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\V00-Engineering\Roadway\Sheets\107714_GY050.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

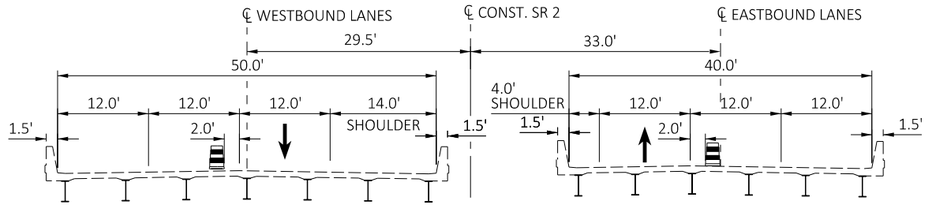
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.26 |
| TOTAL | 28 |

LEGEND

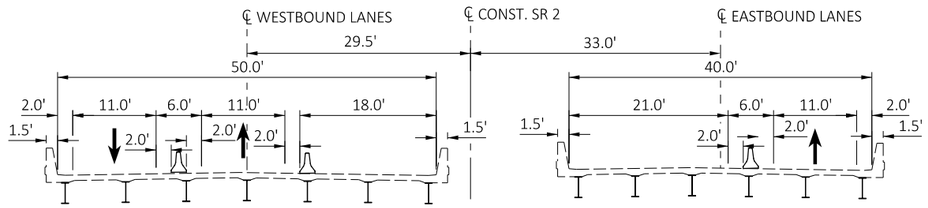
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



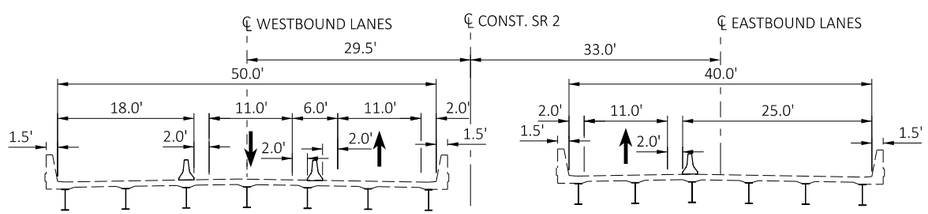

MOT PHASE 1 - SR 2 - BRIDGE LOR-02-10.46
CROSSOVER ALTERNATIVE - EXISTING CONDITION



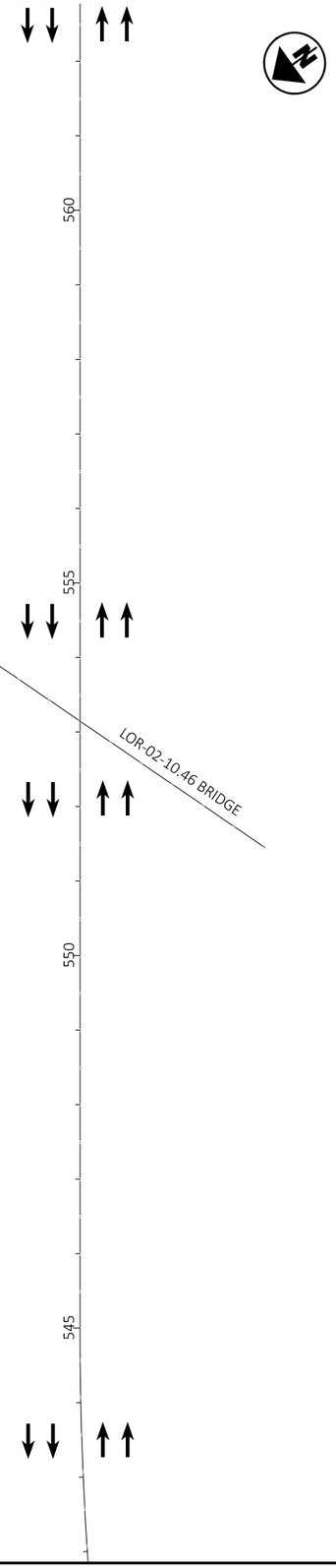

MOT PHASE 1- EVENING CLOSURE - SR 2 - BRIDGE LOR-02-10.46
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT




MOT PHASE 2- SR 2 - BRIDGE LOR-02-10.46
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - SR 2 - BRIDGE LOR-02-10.46
CROSSOVER ALTERNATIVE - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




# MOTAA - TYPICAL SECTIONS - SR 2
# CROSSOVER ALTERNATIVE - SR 2 BRIDGE LOR-2-10.46

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:09 PM USER: thomas
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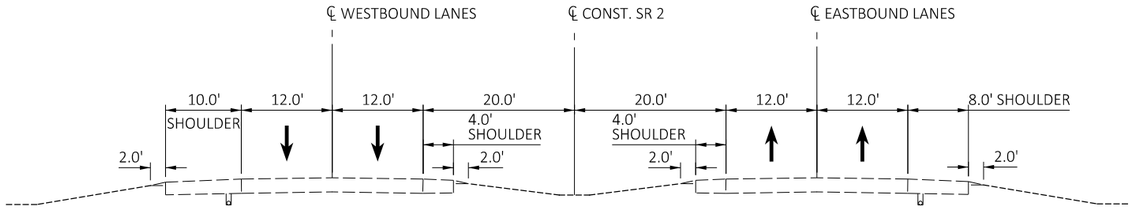
DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

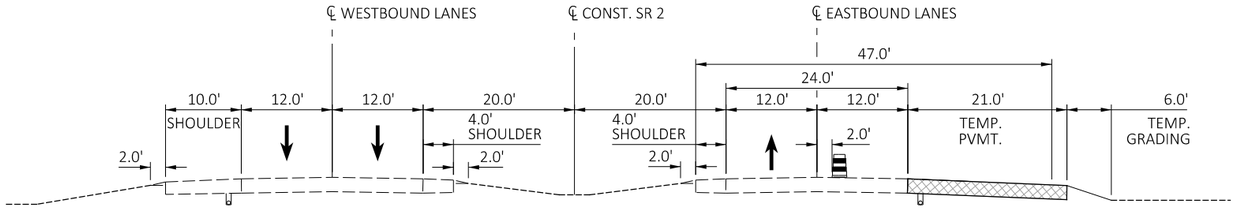
| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.27 |
| TOTAL | 28 |

LEGEND

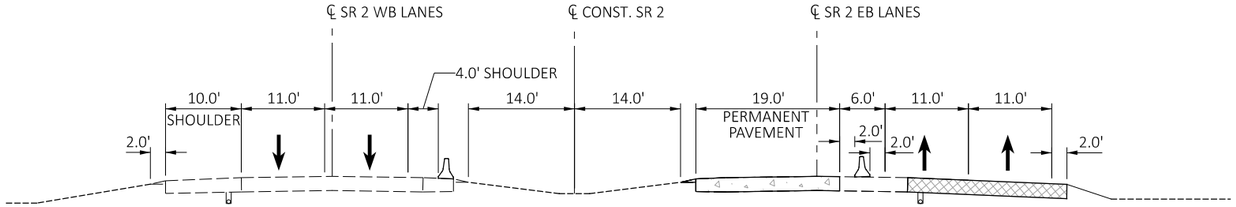
- TEMPORARY PAVEMENT
- NEW FULL-DEPTH PAVEMENT
- MAINTAINED LANE



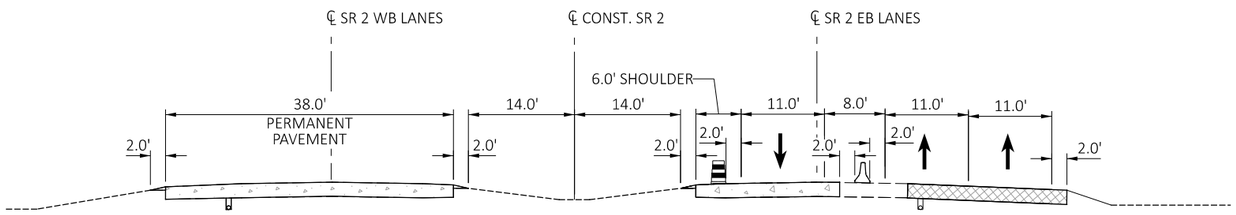

EXISTING TYPICAL - SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90



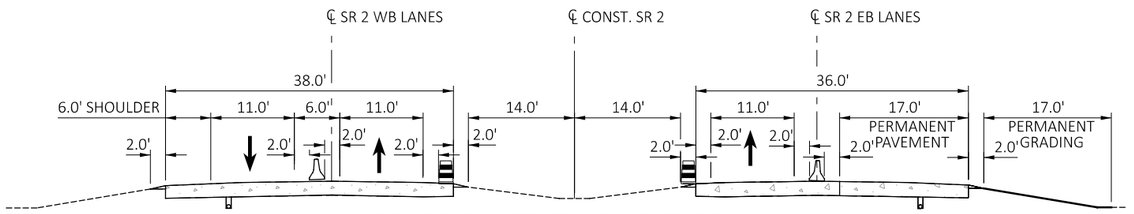

MOT PRE PHASE 1- EVENING CLOSURE - SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
CROSSOVER ALTERNATIVE - TEMPORARY PAVEMENT AND TEMPORARY GRADING



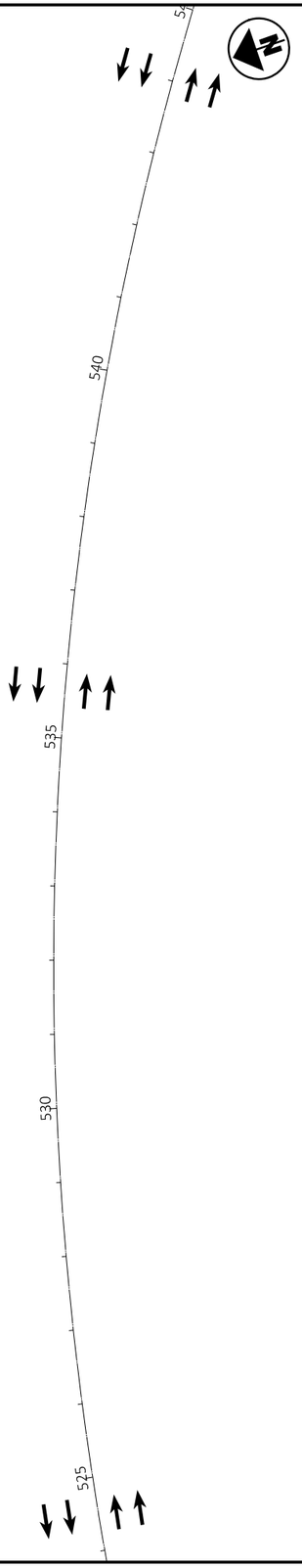

MOT PHASE 1- SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
CROSSOVER ALTERNATIVE - EASTBOUND PERMANENT PAVEMENT




MOT PHASE 2- SR 2 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
CROSSOVER ALTERNATIVE - WESTBOUND FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT




MOT PHASE 3 - SR 02 - BETWEEN MIDDLE RIDGE ROAD AND IR 90
CROSSOVER ALTERNATIVE - EASTBOUND FULL DEPTH AND TEMPORARY PAVEMENT
REMOVAL AND REPLACEMENT, AND FINAL GRADING




# MOTAA - TYPICAL SECTIONS - SR 2
# CROSSOVER ALTERNATIVE - SR 2 BETWEEN MIDDLE RIDGE ROAD & IR-90

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SHT
REVIEWER CWP 11/10/23
PROJECT ID 107714
SHEET P.28 TOTAL 28

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 4:39:11 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\Roadway\Sheets\107714_GV052.dgn

# Appendix G: Crossover Locations

# CROSSOVER LOCATION MAP

HORIZONTAL SCALE IN FEET
0 750 1500 3000

1. PHASE 2: SR 2 WB DIRECTION MOVED BACK TO SR 2 WB LANES
   SR 2 EB DIRECTION SPLIT BETWEEN SR 2 WB LANES
   PHASE 3: SR 2 EB DIRECTION SPLIT BETWEEN SR 2 WB LANES
2. PHASE 2: ACCESS FOR WB IR 90 ENTRANCE RAMP AT SR 57
   SR 2 EB AND WB MOVED BACK TO IR 90 EB
   PHASE 3: ACCESS FOR EB IR 90 EXIT RAMP AT SR 57
   SR 2 EB MOVED TO IR 90 WB
3. PHASE 2: ACCESS FOR WB IR 90 EXIT RAMP AT SR 57
   PHASE 3: ACCESS FOR EB IR 90 ENTRANCE RAMP AT SR 57
4. PHASE 2: ACCESS FOR WB IR 90 ENTRANCE RAMP AT SR 254
   PHASE 3: ACCESS FOR EB IR 90 EXIT RAMP AT SR 254
5. PHASE 2: ACCESS FOR WB IR 90 EXIT RAMP AT SR 254
   PHASE 3: ACCESS FOR EB IR 90 ENTRANCE RAMP AT SR 254
6. PHASE 2: ACCESS FOR WB IR 90 ENTRANCE RAMP AT SR 611
   PHASE 3: ACCESS FOR EB IR 90 EXIT RAMP AT SR 611
7. PHASE 2: WB DIRECTION MOVED TO EB LANES
   PHASE 3: EB DIRECTION MOVED BACK TO EB LANES

COLORADO AVENUE
CHESTER ROAD
CENTER ROAD
DETROIT ROAD
FRENCH CREEK ROAD
STONEY RIDGE ROAD
MOON ROAD
GULF ROAD
ABBE ROAD N
CASE ROAD
MIDDLE RIDGE ROAD
LAKE AVENUE
GRISWOLD ROAD
W RIVER ROAD N
W RIDGE ROAD
MURRAY RIDGE ROAD
OHIO TURNPIKE
JOHN F KENNEDY MEMORIAL PARKWAY
80

LOR-90-10.76 MOTAA

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:57:04 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\MOT\Sheets\107714_MM001.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SHT |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.01 |
| TOTAL | 01 |

# Appendix H: Detour Maps

# LOR-90-10.76 MOTAA

MODEL: Sheet 01 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:47:20 PM USER: thomas
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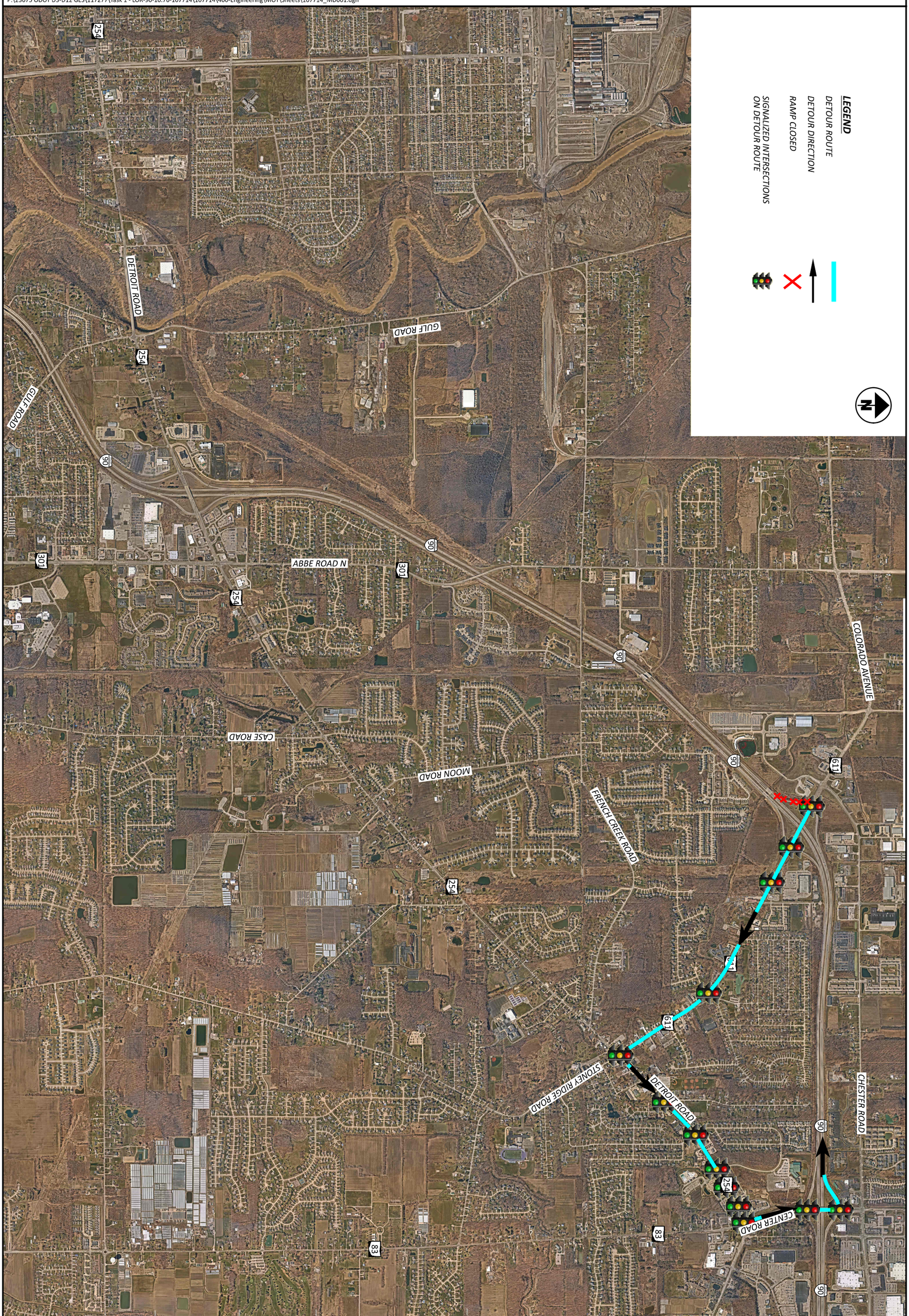


DETOUR EXHIBIT
SR 611 WB ENTRANCE RAMP

DESIGN AGENCY: CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SAF
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P 01 | TOTAL: 11

HORIZONTAL SCALE IN FEET
0 1000
500 2000

**LEGEND**

- DETOUR ROUTE
- DETOUR DIRECTION
- RAMP CLOSED
- SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 254 EB EXIT RAMP

LOR-90-10.76 MOTAA

MODEL: Sheet 03 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:47:32 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SAF |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.02 |
| TOTAL | 11 |

# LOR-90-10.76 MOTAA

MODEL: Sheet 04 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:47:39 PM USER: thomas
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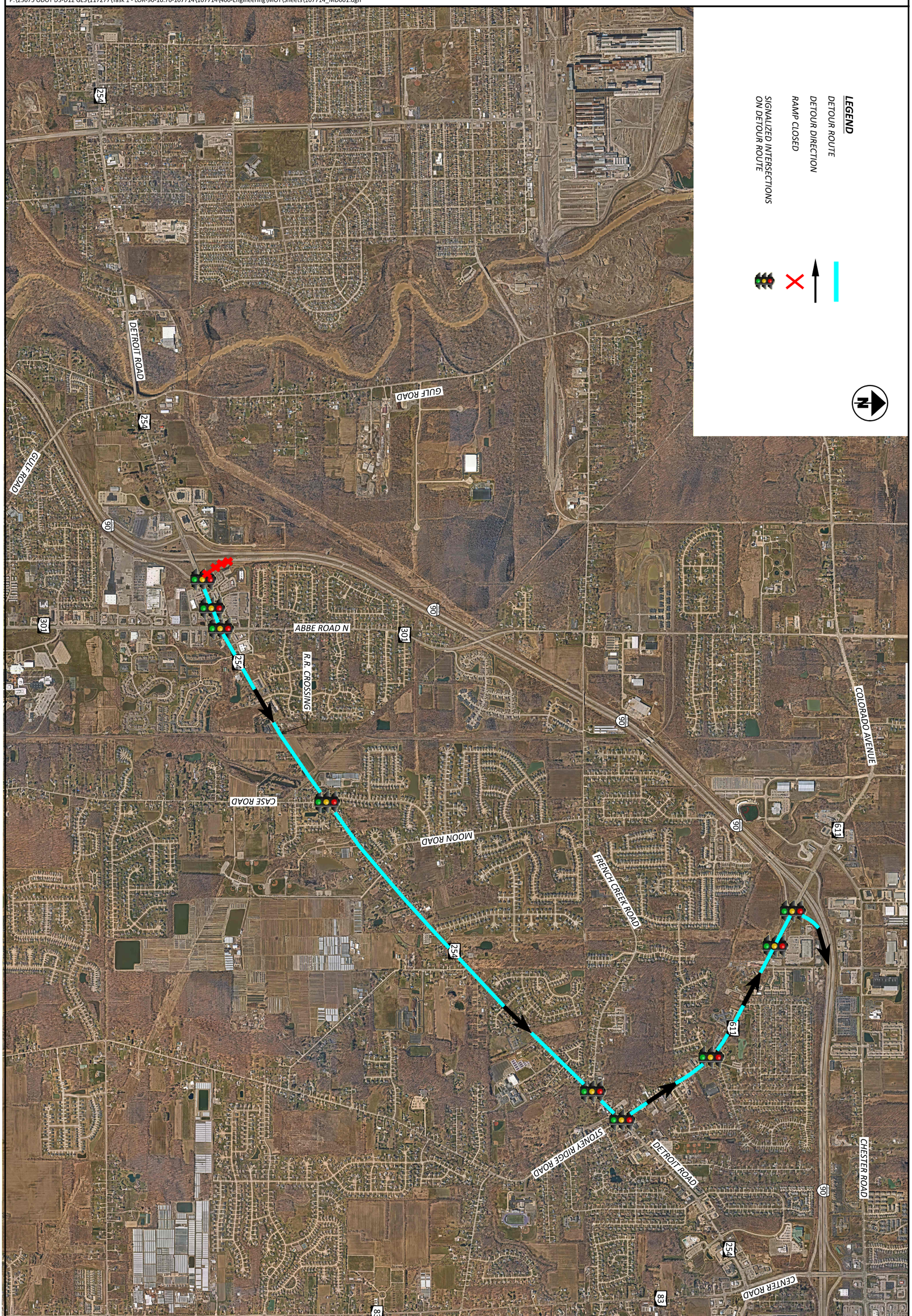


DESIGN AGENCY: CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER: SAF
REVIEWER: CWP 11/10/23
PROJECT ID: 107714
SHEET: P 03 | TOTAL: 11

## DETOUR EXHIBIT
## SR 254 EB ENTRANCE RAMP

HORIZONTAL SCALE IN FEET
0 1000
500 2000

# LOR-90-10.76 MOTAA

MODEL: Sheet 05 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:47:46 PM USER: thomas
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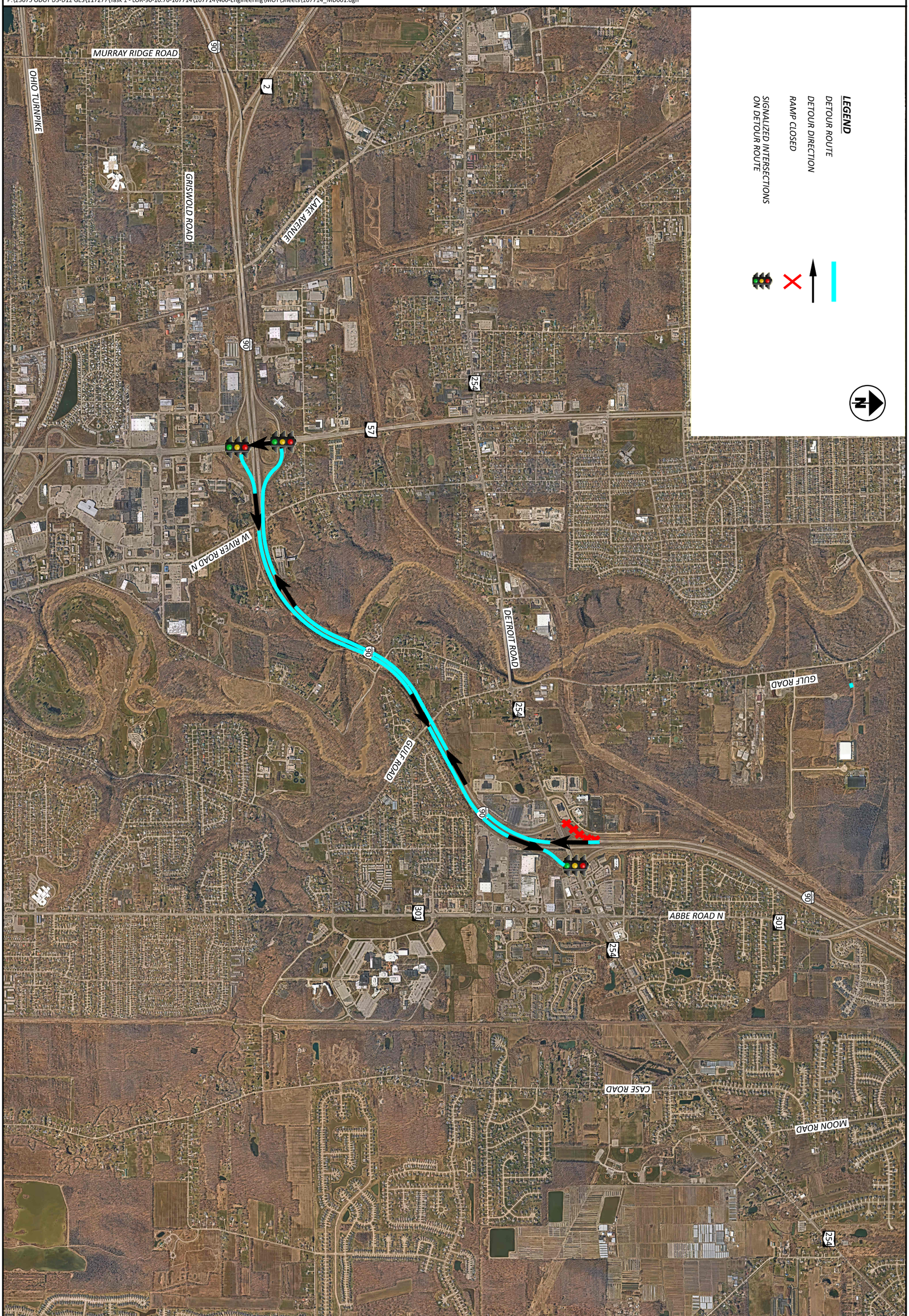


DETOUR EXHIBIT
SR 254 WB EXIT RAMP

HORIZONTAL SCALE IN FEET
0 1000
500 2000

| SHEET | TOTAL |
|---|---|
| P.04 | 11 |

PROJECT ID: 107714
REVIEWER: CWP 11/10/23
DESIGNER: SAF
DESIGN AGENCY: CHAGRIN VALLEY ENGINEERING, LTD.

**LEGEND**

- DETOUR ROUTE
- DETOUR DIRECTION
- RAMP CLOSED
- SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 254 WB ENTRANCE RAMP

LOR-90-10.76 MOTAA

MODEL: Sheet 06 PAPERSIZE: 17X11 (in.) DATE: 11/9/2023 TIME: 2:47:56 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\000-Engineering\MOT\Sheets\107714_MD001.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SAF |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.05 |
| TOTAL | 11 |

**LEGEND**

DETOUR ROUTE

DETOUR DIRECTION

RAMP CLOSED

SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 57 EB EXIT RAMP

LOR-90-10.76 MOTAA

MODEL: Sheet 07 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:48:05 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| DESIGNER | |
|---|---|
| SAF | |
| REVIEWER | |
| CWP 11/10/23 | |
| PROJECT ID | |
| 107714 | |
| SHEET | TOTAL |
| P.06 | 11 |

**LEGEND**

- DETOUR ROUTE
- DETOUR DIRECTION
- RAMP CLOSED
- SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 57 EB ENTRANCE RAMP

LOR-90-10.76 MOTAA

MODEL: Sheet 08 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:48:13 PM USER: thomas
P:\23075 ODOT D3-D12 GE\S\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\MOT\Sheets\107714_MD001.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SAF |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.07 |
| TOTAL | 11 |

**LEGEND**

DETOUR ROUTE

DETOUR DIRECTION

RAMP CLOSED

SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 57 WB EXIT RAMP

LOR-90-10.76 MOTAA

MODEL: Sheet 09 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:48:21 PM USER: thomas
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DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SAF

REVIEWER CWP 11/10/23

PROJECT ID 107714

SHEET P.08 TOTAL 11

**LEGEND**

- DETOUR ROUTE
- DETOUR DIRECTION
- RAMP CLOSED
- SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## SR 57 WB ENTRANCE RAMP

LOR-90-10.76 MOTAA

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| DESIGNER | |
|---|---|
| SAF | |
| REVIEWER | |
| CWP 11/10/23 | |
| PROJECT ID | |
| 107714 | |
| SHEET | TOTAL |
| P.09 | 11 |

MODEL: Sheet 10 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 2:48:33 PM USER: thomas
P:\23075 ODOT D3-D12 GE\S\117277\Task 1 - LOR-90-10.76-107714\107714\107714\400-Engineering\MOT\Sheets\107714_MD001.dgn

**LEGEND**

- DETOUR ROUTE
- DETOUR DIRECTION
- ROAD CLOSED
- SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

# DETOUR EXHIBIT
## WB SR 2 RAMP TO WB IR 90

LOR-90-10.76 MOTAA

MODEL: Sheet 11 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 3:21:55 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\MOT\Sheets\107714_MD001.dgn

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

| | |
|---|---|
| DESIGNER | SAF |
| REVIEWER | CWP 11/10/23 |
| PROJECT ID | 107714 |
| SHEET | P.10 |
| TOTAL | 11 |

**LEGEND**

DETOUR ROUTE

DETOUR DIRECTION

ROAD CLOSED

SIGNALIZED INTERSECTIONS ON DETOUR ROUTE

HORIZONTAL SCALE IN FEET
0 500 1000 2000

DETROIT ROAD
GULF ROAD
LAKE AVENUE
MIDDLE RIDGE ROAD
GRISWOLD ROAD
W RIDGE ROAD
MURRAY RIDGE ROAD
W RIVER ROAD N
OHIO TURNPIKE
TOLL PLAZA
JOHN F KENNEDY MEMORIAL PARKWAY
LAKE AVENUE

# DETOUR EXHIBIT
# EB IR 90

LOR-90-10.76 MOTAA

DESIGN AGENCY
CHAGRIN VALLEY ENGINEERING, LTD.

DESIGNER SAF

REVIEWER CWP 11/10/23

PROJECT ID 107714

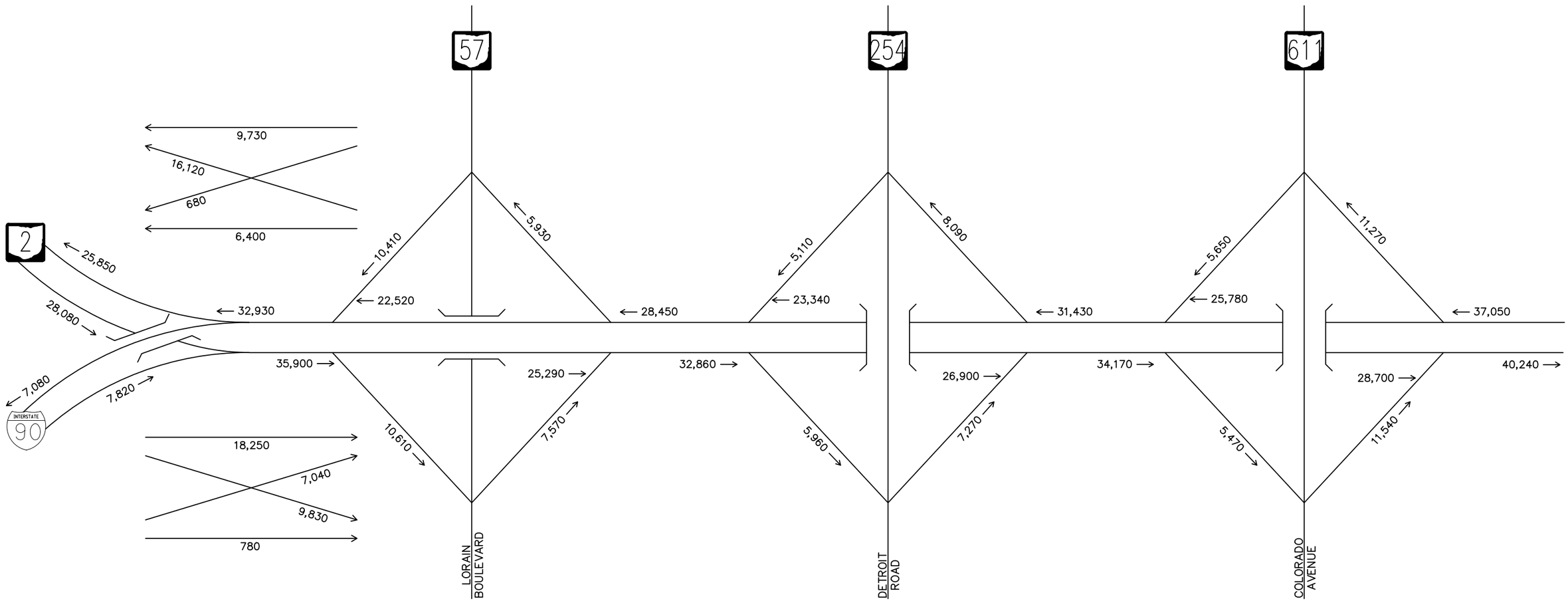
SHEET P.11 TOTAL 11

MODEL: Sheet 12 PAPERSIZE: 17x11 (in.) DATE: 11/9/2023 TIME: 3:19:24 PM USER: thomas
P:\23075 ODOT D3-D12 GES\117277\Task 1 - LOR-90-10.76-107714\107714\400-Engineering\MOT\Sheets\107714_MD001.dgn

# Appendix I: Certified Traffic

N

N.T.S.




NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

PLATE 1

EXISTING YEAR 2020
ADT

MARCH 2021 (REV. JANUARY 2022)

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\4-Lane Volumes\PLATE 1 - 2020 ADT.dwg Layout: PLATE 1
Date: Jan 07, 2022 Time: 2:06 pm Twist: 0
Technician: bferrell

N

N.T.S.

57

254

611

2

INTERSTATE 90

LORAIN BOULEVARD

DETROIT ROAD

COLORADO AVENUE

770 (1,020)
1,230 (1,910)
50 (80)
440 (840)

← 2,000 (2,930)
(2,630) 2,490 →
← 490 (920)
(390) 790 →

← 820 (1,100)
← 430 (700)
← 2,490 (3,850)
← 1,670 (2,750)
← 2,100 (3,450)
(3,020) 3,280 →
(2,060) 2,330 →
(2,760) 3,020 →
(960) 950 →
(700) 690 →

1,620 (1,710)
710 (350)
870 (920)
80 (40)

← 360 (640)
← 510 (1,050)
← 1,740 (2,810)
← 2,250 (3,860)
(2,190) 2,500 →
(2,880) 3,230 →
(570) 520 →
(690) 730 →

← 420 (710)
← 690 (1,290)
← 1,830 (3,150)
← 2,520 (4,440)
(2,410) 2,660 →
(3,380) 3,910 →
(470) 570 →
(970) 1,250 →

NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - AM DHV
(##) - PM DHV

PLATE 2

EXISTING YEAR 2020
AM / PM DHV

MARCH 2021 (REV. JANUARY 2022)

Drawing File: O:\2020\2020089 ODOT D12-03 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\4-Lane Volumes\PLATE 2 - 2020 AM & PM DHV.dwg Layout: PLATE 1
Date: Jan 07, 2022 Time: 2:14 pm Twist: 0
Technician: bferrell

N

N.T.S.

57

254

611

2

INTERSTATE 90

9,830 (10,220)

16,480 (17,920)

680 (710)

6,550 (7,120)

← 26,310 (28,140)

(28,880) 28,260 →

← 7,230 (7,830)

(10,320) 8,290 →

← 10,510 (10,930)

← 5,990 (6,230)

← 5,160 (5,370)

← 8,170 (8,490)

← 5,710 (5,930)

← 11,380 (11,830)

← 33,540 (35,970)

← 23,030 (25,040)

← 29,020 (31,270)

← 23,860 (25,900)

← 32,030 (34,390)

← 26,320 (28,460)

← 37,700 (40,290)

(39,200) 36,550 →

(28,060) 25,830 →

(36,010) 33,480 →

(29,750) 27,460 →

(37,380) 34,800 →

(31,640) 29,280 →

(43,760) 40,940 →

(11,140) 10,720 →

(7,950) 7,650 →

(6,260) 6,020 →

(7,630) 7,340 →

(5,740) 5,520 →

(12,120) 11,660 →

18,370 (18,770)

7,460 (9,290)

9,890 (10,110)

830 (1,030)

LORAIN BOULEVARD

DETROIT ROAD

COLORADO AVENUE

NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

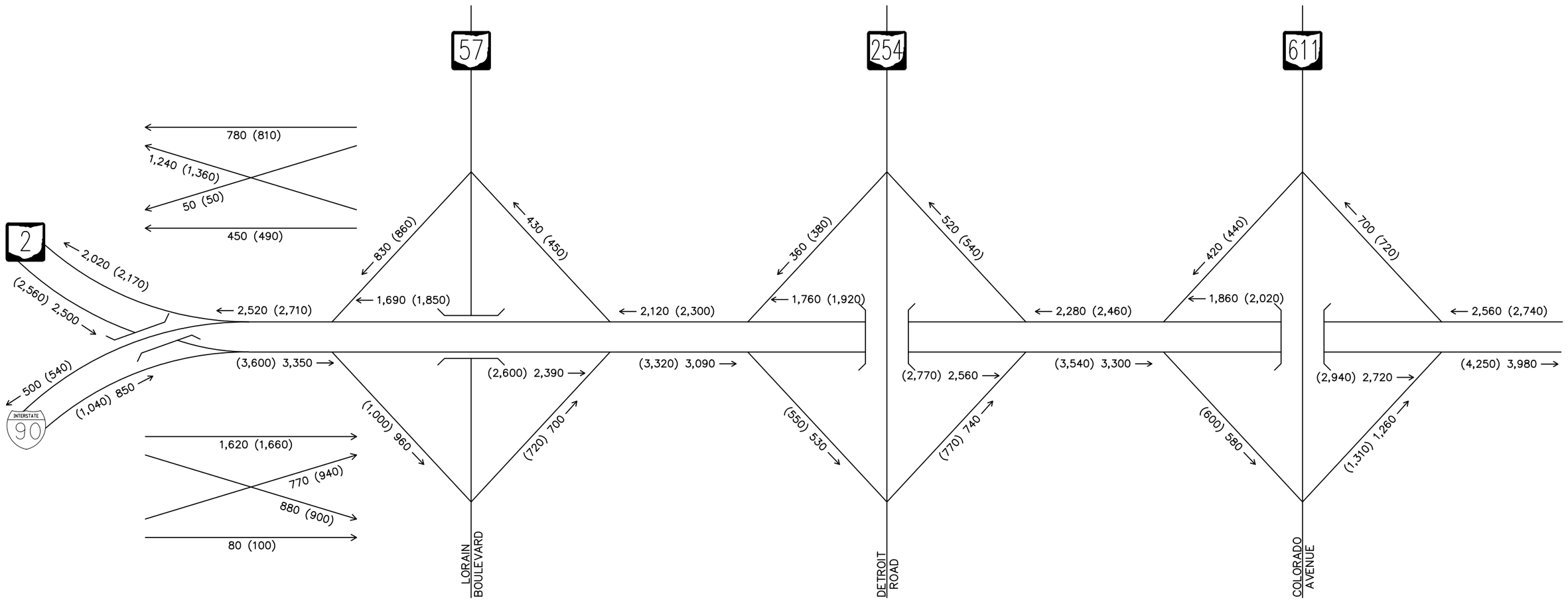
## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 3

YEAR 2025 / YEAR 2045
ADT
4 LANES

MARCH 2021 (REV. JANUARY 2022)

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\4-Lane Volumes\PLATE 3 - 2025 & 2045 ADT.dwg Layout: PLATE 3
Date: Jan 07, 2022 Time: 2:19 pm Tablet: 0
Technician: bferrell




NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 4

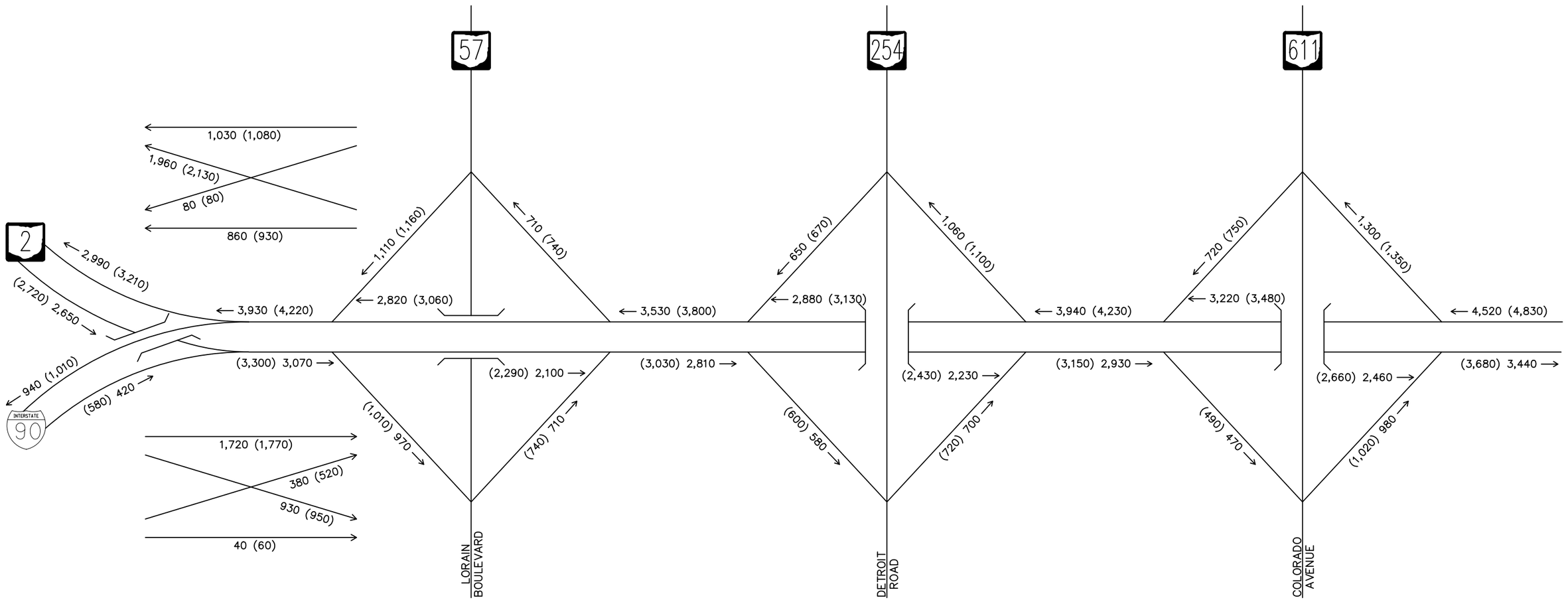
YEAR 2025 / YEAR 2045
AM DHV
4 LANES

MARCH 2021 (REV. JANUARY 2022)

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\4-Lane Volumes\PLATE 4 - 2025 & 2045 AM DHV.dwg Layout: PLATE 4
Date: Jan 07, 2022 Time: 2:28 pm Twist: 0
Technician: bferrell

N

N.T.S.




NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 5

YEAR 2025 / YEAR 2045
PM DHV
4 LANES

MARCH 2021 (REV. JANUARY 2022)

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\4-Lane Volumes\PLATE 5 - 2025 & 2045 PM DHV.dwg Layout: PLATE 5
Date: Jan 07, 2022 Time: 2:30 pm Twist: 0
Technician: bferrell

N

N.T.S.

57

254

611

2

INTERSTATE 90

9,950 (10,830)

16,790 (19,460)

690 (750)

6,670 (7,720)

← 26,740 (30,290)

(30,300) 28,530 →

← 7,360 (8,470)

(11,950) 8,640 →

← 10,640 (11,580)

← 6,060 (6,600)

← 34,100 (38,760)

← 23,460 (27,180)

← 29,520 (33,780)

← 5,220 (5,680)

← 8,270 (9,000)

← 24,300 (28,100)

← 32,570 (37,100)

← 5,780 (6,290)

← 11,520 (12,540)

← 26,790 (30,810)

← 38,310 (43,350)

(42,250) 37,170 →

(30,450) 26,320 →

(38,870) 34,060 →

(32,240) 27,970 →

(40,330) 35,400 →

(34,240) 29,810 →

(47,080) 41,610 →

(11,800) 10,850 →

(8,420) 7,740 →

(6,630) 6,090 →

(8,090) 7,430 →

(6,090) 5,590 →

(12,840) 11,800 →

18,540 (19,690)

7,780 (10,760)

9,990 (10,610)

860 (1,190)

LORAIN BOULEVARD

DETROIT ROAD

COLORADO AVENUE

NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 6

YEAR 2025 / YEAR 2045
ADT
6 LANES

JANUARY 2022

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\6-Lane Volumes\PLATE 6 - 2025 & 2045 ADT.dwg Layout: PLATE 6
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Technician: bferrell

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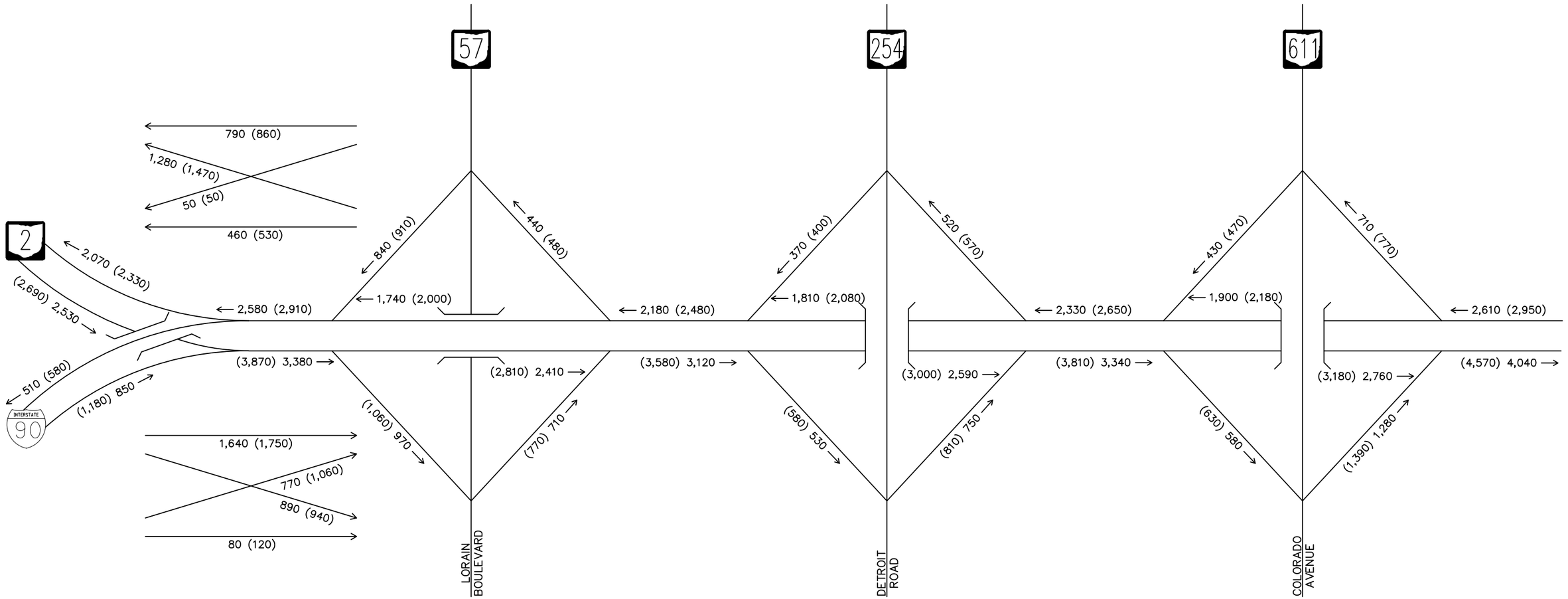


NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 7

YEAR 2025 / YEAR 2045
AM DHV
6 LANES

JANUARY 2022

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\6-Lane Volumes\PLATE 7 - 2025 & 2045 AM DHV.dwg Layout: PLATE 7
Date: Jan 10, 2022 Time: 9:25 am Tablet: 0
Technician: bferrell

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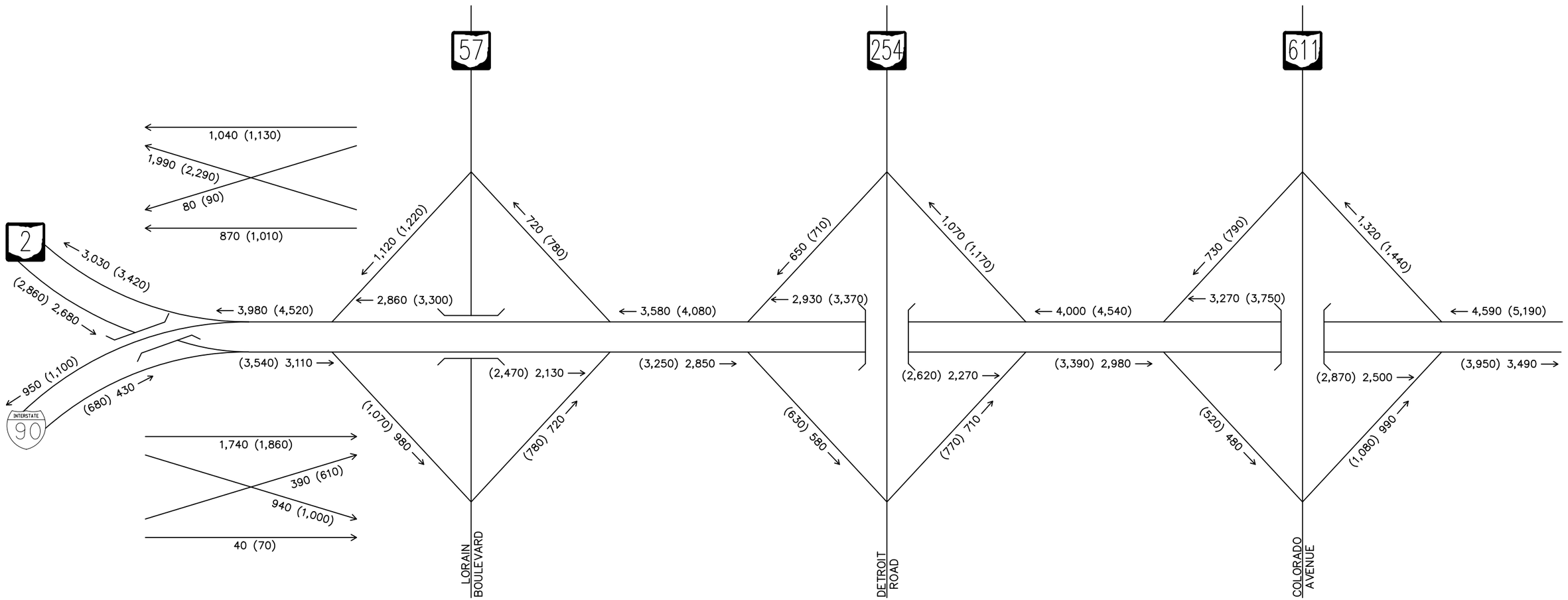
N.T.S.




NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - YEAR 2025 VOLUME
(##) - YEAR 2045 VOLUME

PLATE 8

YEAR 2025 / YEAR 2045
PM DHV
6 LANES

JANUARY 2022

Drawing File: G:\2020\2020089 ODOT D12-D3 Traffic TO\03-01 LOR-90 Certified Traffic\Design\Traffic\Study\Figures\6-Lane Volumes\PLATE 8 - 2025 & 2045 PM DHV.dwg Layout: PLATE 8
Date: Jan 10, 2022 Time: 9:28 am Tablet: 0
Technician: bferrell

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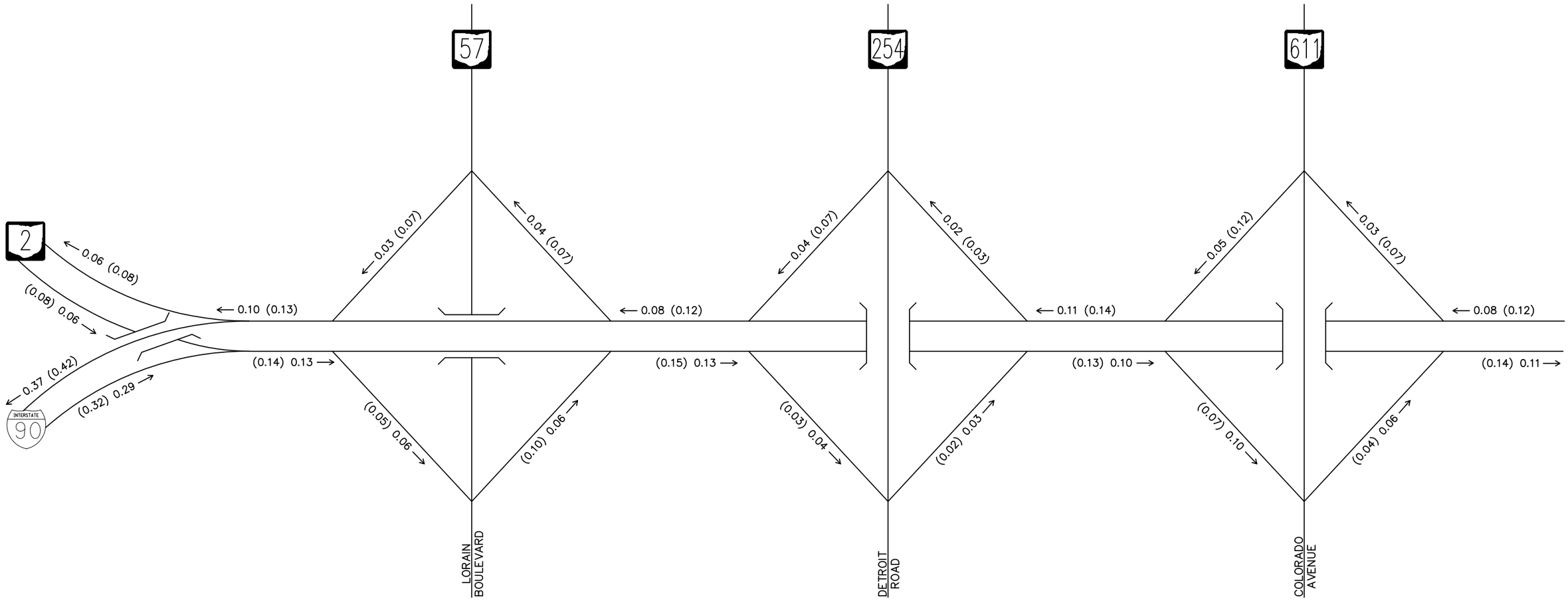


NOTE:
COUNTS COLLECTED DURING COVID-19 PANDEMIC AND FACTORED PER ODOT MODELING AND FORECASTING GUIDANCE.

LEGEND

## - TD
(##) - T24

ATTACHMENT H

TD & T24 VALUES

MARCH 2021

# Appendix J: Permitted Lane Closure Tables

# ODOT Permitted Lane Closure

Print

| District: 3 | County: LOR | Route: IR-90 | DIR: BOTH | Calculation Year: 2016 | Section: SR 57 to SR 611 |
|---|---|---|---|---|---|

COUNTY BEGIN LOG 13.200
COUNTY END LOG 18.820

STATE BEGIN LOG 145.680
STATE END LOG 151.300

Calculation Method: B — ATR-Hourly Breakdowns (with similar functionality)
Road Class: URBAN (Urban or Rural)
Terrain: LEVEL
Lanes per direction: 2

ATR#: 728
ATR Year: 2015
Percent Trucks: 12
Annualized ADT: 51660

Seasonal Traffic Adjustment

| | Weekday | Weekend | |
|---|---|---|---|
| ATR | 63778 | 48280 | Summer |
| ATR | 62241 | 46964 | Spring/Fall |
| ATR | 56152 | 40047 | Winter |
| Capacity | 1490 | per lane | |

There shall be no lane closures on Holidays or Holiday weekends. The following are considered holidays. Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Years. No lane closures are allowed after 12:00 noon on the weekday preceding a holiday. For holiday weekends no lane closures are allowed after 12:00 noon on the day preceding the Holiday weekend until 6:00 AM the day after the holiday weekend. (Ex. Holiday falls on a Monday then no lane closures from 12:00 noon on Friday until 6:00 AM Tuesday.) For Thanksgiving holiday no lane closures are allowed after 6:00 AM on the Wednesday preceding Thanksgiving until 6:00 AM on the following Monday. ***NOTE: If no lane closure tables load upon opening this segment (or if they load but they are blank) do not make assumptions on when lane closures are permitted. Please contact the District Work Zone Traffic Manager (DWZTM) responsible for this district for information on how to proceed.***

| Ratio of Lanes | 2:1 | Traffic Volume per open lane | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | 281 | 449 | 212 | 323 | 191 | 276 |
| 1-2AM | 160 | 250 | 156 | 194 | 141 | 165 |
| 2-3AM | 138 | 143 | 123 | 144 | 111 | 123 |
| 3-4AM | 147 | 129 | 138 | 117 | 125 | 100 |
| 4-5AM | 275 | 155 | 240 | 131 | 216 | 112 |
| 5-6AM | 710 | 296 | 684 | 265 | 617 | 226 |
| 6-7AM | * 1607 | 524 | * 1507 | 446 | 1360 | 380 |
| 7-8AM | * 2036 | 704 | * 2106 | 685 | * 1900 | 584 |
| 8-9AM | * 1694 | 1009 | * 1755 | 866 | * 1583 | 739 |
| 9-10AM | * 1517 | 1304 | 1426 | 1174 | 1287 | 1001 |
| 10-11AM | * 1603 | * 1534 | 1407 | 1368 | 1270 | 1166 |
| 11-12PM | * 1688 | * 1601 | * 1569 | * 1539 | 1416 | 1313 |
| 12-1PM | * 1769 | * 1631 | * 1742 | * 1693 | * 1572 | 1444 |
| 1-2PM | * 1833 | * 1567 | * 1775 | * 1720 | * 1601 | 1467 |
| 2-3PM | * 1988 | * 1633 | * 2045 | * 1746 | * 1845 | 1489 |
| 3-4PM | * 2368 | * 1649 | * 2433 | * 1775 | * 2195 | * 1513 |
| 4-5PM | * 2597 | * 1694 | * 2669 | * 1762 | * 2408 | * 1503 |
| 5-6PM | * 2426 | * 1614 | * 2627 | * 1648 | * 2370 | 1406 |
| 6-7PM | * 2019 | 1427 | * 2000 | * 1558 | * 1805 | 1329 |
| 7-8PM | 1358 | 1152 | 1183 | 1183 | 1067 | 1009 |
| 8-9PM | 1153 | 1037 | 1144 | 987 | 1032 | 842 |
| 9-10PM | 985 | 1059 | 923 | 914 | 833 | 780 |
| 10-11PM | 885 | 894 | 727 | 708 | 656 | 604 |
| 11-12AM | 654 | 684 | 528 | 534 | 477 | 455 |

Legend

* = Lane Closure(s) Not Permitted

2:1 : Ratio Of Lanes
2 : Available Lanes
1 : Lanes Open

| Season | Period |
|---|---|
| Summer | June 1 - Aug 31 |
| Spring/Fall | Mar 1 - May 31 & Sept 1 - Nov 30 |
| Winter | Dec 1 - Feb 29 |

Last Updated : 04/08/16 1:59 PM

| Ratio of Lanes | 2:0 | | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 12-1PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |

3.01: *For any Maintenance lane(s) closure or any Construction project lane(s) closure, outside of plan note times, a Lane Closure Application request form must be submitted to the Work Zone Traffic Manager and the Highway Management Administrator for approval.*
3.02: *3.01 cont.(a) The request must be submitted, in writing, three(3) working days in advance of the lane(s) closure. Traffic flow must be monitored and lanes re-opened if any backup begins to occur.*
3.03: *3.01 cont.(b) In addition a copy of the request form must be submitted to the Roadway Services Manager for ODOT maintenance work or to the Construction Engineer for construction projects. See Special Notes for Holidays or Special Events info.*

Home Search

# ODOT Permitted Lane Closure

Print

| District: 3 | County: LOR | Route: IR-90 | DIR: BOTH | Calculation Year: 2016 | Section: SR 2 to SR 57 |
|---|---|---|---|---|---|

COUNTY BEGIN LOG 11.960
COUNTY END LOG 13.200

STATE BEGIN LOG 144.440
STATE END LOG 145.680

Calculation Method: B — ATR-Hourly Breakdowns (with similar functionality)
Road Class: URBAN (Urban or Rural)
Terrain: LEVEL
Lanes per direction: 2

ATR#: 728
ATR Year: 2015
Percent Trucks: 12
Annualized ADT: 58480

Seasonal Traffic Adjustment

| | Weekday | Weekend | |
|---|---|---|---|
| ATR | 72198 | 54654 | Summer |
| ATR | 70458 | 53164 | Spring/Fall |
| ATR | 63565 | 45333 | Winter |
| Capacity | 1490 | per lane | |

There shall be no lane closures on Holidays or Holiday weekends. The following are considered holidays. Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Years. No lane closures are allowed after 12:00 noon on the weekday preceding a holiday. For holiday weekends no lane closures are allowed after 12:00 noon on the day preceding the Holiday weekend until 6:00 AM the day after the holiday weekend. (Ex. Holiday falls on a Monday then no lane closures from 12:00 noon on Friday until 6:00 AM Tuesday.) For Thanksgiving holiday no lane closures are allowed after 6:00 AM on the Wednesday preceding Thanksgiving until 6:00 AM on the following Monday. ***NOTE: If no lane closure tables load upon opening this segment (or if they load but they are blank) do not make assumptions on when lane closures are permitted. Please contact the District Work Zone Traffic Manager (DWZTM) responsible for this district for information on how to proceed.***

| Ratio of Lanes | 2:1 | Traffic Volume per open lane | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | 319 | 508 | 240 | 366 | 217 | 312 |
| 1-2AM | 181 | 284 | 176 | 219 | 159 | 187 |
| 2-3AM | 156 | 162 | 139 | 164 | 125 | 139 |
| 3-4AM | 166 | 146 | 156 | 132 | 141 | 113 |
| 4-5AM | 311 | 175 | 271 | 149 | 245 | 127 |
| 5-6AM | 804 | 335 | 774 | 300 | 699 | 256 |
| 6-7AM | * 1819 | 593 | * 1706 | 504 | * 1539 | 430 |
| 7-8AM | * 2305 | 797 | * 2384 | 775 | * 2151 | 661 |
| 8-9AM | * 1917 | 1143 | * 1987 | 981 | * 1792 | 836 |
| 9-10AM | * 1718 | 1476 | * 1615 | 1329 | 1457 | 1133 |
| 10-11AM | * 1815 | * 1736 | * 1593 | * 1548 | 1437 | 1320 |
| 11-12PM | * 1911 | * 1812 | * 1777 | * 1743 | * 1603 | 1486 |
| 12-1PM | * 2002 | * 1847 | * 1972 | * 1917 | * 1779 | * 1634 |
| 1-2PM | * 2075 | * 1774 | * 2009 | * 1947 | * 1813 | * 1660 |
| 2-3PM | * 2250 | * 1849 | * 2315 | * 1977 | * 2089 | * 1685 |
| 3-4PM | * 2680 | * 1866 | * 2754 | * 2009 | * 2485 | * 1713 |
| 4-5PM | * 2940 | * 1917 | * 3021 | * 1995 | * 2726 | * 1701 |
| 5-6PM | * 2747 | * 1827 | * 2974 | * 1866 | * 2683 | * 1591 |
| 6-7PM | * 2285 | * 1615 | * 2264 | * 1764 | * 2043 | * 1504 |
| 7-8PM | * 1537 | 1304 | 1339 | 1339 | 1208 | 1142 |
| 8-9PM | 1305 | 1174 | 1295 | 1118 | 1168 | 953 |
| 9-10PM | 1115 | 1199 | 1045 | 1035 | 943 | 882 |
| 10-11PM | 1002 | 1012 | 823 | 802 | 742 | 684 |
| 11-12AM | 740 | 774 | 598 | 605 | 540 | 516 |

Legend

* = Lane Closure(s) Not Permitted

2:1 : Ratio Of Lanes
2 : Available Lanes
1 : Lanes Open

| Season | Period |
|---|---|
| Summer | June 1 - Aug 31 |
| Spring/Fall | Mar 1 - May 31 & Sept 1 - Nov 30 |
| Winter | Dec 1 - Feb 29 |

Last Updated : 04/08/16 1:59 PM

| Ratio of Lanes | 2:0 | | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 12-1PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |

3.01: *For any Maintenance lane(s) closure or any Construction project lane(s) closure, outside of plan note times, a Lane Closure Application request form must be submitted to the Work Zone Traffic Manager and the Highway Management Administrator for approval.*
3.02: *3.01 cont.(a) The request must be submitted, in writing, three(3) working days in advance of the lane(s) closure. Traffic flow must be monitored and lanes re-opened if any backup begins to occur.*
3.03: *3.01 cont.(b) In addition a copy of the request form must be submitted to the Roadway Services Manager for ODOT maintenance work or to the Construction Engineer for construction projects. See Special Notes for Holidays or Special Events info.*

Home Search

# ODOT Permitted Lane Closure

Print

| District: 3 | County: LOR | Route: IR-90 | DIR: BOTH | Calculation Year: 2016 | Section: Turnpike Gate 142 to SR 2 |
|---|---|---|---|---|---|

COUNTY BEGIN LOG 9.480
COUNTY END LOG 11.960

STATE BEGIN LOG 141.960
STATE END LOG 144.440

Calculation Method: B — ATR-Hourly Breakdowns (with similar functionality)
Road Class: URBAN (Urban or Rural)
Terrain: LEVEL
Lanes per direction: 2

ATR#: 728
ATR Year: 2015
Percent Trucks: 24
Annualized ADT: 7600

Seasonal Traffic Adjustment

| | Weekday | Weekend | |
|---|---|---|---|
| ATR | 9383 | 7103 | Summer |
| ATR | 9157 | 6909 | Spring/Fall |
| ATR | 8261 | 5891 | Winter |
| Capacity | 1390 | per lane | |

There shall be no lane closures on Holidays or Holiday weekends. The following are considered holidays. Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Years. No lane closures are allowed after 12:00 noon on the weekday preceding a holiday. For holiday weekends no lane closures are allowed after 12:00 noon on the day preceding the Holiday weekend until 6:00 AM the day after the holiday weekend. (Ex. Holiday falls on a Monday then no lane closures from 12:00 noon on Friday until 6:00 AM Tuesday.) For Thanksgiving holiday no lane closures are allowed after 6:00 AM on the Wednesday preceding Thanksgiving until 6:00 AM on the following Monday. ***NOTE: If no lane closure tables load upon opening this segment (or if they load but they are blank) do not make assumptions on when lane closures are permitted. Please contact the District Work Zone Traffic Manager (DWZTM) responsible for this district for information on how to proceed.***

| Ratio of Lanes | 2:1 | Traffic Volume per open lane | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | 41 | 66 | 31 | 48 | 28 | 41 |
| 1-2AM | 23 | 37 | 23 | 28 | 21 | 24 |
| 2-3AM | 20 | 21 | 18 | 21 | 16 | 18 |
| 3-4AM | 22 | 19 | 20 | 17 | 18 | 15 |
| 4-5AM | 40 | 23 | 35 | 19 | 32 | 16 |
| 5-6AM | 104 | 44 | 101 | 39 | 91 | 33 |
| 6-7AM | 236 | 77 | 222 | 66 | 200 | 56 |
| 7-8AM | 300 | 104 | 310 | 101 | 280 | 86 |
| 8-9AM | 249 | 148 | 258 | 127 | 233 | 109 |
| 9-10AM | 223 | 192 | 210 | 173 | 189 | 147 |
| 10-11AM | 236 | 226 | 207 | 201 | 187 | 172 |
| 11-12PM | 248 | 236 | 231 | 226 | 208 | 193 |
| 12-1PM | 260 | 240 | 256 | 249 | 231 | 212 |
| 1-2PM | 270 | 231 | 261 | 253 | 236 | 216 |
| 2-3PM | 292 | 240 | 301 | 257 | 271 | 219 |
| 3-4PM | 348 | 243 | 358 | 261 | 323 | 223 |
| 4-5PM | 382 | 249 | 393 | 259 | 354 | 221 |
| 5-6PM | 357 | 237 | 386 | 242 | 349 | 207 |
| 6-7PM | 297 | 210 | 294 | 229 | 265 | 195 |
| 7-8PM | 200 | 169 | 174 | 174 | 157 | 148 |
| 8-9PM | 170 | 153 | 168 | 145 | 152 | 124 |
| 9-10PM | 145 | 156 | 136 | 134 | 123 | 115 |
| 10-11PM | 130 | 132 | 107 | 104 | 96 | 89 |
| 11-12AM | 96 | 101 | 78 | 79 | 70 | 67 |

Legend

* = Lane Closure(s) Not Permitted

2:1 : Ratio Of Lanes
2 : Available Lanes
1 : Lanes Open

| Season | Period |
|---|---|
| Summer | June 1 - Aug 31 |
| Spring/Fall | Mar 1 - May 31 & Sept 1 - Nov 30 |
| Winter | Dec 1 - Feb 29 |

Last Updated : 04/08/16 1:59 PM

| Ratio of Lanes | 2:0 | | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 12-1PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |

3.04: *Daytime lane closure permitted without Lane Closure Application request form approval. However, traffic flow must be monitored and lanes re-opened if any backup begins to occur.*

Home Search

# ODOT Permitted Lane Closure

Print

| District: 3 | County: LOR | Route: SR-2 | DIR: BOTH | Calculation Year: 2016 | Section: Oak Point Road to IR 90 |
|---|---|---|---|---|---|

| | |
|---|---|
| COUNTY BEGIN LOG | 5.850 |
| COUNTY END LOG | 11.140 |
| STATE BEGIN LOG | 162.720 |
| STATE END LOG | 168.010 |

| | | |
|---|---|---|
| Calculation Method | D | ADT using statewide distribution |
| Road Class | URBAN | (Urban or Rural) |
| Terrain | LEVEL | |
| Lanes per direction | 2 | |

| | |
|---|---|
| ATR# | 0 |
| ADT Year | 2013 |
| Percent Trucks | 7 |
| Annualized ADT | 54370 |

Seasonal Traffic Adjustment

| | Weekday | Weekend | |
|---|---|---|---|
| ADT | 67123 | 50813 | Summer |
| ADT | 65506 | 49427 | Spring/Fall |
| ADT | 59098 | 42147 | Winter |
| Capacity | 1490 | per lane | |

There shall be no lane closures on Holidays or Holiday weekends. The following are considered holidays. Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Years. No lane closures are allowed after 12:00 noon on the weekday preceding a holiday. For holiday weekends no lane closures are allowed after 12:00 noon on the day preceding the Holiday weekend until 6:00 AM the day after the holiday weekend. (Ex. Holiday falls on a Monday then no lane closures from 12:00 noon on Friday until 6:00 AM Tuesday.) For Thanksgiving holiday no lane closures are allowed after 6:00 AM on the Wednesday preceding Thanksgiving until 6:00 AM on the following Monday. ***NOTE: If no lane closure tables load upon opening this segment (or if they load but they are blank) do not make assumptions on when lane closures are permitted. Please contact the District Work Zone Traffic Manager (DWZTM) responsible for this district for information on how to proceed.***

| Ratio of Lanes | 2:1 | Traffic Volume per open lane | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | 302 | 229 | 295 | 222 | 266 | 190 |
| 1-2AM | 201 | 152 | 197 | 148 | 177 | 126 |
| 2-3AM | 168 | 127 | 164 | 124 | 148 | 105 |
| 3-4AM | 168 | 127 | 164 | 124 | 148 | 105 |
| 4-5AM | 302 | 229 | 295 | 222 | 266 | 190 |
| 5-6AM | 805 | 610 | 786 | 593 | 709 | 506 |
| 6-7AM | * 1678 | 1270 | * 1638 | 1236 | 1477 | 1054 |
| 7-8AM | * 2450 | * 1855 | * 2391 | * 1804 | * 2157 | * 1538 |
| 8-9AM | * 2114 | * 1601 | * 2063 | * 1557 | * 1862 | 1328 |
| 9-10AM | * 1712 | 1296 | * 1670 | 1260 | * 1507 | 1075 |
| 10-11AM | * 1645 | 1245 | * 1605 | 1211 | 1448 | 1033 |
| 11-12PM | * 1745 | 1321 | * 1703 | 1285 | * 1537 | 1096 |
| 12-1PM | * 1846 | 1397 | * 1801 | 1359 | * 1625 | 1159 |
| 1-2PM | * 1879 | 1423 | * 1834 | 1384 | * 1655 | 1180 |
| 2-3PM | * 2114 | * 1601 | * 2063 | * 1557 | * 1862 | 1328 |
| 3-4PM | * 2450 | * 1855 | * 2391 | * 1804 | * 2157 | * 1538 |
| 4-5PM | * 2618 | * 1982 | * 2555 | * 1928 | * 2305 | * 1644 |
| 5-6PM | * 2618 | * 1982 | * 2555 | * 1928 | * 2305 | * 1644 |
| 6-7PM | * 1947 | 1474 | * 1900 | 1433 | * 1714 | 1222 |
| 7-8PM | 1410 | 1067 | 1376 | 1038 | 1241 | 885 |
| 8-9PM | 1175 | 889 | 1146 | 865 | 1034 | 738 |
| 9-10PM | 973 | 737 | 950 | 717 | 857 | 611 |
| 10-11PM | 738 | 559 | 721 | 544 | 650 | 464 |
| 11-12AM | 537 | 407 | 524 | 395 | 473 | 337 |

Legend

* = Lane Closure(s) Not Permitted

2:1 : Ratio Of Lanes
2 : Available Lanes
1 : Lanes Open

| Season | Period |
|---|---|
| Summer | June 1 - Aug 31 |
| Spring/Fall | Mar 1 - May 31 & Sept 1 - Nov 30 |
| Winter | Dec 1 - Feb 29 |

Last Updated : 04/08/16 1:59 PM

| Ratio of Lanes | 2:0 | | | | | |
|---|---|---|---|---|---|---|
| Season | Summer Weekday | Summer Weekend | Spring/Fall Weekday | Spring/Fall Weekend | Winter Weekday | Winter Weekend |
| Hour of the Day | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN | MON-FRI | SAT-SUN |
| 0-1AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 12-1PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 1-2PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 2-3PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 3-4PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 4-5PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 5-6PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 6-7PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 7-8PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 8-9PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 9-10PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 10-11PM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |
| 11-12AM | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted | Not Permitted |

3.01: *For any Maintenance lane(s) closure or any Construction project lane(s) closure, outside of plan note times, a Lane Closure Application request form must be submitted to the Work Zone Traffic Manager and the Highway Management Administrator for approval.*
3.02: *3.01 cont.(a) The request must be submitted, in writing, three(3) working days in advance of the lane(s) closure. Traffic flow must be monitored and lanes re-opened if any backup begins to occur.*
3.03: *3.01 cont.(b) In addition a copy of the request form must be submitted to the Roadway Services Manager for ODOT maintenance work or to the Construction Engineer for construction projects. See Special Notes for Holidays or Special Events info.*

Home Search

# Appendix K: Business Plan Inflation Calculator

# FY 2024-2028 Business Plan Inflation Calculator:

Not sure if you have the latest calculator? Click here.

**Last Modified: 7/20/2023**

**Today's Date:**
**November 9, 2023**

**Please Enter Values in the Yellow Areas Only:**

**Estimation Start Date:**
Less than or Equal to Today's Date
(mm/dd/yyyy)

**11/9/2023**
Start Date:

**Enter Construction Mid-Point Date:**
(cannot exceed 11/09/2048)
(mm/dd/yyyy)

**5/15/2026**
Construction Mid-Point Date:

**Present-Day Estimated Cost:**

**$1,000.00**
Estimated Dollar Amount:

**Estimate Start Date to Construction Mid-Point Date:** **30** **Months**

**Inflation - Start to Mid-Point of Construction:**

| | **(compounded growth rate)** | **Inflated Dollar Amount:** |
|---|---|---|
| **Business Plan** | **13.7%** | **$1,136.53** |

**Estimator's Name:** Chagrin Valley Engineering

**County - Route - Section:** LOR-90-10.76

**PID:** 107714

**Estimator's Notes:** Begin Construction - April 1, 2025
End Construction - July 1, 2027
Midpoint Construction - May 15, 2026