

ROADWAY GEOTECHNICAL REPORT

PAVEMENT RUBBLIZATION STUDY

INTERSTATE 55

FROM MM 195.00 TO MM 201.11

FAI 55 (I-55)

Section (53-5)R&I

P-93-025-14

D-93-011-12

C-93-002-12

Contract 66B64

Livingston County



**Illinois Department
of Transportation**

Region 2, District 3

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TABLE OF CONTENTS

| | | |
|------|---|----|
| I. | GENERAL INFORMATION | 4 |
| A. | Report Purpose..... | 4 |
| B. | Project Location, Description, and Scope..... | 4 |
| C. | Pavement Design..... | 5 |
| D. | Soils..... | 5 |
| E. | Bedrock..... | 5 |
| II. | SUBSURFACE INVESTIGATION..... | 6 |
| A. | Field Investigation | 6 |
| B. | Laboratory Testing and Classification of Soils | 8 |
| C. | Groundwater Conditions | 8 |
| D. | Existing Pavement Conditions | 8 |
| E. | Pavement Investigations | 9 |
| F. | Immediate Bearing Value | 9 |
| III. | ABOVE GROUND INVESTIGATION | 10 |
| A. | Nearby Bridges and Culverts | 10 |
| B. | Nearby Buildings..... | 10 |
| C. | Nearby Utilities..... | 10 |
| IV. | ANALYSIS AND RECOMMENDATIONS..... | 11 |
| A. | Frost Susceptible Soils | 11 |
| B. | Subsurface Drainage..... | 11 |
| C. | Subgrade Support Rating and Illinois Bearing Ratio..... | 11 |
| D. | Subgrade Stability..... | 11 |
| E. | Geotechnical Reports | 11 |
| V. | CONCLUSIONS..... | 12 |
| A. | Rubblization Feasibility..... | 12 |
| B. | Embankment Materials | 12 |
| C. | Additional Information | 12 |

LIST OF APPENDICES

| | |
|---|----------|
| Pavement Investigation Report Memorandum (November 2015) | A |
| Location Map | B |
| Existing Typical Sections | C |
| Plan and Profile | D |
| Existing and Proposed Traffic Data | E |
| Preliminary Pavement Design | F |
| Soil Boring Logs | G |
| Grain Size Distribution with Atterberg Limits | H |
| IDH Textural Classification Chart | I |
| Laboratory Results Summary | J |
| Pavement Core Report Memorandum (November 2015) | K |
| Pavement Core Report Memorandum (March 2015) | L |
| Pavement Core Report Memorandum (November 2014) | M |
| Pavement Core Report Memorandum (November 2010) | N |
| Dynamic Cone Penetrometer Results (Tables) | O |
| Dynamic Cone Penetrometer Results (Charts) | P |
| Culvert Information | Q |
| Subgrade Support Rating Chart | R |
| Geotechnical Reports Special Provision | S |
| Rubblizing PCC Pavement Special Provision | T |
| Embankment Material Proctor Information | U |

I. GENERAL INFORMATION

A. Report Purpose

The purpose of this report is to present the findings and recommendations of the Pavement Rubblization Study performed for this project. The purpose of the Pavement Rubblization Study is to evaluate the existing pavement and subbase for its suitability as a candidate for pavement rubblization.

The proposed Contract 66B64 was originally planned to be a 3R resurfacing of Section 53-4 and Section 53-5. During the construction of Contract 66E81 in September 2015, pavement patches were examined to determine the cause of the pavement failures. A memorandum documenting what was found during construction of Contract 66E81 is provided in Appendix A. The concrete pavement in Section 53-4 was determined to contain D-cracking and is therefore a candidate for rubblization, which was documented in a separate Roadway Geotechnical Report. Upon further investigation in 2017, the pavement in Section 53-5 also contains extensive D-cracking and is also a candidate for rubblization. Due to the availability of funding, these two sections have been separated up into two rubblization Contracts: 66F23 for Section 53-4 and 66B64 for Section 53-5.

B. Project Location, Description, and Scope

A location map is provided in Appendix B.

The project is located on Interstate 55 from MM 195.00 to MM 201.11. The project is located in Pontiac Township Sections 2, 3, 8, 9, 17, 20, 29, and 32 of T 28N, R5E, 3rd Principal Meridian Livingston County, Illinois.

The proposed improvements include rubblization of I-55 from STA 22+10 to STA 344+45.

The improvement has three station equations: STA 89+98.64 BK = STA 90+00.04 AH, STA 175+98.67 BK = STA 176+00.14 AH, and STA 290+00.00 BK = STA 290+00.16 AH.

The proposed improvement to I-55 will involve removal of the existing HMA pavement layers, rubblization of the existing continuously reinforced Portland cement concrete pavement, and placement of a new full depth HMA pavement.

The horizontal alignment of the roadway will not be impacted.

The vertical alignment of the roadway will have a minor change in profile grade to accommodate the increased thickness of HMA. Embankment work will be necessary to bring the slopes of the ditches to match the change in the profile grade. Additionally, the profile of I-55 from STA 120+65 to STA 152+65 will be lowered. This will allow for improved sight distance and reduced grades on the pavement north of the IL 116 interchange.

SN 053-0126 and SN 053-0127, which carry I-55 over an abandoned railroad will be removed and replaced with SN 053-2582. The abandoned railroad is proposed to be converted into a multi-use path in the future. A separate Structure Geotechnical Report is being prepared for this structure.

Existing typical sections are included in Appendix C.

Proposed plan and profile sheets are included in Appendix D.

Existing and projected traffic data is provided in Appendix E.

C. Pavement Design

A preliminary pavement design was prepared. This preliminary analysis indicates 11.0 inches of HMA must be placed directly on top of the rubblized concrete pavement. A copy of this analysis is provided in Appendix F. From STA 120+65 to STA 152+65, the preliminary analysis indicates 11.0 inches of jointed PCC pavement will be placed where the roadway profile is being lowered.

D. Soils

The soils within the project limits generally consist of loam, clay loam, and sandy loam.

E. Bedrock

The bedrock underlying the project will not impact construction of the rubblized pavement, new HMA pavement, or other appurtenances.

II. SUBSURFACE INVESTIGATION

A. Field Investigation

A subsurface investigation of pavement coring, dynamic cone penetrometer (DCP) testing through the core holes, and soil sampling with a hand auger to a depth of 1 foot below the subbase through the core holes was executed to determine the thickness and condition of the existing pavement, the immediate bearing value (IBV) of the soils beneath the pavement, and the physical characteristics of the soils beneath the pavement. A summary of all test locations is provided in Table 1 below. A copy of all soil boring logs is provided in Appendix G.

From STA 120+65 to STA 152+65, soil borings were performed to evaluate the suitability of the existing embankment for use as embankment in other locations on the project, and to determine the condition of the soils at the proposed profile elevation. These boring logs are also provided in Appendix G.

| Boring # | Direction | Lane | Station | Offset Distance (FT) | Offset Direction | Drilling Method |
|----------|-----------|--------------|---------|----------------------|------------------|-------------------|
| 101 | NB | Driving | 205+45 | 62 | Right | Hand Auger |
| 102 | NB | Driving | 225+00 | 62 | Right | Hand Auger |
| 103 | NB | Driving | 238+85 | 62 | Right | Hand Auger |
| 104 | NB | Driving | 261+60 | 62 | Right | Hand Auger |
| 105 | NB | Driving | 305+95 | 62 | Right | Hand Auger |
| 106 | NB | Driving | 315+00 | 62 | Right | Hand Auger |
| 107 | NB | Driving | 341+30 | 62 | Right | Hand Auger |
| 108 | NB | Driving | 356+60 | 62 | Right | Hand Auger |
| 201 | NB | Passing | 200+00 | 50 | Right | Hand Auger |
| 202 | NB | Passing | 249+35 | 50 | Right | Hand Auger |
| 203 | NB | Passing | 275+00 | 50 | Right | Hand Auger |
| 204 | NB | Passing | 305+00 | 50 | Right | Hand Auger |
| 205 | NB | Passing | 325+00 | 50 | Right | Hand Auger |
| 301 | NB | Driving | 74+85 | 62 | Right | Hand Auger |
| 302 | NB | Driving | 109+45 | 62 | Right | Hand Auger |
| 303 | NB | Driving | 121+75 | 62 | Right | Hand Auger |
| 304 | NB | Driving | 180+47 | 62 | Right | Hand Auger |
| 501 | SB | Driving | 350+00 | 62 | Left | Hand Auger |
| 502 | SB | Driving | 306+90 | 62 | Left | Hand Auger |
| 503 | SB | Driving | 277+60 | 62 | Left | Hand Auger |
| 505 | SB | Driving | 244+65 | 62 | Left | Hand Auger |
| 506 | SB | Driving | 195+45 | 62 | Left | Hand Auger |
| 601 | SB | Passing | 320+35 | 50 | Left | Hand Auger |
| 602 | SB | Passing | 286+15 | 50 | Left | Hand Auger |
| 603 | SB | Passing | 233+25 | 50 | Left | Hand Auger |
| 604 | SB | Passing | 220+00 | 50 | Left | Hand Auger |
| 605 | SB | Passing | 205+00 | 50 | Left | Hand Auger |
| 701 | SB | Driving | 180+40 | 62 | Left | Hand Auger |
| 702 | SB | Driving | 141+35 | 62 | Left | Hand Auger |
| 703 | SB | Driving | 74+90 | 62 | Left | Hand Auger |
| RW01 | NB | 10' Shoulder | 130+00 | 70 | Right | Hollow Stem Auger |
| RW02 | NB | 10' Shoulder | 140+00 | 70 | Right | Hollow Stem Auger |
| RW03 | SB | 10' Shoulder | 145+00 | 70 | Left | Hollow Stem Auger |
| RW04 | SB | 10' Shoulder | 135+00 | 70 | Left | Hollow Stem Auger |

Table 1: Subsurface Investigation Summary. Boring numbers and core numbers can be used interchangeably throughout this report.

B. Laboratory Testing and Classification of Soils

Laboratory testing consisted of Atterberg Limits, grain size analysis, and moisture content. The soil samples were classified in accordance with the Illinois Division of Highways (IDH) textural classification chart and the AASHTO engineering designations with group indices were determined. The grain size distribution with Atterberg Limits is included in Appendix H. The IDH Textural Classification Chart is included in Appendix I. A summary of all laboratory results is provided in Appendix J.

C. Groundwater Conditions

Complete precipitation data for the period prior to the subsurface investigation for Pontiac, Illinois is provided in Table 2. The groundwater elevation may have been slightly higher than normal during the subsurface investigation. However, groundwater was not encountered in any of the borings and the moisture content of the in situ soils was not excessive. Groundwater is not expected to impact construction.

| Month | Year | Actual Precipitation | Normal Precipitation | Departure From Normal (+/-) | Cumulative Actual Precipitation | Cumulative Normal Precipitation |
|---------------|------|----------------------|----------------------|-----------------------------|---------------------------------|---------------------------------|
| | | Inch | Inch | Inch | Inch | Inch |
| January | 2016 | 0.77 | 1.96 | -1.19 | 0.77 | 1.96 |
| February | 2016 | 1.69 | 1.59 | 0.10 | 2.46 | 3.55 |
| March | 2016 | 3.29 | 2.83 | 0.46 | 5.75 | 6.38 |
| April | 2016 | 1.68 | 3.28 | -1.60 | 7.43 | 9.66 |
| May | 2016 | 4.21 | 3.88 | 0.33 | 11.64 | 13.54 |
| June | 2016 | 3.87 | 3.66 | 0.21 | 15.51 | 17.20 |
| July | 2016 | 6.36 | 4.08 | 2.28 | 21.87 | 21.28 |
| August | 2016 | 7.47 | 3.90 | 3.57 | 29.34 | 25.18 |
| September | 2016 | 4.09 | 3.02 | 1.07 | 33.43 | 28.20 |
| October | 2016 | 2.19 | 3.05 | -0.86 | 35.62 | 31.25 |
| November | 2016 | 2.71 | 3.03 | -0.32 | 38.33 | 34.28 |
| December | 2016 | 1.24 | 2.36 | -1.12 | 39.57 | 36.64 |
| TOTALS | | 39.57 | 36.64 | 2.93 | | |

Table 2: Precipitation data for Pontiac, Illinois (source: US Dept. of Commerce, NOAA Station GHCND:USC00116910).

D. Existing Pavement Conditions

The existing pavement is generally in poor condition. Extensive D cracking in the CRPCC pavement was identified during a pavement patching contract completed in September 2015. A memorandum documenting the observations made during this patching contract is included in Appendix A.

E. Pavement Investigations

In January 2017, pavement cores were obtained to verify the thickness of the existing pavement and subbase and evaluate the existing concrete for D cracking. The pavement cores indicated the presence of D Cracking in 28 of the 30 cores. Cores 303 and 702 showed little to no evidence of D cracking. Information on the pavement cores obtained in November 2015 is in Appendix K.

In March, 2015 pavement cores were taken to verify the condition of the existing shoulders, immediately adjacent to the original concrete pavement. The cores indicated the existing HMA shoulders are in very poor condition and must be improved prior to using them for stage construction traffic. Information on the pavement cores obtained in March, 2015 is in Appendix L.

In November, 2014 cores of the existing pavement and shoulders were taken, however the cores did not extend through the CRPCC pavement, and therefore do not provide information on the condition of the CRPCC pavement or the underlying soils. Many cores were obtained through the existing shoulders and indicate the existing shoulders are in poor condition and must be improved prior to using them for stage construction traffic. Information on the pavement cores obtained in November, 2014 is in Appendix M.

In November, 2010 cores of the existing pavement were taken to investigate the cause of rutting that was occurring in the HMA layers. These cores did not extend through the CRPCC pavement. Information on the pavement cores obtained in November, 2010 is in Appendix N.

F. Immediate Bearing Value

The field measurements and calculated Immediate Bearing Values (IBV) from the DCP testing are provided in Appendix O. The IBVs plotted with the thickness of the CRPCC and subbase on Figure 54-5.T of the Bureau of Design and Environment Manual are provided in Appendix P.

The DCP testing indicated the subgrade is suitable for Rubblization Method I without requiring any modification of the subgrade.

III. ABOVE GROUND INVESTIGATION

A. Nearby Bridges and Culverts

SN 053-0116, which carries IL Route 116 over I-55 at STA 110+25, is in the area to be rubblized. The rubblization process is not expected to cause any damage to this structure; however, the vertical clearance at SN 053-0116 needs to be checked to verify that it meets policy. If the required vertical clearance is not maintained, the pavement under SN 053-0116 should be removed and replaced with new CRPCC pavement at the proper elevation to provide adequate vertical clearance for traffic.

SN 053-0128 and SN 053-0129, which carries I-55 over the Vermillion River at STA 188+00, is in the area to be rubblized. The rubblization process is not expected to cause any damage to this structure.

SN 053-0130, which carries County Highway 27 over I-55 at STA 194+50, is in the area to be rubblized. The rubblization process is not expected to cause any damage to this structure; however, the vertical clearance at SN 053-0130 for northbound I-55 is 16.3' and for southbound I-55 is 16.1'. If the required vertical clearance is not maintained, the pavement under SN 053-0130 should be removed and replaced with new CRPCC pavement at the proper elevation to provide adequate vertical clearance for traffic.

SN 053-0115, which carries IL Route 23 over I-55 at STA 313+42, is in the area to be rubblized. The rubblization process is not expected to cause any damage to this structure; however, the vertical clearance at SN 053-0115 for northbound I-55 is 16.2' and for southbound I-55 is 16.1'. If the required vertical clearance is not maintained, the pavement under SN 053-0130 should be removed and replaced with new CRPCC pavement at the proper elevation to provide adequate vertical clearance for traffic.

Pipe culverts are located under I-55 at various locations throughout the area to be rubblized. A list of these culverts is provided in Appendix Q. The plans shall contain a list of these culverts and requirements that they be monitored for damage during the rubblization process and that the rubblization process be modified during construction to prevent damage to these facilities.

B. Nearby Buildings

There are no buildings within 50 feet of the pavement to be rubblized.

C. Nearby Utilities

A field inspection for underground utilities crossing I-55 was performed. There are markers indicating the presence of underground utilities at various locations on the project; however, it could not be determined if these utilities cross I-55 or run parallel to I-55. A thorough utility investigation is needed in Phase II engineering.

Overhead utilities are located at approximate mile markers 195.7, 197.7, 199.2, and 200.0. The vertical clearance between these utilities and the proposed pavement elevation must be checked during Phase II engineering.

IV. ANALYSIS AND RECOMMENDATIONS

A. Frost Susceptible Soils

The soils within the proposed improvement were checked for their potential to be frost susceptible using the criteria outlined in the IDOT Geotechnical Manual (2015 edition). Frost susceptible soils were not identified in any of the borings taken. Underdrains are proposed to be constructed as part of the improvement, which will help to mitigate the risk of detrimental frost heave. There is no evidence of frost heave in the existing pavement at these boring locations. After considering all of these factors, remediation of frost susceptible soils is not warranted.

B. Subsurface Drainage

The existing pavement does not have underdrains. Since the rubblization process changes the CRPCC pavement into a free draining base material, underdrains must be installed.

The pay item "Pipe Underdrains, Type 3" should be used in accordance with Section 601 of the 2016 Standard Specifications of Road and Bridge Construction.

C. Subgrade Support Rating and Illinois Bearing Ratio

For the purpose of pavement design, a Subgrade Support Rating of poor is recommended for all existing subgrade soils, including those from STA 120+65 to STA 152+65 where the profile will be lowered. The SSR charts with data points plotted are in Appendix R. Based on Table 5.5.16-1 of the IDOT Geotechnical Manual (2015 edition), the Illinois Bearing Ratio for the existing project soils can be estimated as 3.

D. Subgrade Stability

The DCP test results and the IBVs plotted with the concrete and base thickness were evaluated to determine if the subgrade can support the rubblization construction process and the new pavement. The individual bearing values indicated that rubblization is suitable. However, IBV's for Core 703 showed that it was borderline for rubblization because the top 12" of soil had appreciable penetration rates. This location should be monitored closely during construction to verify the subgrade remains stable.

Based on the results of the DCP testing, additional thickness of improved subgrade in addition to what is provided by the rubblization process is not necessary if Rubblization Method I is used. If Rubblization Method II or III is used, subgrade will need to be removed and replaced at selected areas to provide a stable subgrade. Additional DCP testing will be needed to define the limits of subgrade removal and replacement.

From STA 120+65 to STA 152+65, the soils at the proposed profile elevations are believed to be suitable and will provide an acceptable subgrade if processed according to Section 301 of the Standard Specifications for Road and Bridge Construction.

E. Geotechnical Reports

The Roadway Geotechnical Report for this project should be made available to the contractor. A special provision for this is included in Appendix S.

V. CONCLUSIONS

A. Rubblization Feasibility

Based on the results of the field investigation, rubblization is feasible for the project. Rubblization Methods II and III will require removal and replacement of subgrade at selected locations. In addition, if stage construction is necessary, only Method I can be used because the equipment for Methods II and III encroach three to five feet into the adjacent lane of traffic. Rubblization Method I will not require removal and replacement of subgrade and will allow for the rubblization to occur under stage construction. Therefore, Rubblization Method I is recommended for this project.

A special provision for pavement rubblization is provided in Appendix T. Prior to preparation of final plans and special provisions, the Central Bureau of Materials should be contacted to verify the most recent version of this special provision is included in the plans.

B. Embankment Materials

The soils from STA 120+65 to STA 152+65 will be acceptable for use as embankment throughout the project. Copies of standard Proctor tests on these materials are available in Appendix U. Information on the grain size and Atterberg Limits of these materials is provided in Appendix H.

C. Additional Information

If there are any questions about this report or any additional information is required, please contact the District Geotechnical Engineer.

APPENDIX

A



Illinois Department of Transportation

Memorandum

To: Dave Broviak Attn: Tom Magolan
From: Joe Wick By: Wayne Phillips
Subject: Pavement Investigation Report *
Date: December 21, 2015

* Route: FAI 55 (I-55)
Section: (53-4,5) RS1&I
County: Livingston
Contract: 66B64
Mile Marker 195.0 to 204.7

As you requested, provided below is information on the subject project.

CONSTRUCTION HISTORY

The portion of I-55 from station 20+35.52 to station 344+45.18 (south of MM 201.1) was originally constructed as Section 53-5 in 1973 (contract 29789). The portion of I-55 from station 344+45.18 to station 533+50.00 (north of MM 201.1) was originally constructed as Section 53-4 in 1975 (contract 30471). The typical sections for both contracts show 9 inches of CRPCC pavement and four inches of stabilized subbase. Underdrains were not installed on either contract.

In 2000, both sections were resurfaced with 1.75 inches of HMA binder and 1.5 inches of HMA surface (contract 66001).

In 2012, the HMA overlay had rutted severely in various locations. This was repaired by removing and replacing all of the HMA at various locations in the driving lane. The plans indicated that two lifts of HMA surface be constructed with thicknesses of approximately 1.75 inches for the bottom lift and 1.5 inches for the top lift. The HMA was placed 13 feet wide, which effectively removed and replaced the existing joint between the pavement and the shoulder. There is a note on the as built plans indicating the actual average total thickness was 3.0 inches.

Several patching projects have taken place on this portion of I-55.

CURRENT PROJECT

The current project (contract 66E81) consists of full depth CRPCC pavement patching in Section 53-4 and 53-5. Of the 32 patches in the northbound direction, 21 (66%) of them are in Section 53-4. Of the 56 patches in the southbound direction, 46 (77%) of them are in Section 53-4. It is important to note that some of the largest patches in Section 53-5 are related to expansion joint failures and one large patch was determined to be unnecessary after it was excavated as the failures were located only in the HMA surface.

Therefore, if these patches are removed from consideration, the proportion of patches in Section 53-4 will increase. A copy of the patching schedules for this project is attached.

FUTURE PROJECT

The District is currently performing a Phase 1 study for a 3R resurfacing of both sections (contract 66B64). Materials staff performed a visual inspection of the pavement and pavement coring to provide recommendations on the necessary scope of work. In a March 26, 2015 memorandum, Materials recommended that underdrains not be installed. The Bureau of Program Development requested that we review this recommendation during the current patching project.

PAVEMENT AND SUBBASE INSPECTION

On September 14 and 15, 2015 field inspections were performed on the existing pavement while the pavement patching contract was underway. This allowed for a thorough inspection of the existing HMA, concrete, and subbase at the patch locations. The intent of the field inspections was to gain additional information to help determine if underdrains need to be installed on the future 3R project.

Several observations were made throughout the project:

1. The stabilized subbase is in fair condition. All of the stabilized subbase was firm (Photo 1).
2. Subsurface drainage does not appear to be an issue. None of the patches held water or displayed other evidence of a subsurface drainage problem.
3. Rutting of the HMA overlay which was placed in 2012 is evident, with varying levels of severity.
4. Section 53-4 has significantly more pavement failures than Section 53-5 and the severity of the pavement failures is greater in Section 53-4 than in Section 53-5.
5. There are many more areas that need patching than can be patched on the current project. An additional patching contract will be necessary to complete all of the necessary pavement patching.

Several observations were made in Section 53-5:

1. The CRPCC pavement has a thickness of 9 to 9.25 inches.
2. The CRPCC pavement is in generally good condition.
 - o The aggregate has no evidence of D cracking.
 - o A visual inspection indicates the portion from MM 198.8 to MM 201.0 is experiencing more pavement distress than the rest of the section. The cause of this increased distress frequency will be evaluated in depth during the next patching contract.
3. The reinforcement bars are generally at the correct position within the pavement.
4. The reinforcement bars are 5/8 inch diameter.
5. The HMA repair constructed in 2012 has a total of 5 patches being constructed on the current patching contract.

Several observations were made in Section 53-4:

1. The CRPCC pavement has a thickness of 9 to 9.25 inches.
2. The CRPCC pavement is in poor condition.
 - o The aggregate has evidence of D cracking at all locations (Photo 2).
 - o The CRPCC pavement has evidence of D cracking at many locations (Photo 3 & 4).
 - o The CRPCC pavement has vertical cracks in the center of the right wheel lane at some locations (Photo 5).
 - o The CRPCC pavement has horizontal cracks at some locations (Photo 4).
 - o The sawed vertical face of the CRPCC sounds “hollow” as some locations.
3. The reinforcement bars are at varying positions within the pavement. Locations of the bars range from $t/3$ to $t/2$ below the top of the concrete pavement.
4. The reinforcement bars are 5/8 inch diameter.
5. The HMA repair constructed in 2012 needs a large number of patches. This is evidence that a simple overlay will not be sufficient to prevent the condition of the CRPCC pavement from reflecting through to the surface.

CONCLUSIONS

The condition of the CRPCC pavement appears to be significantly worse in Section 53-4 compared to Section 53-5. Since these were constructed under different contracts, different aggregate sources may have been used, which would explain the difference in the cracking of the aggregate. It is believed that the fundamental problem in Section 53-4 is the use of an aggregate that is susceptible to freeze-thaw action, which causes the D cracking. Unfortunately, there is no way to remediate this aggregate condition, so the Department must accept the fact that the current pavement conditions will reappear shortly after

any HMA overlay is constructed. Removal of the entire D cracked CRPCC pavement is necessary to completely eliminate the risk of similar pavement failures in the future. Options to consider for Section 53-4 include:

1. Complete reconstruction
2. Patching of all areas that have not been patched
3. Rubblization

Options 1 and 2 are not believed to be economically feasible. Therefore, a detailed pavement rubblization study will be performed by the District 3 Geotechnical Unit. The results of this study will be provided when they are available.

In Section 53-5, evidence of D cracking was minimal. It is believed that complete removal of the existing HMA overlay, patching of any failures of the CRPCC pavement, and placement of a structural SMA overlay will provide a suitable pavement for many years. This recommendation will be further evaluated during the next patching contract.

If you have any questions, please contact Mike Short.

MS:bz/imp/mtls/soils/Pavement Investigation Report #66B64

cc: Joe Wick
Ted Fultz

| CONTRACT 66E81 PATCHING SCHEDULE - NORTHBOUND | | | | | | | | | | | | | | |
|---|--------|------|-------|----|-------|-------|-------|----------|--------|--------|----------|--------|---------|-------|
| patch # | M.P. | lane | L | W | ty 2 | ty 3 | ty 4 | saw cuts | reinf. | fabric | tie bars | dowels | Section | Area |
| 1 | 195 | | 30 | 6 | | 20.0 | | 72.0 | 20.0 | 20.0 | 15.0 | | 53-5 | 20.0 |
| 2 | 196.65 | PL | 98 | 12 | | | 130.7 | 220.0 | 130.7 | 130.7 | 49.0 | | 53-5 | 130.7 |
| 3 | | PL | 18 | 12 | | 24.0 | | 60.0 | 24.0 | 24.0 | | | 53-5 | 24.0 |
| 5 | 196.8 | | 100 | 6 | | | 66.7 | 212.0 | 66.7 | 66.7 | 50.0 | | 53-5 | 66.7 |
| 6 | 197.1 | PL | 13 | 12 | | 17.3 | | 50.0 | 17.3 | 17.3 | | 12.0 | 53-5 | 17.3 |
| 7 | | PL | 11.5 | 12 | | 15.3 | | 47.0 | 15.3 | 15.3 | | 12.0 | 53-5 | 15.3 |
| 9 | 197.2 | | 297.3 | 6 | | | 198.2 | 606.6 | 198.2 | 198.2 | 148.0 | | 53-5 | 198.2 |
| | | | 41.5 | 12 | | | 55.3 | 107.0 | 55.3 | 55.3 | 20.0 | | 53-5 | 55.3 |
| 10 | | | 40 | 6 | | | 26.7 | 92.0 | 26.7 | 26.7 | 20.0 | | 53-5 | 26.7 |
| 11 | 198.9 | | 15.3 | 6 | 10.2 | | | 42.6 | 10.2 | 10.2 | | | 53-5 | 10.2 |
| 13 | 200.7 | | 8 | 6 | 5.3 | | | 28.0 | 5.3 | 5.3 | | | 53-5 | 5.3 |
| 14 | 201.6 | | 9 | 12 | 12.0 | | | 42.0 | 12.0 | 12.0 | | | 53-4 | 12.0 |
| 16 | 202.1 | | 17.5 | 6 | 11.7 | | 32.3 | 47.0 | 11.7 | 11.7 | | | 53-4 | 44.0 |
| 17 | 202.1 | | 9.2 | 6 | 6.1 | | | 30.4 | 6.1 | 6.1 | | | 53-4 | 6.1 |
| 17A | 202.2 | | 17.6 | 12 | | 23.5 | | 59.2 | 23.5 | 23.5 | | | 53-4 | 23.5 |
| 17B | 202.4 | | 7.5 | 6 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 18 | 202.4 | PL | 7.5 | 6 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 19 | 202.5 | | 26 | 6 | | 17.3 | | 64.0 | 17.3 | 17.3 | 13.0 | | 53-4 | 17.3 |
| | | | 12.7 | 12 | | 16.9 | | 49.4 | 16.9 | 16.9 | | | 53-4 | 16.9 |
| 20 | 202.9 | | 7.5 | 6 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 21 | 202.9 | | 7.5 | 6 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 21A | 203.3 | | 15.3 | 12 | | 20.4 | | 54.6 | 20.4 | 20.4 | | | 53-4 | 20.4 |
| 22 | 203.3 | | 135 | 6 | | | 90.0 | 282.0 | 90.0 | 90.0 | 67.0 | | 53-4 | 90.0 |
| 23 | | | 22 | 6 | 14.7 | | | 56.0 | 14.7 | 14.7 | 11.0 | | 53-4 | 14.7 |
| 24 | 203.6 | | 15 | 6 | 10.0 | | | 42.0 | 10.0 | 10.0 | | | 53-4 | 10.0 |
| 25 | 203.6 | | 18.5 | 6 | 12.3 | | | 49.0 | 12.3 | 12.3 | | | 53-4 | 12.3 |
| 26 | | | 16 | 12 | | 21.3 | | 56.0 | 21.3 | 21.3 | | | 53-4 | 21.3 |
| | | | 19.5 | 6 | 13.0 | | | 51.0 | 13.0 | 13.0 | | | 53-4 | 13.0 |
| 27 | 203.7 | | 27.5 | 6 | | 18.3 | | 67.0 | 18.3 | 18.3 | 13.0 | | 53-4 | 18.3 |
| 28 | | | 27.5 | 6 | | 18.3 | | 67.0 | 18.3 | 18.3 | 13.0 | | 53-4 | 18.3 |
| 29 | 203.9 | | 55.5 | 6 | | | 37.0 | 123.0 | 37.0 | 37.0 | 27.0 | | 53-4 | 37.0 |
| 30 | 204.6 | PL | 19.5 | 12 | | | 26.0 | 63.0 | 26.0 | 26.0 | | | 53-4 | 26.0 |
| | | | | | | | | | | | | | | 0.0 |
| total | | | | | 115.3 | 212.6 | 662.9 | 2847.8 | 958.5 | 958.5 | 446.0 | 24.0 | | 990.8 |

| SUMMARY | | | | |
|--------------|-------------------|-----------------------|-------------------------|--------------------------|
| | Number of Patches | Percentage of Patches | Area of Patches (sq yd) | Percentage of Patch Area |
| TOTAL | 32 | 100% | 991 | 100% |
| Section 53-5 | 11 | 34% | 570 | 57% |
| Section 53-4 | 21 | 66% | 421 | 43% |

| CONTRACT 66E81 PATCHING SCHEDULE - SOUTHBOUND | | | | | | | | | | | | | | |
|---|-------|------|-------|------|-------|-------|-------|----------|--------|--------|----------|--------|---------|--------|
| patch # | M.P. | lane | L | W | ty 2 | ty 3 | ty 4 | saw cuts | reinf. | fabric | tie bars | dowels | Section | Area |
| 1 | 213.5 | | 55.2 | 12.0 | | | 73.6 | 134.4 | 73.6 | 73.6 | 27.0 | 12.0 | 53-4 | 73.6 |
| 1A | 204.2 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 1B | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 2 | 203.8 | | 11.0 | 6.0 | 7.3 | | | 34.0 | 7.3 | 7.3 | | | 53-4 | 7.3 |
| 3 | 203.4 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 4 | 203.2 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 5 | | | 36.8 | 6.0 | | 24.5 | | 85.6 | 24.5 | 24.5 | 18.0 | | 53-4 | 24.5 |
| 6 | 203.2 | | 23.5 | 6.0 | | 15.7 | | 59.0 | 15.7 | 15.7 | 11.0 | | 53-4 | 15.7 |
| 7 | | | 41.5 | 6.0 | | | 27.7 | 95.0 | 27.7 | 27.7 | 20.0 | | 53-4 | 27.7 |
| 8 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 9 | | | 13.5 | 6.0 | 9.0 | | | 39.0 | 9.0 | 9.0 | | | 53-4 | 9.0 |
| 10 | 202.9 | | 42.5 | 6.0 | | | 28.3 | 97.0 | 28.3 | 28.3 | 21.0 | | 53-4 | 28.3 |
| 11 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 12 | | | 9.3 | 6.0 | 6.2 | | | 30.6 | 6.2 | 6.2 | | | 53-4 | 6.2 |
| 14 | | | 24.3 | 6.0 | | 16.2 | | 60.6 | 16.2 | 16.2 | 12.0 | | 53-4 | 16.2 |
| 15 | | | 8.5 | 12.0 | 11.3 | | | 41.0 | 11.3 | 11.3 | | | 53-4 | 11.3 |
| 16 | | | 30.5 | 6.0 | | 20.3 | | 73.0 | 20.3 | 20.3 | 15.0 | | 53-4 | 20.3 |
| 17 | | | 41.5 | 6.0 | | | 27.7 | 95.0 | 27.7 | 27.7 | 20.0 | | 53-4 | 27.7 |
| 18 | | | 24.5 | 6.0 | | 16.3 | | 61.0 | 16.3 | 16.3 | 12.0 | | 53-4 | 16.3 |
| 19 | | | 8.5 | 6.0 | 5.7 | | | 29.0 | 5.7 | 5.7 | | | 53-4 | 5.7 |
| 20 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 21 | | | 10.5 | 6.0 | 7.0 | | | 33.0 | 7.0 | 7.0 | | | 53-4 | 7.0 |
| 22 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 23 | | | 12.0 | 6.0 | 8.0 | | | 36.0 | 8.0 | 8.0 | | | 53-4 | 8.0 |
| 24 | 202.8 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 25 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 26 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 27 | | | 11.5 | 6.0 | 7.7 | | | 35.0 | 7.7 | 7.7 | | | 53-4 | 7.7 |
| 28 | 202.6 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-4 | 5.0 |
| 29 | | | 33.0 | 12.0 | | | 44.0 | 90.0 | 44.0 | 44.0 | 16.0 | | 53-4 | 44.0 |
| 30 | | | 9.5 | 6.0 | 6.3 | | | 31.0 | 6.3 | 6.3 | | | 53-4 | 6.3 |
| 31 | | | 18.5 | 12.0 | | 24.7 | | 61.0 | 24.7 | 24.7 | | | 53-4 | 24.7 |
| | | | 26.0 | 6.0 | | 17.3 | | 64.0 | 17.3 | 17.3 | 13.0 | | 53-4 | 17.3 |
| 32 | 202.5 | | 17.5 | 6.0 | 11.7 | | | 47.0 | 11.7 | 11.7 | | | 53-4 | 11.7 |
| 33 | | | 50.0 | 6.0 | | | 33.3 | 112.0 | 33.3 | 33.3 | 25.0 | | 53-4 | 33.3 |
| 34 | | | 35.5 | 6.0 | | 23.7 | | 83.0 | 23.7 | 23.7 | 17.0 | | 53-4 | 23.7 |
| 35 | | | 60.0 | 6.0 | | | 40.0 | 132.0 | 40.0 | 40.0 | 30.0 | | 53-4 | 40.0 |
| 36 | 202.4 | | 38.5 | 6.0 | | | 25.7 | 89.0 | 25.7 | 25.7 | 19.0 | | 53-4 | 25.7 |
| 36A | 202.2 | | 56.2 | 6.0 | | | 37.5 | 124.4 | 37.5 | 37.5 | 28.0 | | 53-4 | 37.5 |
| 36B | | | 45.0 | 6.0 | | | 30.0 | 102.0 | 30.0 | 30.0 | 22.0 | | 53-4 | 30.0 |
| 36C | 202 | | 8.0 | 6.0 | 5.3 | | | 28.0 | 5.3 | 5.3 | | | 53-4 | 5.3 |
| 36D | | | 14.0 | 6.0 | 9.3 | | | 40.0 | 9.3 | 9.3 | | | 53-4 | 9.3 |
| 37 | | | 27.2 | 6.0 | | 18.1 | | 66.4 | 18.1 | 18.1 | 13.0 | | 53-4 | 18.1 |
| 37A | 201.9 | | 51.0 | 6.0 | | | 34.0 | 114.0 | 34.0 | 34.0 | 25.0 | | 53-4 | 34.0 |
| 38 | 201.6 | | 8.0 | 6.0 | 5.3 | | | 28.0 | 5.3 | 5.3 | | | 53-4 | 5.3 |
| 38A | 201.5 | | 94.0 | 6.0 | | | 62.7 | 200.0 | 62.7 | 62.7 | 47.0 | | 53-4 | 62.7 |
| 38B | 200.8 | PL | 8.0 | 6.0 | 5.3 | | | 28.0 | 5.3 | 5.3 | | | 53-5 | 5.3 |
| 39 | 200 | | 8.5 | 6.0 | 5.7 | | | 29.0 | 5.7 | 5.7 | | | 53-5 | 5.7 |
| 40 | 199.5 | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-5 | 5.0 |
| 41 | | | 7.5 | 6.0 | 5.0 | | | 27.0 | 5.0 | 5.0 | | | 53-5 | 5.0 |
| 42 | 199 | PL | 8.5 | 12.0 | 11.3 | | | 41.0 | 11.3 | 11.3 | | | 53-5 | 11.3 |
| 42A | 197.1 | | 13.0 | 12.0 | | 17.3 | | 50.0 | 17.3 | 17.3 | | 12.0 | 53-5 | 17.3 |
| 42B | 197.1 | PL | 13.0 | 12.0 | | 17.3 | | 50.0 | 17.3 | 17.3 | | 12.0 | 53-5 | 17.3 |
| 43 | 195 | | 16.5 | 6.0 | 11.0 | | | 45.0 | 11.0 | 11.0 | | | 53-5 | 11.0 |
| 44 | | | 28.6 | 6.0 | | 19.1 | | 69.2 | 19.1 | 19.1 | 14.0 | | 53-5 | 19.1 |
| | | | 106.7 | 12.0 | | | 142.3 | 237.4 | 142.3 | 142.3 | 53.0 | | 53-5 | 142.3 |
| | | | | | | | | | | | | | | 0.0 |
| total | | | | | 203.4 | 230.5 | 606.8 | 3377.6 | 1040.7 | 1040.7 | 478.0 | 36.0 | | 1040.7 |

| SUMMARY | | | | |
|--------------|-------------------|-----------------------|-------------------------|--------------------------|
| | Number of Patches | Percentage of Patches | Area of Patches (sq yd) | Percentage of Patch Area |
| TOTAL | 56 | 93% | 1041 | 100% |
| Section 53-5 | 10 | 17% | 239 | 23% |
| Section 53-4 | 46 | 77% | 801 | 77% |



Photo 1: Example of a typical patch with a subbase in good condition.



Photo 2: Example of typical cracking in the aggregate in Section 53-4.



Photo 3: Example of typical D cracking of the PCC pavement in Section 53-4.



Photo 4: Example of typical D cracking with a horizontal crack in the PCC in Section 53-4.

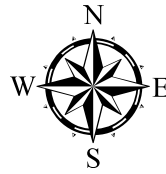


Photo 5: Example of a reflective longitudinal crack in the HMA overlay caused by an underlying longitudinal crack in the PCC pavement in Section 53-4.

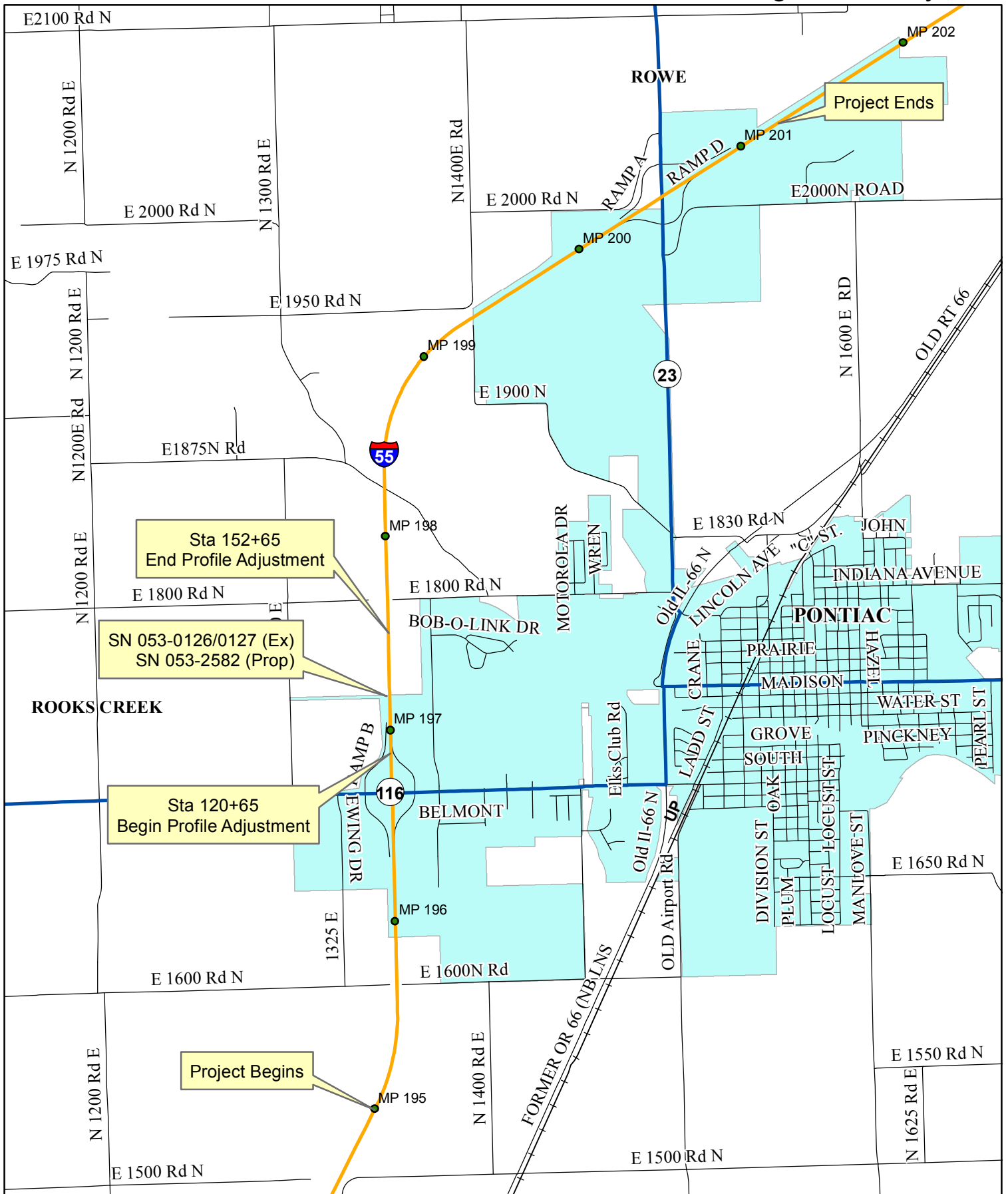
APPENDIX

B

Project Location Map



FAI 55 (I-55)
 Section (53-5) R&I
 Contract 66B64
 Livingston County



APPENDIX

C

APPENDIX

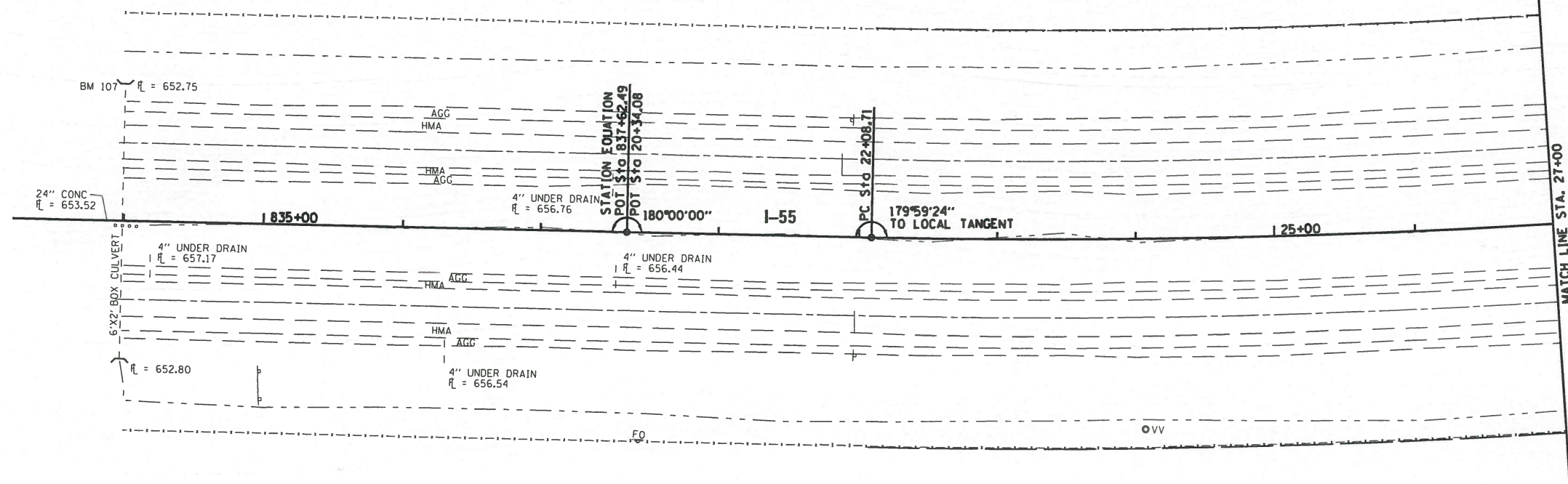
D



SCALE IN FEET



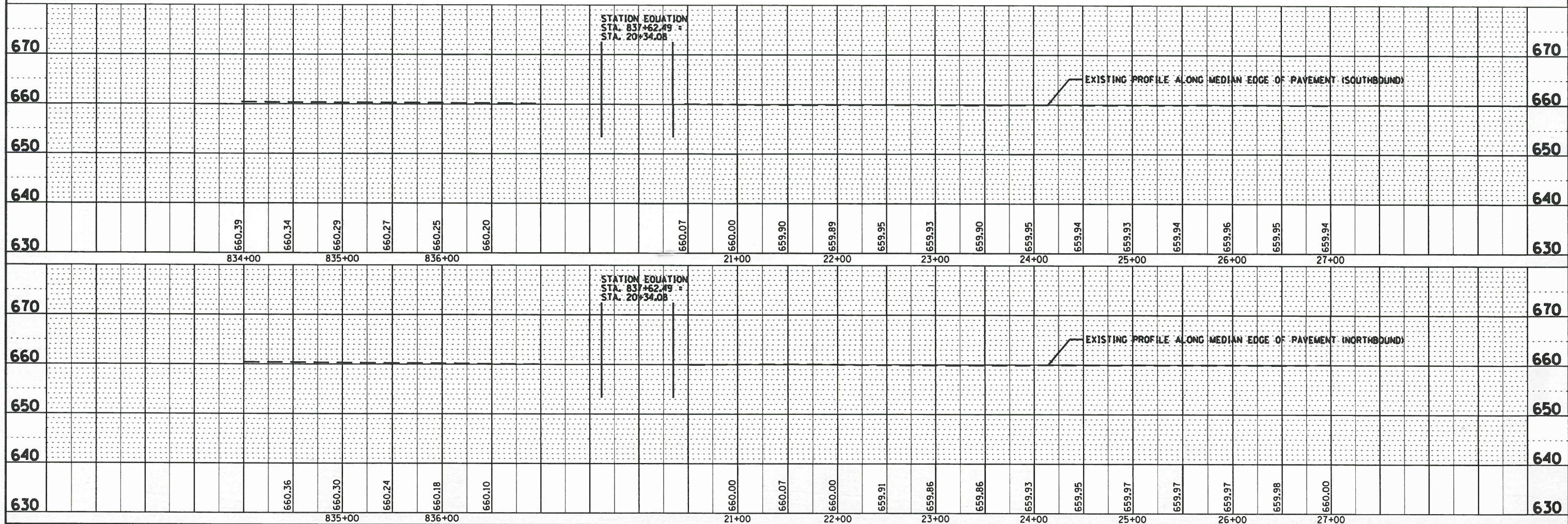
PROP. CURVE 155.53-5-1
 PI STA. = 36+51.29
 Δ = 28° 15' 52" (LT)
 D = 1° 00' 00"
 R = 5,729.46'
 T = 1,442.57'
 L = 2,826.39'
 E = 178.82'
 e = 0.035%
 T.R. =
 S.E. RUN =
 P.C. STA. = 22+08.72
 P.T. STA. = 50+35.11



BENCHMARK: 107
 CHISELED "□" ON TOP OF SOUTH
 SIDE OF HEADWALL WEST SIDE
 OF I-55 SOUTHBOUND ON SOUTH
 END OF LIMITS.
 ELEVATION = 655.95
 STA. 833+96, LT

| | |
|---------------------|----------------------------------|
| PLAN | DATE |
| SURVEYED | 09/14 |
| BY | CHAMLIN & ASSOCIATES |
| PLANNED | 09/14 |
| CHECKED | 09/14 |
| BY | 09/14 |
| NO. OF WAY CHECKED | 09/14 |
| NO. OF FILE CHECKED | 09/14 |
| NO. OF FILE NAME | 036664-5HT-PLNPRF-155-834-27.DGN |

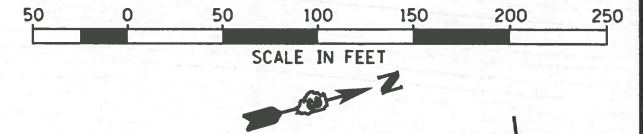
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|---------------------|----------------------------------|
| PROFILE | DATE |
| SURVEYED | 09/14 |
| BY | CHAMLIN & ASSOCIATES |
| PLANNED | 09/14 |
| CHECKED | 09/14 |
| BY | 09/14 |
| NO. OF WAY CHECKED | 09/14 |
| NO. OF FILE CHECKED | 09/14 |
| NO. OF FILE NAME | 036664-5HT-PLNPRF-155-834-27.DGN |



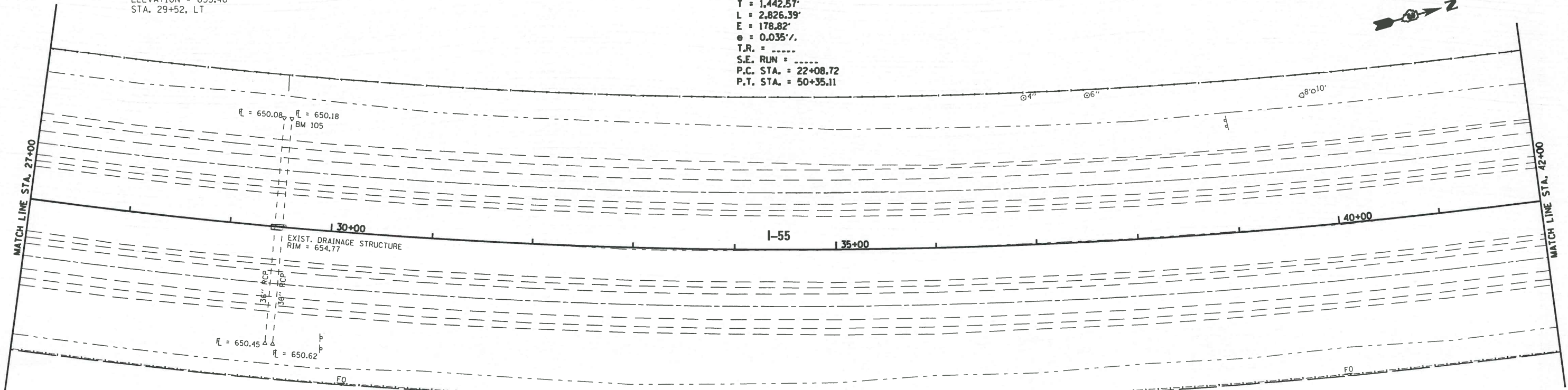
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| PLLOT SCALE = 1" = 50' | PLLOT DATE = 10/14 | CHECKED - | REVISOR - | SCALE: 1" = 50' | SHEET OF SHEETS | STA. 834+00 | TO STA. 27+00 | CONTRACT NO. 66B64 | ILLINOIS FED. AID PROJECT | |

BENCHMARK: 105
 CHISELED "□" ON TOP OF FLARED
 END SECTION WEST SIDE OF
 SOUTHBOUND I-55.
 ELEVATION = 653.46
 STA. 29+52, LT

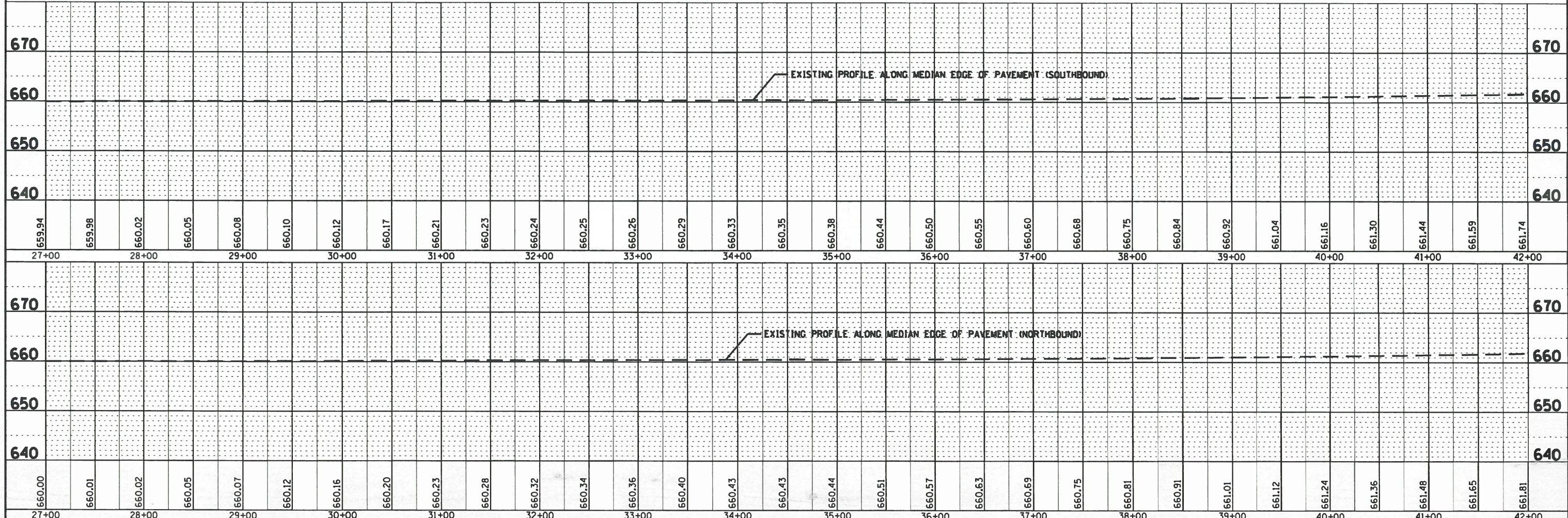
PROP. CURVE 155.53-5-1
 PI STA. = 36+51.29
 $\Delta = 28^\circ 15' 52''$ (LT)
 $D = 1^\circ 00' 00''$
 $R = 5,729.46'$
 $T = 1,442.57'$
 $L = 2,826.39'$
 $E = 178.82'$
 $e = 0.035\%$
 $T.R. = \dots$
 $S.E. RUN = \dots$
 $P.C. STA. = 22+08.72$
 $P.T. STA. = 50+35.11$



| | | | |
|-----------|--------------------|----------------------|-------|
| PLAN | SURVEYED | BY | DATE |
| NOTE BOOK | ALIGNED | CHAMLIN & ASSOCIATES | 09/14 |
| NO. | RT. OF WAY CHECKED | LAG | 09/14 |
| | CADD FILE NAME | D:\66864-TOPDOWN | 09/14 |



| | | | |
|-----------|-------------------------|----------------------|-------|
| PROFILE | SURVEYED | BY | DATE |
| NOTE BOOK | GRADES CHECKED | CHAMLIN & ASSOCIATES | 09/14 |
| NO. | STRUCTURE NOTATION OK'D | LAG | 09/14 |



| | | | | | | | | | | | |
|---------------------------------|-------------|------------|-----------|---|--|---------------------------|----------------|------------|--------------|-----------|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 SCALE: 1" = 50' SHEET OF SHEETS STA. 27+00 TO STA. 42+00 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| D36864-SHT-PLNPRF-155-27-42.DGN | | CHECKED - | REVISED - | | | 55 | (53-4.5)RS-1&1 | LIVINGSTON | | | |
| | | DRAWN - | REVISED - | | | CONTRACT NO. 66864 | | | | | |
| | | CHECKED - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

BENCHMARK: 101
 CHISELED "□" ON CONCRETE
 FOUNDATION OF SIGN ON WEST
 SIDE OF I-55 SOUTHBOUND.
 ELEVATION = 660.87
 STA. 52+90, LT

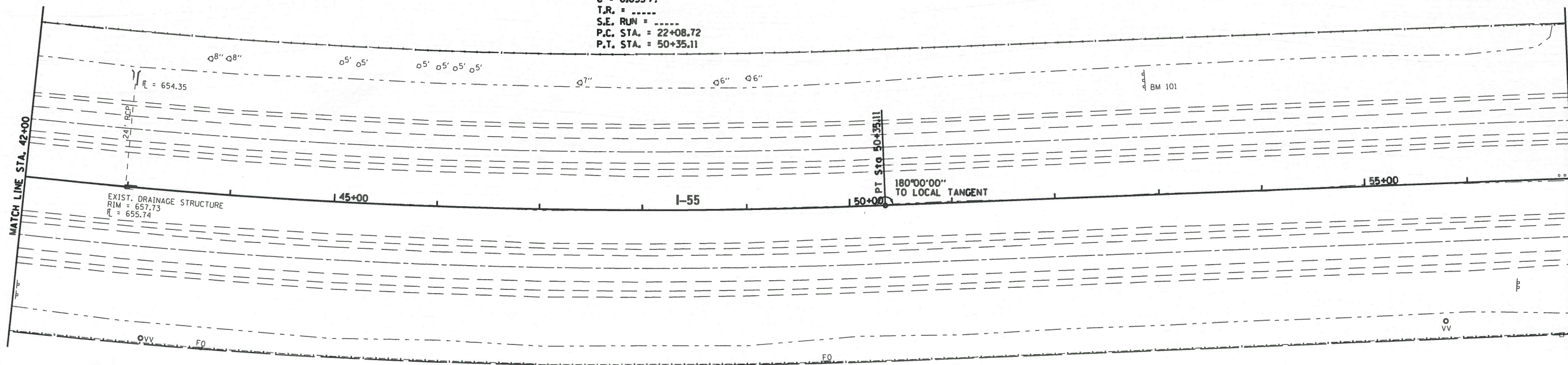
PROP. CURVE 155-53-5-1
 PI STA. = 36+51.29
 $\Delta = 28^\circ 15' 52''$ (L.T.)
 $D = 1^\circ 00' 00''$
 $R = 5,729.46'$
 $T = 1,442.57'$
 $L = 2,826.39'$
 $E = 178.82'$
 $e = 0.035\%$
 $T.R. = \dots$
 $S.E. RUN = \dots$
 P.C. STA. = 22+08.72
 P.T. STA. = 50+35.11

50 0 50 100 150 200 250

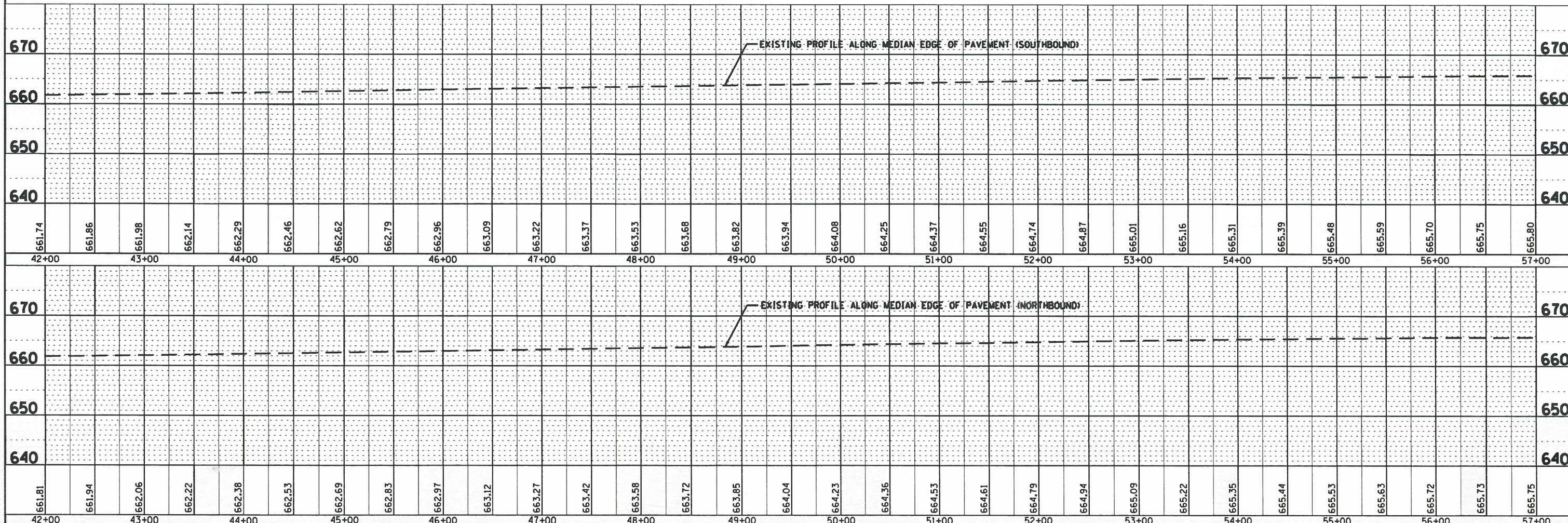
SCALE IN FEET



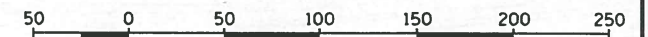
PLAN
 SURVEYED BY CHAMLIN & ASSOCIATES 09/14
 PLOTTED BY CHAMLIN & ASSOCIATES 09/14
 CHECKED BY CHAMLIN & ASSOCIATES 09/14
 NOTE BOOK NO. 1000000000
 CADD FILE NAME: D:\PROJECTS\155-53-5-1\PLAN



PROFILE
 SURVEYED BY CHAMLIN & ASSOCIATES 09/14
 PLOTTED BY CHAMLIN & ASSOCIATES 09/14
 CHECKED BY CHAMLIN & ASSOCIATES 09/14
 NOTE BOOK NO. 1000000000
 STRUCTURE NOTATION: CHKD



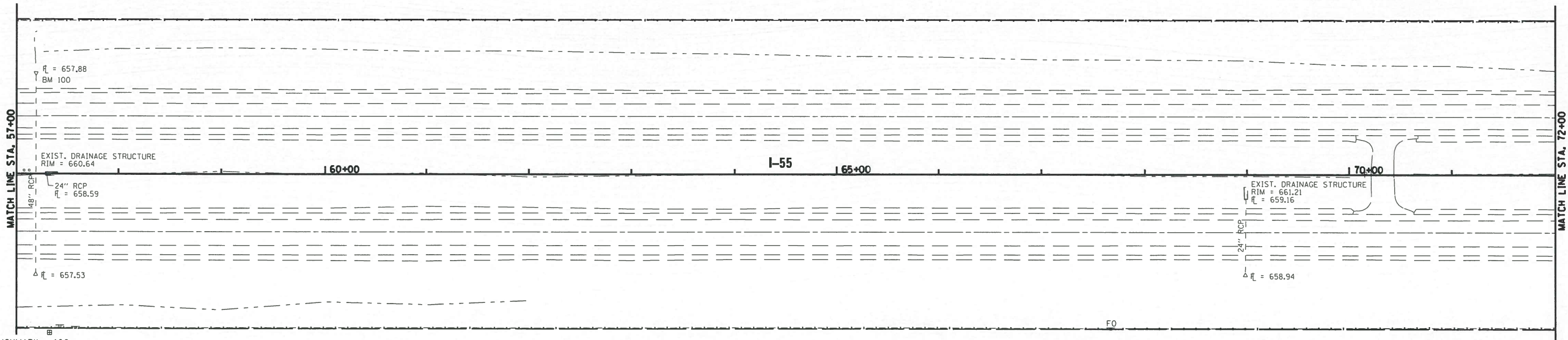
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|--|-----------------|------------|-----------|---|--------------------------------|-----------------|--------------------------|---------------------------|-------------------|--------------|-----------|
| FILE NAME = D366864-SHT-PLNPRF-I55-42-57.DGN | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | | F.A.I. RTE. 55 | SECTION 153-4.5RS-1&I | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. |
| PLOT SCALE = 1" = 50' | | CHECKED - | REVISED - | | SCALE: 1" = 50' | SHEET OF SHEETS | STA. 42+00 TO STA. 57+00 | CONTRACT NO. 66864 | | | |
| PLOT DATE = 10/14 | | DRAWN - | REVISED - | | ILLINOIS FED. AID PROJECT | | | | | | |
| | | CHECKED - | REVISED - | | | | | | | | |



SCALE IN FEET

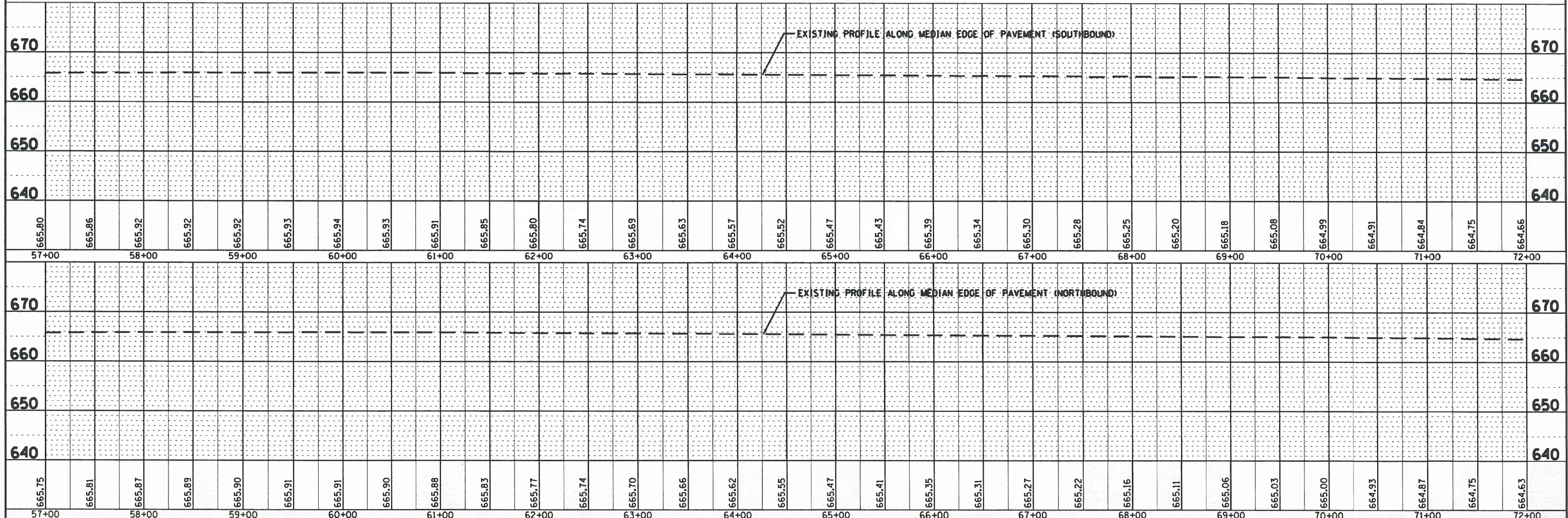


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| PLAN | SURVEYED | DATE |
| | BY CHAMLIN & ASSOCIATES | 08/14 |
| | PLOTTED | 08/14 |
| | GRADES CHECKED | 08/14 |
| | ALIGNED | 08/14 |
| | NOTE BOOK | 08/14 |
| | NO. | 08/14 |
| | FILE NAME | 08/14 |
| | BY | |
| | DATE | |
| | BY | |
| | DATE | |



BENCHMARK: 100
 CHISELED "□" ON FLARED
 END SECTION WEST SIDE
 OF SOUTHBOUND I-55
 ELEVATION = 662.26
 STA. 57+19, LT

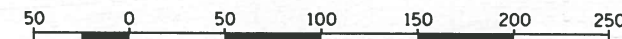
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| PROFILE | SURVEYED | DATE |
| | BY CHAMLIN & ASSOCIATES | 08/14 |
| | PLOTTED | 08/14 |
| | GRADES CHECKED | 08/14 |
| | ALIGNED | 08/14 |
| | NOTE BOOK | 08/14 |
| | NO. | 08/14 |
| | FILE NAME | 08/14 |
| | BY | |
| | DATE | |
| | BY | |
| | DATE | |



| | | | | | | |
|----------------------------------|-------------|------------|-----------|---|---|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 SCALE: 1" = 50' SHEET OF SHEETS STA. 57+00 TO STA. 72+00 | F.A.I. RTE. 55 SECTION (53-4,5)RS-1&1 COUNTY LIVINGSTON CONTRACT NO. 66B64 ILLINOIS FED. AID PROJECT |
| 0366864-SHT-PLNPRF-I55-57-72.DGN | | CHECKED - | REVISED - | | | |
| | | DRAWN - | REVISED - | | | |
| | | CHECKED - | REVISED - | | | |
| | | | | | | |

BENCHMARK: 97
 CHISELED "□" ON CONCRETE
 SIGN FOUNDATION WEST
 SIDE OF SOUTHBOUND I-55,
 SOUTH OF IL 116 EXIT.
 ELEVATION = 661.79
 STA. 73+09, LT

BENCHMARK: 95
 CHISELED "□" ON CONCRETE
 FOUNDATION OF SIGN ON WEST
 SIDE OF SOUTHBOUND I-55,
 SOUTH OF IL 116 EXIT.
 ELEVATION = 660.13
 STA. 79+56, LT

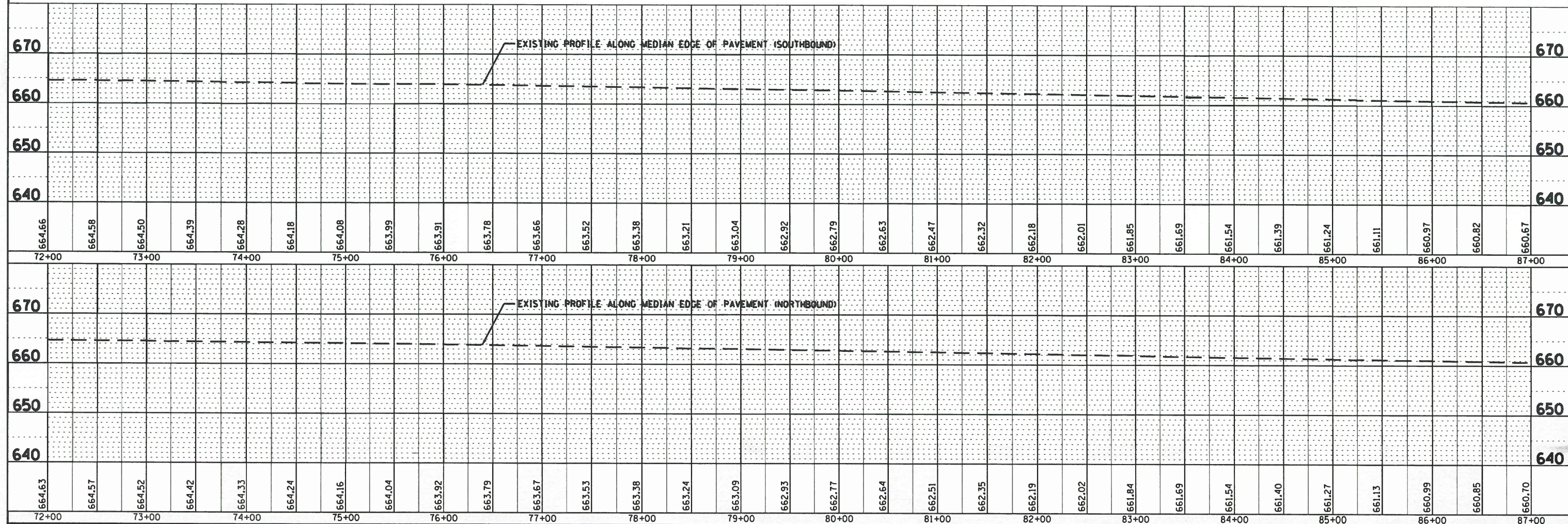
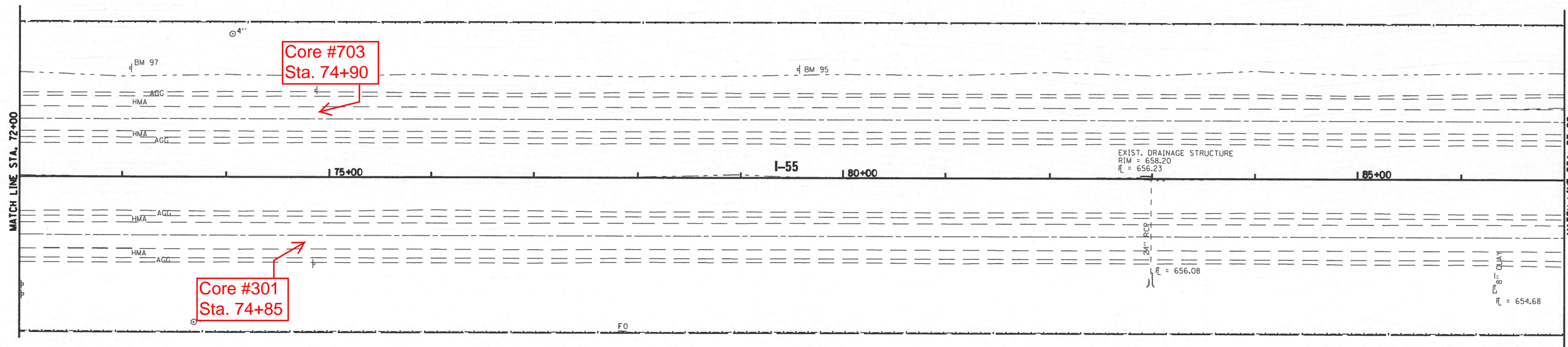


SCALE IN FEET



| | | | |
|------|-----------|----------------------|---------|
| PLAN | SURVEYED | BY | DATE |
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| | ALIGNED | LAG | 09/7/14 |
| | CHECKED | | |
| | FILE NAME | D:\66864\090909 | 09/7/14 |

| | | | |
|---------|-----------|----------------------|---------|
| PROFILE | SURVEYED | BY | DATE |
| NO. | PLOTTED | CHAMLIN & ASSOCIATES | 09/7/14 |
| | ALIGNED | LAG | 09/7/14 |
| | CHECKED | | |
| | FILE NAME | D:\66864\090909 | 09/7/14 |



| | | | | | | | | | | | | |
|---------------------------------|-------------|------------|-----------|--|--------------------------------|---|---------------------------|---------------|------------|--------------|-----------|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | SCALE: 1" = 50' SHEET OF SHEETS STA. 72+00 TO STA. 87+00 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| D36864-SHT-PLNPRF-I55-72-87.DGN | | CHECKED - | REVISED - | | | | 55 | 63-4,5,RS-1&I | LIVINGSTON | | | |
| PLOT SCALE = 1" = 50' | | DRAWN - | REVISED - | | | | CONTRACT NO. 66864 | | | | | |
| PLOT DATE = 10/14 | | CHECKED - | REVISED - | | | | ILLINOIS FED. AID PROJECT | | | | | |

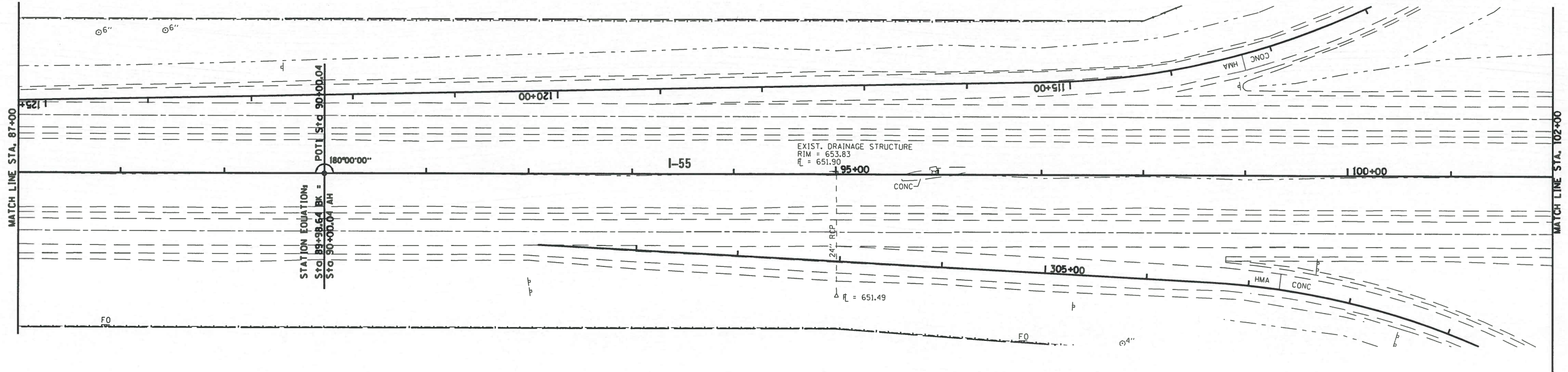
BENCHMARK: 95
 CHISELED "□" ON CONCRETE
 FOUNDATION OF SIGN ON WEST
 SIDE OF SOUTHBOUND I-55,
 SOUTH OF IL 116 EXIT.
 ELEVATION = 660.13
 STA. 79+56, LT



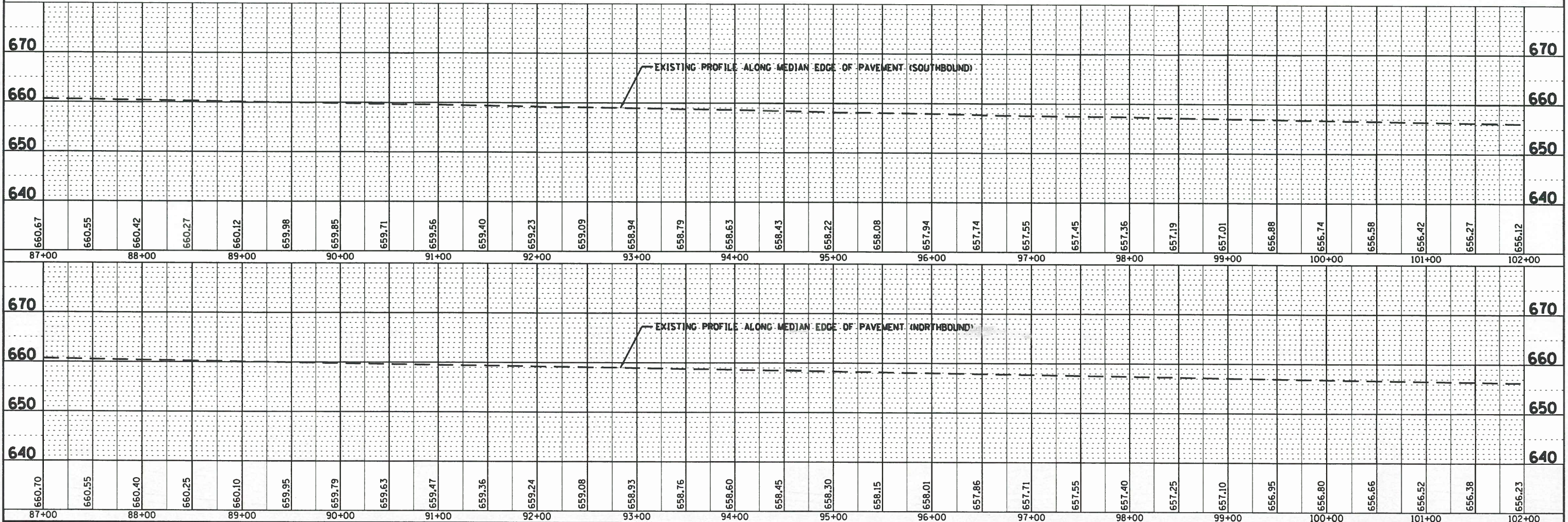
SCALE IN FEET



| | | | |
|------|--------------------|-----------------------------------|-------|
| PLAN | SURVEYED | BY | DATE |
| NO. | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | NOTED | LAG | 09/14 |
| | RT. OF WAY CHECKED | LAG | 09/14 |
| | FILE NAME | D366864-SHT-PLNPRF-155-87-102.DGN | 09/14 |



| | | | |
|---------|-------------------------|----------------------|-------|
| PROFILE | SURVEYED | BY | DATE |
| NO. | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | NOTED | LAG | 09/14 |
| | STRUCTURE NOTATION CHRG | LAG | 09/14 |



FILE NAME = D366864-SHT-PLNPRF-155-87-102.DGN

USER NAME = ---
 PLOT SCALE = 1" = 50'
 PLOT DATE = 10/14

| | |
|------------|-----------|
| DESIGNED - | REVISED - |
| CHECKED - | REVISED - |
| DRAWN - | REVISED - |
| CHECKED - | REVISED - |

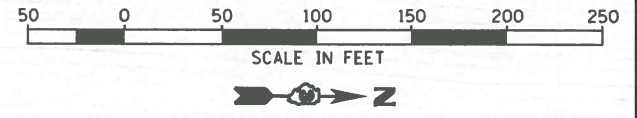
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE - I-55
 SCALE: 1" = 50' SHEET OF SHEETS STA. 87+00 TO STA. 102+00

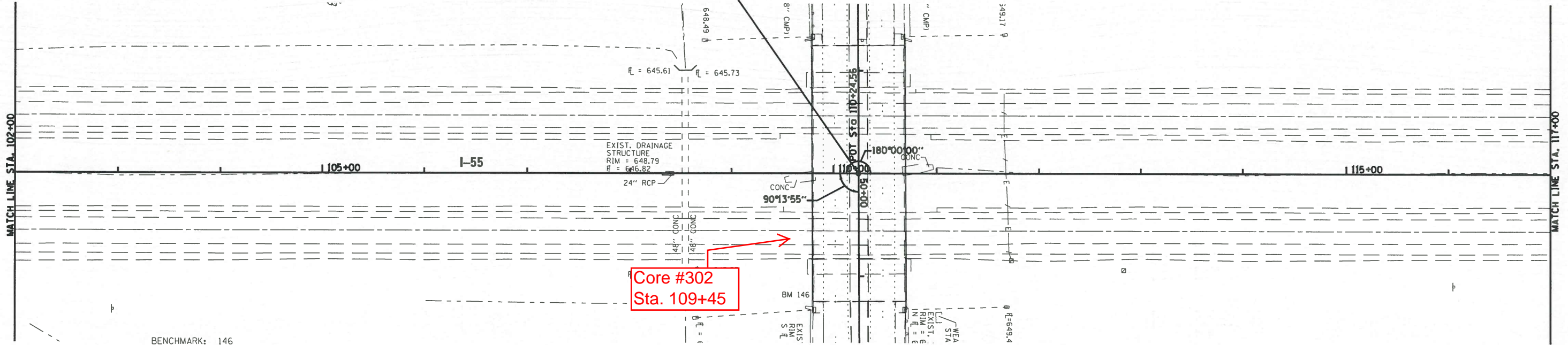
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|---------------------------|---------------|------------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 55 | 63-4,5,RS-1&I | LIVINGSTON | | |
| CONTRACT NO. 66864 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

PLAN
 SURVEYED BY CHAMLIN & ASSOCIATES
 DATE 03/14
 DRAWN BY LAC
 CHECKED BY LAC
 DATE 03/14
 REVISIONS
 NO. 036664-TOPOGRAPHY 03/14

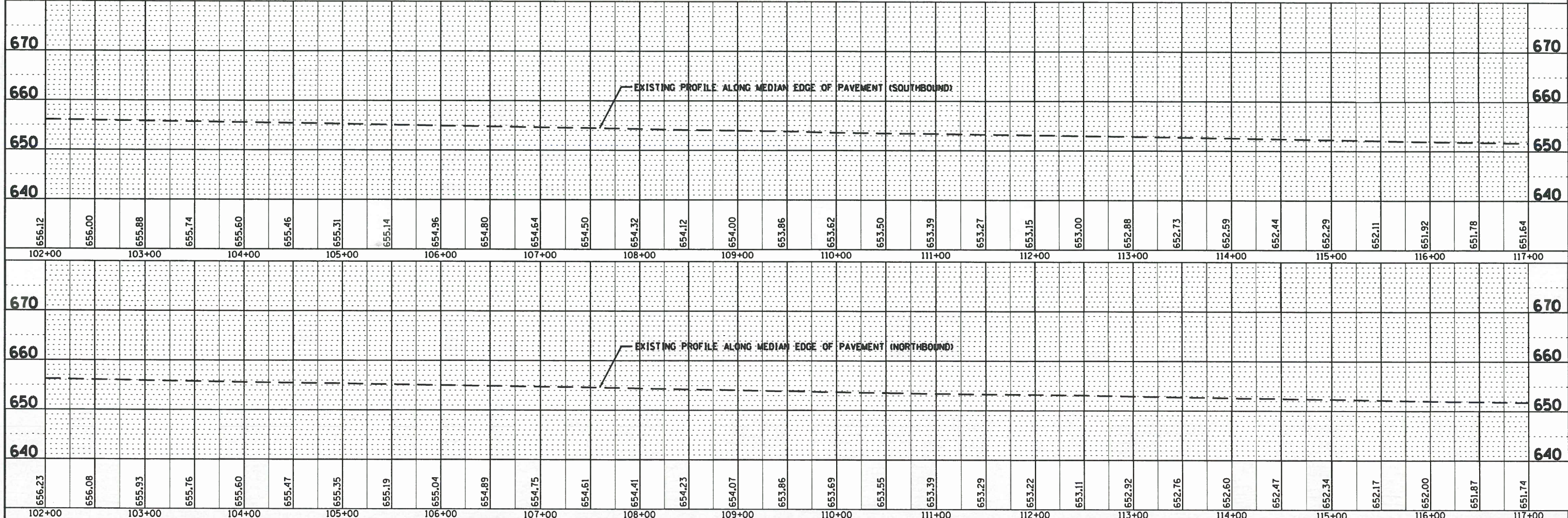
PROFILE
 SURVEYED BY CHAMLIN & ASSOCIATES
 DATE 03/14
 DRAWN BY LAC
 CHECKED BY LAC
 DATE 03/14
 REVISIONS
 NO. 036664-TOPOGRAPHY 03/14



STA. 110+24.56 (I55) =
 STA. 50+00.00 (IL116)



BENCHMARK: 146
 CHISELED "□" ON NORTHEAST
 CORNER OF SOUTHEAST WINGWALL
 OF IL 116 BRIDGE OVER I-55
 ELEVATION = 678.54
 STA. 109+80, RT

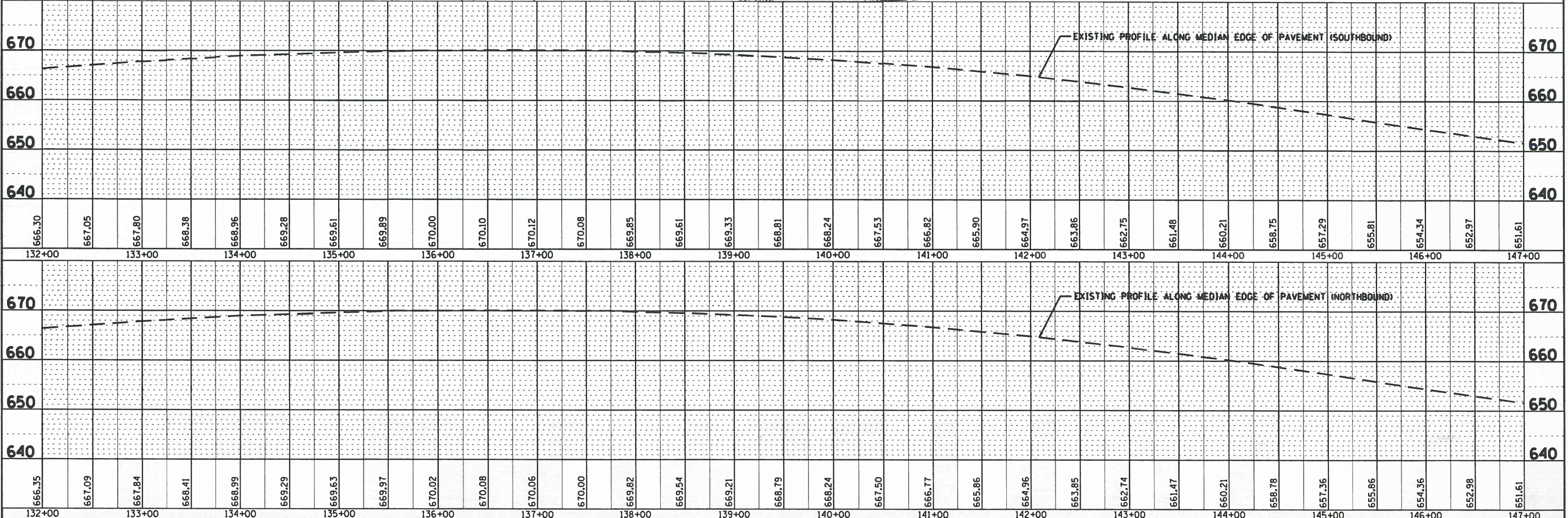
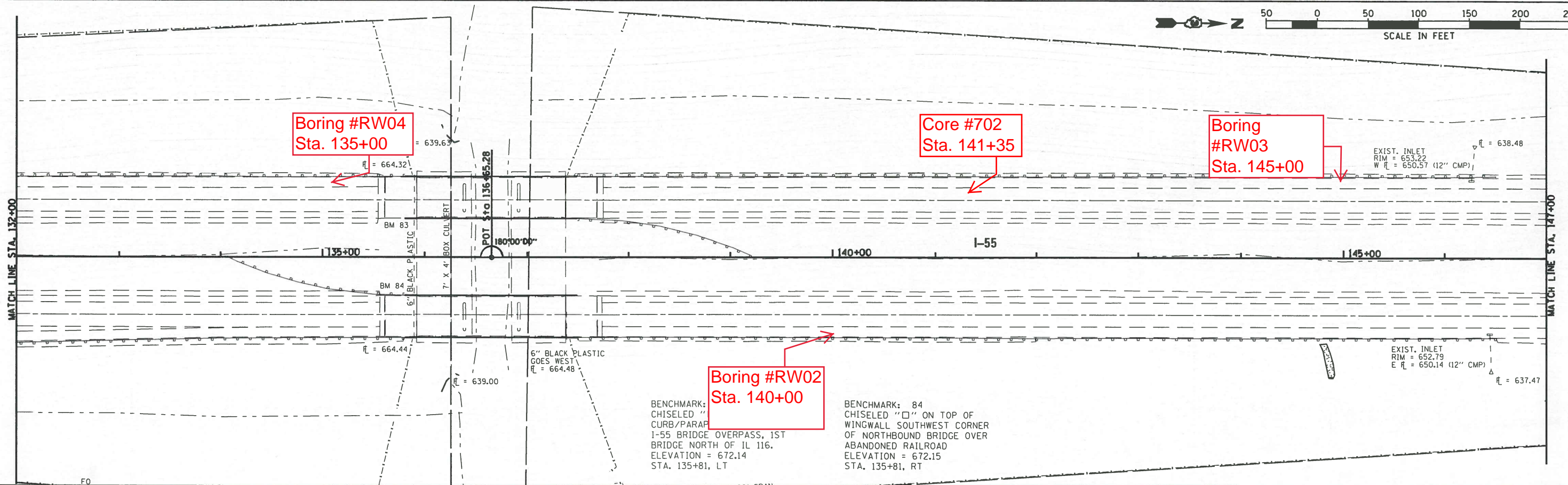


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|---|-----------------|------------|-----------|---|-------------------------|-------|----------------|------------------------|-------------------|--------------|-------------|---------------------------|
| FILE NAME = 036664-SHT-PLNPRF-155-102-117.DGN | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | | F.A.I. RTE. 55 | SECTION 63-4.5(RS-1&I) | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. | |
| | | CHECKED - | REVISED - | | SCALE: 1" = 50' | SHEET | OF | SHEETS | STA. 102+00 | TO | STA. 117+00 | CONTRACT NO. 66B64 |
| | | DRAWN - | REVISED - | | | | | | | | | ILLINOIS FED. AID PROJECT |
| | | CHECKED - | REVISED - | | | | | | | | | |

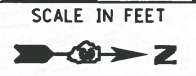
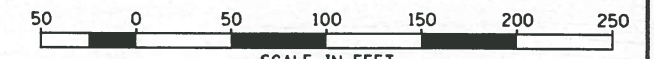


| | | |
|------|------------------------|-------|
| PLAN | DESIGNED BY | DATE |
| | CHARLIE E. SASSERLAKES | 09/14 |
| | PLOTTED BY | 09/14 |
| | ALIGNED BY | 09/14 |
| | CADD FILE NAME | 09/14 |
| | NO. | |

| | | |
|---------|------------------------|-------|
| PROFILE | DESIGNED BY | DATE |
| | CHARLIE E. SASSERLAKES | 09/14 |
| | PLOTTED BY | 09/14 |
| | ALIGNED BY | 09/14 |
| | CADD FILE NAME | 09/14 |
| | NO. | |

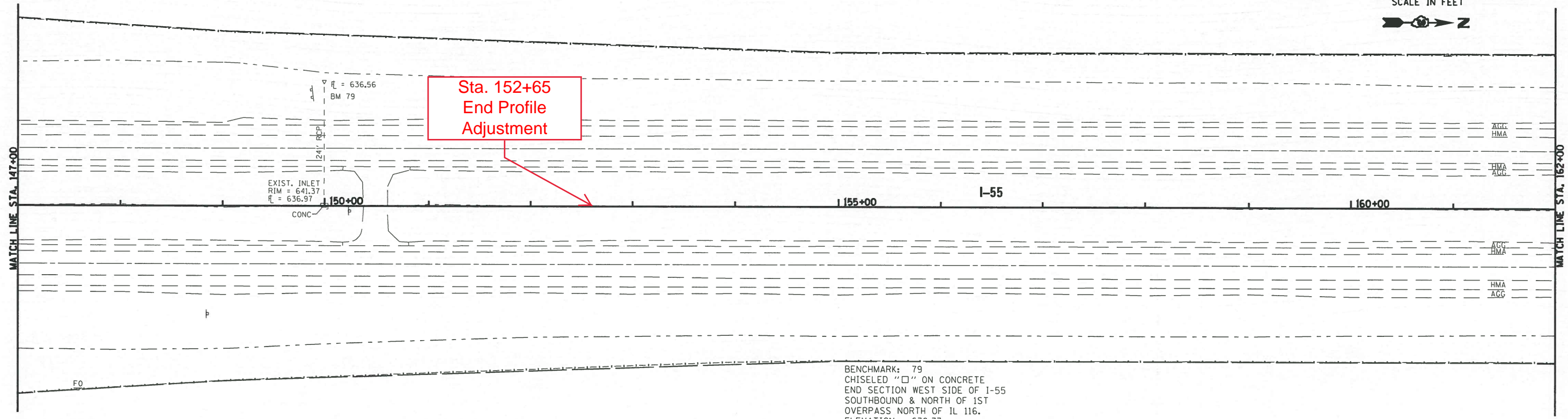


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|------------------------------------|-------------|------------|-----------|---|--|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 SCALE: 1" = 50' SHEET OF SHEETS STA. 132+00 TO STA. 147+00 | F.A.I. RTE. 55 SECTION (53-4.5)RS-1&1 COUNTY LIVINGSTON CONTRACT NO. 66B64 ILLINOIS FED. AID PROJECT |
| D366B64-SHT-PLNPRF-155-132-147.DGN | | CHECKED - | REVISED - | | | |
| | | DRAWN - | REVISED - | | | |
| | | CHECKED - | REVISED - | | | |

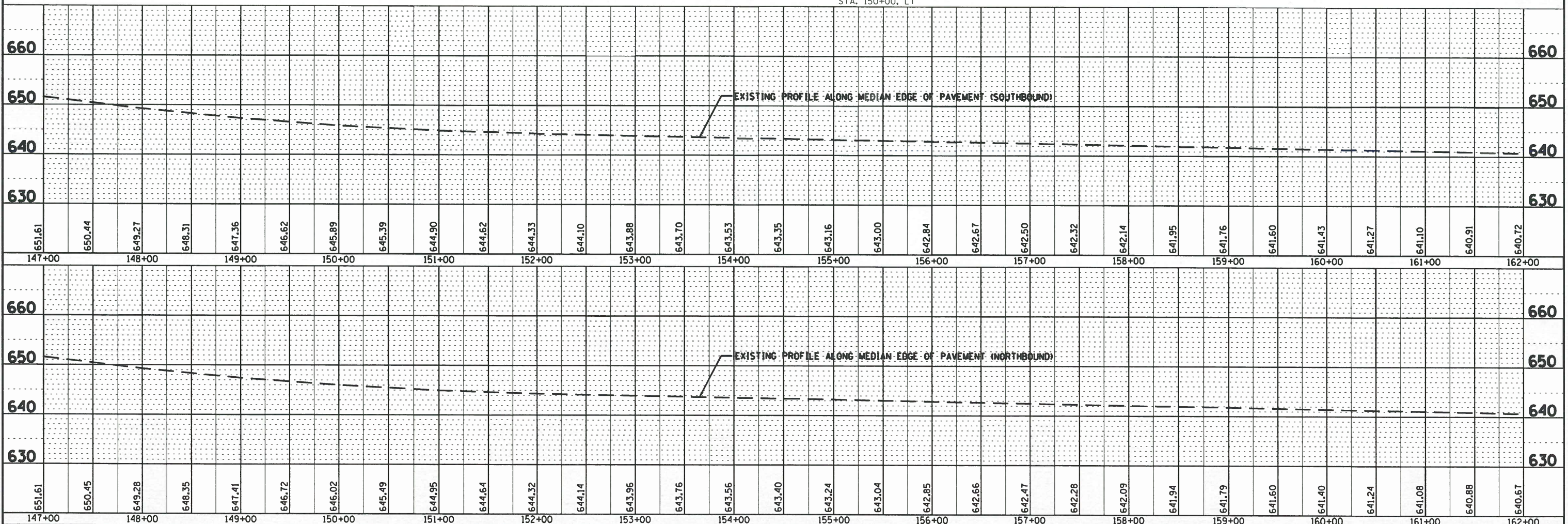


PLAN
 DESIGNED BY: CHAMBLIN & ASSOCIATES
 DATE: 08/14
 CHECKED BY: JAC
 ALIGNED, CHECKED, PLOTTED: 08/14
 NO. 0366B64-SHT-PLNPRF-155-147-162.DGN

PROFILE
 DESIGNED BY: CHAMBLIN & ASSOCIATES
 DATE: 08/14
 CHECKED BY: JAC
 GRADES CHECKED, PLOTTED: 08/14
 NO. 0366B64-SHT-PLNPRF-155-147-162.DGN



BENCHMARK: 79
 CHISELED "□" ON CONCRETE
 END SECTION WEST SIDE OF I-55
 SOUTHBOUND & NORTH OF 1ST
 OVERPASS NORTH OF IL 116.
 ELEVATION = 638.73
 STA. 150+00, LT



| | | | | | | | | | | | | |
|--|-----------------|------------|-----------------|---|--------------------------------|----------------|------------------------|-------------------|--------------|----------------|--------------------|---------------------------|
| FILE NAME : 0366B64-SHT-PLNPRF-155-147-162.DGN | USER NAME : --- | DESIGNED - | REVISD - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | F.A.I. RTE. 55 | SECTION (53-4.5)RS-1&I | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. | | |
| PLOT SCALE = 1" = 50' | DESIGNED - | REVISD - | SCALE: 1" = 50' | | | SHEET | OF | SHEETS | STA. 147+00 | TO STA. 162+00 | CONTRACT NO. 66B64 | ILLINOIS FED. AID PROJECT |
| PLOT DATE = 10/14 | CHECKED - | REVISD - | | | | | | | | | | |
| | DRAWN - | REVISD - | | | | | | | | | | |

BENCHMARK: 72
 CHISELED "□" ON TOP OF SIGN
 FOUNDATION WEST SIDE OF I-55
 SOUTHBOUND, SIGN "1 MILE EXIT 197"
 ELEVATION = 629.08
 STA. 179+89, LT

BENCHMARK: 70
 CHISELED "□" ON SOUTH END
 OF WINGWALL SOUTHBOUND
 BRIDGE OVER VERMILION RIVER
 ELEVATION = 637.41
 STA. 185+58, LT

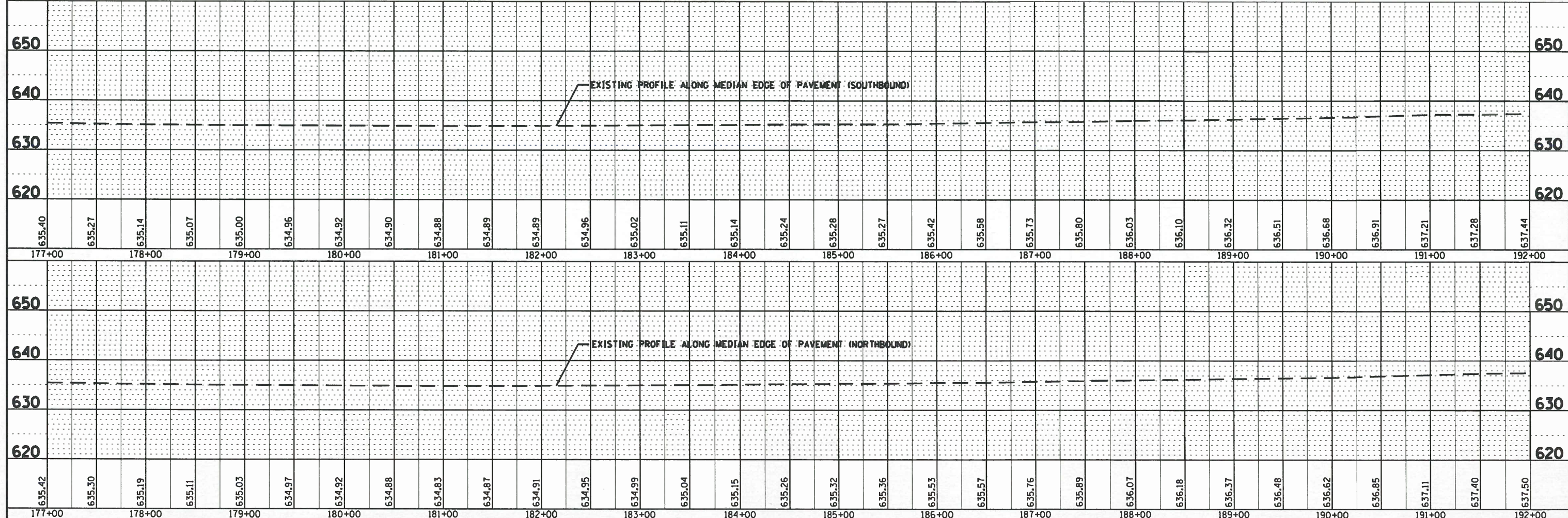
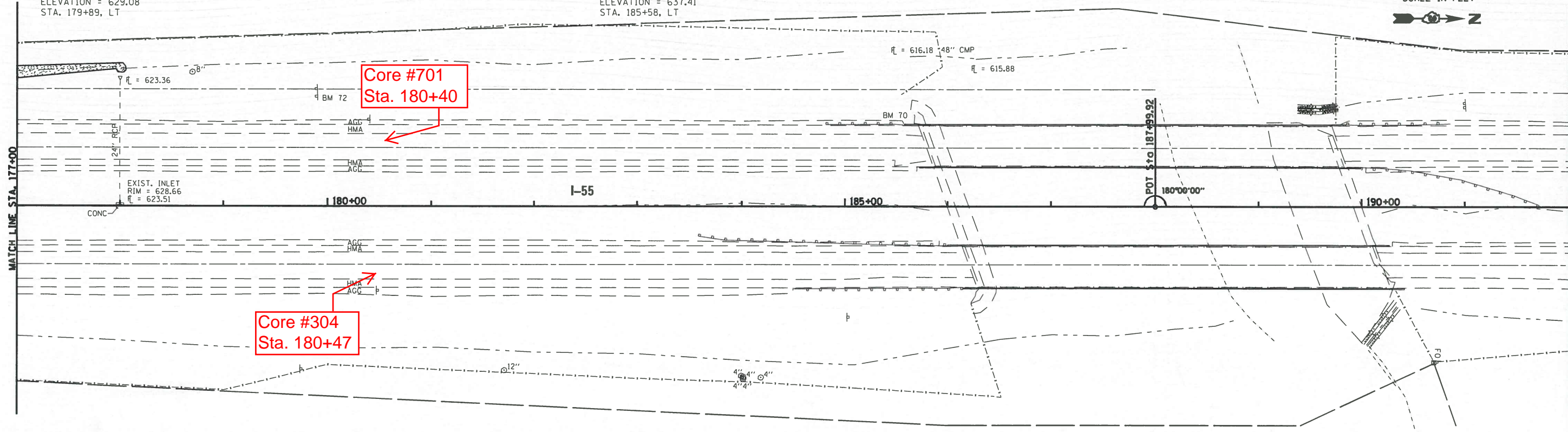
50 0 50 100 150 200 250

SCALE IN FEET



| | | | |
|------|--------------------|----------------------|-------|
| PLAN | SURVEYED | BY | DATE |
| | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | CHECKED | LAG | 09/14 |
| | RT. OF WAY CHECKED | AKC | 09/14 |
| | NO. _____ | DABEBER-TOPOGR | 09/14 |
| | | | |

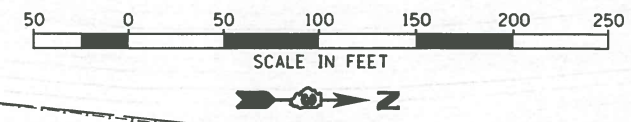
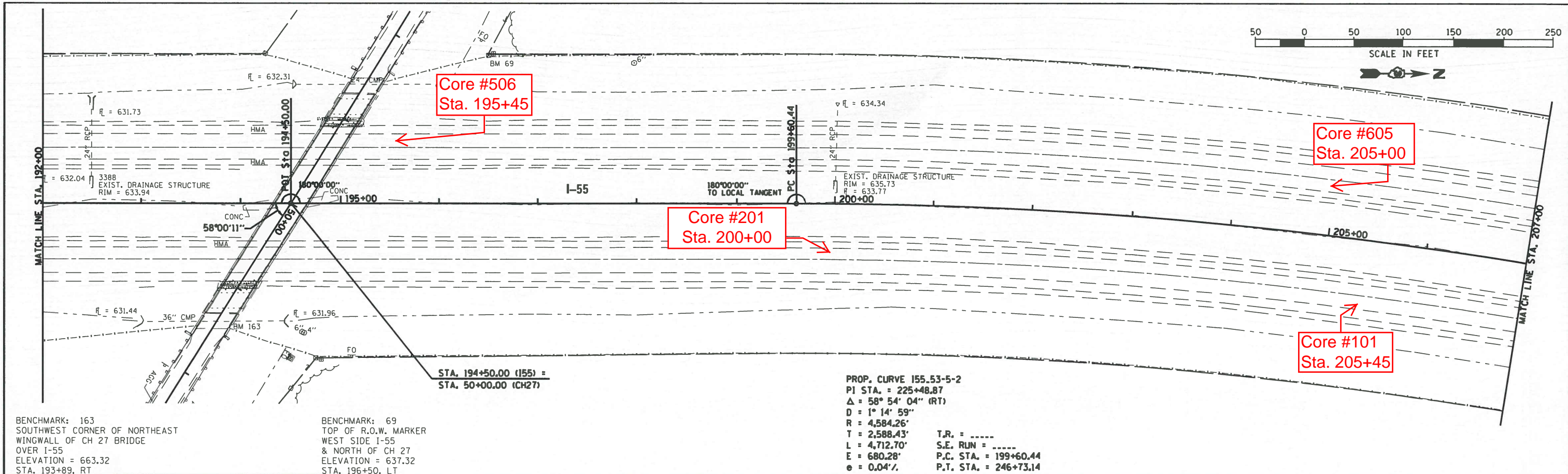
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|---------|-----------|----------------------|-------|
| PROFILE | SURVEYED | BY | DATE |
| | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | CHECKED | LAG | 09/14 |
| | NO. _____ | | |
| | | | |



| | | | | | | | | | | | |
|------------------------------------|-----------------|------------|-----------|---|---|---------------------------|----------------|------------|--------------|-----------|--|
| FILE NAME = | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 SCALE: 1" = 50' SHEET OF SHEETS STA. 177+00 TO STA. 192+00 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| D366B64-SHT-PLNPRF-155-177-192.DGN | | CHECKED - | REVISED - | | | 55 | (53-4,5)RS-1&1 | LIVINGSTON | | | |
| | | DRAWN - | REVISED - | | | CONTRACT NO. 66B64 | | | | | |
| | | CHECKED - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

PLAN
 SURVEYED BY CHAMLIN & ASSOCIATES DATE 08/14
 PLOTTED BY LAG 08/14
 NOTE BOOK NO. 000000
 ALIGNED CHECKED BY D. SEIBERT
 CADD FILE NAME 08/14

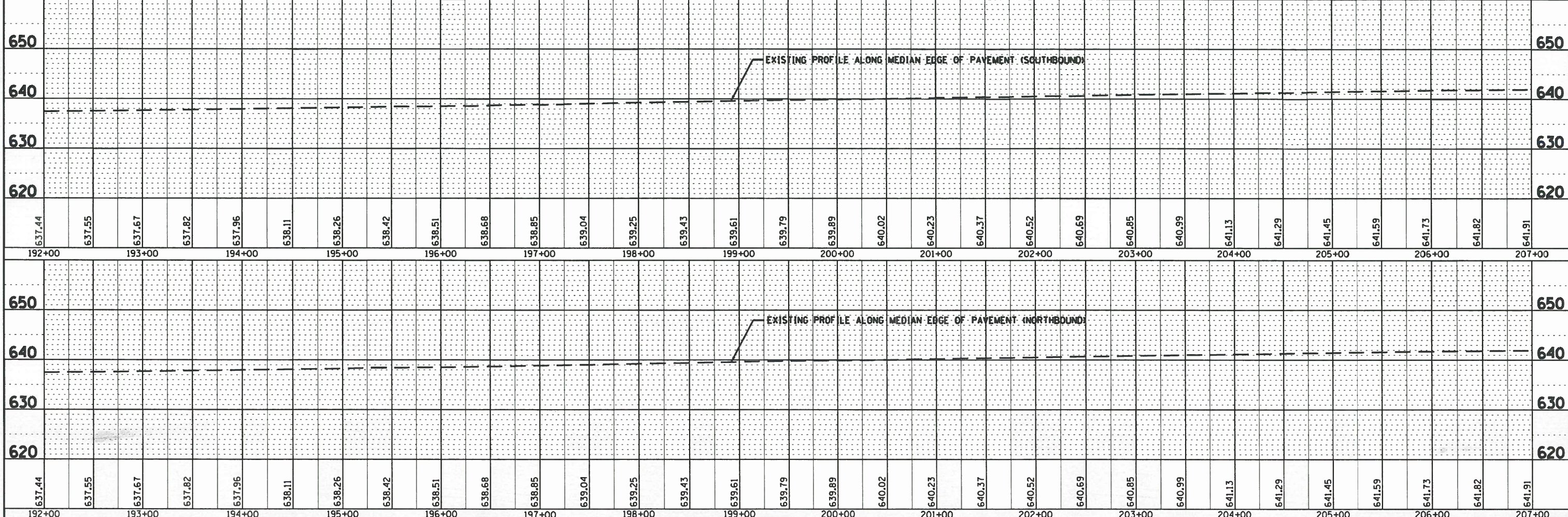
PROFILE
 SURVEYED BY CHAMLIN & ASSOCIATES DATE 08/14
 PLOTTED BY LAG 08/14
 NOTE BOOK NO. 000000
 GRADES CHECKED BY D. SEIBERT
 STRUCTURE NOTATION CHKD



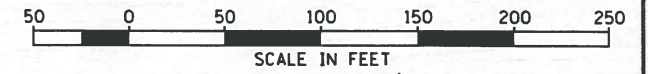
BENCHMARK: 163
 SOUTHWEST CORNER OF NORTHEAST
 WINGWALL OF CH 27 BRIDGE
 OVER I-55
 ELEVATION = 663.32
 STA. 193+89, RT

BENCHMARK: 69
 TOP OF R.O.W. MARKER
 WEST SIDE I-55
 & NORTH OF CH 27
 ELEVATION = 637.32
 STA. 196+50, LT

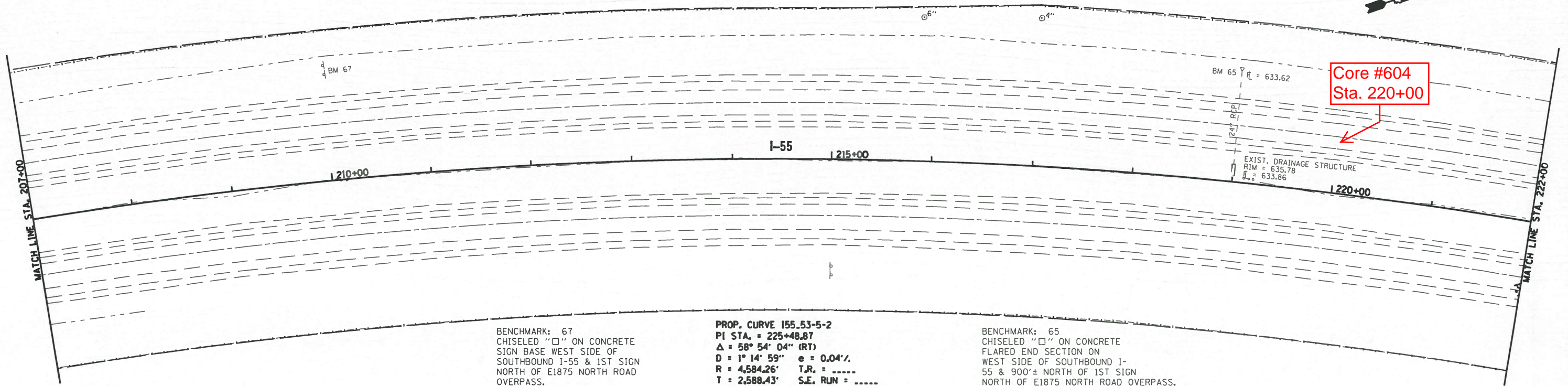
PROP. CURVE 155.53-5-2
 PI STA. = 225+48.87
 Δ = 58° 54' 04" (RT)
 D = 1° 14' 59"
 R = 4,584.26'
 T = 2,588.43' T.R. = -----
 L = 4,712.70' S.E. RUN = -----
 E = 680.28' P.C. STA. = 199+60.44
 e = 0.04% P.T. STA. = 246+73.14



| | | | | | | | | | | | | |
|--|-----------------|------------|---------------------------|---|-------------------------|-----------------|--|----------------|------------------------|-------------------|--------------|-----------|
| FILE NAME = 0366864-SHT-PLNPRF-I55-192-207.DGN | USER NAME = --- | DESIGNED - | REVISD - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | SCALE: 1" = 50' | SHEET OF SHEETS STA. 192+00 TO STA. 207+00 | F.A.I. RTE. 55 | SECTION (53-4.5)RS-1&1 | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. |
| PLOT SCALE = 1" = 50' | DESIGNED - | REVISD - | CONTRACT NO. 66B64 | | | | | | | | | |
| PLOT DATE = 10/14 | CHECKED - | REVISD - | ILLINOIS FED. AID PROJECT | | | | | | | | | |
| | DRAWN - | REVISD - | | | | | | | | | | |



| | | |
|------|----------------------|-------|
| PLAN | DESIGNED BY | DATE |
| | CHAMLIN & ASSOCIATES | 03/14 |
| | ALIGNED CHECKED | 03/14 |
| | NOTE BOOK | 03/14 |
| | NO. | 03/14 |

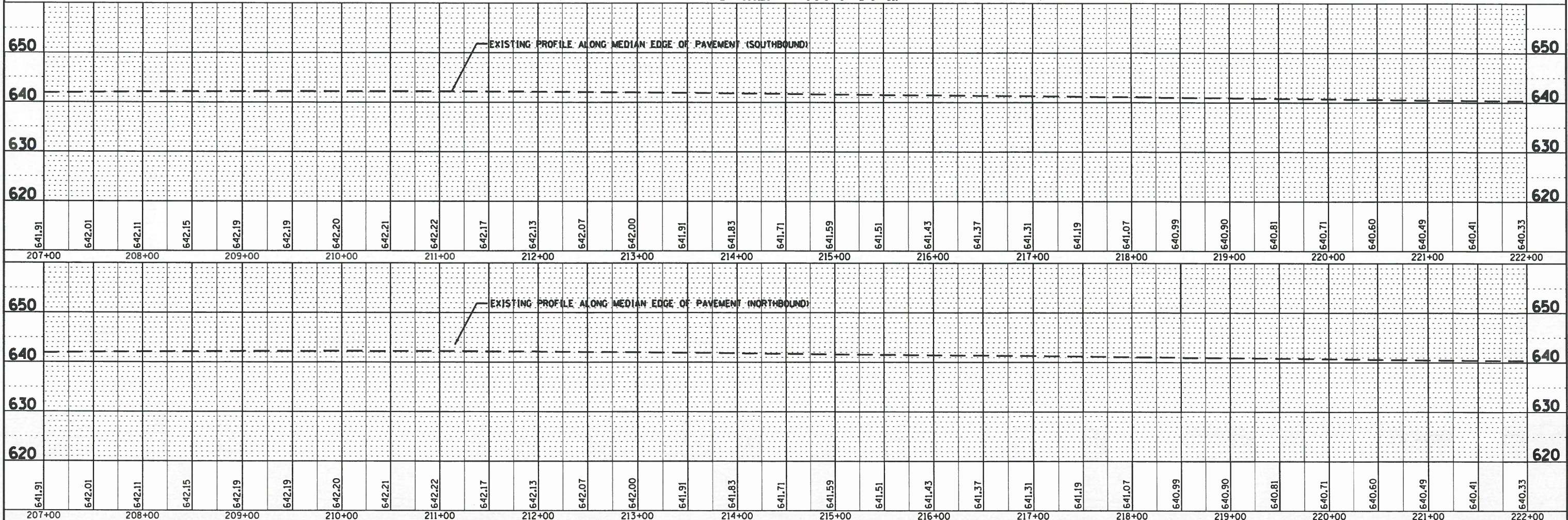


BENCHMARK: 67
 CHISELED "□" ON CONCRETE
 SIGN BASE WEST SIDE OF
 SOUTHBOUND I-55 & 1ST SIGN
 NORTH OF E1875 NORTH ROAD
 OVERPASS.
 ELEVATION = 637.14
 STA. 210+01, LT

PROP. CURVE I55.53-5-2
 PI STA. = 225+48.87
 Δ = 58° 54' 04" (RT)
 D = 1° 14' 59" e = 0.04%
 R = 4,584.26' T.R. = -----
 T = 2,588.43' S.E. RUN = -----
 L = 4,712.70' P.C. STA. = 199+60.44
 E = 680.28' P.T. STA. = 246+73.14

BENCHMARK: 65
 CHISELED "□" ON CONCRETE
 FLARED END SECTION ON
 WEST SIDE OF SOUTHBOUND I-
 55 & 900± NORTH OF 1ST SIGN
 NORTH OF E1875 NORTH ROAD OVERPASS.
 ELEVATION = 635.84
 STA. 218+99, LT

| | | |
|---------|----------------------|-------|
| PROFILE | DESIGNED BY | DATE |
| | CHAMLIN & ASSOCIATES | 03/14 |
| | GRADES CHECKED | 03/14 |
| | NOTE BOOK | 03/14 |
| | NO. | 03/14 |



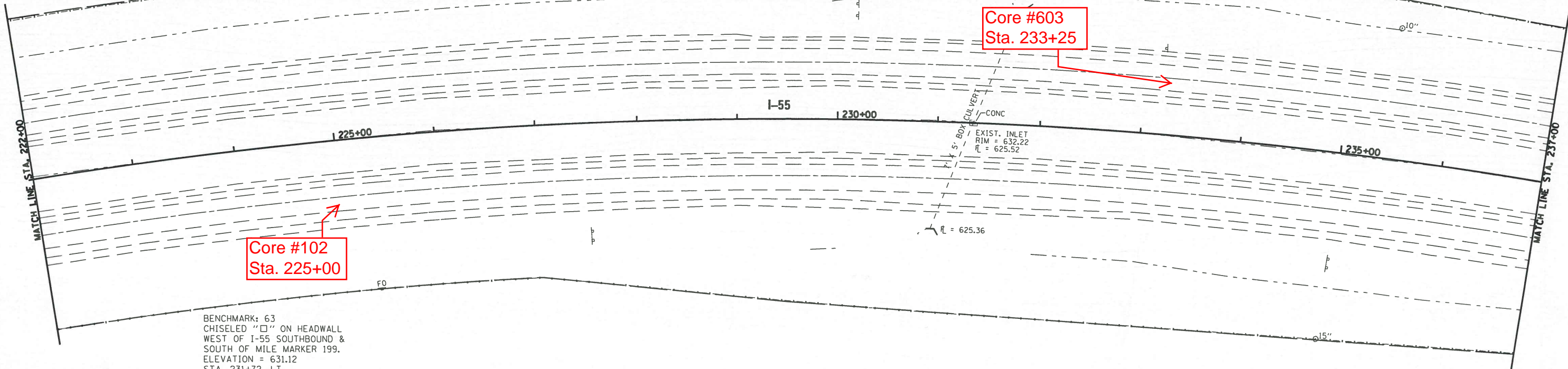
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| FILE NAME = 0366864-SHT-PLNPRF-I55-207-222.DGN | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | | | F.A.I. RTE. 55 | SECTION (53-4,5)RS-1&1 | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. |
| | | CHECKED - | REVISED - | | SCALE: 1" = 50' | | | SHEET | OF | SHEETS | STA. 207+00 | TO STA. 222+00 |
| | | DRAWN - | REVISED - | | CONTRACT NO. 66B64 | | | | | | | |
| | | CHECKED - | REVISED - | | ILLINOIS FED. AID PROJECT | | | | | | | |

PROP. CURVE 155.53-5-2
 PI STA. = 225+48.87
 $\Delta = 58^\circ 54' 04''$ (RT)
 $D = 1^\circ 14' 59''$ $e = 0.04\%$
 $R = 4,584.26'$ T.R. = -----
 $T = 2,588.43'$ S.E. RUN = -----
 $L = 4,712.70'$ P.C. STA. = 199+60.44
 $E = 680.28'$ P.T. STA. = 246+73.14



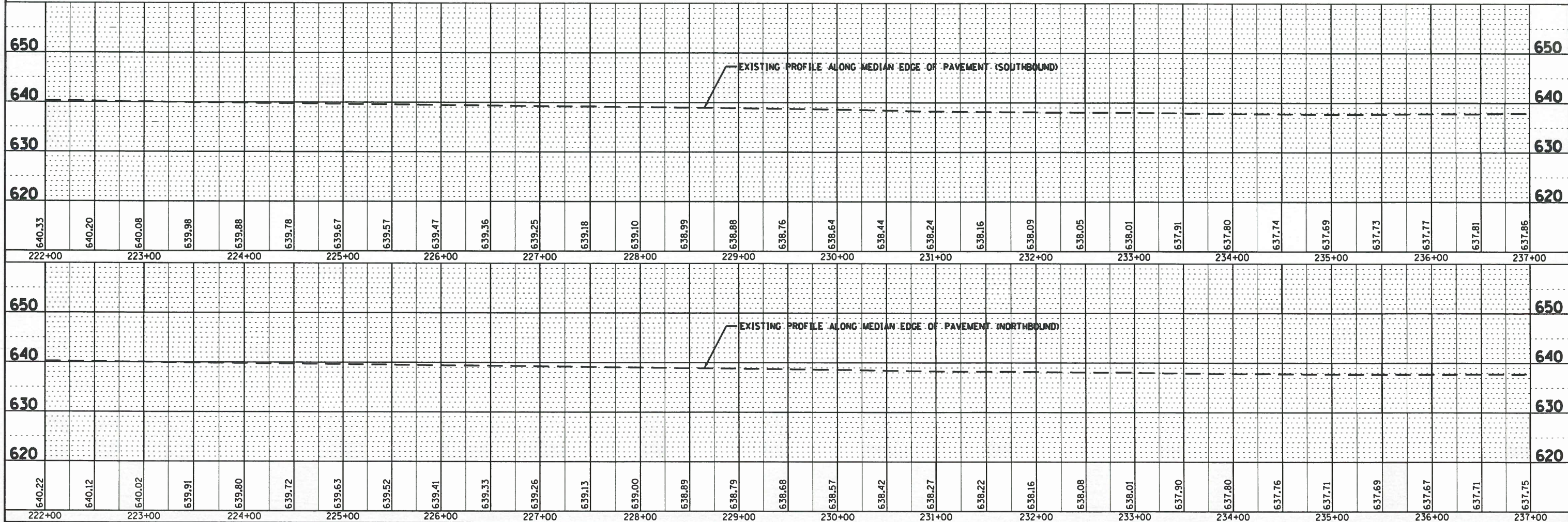
SCALE IN FEET

| | | | |
|------|----------------------|----------------------|-------|
| PLAN | SURVEYED | BY | DATE |
| NO. | CHAMLIN & ASSOCIATES | CHAMLIN & ASSOCIATES | 09/14 |
| | NOTE BOOK | LAG | 09/14 |
| | NO. OF SHEETS | NO. | 09/14 |
| | RT. OF WAY CHECKED | NO. | 09/14 |
| | DATE FILE NAME | NO. | 09/14 |



BENCHMARK: 63
 CHISELED "□" ON HEADWALL
 WEST OF I-55 SOUTHBOUND &
 SOUTH OF MILE MARKER 199.
 ELEVATION = 631.12
 STA. 231+72, LT

| | | | |
|---------|----------------------|----------------------|-------|
| PROFILE | SURVEYED | BY | DATE |
| NO. | CHAMLIN & ASSOCIATES | CHAMLIN & ASSOCIATES | 09/14 |
| | NOTE BOOK | LAG | 09/14 |
| | NO. OF SHEETS | NO. | 09/14 |
| | RT. OF WAY CHECKED | NO. | 09/14 |
| | DATE FILE NAME | NO. | 09/14 |



| | | | | | | | | | | | |
|------------------------------------|-------------|------------|-----------|---|--------------------------------|---------------------------|----------------|------------|--------------|-----------|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| D366B64-SHT-PLNPRF-155-222-237.DGN | | CHECKED - | REVISED - | | | 55 | (53-4.5)RS-1&1 | LIVINGSTON | | | |
| PLOT SCALE = 1" = 50' | | DRAWN - | REVISED - | | | CONTRACT NO. 66B64 | | | | | |
| PLOT DATE = 10/14 | | CHECKED - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

PROP. CURVE 155.53-5-2
 PI STA. = 225+48.87
 $\Delta = 58^\circ 54' 04''$ (RT)
 $D = 1^\circ 14' 59''$
 $R = 4,584.26'$
 $T = 2,588.43'$
 $L = 4,712.70'$
 $E = 680.28'$
 $\epsilon = 0.04\%$

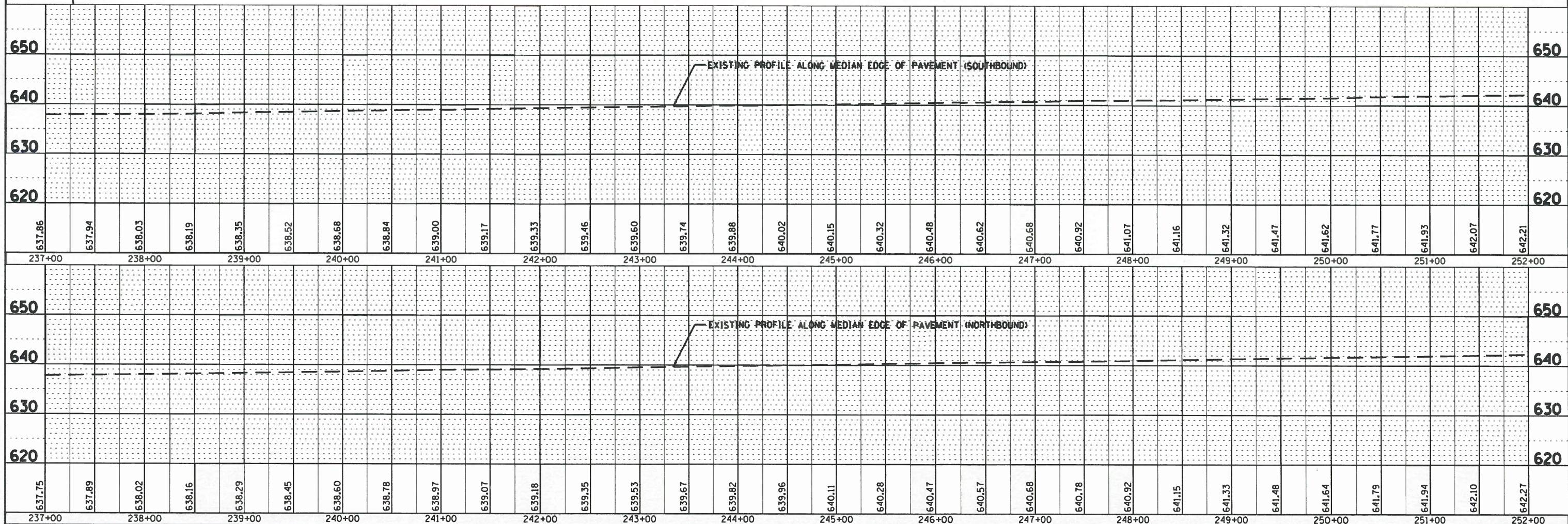
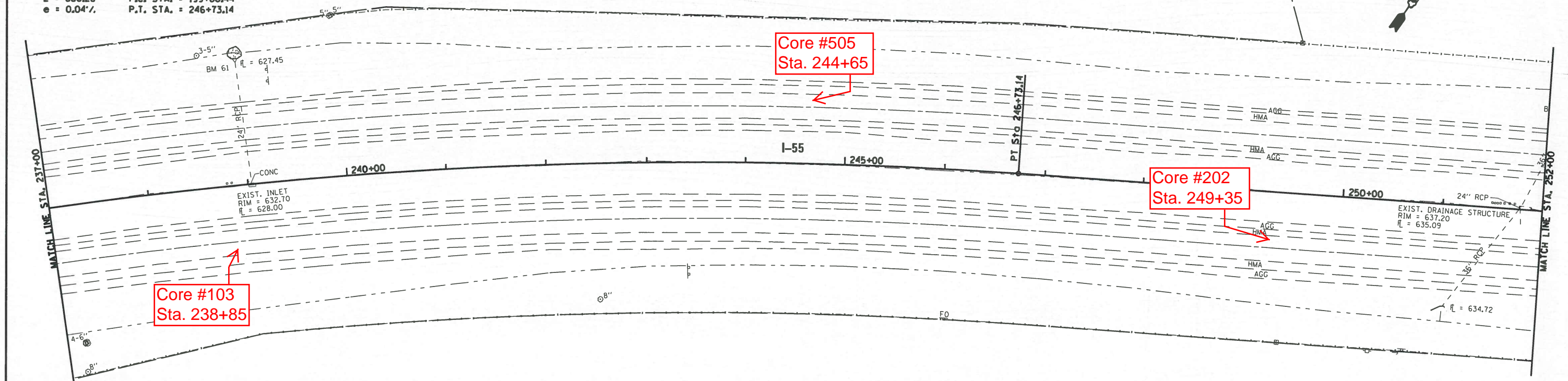
T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 199+60.44
 P.T. STA. = 246+73.14

BENCHMARK: 61
 CHISELED "□" ON CONCRETE
 FLARED END SECTION WEST
 OF SOUTHBOUND I-55 & NORTH
 OF MILE MARKER 199.
 ELEVATION = 629.74
 STA. 238+99, LT

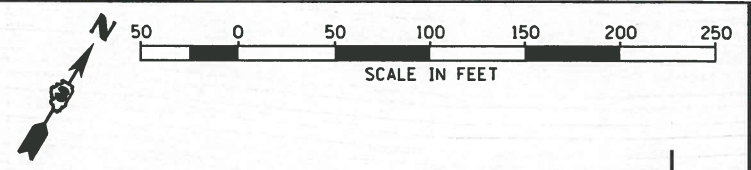


| | |
|-------|----------------------|
| DATE | BY |
| 08/14 | CHAMLIN & ASSOCIATES |
| 08/14 | LAC |
| 08/14 | CHK |
| 08/14 | APP |
| 08/14 | DES |
| 08/14 | CON |
| 08/14 | PRJ |
| 08/14 | NO. |

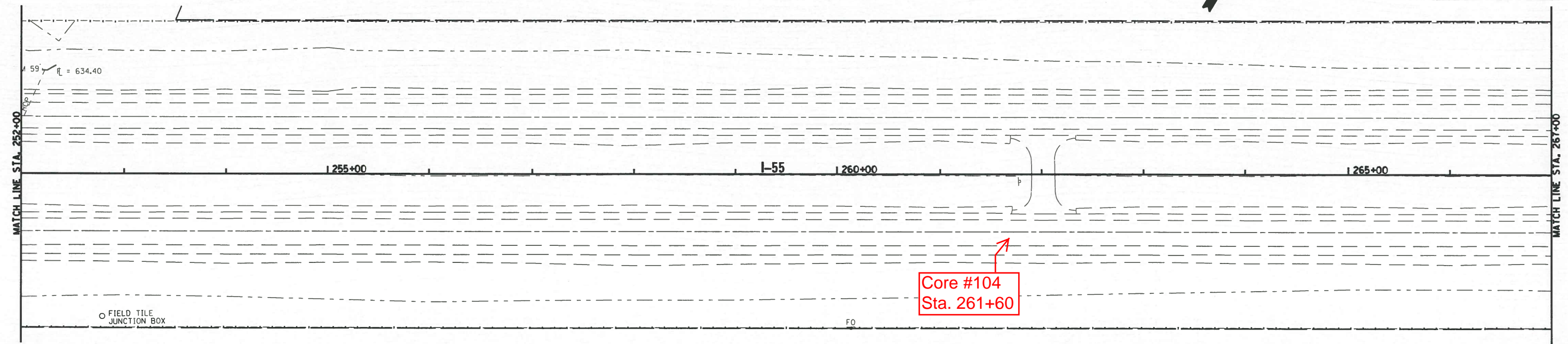
| | |
|-------|----------------------|
| DATE | BY |
| 08/14 | CHAMLIN & ASSOCIATES |
| 08/14 | LAC |
| 08/14 | CHK |
| 08/14 | APP |
| 08/14 | DES |
| 08/14 | CON |
| 08/14 | PRJ |
| 08/14 | NO. |



| | | | | | | | | | | | | | |
|-------------------------------------|-------------|------------|-----------|---|-------------------------|-----------------|-----------------|----------------------------|---------------------------|----------------|------------|--------------|-----------|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | SCALE: 1" = 50' | SHEET OF SHEETS | STA. 237+00 TO STA. 252+00 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| D366664-SHT-PLN-PRF-155-237-252.DGN | | CHECKED - | REVISED - | | | | | | 55 | (53-4,5)RS-1&1 | LIVINGSTON | | |
| PLOT SCALE = 1" = 50' | | DRAWN - | REVISED - | | | | | | CONTRACT NO. 66B64 | | | | |
| PLOT DATE = 10/14 | | CHECKED - | REVISED - | | | | | | ILLINOIS FED. AID PROJECT | | | | |

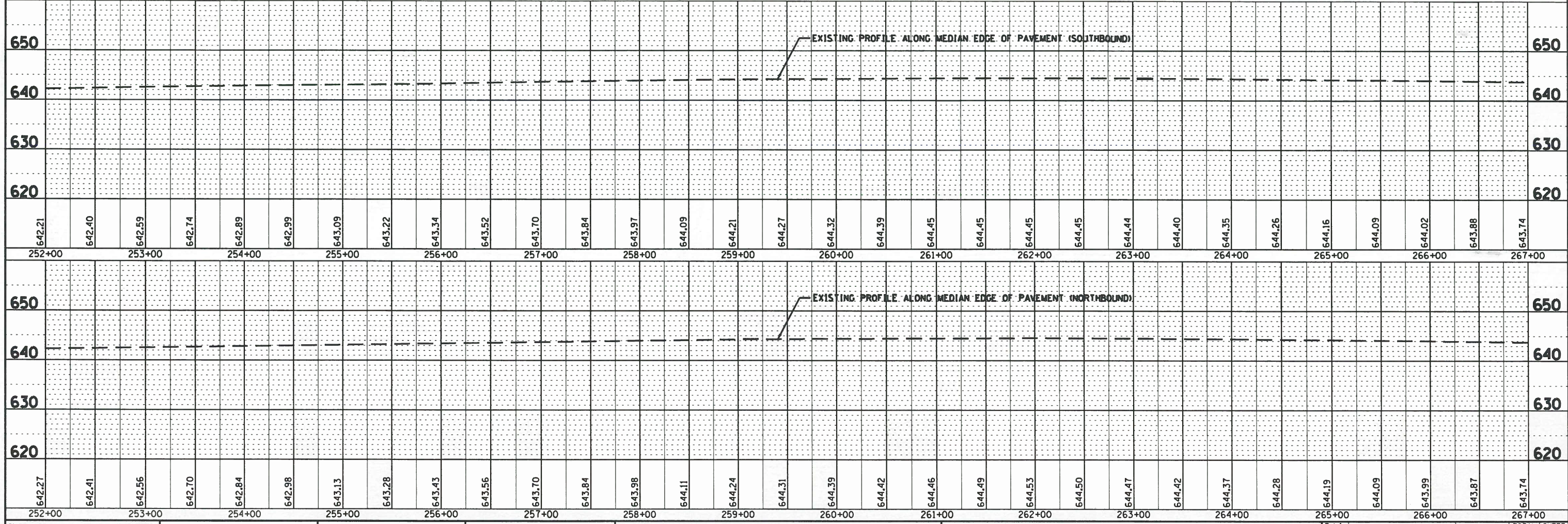


PLAN
 SURVEYED BY CHAMLIN & ASSOCIATES
 DATE 03/14
 PLOTTED BY LAG
 CHECKED BY LAG
 DATE 03/14
 NO. OF WAY CHECKED
 DATE 03/14
 CADD FILE NAME
 NO. D366864-TOPO.DGN



BENCHMARK: 59
 CHISELED "□" ON
 HEADWALL ON WEST SIDE
 OF SOUTHBOUND I-55.
 ELEVATION = 638.74
 STA. 252+78, LT

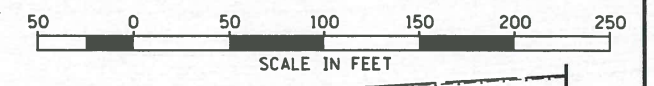
PROFILE
 SURVEYED BY CHAMLIN & ASSOCIATES
 DATE 03/14
 PLOTTED BY LAG
 CHECKED BY LAG
 DATE 03/14
 NO. OF WAY CHECKED
 DATE 03/14
 CADD FILE NAME
 NO. D366864-TOPO.DGN



| | | | | | | | | |
|--|-----------------|------------|-----------|---|-------------------------|-----------------|---|----------------------------|
| FILE NAME = 0366864-SHT-PLNPRF-155-252-267.DGN | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | | F.A.I. RTE. 55 SECTION 63-4.5)RS-1&1 COUNTY LIVINGSTON CONTRACT NO. 66B64 ILLINOIS FED. AID PROJECT | |
| | | CHECKED - | REVISED - | | SCALE: 1" = 50' | SHEET OF SHEETS | | STA. 252+00 TO STA. 267+00 |
| | | DRAWN - | REVISED - | | | | | |
| | | CHECKED - | REVISED - | | | | | |

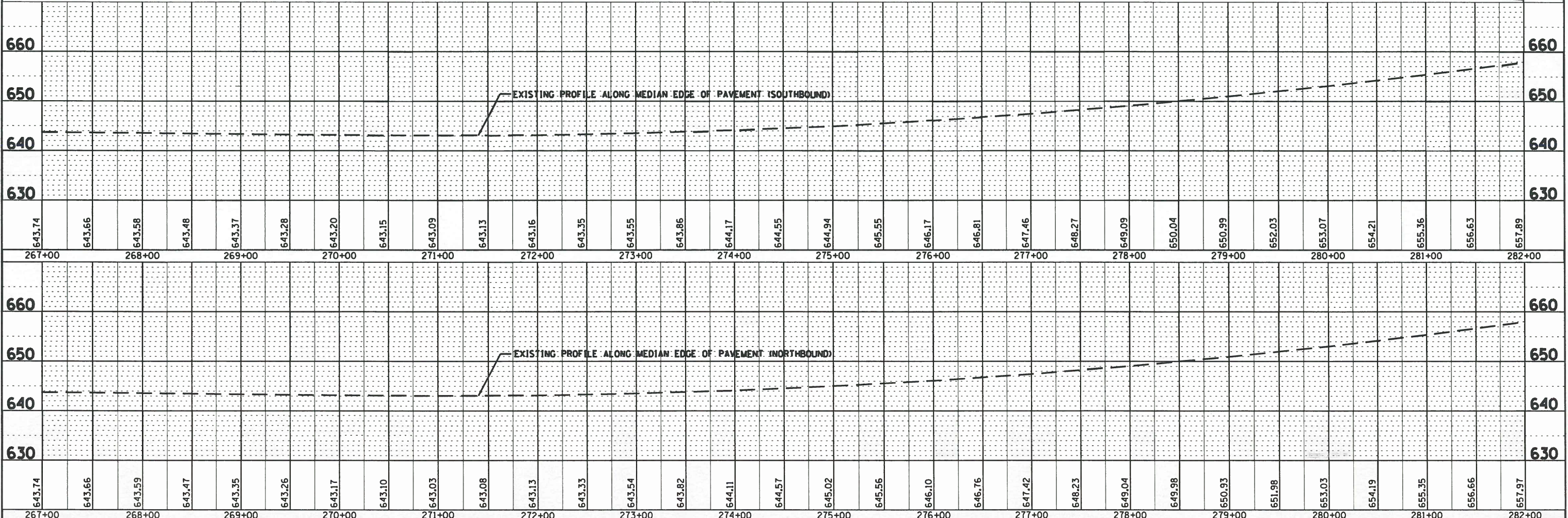
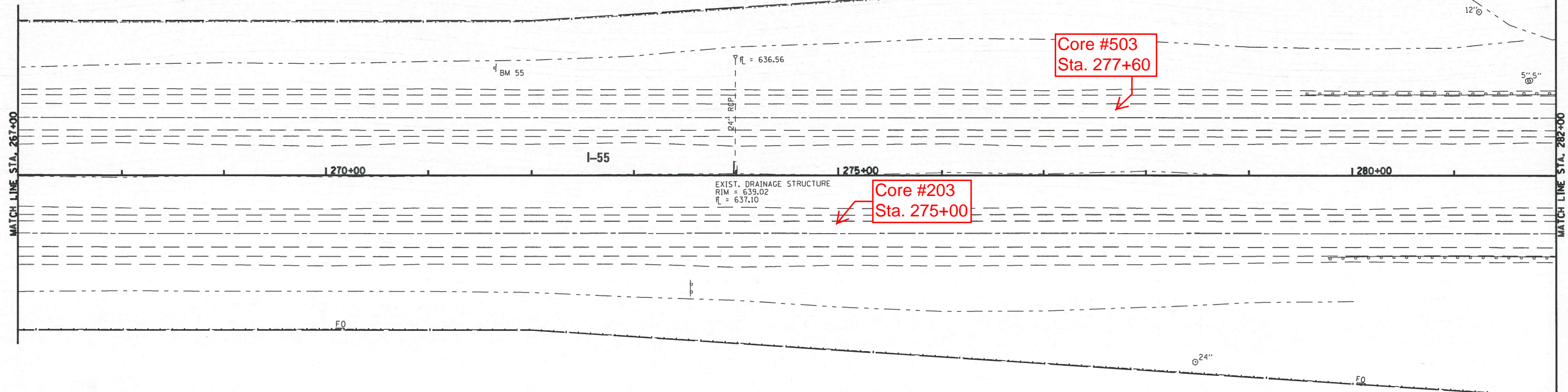
BENCHMARK: 55
 CHISELED "X" ON SIGN
 FOUNDATION WEST SIDE
 SOUTHBOUND I-55
 ELEVATION = 638.15
 STA. 271+65, LT

BENCHMARK: 54
 TOP OF SOUTHEAST BOLT OF
 SIGN, 1ST SIGN SOUTH OF
 GUARDRAIL OF WEST SIDE OF
 SOUTH I-55, "SPEED LIMIT"
 SIGN SOUTH OF MILE MARKER 200.
 ELEVATION = 642.77
 STA. 277+72, LT



| | | |
|-----------------------|-----------|------|
| PLAN | SUBMITTED | DATE |
| NOTE BOOK | NO. | |
| BY | DATE | |
| CHAMBLIN & ASSOCIATES | 05/14 | |
| LAB | 05/14 | |
| DESIGNED | DATE | |
| CHECKED | DATE | |
| DRAWN | DATE | |
| REVISIONS | DATE | |

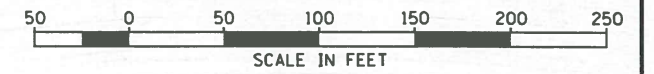
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| PROFILE | SUBMITTED | DATE |
| NOTE BOOK | NO. | |
| BY | DATE | |
| CHAMBLIN & ASSOCIATES | 05/14 | |
| LAB | 05/14 | |
| DESIGNED | DATE | |
| CHECKED | DATE | |
| DRAWN | DATE | |
| REVISIONS | DATE | |



| | | | | | | | | |
|------------------------------------|-------------|------------|-------------|---|--------------------------------|-----------------|--|----------------------------|
| FILE NAME = | USER NAME = | DESIGNED - | REVISIONS - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | | F.A.I. RTE. 55 SECTION (53-4.5)RS-1&1 COUNTY LIVINGSTON CONTRACT NO. 66B64 ILLINOIS FED. AID PROJECT | |
| D366864-SHT-PLNPRF-155-267-282.DGN | | CHECKED - | REVISIONS - | | SCALE: 1" = 50' | SHEET OF SHEETS | | STA. 267+00 TO STA. 282+00 |
| | | DRAWN - | REVISIONS - | | | | | |
| | | CHECKED - | REVISIONS - | | | | | |

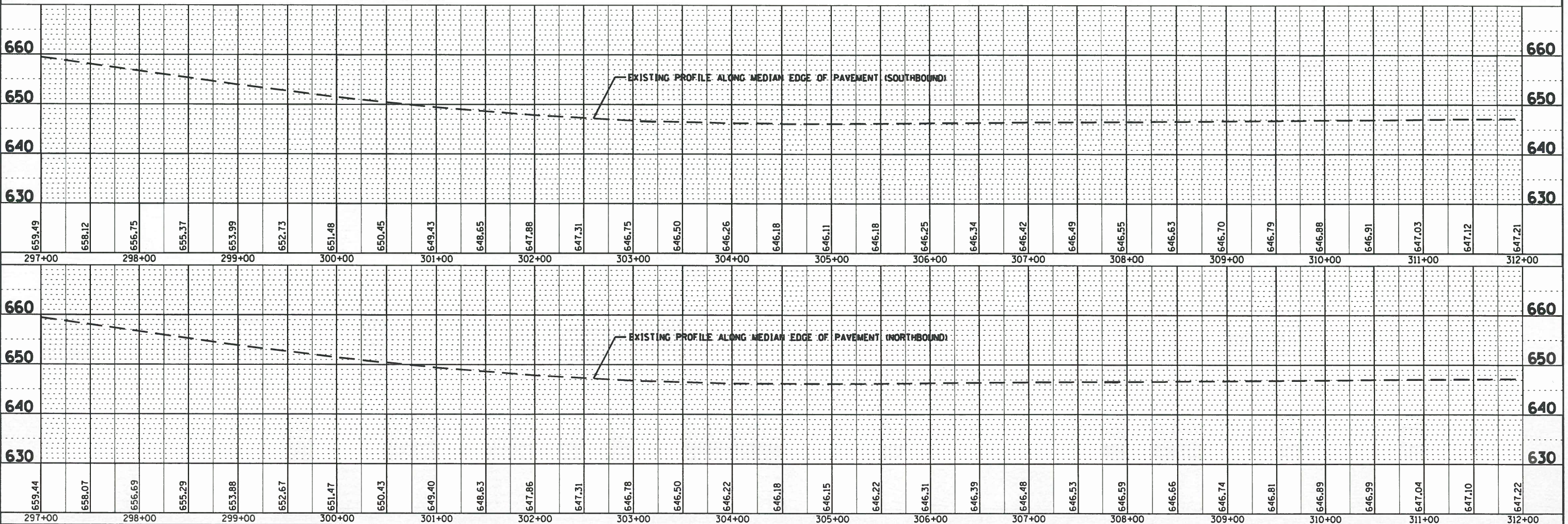
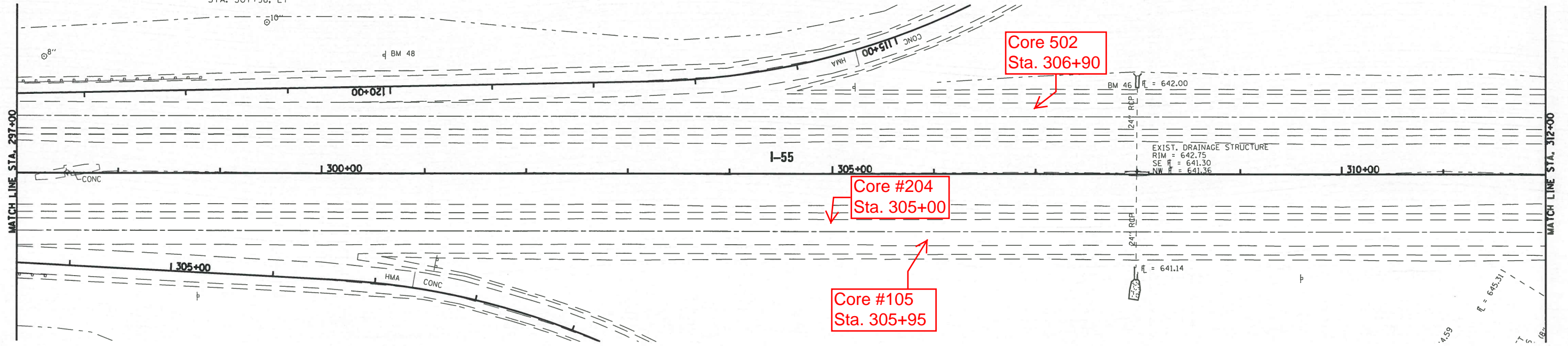
BENCHMARK: 48
 SURVEY NAIL ON EAST SIDE OF
 SIGN POST ON WEST SIDE OF
 SOUTHBOUND I-55 NEAR ON
 RAMP FROM IL 23.
 ELEVATION = 647.26
 STA. 300+61, LT

BENCHMARK: 46
 CHISELED "□" ON SOUTHEAST
 CONCRETE WALL OF CATCH
 BASIN WEST SIDE OF
 SOUTHBOUND I-55 AND
 SLIGHTLY NORTHEAST OF ON
 RAMP FROM IL23, IN INFIELD.
 ELEVATION = 644.60
 STA. 307+98, LT



| | | | |
|------|-----------------------------|----------------------|-------|
| PLAN | SURVEYED | BY | DATE |
| NO. | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | GRADES CHECKED | LAC | 09/14 |
| | STRUCTURE NOTATIONS CHECKED | NO | 09/14 |
| | CADD FILE NAME | 0366864-1050.DGN | 09/14 |

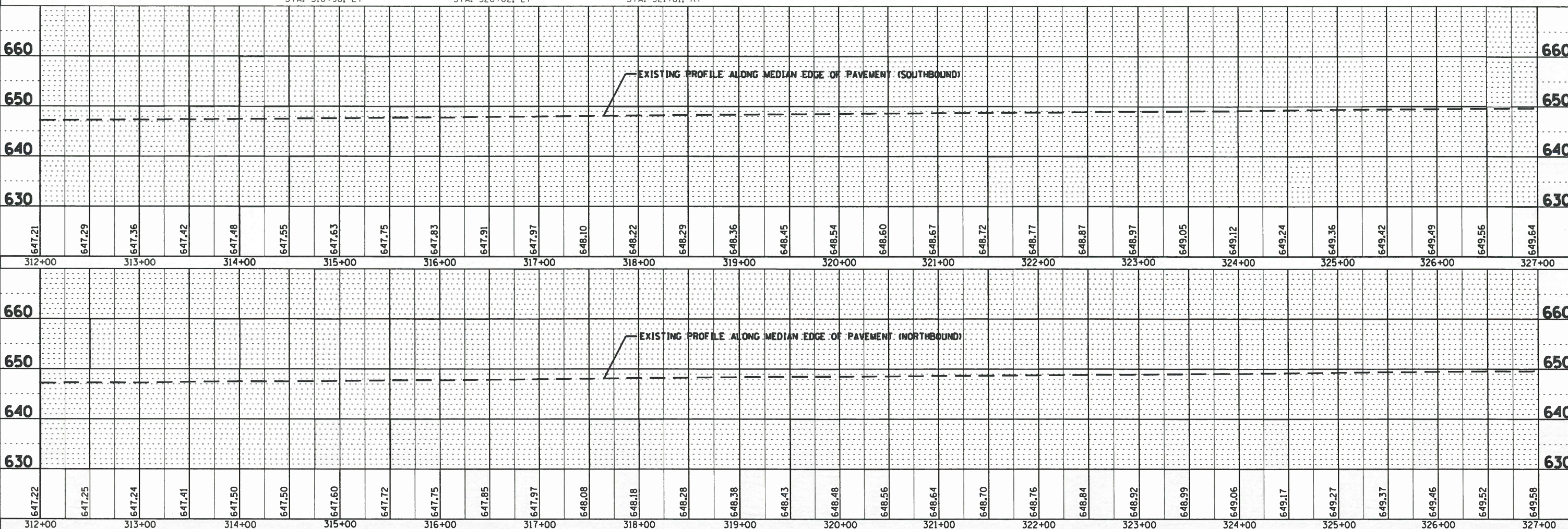
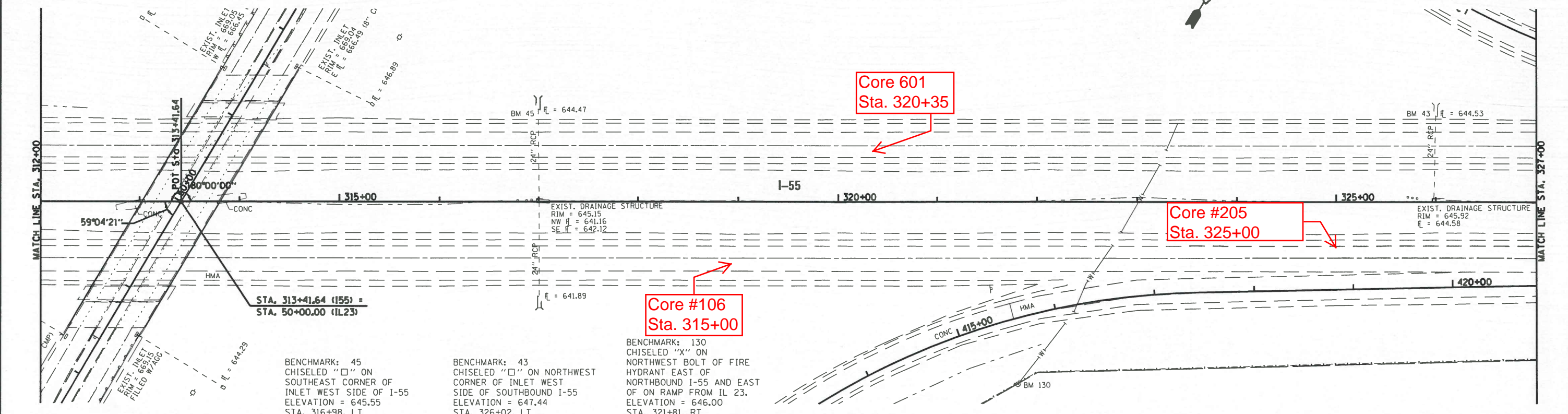
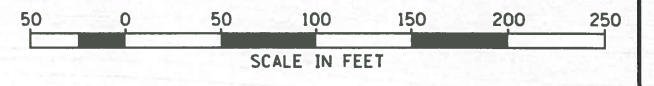
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| PROFILE | SURVEYED | BY | DATE |
| NO. | PLOTTED | CHAMLIN & ASSOCIATES | 09/14 |
| | GRADES CHECKED | LAC | 09/14 |
| | STRUCTURE NOTATIONS CHECKED | NO | 09/14 |



| | | | | | | | | | | | |
|-------------------------------------|-------------|------------|-----------|---|--|---------------------------|----------------|------------|--------------|-----------|--|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 SCALE: 1" = 50' SHEET OF SHEETS STA. 297+00 TO STA. 312+00 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| D366864-SHT-PLANPRF-I55-297-312.DGN | | CHECKED - | REVISED - | | | 55 | (53-4,5IRS-1&I | LIVINGSTON | | | |
| PLOT SCALE = 1" = 50' | | DRAWN - | REVISED - | | | CONTRACT NO. 66864 | | | | | |
| PLOT DATE = 10/14 | | CHECKED - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

PLAN
 SURVEYED BY CHAMLIN & ASSOCIATES 08/14
 PLOTTED BY LAG 08/14
 CHECKED BY LAG 08/14
 DRAWING NO. 0366664-SHT-PLNPRF-155-312-327.DGN
 DATE 08/14
 NO. 08/14
 DIBERBER, TOPPOKER

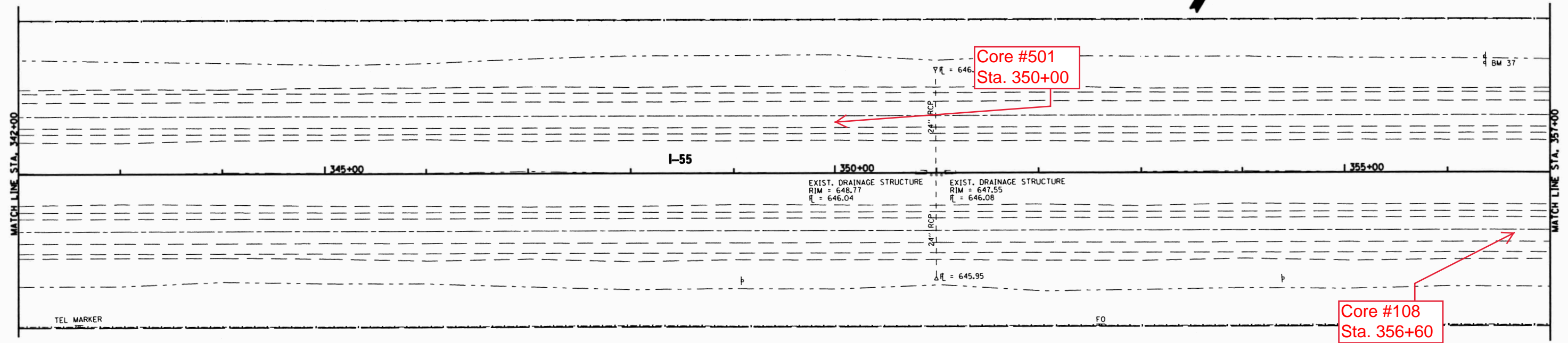
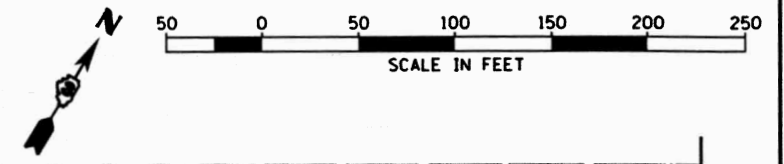
PROFILE
 SURVEYED BY CHAMLIN & ASSOCIATES 08/14
 PLOTTED BY LAG 08/14
 CHECKED BY LAG 08/14
 DRAWING NO. 0366664-SHT-PLNPRF-155-312-327.DGN
 DATE 08/14
 NO. 08/14
 DIBERBER, TOPPOKER



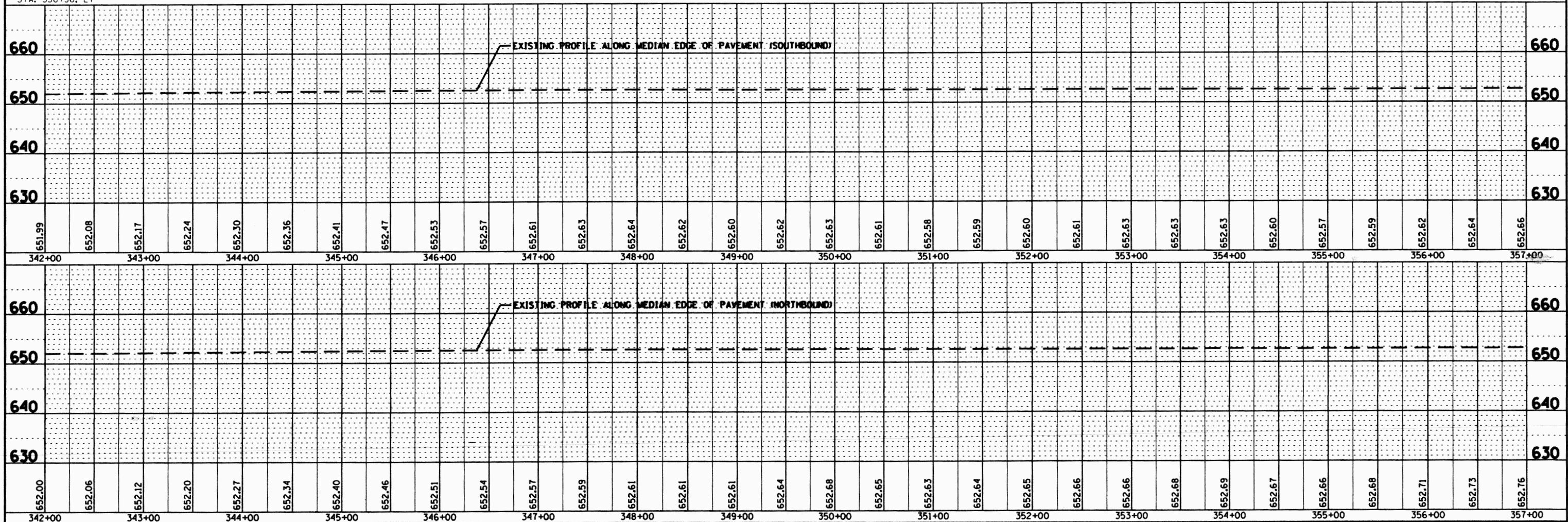
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|--|-----------------|------------|-----------------|---|--------------------------------|-----------------|----------------------------|--------------------|--------------|---------------------------|--|
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| PLOT SCALE = 1" = 50' | DRAWN - | REVISED - | SCALE: 1" = 50' | | | SHEET OF SHEETS | STA. 312+00 TO STA. 327+00 | CONTRACT NO. 66B64 | | ILLINOIS FED. AID PROJECT | |
| PLOT DATE = 10/14 | CHECKED - | REVISED - | | | | | | | | | |
| | | | | | | | | | | | |

| | |
|----------------------------|--|
| PLAN | DATE |
| SURVEYED | BY |
| PLOTTED | CHAMLIN & ASSOCIATES |
| GRADES CHECKED | DATE |
| STRUCTURE NOTATION CHECKED | 10/14 |
| FILE NAME | D:\66864\66864-SHT-PLANPRF-I55-342-357.DGN |
| NO. | |

| | |
|----------------------------|--|
| PROFILE | DATE |
| SURVEYED | BY |
| PLOTTED | CHAMLIN & ASSOCIATES |
| GRADES CHECKED | DATE |
| STRUCTURE NOTATION CHECKED | 10/14 |
| FILE NAME | D:\66864\66864-SHT-PLANPRF-I55-342-357.DGN |
| NO. | |



BENCHMARK: 37
 CHISELED "□" ON CONCRETE
 BASE, EAST LEG SIGN POST
 SOUTHBOUND I-55, "EXIT 201
 PONTIAC/STREATOR" SIGN.
 ELEVATION = 647.83
 STA. 356+36, LT



| | | | | | | | | | | | | |
|---|-----------------|------------|-----------|---|-------------------------|-----------------|------------------------|-------------------|--------------|-------------|----------------|--------------------|
| FILE NAME = 0366864-SHT-PLANPRF-I55-342-357.DGN | USER NAME = --- | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN AND PROFILE - I-55 | F.A.I. RTE. 55 | SECTION 053-4.5RS-18.1 | COUNTY LIVINGSTON | TOTAL SHEETS | SHEET NO. | | |
| PLOT SCALE = 1" = 50' | | CHECKED - | REVISED - | | | SCALE: 1" = 50' | SHEET | OF | SHEETS | STA. 342+00 | TO STA. 357+00 | CONTRACT NO. 66864 |
| PLOT DATE = 10/14 | | DRAWN - | REVISED - | | | | | | | | | |
| | | CHECKED - | REVISED - | | | | | | | | | |

APPENDIX

E



Illinois Department of Transportation

Memorandum

To: Ted Fultz **Attn:** Karen Pillion
From: Tom Magolan **By:** G. Bertolino
Subject: Traffic Data Request
Date: 7/7/2014

Study Area

Contract 66B64 **Marked Route:** I-55
From: South of Rt 116 **To:** _____
County: Livingston **City:** _____
construction year: 2017 **Job #:** P-93-025-14

Data Requirements (provide a map)

plan sheet cover: _____ intersection design study: _____
signal warrents: _____ 3P, 3R, & Smart: _____
multi year: _____ bridge: _____

traffic volume

turning movements

existing: x existing: _____
projected: x projected: _____

| YEAR | ADT | 30th Hr | DHV: | | | Vehicle % |
|------|-------|---------|------|-------------------|-------|-----------|
| 2013 | 22900 | 1718 | 8% | P.V. Count | 16334 | 71% |
| 2019 | 24262 | 1820 | | S.U. Count | 818 | 4% |
| 2030 | 26758 | 2007 | | M.U. Count | 5595 | 24% |
| 2039 | 28800 | 2160 | | | | |



Illinois Department of Transportation

Memorandum

To: Ted Fultz **Attn:** Karen Pillion

From: Tom Magolan **By:** G. Bertolino

Subject: Traffic Data Request

Date: 7/7/2014

Study Area

Contract 66B64 **Marked Route:** I-55

From: North of Rt 116 **To:** South of RT 23

County: Livingston **City:** _____

construction year: 2017 **Job #:** P-93-025-14

Data Requirements (provide a map)

plan sheet cover: _____ intersection design study: _____

signal warrents: _____ 3P, 3R, & Smart: _____

multi year: _____ bridge: _____

traffic volume

turning movements

existing: x

existing: _____

projected: x

projected: _____

| YEAR | ADT | 30th Hr | DHV: | | | Vehicle % |
|------|-------|---------|------|-------------------|-------|-----------|
| 2013 | 21675 | 1626 | 8% | P.V. Count | 15281 | 71% |
| 2019 | 22973 | 1723 | | S.U. Count | 808 | 4% |
| 2030 | 25353 | 1901 | | M.U. Count | 5560 | 26% |
| 2039 | 27300 | 2048 | | | | |

APPENDIX

F

PROJECT AND TRAFFIC INPUTS

(Enter Data in Gray Shaded Cells)

Route: **FAI 55 (I-55)**
 Section: **(53-5)RS-1&I**
 County: **LIVINGSTON**
 Location: **MM 195.00 TO MM 201.11**

Comments: **PRELIMINARY PAVEMENT DESIGN FOR ROADWAY GEOTECHNICAL REPORT**

Design Date: **02/18/2017** **CN**
 Modify Date:

| | | |
|----------|---------------|-------------|
| <-- BY | ADT | Year |
| Current: | 24,262 | 2019 |
| Future: | 28,800 | 2039 |

Facility Type: **Interstate or Freeway**

of Lanes = **2 or 3**
 Part of future 4 lanes or more ? **No**
 One Way Street ? **No**
 Road Class: **I**

Subgrade Support Rating (SSR): **Poor**
 Construction Year: **2018**
 Design Period (DP) = **20** years

| | Structural Design Traffic | | | % of ADT in Design Lane |
|----------------------|---------------------------|------------|----------------------|-------------------------|
| | Minimum ADT | Actual ADT | Actual %of Total ADT | |
| PV = | 0 | 18,939 | 72.0% | P = 50% |
| SU = | 500 | 1,052 | 4.0% | S = 50% |
| MU = | 1500 | 6,313 | 24.0% | M = 50% |
| Struct. Design ADT = | 26,304 (2028) | | | |

TRAFFIC FACTOR CALCULATION

FLEXIBLE PAVEMENT
 Cpv = 0.15
 Csu = **132.5**
 Cmu = **482.53**
 TF flexible (Actual) = 31.88 (Actual ADT)
 TF flexible (Min) = 7.90 (Min ADT Fig. 54-2.C)

RIGID PAVEMENT
 Cpv = 0.15
 Csu = **143.81**
 Cmu = **696.42**
 TF rigid (Actual) = 45.51 (Actual ADT)
 TF rigid (Min) = 11.17 (Min ADT Fig. 54-2.C)

NEW CONSTRUCTION / RECONSTRUCTION PAVEMENT DESIGN CALCULATIONS

| Full-Depth HMA Pavement | | JPC Pavement | |
|--|----------------------------------|----------------------------|--------------------------------|
| Use TF flexible = | 31.88 | Use TF rigid = | 45.51 |
| PG Grade Lower Binder Lifts = | PG 64-22 (Fig. 53-4.R) | Edge Support = | Tied Shoulder or C.&G. |
| HMA Mixture Temp. = | 76.5 deg. F (Fig. 54-5.C) | Rigid Pavt Thick. = | 11.00 in. (Fig. 54-4.E) |
| Design HMA Mixture Modulus (E _{HMA}) = | 650 ksi (Fig. 54-5.D) | | |
| Design HMA Strain (ε _{HMA}) = | 45 (Fig. 54-5.E) | | |
| Full Depth HMA Design Thickness = | 15.50 in. (Fig. 54-5.F) | CRCP Pavement | |
| Limiting Strain Criterion Thickness = | 15.25 in. (Fig. 54-5.I) | Use TF rigid = | 45.51 |
| Use Full-Depth HMA Thickness = | 15.25 inches | IBR value = | 3 |
| | | CRCP Thickness = | 11.25 in. (Fig. 54-4.M) |

TF MUST BE > 60 FOR CRCP

RECONSTRUCTION ONLY (SUPPLEMENTAL) PAVEMENT DESIGN CALCULATIONS

| HMA Overlay of Rubblized PCC | | Unbonded Concrete Overlay | |
|---------------------------------------|--------------------------------|--|------------------|
| Use TF flexible = | 31.88 | Review 54-4.03 for limitations and special considerations. | |
| HMA Overlay Design Thickness = | 12.75 in. (Fig. 54-5.U) | JPCP Thickness = | NA inches |
| Limiting Strain Criterion Thickness = | 11.00 in. (Fig. 54-5.V) | | |
| Use HMA Overlay Thickness = | 11.00 inches | | |

CONTACT BMPR FOR ASSISTANCE

DESIGN TABLES FROM BDE MANUAL CHAPTER 54 - PAVEMENT DESIGN

| Class I Roads | Class II Roads | Class III Roads | Class IV Roads |
|--|--|----------------------------|------------------------|
| 4 lanes or more Part of a future 4 lanes or more One-way Streets with ADT > 3500 | 2 lanes with ADT > 2000 One way Street with ADT <= 3500 | 2 Lanes (ADT 750 -2000) | 2 Lanes (ADT < 750) |

| Facility Type | Min. Str. Design Traffic (Fig 54-2.C) | | |
|--------------------------|---------------------------------------|------------|-------------|
| | PV | SU | MU |
| Interstate or Freeway | 0 | 500 | 1500 |
| Other Marked State Route | 0 | 250 | 750 |
| Unmarked State Route | No Min | No Min | No Min |

| Class Table for One-Way Streets | |
|---------------------------------|-----------|
| ADT | Class |
| 0 - 3500 | II |
| >3501 | I |

| Class | Traffic Factor ESAL Coefficients | | | |
|-------|----------------------------------|---------------|------------------------|---------------|
| | Rigid (Fig. 54-4.C) | | Flexible (Fig. 54-5.B) | |
| | Csu | Cmu | Csu | Cmu |
| I | 143.81 | 696.42 | 132.50 | 482.53 |
| II | 135.78 | 567.21 | 112.06 | 385.44 |
| III | 129.58 | 562.47 | 109.14 | 384.35 |
| IV | 129.58 | 562.47 | 109.14 | 384.35 |

| Class Table for 2 or 3 lanes (not future 4 lane & not one-way street) | |
|---|------------|
| ADT | Class |
| 0 - 749 | IV |
| 750 - 2000 | III |
| >2000 | II |

| Number of Lanes | Design Lane Distribution Factors For Structural Design Traffic (Fig. 54-2.B) | | | | | |
|-----------------|--|------------|------------|------------|------------|------------|
| | Rural | | | Urban | | |
| | P | S | M | P | S | M |
| 1 Lane Ramp | 100% | 100% | 100% | 100% | 100% | 100% |
| 2 or 3 | 50% | 50% | 50% | 50% | 50% | 50% |
| 4 | 32% | 45% | 45% | 32% | 45% | 45% |
| 6 or more | 20% | 40% | 40% | 8% | 37% | 37% |

APPENDIX

G



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #1 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 17, TWP. 28N, RNG. 5E, 3rd PM,
 Latitude -88.67124167, Longitude 40.89959444

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| STRUCT. NO. Station | DEPTH H | BLOW S | UCS Qu | MOIST T | Surface Water Elev. _____ ft |
|--|------------|-----------|-----------|------------|---|
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. Station Offset Ground Surface Elev. _____ ft | (ft) | (/6") | (tsf) | (%) | Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 12 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #2 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.66906667, Longitude 40.90457778

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|--------------------------------|-----------------------|--------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S S | U C S Qu | M O I S T T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>102</u> Station <u>225+00</u> Offset <u>62.0 ft Rt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOIST T |
|--|------------|--------|-----------|---------|
| Asphalt, Concrete, CAM | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel Pieces | | | | 13 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #3 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.66576389, Longitude 40.907475

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|--------------------------------|--------------------------------|-----------------------|--------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S S | U C S Qu | M O I S T T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>103</u> Station <u>238+85</u> Offset <u>62.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: _____ |
| | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | Depth (ft) | Blow Count (/6") | UCS (tsf) | Moisture (%) |
|--|------------|------------------|-----------|--------------|
| Asphalt, Concrete, CAM | 0 | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | 0 - 13 | | | 13 |
| End of Boring | 13 - 20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #4 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.65904166, Longitude 40.91079444

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|--------------------------------|-----------------------|--------------------------------|---|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S S | U C S Qu | M O I S T T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>104</u> Station <u>261+60</u> Offset <u>62.0 ft Rt.</u> | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| Ground Surface Elev. _____ ft | | | | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOST (%) |
|--|------------|--------|-----------|----------|
| Asphalt, Concrete, CAM | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 17 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #5 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.65156667, Longitude 40.91433333

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|------------------------------------|------|-------|-------|-----|-------------------------------|
| STRUCT. NO. _____ Station _____ | D | B | U | M | Surface Water Elev. _____ ft |
| | E | L | C | O | Stream Bed Elev. _____ ft |
| | P | O | S | I | |
| | T | W | S | S | Groundwater Elev.: _____ |
| BORING NO. <u>105</u> | H | S | Qu | T | First Encounter <u>Dry</u> ft |
| Station <u>205+95</u> | | | | | Upon Completion _____ ft |
| Offset <u>62.0 ft Rt.</u> | | | | | After _____ Hrs. _____ ft |
| Ground Surface Elev. _____ ft | (ft) | (/6") | (tsf) | (%) | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill | | | | 14 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #6 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.64266111, Longitude 40.91850556

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|--------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>106</u> Station <u>315+00</u> Offset <u>62.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 11 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #7 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.63446111, Longitude 40.92225278

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--|-----------------------|-----------------------|-----------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H S P T H S | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>107</u> Station <u>341+30</u> Offset <u>62.0 ft Rt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | | 21 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #8 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.62973889, Longitude 40.92433611

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|------------------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>108</u> Station <u>356+50</u> Offset <u>62.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 14 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



ROUTE FAI 55 (I-55) DESCRIPTION Sample #14 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 17, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67137222, Longitude 40.89820556

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|-------------------------------|
| STRUCT. NO. _____ Station _____ | D E P T H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft | Stream Bed Elev. _____ ft |
| BORING NO. <u>201</u> Station <u>200+00</u> Offset <u>50.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: _____ | First Encounter <u>Dry</u> ft |
| | | | | | Upon Completion _____ ft | After _____ Hrs. _____ ft |
| | | | | | | |

| | | | | | |
|--|-----|--|--|--|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #15 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.66278889, Longitude 40.90914444

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|---------------------------------|------------------------------------|------------------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>202</u> Station <u>249+35</u> Offset <u>50.0 ft Rt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| | | | | | |
|------------------------------------|-----|--|--|------|---|
| Asphalt, Concrete, CAM | | | | | |
| Gray Silty Clay Loam Till Fill | | | | | |
| * Free water from coring in sample | | | | 20.8 | * |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #16 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.65499167, Longitude 40.912875

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | |
|--|--|---|
| STRUCT. NO. _____ Station _____ | D E P T H B L O W S U C S M O I S T | Surface Water Elev. _____ ft |
| BORING NO. <u>203</u> Station <u>275+00</u> Offset <u>50.0 ft Rt.</u> Ground Surface Elev. _____ ft | | Stream Bed Elev. _____ ft |
| | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | | 15 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #17 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.64576667, Longitude 40.91705

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | |
|--|--|---|
| STRUCT. NO. _____ Station _____ | D E P T H B L O W S U C S M O I S T | Surface Water Elev. _____ ft |
| BORING NO. <u>204</u> Station <u>305+00</u> Offset <u>50.0 ft Rt.</u> Ground Surface Elev. _____ ft | | Stream Bed Elev. _____ ft |
| | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill | | | | | 14 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #18 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.63953333, Longitude 40.91998333

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|------------------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>205</u> Station <u>325+00</u> Offset <u>50.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Concrete Debris | | | | 11 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #28 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 29, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67101944, Longitude 40.86386389

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|--------------------------------|-----------------------|-----------------------|-----------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>301</u> Station <u>74+85</u> Offset <u>62.0 ft Rt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Brown Silty Clay Loam Till Fill with some Black Silty Clay Loam & Gray Silty Clay Loam Till Fill | | | | | 19 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #29 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 29, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67110556, Longitude 40.87330278

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | |
|--|--|--|
| STRUCT. NO. _____ Station _____ | D E P T H B L O W S U C S M O I S T | Surface Water Elev. _____ ft |
| BORING NO. <u>302</u> Station <u>109+45</u> Offset <u>62.0 ft Rt.</u> Ground Surface Elev. _____ ft | | Stream Bed Elev. _____ ft |
| | | Groundwater Elev.: _____ ft |
| | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Blue / Green Silty Clay Loam Till Fill | | | | | 15 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #30 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67117222, Longitude 40.87669444

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|-----------------------|-----------------------|-----------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>303</u> Station <u>121+75</u> Offset <u>62.0 ft Rt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Brown & Gray Silty Clay Loam Till Fill | | | | | 16 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #24 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 17, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67134167, Longitude 40.89279166

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|------------------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>304</u> Station <u>180+47</u> Offset <u>62.0 ft Rt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: _____ ft |
| | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 12 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION _____ Sample #9 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.63201944, Longitude 40.92383889

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|-----------------------|-----------------------|-----------------------|---|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>501</u> Station <u>350+00</u> Offset <u>62.0 ft Lt.</u> | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| Ground Surface Elev. _____ ft | | | | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOST (%) |
|---|------------|--------|-----------|----------|
| Asphalt, Concrete, CAM | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel & Concrete Debris | | | | 17 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #10 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 4, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.64543333, Longitude 40.91763333

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| STRUCT. NO. Station _____ | DEPTH H | BLOWS S | UCS Qu | MOIST T | Surface Water Elev. _____ ft Stream Bed Elev. _____ ft |
|--|------------|------------|-----------|------------|--|
| BORING NO. <u>502</u> Station <u>306+90</u> Offset <u>62.0 ft Lt.</u> Ground Surface Elev. _____ ft | (ft) | (/6") | (tsf) | (%) | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| Asphalt, Concrete, CAM | | | | | |
| Brown Gravel Fill over Black & Gray Silty Clay Loam Fill | | | | 16 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #11 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.65449444, Longitude 40.91338611

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

STRUCT. NO. _____
Station _____

BORING NO. 503
Station 277+60
Offset 62.0 ft Lt.
Ground Surface Elev. _____ ft

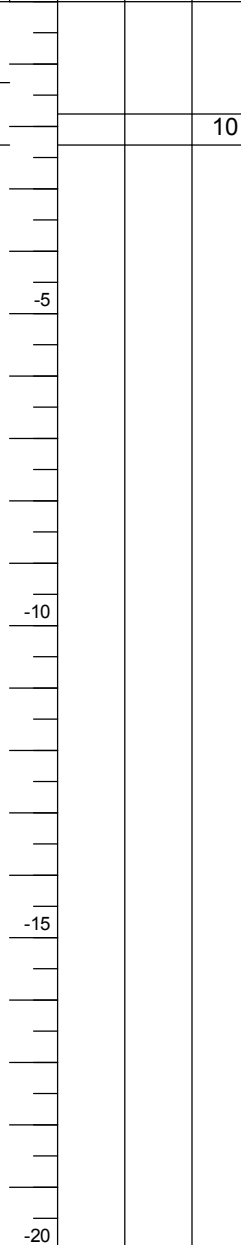
| | | | |
|----------------------------------|----------------------------------|----------------------|----------------------------------|
| D E P T H | B L O W S | U C S | M O I S T |
| (ft) | (/6") | (tsf) | (%) |

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion _____ ft
After _____ Hrs. _____ ft

Asphalt, Concrete, CAM

Black & Gray Silty Clay Loam Till
Fill

End of Boring



SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #12 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.664575, Longitude 40.90876389

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | |
|--|--|--|
| STRUCT. NO. _____ Station _____ | D E P T H B L O W S U C S M O I S T | Surface Water Elev. _____ ft |
| BORING NO. <u>505</u> Station <u>244+65</u> Offset <u>62.0 ft Lt.</u> Ground Surface Elev. _____ ft | | Stream Bed Elev. _____ ft |
| | | Groundwater Elev.: _____ |
| | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Black & Gray Silty Clay Loam Till Fill | | | | | 12 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #13 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 17, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67194444, Longitude 40.89701389

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|---------------------------------|------------------------------------|------------------------------------|----------------------------------|---|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>506</u> Station <u>195+45</u> Offset <u>62.0 ft Lt.</u> | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| Ground Surface Elev. _____ ft | | | | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Brown & Gray Silty Clay Loam Till Fill | | | | 13 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #19 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.63767222, Longitude 40.92103333

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|-----------------------------------|------------------------------------|--------------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H (ft) | B L O W S (/6") | U C S Qu (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| BORING NO. <u>601</u> Station <u>331+20</u> Offset <u>50.0 ft Lt.</u> Ground Surface Elev. _____ ft | | | | | Stream Bed Elev. _____ ft Groundwater Elev.: _____ ft First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel Pieces | | | | 14 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #20 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 3, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.64103611, Longitude 40.91942222

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|-----------------------|-----------------------|-----------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>602</u> Station <u>320+35</u> Offset <u>50.0 ft Lt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOST (%) |
|--|------------|--------|-----------|----------|
| Asphalt, Concrete, CAM | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel Pieces | | | | 15 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #21 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 9, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.651725, Longitude 40.91456111

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | |
|--|--|---|
| STRUCT. NO. _____ Station _____ | D E P T H B L O W S U C S M O I S T | Surface Water Elev. _____ ft |
| BORING NO. <u>603</u> Station <u>286+15</u> Offset <u>50.0 ft Lt.</u> Ground Surface Elev. _____ ft | | Stream Bed Elev. _____ ft |
| | | Groundwater Elev.: First Encounter <u>Dry</u> ft |
| | | Upon Completion _____ ft After _____ Hrs. _____ ft |

| Description | ft | (ft) | (/6") | (tsf) | (%) |
|--|-----|------|-------|-------|-----|
| Asphalt, Concrete, CAM | | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel Pieces | | | | | 15 |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #22 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.66783889, Longitude 40.90655

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|--------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>604</u> Station <u>233+25</u> Offset <u>50.0 ft Lt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Gray & Brown Silty Clay Loam Till Fill with Gravel Pieces | | | | 14 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #23 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 8, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67020278, Longitude 40.90346389

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|--|---------------------------------|------------------------------------|--------------------------|----------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>605</u> Station <u>220+00</u> Offset <u>50.0 ft Lt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| | | | | | |
|--|-----|--|--|----|--|
| Asphalt, Concrete, CAM | | | | | |
| Brown & Gray Silty Clay Loam Till Fill with Gravel Pieces | | | | 18 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17



Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #25 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 17, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67191389, Longitude 40.89276389

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| STRUCT. NO. Station | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
|---|---------------------------------|------------------------------------|--------------------------|----------------------------------|---|
| Asphalt, Concrete, CAM | | | | | |
| Brown Silty Clay Loam / Silty Loam Till Fill with Gravel Pieces | | | | 15 | |
| End of Boring | | | | | |
| | -5 | | | | |
| | -10 | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #26 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67173055, Longitude 40.88203056

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|--------------------------------|-----------------------|--------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S S | U C S Qu | M O I S T T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>702</u> Station <u>141+35</u> Offset <u>62.0 ft Lt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. _____ ft | | | | | First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOST (%) |
|---|------------|--------|-----------|----------|
| Asphalt, Concrete, CAM | | | | |
| Brown Silty Clay Loam Till Fill with some Gravel Pieces | | | | 16 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17



SOIL BORING LOG

ROUTE FAI 55 (I-55) DESCRIPTION Sample #27 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 29, TWP. 28N, RNG. 5E, 3rd PM,
Latitude -88.67168333, Longitude 40.863725

COUNTY Livingston DRILLING METHOD Hand Auger HAMMER TYPE _____

| | | | | | |
|---|--------------------------------|--------------------------------|-----------------------|--------------------------------|--|
| STRUCT. NO. _____ Station _____ | D E P T H H | B L O W S S | U C S Qu | M O I S T T | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>703</u> Station <u>74+90</u> Offset <u>62.0 ft Lt.</u> Ground Surface Elev. _____ ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion _____ ft After _____ Hrs. _____ ft |
| | | | | | |

| Soil Description | DEPTH (ft) | BLOW S | UCS (tsf) | MOIST T |
|---------------------------------|------------|--------|-----------|---------|
| Asphalt, Concrete, CAM | | | | |
| Brown Silty Clay Loam Till Fill | | | | 16 |
| End of Boring | | | | |
| | -5 | | | |
| | -10 | | | |
| | -15 | | | |
| | -20 | | | |

SOIL BORING I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI-55 (I-55) DESCRIPTION I-55 Profile Change over Abandoned I.C. Railroad, 0.5 miles North of IL 116 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SE 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM, Latitude 40.878891, Longitude -88.671165

COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

| STRUCT. NO. Station | DEPTH (ft) | BLOW S (/6") | UCS Qu (tsf) | MOIST T (%) | Surface Water Elev. _____ ft | Stream Bed Elev. _____ ft |
|--|---------------|--------------------|--------------------|-------------------|---|-------------------------------|
| BORING NO. <u>RW 01</u> Station <u>130+00</u> Offset <u>70.0 ft Rt.</u> Ground Surface Elev. <u>661.76</u> ft | | | | | Groundwater Elev.: First Encounter <u>Dry</u> ft | Upon Completion <u>Dry</u> ft |
| After _____ Hrs. | | | | | | |
| Augered Bituminous Shoulder, 12+'' Stone Fill, Gray Silty Clay Loam Till Fill | 656.76 -5 | | | | | |
| Hard Gray & Brown Silty Clay Loam Till Fill with some Large Gravel / Rock Pieces | | 6 8 10 | >4.5 P | 9 | | |
| Proctor Sample #1 (4' - 10') | | | | | | |
| | | 8 12 15 | >4.5 P | 9 | | |
| | -10 | | | | | |
| | | 9 9 9 | >4.5 P | 14 | | |
| 650.26 | | | | | | |
| End of Boring | | | | | | |
| | | | | | | |
| | -15 | | | | | |
| | | | | | | |
| | | | | | | |
| | -20 | | | | | |

SOIL BORING 053-0126, 0127.GPJ IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Illinois Department of Transportation

Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/27/17

ROUTE FAI-55 (I-55) DESCRIPTION I-55 Profile Change over Abandoned I.C. Railroad, 0.5 miles North of IL 116 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NE 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM, Latitude 40.881635, Longitude -88.671228

COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

| STRUCT. NO. | DEPTH (ft) | BLOW (1/6") | UCS (tsf) | MOIST (%) | Surface Water Elev. | Stream Bed Elev. | Groundwater Elev.: | First Encounter | Upon Completion | After |
|--|------------|-------------|-----------|-----------|---------------------|------------------|--------------------|-----------------|-----------------|---------------------|
| Station _____ | | | | | _____ ft | _____ ft | _____ | Dry _____ ft | Dry _____ ft | _____ Hrs. _____ ft |
| BORING NO. RW 02 | | | | | | | | | | |
| Station 140+00 | | | | | | | | | | |
| Offset 70.0 ft Rt. | | | | | | | | | | |
| Ground Surface Elev. 668.16 | ft | (ft) | (/6") | (tsf) | (%) | | | | | |
| Augered Bituminous Shoulder, Minimal Gravel Fill, Brown & Gray Silty Clay Loam Till Fill | 665.66 | | | | | | | | | |
| Hard Brown & Gray Silty Clay Loam Till Fill with some Black Silty Clay Loam Fill @ 8' | 5 | 8 | >4.5 | 14 | | | | | | |
| Proctor Sample #2 (2.5' - 9') | -5 | 6 | | | | | | | | |
| | | 6 | 4.4 | 15 | | | | | | |
| | | 9 | S | | | | | | | |
| | | 6 | | | | | | | | |
| | | 7 | 4.1 | 18 | | | | | | |
| | | 7 | S | | | | | | | |
| 658.66 | | | | | | | | | | |
| Very Stiff Gray & Black Silty Clay Loam Fill with some Shale Pieces | -10 | 5 | | | | | | | | |
| Proctor Sample #3 (9.5' - 15') | | 7 | 3.1 | 11 | | | | | | |
| | | 10 | B | | | | | | | |
| | | 5 | | | | | | | | |
| | | 6 | 3.0 | 13 | | | | | | |
| | | 8 | B | | | | | | | |
| | -15 | 8 | | | | | | | | |
| | | 9 | 4.0 | 11 | | | | | | |
| | | 12 | B | | | | | | | |
| 651.66 | | | | | | | | | | |
| End of Boring | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | -20 | | | | | | | | | |

SOIL BORING 053-0126, 0127.GPJ IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAI-55 (I-55) DESCRIPTION I-55 Profile Change over Abandoned I.C. Railroad, 0.5 miles North of IL 116 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION NW 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM, Latitude 40.883004, Longitude -88.67175

COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

| | | | | | |
|---|---------------------------------|------------------------------------|--------------------------|----------------------------------|---|
| STRUCT. NO. _____ Station _____ | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft |
| | | | | | Stream Bed Elev. _____ ft |
| BORING NO. <u>RW 03</u> Station <u>145+00</u> Offset <u>70.0 ft Lt.</u> | | | | | Groundwater Elev.: _____ |
| Ground Surface Elev. <u>657.39</u> ft | | | | | First Encounter _____ Dry ft Upon Completion _____ Dry ft After _____ Hrs. _____ ft |

| | | | | | |
|---|----------------------|-----------|----|--|--|
| Augered Bituminous Shoulder, Gray Silty Clay Loam Till Fill 654.89 | | | | | |
| Hard Gray & Brown Silty Clay Loam Till Fill with some Black Silty Clay Loam Fill @ 6' | 6 8 9 | >4.5 P | 13 | | |
| Proctor Sample #4 (2.5' - 10') | -5 6 4 | 4.0 B | 18 | | |
| | 12 14 16 | >4.5 P | 13 | | |
| | -10 8 10 12 | 6.1 S | 14 | | |
| 645.89 | | | | | |
| End of Boring | | | | | |
| | -15 | | | | |
| | -20 | | | | |

SOIL BORING 053-0126, 0127.GPJ IL_DOT.GDT 7/21/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE FAI-55 (I-55) DESCRIPTION I-55 Profile Change over Abandoned I.C. Railroad, 0.5 miles North of IL 116 LOGGED BY Larry Myers

SECTION (53-4,5)RS-1&I LOCATION SW 1/4, SEC. 20, TWP. 28N, RNG. 5E, 3rd PM, Latitude 40.880259, Longitude -88.671722

COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

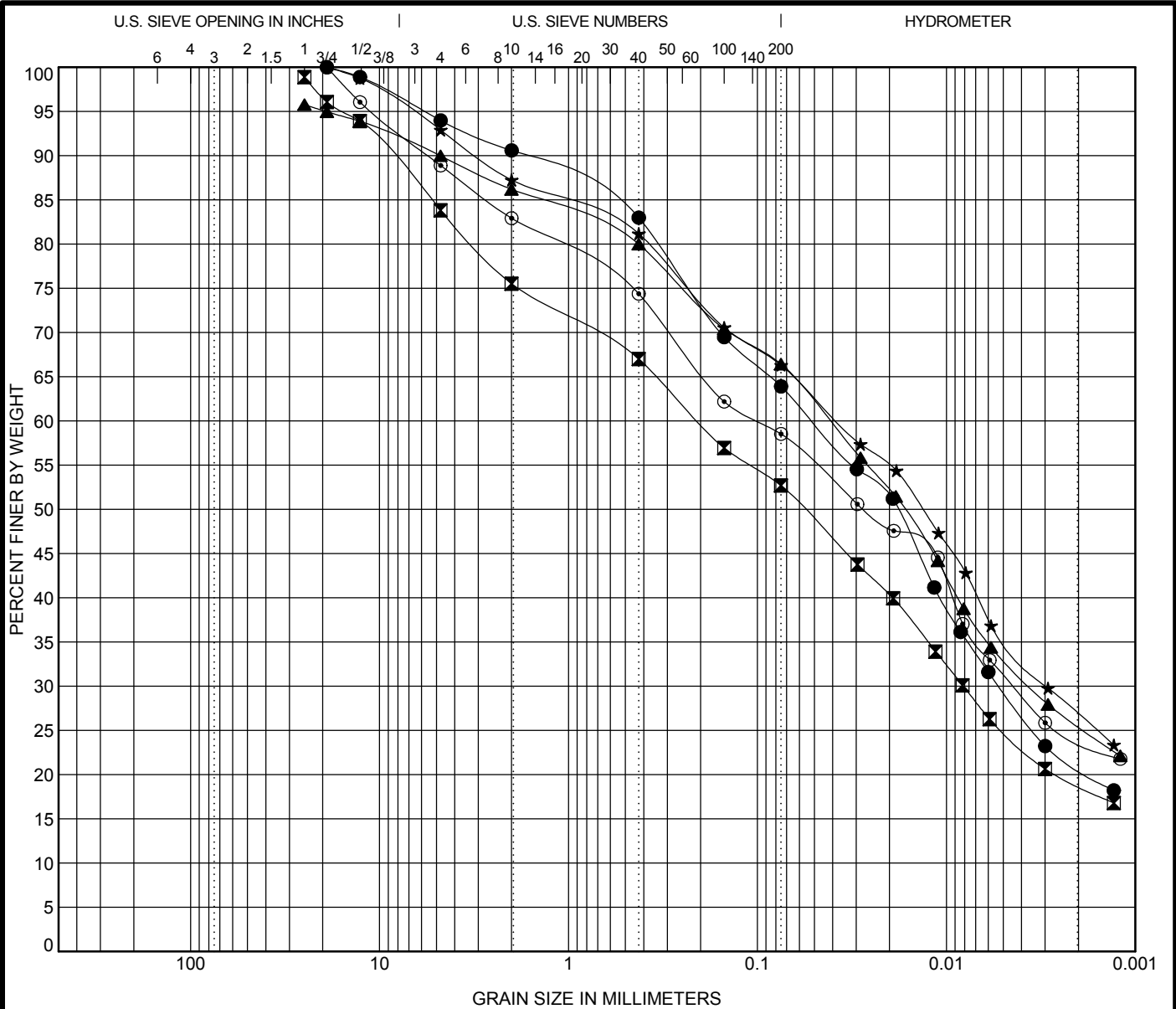
| STRUCT. NO. Station | D E P T H ft | B L O W S (/6") | U C S (tsf) | M O I S T (%) | Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ Dry ft Upon Completion _____ Dry ft After _____ Hrs. _____ ft |
|--|---------------------------------|------------------------------------|--------------------------|----------------------------------|--|
| Augered Bituminous Shoulder, Gravel & Gray & Brown Silty Clay Loam Till Fill 667.07 | | | | | |
| Hard Gray & Brown Silty Clay Loam Till Fill with Large Gravel Pieces | | 7 | | | |
| | | 8 | >4.5 | 12 | |
| | | 8 | P | | |
| Proctor Sample #5 (2.5' - 10') | -5 | | | | |
| | | 9 | | | |
| | | 10 | 7.1 | 11 | |
| | | 12 | S | | |
| | | 6 | | | |
| | | 10 | 6.8 | 12 | |
| | | 11 | S | | |
| Proctor Sample #6 (10' - 15') | -10 | | | | |
| | | 8 | | | |
| | | 10 | 5.4 | 16 | |
| | | 8 | S | | |
| | | 8 | | | |
| | | 9 | 4.5 | 14 | |
| | | 10 | S | | |
| | -15 | | | | |
| | | 10 | | | |
| | | 12 | 4.4 | 14 | |
| | | 14 | S | | |
| End of Boring | 653.07 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | -20 | | | | |

SOIL BORING 053-0126, 0127.GPJ IL_DOT.GDT 7/21/17

APPENDIX

H

GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL_DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|-------------------|------|------|------|----|----|
| ● 101 | A-6 (4) CLAY LOAM | 21.5 | 10.6 | 10.9 | | |
| ☒ 102 | A-4 (2) LOAM | 25.2 | 15.0 | 10.2 | | |
| ▲ 103 | A-6 (5) CLAY LOAM | 25.7 | 14.9 | 10.8 | | |
| ★ 104 | A-6 (6) CLAY LOAM | 28.0 | 15.5 | 12.5 | | |
| ◎ 105 | A-6 (5) CLAY LOAM | 28.7 | 15.6 | 13.1 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-----|-------|-------|---------|-------|-------|-------|
| ● 101 | 1.50 | 19 | 0.051 | 0.005 | 9.4 | 26.7 | 43.1 | 20.8 |
| ☒ 102 | 1.50 | 25 | 0.206 | 0.008 | 23.4 | 22.8 | 33.9 | 18.8 |
| ▲ 103 | 1.50 | 25 | 0.042 | 0.004 | 9.6 | 19.8 | 40.9 | 25.5 |
| ★ 104 | 1.25 | 19 | 0.038 | 0.003 | 12.8 | 20.9 | 39.5 | 26.8 |
| ◎ 105 | 1.50 | 19 | 0.099 | 0.004 | 17.1 | 24.4 | 34.5 | 24.0 |

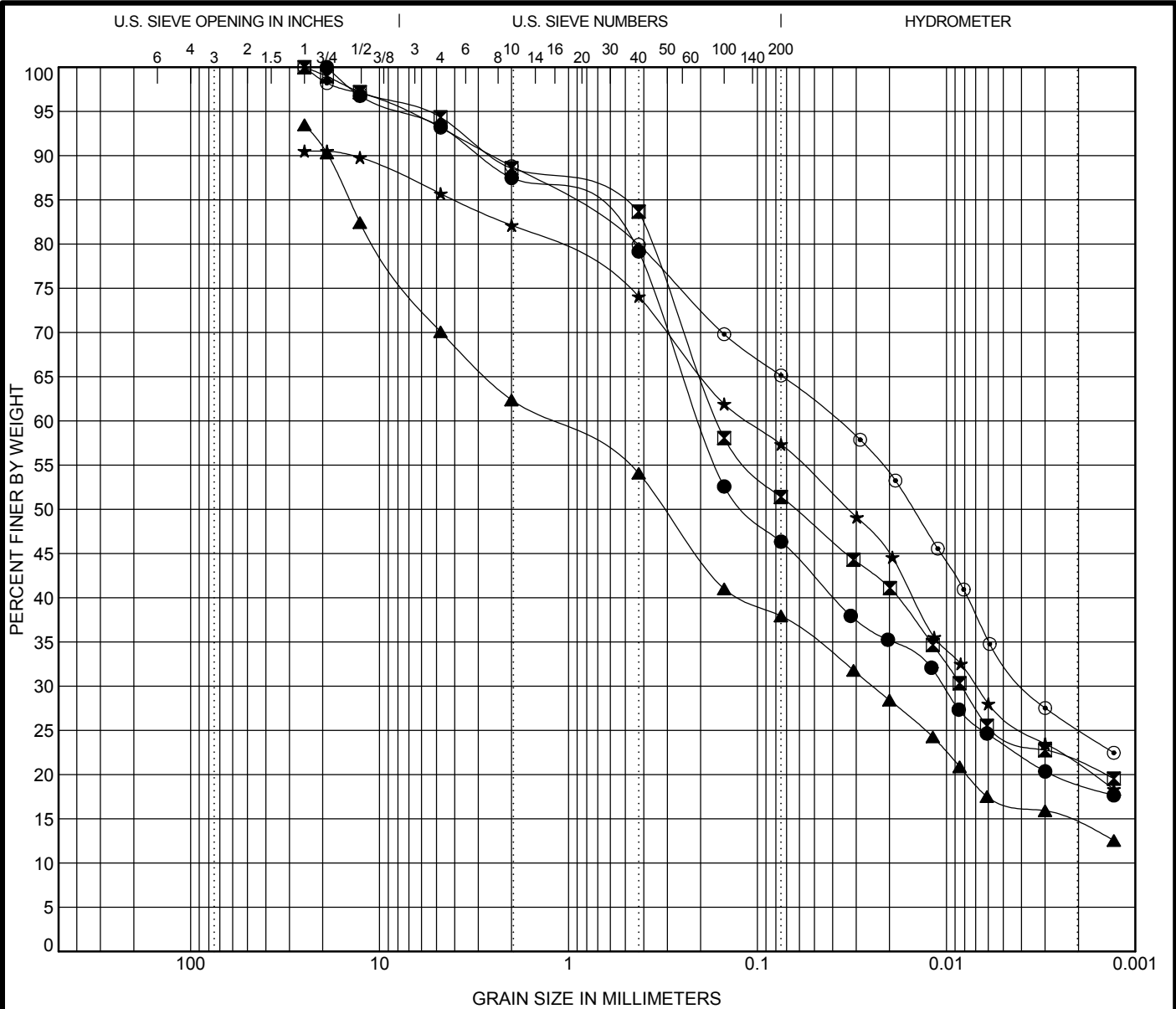


Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL_DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|--------------------|------|------|------|----|----|
| ● 106 | A-6 (3) SANDY LOAM | 27.7 | 13.5 | 14.2 | | |
| ■ 107 | A-6 (3) CLAY LOAM | 27.0 | 13.8 | 13.2 | | |
| ▲ 108 | A-6 (1) SANDY LOAM | 30.3 | 16.2 | 14.1 | | |
| ★ 201 | A-4 (2) CLAY LOAM | 23.8 | 14.8 | 9.0 | | |
| ○ 202 | A-6 (4) CLAY LOAM | 25.8 | 14.8 | 11.0 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-------|-------|-----|---------|-------|-------|-------|
| ● 106 | 19 | 0.201 | 0.01 | | 12.5 | 41.1 | 27.3 | 19.0 |
| ■ 107 | 25 | 0.162 | 0.008 | | 11.4 | 37.2 | 30.2 | 21.2 |
| ▲ 108 | 25 | 1.286 | 0.025 | | 31.1 | 24.4 | 23.7 | 14.3 |
| ★ 201 | 25 | 0.112 | 0.007 | | 8.4 | 24.8 | 36.4 | 21.0 |
| ○ 202 | 25 | 0.038 | 0.004 | | 11.2 | 23.7 | 40.1 | 25.1 |

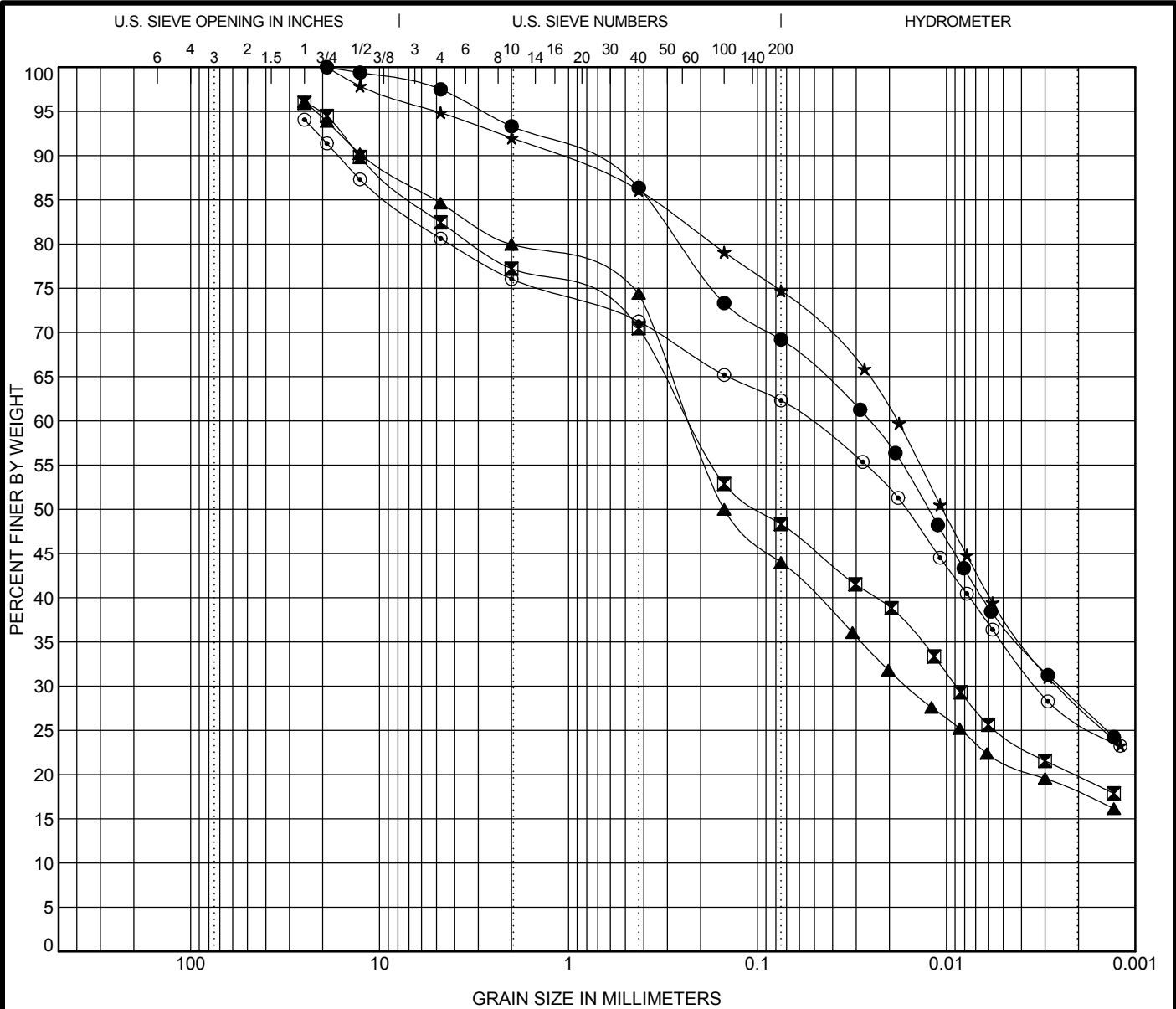


Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

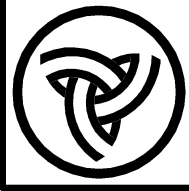
GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|--------------------|------|------|------|----|----|
| ● 203 | A-6 (6) CLAY LOAM | 27.7 | 15.2 | 12.5 | | |
| ☒ 204 | A-6 (5) SANDY LOAM | 30.4 | 12.3 | 18.1 | | |
| ▲ 205 | A-6 (2) SANDY LOAM | 25.2 | 13.2 | 12.0 | | |
| ★ 301 | A-6 (6) CLAY LOAM | 26.6 | 15.7 | 10.9 | | |
| ◎ 302 | A-6 (7) CLAY LOAM | 33.8 | 17.8 | 16.0 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-----|-------|-------|---------|-------|-------|-------|
| ● 203 | 1.50 | 19 | 0.026 | 0.003 | 6.7 | 24.1 | 41.2 | 28.0 |
| ☒ 204 | 1.50 | 25 | 0.229 | 0.009 | 18.8 | 28.9 | 28.6 | 19.8 |
| ▲ 205 | 1.50 | 25 | 0.23 | 0.016 | 16.1 | 36.0 | 26.1 | 17.9 |
| ★ 301 | 1.50 | 19 | 0.018 | 0.003 | 8.0 | 17.3 | 47.0 | 27.8 |
| ◎ 302 | 1.25 | 25 | 0.054 | 0.003 | 18.0 | 13.7 | 36.1 | 26.2 |

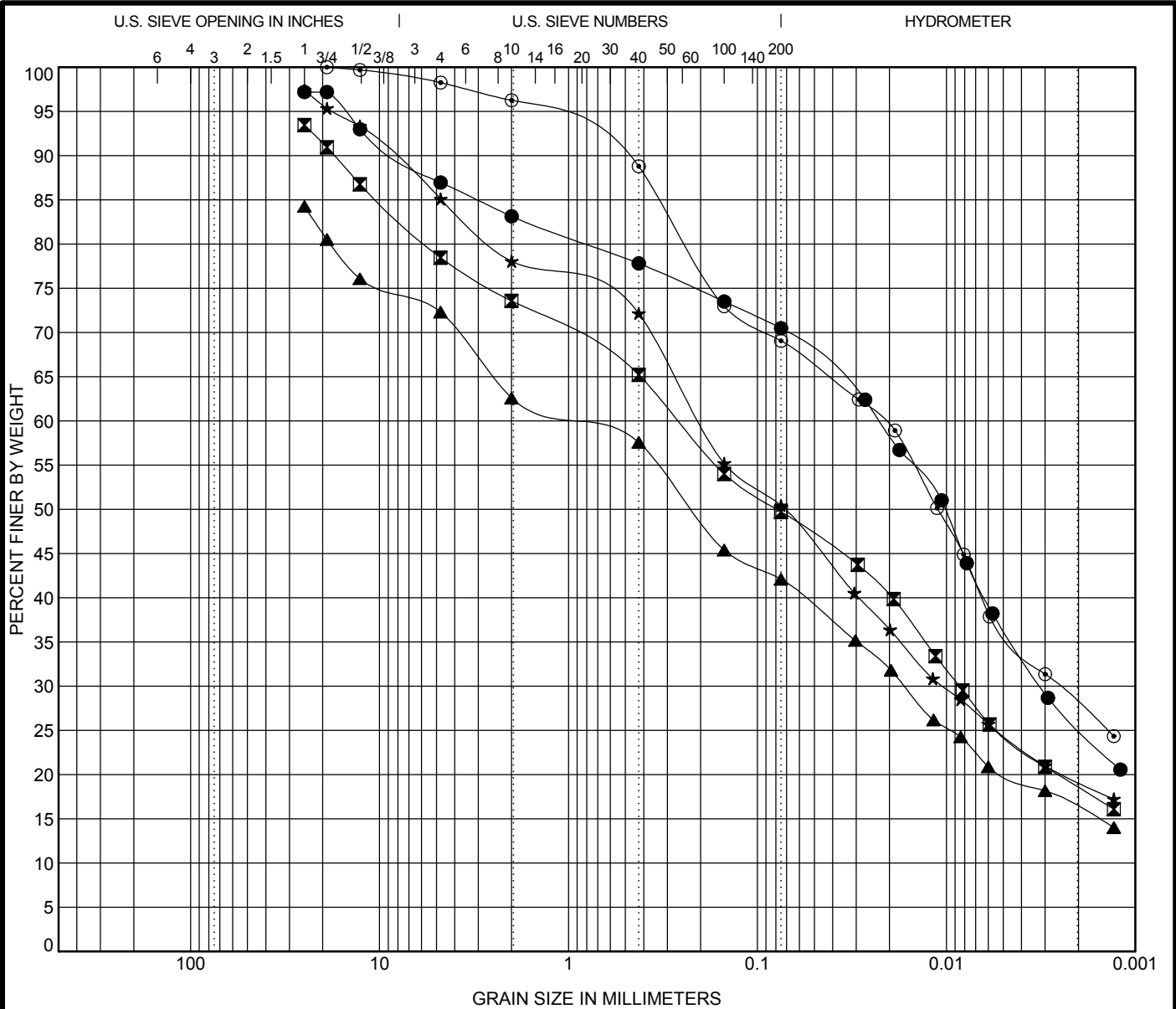


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IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

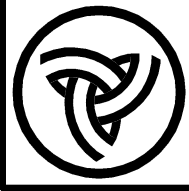
GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|--------------------|------|------|------|----|----|
| ● 303 1.50 | A-4 (5) CLAY LOAM | 26.7 | 17.1 | 9.6 | | |
| ☒ 304 1.50 | A-4 (2) SANDY LOAM | 25.4 | 14.7 | 10.7 | | |
| ▲ 501 1.50 | A-6 (3) SANDY LOAM | 31.6 | 16.5 | 15.1 | | |
| ★ 502 1.50 | A-6 (3) LOAM | 28.2 | 15.2 | 13.0 | | |
| ⊙ 503 1.30 | A-6 (7) CLAY LOAM | 29.0 | 15.7 | 13.3 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-------|-------|-----|---------|-------|-------|-------|
| ● 303 1.50 | 25 | 0.023 | 0.003 | | 14.1 | 12.7 | 45.2 | 25.3 |
| ☒ 304 1.50 | 25 | 0.262 | 0.009 | | 19.9 | 23.9 | 31.2 | 18.5 |
| ▲ 501 1.50 | 25 | 0.9 | 0.017 | | 21.7 | 20.5 | 26.0 | 16.1 |
| ★ 502 1.50 | 25 | 0.201 | 0.01 | | 19.4 | 27.6 | 31.3 | 19.2 |
| ⊙ 503 1.30 | 19 | 0.021 | 0.003 | | 3.7 | 27.2 | 41.1 | 28.0 |

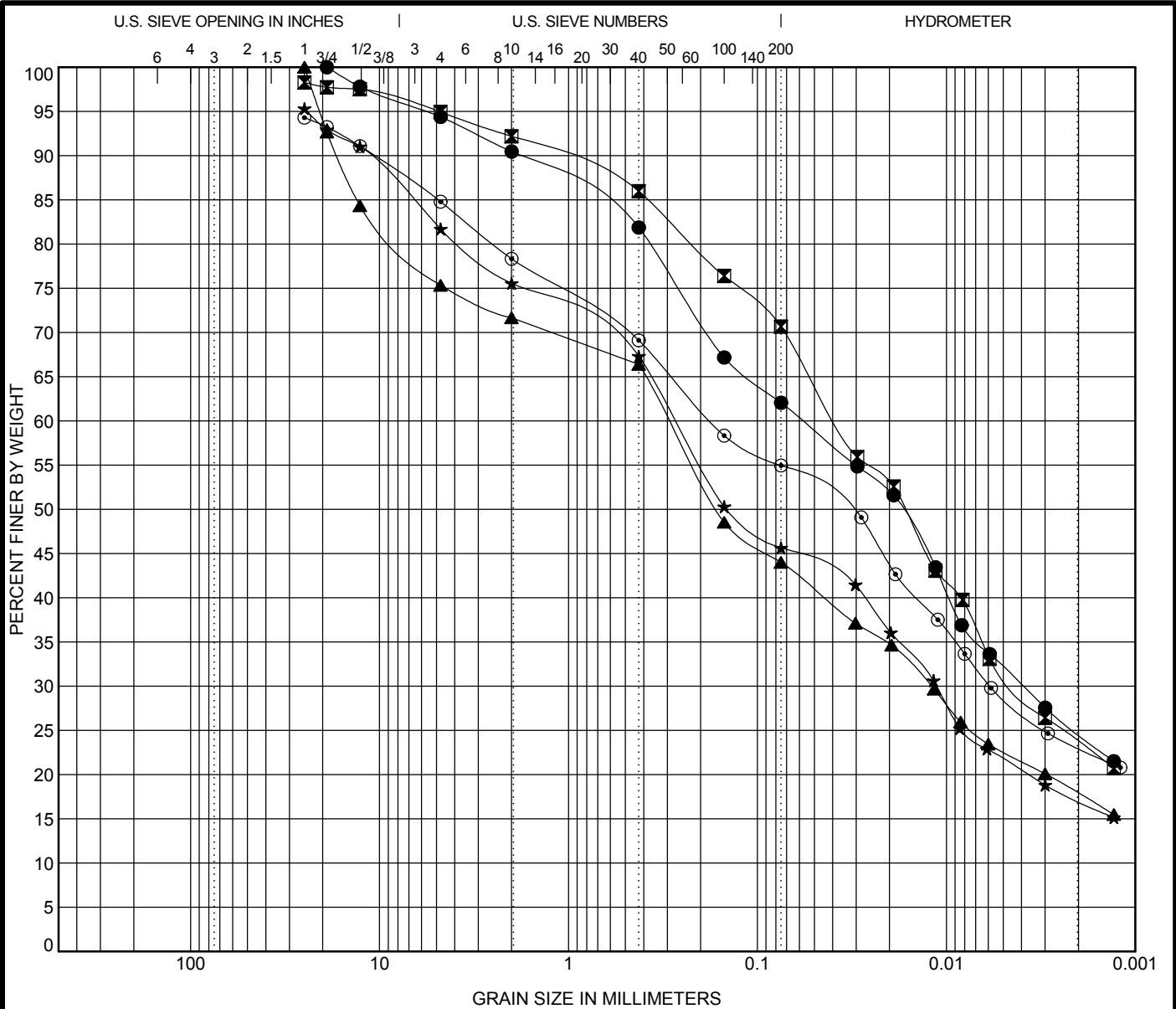


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IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

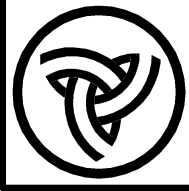
GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL_DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|--------------------|------|------|------|----|----|
| ● 505 | A-6 (4) CLAY LOAM | 25.1 | 14.5 | 10.6 | | |
| ⊠ 506 | A-4 (4) CLAY LOAM | 23.7 | 14.8 | 8.9 | | |
| ▲ 601 | A-6 (2) SANDY LOAM | 27.3 | 14.4 | 12.9 | | |
| ★ 602 | A-6 (2) SANDY LOAM | 27.5 | 14.8 | 12.7 | | |
| ⊙ 603 | A-6 (4) CLAY LOAM | 28.7 | 15.9 | 12.8 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-----|-------|-------|---------|-------|-------|-------|
| ● 505 | 1.30 | 19 | 0.058 | 0.004 | 9.5 | 28.4 | 37.4 | 24.6 |
| ⊠ 506 | 1.50 | 25 | 0.038 | 0.004 | 6.1 | 21.5 | 47.0 | 23.7 |
| ▲ 601 | 1.50 | 25 | 0.293 | 0.012 | 28.3 | 27.7 | 26.1 | 17.9 |
| ★ 602 | 1.50 | 25 | 0.271 | 0.011 | 19.8 | 29.9 | 28.6 | 17.0 |
| ⊙ 603 | 1.50 | 25 | 0.176 | 0.006 | 16.0 | 23.4 | 31.9 | 23.0 |

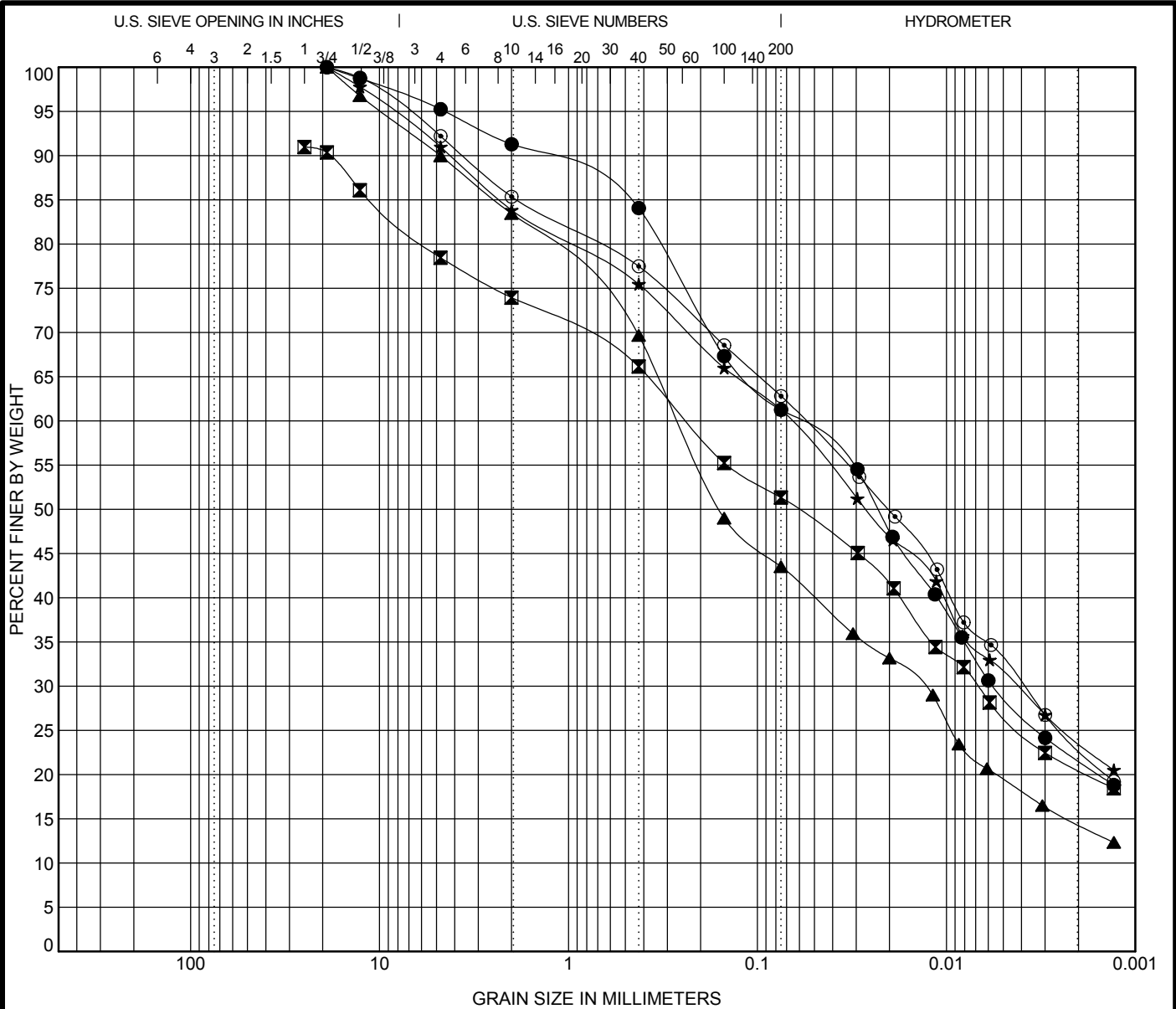


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 Illinois Department of Transportation

IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

GRAIN SIZE IDH-3-18-11 I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ IL_DOT.GDT 7/21/17



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|--------------------|------|------|------|----|----|
| ● 604 | A-4 (3) CLAY LOAM | 22.8 | 13.1 | 9.7 | | |
| ☒ 605 | A-6 (3) CLAY LOAM | 26.9 | 15.3 | 11.6 | | |
| ▲ 701 | A-4 (1) SANDY LOAM | 24.0 | 15.2 | 8.8 | | |
| ★ 702 | A-6 (6) CLAY LOAM | 29.4 | 15.5 | 13.9 | | |
| ⊙ 703 | A-6 (4) CLAY LOAM | 25.7 | 14.7 | 11.0 | | |

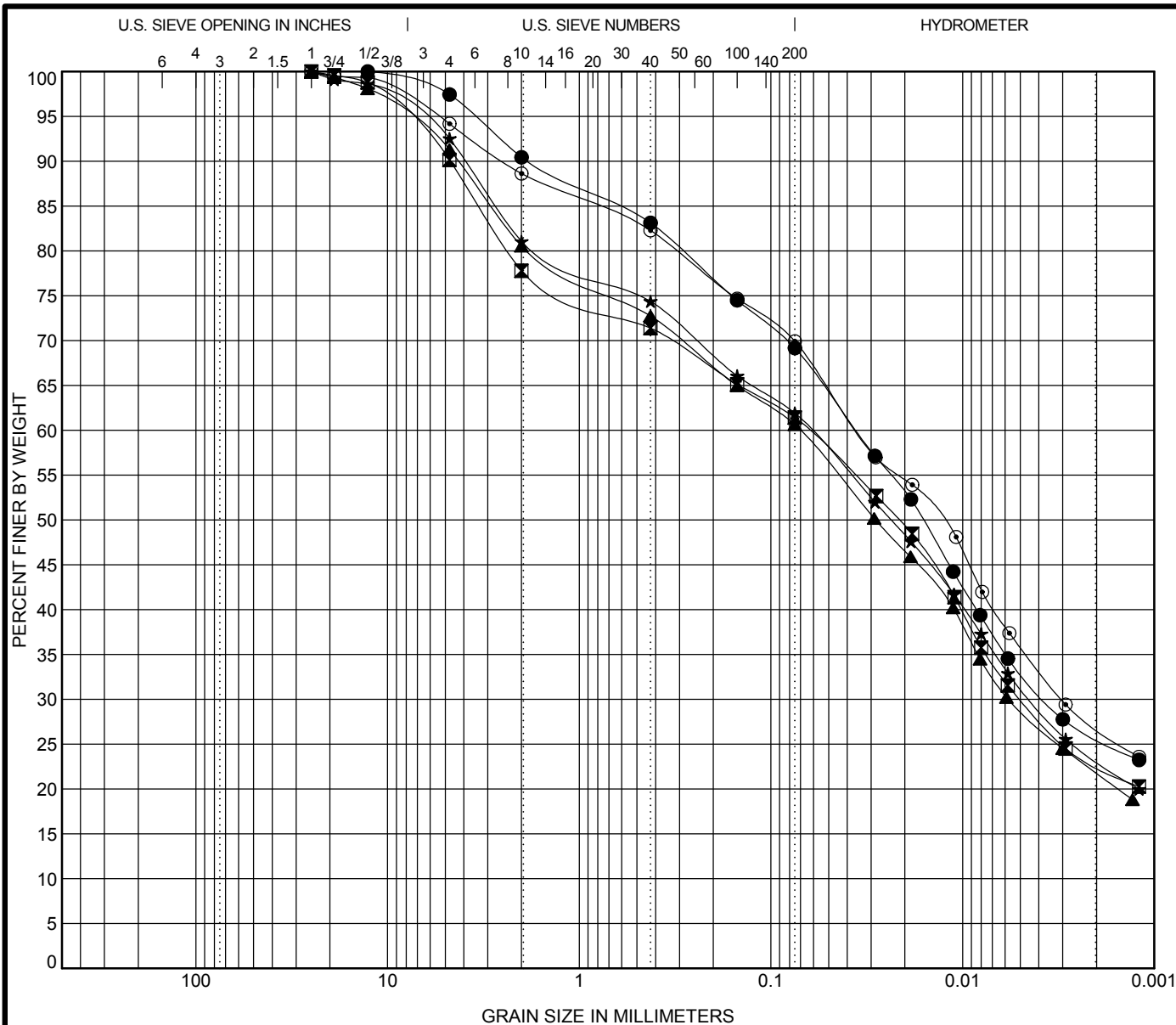
| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-----|-------|-------|---------|-------|-------|-------|
| ● 604 | 1.50 | 19 | 0.063 | 0.006 | 8.7 | 30.0 | 39.7 | 21.6 |
| ☒ 605 | 1.50 | 25 | 0.236 | 0.007 | 17.0 | 22.6 | 30.8 | 20.5 |
| ▲ 701 | 1.50 | 19 | 0.261 | 0.013 | 16.6 | 39.9 | 29.1 | 14.4 |
| ★ 702 | 1.50 | 19 | 0.067 | 0.004 | 16.2 | 22.6 | 37.5 | 23.7 |
| ⊙ 703 | 1.50 | 19 | 0.056 | 0.004 | 14.6 | 22.5 | 39.7 | 23.1 |



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 Illinois Department of Transportation

IDH GRAIN SIZE DISTRIBUTION

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|-------------------|------|------|------|----|----|
| ● RW 01 4.00 | A-6 (7) CLAY LOAM | 28.1 | 14.1 | 14.0 | | |
| ■ RW 02 2.50 | A-6 (4) CLAY LOAM | 26.6 | 15.1 | 11.5 | | |
| ▲ RW 02 9.50 | A-6 (4) CLAY LOAM | 27.4 | 14.7 | 12.7 | | |
| ★ RW 03 2.50 | A-6 (6) CLAY LOAM | 28.9 | 15.2 | 13.7 | | |
| ⊙ RW 04 2.50 | A-6 (7) CLAY LOAM | 28.3 | 14.3 | 14.0 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-------|-------|-----|---------|-------|-------|-------|
| ● RW 01 4.00 | 12.7 | 0.036 | 0.004 | | 9.6 | 21.3 | 43.4 | 25.8 |
| ■ RW 02 2.50 | 25 | 0.064 | 0.005 | | 22.2 | 16.4 | 38.7 | 22.7 |
| ▲ RW 02 9.50 | 25 | 0.071 | 0.006 | | 19.5 | 19.9 | 38.9 | 21.7 |
| ★ RW 03 2.50 | 25 | 0.062 | 0.004 | | 18.9 | 19.1 | 38.7 | 23.2 |
| ⊙ RW 04 2.50 | 25 | 0.036 | 0.003 | | 11.4 | 18.7 | 43.0 | 27.0 |

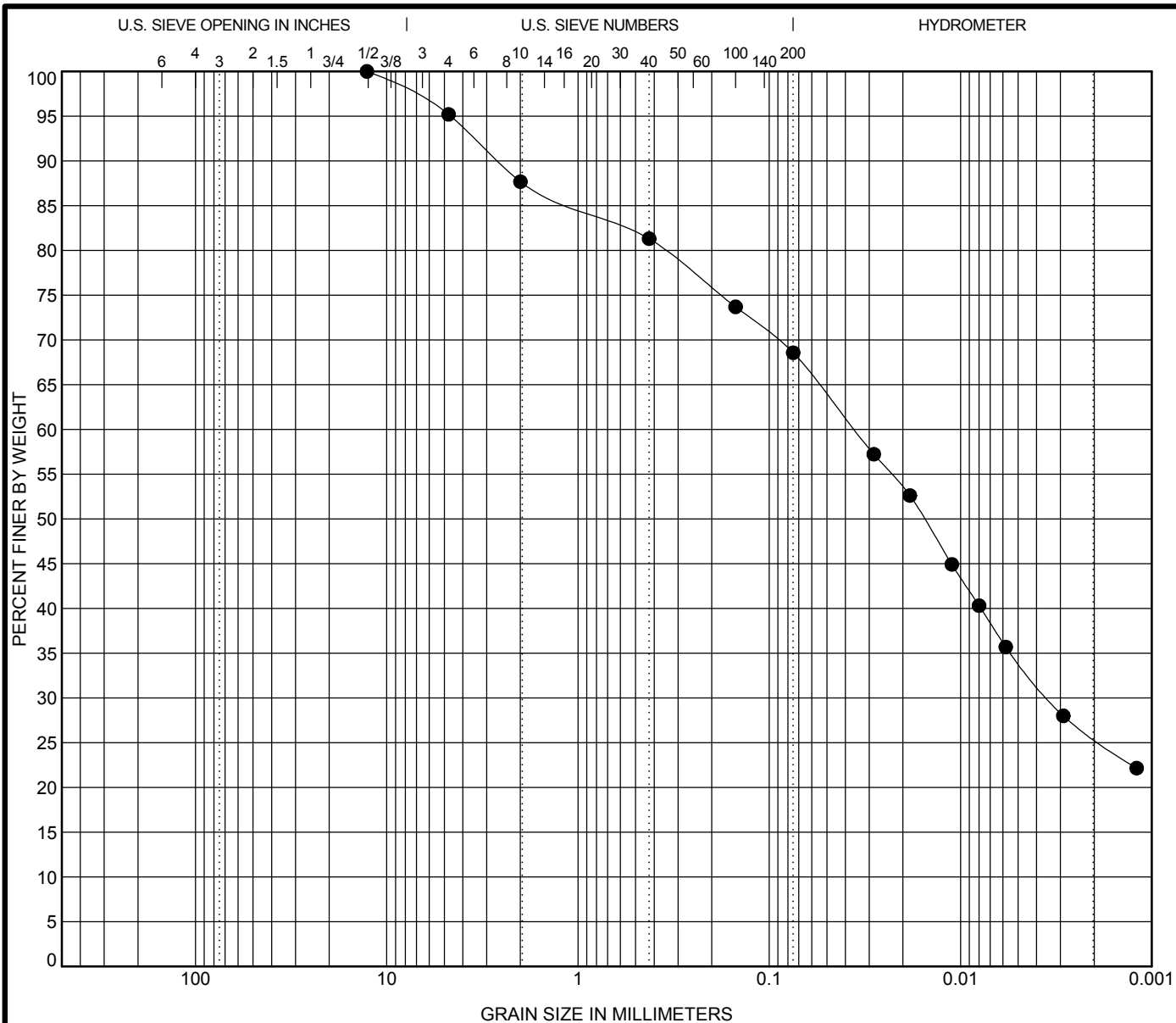
GRAIN SIZE IDH 3-18-11 053-0126_0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

IDH GRAIN SIZE DISTRIBUTION

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston



| | | | | | |
|---------|--------|--------|------|------|------|
| COBBLES | GRAVEL | SAND | | SILT | CLAY |
| | | coarse | fine | | |

| Specimen Identification | Classification | LL | PL | PI | Cc | Cu |
|-------------------------|-------------------|------|------|------|----|----|
| ● RW 04 10.00 | A-6 (6) CLAY LOAM | 26.6 | 14.2 | 12.4 | | |

| Specimen Identification | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|-------------------------|------|-------|-------|-----|---------|-------|-------|-------|
| ● RW 04 10.00 | 12.7 | 0.036 | 0.003 | | 12.3 | 19.1 | 43.0 | 25.5 |



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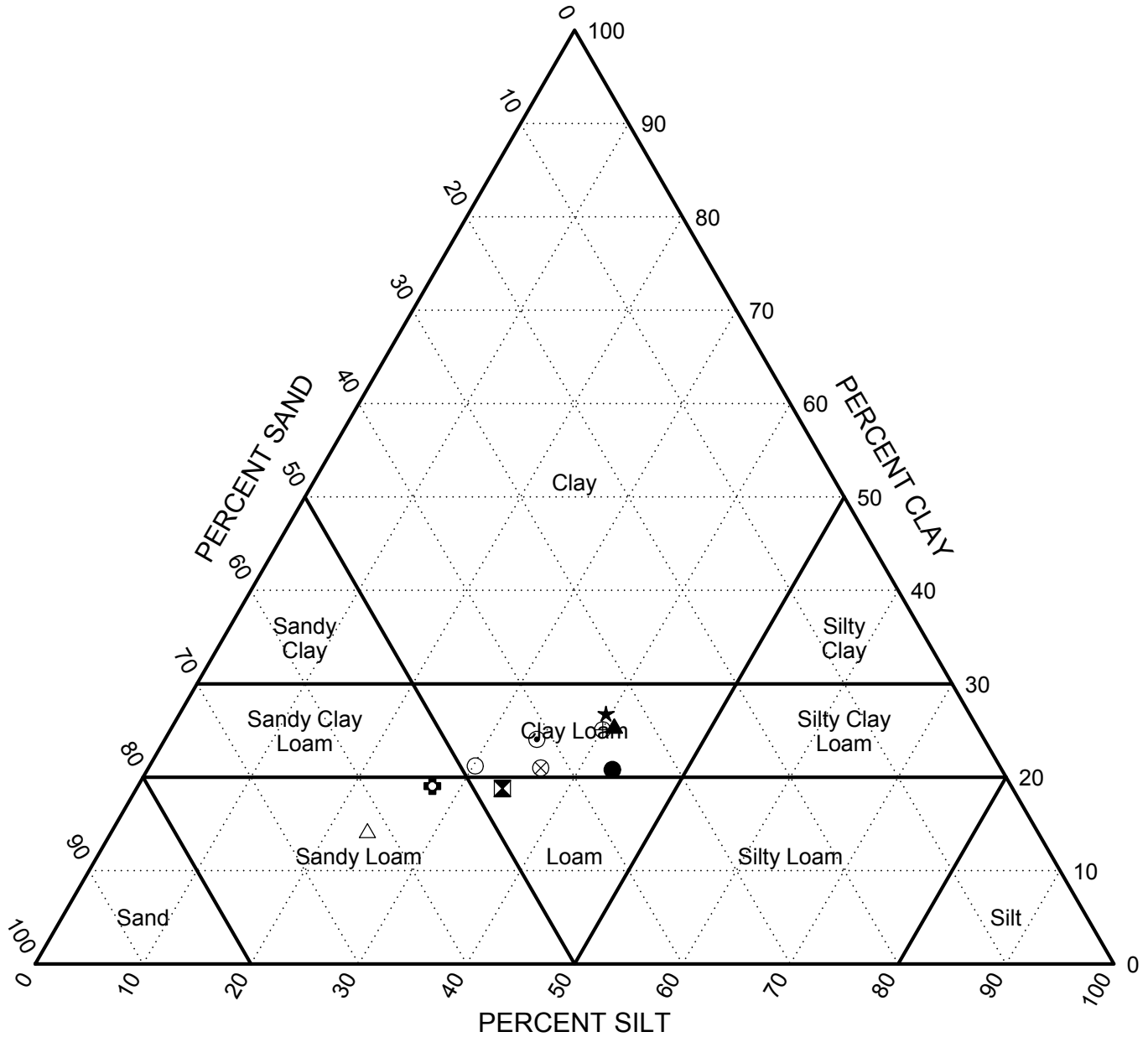
IDH GRAIN SIZE DISTRIBUTION

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

GRAIN SIZE IDH 3-18-11 053-0126_0127.GPJ IL DOT.GDT 7/21/17

APPENDIX

I



| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|--------------------|
| ● | 101 | 205+45 | 62.00 ft Rt. | 1.50 | A-6 (4) CLAY LOAM |
| ⊠ | 102 | 225+00 | 62.00 ft Rt. | 1.50 | A-4 (2) LOAM |
| ▲ | 103 | 238+85 | 62.00 ft Rt. | 1.50 | A-6 (5) CLAY LOAM |
| ★ | 104 | 261+60 | 62.00 ft Rt. | 1.25 | A-6 (6) CLAY LOAM |
| ⊙ | 105 | 205+95 | 62.00 ft Rt. | 1.50 | A-6 (5) CLAY LOAM |
| ⊕ | 106 | 315+00 | 62.00 ft Rt. | 1.50 | A-6 (3) SANDY LOAM |
| ⊗ | 107 | 341+30 | 62.00 ft Rt. | 1.50 | A-6 (3) CLAY LOAM |
| △ | 108 | 356+50 | 62.00 ft Rt. | 1.50 | A-6 (1) SANDY LOAM |
| ⊗ | 201 | 200+00 | 50.00 ft Rt. | 1.50 | A-4 (2) CLAY LOAM |
| ⊕ | 202 | 249+35 | 50.00 ft Rt. | 1.50 | A-6 (4) CLAY LOAM |

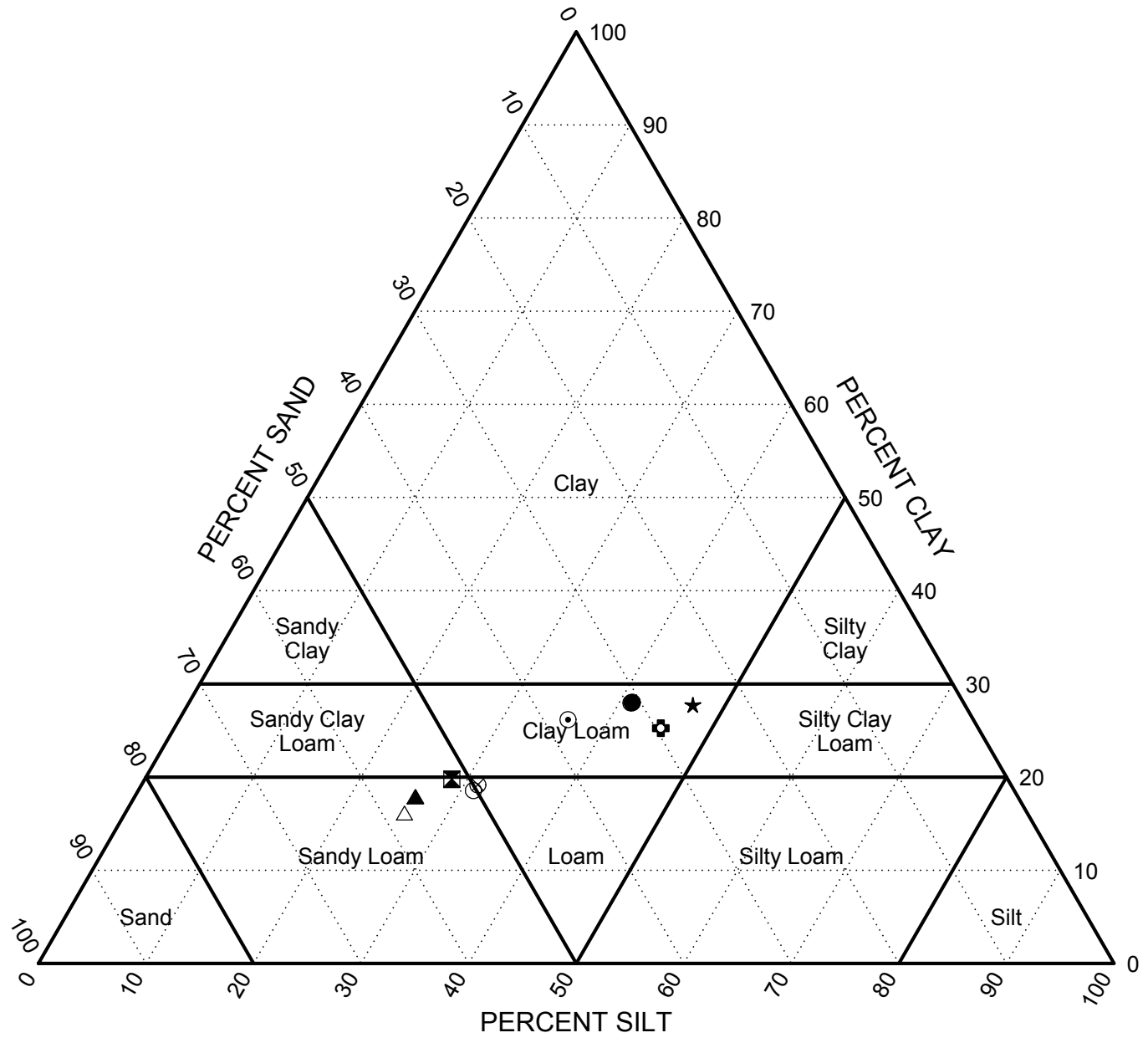


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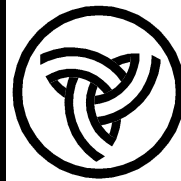
IDH Textural Classification Chart

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

TEXTURAL CLASSIFICATION I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1).GPJ IL_DOT.GDT 7/21/17



| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|--------------------|
| ● | 203 | 275+00 | 50.00 ft Rt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊠ | 204 | 305+00 | 50.00 ft Rt. | 1.50 | A-6 (5) SANDY LOAM |
| ▲ | 205 | 325+00 | 50.00 ft Rt. | 1.50 | A-6 (2) SANDY LOAM |
| ★ | 301 | 74+85 | 62.00 ft Rt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊙ | 302 | 109+45 | 62.00 ft Rt. | 1.25 | A-6 (7) CLAY LOAM |
| ⊕ | 303 | 121+75 | 62.00 ft Rt. | 1.50 | A-4 (5) CLAY LOAM |
| ⊕ | 304 | 180+47 | 62.00 ft Rt. | 1.50 | A-4 (2) SANDY LOAM |
| △ | 501 | 350+00 | 62.00 ft Lt. | 1.50 | A-6 (3) SANDY LOAM |
| ⊗ | 502 | 306+90 | 62.00 ft Lt. | 1.50 | A-6 (3) LOAM |
| ⊕ | 503 | 277+60 | 62.00 ft Lt. | 1.30 | A-6 (7) CLAY LOAM |

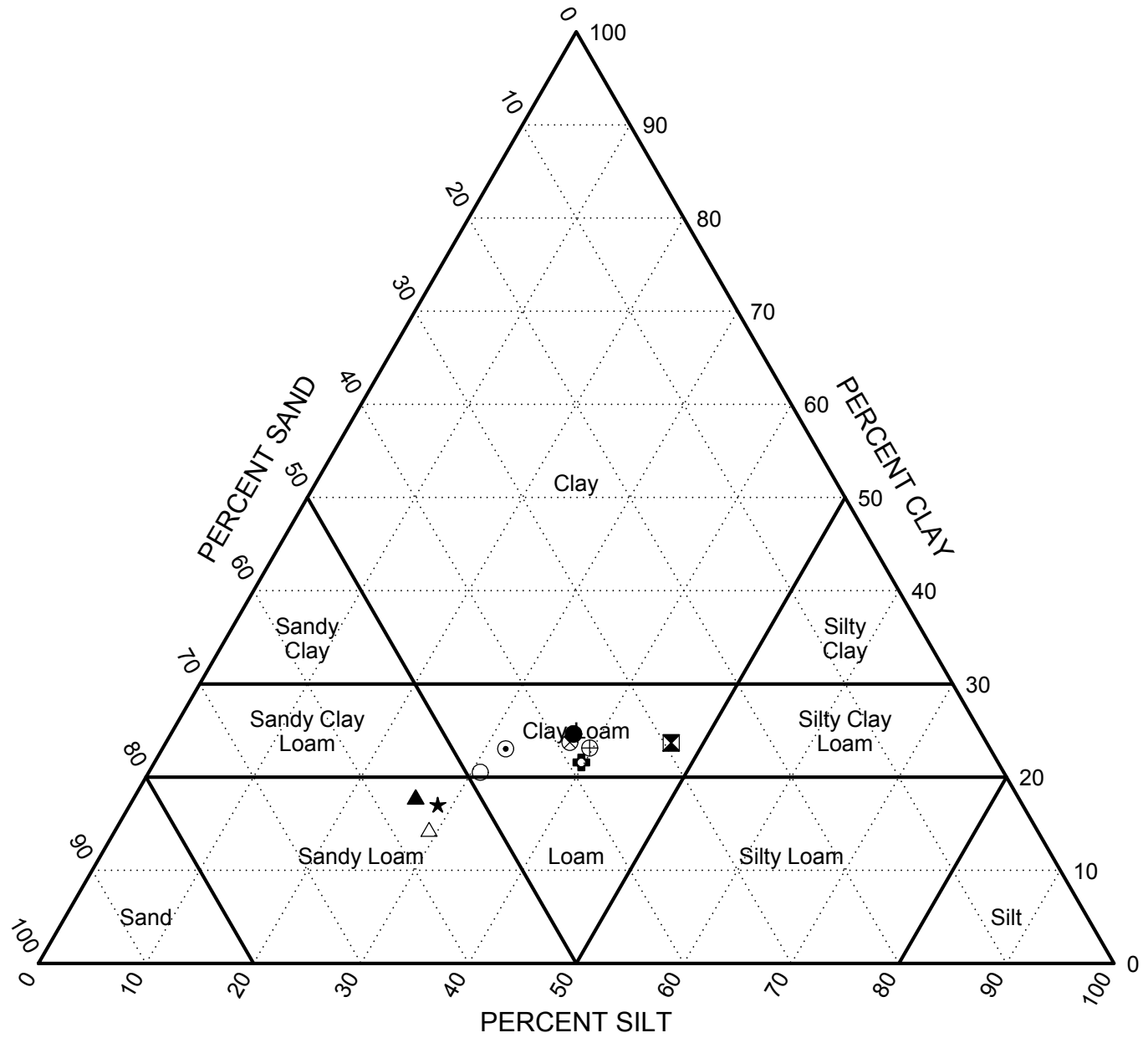


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 Illinois Department of Transportation

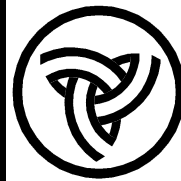
IDH Textural Classification Chart

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

TEXTURAL CLASSIFICATION I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1). GPJ_IL_DOT.GDT 7/21/17



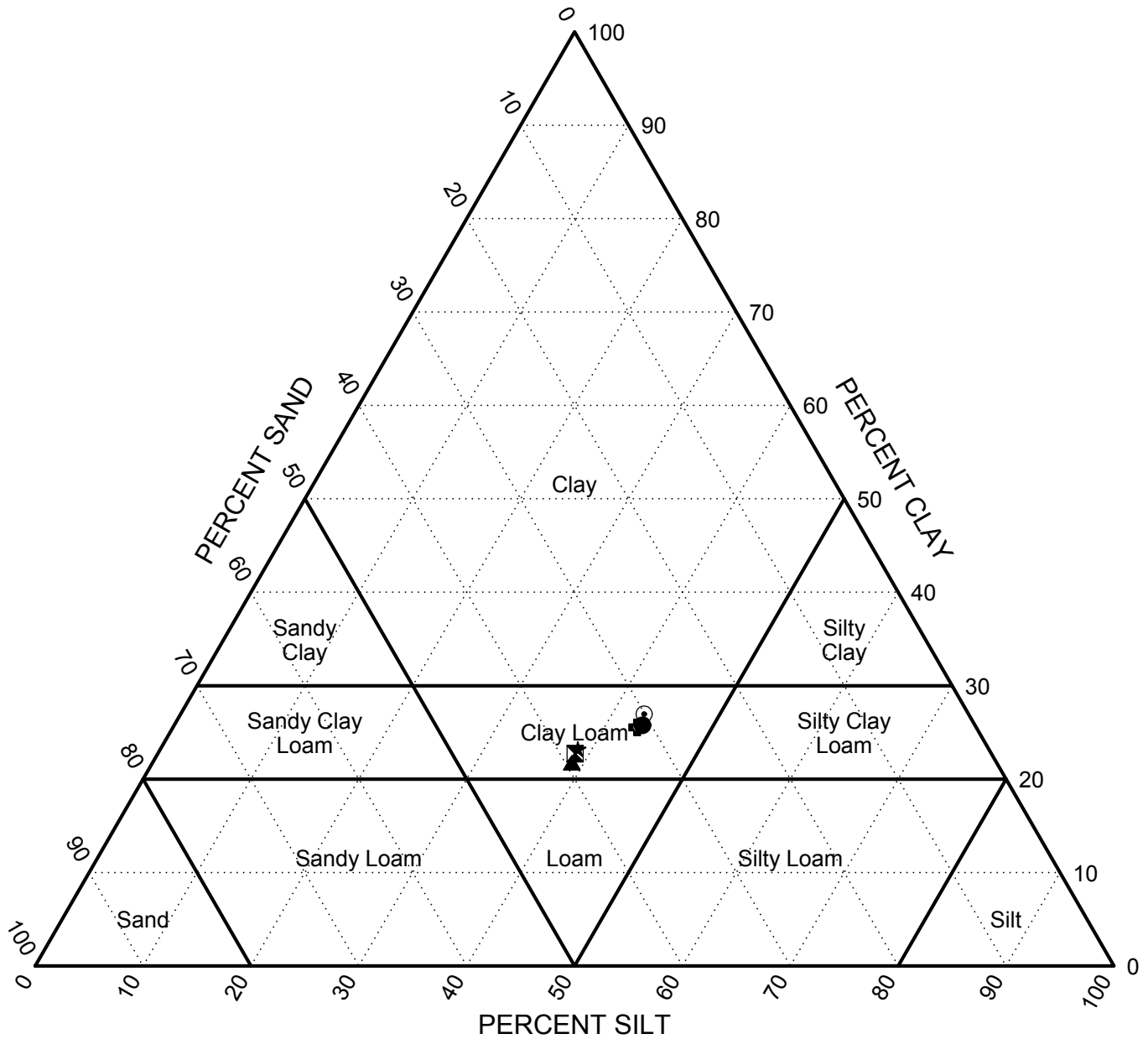
| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|--------------------|
| ● | 505 | 244+65 | 62.00 ft Lt. | 1.30 | A-6 (4) CLAY LOAM |
| ⊠ | 506 | 195+45 | 62.00 ft Lt. | 1.50 | A-4 (4) CLAY LOAM |
| ▲ | 601 | 331+20 | 50.00 ft Lt. | 1.50 | A-6 (2) SANDY LOAM |
| ★ | 602 | 320+35 | 50.00 ft Lt. | 1.50 | A-6 (2) SANDY LOAM |
| ⊙ | 603 | 286+15 | 50.00 ft Lt. | 1.50 | A-6 (4) CLAY LOAM |
| ⊕ | 604 | 233+25 | 50.00 ft Lt. | 1.50 | A-4 (3) CLAY LOAM |
| ○ | 605 | 220+00 | 50.00 ft Lt. | 1.50 | A-6 (3) CLAY LOAM |
| △ | 701 | 180+40 | 62.00 ft Lt. | 1.50 | A-4 (1) SANDY LOAM |
| ⊗ | 702 | 141+35 | 62.00 ft Lt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊕ | 703 | 74+90 | 62.00 ft Lt. | 1.50 | A-6 (4) CLAY LOAM |



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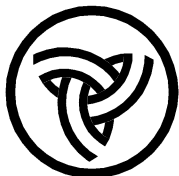
IDH Textural Classification Chart

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston



| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|-------------------|
| ● | RW 01 | 130+00 | 70.00 ft Rt. | 4.00 | A-6 (7) CLAY LOAM |
| ⊠ | RW 02 | 140+00 | 70.00 ft Rt. | 2.50 | A-6 (4) CLAY LOAM |
| ▲ | RW 02 | 140+00 | 70.00 ft Rt. | 9.50 | A-6 (4) CLAY LOAM |
| ★ | RW 03 | 145+00 | 70.00 ft Lt. | 2.50 | A-6 (6) CLAY LOAM |
| ⊙ | RW 04 | 135+00 | 70.00 ft Lt. | 2.50 | A-6 (7) CLAY LOAM |
| ⊕ | RW 04 | 135+00 | 70.00 ft Lt. | 10.00 | A-6 (6) CLAY LOAM |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

TEXTURAL CLASSIFICATION 053-0126_0127.GPJ IL_DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

IDH Textural Classification Chart

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

APPENDIX

J

| Borehole | Depth | Liquid Limit | Plastic Limit | Plasticity Index | Maximum Size (mm) | %<#200 Sieve | Classification | Water Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|----------|-------|--------------|---------------|------------------|-------------------|--------------|----------------|-------------------|-------------------|----------------|------------|
| 101 | 1.50 | 21.5 | 10.6 | 10.9 | 19 | 64 | A-6 | 11.5 | | | |
| 102 | 1.50 | 25.2 | 15.0 | 10.2 | 25 | 53 | A-4 | 12.6 | | | |
| 103 | 1.50 | 25.7 | 14.9 | 10.8 | 25 | 66 | A-6 | 12.6 | | | |
| 104 | 1.25 | 28.0 | 15.5 | 12.5 | 19 | 66 | A-6 | 16.5 | | | |
| 105 | 1.50 | 28.7 | 15.6 | 13.1 | 19 | 59 | A-6 | 14.4 | | | |
| 106 | 1.50 | 27.7 | 13.5 | 14.2 | 19 | 46 | A-6 | 10.8 | | | |
| 107 | 1.50 | 27.0 | 13.8 | 13.2 | 25 | 51 | A-6 | 20.6 | | | |
| 108 | 1.50 | 30.3 | 16.2 | 14.1 | 25 | 38 | A-6 | 13.5 | | | |
| 201 | 1.50 | 23.8 | 14.8 | 9.0 | 25 | 57 | A-4 | 14.6 | | | |
| 202 | 1.50 | 25.8 | 14.8 | 11.0 | 25 | 65 | A-6 | 20.8 * | | | |
| 203 | 1.50 | 27.7 | 15.2 | 12.5 | 19 | 69 | A-6 | 15.3 | | | |
| 204 | 1.50 | 30.4 | 12.3 | 18.1 | 25 | 48 | A-6 | 14.2 | | | |
| 205 | 1.50 | 25.2 | 13.2 | 12.0 | 25 | 44 | A-6 | 10.5 | | | |
| 301 | 1.50 | 26.6 | 15.7 | 10.9 | 19 | 75 | A-6 | 19.0 | | | |
| 302 | 1.25 | 33.8 | 17.8 | 16.0 | 25 | 62 | A-6 | 14.6 | | | |
| 303 | 1.50 | 26.7 | 17.1 | 9.6 | 25 | 70 | A-4 | 15.8 | | | |
| 304 | 1.50 | 25.4 | 14.7 | 10.7 | 25 | 50 | A-4 | 12.1 | | | |
| 501 | 1.50 | 31.6 | 16.5 | 15.1 | 25 | 42 | A-6 | 17.3 | | | |
| 502 | 1.50 | 28.2 | 15.2 | 13.0 | 25 | 50 | A-6 | 15.6 | | | |
| 503 | 1.30 | 29.0 | 15.7 | 13.3 | 19 | 69 | A-6 | 9.6 | | | |
| 505 | 1.30 | 25.1 | 14.5 | 10.6 | 19 | 62 | A-6 | 11.7 | | | |
| 506 | 1.50 | 23.7 | 14.8 | 8.9 | 25 | 71 | A-4 | 13.0 | | | |
| 601 | 1.50 | 27.3 | 14.4 | 12.9 | 25 | 44 | A-6 | 13.8 | | | |
| 602 | 1.50 | 27.5 | 14.8 | 12.7 | 25 | 46 | A-6 | 14.8 | | | |
| 603 | 1.50 | 28.7 | 15.9 | 12.8 | 25 | 55 | A-6 | 15.0 | | | |
| 604 | 1.50 | 22.8 | 13.1 | 9.7 | 19 | 61 | A-4 | 13.8 | | | |
| 605 | 1.50 | 26.9 | 15.3 | 11.6 | 25 | 51 | A-6 | 17.6 | | | |
| 701 | 1.50 | 24.0 | 15.2 | 8.8 | 19 | 44 | A-4 | 14.7 | | | |
| 702 | 1.50 | 29.4 | 15.5 | 13.9 | 19 | 61 | A-6 | 16.0 | | | |
| 703 | 1.50 | 25.7 | 14.7 | 11.0 | 19 | 63 | A-6 | 15.9 | | | |

LAB SUMMARY I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.1) GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

Summary of Laboratory Results

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

| Borehole | Depth | Liquid Limit | Plastic Limit | Plasticity Index | Maximum Size (mm) | %<#200 Sieve | Classification | Water Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|----------|-------|--------------|---------------|------------------|-------------------|--------------|----------------|-------------------|-------------------|----------------|------------|
| RW 01 | 4.00 | 28.1 | 14.1 | 14.0 | 12.7 | 69 | A-6 | | | | |
| RW 01 | 5.00 | | | | | | | 9.3 | | | |
| RW 01 | 7.50 | | | | | | | 9.1 | | | |
| RW 01 | 10.00 | | | | | | | 14.0 | | | |
| RW 02 | 2.50 | 26.6 | 15.1 | 11.5 | 25 | 61 | A-6 | 14.0 | | | |
| RW 02 | 5.00 | | | | | | | 15.1 | | | |
| RW 02 | 7.50 | | | | | | | 17.5 | | | |
| RW 02 | 9.50 | 27.4 | 14.7 | 12.7 | 25 | 61 | A-6 | | | | |
| RW 02 | 10.00 | | | | | | | 11.0 | | | |
| RW 02 | 12.50 | | | | | | | 13.2 | | | |
| RW 02 | 15.00 | | | | | | | 11.2 | | | |
| RW 03 | 2.50 | 28.9 | 15.2 | 13.7 | 25 | 62 | A-6 | 13.4 | | | |
| RW 03 | 5.00 | | | | | | | 17.8 | | | |
| RW 03 | 7.50 | | | | | | | 12.5 | | | |
| RW 03 | 10.00 | | | | | | | 14.2 | | | |
| RW 04 | 2.50 | 28.3 | 14.3 | 14.0 | 25 | 70 | A-6 | 12.0 | | | |
| RW 04 | 5.00 | | | | | | | 10.9 | | | |
| RW 04 | 7.50 | | | | | | | 12.0 | | | |
| RW 04 | 10.00 | 26.6 | 14.2 | 12.4 | 12.7 | 69 | A-6 | 15.8 | | | |
| RW 04 | 12.50 | | | | | | | 13.8 | | | |
| RW 04 | 15.00 | | | | | | | 13.6 | | | |

LAB SUMMARY 053-0126_0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

Summary of Laboratory Results

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

APPENDIX

K

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 101 | Route | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 205+45 | Latitude: | 40.89959444 | Longitude: | -88.67124167 | | |
| Offset: | 6 Ft. Rt. | Direction: | NB | Lane: | Driving Lane | | |
| Comments: | MM 198.47 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|--------|----------------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/4" | HMA Surface | Good | None | None | Some | |
| 3 | 9 1/8" | PCC | Poor | Many | Many | Some | |
| 4 | Unknown | | Poor | choose | choose | choose | CAM 50% Intact |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 102 | Route | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 225+00 | Latitude: | 40.90457778 | | Longitude: | -88.66906667 | |
| Offset: | 6 Ft. Rt. | | Direction: | N | Lane: | Driving Lane | |
| Comments: | MM 198.84 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 3 | 9 1/8" | PCC | Good | None | Many | Some | |
| 4 | 4 1/4" | | Fair | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-----------|-------------------|--------------|-------------------|------------|
| Core # | 103 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 238+85 | Latitude: | 40.907475 | Longitude: | -88.66576389 | | |
| Offset: | 6 Ft. Rt. | Direction: | NB | Lane: | Driving Lane | | |
| Comments: | MM 199.11 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|-------------------------|
| 1 | 1 ¼" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 3 | Unknown | PCC | Poor | Many | Many | Some | Broken into many pieces |
| 4 | 4" | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |
| 6 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 104 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 261+60 | Latitude: | 40.91079444 | Longitude: | -88.65904166 | | |
| Offset: | 6 Ft. Rt. | Direction: | NB | Lane: | Driving Lane | | |
| Comments: | MM 199.54 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1" | HMA Surface | Good | None | None | Some | |
| 3 | 9 1/8" | PCC | Poor | Many | Many | Some | |
| 4 | 3 1/2" | | Fair | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 105 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 205+95 | Latitude: | 40.91433333 | | Longitude: | -88.65156667 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 200.00 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 3 | 9" | PCC | Fair | Some | Many | | |
| 4 | 3 3/4" | | Fair | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 106 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 315+00 | Latitude: | 40.91850556 | | Longitude: | -88.64266111 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 200.55 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 5/8" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 3 | 9 1/4" | PCC | Good | Some | Many | Some | |
| 4 | 4 1/4" | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 107 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 341+30 | Latitude: | 40.92225278 | | Longitude: | -88.63446111 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 201.66 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|------------------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 2" | HMA Binder | Fair | None | Some | Some | |
| 3 | 9 1/2" | PCC | Fair | Many | Many | Some | |
| 4 | 4 1/4" | | Poor | Many | None | Some | CAM – not intact |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 108 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 356+50 | Latitude: | 40.92433611 | | Longitude: | -88.62973889 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 201.35 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/8" | HMA Surface | Good | None | None | Some | |
| 2 | 1 3/4" | HMA Binder | Fair | None | Some | Some | |
| 3 | 9" | PCC | Fair | Some | Many | Some | |
| 4 | 3 1/4" | | Good | None | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 201 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 200+00 | Latitude: | 40.89820556 | Longitude: | -88.67137222 | | |
| Offset: | 6 Ft. Lt. | Direction: | NB | Lane: | Passing Lane | | |
| Comments: | MM 198.38 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/2" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/4" | PCC | Good | None | Many | Some | |
| 4 | 4 3/4" | | Good | None | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 202 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 249+35 | Latitude: | 40.90914444 | Longitude: | -88.66278889 | | |
| Offset: | 6 Ft. Lt. | Direction: | NB | Lane: | Passing Lane | | |
| Comments: | MM 199.32 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ½" | HMA Binder | Fair | None | Some | Some | |
| 3 | 9 ¼" | PCC | Poor | Many | Many | Some | |
| 4 | 4 ¼" | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-----------|-------------------|--------------|-------------------|------------|
| Core # | 203 | Route: | I-55 | Core Date: | 01/19/2017 | Logged By: | Mike Short |
| Station: | 275+00 | Latitude: | 40.912875 | Longitude: | -88.65499167 | | |
| Offset: | 6 Ft. Lt. | Direction: | NB | Lane: | Passing Lane | | |
| Comments: | MM 199.80 | | | | | | |



203 - photo not available

| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 2" | HMA Binder | Good | None | Some | Some | |
| 3 | 9" | PCC | Good | None | Some | Some | |
| 4 | 4" | | Good | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|----------|-------------------|--------------|-------------------|------------|
| Core # | 204 | Route: | I-55 | Core Date: | 01/19/2017 | Logged By: | Mike Short |
| Station: | 305+00 | Latitude: | 40.91705 | Longitude: | -88.64576667 | | |
| Offset: | 6 Ft. Lt. | Direction: | NB | Lane: | Passing Lane | | |
| Comments: | MM 200.37 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1 3/4" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/4" | PCC | Good | None | Some | Some | |
| 4 | Unknown | | Poor | None | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|------------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 205 | Route: | I-55 | Core Date: | 01/19/2017 | Logged By: | Mike Short |
| Station: | 325+00 | Latitude: | 40.91998333 | Longitude: | -88.63953333 | | |
| Offset: | 54 Ft. Lt. | Direction: | NB | Lane: | Passing Lane | | |
| Comments: | MM 200.76 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 3/4" | HMA Binder | Good | None | Some | Some | |
| 3 | 9" | PCC | Good | None | Many | Some | |
| 4 | Unknown | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------------------|-------------------|-------------|-------------------|--------------|-------------------|-------------|
| Core # | 301 | Route: | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 74+85 | Latitude: | 40.86386389 | Longitude: | -88.67101944 | | |
| Offset: | 6 Ft. Rt. | Direction: | NB | Lane: | Driving Lane | | |
| Comments: | MM 196.00; Good Pavt. | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|-------------------|
| 1 | 1 9/16" | HMA Surface | Good | None | None | Some | |
| 2 | 1 7/16" | HMA Surface | Good | None | None | Some | |
| 3 | 9 9/16" | PCC | Poor | Some | Some | Some | Broke in 2 pieces |
| 4 | 4" | | Poor | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|------------|-------------------|--------------|
| Core # | 302 | Route: | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 109+45 | Latitude: | 40.87330278 | Longitude: | | | -88.67110556 |
| Offset: | 6 Ft. Rt. | Direction: | NB | Lane: | | | Driving Lane |
| Comments: | | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 9 3/8" | PCC | Good | None | Some | Some | |
| 3 | Unknown | | Poor | Some | None | Some | CAM |
| 4 | | | | | | | |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|------------------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------|
| Core # | 303 | Route: | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 121+75 | Latitude: | 40.87669444 | | Longitude: | -88.67117222 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 196.90, Patch in Rt. Wheel Path | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 5/8" | HMA Surface | Good | None | None | Some | |
| 2 | 1 11/16" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/4" | PCC | Good | None | None | Some | |
| 4 | 4 1/2" | | Good | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|--------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------|
| Core # | 304 | Route: | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 180+47 | Latitude: | 40.89279166 | | Longitude: | -88.67134167 | |
| Offset: | 6 Ft. Rt. | | Direction: | NB | Lane: | Driving Lane | |
| Comments: | MM 198.00, Good Pavement | | | | | | |



304 - photo not available

| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|-----------------------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1 9/16" | HMA Surface | Good | None | None | Some | |
| 3 | 9 5/16" | PCC | Poor | Some | Some | Some | 2 longitudinal cracks |
| 4 | Unknown | | Poor | Many | None | Some | CAM – in pieces |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 501 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 350+00 | Latitude: | 40.92383889 | | Longitude: | -88.63201944 | |
| Offset: | 6 Ft. Rt. | | Direction: | SB | Lane: | Driving Lane | |
| Comments: | MM 201.22 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 3 | 9" | PCC | Good | None | Some | Some | |
| 4 | 4" | | Fair | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 502 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 350+00 | Latitude: | 40.91763333 | Longitude: | -88.64543333 | | |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | Driving Lane | | |
| Comments: | MM 201.22 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 3 | 9" | PCC | Good | None | Some | Some | |
| 4 | 4" | | Fair | Some | None | Some | CAM |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 503 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 277+60 | Latitude: | 40.91338611 | Longitude: | -88.65449444 | | |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | Driving Lane | | |
| Comments: | MM 199.83 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/4" | HMA Surface | Good | None | None | None | |
| 3 | 9 1/2" | PCC | Poor | Many | Many | Some | |
| 4 | 4 1/4" | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|------------|
| Core # | 505 | Route | I-55 | Core Date: | 01/17/2017 | Logged By: | Mike Short |
| Station: | 244+65 | Latitude: | 40.90876389 | Longitude: | -88.664575 | | |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | Driving Lane | | |
| Comments: | MM 199.21 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1" | HMA Surface | Good | None | None | None | |
| 3 | 9 1/2" | PCC | Poor | Many | Many | Some | |
| 4 | 4 1/8" | | Poor | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|-----------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 506 | Route | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 199+45 | Latitude: | 40.89701389 | | Longitude: | -88.67194444 | |
| Offset: | 6 Ft. Rt. | | Direction: | SB | Lane: | Driving Lane | |
| Comments | MM 198.29 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ¼" | HMA Surface | Good | None | None | Some | |
| 3 | 9 ¼" | PCC | Poor | Many | Many | Some | |
| 4 | 4 ½" | | Fair | Some | None | Some | CAM |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 601 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 331+20 | Latitude: | 40.92103333 | | Longitude: | -88.63767222 | |
| Offset: | 6 Ft. Lt. | | Direction: | SB | Lane: | Passing Lane | |
| Comments: | | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|---------------------|
| 1 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 2 | 2 1/8" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/8" | PCC | Good | None | Some | Some | 1 vertical crack in |
| 4 | 4 1/8" | | Good | Some | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 602 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 320+35 | Latitude: | 40.91942222 | | Longitude: | -88.64103611 | |
| Offset: | 6 Ft. Lt. | | Direction: | SB | Lane: | Passing Lane | |
| Comments: | MM 200.64 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 3/8" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/2" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/4" | PCC | Good | Some | Some | Some | |
| 4 | 4 1/4" | | Fair | Many | None | Some | CAM |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 603 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 286+15 | Latitude: | 40.91456111 | | Longitude: | -88.651725 | |
| Offset: | 6 Ft. Lt. | | Direction: | SB | Lane: | Passing Lane | |
| Comments: | | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1 5/8" | HMA Binder | Good | None | Some | Some | |
| 3 | 9" | PCC | Good | Some | Many | Some | |
| 4 | 4" | | Fair | Many | None | Some | CAM |

| | | | | | | | |
|------------------|-----------|-------------------|----------|-------------------|--------------|-------------------|--------------|
| Core # | 604 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 233+25 | Latitude: | 40.90655 | Longitude: | | | -88.66783889 |
| Offset: | 6 Ft. Lt. | Direction: | SB | Lane: | Passing Lane | | |
| Comments: | MM 199.00 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------------------------|
| 1 | 1 ½" | HMA Surface | Good | None | None | Some | |
| 2 | 1 ¼" | HMA Binder | Fair | None | Some | Some | |
| 3 | 9 ¼" | PCC | Fair | Some | Many | Some | |
| 4 | Unknown | | Poor | Many | None | Some | CAM—Two Half-Disintegrated |

| | | | | | | | |
|------------------|-----------|------------------|-------------------|-------------------|-------------------|-------------------|------------|
| Core # | 605 | Route: | I-55 | Core Date: | 01/18/2017 | Logged By: | Mike Short |
| Station: | 220+00 | Latitude: | 40.90346389 | | Longitude: | -88.67020278 | |
| Offset: | 6 Ft. Lt. | | Direction: | SB | Lane: | Passing Lane | |
| Comments: | MM 198.72 | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|-------------------|
| 1 | 1 3/8" | HMA Surface | Good | None | None | Some | |
| 2 | 1 1/2" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 1/4" | PCC | Fair | Many | Many | Some | |
| 4 | Unknown | | Poor | Many | None | Some | CAM-Disintegrated |

| | | | | | | | |
|------------------|-----------|-------------------|-------------|-------------------|--------------|-------------------|-------------|
| Core # | 701 | Route | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 141+35 | Latitude: | 40.89276389 | Longitude: | -88.67191389 | | |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | Driving Lane | | |
| Comments: | | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|-----------------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1 3/4" | HMA Surface | Good | None | None | Some | |
| 3 | 9 7/16" | PCC | Poor | | Many | Some | |
| 4 | Unknown | | Poor | Many | None | Some | CAM – in pieces |

| | | | | | | | |
|------------------|-----------------------------------|-------------------|-------------|-------------------|------------|-------------------|--------------|
| Core # | 702 | Route | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 141+35 | Latitude: | 40.88203056 | Longitude: | | | -88.67173055 |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | | | Driving Lane |
| Comments: | MM 197.16, Bad Pavement / Rutting | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------------------|
| 1 | 1 1/2" | HMA Surface | Good | None | None | Some | |
| 2 | 1 5/8" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 5/16" | PCC | Good | None | None | Some | Very few Agg. Cracks |
| 4 | Unknown | | Poor | Many | None | Some | CAM – in pieces |
| 5 | | | | | | | |

| | | | | | | | |
|------------------|---|-------------------|-----------|-------------------|--------------|-------------------|-------------|
| Core # | 703 | Route | I-55 | Core Date: | 01/23/2017 | Logged By: | Chad Nelson |
| Station: | 74+90 | Latitude: | 40.863725 | Longitude: | -88.67168333 | | |
| Offset: | 6 Ft. Rt. | Direction: | SB | Lane: | Driving Lane | | |
| Comments: | MM 196.00, Good Condition, in cut section | | | | | | |



| Lift | Thickness | Material | Condition | Pavement Cracks | Aggregate Cracks | Voids | Comments |
|------|-----------|-------------|-----------|-----------------|------------------|-------|----------|
| 1 | 1 7/16" | HMA Surface | Good | None | None | Some | |
| 2 | 1 9/16" | HMA Binder | Good | None | Some | Some | |
| 3 | 9 3/16" | PCC | Good | None | Some | Some | |
| 4 | 3 1/4" | | Good | Some | Some | Some | CAM |
| 5 | | | | | Some | | |

I-55 Northbound Pavement Cores



I-55 Southbound Pavement Cores



APPENDIX

L



Illinois Department of Transportation

Memorandum

| | | |
|-----------------|-------------------|-----------------|
| To: | Dave Broviak | Attn: Ted Fultz |
| From: | Wayne L. Phillips | By: Mike Short |
| Subject: | Pavement Cores * | |
| Date: | March 31, 2015 | |

* Route: FAI 55 (I-55)
Section: (53-4,5) RS1 & I
County: Livingston
Contract No. 66B64

Attached are descriptions and pictures for the 8 cores taken. The intent of the cores is to evaluate the thickness and condition of the existing HMA shoulder. Cores were taken at the locations indicated.

These cores were taken immediately adjacent to the edge of the original concrete pavement. Previous cores taken in November, 2014 were taken adjacent to the longitudinal edge of pavement joint in the HMA surface. At various locations, the HMA surface was placed greater than 12 feet wide, which resulted in the cores actually being taken about 2 feet from the edge of the original concrete pavement.

As a result of the cores being taken about 2 feet from the edge of the original concrete pavement, these additional cores were taken. These cores indicated that the existing shoulder is in very poor condition immediately adjacent to the edge of the original concrete pavement.

If you have any questions, please contact Mike Short at Ext. 7085.

JH:bz/Soils/Pavement Cores – I-55 Shoulder Cores MM195.0-204.7

cc: Mike Short

Core #1

6" o/s EOP S.B. Outside Shoulder, M. M. 203.00



Lift #1
Lift #2
Lift #3

1 ¾" HMA Surface Course – Fair Condition – No Cracks – Some Voids
2" HMA Binder Course – Poor Condition – Some Cracks – Some Voids
2 ¼" HMA Binder Course – Poor Condition – Some Cracks – Some Voids
6" recovery – the rest is rubble

Core #2

6" o/s EOP S.B. Outside Shoulder, M. M. 201.00



Lift #1

3" HMA Surface Course – Poor Condition – Some Cracks – Many Voids
3" recovery – the rest is rubble

Core #3

6" o/s EOP S.B. Outside Shoulder, M. M. 198.00

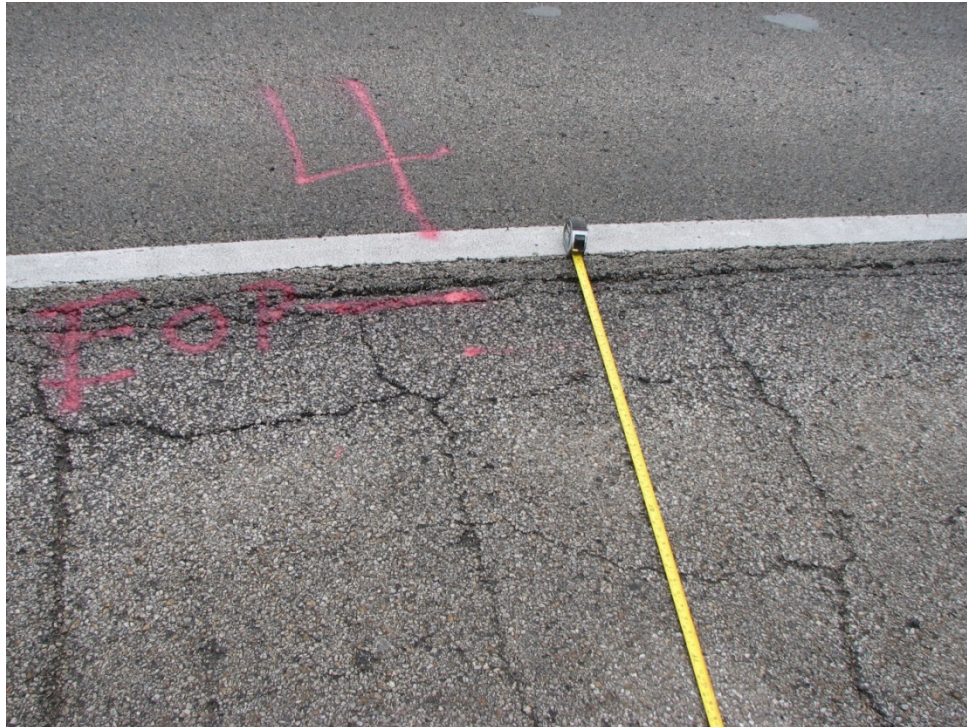


Lift #1
Lift #2

2 ½" HMA Surface Course – Fair Condition – No Cracks – Some Voids
3" HMA Binder Course – Poor Condition – Some Cracks – Many Voids –
Very Poor
5" recovery – the rest is rubble

Core #4

6" o/s EOP S.B. Outside Shoulder, M. M. 195.00



Lift #1
Lift #2
Lift #3

1 ¼" HMA Surface Course – Poor Condition – No Cracks – Many Voids
3" HMA Binder Course – Poor Condition – Some Cracks – Many Voids
2 ½" HMA Surface Course – Poor Condition – Some Cracks – Many Voids –
Very Poor
7" recovery – the rest is rubble

Core #5

6" o/s EOP N.B. Outside Shoulder, M. M. 195.00



- Lift #1 2" HMA Surface Course – Fair Condition – No Cracks – Some Voids
- Lift #2 ½" HMA Surface Course – Poor Condition – Some Cracks – Many Voids –
Very Poor
- Lift #3 1 ¾" HMA Surface Course – Poor Condition – Many Cracks – Many Voids –
Very Poor
- 4" recovery – the rest is rubble

Core #6

6" o/s EOP N.B. Outside Shoulder, M. M. 198.00



- | | |
|---------|--|
| Lift #1 | 3 1/2" HMA Surface Course – Fair Condition – No Cracks – Some Voids |
| Lift #2 | 2 1/2" HMA Binder Course – Fair Condition – No Cracks – Some Voids |
| Lift #3 | 2 1/2" HMA Binder Course – Fair Condition - No Cracks – Some Voids |
| Lift #4 | 3 1/2" HMA Binder Course – Poor Condition – Some Cracks – Some Voids |
| | 12" recovery – full recovery |

Core #7

6" o/s EOP N.B. Outside Shoulder, M. M. 201.00

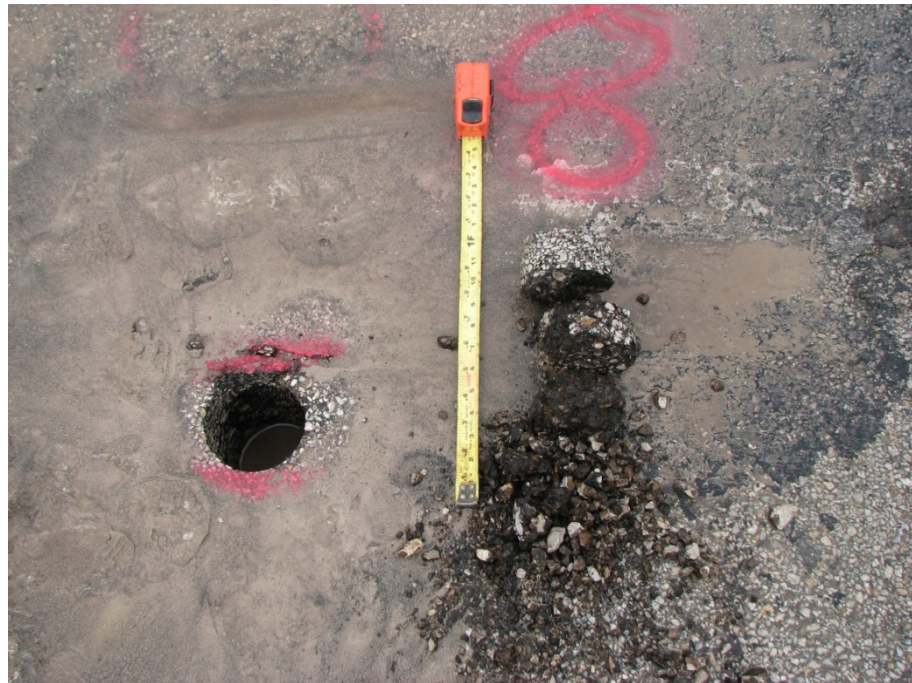


Lift #1
Lift #2

1 ¾" HMA Surface Course – Fair Condition – No Cracks – Some Voids
2 ½" HMA Binder Course – Poor Condition – Many Cracks – Many Voids –
Rubble – Very Poor
4" recovery – the rest is rubble

Core #8

6" o/s EOP N.B. Outside Shoulder, M. M. 203.00



Lift #1
Lift #2

1 ¾" HMA Surface Course – Fair Condition – No Cracks – Some Voids
5 ½" HMA Binder Course – Broken & Crumbled – Very Poor
7" recovery – the rest is rubble

APPENDIX

M

Core #5 2' O/S EOP, S.B. Driving Lane Shoulder, M.M. 202.00

Lift #1 1 ¾" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 2" HMA Binder Course, Good Condition, No Cracks, Many Voids
Lift #3 3" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #4 2 ½" HMA Binder Course, Good Condition, No Cracks, Many Voids
Lift #5 3 ¾" HMA Binder Course, Good Condition, Some Cracks, Some Voids

Core #6 6' O/S C/L, S.B. Driving Lane, Under Structure 0115, M.M. 200.52

Lift #6 2 ¾" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #7 2' O/S EOP, S.B. Driving Lane Shoulder, Under Structure 0115, M.M. 200.52

Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 3 ¼" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #3 4" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #4 3 ½" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #5 1" HMA Binder Course, Poor Condition, HMA Rubble

Core #8 6' O/S C/L, S.B. Driving Lane, Under Structure 0130, M.M. 198.25

Lift #1 1 3/8" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 1/8" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #9 2' O/S EOP, S.B. Driving Lane Shoulder, Under Structure 0130, M.M. 198.25

Lift #1 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ¼" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 2 ½" HMA Binder Course, Good Condition, No Cracks, Many Voids
Lift #4 3 ¾" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 4 ¼" HMA Binder Course, Fair Condition, Some Cracks, Some Voids

Core #10 6' O/S C/L, S.B. Driving Lane, 50' Before Structure 0128, M.M. 198.16

Lift #1 2" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #11 2' O/S EOP, S.B. Driving Lane Shoulder, 50' Before Structure 0128, M.M. 198.16

Lift #1 1 ¼" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Good Condition, Some Cracks, No Voids
Lift #3 3" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #4 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 2" HMA Binder Course, Good Condition, No Cracks, No Voids

Core #12 6' O/S C/L, S.B. Driving Lane, 50' After Structure 0128, M.M. 198.07

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids

Core #13 2' O/S EOP, S.B. Driving Lane Shoulder, 50' After Structure 0128, M.M. 198.07

Lift #1 1" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #3 3" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #4 2 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 4 ¾" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #14 6' O/S C/L, S.B. Driving Lane, M.M. 198.00

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #15 2' O/S EOP, S.B. Driving Lane Shoulder, M.M. 198.00

Lift #1 1" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 1 ¼" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #3 2 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #4 3 ¾" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #5 4 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #16 0.5' O/S EOP, S.B. Driving Lane Shoulder, M.M. 198.00

Lift #1 2 ½" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #2 2 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 1 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 2" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #5 4 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #17 6' O/S C/L, S.B. Driving Lane, 50' before Structure 0126, M.M. 197.16

Lift #1 3 ¼" HMA Surface Course, Good Condition, Some Cracks, Many Voids

Core #18 2' O/S EOP, S.B. Driving Lane Shoulder, 50' Before Structure 0126, M.M. 197.16

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #3 3 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #4 4 ¾" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #19 6' O/S C/L, S.B. Driving Lane, 55' After Structure 0126, M.M. 197.11

Lift #1 2" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 2 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #20 2' O/S EOP, S.B. Driving Lane Shoulder, 55' After Structure 0126, M.M. 197.11

Lift #1 3" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 3" HMA Binder Course, Good Condition, No Cracks, Many Voids
Lift #4 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #6 3" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #21 6' O/S C/L, S.B. Driving Lane, Under Structure 0116, M.M. 196.63
Lift #1 2" HMA Surface Course, Good Condition, Some Cracks, Many Voids

Core #22 2' O/S EOP, S.B. Driving Lane Shoulder, Under Structure 0116, M.M. 196.63
Lift #1 2 ½" HMA Surface Course, Good Condition, Some Cracks, Some Voids
Lift #2 2 ¾" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #3 2 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 4 ¼" HMA Binder Course, Good Condition, Some Cracks, Some Voids

Core #23 6' O/S C/L, N.B. Driving Lane, Under Structure 0116, M.M. 196.68
Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #24 2' O/S EOP, N.B. Driving Lane Shoulder, Under Structure 0116, M.M. 196.68
Lift #1 2 ¼" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #3 4" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 2 ¼" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 3 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #25 6' O/S C/L, N.B. Driving Lane, 50' before Structure 0127, M.M. 197.15
Lift #1 1 ½" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids

Core #26 2' O/S EOP, N.B. Driving Lane Shoulder, 50' before Structure 0127, M.M. 197.15
Lift #1 2" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 2" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #3 4" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #4 1 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 1 ¾" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #6 2 ¾" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #27 6' O/S C/L, N.B. Driving Lane, 50' after Structure 0127, M.M. 197.20
Lift #1 3" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 1 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #28 2' O/S EOP, N.B. Driving Lane Shoulder, 50' after Structure 0127, M.M. 197.20
Lift #1 1 ¼" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 1 ¾" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2 ½" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #4 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 2 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #6 4" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #29 6' O/S C/L, N.B. Driving Lane, M.M. 198.00

Lift #1 1" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 2" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #30 0.5' O/S EOP, N.B. Driving Lane Shoulder, M.M. 198.00

Lift #1 1 ¼" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2 ½" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #4 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 4 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #31 2' O/S EOP, N.B. Driving Lane Shoulder, M.M. 198.00

Lift #1 1" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 2 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #4 3 ½" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #5 4" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #32 6' O/S C/L, N.B. Driving Lane, 50' before Structure 0129, M.M. 198.11

Lift #1 1" HMA Surface Course, Good Condition, No Cracks, Many Voids

Core #33 2' O/S EOP, N.B. Driving Lane Shoulder, 50' before Structure 0129, M.M. 198.11

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 4" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #3 5 ½" HMA Binder Course, Good Condition, Some Cracks, Some Voids

Core #34 6' O/S C/L, N.B. Driving Lane, 50' after Structure 0129, M.M. 198.20

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids

Core #35 2" O/S EOP, N.B. Driving Lane Shoulder, 50' after Structure 0129, M.M. 198.20

Lift #1 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 3 ¼" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #3 2 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 3 ¼" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #5 3 ¼" HMA Binder Course, Good Condition, Some Cracks, Some Voids

Core #36 6' O/S C/L, N.B. Driving Lane, Under Structure 0130, M.M. 198.30

Lift #1 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #37 2' O/S EOP, N.B. Driving Lane Shoulder, Under Structure 0130, M.M. 198.30

Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 1 ¾" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #4 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #38 6' O/S C/L, N.B. Driving Lane, Under Structure 0115, M.M. 200.54

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids

Core #39 2' O/S EOP, N.B. Driving Lane Shoulder, Under Structure 0115, M.M. 200.54

Lift #1 1" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #3 2" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #4 2" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #5 3 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #6 3 ½" HMA Binder Course, Good Condition, Some Cracks, Some Voids

Core #40 6' O/S C/L, N.B. Driving Lane, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 1 ¾" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #41 0.5' O/S EOP, N.B. Driving Lane Shoulder, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Lift #2 2 ½" HMA Binder Course, Poor Condition, Many Cracks, Some Voids
Lift #3 1 ½" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #4 2 ½" HMA Binder Course, Poor Condition, Many Cracks, Many Voids – Degraded
Lift #5 4" HMA Binder Course, Poor Condition – HMA Rubble/Gravel

Core #42 2' O/S EOP, N.B. Driving Lane Shoulder, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Lift #2 4" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2 ¾" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #4 4 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids – Degraded/with broken pieces and HMA rubble

Core #43 6' O/S C/L, N.B. Driving Lane, Under Structure 0135, M.M. 203.65

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #44 2' O/S EOP, N.B. Driving Lane Shoulder, Under Structure 0135, M.M. 203.65

Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 1" HMA Binder Course, Poor Condition, Some Cracks, Many Voids – Big cracks & voids
Lift #3 3" HMA Binder Course, Fair Condition, Many Cracks, Some Voids
Lift #4 2 ¾" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #5 3 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #45 2' O/S EOP, N.B. Passing Lane Shoulder, Under Structure 0116, M.M. 196.68

Lift #1 1 ¾" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #4 2 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #46 2' O/S EOP, N.B. Passing Lane Shoulder, 50' Before Structure 0127, M.M. 197.15

Lift #1 1 ¼" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Broken into 2 pieces
Lift #2 2" HMA Surface Course, Poor Condition, Many Cracks, Many Voids
Lift #3 2" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #4 3" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #5 3 ¾" HMA Binder Course, Fair Condition, some Cracks, Some Voids

Core #47 2' O/S EOP, N.B. Passing Lane Shoulder, 50' After Structure 0127, M.M. 197.20

Lift #1 1 ¼" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Broken into pieces
Lift #2 4 ½" HMA Surface Course, Poor Condition, Many Cracks, Many Voids
Lift #3 3 ½" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #4 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 3 ¾" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #48 2' O/S EOP, N.B. Passing Lane Shoulder, M.M. 198.00

Lift #1 1 ¼" HMA Surface Course, Poor Condition, Many Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #3 3 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #4 3 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #5 2" HMA Binder Course – HMA Rubble

Core #49 0.5' O/S EOP, N.B. Passing Lane Shoulder, M.M. 198.00

Lift #1 1 ½" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Lift #2 1 ½" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #3 3" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Rubble Underneath

Core #50 6' O/S C/L, N.B. Passing Lane, M.M. 198.00

Lift #1 1 ½" HMA Surface Course, Good Condition, Some Cracks, Many Voids
Lift #2 1 ½" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #51 2' O/S EOP, N.B. Passing Lane Shoulder, 50' Before Structure 0129, M.M. 198.11

Lift #1 2" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 3 ¾" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 2 ½" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #5 2 ¼" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #52 2' O/S EOP, N.B. Passing Lane Shoulder, 50' After Structure 0129, M.M. 198.20

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 1 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #3 3 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 3 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #6 2" HMA Binder Course, Good Condition, No Cracks, Many Voids

Core #53 2' O/S EOP, N.B. Passing Lane Shoulder, Under Structure 0130, M.M. 198.30

Lift #1 1 ½" HMA Surface Course, Poor Condition, Many Cracks, Many Voids
Lift #2 4 ½" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #3 3 ¾" HMA Binder Course, Fair Condition, Many Cracks, Some Voids
Lift #4 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #54 2' O/S EOP, N.B. Passing Lane Shoulder, Under Structure 0115, M.M. 200.54

Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ¾" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #3 3 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #4 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #55 2' O/S EOP, N.B. Passing Lane Shoulder, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 2 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #4 3 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #5 2 ¾" HMA Binder Course, Poor Condition, Many Cracks, Many Voids

Core #56 0.5' O/S EOP, N.B. Passing Lane Shoulder, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Fair Condition, Some Cracks, Some Voids
Lift #2 2" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Rubble Underneath

Core #57 6' O/S C/L, N.B. Passing Lane, M.M. 202.00

Lift #1 1 ½" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 2" HMA Binder Course, Good Condition, No Cracks, Many Voids

Core #58 2' O/S EOP, N.B. Passing Lane Shoulder, Under Structure 0135, M.M. 203.65

Lift #1 1 ½" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #4 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #5 3" HMA Binder Course, Fair Condition, Some Cracks, Some Voids

Core #59 2' O/S EOP, S.B. Passing Lane Shoulder, Under 0135, M.M. 203.65
Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #3 3" HMA Binder Course, Poor Condition, Many Cracks, Some Voids
Lift #4 3" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #5 2 ¼" HMA Binder Course, Poor Condition, Many Cracks, Many Voids – Degrading

Core #60 2' O/S EOP, S.B. Passing Lane Shoulder, M.M. 202.00
Lift #1 1 ¾" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #3 2" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #4 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #5 3 ¼" HMA Binder Course, Fair Condition, Some Cracks, Some Voids

Core #61 0.5' O/S EOP, S.B. Passing Lane Shoulder, M.M. 202.00
Lift #1 1 ¾" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ½" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #3 2 ½" HMA Binder Course, Poor Condition, Many Cracks, Some Voids
Lift #4 3" HMA Binder Course, Poor Condition, Many Cracks, Some Voids
Lift #5 3 ¼" HMA Binder Course, Fair Condition, Many Cracks, Some Voids

Core #62 6' O/S C/L, S.B. Passing Lane, M.M. 202.00
Lift #1 1 ¾" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Good Condition, No Cracks, Many Voids

Core #63 2' O/S EOP, S.B. Passing Lane Shoulder, Under Structure 0115, M.M. 200.52
Lift #1 1 ½" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Lift #2 1 ½" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #3 1 ¾" HMA Binder Course, Poor Condition, Many Cracks, Many Voids
Lift #4 3 ¾" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #5 3 ½" HMA Binder Course, Fair Condition, Some Cracks, Some Voids

Core #64 2' O/S EOP, S.B. Passing Lane Shoulder, Under Structure 0130, M.M. 198.25
Lift #1 1 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 1 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #4 4" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #5 3 ¼" HMA Binder Course, Fair Condition, Many Cracks, Some Voids

Core #65 2' O/S EOP, S.B. Passing Lane Shoulder, 50' Before Structure 0128, M.M. 198.16
Lift #1 1" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 1" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #3 3" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 2" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #5 3" HMA Binder Course, Good Condition, Some Cracks, Some Voids
Lift #6 3" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #66 2' O/S EOP, S.B. Passing Lane Shoulder, 50' After Structure 0128, M.M. 198.07

Lift #1 2" HMA Surface Course, Good Condition, No Cracks, Many Voids
Lift #2 5" HMA Binder Course, Good Condition, Some Cracks, Many Voids
Lift #3 5" HMA Binder Course, Good Condition, Some Cracks, Many Voids

Core #67 2' O/S EOP, S.B. Passing Lane Shoulder, M.M. 198.00

Lift #1 1 ¼" HMA Surface Course, Poor Condition, Some Cracks, Many Voids
Lift #2 2" HMA Binder Course, Poor Condition, Some Cracks, Many Voids – (partially) degraded

Lift #3 2" HMA Binder Course, Poor Condition, Some Cracks, Many Voids
Lift #4 3 ¾" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

Core #68 0.5' O/S EOP, S.B. Passing Lane Shoulder, M.M. 198.00

Lift #1 1 ¼" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 2" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2 ¼" HMA Binder Course, Poor Condition, Many Cracks, Some Voids
Lift #4 3 ½" HMA Binder Course, Fair Condition, Many Cracks, Some Voids
Lift #5 3" HMA Binder Course, Poor Condition, Some Cracks, Many Voids

Core #69 6' O/S C/L, S.B. Passing Lane, M.M. 198.00

Lift #1 1" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ¼" HMA Binder Course, Fair Condition, Many Cracks, Many Voids

Core #70 2' O/S EOP, S.B. Passing Lane Shoulder, 50' Before Structure 0126, M.M. 197.16

Lift #1 1 ¾" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ½" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #3 3" HMA Binder Course, Fair Condition, Many Cracks, Many Voids
Lift #4 3 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 4 ¾" HMA Binder Course, Fair Condition, Many Cracks, Many Voids

Core #71 2' O/S EOP, S.B. Passing Lane Shoulder, 50' After Structure 0126, M.M. 197.11

Lift #1 1 ¾" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #2 2 ¼" HMA Surface Course, Fair Condition, Some Cracks, Many Voids
Lift #3 2 ½" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #4 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #5 2" HMA Binder Course, Fair Condition, Some Cracks, Some Voids
Lift #6 2 ¾" HMA Binder Course, Fair Condition, Some Cracks, Some Voids

Core #72 2' O/S EOP, S.B. Passing Lane Shoulder, Under Structure 0116, M.M. 196.63

Lift #1 2 ¼" HMA Surface Course, Poor Condition, Many Cracks, Many Voids
Lift #2 5 ¼" HMA Binder Course, Fair Condition, Some Cracks, Many Voids
Lift #3 3" HMA Binder Course, Fair Condition, Some Cracks, Many Voids

- Core #73 3' O/S EOP, N.B. Outside Shoulder, Ramp from IL 116 to I-55 N.B., 157' from IL 116 C/L**
Lift #1 2" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 8" HMA Binder Course, Fair Condition, No Cracks, Many Voids
- Core #74 0.5' O/S EOP, Outside Shoulder, Ramp from IL 116 to I-55 N.B. 157' N. of IL 116 C/L**
Lift #1 2" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 2 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 1 ½" HMA Binder Course, Poor Condition, No Cracks, Some Voids – Large Voids
Lift #4 3 ¾" HMA Binder Course, Good Condition, No Cracks, Some Voids
- Core #75 2' O/S EOP, N.B. Inside Shoulder, Ramp from IL 116 to I-55 N.B., 157' N. of IL 116 C/L**
Lift #1 2" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 9" HMA Binder Course, Poor Condition, No Cracks, Many Voids
- Core #76 3' O/S EOP, N.B. Outside Shoulder, Ramp from I-55 N.B. to IL 23, 178' S. of IL 23 C/L**
Lift #1 3" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 7 ½" HMA Binder Course, Fair Condition, No Cracks, Many Voids
- Core #77 0.5' O/S EOP, N.B. Outside Shoulder, Ramp from I-55 N.B. to IL 23, 178' S. of IL 23 C/L**
Lift #1 2 ¾" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 6 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids
- Core #78 2' O/S EOP, N.B. Inside Shoulder, Ramp from I-55 N.B. to IL 23, 178' S. of IL 23 C/L**
Lift #1 2 ½" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 2 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 4 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
- Core #79 3' O/S EOP, N.B. Outside Shoulder, Ramp from IL 23 to I-55 N.B., 147' N. of IL 23 C/L**
Lift #1 1 ¾" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 1 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 2 ¼" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #4 4 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
- Core #80 0.5' O/S EOP, N.B. Outside Shoulder, Ramp from IL 23 to I-55 N.B., 147' N. of IL 23 C/L**
Lift #1 1 ¼" HMA Surface Course, Good Condition, No Cracks, No Voids
Lift #2 1 ½" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 2" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #4 4 ½" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #81 2' O/S EOP, N.B. Inside Shoulder, Ramp from IL 23 to I-55 N.B.,
147' N. of IL 23 C/L**

Lift #1 1 ¼" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 1 ½" HMA Binder Course, Fair Condition, No Cracks Some Voids
Lift #3 2 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #4 4 ½" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #82 3' O/S EOP, S.B. Outside Shoulder, Ramp from I-55 S.B. to IL 23,
192' N. of IL 23 C/L**

Lift #1 3" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 3 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 3 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #83 0.5' O/S EOP, S.B. Outside Shoulder, Ramp from I-55 S.B. to IL 23,
192' N. of IL 23 C/L**

Lift #1 2 ½" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 3 ¼" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 3 ¼" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #84 2' O/S EOP, S.B. Inside Shoulder, Ramp from I-55 S.B. to IL 23,
192' N. of IL 23 C/L**

Lift #1 2 ¾" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 4" HMA Binder Surface Course, Poor Condition, No Cracks, Many Voids
Lift #3 2 ½" HMA Binder Surface Course, Fair Condition, No Cracks, Some Voids

**Core #85 3' O/S EOP, S.B. Outside Shoulder, Ramp from IL 23 to I-55 S.B.,
159' S. of IL 23 C/L**

Lift #1 3" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 6 ½" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #86 0.5' O/S EOP, S.B. Outside Shoulder, Ramp from IL 23 to I-55 S.B.,
159' S. of IL 23 C/L**

Lift #1 2" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 6 ½" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #87 2' O/S EOP, S.B. Inside Shoulder, Ramp from IL 23 to I-55 S.B.,
159' S. of IL 23 C/L**

Lift #1 3 ½" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 6 ½" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #88 3' O/S EOP, S.B. Outside Shoulder, Ramp from I-55 S.B. to IL 116,
153' N. of IL 116 C/L**

Lift #1 2 ¼" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 4" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 4 ½" HMA Binder Course, Good Condition, No Cracks, Some Voids

**Core #89 0.5' O/S EOP, S.B. Outside Shoulder, Ramp from I-55 S.B. to IL 116,
153' N. of IL 116 C/L**

Lift #1 1 ¾" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 ¾" HMA Surface Course, Good Condition, No Cracks, No Voids
Lift #3 3" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #4 5 ¾" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #90 2' O/S EOP, S.B. Inside Shoulder, Ramp from I-55 S.B. to IL 116,
153' N. of IL 116 C/L**

Lift #1 2 ½" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 7 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #91 3' O/S EOP, S.B. Outside Shoulder, Ramp from IL 116 to I-55 S.B.,
172' S. of IL 116 C/L**

Lift #1 2 ½" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 2" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 5" HMA Binder Course, Fair Condition, No Cracks, Some Voids

**Core #92 0.5' O/S EOP, S.B. Outside Shoulder, Ramp from IL 116 to I-55 S.B.,
172' S. of IL 116 C/L**

Lift #1 2 ½" HMA Surface Course, Poor Condition, No Cracks, Many Voids
Lift #2 1 ¾" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 3 ½" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #93 2' O/S EOP, S.B. Inside Shoulder, Ramp from IL 116 to I-55 S.B.,
172' S. of IL 116 C/L**

Lift #1 3" HMA Surface Course, Fair Condition, No Cracks, Some Voids
Lift #2 2 ½" HMA Binder Course, Fair Condition, No Cracks, Some Voids
Lift #3 4" HMA Binder Course, Good Condition, No Cracks, No Voids

**Core #94 3' O/S EOP, N.B. Outside Shoulder, Ramp from I-55 N.B. to IL 116,
175' S. of IL 116 C/L**

Lift #1 2 ¾" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 4" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 4 ½" HMA Binder Course, Poor Condition, No Cracks, Many Voids

**Core #95 0.5' O/S EOP, N.B. Outside Shoulder, Ramp from I-55 N.B. to IL 116,
175' S. of IL 116 C/L**

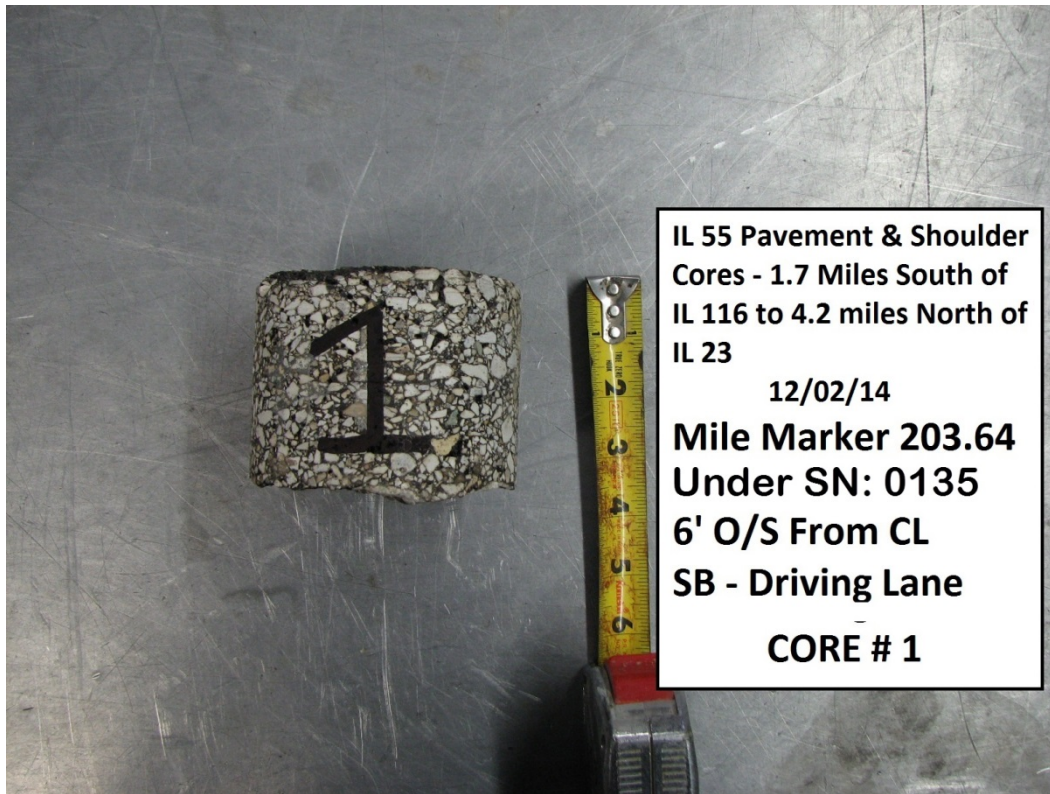
Lift #1 2 ½" HMA Surface Course, Good Condition, No Cracks, Some Voids
Lift #2 3" HMA Binder Course, Fair Condition, No Cracks, Some Voids

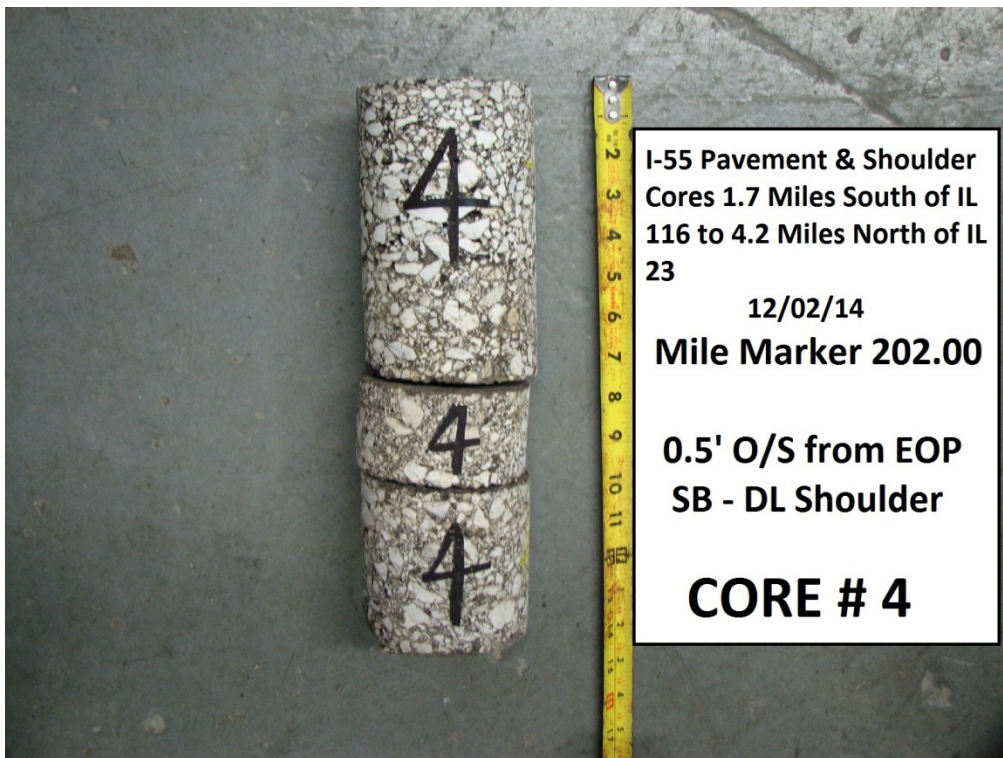
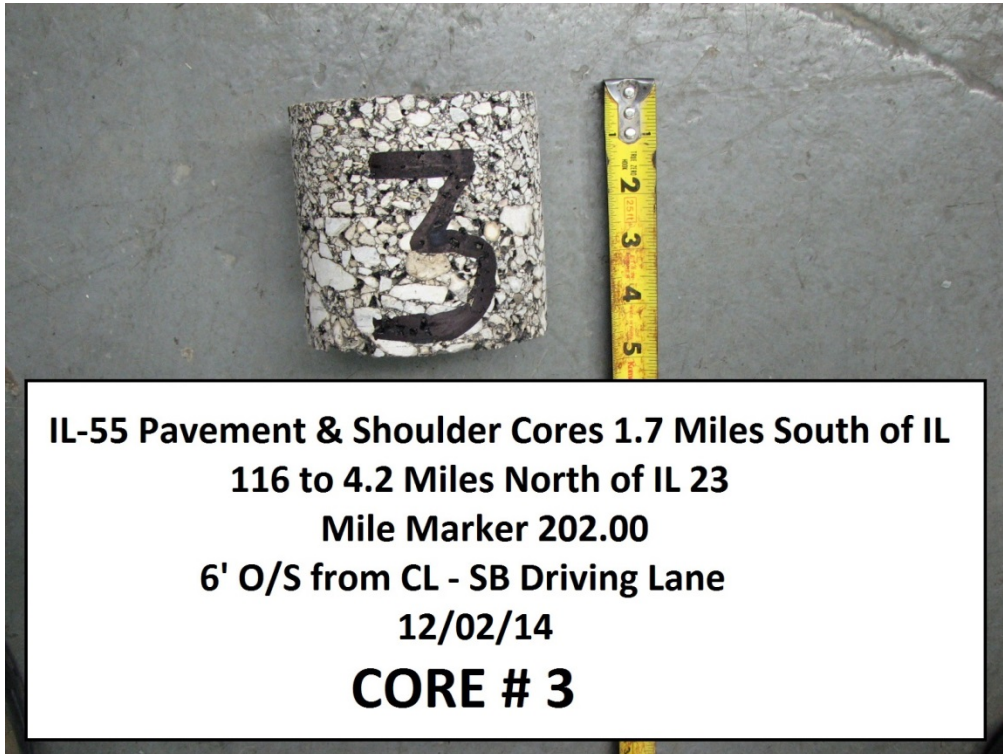
Dave Broviak Attn: Ted Fultz
Page 14
January 5, 2015

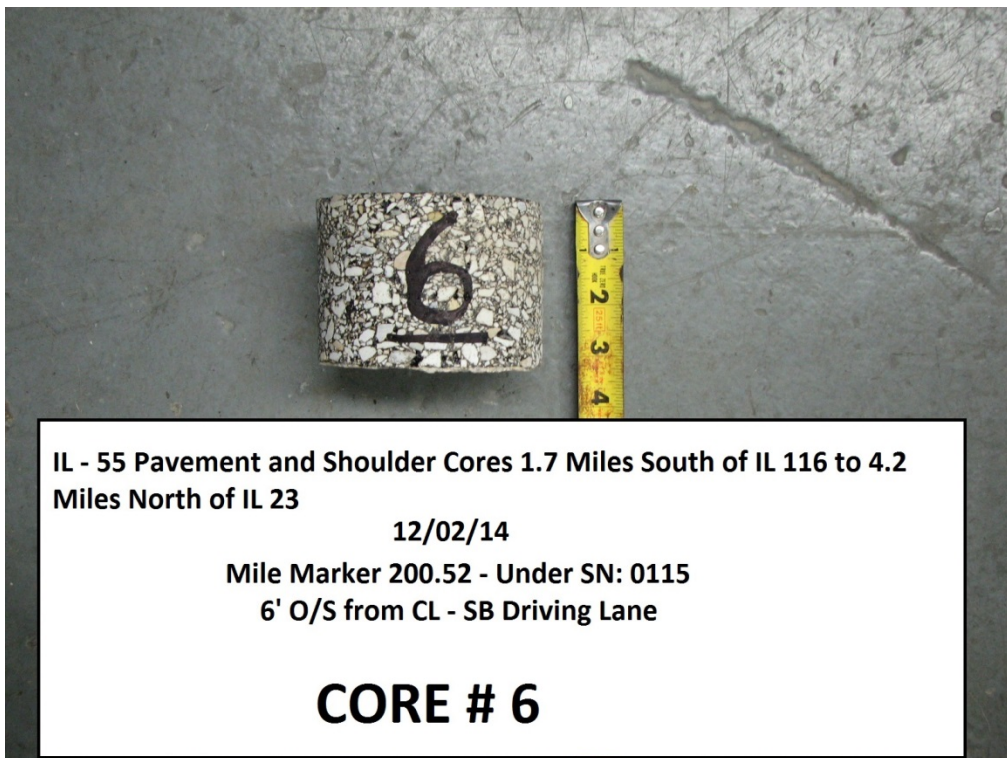
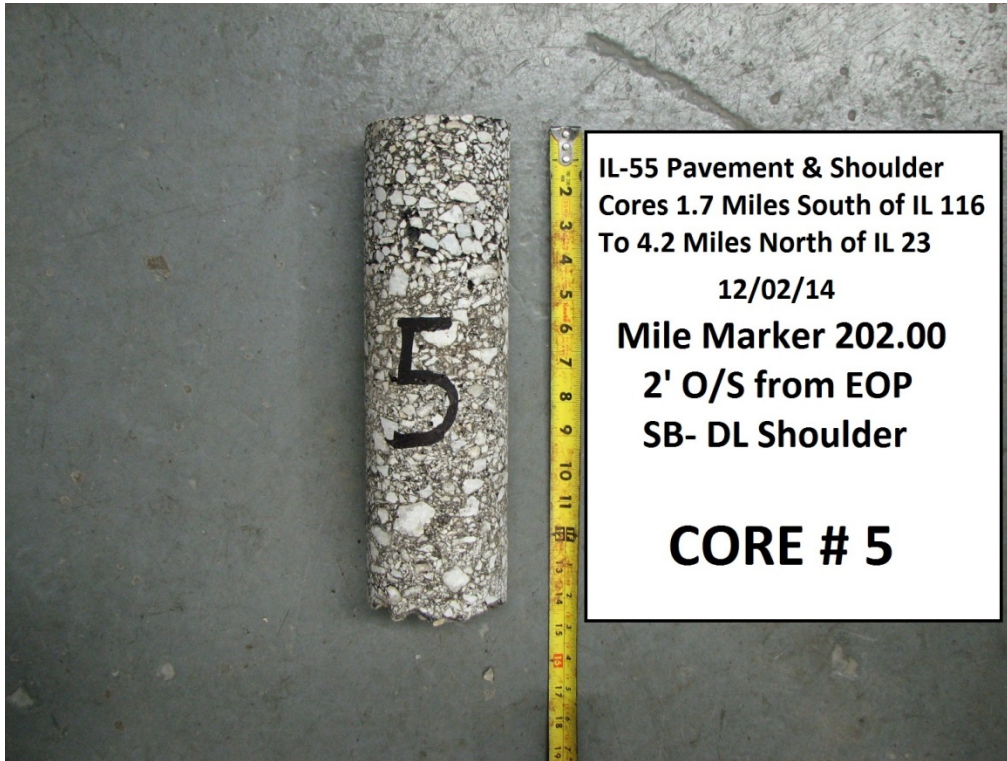
**Core #96 2' O/S EOP, N.B. Inside Shoulder, Ramp from I-55 N.B. to IL 116,
175' S. of IL 116 C/L**
Lift #1 2 1/4" HMA Surface Course, Fair Condition, No Cracks, Many Voids
Lift #2 3" HMA Binder Course, Good Condition, No Cracks, Some Voids
Lift #3 4 3/4" HMA Binder Course, Fair Condition, No Cracks, Some Voids

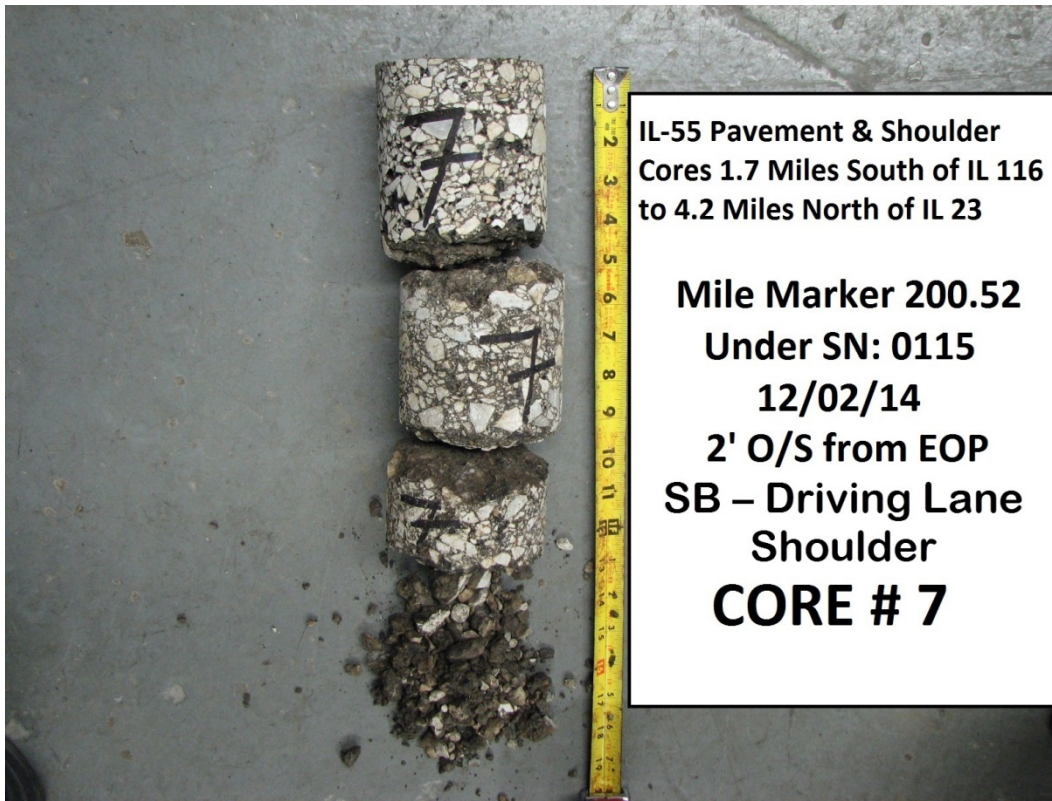
JH:bz/Soils/Pavement Cores – I-55 66B64

cc: Mike Short



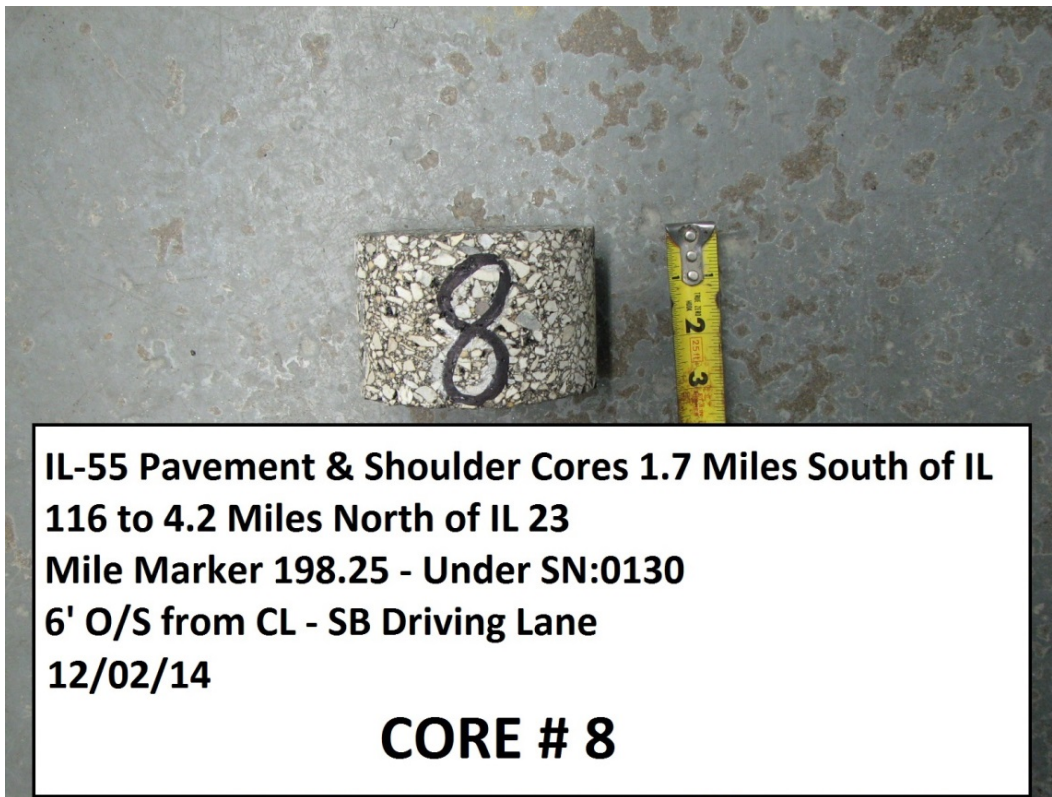






**IL-55 Pavement & Shoulder
Cores 1.7 Miles South of IL 116
to 4.2 Miles North of IL 23**

**Mile Marker 200.52
Under SN: 0115
12/02/14
2' O/S from EOP
SB – Driving Lane
Shoulder
CORE # 7**



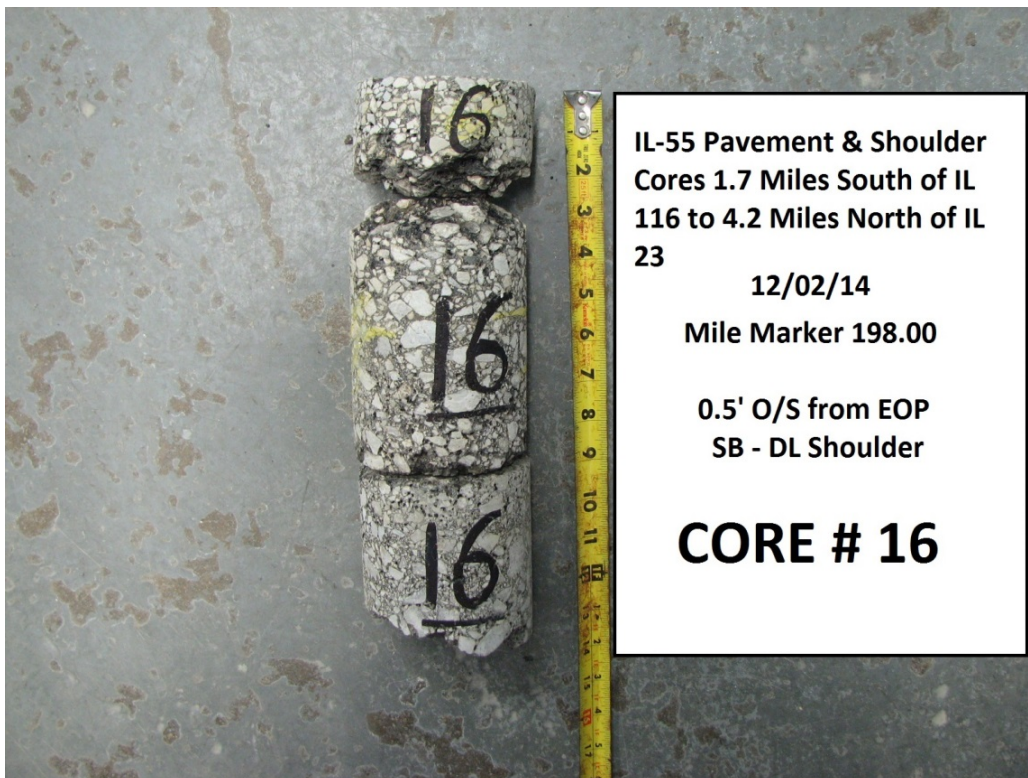
**IL-55 Pavement & Shoulder Cores 1.7 Miles South of IL
116 to 4.2 Miles North of IL 23
Mile Marker 198.25 - Under SN:0130
6' O/S from CL - SB Driving Lane
12/02/14**

CORE # 8











IL-55 Pavement & Shoulder Cores 1.7 Miles South of IL 116 to 4.2 Miles North of IL 23

12/02/14
Mile Marker 197.16
50' Before SN: 0126
6' O/S from CL- SB Driving Lane

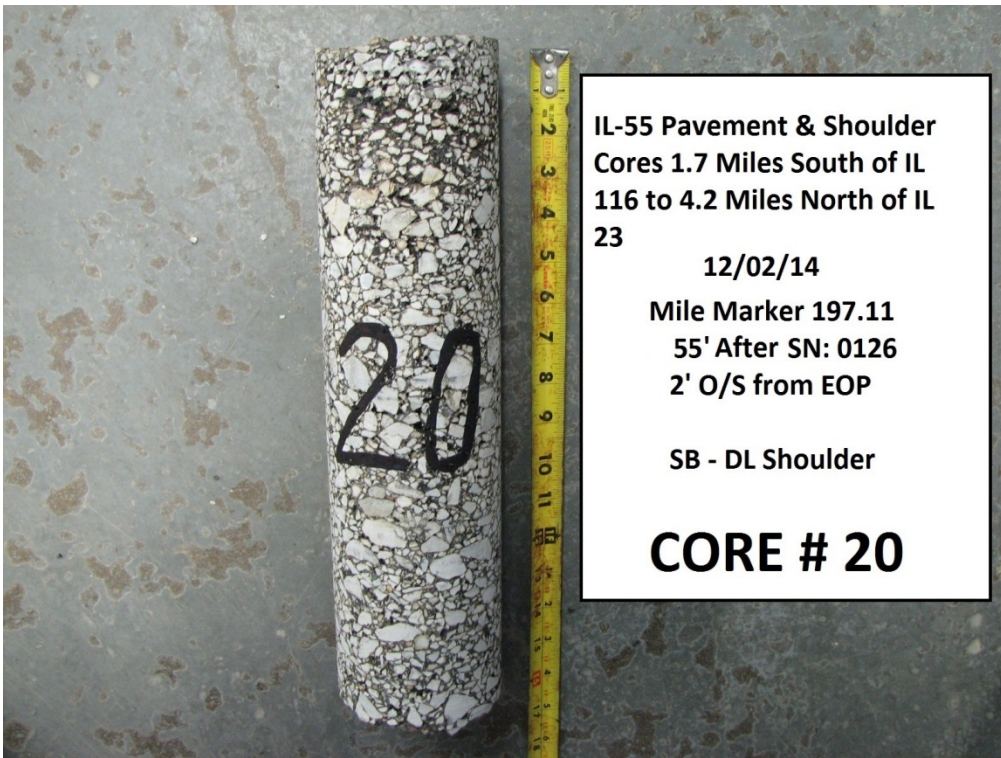
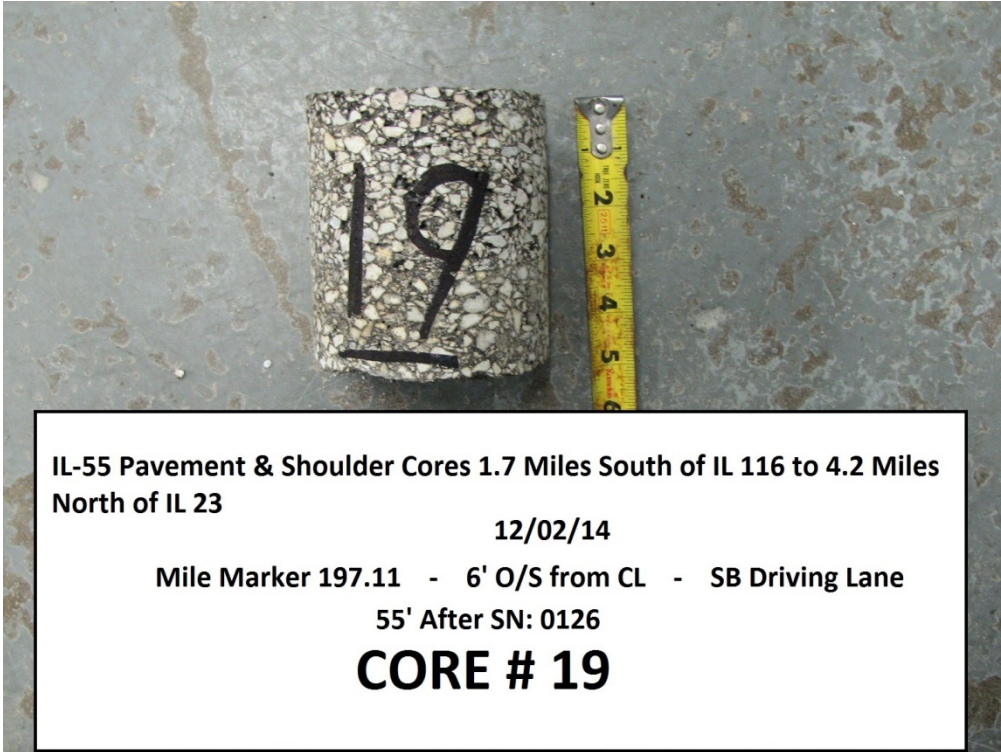
CORE # 17

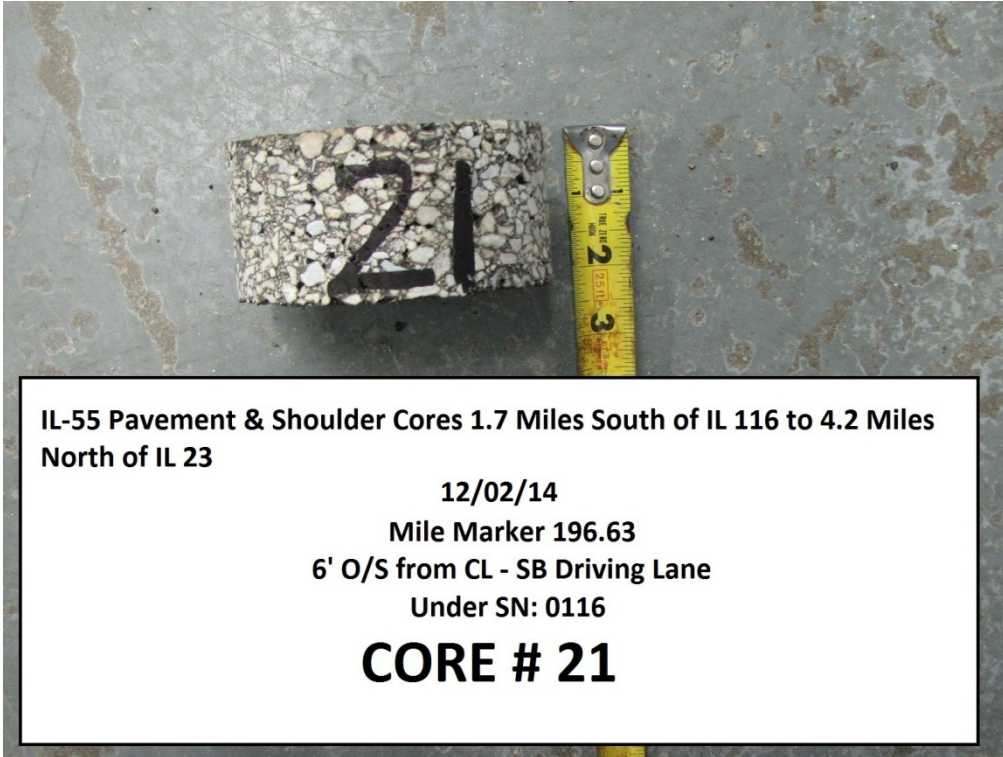


IL-55 Pavement & Shoulder Cores 1.7 Miles South of IL 116 to 4.2 Miles of IL 23

12/02/14
Mile Marker 197.16
50' Before SN: 0126
2' O/S from EOP
SB - DL Shoulder

CORE # 18

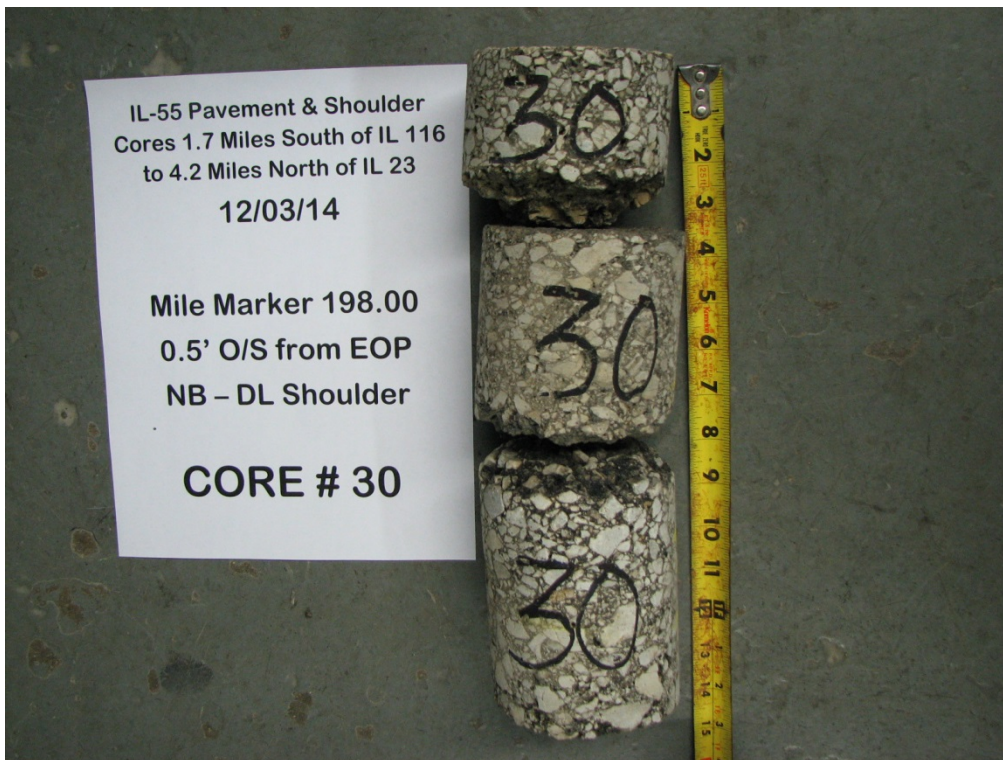




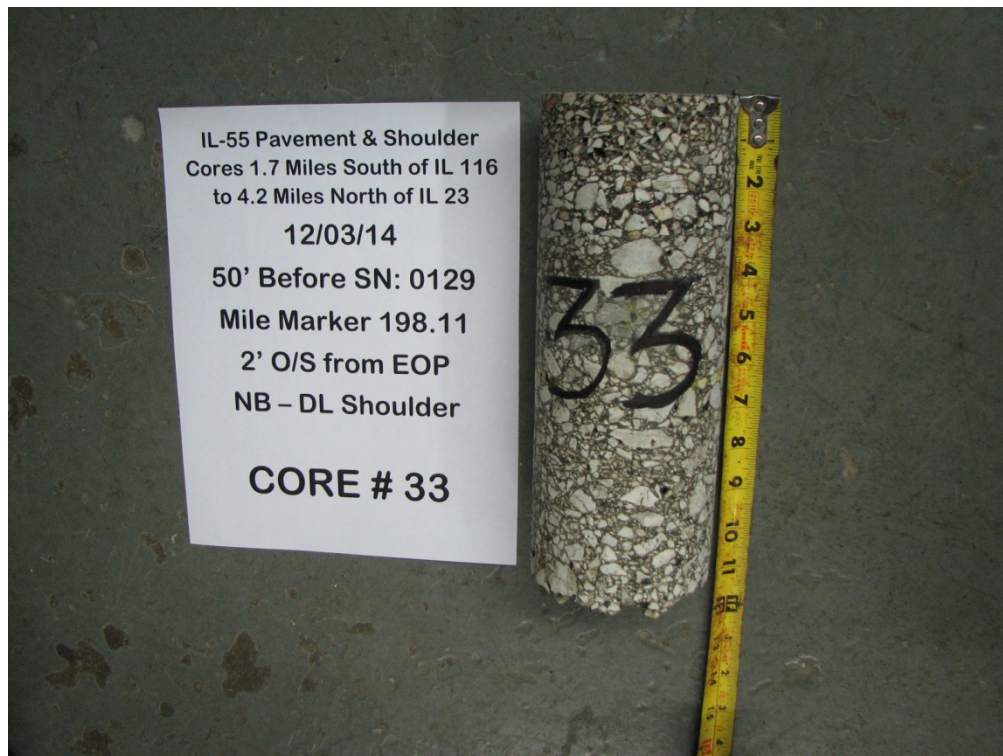


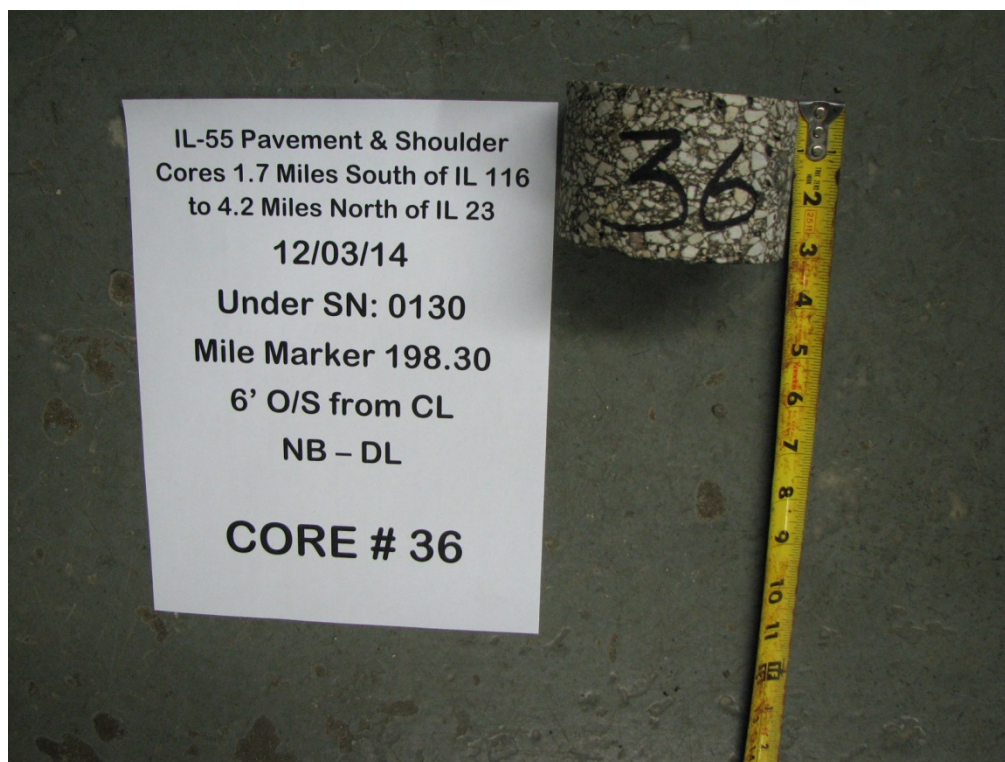


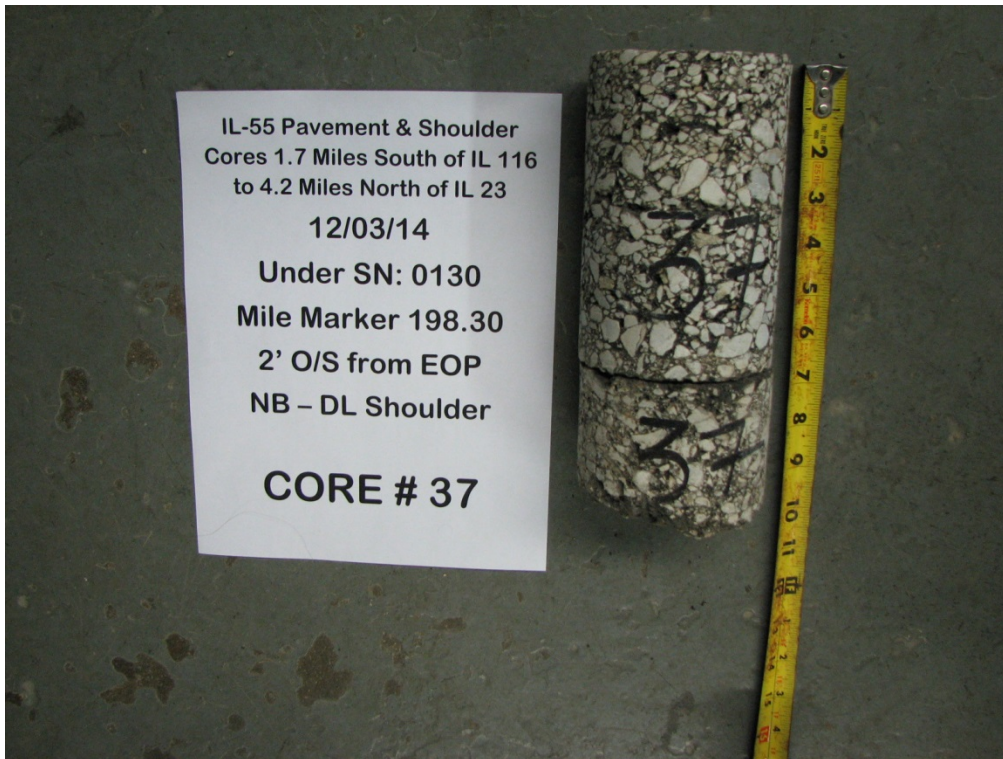


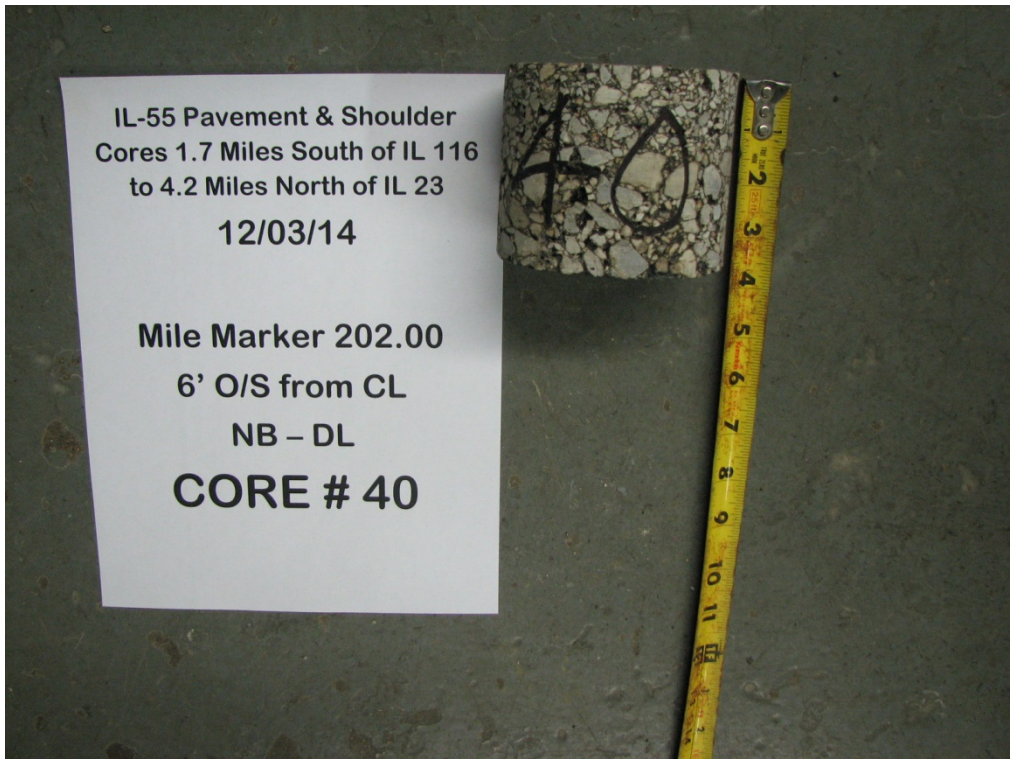
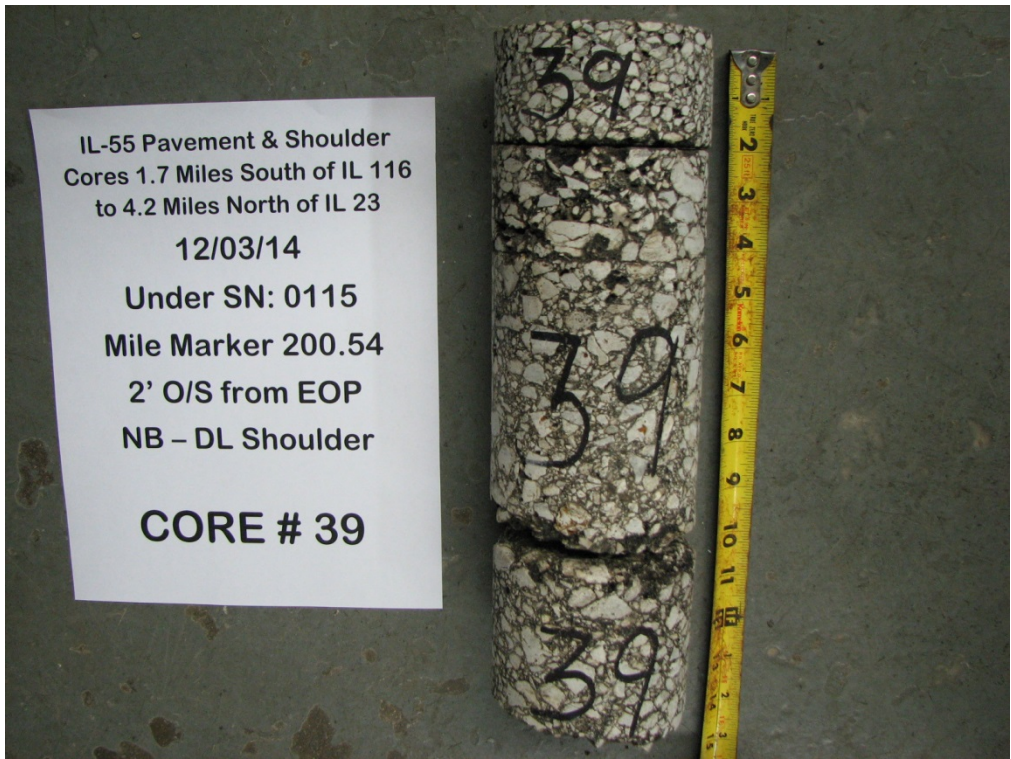












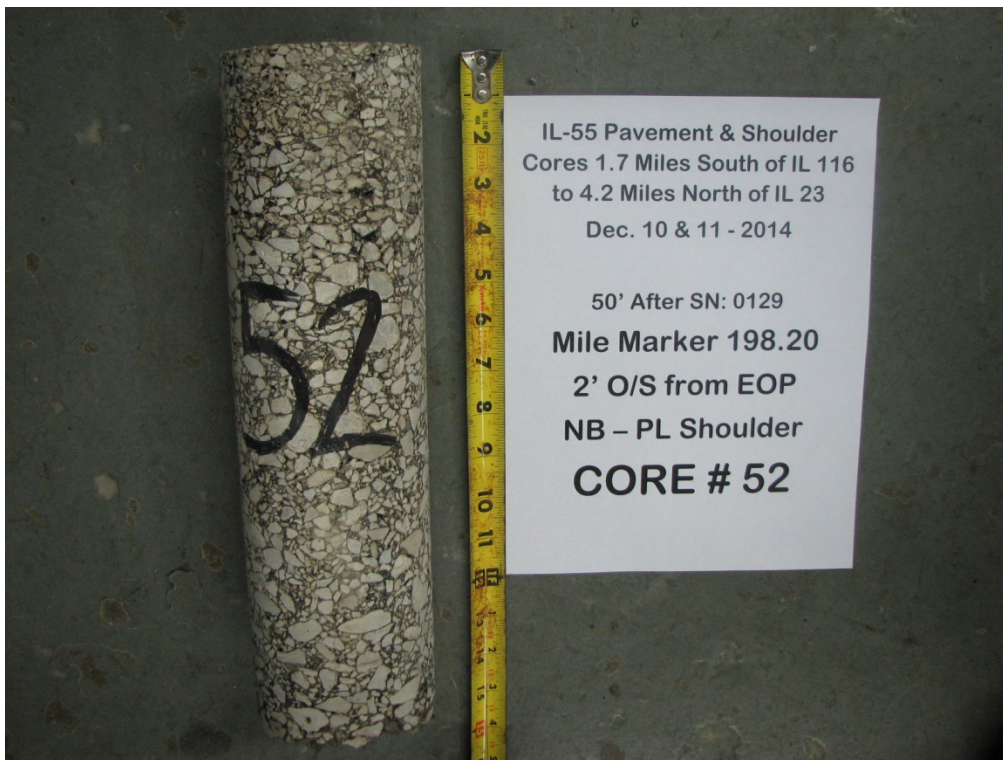


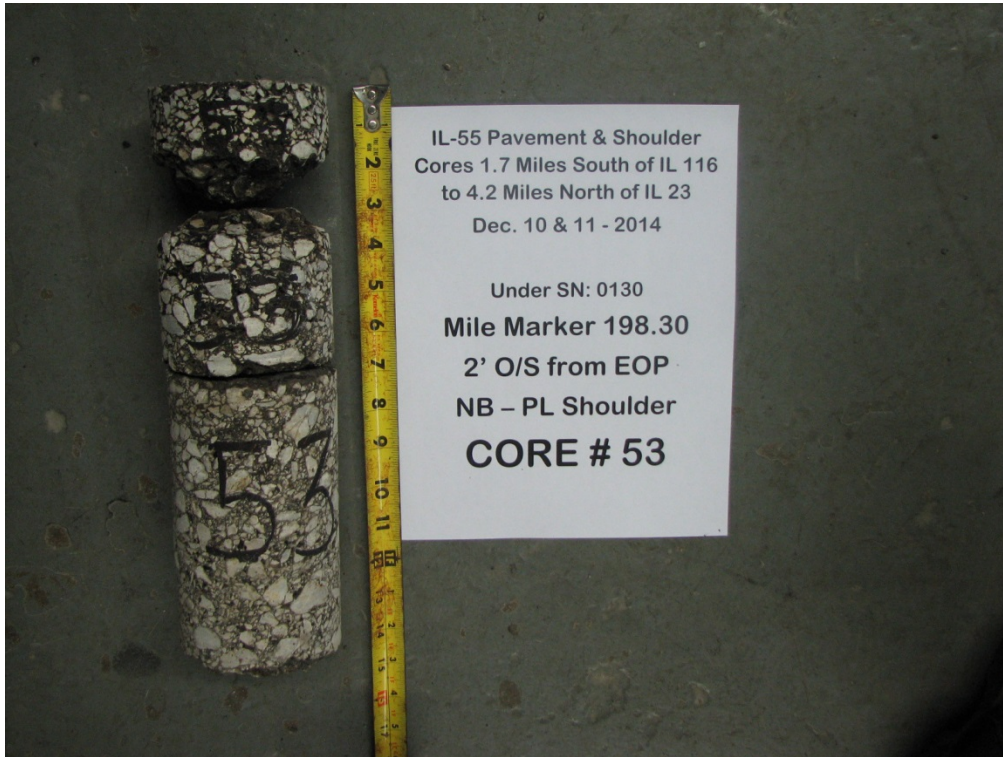








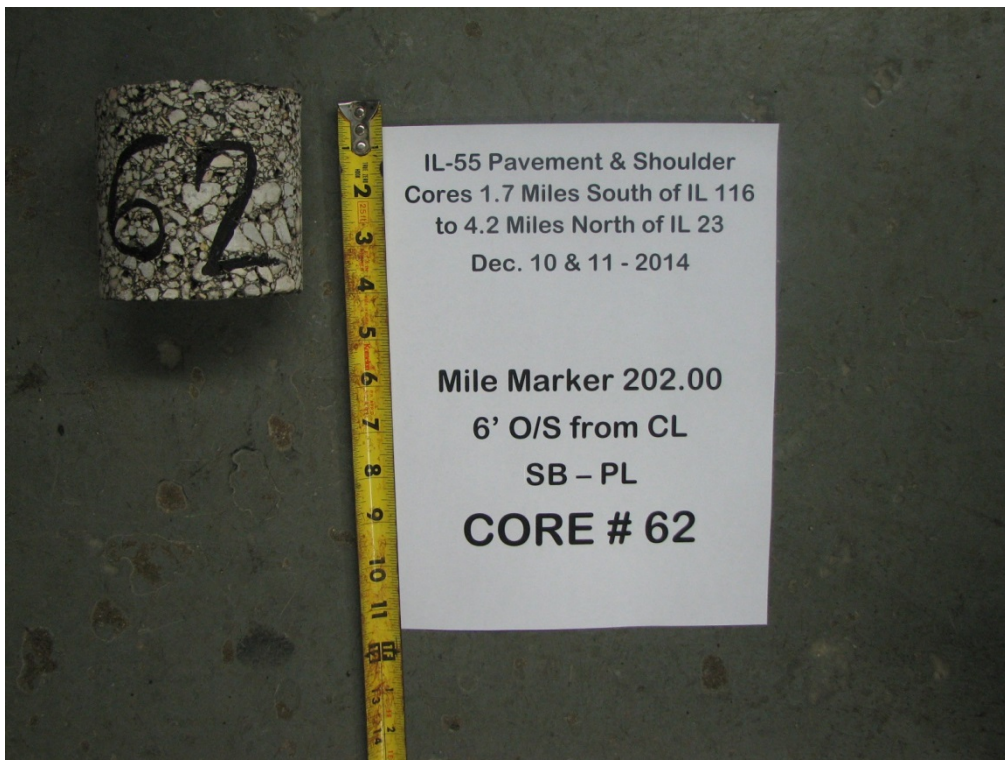




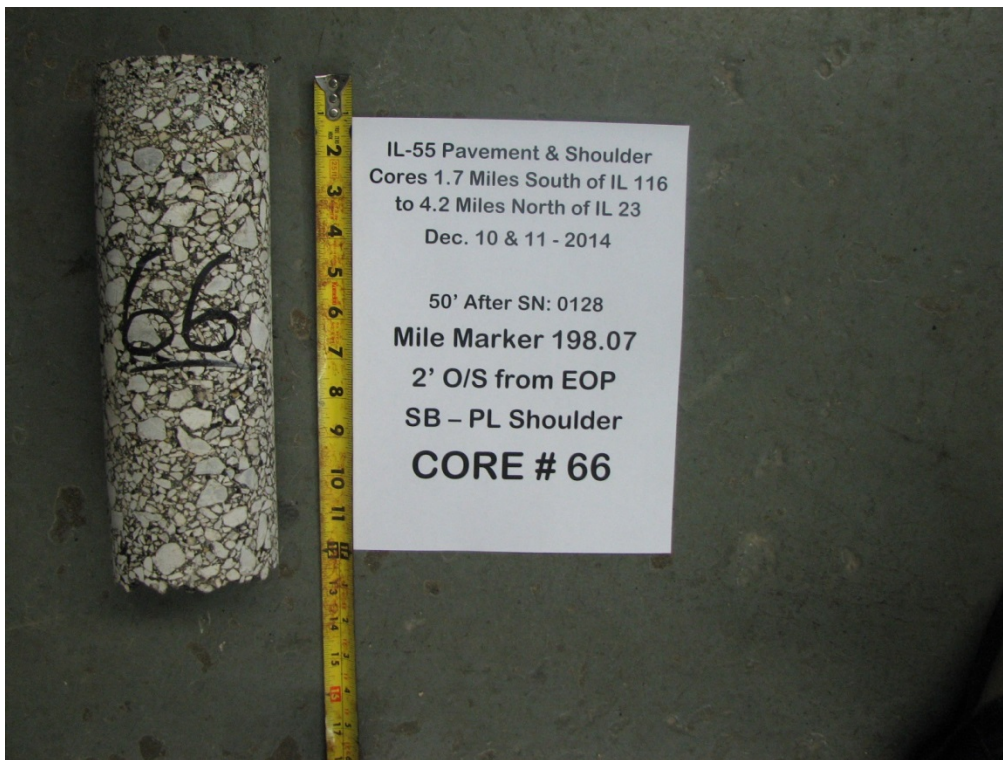






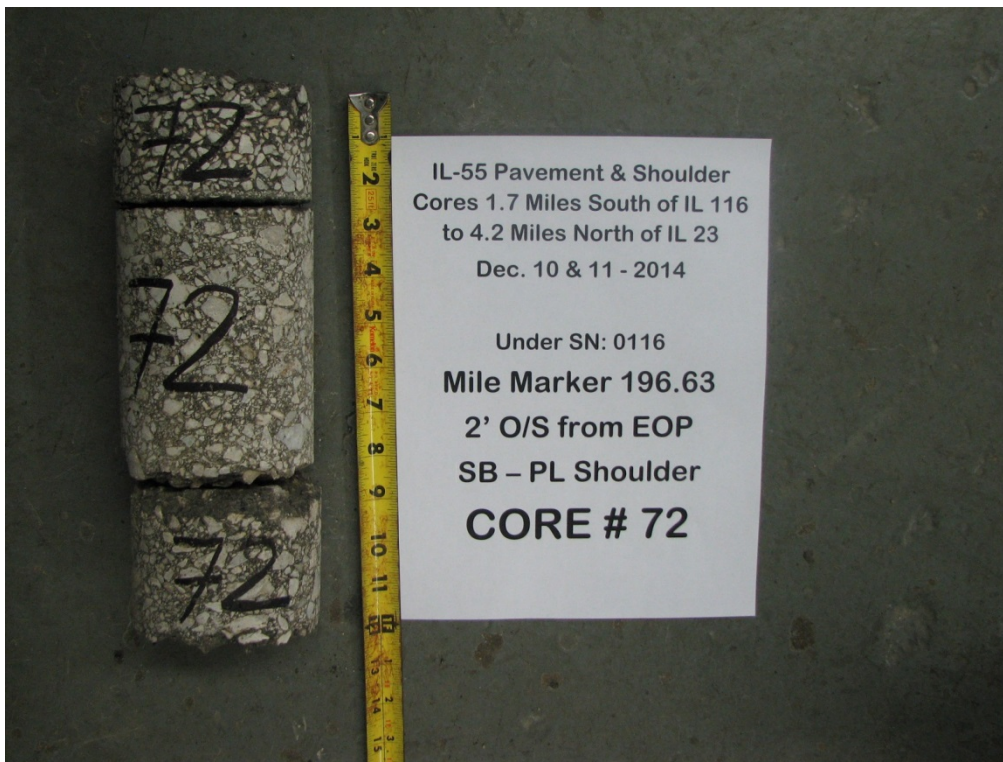


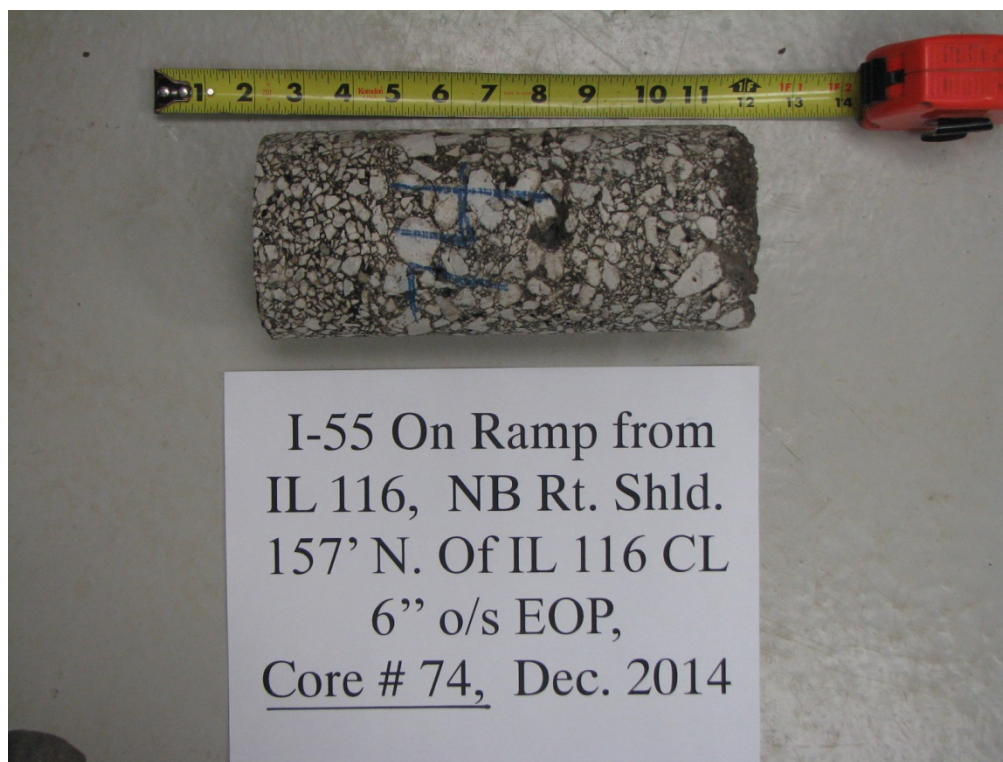
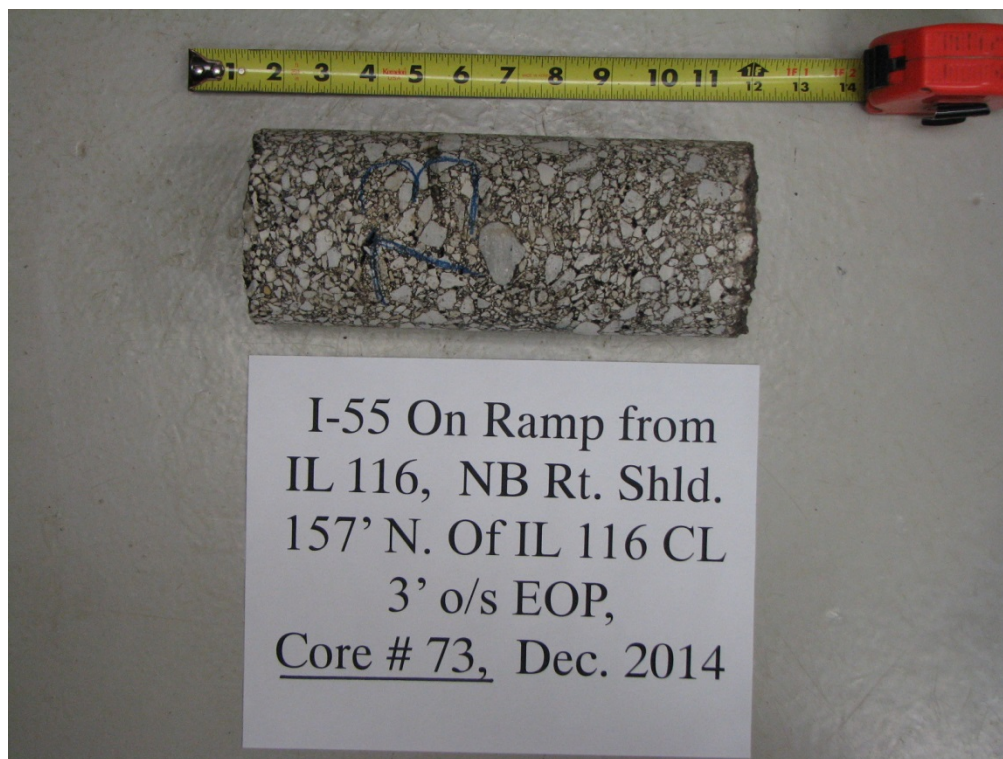


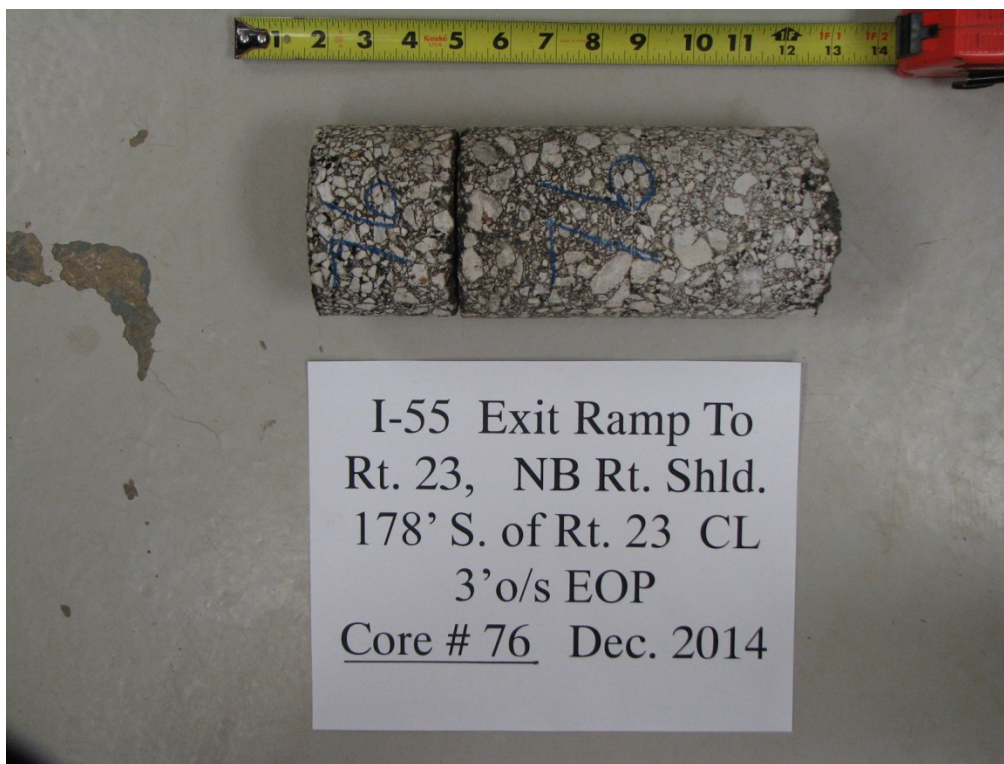


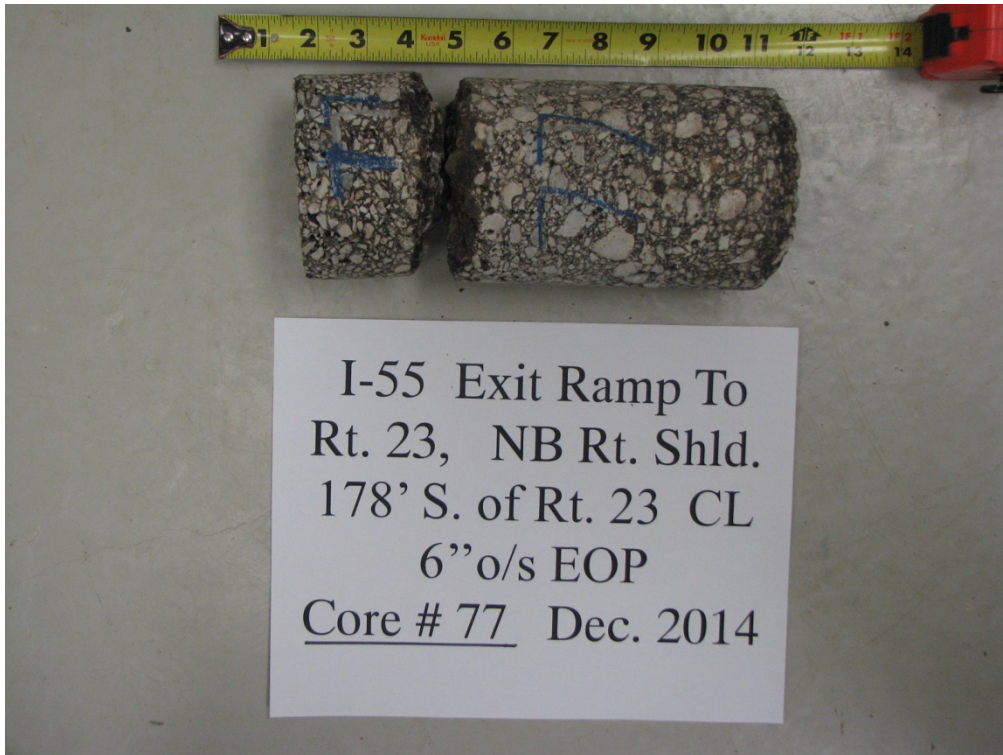


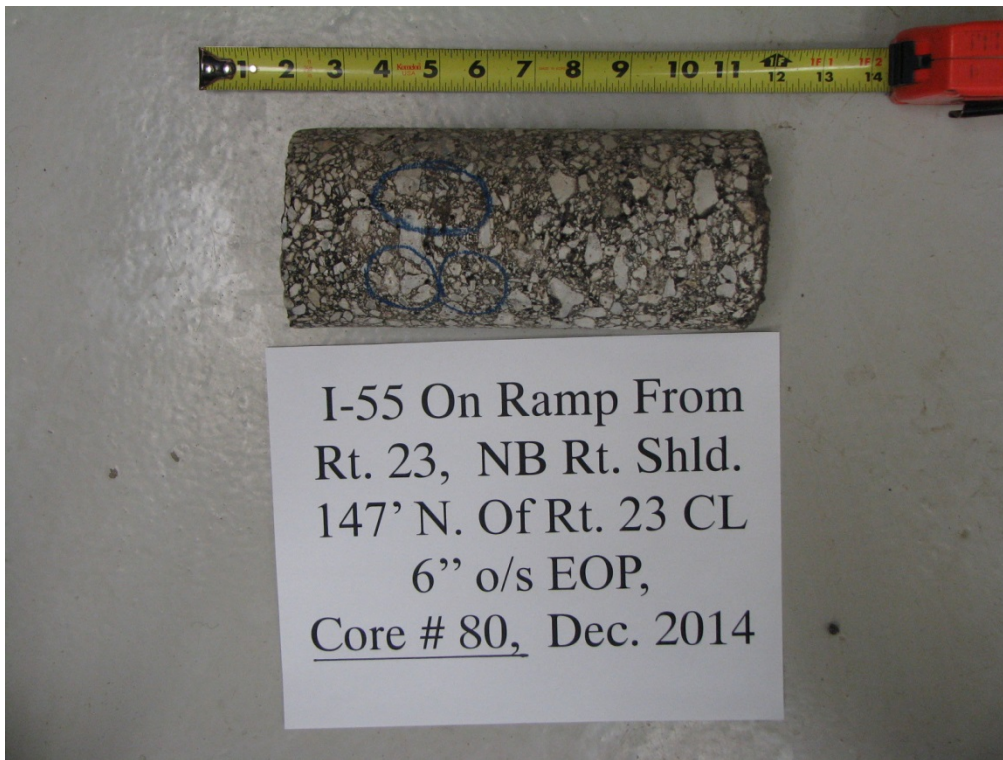








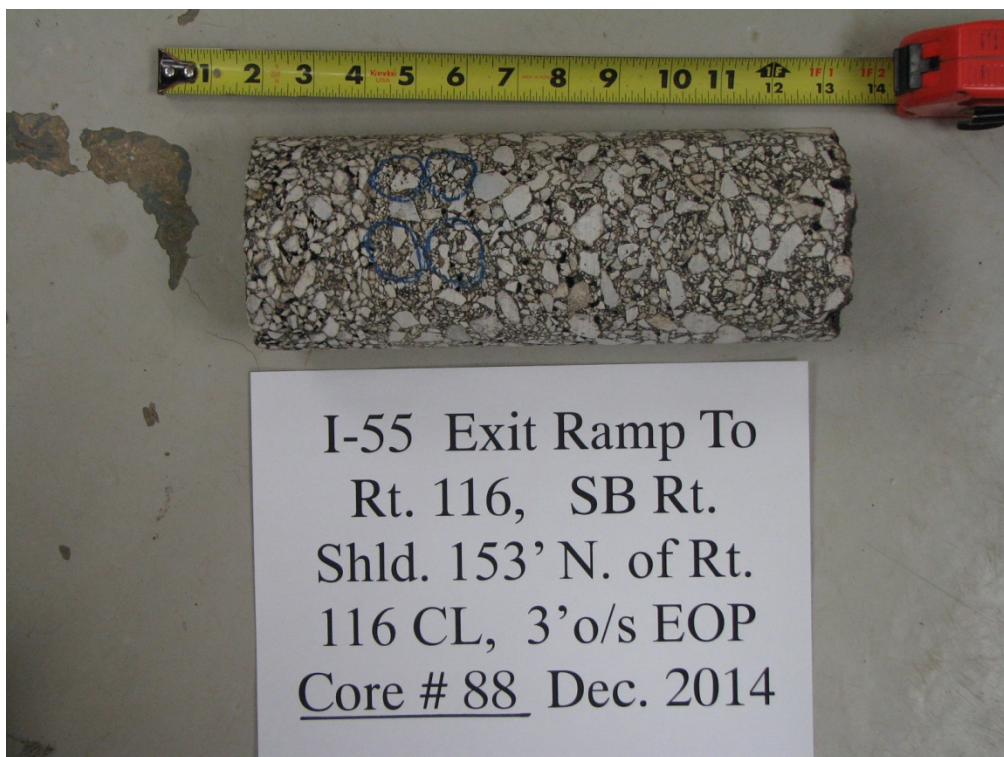




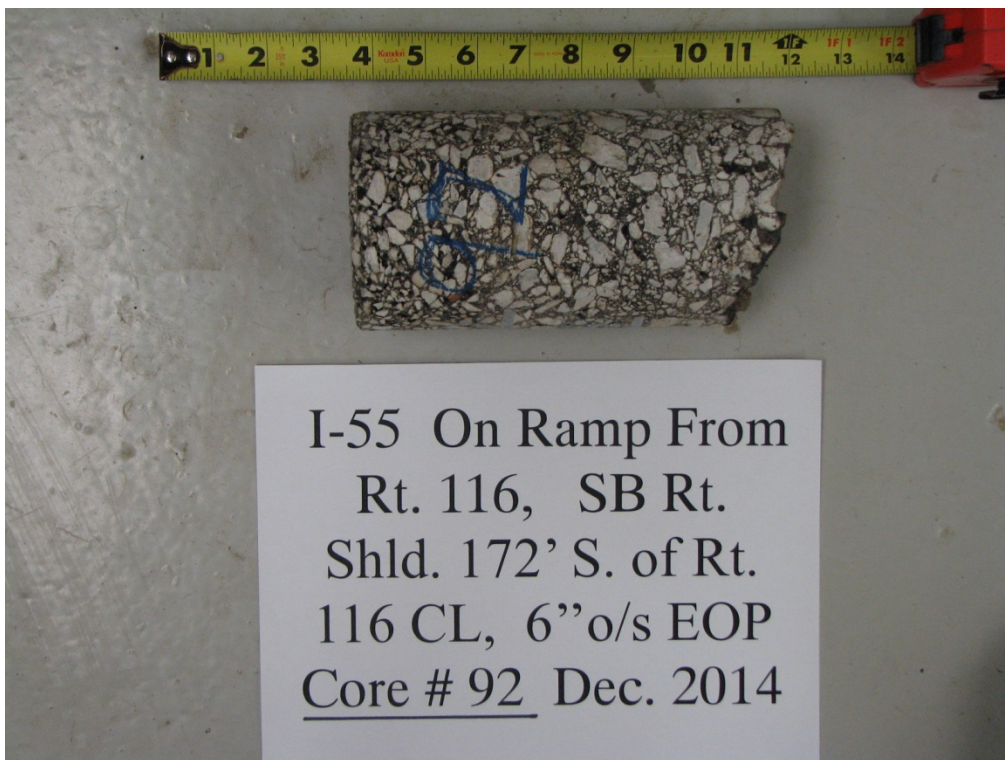




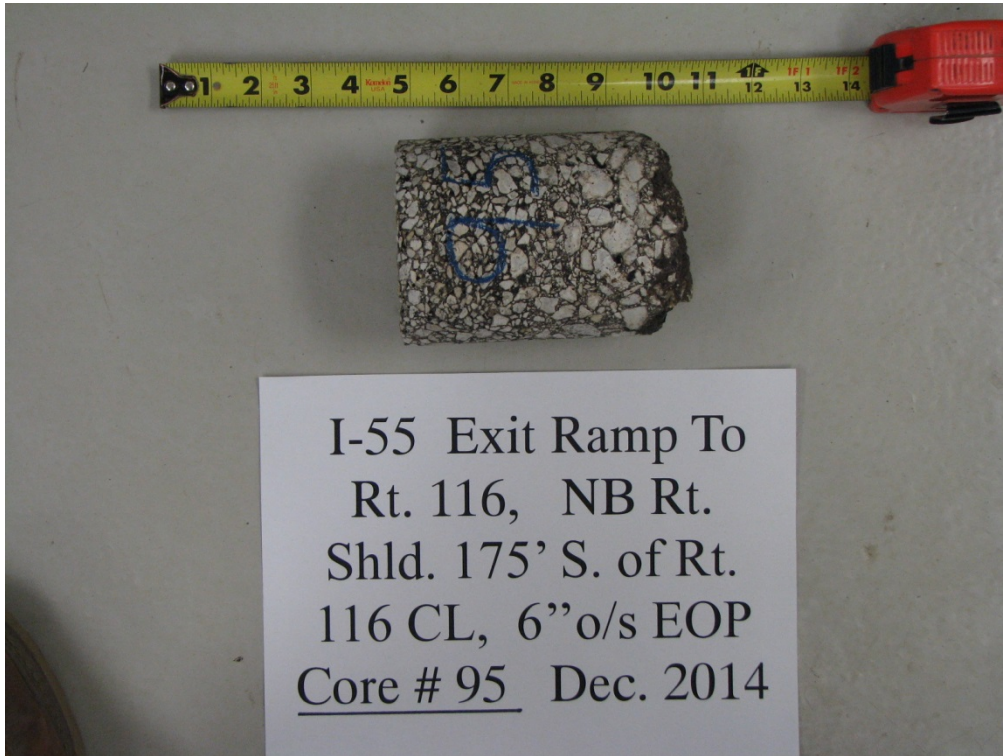






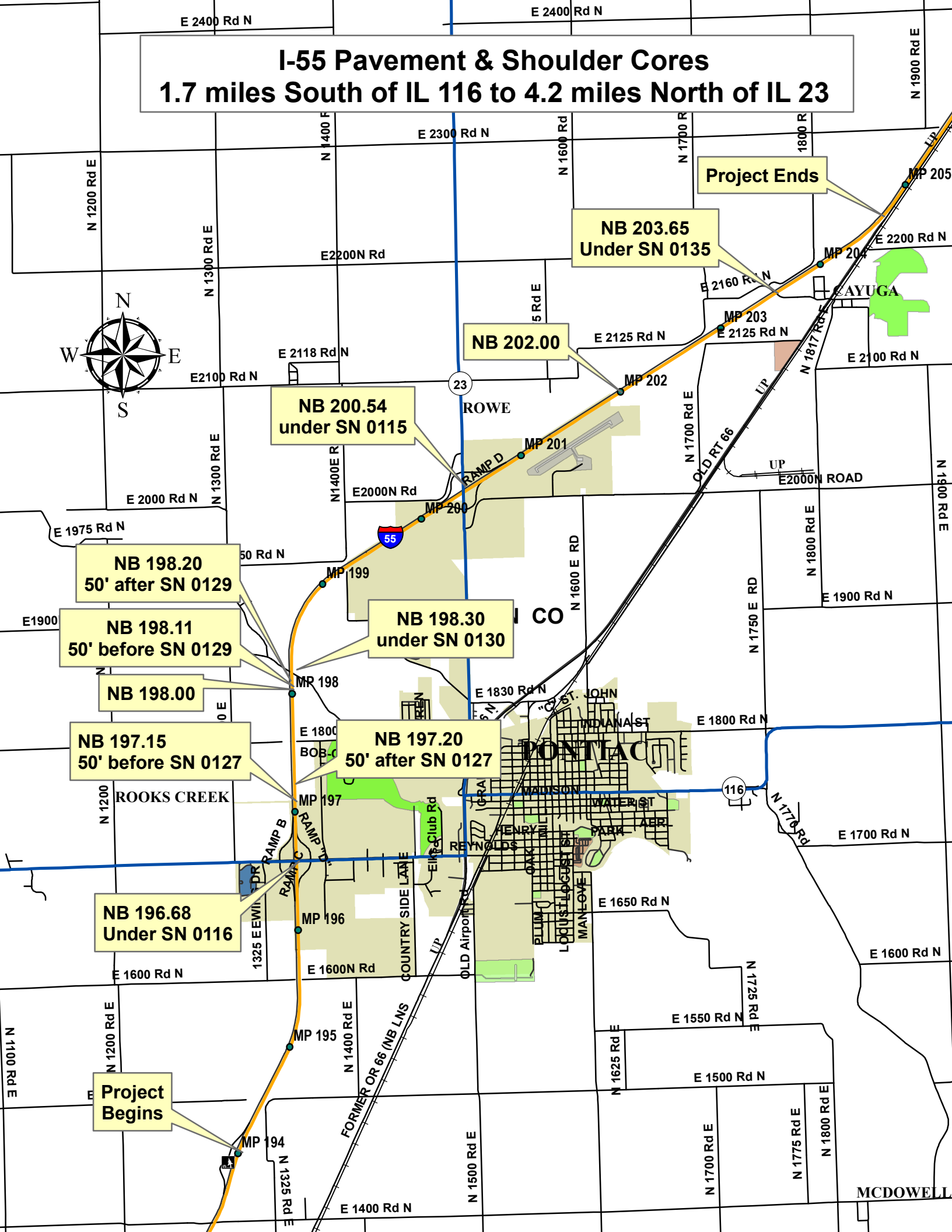






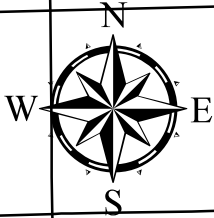
I-55 Pavement & Shoulder Cores

1.7 miles South of IL 116 to 4.2 miles North of IL 23



I-55 Pavement & Shoulder Cores

1.7 miles South of IL 116 to 4.2 miles North of IL 23



Project Ends

SB 203.64
Under SN 0135

SB 202.00

SB 200.52
under SN 0115

SB 198.16
50' before SN 0128

SB 198.07
50' after SN 0128

SB 198.00

SB 197.11
55' after SN 0126

SB 198.25
under SN 0130

SB 197.16
50' before SN 0126

SB 196.63
Under SN 0116

Project Begins



APPENDIX

N



Illinois Department of Transportation

Memorandum

To: File

From: Wayne Phillips

By: Mike Short

Subject: Pavement Cores*

Date: December 6, 2010

* Route: I-55
Section: 53 -5,6
County: Livingston
I-55 Northbound driving lane from Mile Marker 194.9 to
Mile Marker 199 near Pontiac.

Ten cores were taken on the subject project. The approximate locations and core locations are indicated below.

Core #1 – NB I-55 mile marker 194.9, Driving Lane, 3' offset from Centerline – Slag Mixture

1.50" HMA Surface Course, Good Condition, No Cracks, Some Voids
1.75" HMA Binder Course, Excellent Condition, No Cracks, Some Voids
1.75" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #2A – NB I-55 mile marker 195.5, Driving Lane, 3' offset from Centerline

1.25" HMA Surface Course, Excellent Condition, No Cracks, No Voids
1.50" HMA Binder Course, Fair Condition, No Cracks, Some Voids
10" PCC, Good Condition, No Cracks, Some Voids

Core #2B – NB I-55 mile marker 195.5, Driving Lane, Center of Lane

1.50" HMA Surface Course, Good Condition, No Cracks, Some Voids
2.00" HMA Binder Course, Good Condition, No Cracks, Some Voids
9.50" PCC, Excellent Condition, No Cracks, Some Voids

Core #2C – NB I-55 mile marker 195.5, Driving Lane, Wheel Rut 9' off Center Lane

1.25" HMA Surface Course, Excellent Condition, No Cracks, No Voids
1.75" HMA Binder Course, Good Condition, No Cracks, Some Voids
9.50" PCC, Excellent Condition, No Cracks, Some Voids

Core #3A - NB I-55 mile marker 196.7, Driving Lane, 3' offset Center Line

- 1.50" HMA Surface Course, Good Condition, No Cracks, Some Voids
- 1.75" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #3B – NB I-55 mile marker 196.7, Driving Lane, Center of Lane

- 1.50" HMA Surface Course, Fair Condition, No Cracks, Some Voids
- 2.00" HMA Binder Course, Fair Condition, No Cracks, Many Voids

Core #3C – NB I-55 mile marker 196.7, Driving Lane, 9' offset Center Line

- 1.50" HMA Surface Course, Fair Condition, No Cracks, Some Voids
- 2.00" HMA Binder Course, Poor Condition, Some Cracks, Some Voids
- 9.00" PCC, Poor Condition, Some Cracks, Some Voids, Broken in half

Core #4A – NB I-55 mile marker 199.0, Driving Lane, 3' offset Center Line

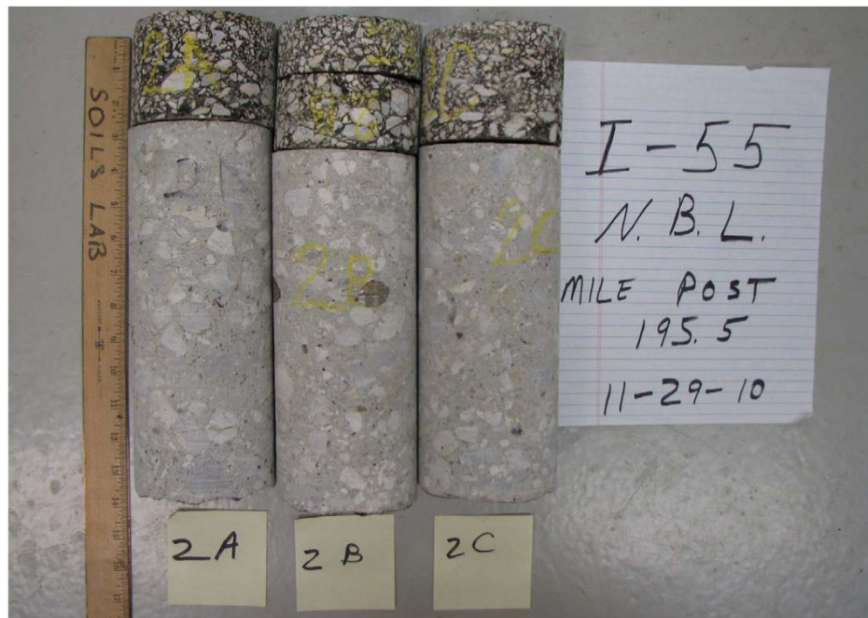
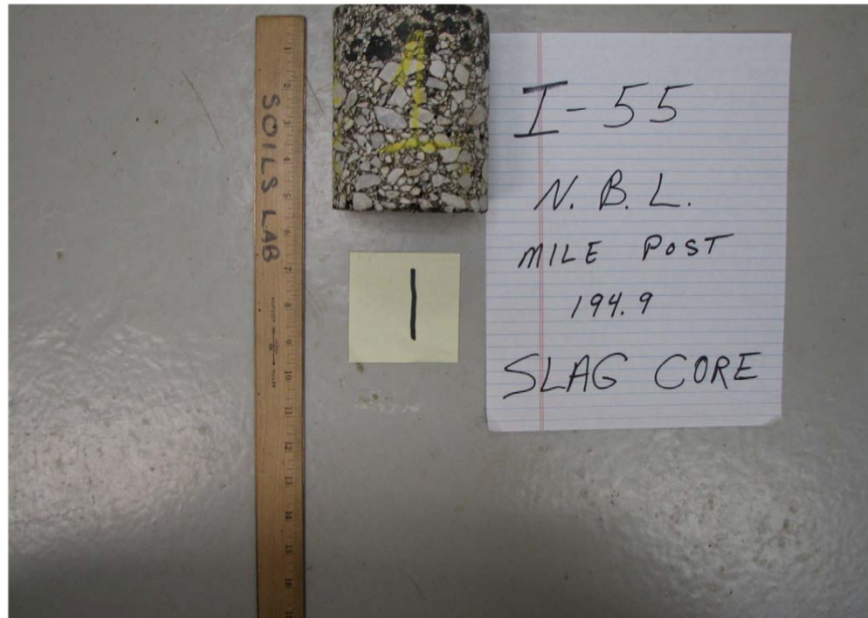
- 1.25" HMA Surface Course, Good Condition, No Cracks, Some Voids
- 1.75" HMA Binder Course, Good Condition, No Cracks, Some Voids

Core #4B – NB I-55 mile marker 199.0, Driving Lane, Center of Lane

- 1.50" HMA Surface Binder, Fair Condition, No Cracks, Many Voids
- 1.75" HMA Binder Course, Fair Condition, No Cracks, Many Voids

Core #4C-NB I-55 mile marker 199.0, Driving Lane, 9' offset of Center Lane

- 1.25" HMA Surface Course, Good Condition, No Cracks, Some Voids
- 1.75" HMA Binder Course, Good Condition, No Cracks, No Voids
- 9.00" PCC, Good Condition, No Cracks, Some Voids





APPENDIX

O

F-55 MM 195.00 - MM 201.11 SOUTHBOUND

4.5 4.25 < IBV < 10

1.4 IBV < 1.5

3.3 3 < IBV < 3.5

15.0 10 < IBV

2.0 1.5 < IBV < 3

3.8 3.5 < IBV < 4.25

| CORE NUMBER | 603 | | | | | 604 | | | | | 605 | | | | | 605 | | | | | 701 | | | | | 702 | | | | | 703 | | | | | | | |
|---------------------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|------|------|
| CONCRETE + BASE THICKNESS | 13.00 | | | | | 13.25 | | | | | 13.25 | | | | | 13.25 | | | | | 13.44 | | | | | 13.31 | | | | | 13.25 | | | | | | | |
| STATION | 286+15 | | | | | 233+25 | | | | | 220+00 | | | | | 220+00 | | | | | 180+40 | | | | | 141+35 | | | | | 74+90 | | | | | | | |
| OFFSET | 6.0 LT CL | | | | | 6.0 LT CL | | | | | 6.0 LT CL | | | | | 6.0 LT CL | | | | | 6.0 LT CL | | | | | 6.5 LT CL | | | | | 6.0 LT CL | | | | | | | |
| DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | |
| BLOWS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1.3 | 13.0 | 5.0 | 18.4 | 0.0 | 1.3 | 13.3 | 4.0 | 19.7 | 1.3 | 1.2 | 13.3 | 5.5 | 20.7 | 1.2 | 1.2 | 13.3 | 5.5 | 18.7 | 1.4 | 1.4 | 13.4 | 4.5 | 17.0 | 1.8 | 1.8 | 13.3 | 16.2 | 1.8 | 1.8 | 13.3 | 19.5 | 3.3 | 3.3 | 13.3 | 1.5 | | |
| 2 | 2.0 | 13.0 | 10.8 | 20.4 | 0.7 | 2.0 | 13.3 | 10.8 | 21.5 | 0.8 | 2.0 | 13.3 | 9.2 | 21.5 | 0.8 | 2.0 | 13.3 | 9.2 | 19.9 | 1.2 | 2.6 | 13.4 | 5.5 | 20.1 | 1.3 | 3.1 | 13.3 | 5.0 | 20.8 | 1.3 | 4.6 | 13.3 | 5.0 | 20.8 | 1.3 | 4.6 | 13.3 | 5.0 |
| 3 | 2.7 | 13.0 | 10.8 | 21.1 | 0.7 | 2.7 | 13.3 | 10.8 | 22.1 | 0.6 | 2.6 | 13.3 | 13.2 | 22.1 | 0.6 | 2.6 | 13.3 | 13.2 | 20.4 | 0.5 | 3.1 | 13.4 | 16.6 | 21.3 | 1.2 | 4.3 | 13.3 | 5.5 | 21.9 | 1.1 | 5.7 | 13.3 | 6.1 | 23.4 | 1.5 | 7.2 | 13.3 | 6.1 |
| 4 | 3.3 | 13.0 | 13.2 | 21.5 | 0.4 | 3.1 | 13.3 | 21.9 | 22.6 | 0.5 | 3.1 | 13.3 | 16.6 | 22.6 | 0.5 | 3.1 | 13.3 | 16.6 | 20.8 | 0.4 | 3.5 | 13.4 | 21.9 | 22.4 | 1.1 | 5.4 | 13.3 | 6.1 | 23.4 | 1.5 | 7.2 | 13.3 | 6.1 | 23.4 | 1.5 | 7.2 | 13.3 | 6.1 |
| 5 | 3.8 | 13.0 | 16.6 | 21.9 | 0.4 | 3.5 | 13.3 | 21.9 | 23.2 | 0.6 | 3.7 | 13.3 | 13.2 | 23.2 | 0.6 | 3.7 | 13.3 | 13.2 | 21.2 | 0.4 | 3.9 | 13.4 | 21.9 | 23.6 | 1.2 | 6.6 | 13.3 | 5.5 | 25.3 | 1.9 | 9.1 | 13.3 | 3.1 | 27.0 | 1.7 | 10.8 | 13.3 | 3.5 |
| 6 | 4.4 | 13.0 | 13.2 | 22.3 | 0.4 | 3.9 | 13.3 | 21.9 | 23.9 | 0.7 | 4.4 | 13.3 | 10.8 | 23.9 | 0.7 | 4.4 | 13.3 | 10.8 | 21.5 | 0.3 | 4.2 | 13.4 | 31.5 | 25.0 | 1.4 | 8.0 | 13.3 | 4.5 | 27.0 | 1.7 | 10.8 | 13.3 | 3.5 | 27.0 | 1.7 | 10.8 | 13.3 | 3.5 |
| 7 | 4.9 | 13.0 | 16.6 | 22.5 | 0.2 | 4.1 | 13.3 | 22.6 | 24.2 | 0.3 | 4.7 | 13.3 | 31.5 | 24.2 | 0.3 | 4.7 | 13.3 | 31.5 | 21.7 | 0.2 | 4.6 | 13.4 | 32.6 | 26.8 | 1.4 | 9.4 | 13.3 | 4.5 | 29.0 | 2.0 | 12.8 | 13.3 | 4.5 | 29.0 | 2.0 | 12.8 | 13.3 | 4.5 |
| 8 | 5.4 | 13.0 | 16.6 | 22.8 | 0.3 | 4.4 | 13.3 | 31.5 | 24.7 | 0.5 | 5.2 | 13.3 | 16.6 | 24.7 | 0.5 | 5.2 | 13.3 | 16.6 | 21.7 | 0.2 | 4.6 | 13.4 | 32.6 | 26.8 | 1.4 | 9.8 | 13.3 | 21.9 | 31.2 | 2.2 | 15.0 | 13.3 | 21.9 | 31.2 | 2.2 | 15.0 | 13.3 | 21.9 |
| 9 | 5.8 | 13.0 | 21.9 | 23.1 | 0.3 | 4.7 | 13.3 | 31.5 | 25.3 | 0.6 | 5.8 | 13.3 | 13.2 | 25.3 | 0.6 | 5.8 | 13.3 | 13.2 | 22.0 | 0.1 | 4.7 | 13.4 | 125.9 | 27.2 | 0.4 | 10.2 | 13.3 | 21.9 | 32.3 | 1.1 | 16.1 | 13.3 | 6.1 | 32.3 | 1.1 | 16.1 | 13.3 | 6.1 |
| 10 | 6.3 | 13.0 | 16.6 | 23.4 | 0.3 | 5.0 | 13.3 | 31.5 | 25.8 | 0.5 | 6.3 | 13.3 | 16.6 | 25.8 | 0.5 | 6.3 | 13.3 | 16.6 | 22.2 | 0.2 | 4.9 | 13.4 | 32.6 | 27.5 | 0.3 | 10.5 | 13.3 | 31.5 | 33.3 | 1.0 | 17.1 | 13.3 | 6.9 | 33.3 | 1.0 | 17.1 | 13.3 | 6.9 |
| 11 | 7.0 | 13.0 | 10.8 | 23.9 | 0.5 | 5.5 | 13.3 | 16.6 | 26.5 | 0.7 | 7.0 | 13.3 | 10.8 | 26.5 | 0.7 | 7.0 | 13.3 | 10.8 | 22.4 | 0.2 | 5.1 | 13.4 | 32.6 | 28.0 | 0.5 | 11.0 | 13.3 | 16.6 | 34.5 | 1.2 | 18.3 | 13.3 | 5.5 | 34.5 | 1.2 | 18.3 | 13.3 | 5.5 |
| 12 | 7.7 | 13.0 | 10.8 | 24.1 | 0.2 | 5.7 | 13.3 | 32.6 | 27.6 | 1.1 | 8.1 | 13.3 | 6.1 | 27.6 | 1.1 | 8.1 | 13.3 | 6.1 | 22.7 | 0.3 | 5.4 | 13.4 | 31.5 | 29.0 | 1.0 | 12.0 | 13.3 | 6.9 | 35.6 | 1.1 | 19.4 | 13.3 | 6.1 | 35.6 | 1.1 | 19.4 | 13.3 | 6.1 |
| 13 | 8.3 | 13.0 | 13.2 | 24.4 | 0.3 | 6.0 | 13.3 | 31.5 | 28.7 | 1.1 | 9.2 | 13.3 | 6.1 | 28.7 | 1.1 | 9.2 | 13.3 | 6.1 | 23.0 | 0.3 | 5.7 | 13.4 | 31.5 | 30.0 | 1.0 | 13.0 | 13.3 | 6.9 | 37.0 | 1.4 | 20.8 | 13.3 | 4.5 | 37.0 | 1.4 | 20.8 | 13.3 | 4.5 |
| 14 | 8.8 | 13.0 | 16.6 | 24.7 | 0.3 | 6.3 | 13.3 | 31.5 | 29.4 | 0.7 | 9.9 | 13.3 | 10.8 | 29.4 | 0.7 | 9.9 | 13.3 | 10.8 | 23.4 | 0.4 | 6.1 | 13.4 | 31.5 | 30.7 | 0.7 | 13.7 | 13.3 | 10.8 | 38.4 | 1.4 | 22.2 | 13.3 | 4.5 | 38.4 | 1.4 | 22.2 | 13.3 | 4.5 |
| 15 | 9.3 | 13.0 | 16.6 | 25.0 | 0.3 | 6.6 | 13.3 | 31.5 | 30.1 | 0.7 | 10.6 | 13.3 | 10.8 | 30.1 | 0.7 | 10.6 | 13.3 | 10.8 | 23.9 | 0.5 | 6.6 | 13.4 | 16.6 | 31.4 | 0.7 | 14.4 | 13.3 | 10.8 | 39.9 | 1.5 | 23.7 | 13.3 | 4.2 | 39.9 | 1.5 | 23.7 | 13.3 | 4.2 |
| 16 | 9.7 | 13.0 | 21.9 | 25.3 | 0.3 | 6.9 | 13.3 | 31.5 | 30.8 | 0.7 | 11.3 | 13.3 | 10.8 | 30.8 | 0.7 | 11.3 | 13.3 | 10.8 | 24.2 | 0.3 | 6.9 | 13.4 | 31.5 | 32.0 | 0.6 | 15.0 | 13.3 | 13.2 | 41.0 | 1.1 | 24.8 | 13.3 | 6.1 | 41.0 | 1.1 | 24.8 | 13.3 | 6.1 |
| 17 | 10.0 | 13.0 | 31.5 | 25.6 | 0.3 | 7.2 | 13.3 | 31.5 | 31.6 | 0.8 | 12.1 | 13.3 | 9.2 | 31.6 | 0.8 | 12.1 | 13.3 | 9.2 | 24.7 | 0.5 | 7.4 | 13.4 | 16.6 | 33.0 | 1.0 | 16.0 | 13.3 | 6.9 | 42.2 | 1.2 | 26.0 | 13.3 | 5.5 | 42.2 | 1.2 | 26.0 | 13.3 | 5.5 |
| 18 | 10.3 | 13.0 | 31.5 | 25.8 | 0.2 | 7.4 | 13.3 | 32.6 | 32.3 | 0.7 | 12.8 | 13.3 | 10.8 | 32.3 | 0.7 | 12.8 | 13.3 | 10.8 | 25.2 | 0.5 | 7.9 | 13.4 | 16.6 | 33.4 | 0.4 | 16.4 | 13.3 | 21.9 | 43.3 | 1.1 | 27.1 | 13.3 | 6.1 | 43.3 | 1.1 | 27.1 | 13.3 | 6.1 |
| 19 | 10.6 | 13.0 | 31.5 | 26.1 | 0.3 | 7.7 | 13.3 | 31.5 | 33.2 | 0.9 | 13.7 | 13.3 | 7.9 | 33.2 | 0.9 | 13.7 | 13.3 | 7.9 | 25.8 | 0.6 | 8.5 | 13.4 | 13.2 | 33.9 | 0.5 | 16.9 | 13.3 | 16.6 | 44.5 | 1.2 | 28.3 | 13.3 | 5.5 | 44.5 | 1.2 | 28.3 | 13.3 | 5.5 |
| 20 | 10.9 | 13.0 | 31.5 | 26.4 | 0.3 | 8.0 | 13.3 | 31.5 | 34.1 | 0.9 | 14.6 | 13.3 | 7.9 | 34.1 | 0.9 | 14.6 | 13.3 | 7.9 | 26.3 | 0.5 | 9.0 | 13.4 | 16.6 | 34.2 | 0.3 | 17.2 | 13.3 | 31.5 | | | | | | | | | | |
| 21 | 11.2 | 13.0 | 31.5 | 26.7 | 0.3 | 8.3 | 13.3 | 31.5 | 35.1 | 1.0 | 15.6 | 13.3 | 6.9 | 35.1 | 1.0 | 15.6 | 13.3 | 6.9 | 26.9 | 0.6 | 9.6 | 13.4 | 13.2 | 34.6 | 0.4 | 17.6 | 13.3 | 21.9 | | | | | | | | | | |
| 22 | 11.5 | 13.0 | 31.5 | 27.0 | 0.3 | 8.6 | 13.3 | 31.5 | 36.0 | 0.9 | 16.5 | 13.3 | 7.9 | 36.0 | 0.9 | 16.5 | 13.3 | 7.9 | 27.4 | 0.5 | 10.1 | 13.4 | 16.6 | 35.0 | 0.4 | 18.0 | 13.3 | 21.9 | | | | | | | | | | |
| 23 | 11.8 | 13.0 | 31.5 | 27.3 | 0.3 | 8.9 | 13.3 | 31.5 | 37.0 | 1.0 | 17.5 | 13.3 | 6.9 | 37.0 | 1.0 | 17.5 | 13.3 | 6.9 | 28.0 | 0.6 | 10.7 | 13.4 | 13.2 | 35.4 | 0.4 | 18.4 | 13.3 | 21.9 | | | | | | | | | | |
| 24 | 12.0 | 13.0 | 32.6 | 27.5 | 0.2 | 9.1 | 13.3 | 32.6 | 37.9 | 0.9 | 18.4 | 13.3 | 7.9 | 37.9 | 0.9 | 18.4 | 13.3 | 7.9 | 28.6 | 0.6 | 11.3 | 13.4 | 13.2 | 35.7 | 0.3 | 18.7 | 13.3 | 31.5 | | | | | | | | | | |
| 25 | 12.3 | 13.0 | 31.5 | 27.8 | 0.3 | 9.4 | 13.3 | 31.5 | 38.6 | 0.7 | 19.1 | 13.3 | 10.8 | 38.6 | 0.7 | 19.1 | 13.3 | 10.8 | 29.1 | 0.5 | 11.8 | 13.4 | 16.6 | 36.1 | 0.4 | 19.1 | 13.3 | 21.9 | | | | | | | | | | |
| 26 | 12.7 | 13.0 | 21.9 | 28.1 | 0.3 | 9.7 | 13.3 | 31.5 | 39.1 | 0.5 | 19.6 | 13.3 | 16.6 | 39.1 | 0.5 | 19.6 | 13.3 | 16.6 | 29.7 | 0.6 | 12.4 | 13.4 | 13.2 | 36.5 | 0.4 | 19.5 | 13.3 | 21.9 | | | | | | | | | | |
| 27 | 13.2 | 13.0 | 16.6 | 28.3 | 0.2 | 9.9 | 13.3 | 32.6 | 39.5 | 0.4 | 20.0 | 13.3 | 21.9 | 39.5 | 0.4 | 20.0 | 13.3 | 21.9 | 30.4 | 0.7 | 13.1 | 13.4 | 10.8 | 36.8 | 0.3 | 19.8 | 13.3 | 21.9 | | | | | | | | | | |
| 28 | 13.7 | 13.0 | 16.6 | 28.6 | 0.3 | 10.2 | 13.3 | 31.5 | 39.7 | 0.2 | 20.2 | 13.3 | 32.6 | 39.7 | 0.2 | 20.2 | 13.3 | 32.6 | 31.0 | 0.6 | 13.7 | 13.4 | 13.2 | 37.1 | 0.3 | 20.1 | 13.3 | 31.5 | | | | | | | | | | |
| 29 | 14.2 | 13.0 | 16.6 | 28.8 | 0.2 | 10.4 | 13.3 | 32.6 | 40.0 | 0.3 | 20.5 | 13.3 | 31.5 | 40.0 | 0.3 | 20.5 | 13.3 | 31.5 | 31.6 | 0.6 | 14.3 | 13.4 | 13.2 | 37.3 | 0.2 | 20.3 | 13.3 | 32.6 | | | | | | | | | | |
| 30 | 14.7 | 13.0 | 16.6 | 29.0 | 0.2 | 10.6 | 13.3 | 32.6 | 40.3 | 0.3 | 20.8 | 13.3 | 31.5 | 40.3 | 0.3 | 20.8 | 13.3 | 31.5 | 32.2 | 0.6 | 14.9 | 13.4 | 13.2 | | | | | | | | | | | | | | | |
| 31 | 15.2 | 13.0 | 16.6 | 29.2 | 0.2 | 10.8 | 13.3 | 32.6 | 40.5 | 0.2 | 21.0 | 13.3 | 32.6 | 40.5 | 0.2 | 21.0 | 13.3 | 32.6 | 32.8 | 0.6 | 15.5 | 13.4 | 13.2 | | | | | | | | | | | | | | | |
| 32 | 15.7 | 13.0 | 16.6 | 29.5 | 0.3 | 11.1 | 13.3 | 31.5 | 40.7 | 0.2 | 21.2 | 13.3 | 32.6 | 40.7 | 0.2 | 21.2 | 13.3 | 32.6 | 33.6 | 0.8 | 16.3 | 13.4 | 13.2 | | | | | | | | | | | | | | | |
| 33 | 16.2 | 13.0 | 16.6 | 29.7 | 0.2 | 11.3 | 13.3 | 32.6 | 41.0 | 0.3 | 21.5 | 13.3 | 31.5 | 41.0 | 0.3 | 21.5 | 13.3 | 31.5 | 34.6 | 1.0 | 17.9 | 13.4 | 6.9 | | | | | | | | | | | | | | | |
| 34 | 16.8 | 13.0 | 13.2 | 29.9 | 0.2 | 11.5 | 13.3 | 32.6 | 41.2 | 0.2 | 21.7 | 13.3 | 32.6 | 41.2 | 0.2 | 21.7 | 13.3 | 32.6 | 35.6 | 1.0 | 18.3 | 13.4 | 6.9 | | | | | | | | | | | | | | | |
| 35 | 17.2 | 13.0 | 21.9 | 30.2 | 0.3 | 11.8 | 13.3 | 31.5 | 41.4 | 0.2 | 21.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

1.4 IBV < 1.5
2.0 1.5 < IBV < 3

3.3 3 < IBV < 3.5
3.8 3.5 < IBV < 4.25

4.5 4.25 < IBV < 10
15.0 10 < IBV

1.4 IBV < 1.5
2.0 1.5 < IBV < 3

3.3 3 < IBV < 3.5
3.8 3.5 < IBV < 4.25

4.5 4.25 < IBV < 10
15.0 10 < IBV

| DCP NUMBER | 101 | | | | | 102 | | | | | 103 | | | | | 104 | | | | | 105 | | | | | 106 | | | | | 107 | | | | | 108 | | | | | 201 | | | | | | | | |
|---------------------------|-----------|------------|--------------------------------|------|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-------|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|---------|-----------|------------|--------------------------------|-----|
| | 13.13 | | | | | 13.38 | | | | | 13.00 | | | | | 12.63 | | | | | 12.75 | | | | | 13.50 | | | | | 13.75 | | | | | 14.00 | | | | | | | | | | | | | |
| | 205+495 | | | | | 220+00 | | | | | 239+85 | | | | | 261+60 | | | | | 269+95 | | | | | 315+00 | | | | | 341+00 | | | | | 356+00 | | | | | | | | | | | | | |
| STATION | 6.0 RT CL | | | | | 5.5 RT CL | | | | | 6.0 RT CL | | | | | 6.0 RT CL | | | | | 6.0 RT CL | | | | | 6.0 RT CL | | | | | 6.0 RT CL | | | | | 6.5 LT CL | | | | | | | | | | | | | |
| OFFSET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONCRETE + BASE THICKNESS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IBV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV | READING | IN / BLOW | DEPTH (in) | CONCRETE + BASE THICKNESS (in) | IBV |
| 0 | 18.1 | 0.0 | | 13.1 | 22.6 | 0.0 | | 13.4 | 7.9 | 22.1 | 0.0 | | 13.0 | 6.1 | 21.1 | 0.0 | | 12.6 | 7.9 | 21.9 | 0.0 | | 12.8 | 7.9 | 22.0 | 0.0 | | 13.5 | 6.9 | 22.7 | 0.0 | | 13.8 | 6.1 | 21.6 | 0.0 | | 12.3 | 6.9 | 20.8 | 0.0 | | 14.0 | 6.1 | | | | | |
| 1 | 19.1 | 1.0 | 1.0 | 13.1 | 23.5 | 0.9 | 0.9 | 13.4 | 7.9 | 23.2 | 1.1 | 1.1 | 13.0 | 6.1 | 22.0 | 0.9 | 0.9 | 12.6 | 7.9 | 22.8 | 0.9 | 0.9 | 12.8 | 7.9 | 23.0 | 1.0 | 1.0 | 13.5 | 6.9 | 23.8 | 1.1 | 1.1 | 13.8 | 6.1 | 22.6 | 1.0 | 1.0 | 12.3 | 6.9 | 21.9 | 1.1 | 1.1 | 14.0 | 6.1 | | | | | |
| 2 | 20.0 | 0.9 | 1.9 | 13.1 | 23.9 | 0.4 | 1.3 | 13.4 | 7.9 | 23.4 | 0.2 | 1.3 | 13.0 | 6.1 | 22.5 | 0.5 | 1.4 | 12.6 | 7.9 | 23.2 | 0.4 | 1.3 | 12.8 | 7.9 | 23.5 | 0.5 | 1.5 | 13.5 | 6.9 | 24.6 | 0.8 | 1.9 | 13.8 | 6.1 | 23.0 | 0.4 | 1.4 | 12.3 | 6.9 | 22.4 | 0.5 | 1.6 | 14.0 | 6.1 | | | | | |
| 3 | 20.4 | 0.4 | 2.3 | 13.1 | 23.9 | 0.4 | 1.7 | 13.4 | 7.9 | 24.4 | 1.0 | 2.3 | 13.0 | 6.9 | 22.9 | 0.4 | 1.8 | 12.6 | 7.9 | 23.6 | 0.4 | 1.7 | 12.8 | 7.9 | 23.9 | 0.4 | 1.9 | 13.5 | 6.9 | 25.4 | 0.8 | 2.7 | 13.8 | 6.1 | 23.4 | 0.4 | 1.8 | 12.3 | 6.9 | 22.9 | 0.5 | 2.1 | 14.0 | 6.1 | | | | | |
| 4 | 20.8 | 0.4 | 2.7 | 13.1 | 23.9 | 0.4 | 2.1 | 13.4 | 7.9 | 24.7 | 0.3 | 2.6 | 13.0 | 7.9 | 23.3 | 0.4 | 2.2 | 12.6 | 7.9 | 23.9 | 0.3 | 2.0 | 12.8 | 7.9 | 24.2 | 0.3 | 2.2 | 13.5 | 6.9 | 26.0 | 0.6 | 3.3 | 13.8 | 6.1 | 23.8 | 0.4 | 2.2 | 12.3 | 6.9 | 23.3 | 0.4 | 2.5 | 14.0 | 6.1 | | | | | |
| 5 | 21.1 | 0.3 | 3.0 | 13.1 | 23.9 | 0.3 | 2.4 | 13.4 | 7.9 | 25.1 | 0.4 | 3.0 | 13.0 | 7.9 | 23.7 | 0.4 | 2.6 | 12.6 | 7.9 | 24.3 | 0.4 | 2.4 | 12.8 | 7.9 | 24.6 | 0.4 | 2.6 | 13.5 | 6.9 | 26.5 | 0.5 | 3.8 | 13.8 | 6.1 | 24.2 | 0.4 | 2.6 | 12.3 | 6.9 | 23.7 | 0.4 | 2.9 | 14.0 | 6.1 | | | | | |
| 6 | 21.4 | 0.3 | 3.3 | 13.1 | 23.9 | 0.3 | 2.7 | 13.4 | 7.9 | 25.5 | 0.4 | 3.4 | 13.0 | 7.9 | 24.0 | 0.3 | 2.9 | 12.6 | 7.9 | 24.7 | 0.4 | 2.8 | 12.8 | 7.9 | 25.1 | 0.5 | 3.1 | 13.5 | 6.9 | 27.0 | 0.5 | 4.3 | 13.8 | 6.1 | 24.7 | 0.5 | 3.1 | 12.3 | 6.9 | 24.0 | 0.3 | 3.2 | 14.0 | 6.1 | | | | | |
| 7 | 21.8 | 0.4 | 3.7 | 13.1 | 23.9 | 0.2 | 2.9 | 13.4 | 7.9 | 25.8 | 0.3 | 3.7 | 13.0 | 7.9 | 24.3 | 0.3 | 3.2 | 12.6 | 7.9 | 25.2 | 0.5 | 3.3 | 12.8 | 7.9 | 25.6 | 0.5 | 3.6 | 13.5 | 6.9 | 27.5 | 0.5 | 4.8 | 13.8 | 6.1 | 25.3 | 0.6 | 3.7 | 12.3 | 6.9 | 24.3 | 0.3 | 3.5 | 14.0 | 6.1 | | | | | |
| 8 | 22.9 | 0.2 | 3.9 | 13.1 | 23.9 | 0.3 | 3.2 | 13.4 | 7.9 | 26.1 | 0.3 | 4.0 | 13.0 | 7.9 | 24.6 | 0.3 | 3.5 | 12.6 | 7.9 | 25.8 | 0.6 | 3.9 | 12.8 | 7.9 | 26.0 | 0.4 | 4.0 | 13.5 | 6.9 | 28.0 | 0.5 | 5.3 | 13.8 | 6.1 | 25.9 | 0.6 | 4.3 | 12.3 | 6.9 | 24.6 | 0.3 | 3.8 | 14.0 | 6.1 | | | | | |
| 9 | 22.4 | 0.4 | 4.3 | 13.1 | 23.9 | 0.2 | 3.4 | 13.4 | 7.9 | 26.4 | 0.3 | 4.3 | 13.0 | 7.9 | 24.9 | 0.3 | 3.8 | 12.6 | 7.9 | 26.3 | 0.5 | 4.4 | 12.8 | 7.9 | 26.6 | 0.6 | 4.6 | 13.5 | 6.9 | 28.4 | 0.4 | 5.7 | 13.8 | 6.1 | 26.6 | 0.7 | 5.0 | 12.3 | 6.9 | 24.8 | 0.2 | 4.0 | 14.0 | 6.1 | | | | | |
| 10 | 22.7 | 0.3 | 4.6 | 13.1 | 23.9 | 0.2 | 3.6 | 13.4 | 7.9 | 26.7 | 0.3 | 4.6 | 13.0 | 7.9 | 25.2 | 0.3 | 4.1 | 12.6 | 7.9 | 26.7 | 0.4 | 4.8 | 12.8 | 7.9 | 27.2 | 0.6 | 5.2 | 13.5 | 6.9 | 28.9 | 0.5 | 6.2 | 13.8 | 6.1 | 27.4 | 0.8 | 5.8 | 12.3 | 6.9 | 24.9 | 0.1 | 4.1 | 14.0 | 6.1 | | | | | |
| 11 | 22.9 | 0.2 | 4.8 | 13.1 | 23.9 | 0.2 | 3.8 | 13.4 | 7.9 | 26.9 | 0.2 | 4.8 | 13.0 | 7.9 | 25.5 | 0.3 | 4.4 | 12.6 | 7.9 | 27.2 | 0.5 | 5.3 | 12.8 | 7.9 | 27.7 | 0.5 | 5.7 | 13.5 | 6.9 | 29.4 | 0.5 | 6.7 | 13.8 | 6.1 | 27.9 | 0.5 | 6.3 | 12.3 | 6.9 | 25.1 | 0.2 | 4.3 | 14.0 | 6.1 | | | | | |
| 12 | 23.2 | 0.3 | 5.1 | 13.1 | 23.9 | 0.3 | 4.1 | 13.4 | 7.9 | 27.2 | 0.3 | 5.1 | 13.0 | 7.9 | 25.7 | 0.2 | 4.6 | 12.6 | 7.9 | 27.7 | 0.5 | 5.8 | 12.8 | 7.9 | 28.2 | 0.5 | 6.2 | 13.5 | 6.9 | 30.0 | 0.6 | 7.3 | 13.8 | 6.1 | 28.3 | 0.4 | 6.7 | 12.3 | 6.9 | 25.3 | 0.2 | 4.5 | 14.0 | 6.1 | | | | | |
| 13 | 23.5 | 0.3 | 5.4 | 13.1 | 23.9 | 0.3 | 4.2 | 13.4 | 7.9 | 27.5 | 0.3 | 5.4 | 13.0 | 7.9 | 25.9 | 0.2 | 4.8 | 12.6 | 7.9 | 28.2 | 0.5 | 6.3 | 12.8 | 7.9 | 28.8 | 0.6 | 6.8 | 13.5 | 6.9 | 30.6 | 0.6 | 7.9 | 13.8 | 6.1 | 28.8 | 0.5 | 7.2 | 12.3 | 6.9 | 25.5 | 0.2 | 4.7 | 14.0 | 6.1 | | | | | |
| 14 | 23.7 | 0.2 | 5.6 | 13.1 | 23.9 | 0.2 | 4.4 | 13.4 | 7.9 | 27.7 | 0.2 | 5.6 | 13.0 | 7.9 | 26.1 | 0.2 | 5.2 | 12.6 | 7.9 | 28.6 | 0.4 | 6.7 | 12.8 | 7.9 | 29.4 | 0.6 | 7.4 | 13.5 | 6.9 | 31.4 | 0.8 | 8.7 | 13.8 | 6.1 | 29.7 | 0.7 | 7.9 | 12.3 | 6.9 | 25.7 | 0.2 | 4.9 | 14.0 | 6.1 | | | | | |
| 15 | 23.9 | 0.2 | 5.8 | 13.1 | 23.9 | 0.2 | 4.6 | 13.4 | 7.9 | 27.9 | 0.2 | 5.8 | 13.0 | 7.9 | 26.3 | 0.2 | 5.2 | 12.6 | 7.9 | 29.0 | 0.4 | 7.1 | 12.8 | 7.9 | 30.0 | 0.6 | 8.0 | 13.5 | 6.9 | 32.4 | 1.0 | 9.7 | 13.8 | 6.1 | 30.0 | 0.5 | 8.4 | 12.3 | 6.9 | 26.0 | 0.3 | 5.2 | 14.0 | 6.1 | | | | | |
| 16 | 24.1 | 0.2 | 6.0 | 13.1 | 23.9 | 0.2 | 4.8 | 13.4 | 7.9 | 28.0 | 0.1 | 5.9 | 13.0 | 7.9 | 26.5 | 0.2 | 5.4 | 12.6 | 7.9 | 29.4 | 0.4 | 7.5 | 12.8 | 7.9 | 30.6 | 0.6 | 8.6 | 13.5 | 6.9 | 33.5 | 1.1 | 10.8 | 13.8 | 6.1 | 30.7 | 0.7 | 9.1 | 12.3 | 6.9 | 26.3 | 0.3 | 5.5 | 14.0 | 6.1 | | | | | |
| 17 | 24.3 | 0.2 | 6.2 | 13.1 | 23.9 | 0.1 | 4.9 | 13.4 | 7.9 | 28.3 | 0.3 | 6.2 | 13.0 | 7.9 | 26.7 | 0.2 | 5.6 | 12.6 | 7.9 | 29.9 | 0.5 | 8.0 | 12.8 | 7.9 | 31.3 | 0.7 | 9.3 | 13.5 | 6.9 | 34.4 | 0.9 | 11.7 | 13.8 | 6.1 | 31.2 | 0.5 | 9.6 | 12.3 | 6.9 | 26.6 | 0.3 | 5.8 | 14.0 | 6.1 | | | | | |
| 18 | 24.5 | 0.2 | 6.4 | 13.1 | 23.9 | 0.2 | 5.1 | 13.4 | 7.9 | 28.4 | 0.1 | 6.3 | 13.0 | 7.9 | 26.9 | 0.2 | 5.8 | 12.6 | 7.9 | 30.4 | 0.5 | 8.5 | 12.8 | 7.9 | 32.0 | 0.7 | 10.0 | 13.5 | 6.9 | 35.1 | 0.9 | 12.6 | 13.8 | 6.1 | 31.7 | 0.5 | 10.1 | 12.3 | 6.9 | 26.9 | 0.3 | 6.1 | 14.0 | 6.1 | | | | | |
| 19 | 24.8 | 0.3 | 6.7 | 13.1 | 23.9 | 0.2 | 5.3 | 13.4 | 7.9 | 28.5 | 0.1 | 6.4 | 13.0 | 7.9 | 27.1 | 0.2 | 6.0 | 12.6 | 7.9 | 30.8 | 0.4 | 8.9 | 12.8 | 7.9 | 32.5 | 0.5 | 10.5 | 13.5 | 6.9 | 36.3 | 1.0 | 13.6 | 13.8 | 6.1 | 32.1 | 0.4 | 10.5 | 12.3 | 6.9 | 27.2 | 0.3 | 6.4 | 14.0 | 6.1 | | | | | |
| 20 | 24.9 | 0.1 | 6.8 | 13.1 | 23.9 | 0.1 | 5.4 | 13.4 | 7.9 | 28.7 | 0.2 | 6.6 | 13.0 | 7.9 | 27.3 | 0.2 | 6.2 | 12.6 | 7.9 | 31.2 | 0.4 | 9.3 | 12.8 | 7.9 | 33.2 | 0.7 | 11.2 | 13.5 | 6.9 | 37.3 | 1.0 | 14.6 | 13.8 | 6.1 | 32.5 | 0.4 | 10.9 | 12.3 | 6.9 | 27.4 | 0.2 | 6.6 | 14.0 | 6.1 | | | | | |
| 21 | 25.2 | 0.3 | 7.1 | 13.1 | 23.9 | 0.2 | 5.6 | 13.4 | 7.9 | 28.8 | 0.1 | 6.7 | 13.0 | 7.9 | 27.5 | 0.2 | 6.4 | 12.6 | 7.9 | 31.5 | 0.3 | 9.6 | 12.8 | 7.9 | 33.8 | 0.6 | 11.8 | 13.5 | 6.9 | 38.1 | 0.8 | 15.4 | 13.8 | 6.1 | 32.8 | 0.3 | 11.2 | 12.3 | 6.9 | 27.6 | 0.2 | 6.8 | 14.0 | 6.1 | | | | | |
| 22 | 25.4 | 0.2 | 7.3 | 13.1 | 23.9 | 0.2 | 5.8 | 13.4 | 7.9 | 29.0 | 0.2 | 6.9 | 13.0 | 7.9 | 27.7 | 0.2 | 6.6 | 12.6 | 7.9 | 31.8 | 0.3 | 9.9 | 12.8 | 7.9 | 34.5 | 0.7 | 12.5 | 13.5 | 6.9 | 38.9 | 0.8 | 16.2 | 13.8 | 6.1 | 33.2 | 0.4 | 11.6 | 12.3 | 6.9 | 27.9 | 0.3 | 7.1 | 14.0 | 6.1 | | | | | |
| 23 | 25.6 | 0.2 | 7.5 | 13.1 | 23.9 | 0.2 | 6.0 | 13.4 | 7.9 | 29.2 | 0.2 | 7.1 | 13.0 | 7.9 | 27.9 | 0.2 | 6.8 | 12.6 | 7.9 | 32.2 | 0.4 | 10.3 | 12.8 | 7.9 | 35.0 | 0.5 | 13.0 | 13.5 | 6.9 | 39.4 | 0.5 | 16.7 | 13.8 | 6.1 | 33.6 | 0.4 | 12.0 | 12.3 | 6.9 | 28.1 | 0.2 | 7.3 | 14.0 | 6.1 | | | | | |
| 24 | 25.8 | 0.2 | 7.7 | 13.1 | 23.9 | 0.3 | 6.2 | 13.4 | 7.9 | 29.5 | 0.3 | 7.4 | 13.0 | 7.9 | 28.0 | 0.1 | 6.9 | 12.6 | 7.9 | 32.5 | 0.3 | 10.6 | 12.8 | 7.9 | 35.5 | 0.5 | 13.5 | 13.5 | 6.9 | 39.9 | 0.5 | 17.2 | 13.8 | 6.1 | 33.8 | 0.5 | 12.5 | 12.3 | 6.9 | 28.2 | 0.1 | 7.4 | 14.0 | 6.1 | | | | | |
| 25 | 25.9 | 0.1 | 7.8 | 13.1 | 23.9 | 0.2 | 6.4 | 13.4 | 7.9 | 29.7 | 0.2 | 7.6 | 13.0 | 7.9 | 28.3 | 0.3 | 7.2 | 12.6 | 7.9 | 32.9 | 0.4 | 11.0 | 12.8 | 7.9 | 35.5 | 0.6 | 14.1 | 13.5 | 6.9 | 40.2 | 0.4 | 17.6 | 13.8 | 6.1 | 34.7 | 0.6 | 13.3 | 12.3 | 6.9 | 28.3 | 0.1 | 7.5 | 14.0 | 6.1 | | | | | |
| 26 | 26.1 | 0.2 | 8.0 | 13.1 | 23.9 | 0.2 | 6.6 | 13.4 | 7.9 | 29.9 | 0.2 | 7.8 | 13.0 | 7.9 | 28.5 | 0.2 | 7.4 | 12.6 | 7.9 | 33.3 | 0.4 | 11.4 | 12.8 | 7.9 | 35.7 | 0.6 | 14.7 | 13.5 | 6.9 | 40.7 | 0.4 | 18.0 | 13.8 | 6.1 | 35.4 | 0.7 | 13.8 | 12.3 | 6.9 | 28.4 | 0.1 | 7.6 | 14.0 | 6.1 | | | | | |
| 27 | 26.3 | 0.2 | 8.2 | 13.1 | 23.9 | 0.2 | 6.8 | 13.4 | 7.9 | 30.1 | 0.2 | 8.0 | 13.0 | 7.9 | 28.7 | 0.2 | 7.6 | 12.6 | 7.9 | 33.7 | 0.4 | 11.8 | 12.8 | 7.9 | 35.7 | 0.5 | 15.2 | 13.5 | 6.9 | 41.1 | 0.4 | 18.4 | 13.8 | 6.1</ | | | | | | | | | | | | | | | |

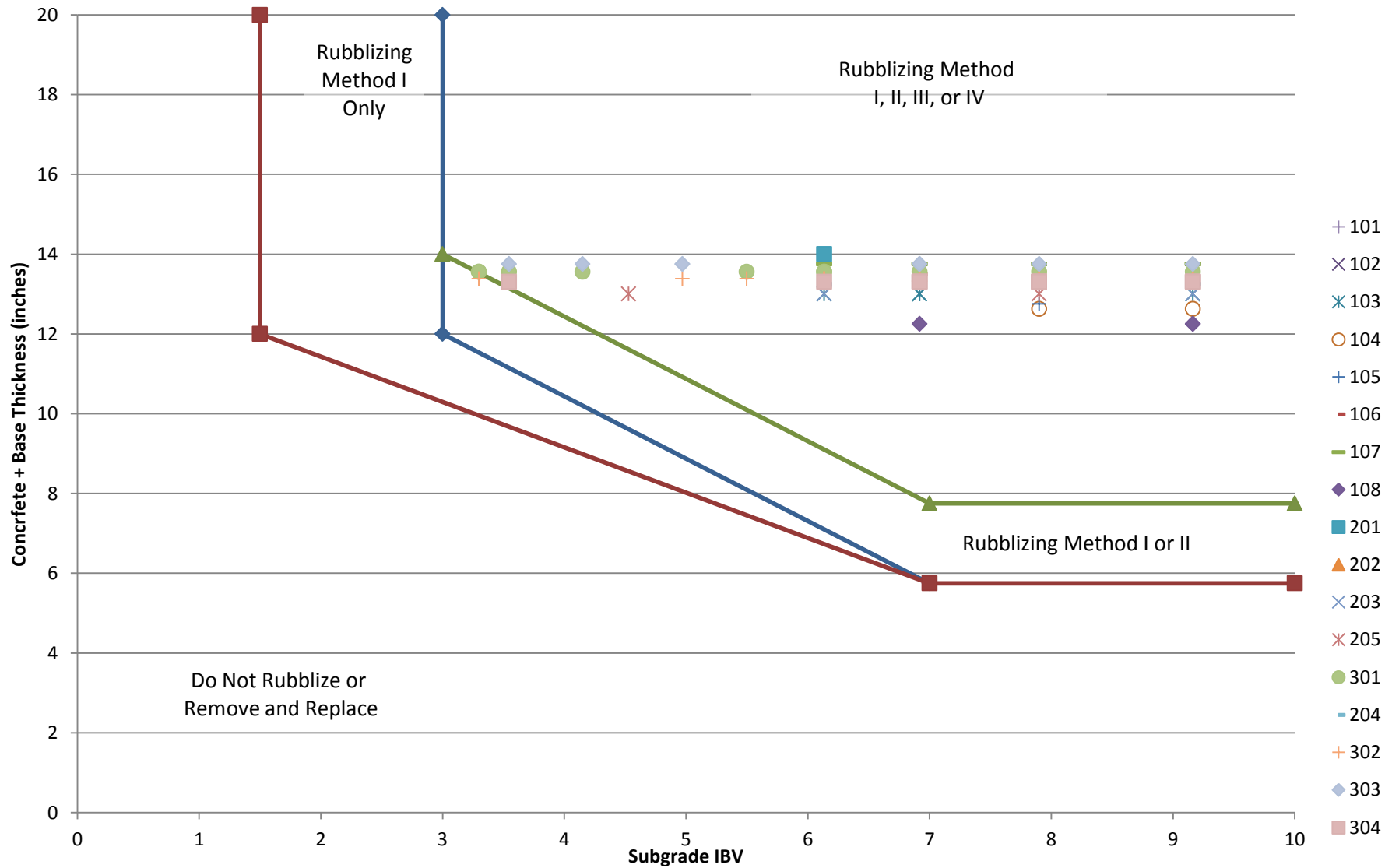
APPENDIX

P

SUBGRADE RUBBLIZING GUIDE

(BDE Manual Figure 54-5.T)

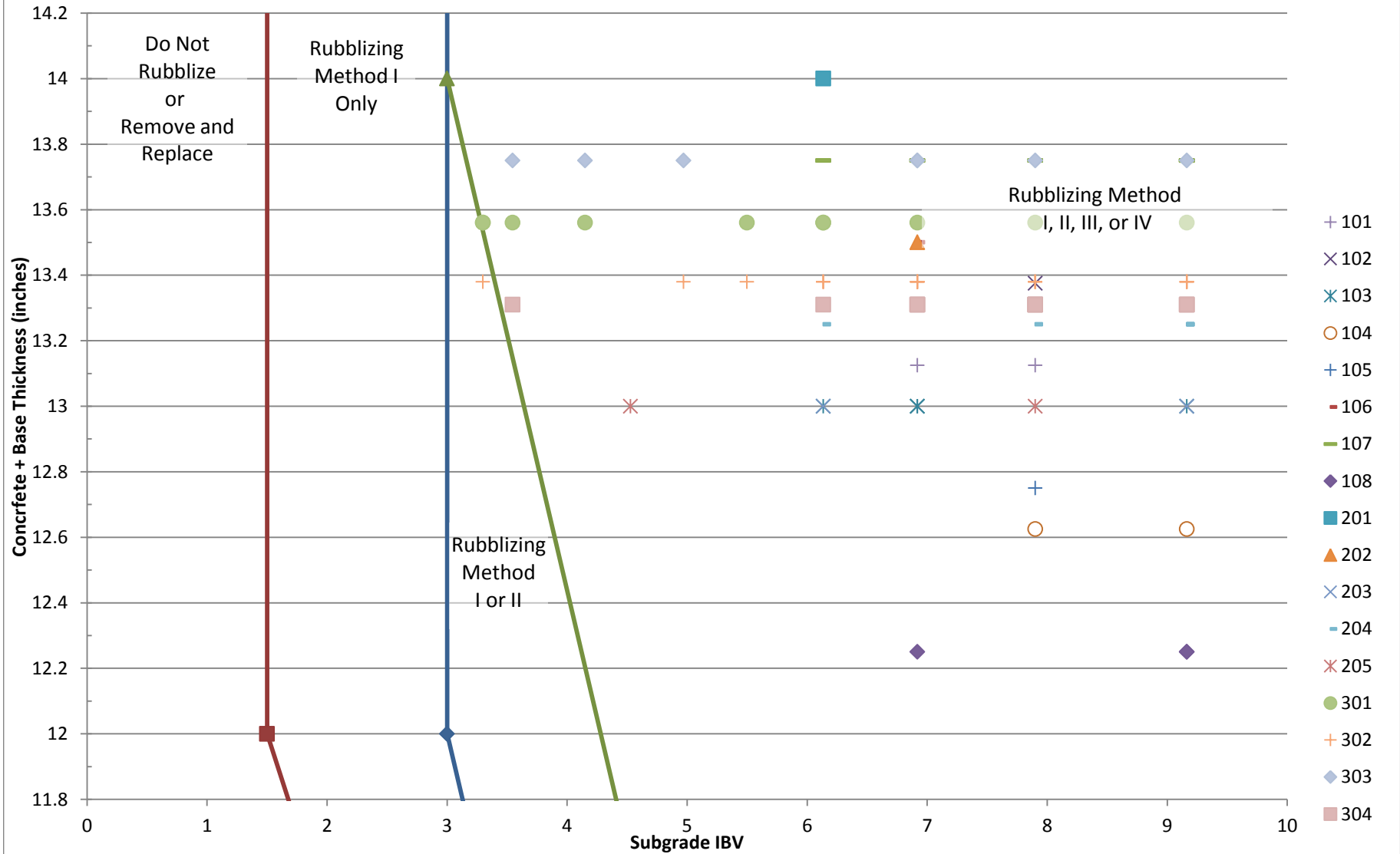
NORTHBOUND DIRECTION



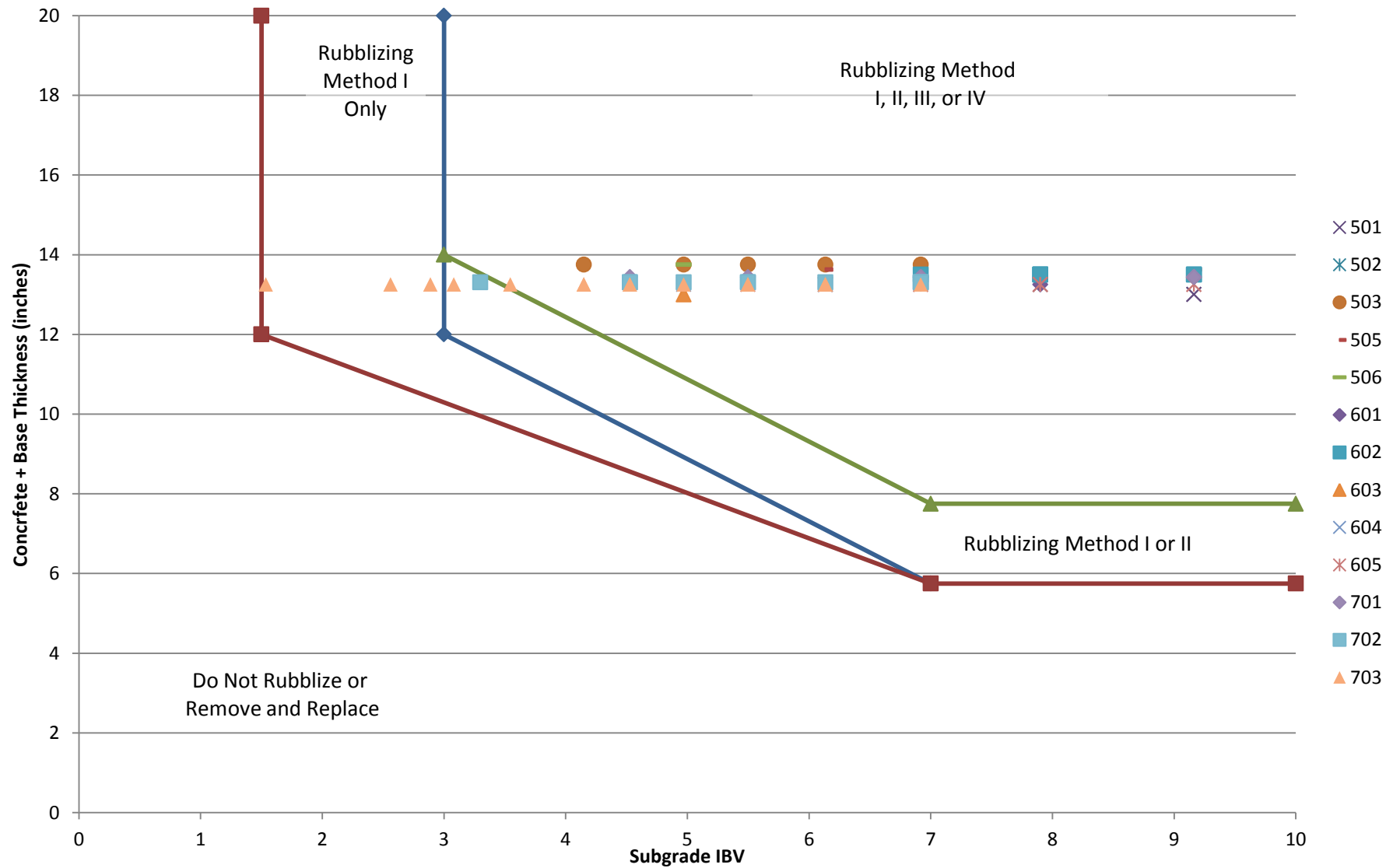
SUBGRADE RUBBLIZING GUIDE

(BDE Manual Figure 54-5.T)

NORTHBOUND DIRECTION - CLOSE UP VIEW



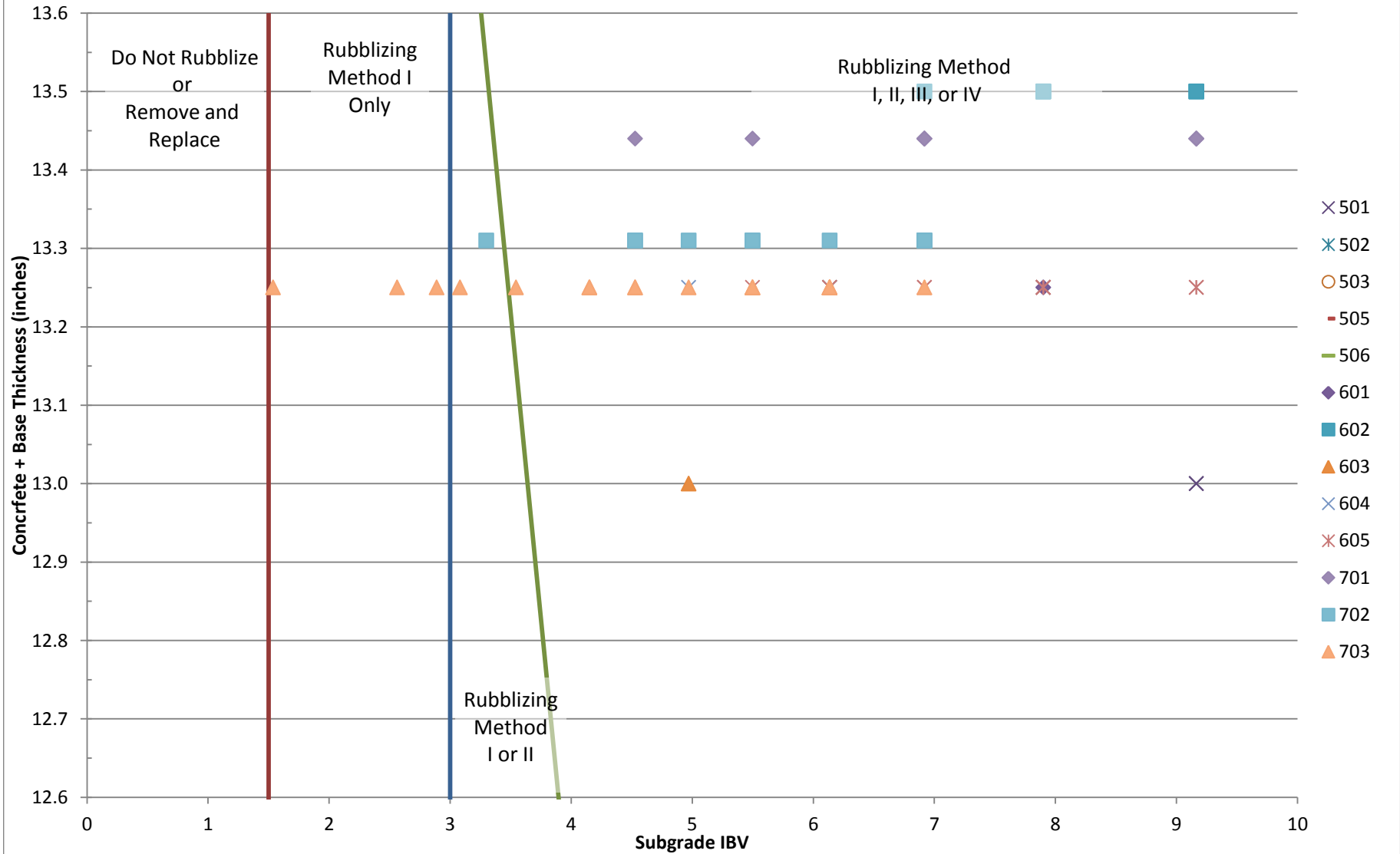
SUBGRADE RUBBLIZING GUIDE (BDE Manual Figure 54-5.T) SOUTHBOUND DIRECTION



SUBGRADE RUBBLIZING GUIDE

(BDE Manual Figure 54-5.T)

SOUTHBOUND DIRECTION - CLOSE UP VIEW



APPENDIX

Q

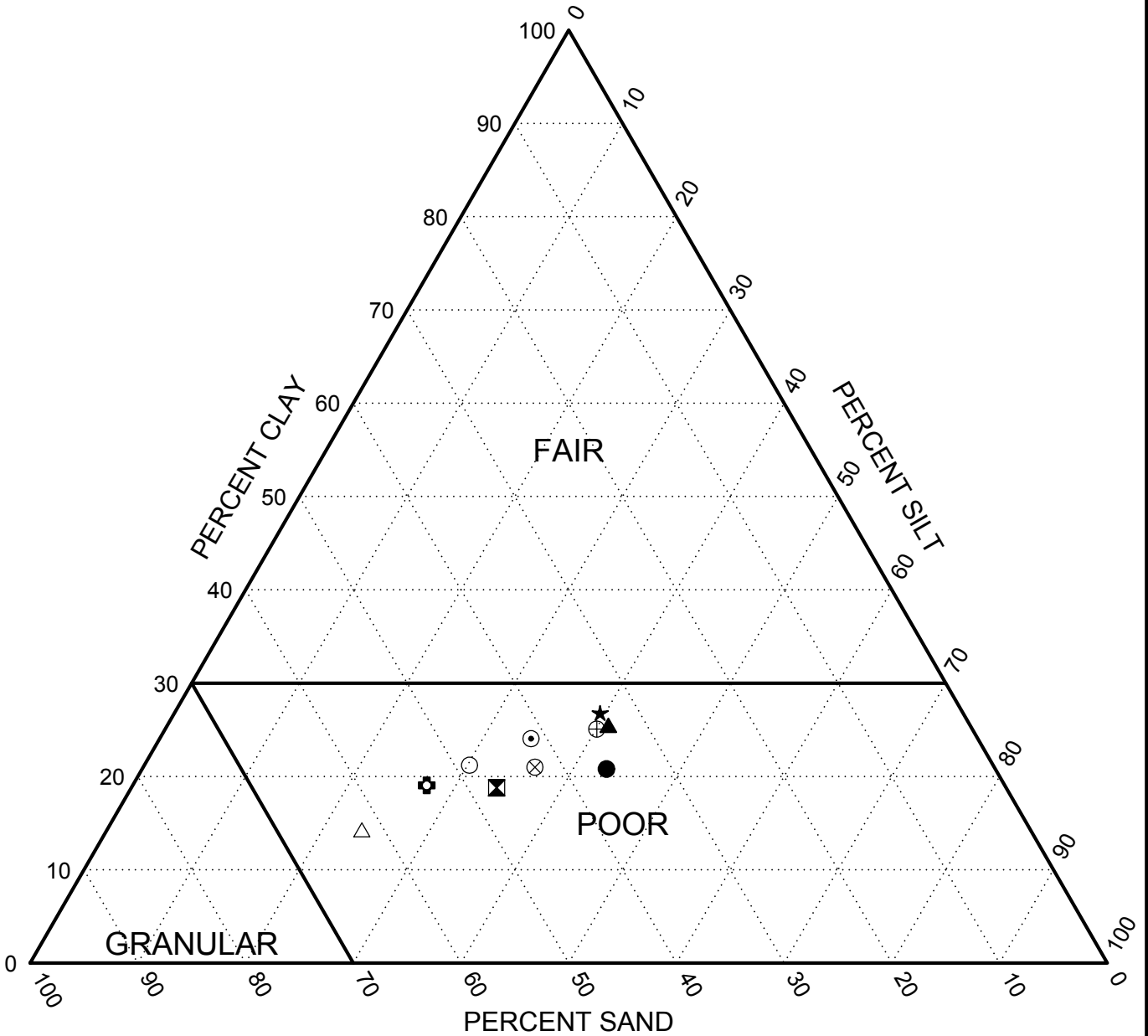
CULVERT DATA FOR I-55 FROM MM 195.00 TO MM 201.11

| Station | Direction | Highest Flow Line of Culvert | Culvert Diameter | Culvert Wall Thickness | Top of Culvert Elevation | Existing Profile Grade Elevation | Clearance Between Top of Existing Pavement and Top of Culvert | Clearance Between Top of Existing Concrete Pavement and Top of Culvert* |
|----------------------|-----------|------------------------------|------------------|------------------------|--------------------------|----------------------------------|---|---|
| | | feet | inches | inches | feet | feet | feet | feet |
| Pipe Culverts | | | | | | | | |
| 29+50 | NB | 654.8 | 36.00 | 4.00 | 658.1 | 660.1 | 2.0 | 1.7 |
| 29+50 | SB | 654.8 | 36.00 | 4.00 | 658.1 | 660.1 | 2.0 | 1.7 |
| 43+00 | SB | 655.7 | 24.00 | 3.00 | 658.0 | 662.0 | 4.0 | 3.7 |
| 57+25 | NB | 658.6 | 48.00 | 5.00 | 663.0 | 665.8 | 2.8 | 2.5 |
| 57+25 | SB | 658.6 | 48.00 | 5.00 | 663.0 | 665.8 | 2.8 | 2.5 |
| 69+00 | SB | 659.2 | 24.00 | 3.00 | 661.4 | 665.2 | 3.8 | 3.5 |
| 83+00 | SB | 656.2 | 24.00 | 3.00 | 658.5 | 661.2 | 2.8 | 2.5 |
| 95+00 | SB | 651.9 | 24.00 | 3.00 | 654.2 | 658.2 | 4.1 | 3.8 |
| 108+50 | NB | 646.8 | 48.00 | 5.00 | 651.2 | 654.2 | 3.0 | 2.7 |
| 108+50 | SB | 646.8 | 48.00 | 5.00 | 651.2 | 654.1 | 2.9 | 2.6 |
| 123+00 | NB | 643.9 | 24.00 | 3.00 | 646.1 | 650.0 | 3.9 | 3.6 |
| 150+00 | SB | 637.0 | 24.00 | 3.00 | 639.2 | 645.9 | 6.7 | 6.4 |
| 164+00 | SB | 633.1 | 24.00 | 3.00 | 635.3 | 639.9 | 4.6 | 4.3 |
| 178+00 | SB | 623.5 | 24.00 | 3.00 | 625.8 | 635.1 | 9.4 | 9.1 |
| 192+50 | SB | 632.0 | 24.00 | 3.00 | 634.3 | 637.6 | 3.3 | 3.0 |
| 200+00 | SB | 633.8 | 24.00 | 3.00 | 636.0 | 639.9 | 3.9 | 3.6 |
| 219+00 | SB | 633.9 | 24.00 | 3.00 | 636.1 | 640.9 | 4.8 | 4.5 |
| 239+00 | SB | 628.0 | 24.00 | 3.00 | 630.3 | 638.6 | 8.3 | 8.0 |
| 251+75 | NB | 635.1 | 36.00 | 4.00 | 638.4 | 642.2 | 3.8 | 3.5 |
| 251+75 | SB | 635.1 | 36.00 | 4.00 | 638.4 | 642.1 | 3.7 | 3.4 |
| 274+00 | SB | 637.1 | 24.00 | 3.00 | 639.4 | 644.2 | 4.8 | 4.5 |
| 308+00 | NB | 641.4 | 24.00 | 3.00 | 643.6 | 646.6 | 2.9 | 2.6 |
| 308+00 | SB | 641.3 | 24.00 | 3.00 | 643.6 | 646.6 | 3.0 | 2.7 |
| 317+00 | NB | 641.2 | 24.00 | 3.00 | 643.4 | 648.0 | 4.6 | 4.3 |
| 317+00 | SB | 642.1 | 24.00 | 3.00 | 644.4 | 648.0 | 3.6 | 3.3 |
| 326+00 | SB | 644.6 | 24.00 | 3.00 | 646.8 | 649.5 | 2.7 | 2.4 |
| 339+00 | NB | 646.0 | 24.00 | 3.00 | 648.3 | 651.6 | 3.3 | 3.0 |
| Box Culverts | | | | | | | | |
| 230+25 | NB | 625.5 | 60.00 | 12.00 | 631.5 | 638.5 | 7.0 | 6.7 |
| 230+25 | SB | 625.5 | 60.00 | 12.00 | 631.5 | 638.5 | 7.0 | 6.7 |
| 284+25 | NB | 634.5 | 36.00 | 12.00 | 638.5 | 663.4 | 24.9 | 24.6 |
| 284+25 | SB | 633.9 | 36.00 | 12.00 | 637.9 | 663.4 | 25.5 | 25.2 |

* Clearance is calculated assuming the existing 3.5" thick HMA overlay is removed prior to rubblization.

APPENDIX

R



| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|-------------|--------------------|
| ● | 101 | 205+45 | 62.00 ft Rt. | 1.50 | A-6 (4) CLAY LOAM |
| ⊠ | 102 | 225+00 | 62.00 ft Rt. | 1.50 | A-4 (2) LOAM |
| ▲ | 103 | 238+85 | 62.00 ft Rt. | 1.50 | A-6 (5) CLAY LOAM |
| ★ | 104 | 261+60 | 62.00 ft Rt. | 1.25 | A-6 (6) CLAY LOAM |
| ⊙ | 105 | 205+95 | 62.00 ft Rt. | 1.50 | A-6 (5) CLAY LOAM |
| ⊕ | 106 | 315+00 | 62.00 ft Rt. | 1.50 | A-6 (3) SANDY LOAM |
| ○ | 107 | 341+30 | 62.00 ft Rt. | 1.50 | A-6 (3) CLAY LOAM |
| △ | 108 | 356+50 | 62.00 ft Rt. | 1.50 | A-6 (1) SANDY LOAM |
| ⊗ | 201 | 200+00 | 50.00 ft Rt. | 1.50 | A-4 (2) CLAY LOAM |
| ⊕ | 202 | 249+35 | 50.00 ft Rt. | 1.50 | A-6 (4) CLAY LOAM |

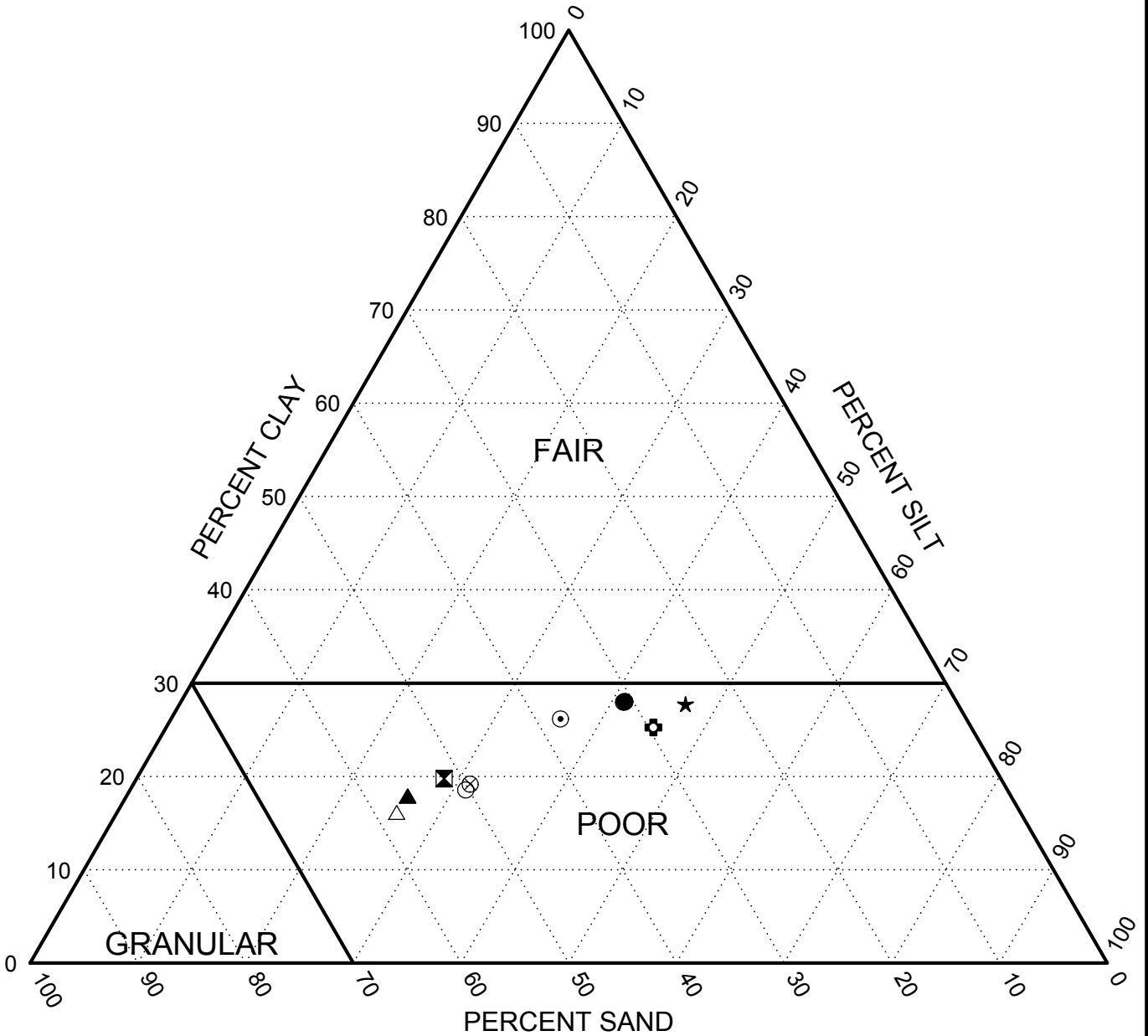


Illinois Department of Transportation
 Division of Highways
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SUBGRADE SUPPORT RATING

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

SUBGRADE SUPPORT RATINGS, I-55 PAVEMENT INVESTIGATION NEAR PONTIAC (MM 195.0 TO 201.11).GPJ_IL_DOT.GDT 7/21/17



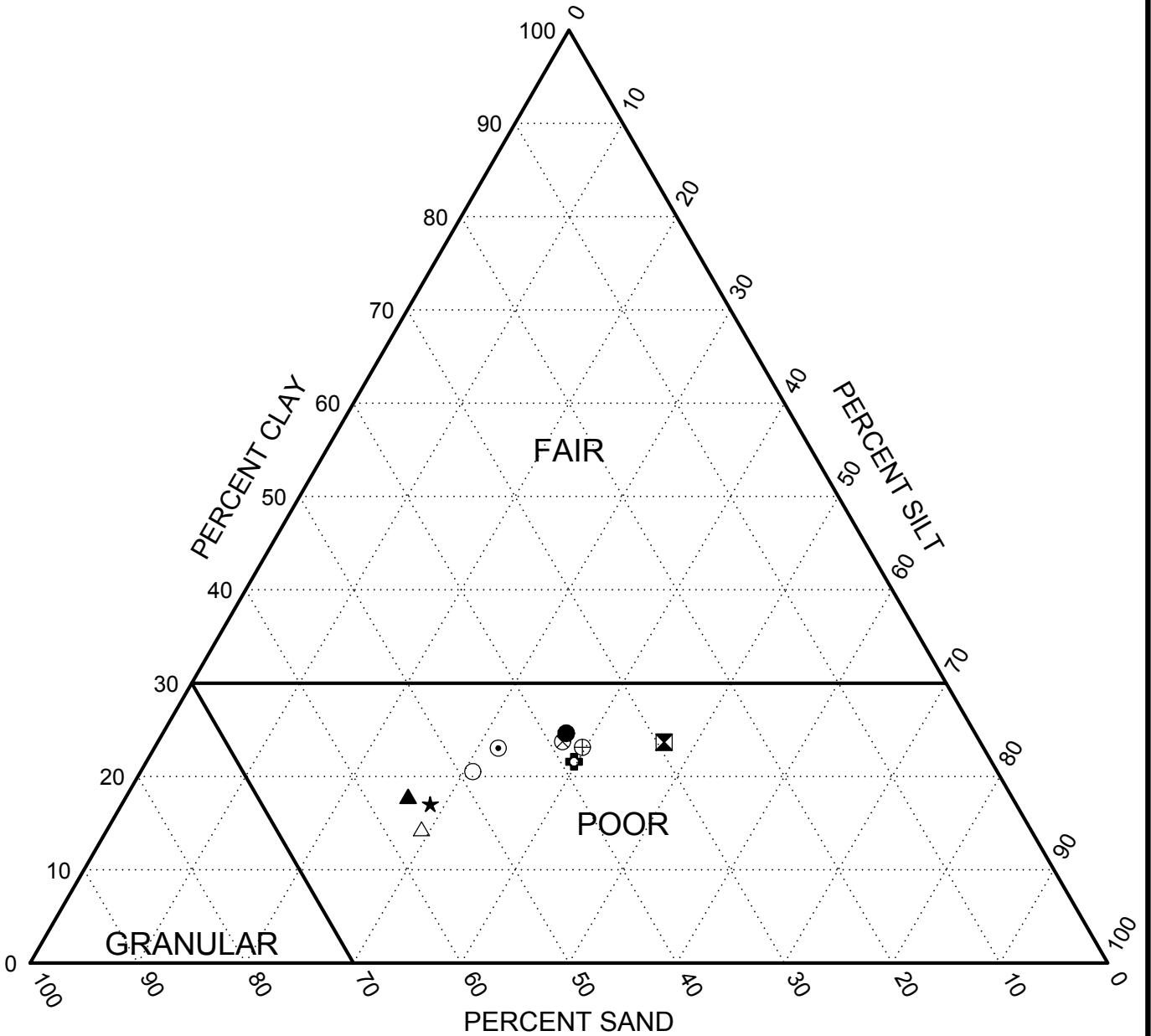
| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|--------------------|
| ● | 203 | 275+00 | 50.00 ft Rt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊠ | 204 | 305+00 | 50.00 ft Rt. | 1.50 | A-6 (5) SANDY LOAM |
| ▲ | 205 | 325+00 | 50.00 ft Rt. | 1.50 | A-6 (2) SANDY LOAM |
| ★ | 301 | 74+85 | 62.00 ft Rt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊙ | 302 | 109+45 | 62.00 ft Rt. | 1.25 | A-6 (7) CLAY LOAM |
| ⊕ | 303 | 121+75 | 62.00 ft Rt. | 1.50 | A-4 (5) CLAY LOAM |
| ○ | 304 | 180+47 | 62.00 ft Rt. | 1.50 | A-4 (2) SANDY LOAM |
| △ | 501 | 350+00 | 62.00 ft Lt. | 1.50 | A-6 (3) SANDY LOAM |
| ⊗ | 502 | 306+90 | 62.00 ft Lt. | 1.50 | A-6 (3) LOAM |
| ⊕ | 503 | 277+60 | 62.00 ft Lt. | 1.30 | A-6 (7) CLAY LOAM |



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

SUBGRADE SUPPORT RATING

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston



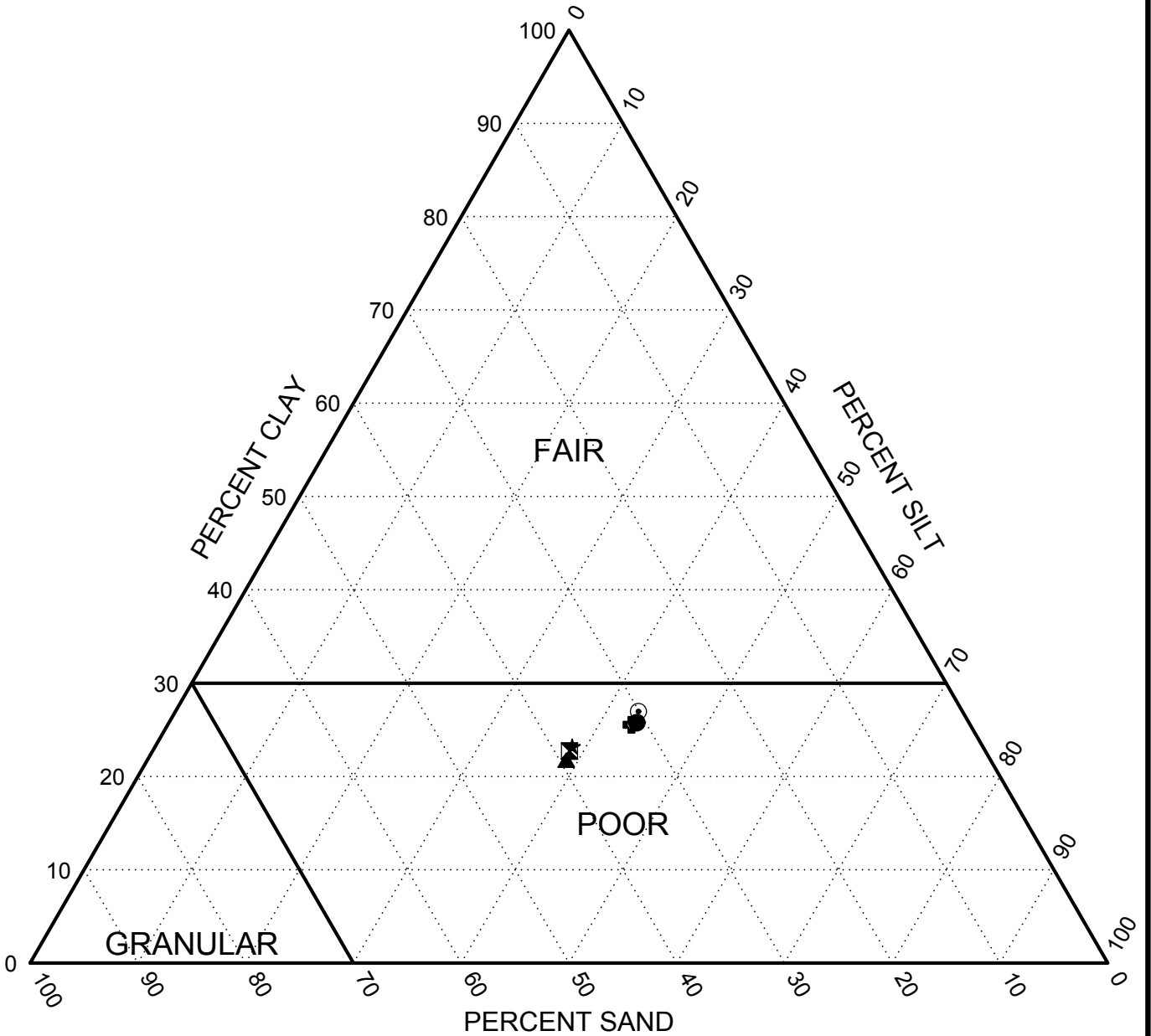
| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|--------------------|
| ● | 505 | 244+65 | 62.00 ft Lt. | 1.30 | A-6 (4) CLAY LOAM |
| ⊠ | 506 | 195+45 | 62.00 ft Lt. | 1.50 | A-4 (4) CLAY LOAM |
| ▲ | 601 | 331+20 | 50.00 ft Lt. | 1.50 | A-6 (2) SANDY LOAM |
| ★ | 602 | 320+35 | 50.00 ft Lt. | 1.50 | A-6 (2) SANDY LOAM |
| ⊙ | 603 | 286+15 | 50.00 ft Lt. | 1.50 | A-6 (4) CLAY LOAM |
| ⊕ | 604 | 233+25 | 50.00 ft Lt. | 1.50 | A-4 (3) CLAY LOAM |
| ○ | 605 | 220+00 | 50.00 ft Lt. | 1.50 | A-6 (3) CLAY LOAM |
| △ | 701 | 180+40 | 62.00 ft Lt. | 1.50 | A-4 (1) SANDY LOAM |
| ⊗ | 702 | 141+35 | 62.00 ft Lt. | 1.50 | A-6 (6) CLAY LOAM |
| ⊕ | 703 | 74+90 | 62.00 ft Lt. | 1.50 | A-6 (4) CLAY LOAM |



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

SUBGRADE SUPPORT RATING

Route: FAI 55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston



| | Borehole | Station | Offset | Depth (ft) | Classification |
|---|----------|---------|--------------|--------------|-------------------|
| ● | RW 01 | 130+00 | 70.00 ft Rt. | 4.00 | A-6 (7) CLAY LOAM |
| ⊠ | RW 02 | 140+00 | 70.00 ft Rt. | 2.50 | A-6 (4) CLAY LOAM |
| ▲ | RW 02 | 140+00 | 70.00 ft Rt. | 9.50 | A-6 (4) CLAY LOAM |
| ★ | RW 03 | 145+00 | 70.00 ft Lt. | 2.50 | A-6 (6) CLAY LOAM |
| ⊙ | RW 04 | 135+00 | 70.00 ft Lt. | 2.50 | A-6 (7) CLAY LOAM |
| ⊕ | RW 04 | 135+00 | 70.00 ft Lt. | 10.00 | A-6 (6) CLAY LOAM |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SUBGRADE SUPPORT RATINGS: 053-0126, 0127 GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

SUBGRADE SUPPORT RATING

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

APPENDIX

S

Geotechnical Reports

Revised 12-21-2015

A Roadway Geotechnical Report has been prepared for this project. Copies can be obtained by contacting Mike Short, District Geotechnical Engineer, at 1-815-433-7085 or Michael.Short@Illinois.gov.

APPENDIX

T

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
RUBBLIZING PCC PAVEMENT

Effective June 1, 2001

Description. This work shall consist of rubblizing the existing portland cement concrete (PCC) pavement.

Materials. Aggregate replacement material, for areas of approximately 1 sq m (10 sq ft) or less, shall be a Class D Quality (or better) crushed stone, crushed slag, crushed concrete, or crushed gravel meeting a CA 6 or CA 10 gradation; according to Section 1004 of the Standard Specifications. Bituminous concrete mixture used for repairs shall be the same as noted in the mixture requirements for mainline binder.

Equipment. Equipment shall be according to the following Articles of Section 1100:

- | Item | Article/Section |
|---|-----------------|
| (a) Vibratory Steel Wheel Roller..(Note 1)..... | 1101.01 |
| (b) Pneumatic Tired Rollers.....(Note 2)..... | 1101.01 |
- (c) Multi-head Breaker (MHB). The equipment shall consist of a self-contained, self-propelled MHB. Hammer heads shall be mounted laterally in a single row or in pairs with half the hammers in a forward row, and the remainder diagonally offset in a rear row so there is continuous pavement breaking from side to side. This equipment shall have the capability of rubblizing pavement up to 4 m (13 ft) in width, in a single pass. Hammer drop height shall have the ability to be independently controlled. (Note 3)
- (d) Resonant Breaker. The equipment shall consist of a self-contained, self-propelled resonant frequency pavement breaking unit capable of producing low amplitude, 8,880 N (2,000 lb) blows, at a rate of not less than 44 per second.
- (e) Z-Pattern Steel Grid Roller. The equipment shall consist of a self-contained, self-propelled vibratory steel wheel roller with a Z-pattern grid cladding mounted transversely to the surface of the drum. The vibratory roller shall have a minimum gross weight of 9 metric tons (10 tons).

Note 1. The vibratory roller shall have a minimum gross weight of 9 metric tons (10 tons).

Note 2. The pneumatic tired rollers shall develop a compression of not less than 50 N/mm (300 lb/in.), nor more than 90 N/mm (500 lb/in.), of width of the tire tread in surface contact.

Note 3. When the MHB is used, a Z-pattern steel grid roller shall be used for additional particle break down as described herein.

CONSTRUCTION REQUIREMENTS

General. If a drainage system is specified on the plans, the system shall be installed and functioning before rubblizing begins. Rubblizing shall commence after removal of any existing bituminous concrete overlay in the area to be rubblized. Any bituminous concrete overlay left on the pavement (after the milling process) shall be removed prior to rubblizing to the satisfaction of the Engineer.

Partial-depth bituminous concrete patches may be left in place and impacted by rubblizing equipment. If breaking is not satisfactory under partial-depth bituminous patches, alternate methods shall be used to break the pavement with approval of the Engineer. Full-depth bituminous patches will be reviewed by the Engineer prior to rubblizing. Unsound patches will be removed and replaced with a Class C or D patch. If the patch is concrete it shall be rubblized. Lane width, full-depth bituminous patches that exceed 3 m (10 ft) in length shall not be impacted by breaking equipment. The Engineer will direct the removal of any unstable material, and method of replacement.

If the unsound patch is greater than 1 sq m (10 sq ft), bituminous concrete binder mixture shall be used. When the road is closed to traffic and the unsound patch is less than or equal to 1 sq m (10 sq ft), the replacement material may be aggregate.

PCC pavement or other PCC appurtenances to remain in place shall be severed from the pavement to be rubblized with a full-depth saw cut. Rubblized pavement less than or equal to 1 sq m (10 sq ft) dislodged by construction traffic shall be repaired with aggregate replacement material and compacted prior to the paving operation. Rubblized pavement greater than 1 sq m (10 sq ft) dislodged by construction traffic shall be repaired with bituminous concrete binder mixture.

The Contractor shall prevent damage to underground utilities and drainage structures during rubblizing. Approved alternate breaking methods shall be used over underground utilities and drainage structures as specified on the plans or directed by the Engineer.

Reinforcement shall be left in place, except that reinforcement projecting from the surface after breaking or compaction shall be cut off below the surface and removed. Any loose joint fillers, expansion material, or other similar items shall also be removed.

Pavement Breaking. Above the reinforcing steel or upper one-half of the pavement, the equipment shall break the pavement such that at least 75 percent of the pieces are a maximum of 75 mm (3 in.). Below the reinforcing steel or in the lower one-half of the pavement, at least 75 percent of the pieces shall be a maximum of 225 mm (9 in.). Concrete to steel bond shall be broken. Uniform breaking shall be maintained through successive passes of the breaking equipment.

Breaking shall be accomplished only by the method(s) specified on the plans and defined as follows:

Method I - This method uses the MHB and Z-pattern steel grid roller to break the pavement, as specified herein.

Method II - This method uses the resonant breaker to break the pavement, as specified herein. This resonant breaker utilizes high flotation tires, which shall be maintained under 415 MPa (60 psi). The breaking shall begin at the centerline and proceed to the edge of the pavement.

Method III - This method uses the resonant breaker to break the pavement, as specified herein, without restriction on tire pressure.

Method IV - This method uses either the MHB with Z-pattern steel grid roller or the resonant breaker to break the pavement, as specified herein.

Prior to the acceptance of the proposed breaking procedure, the Contractor shall complete a strip for evaluation by the Engineer. To ensure the pavement is being broken to the specified dimensions; the Contractor shall excavate a broken area of 1 sq m (10 sq ft), in two separate locations during the first day of breaking, as directed by the Engineer. Modifications to the breaking procedure must be made if the size requirements are not met. These excavations may be repaired with replacement material. If breaking procedures or conditions change, additional excavations to inspect the broken pavement dimensions shall be made, as directed by the Engineer.

Any large concrete pieces that result from inadequate breaking shall be treated as follows:

| <u>Size and Location of Pieces</u> | <u>Action</u> |
|---|--|
| Greater than 225 mm (9 in.) at surface of broken pavement. | Reduce size to under 225 mm (9 in.), or remove and replace. |
| Greater than 300 mm (12 in.) below steel or lower 1/2 of broken pavement. | Reduce size to under 300 mm (12 in.), or remove and replace. |

Unsuitable or unstable material encountered during the breaking process shall be removed and disposed of, according to Article 202.03 of the Standard Specifications. Areas of approximately 1 sq m (10 sq ft) or less may be repaired by use of aggregate replacement material. Larger unstable areas require removal and replacement, as directed by the Engineer. Following subgrade repairs, bituminous concrete binder mixture shall be placed to the depth of the original PCC pavement, and compacted to the satisfaction of the Engineer.

Compaction. Prior to placing the bituminous overlay, the complete width of the broken pavement shall be compacted by vibratory steel wheel and pneumatic tired rollers in the following sequence:

After breaking:

1. Minimum of four passes with Z-pattern steel grid roller (only with the MHB).
2. Four passes with a vibratory roller.
3. Two passes with a pneumatic-tired roller.

The contractor shall not trim the broken or rubblized pavement, or otherwise attempt to grade the broken or rubblized pavement to improve grade lines.

Immediately prior to overlay:

Two passes with a vibratory roller.

Any unstable material encountered while compacting or under construction trafficking shall be treated as defined in the section entitled Pavement Breaking. If a large area of unstable material is identified during the rubblizing process, work shall be halted and the Engineer notified. Any depressions greater than 50 mm (2 in.) in depth shall be filled with replacement material and compacted. When specified by the Engineer, replacement material shall be used to reestablish the pavement crown. Water may be used to aid in compaction of the replacement material, when approved by the Engineer.

Opening Roadway to Traffic. Public traffic will not be allowed on the rubblized pavement before the required binder layers are in place, except at crossovers and/or access points. Public traffic will not be allowed on a rubblized crossover or access point for more than 24 hours. Maintenance of crossovers and/or access points shall be as specified by the Engineer. Crossovers and/or access points shall be maintained in the same compacted state as the other areas, until the bituminous concrete overlay is in place. Construction traffic shall be limited to delivery of materials directly ahead of the paver.

Paving Limitations. A tracked paver shall be used to place the first lift of bituminous concrete binder over the prepared rubblized pavement. During stage construction, the overlay width shall be such that it will not interfere with subsequent rubblizing operations. At a given location, the overlay shall be placed within 48 hours of the pavement breaking operation. If rain occurs between rubblizing and paving, the rubblized pavement shall be dry and stable to the satisfaction of the Engineer before the paving operation begins.

If a material transfer device is proposed, the Contractor shall submit equipment specifications with axle loading configurations and proposed paving sequence to the Engineer three weeks prior to paving. The Engineer will provide any equipment restrictions based on device loadings and proposed paving sequence.

Method of Measurement. Rubblizing will be measured for payment in square meters (square yards) of existing pavement in place.

Basis of Payment. This work will be paid for at the contract unit price per square meters (square yards) for RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT, of the method shown in the plans. (*Design Note 1*)

Any required removal of unsuitable or unstable material, subgrade repair, and bituminous concrete placement will be paid for according to Article 109.04 of the Standard Specifications.

Action taken to address any large concrete pieces resulting from inadequate breaking will not be paid for separately.

(Design Note 1. The method of pavement breaking must be selected.)

APPENDIX

U

Source of Material
 Description of Material
 Test Method

RW 01 4.00
Medium Brown
A-6 (7) CLAY LOAM
ASTM D1557 Method C

TEST RESULTS

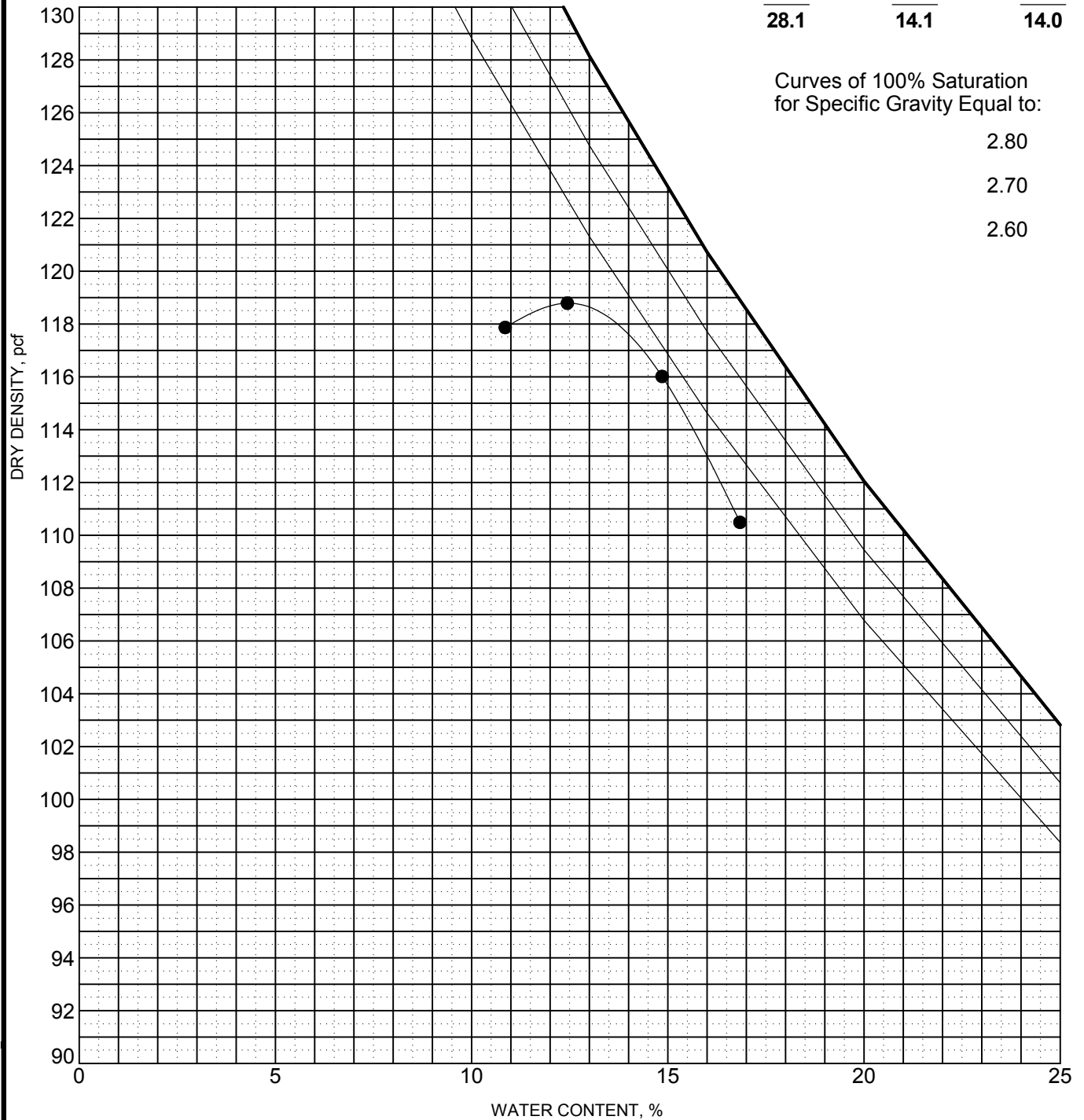
Standard Dry Density 118.7 pcf
 Optimum Water Content 12.5 %

ATTERBERG LIMITS

$\frac{LL}{28.1}$ $\frac{PL}{14.1}$ $\frac{PI}{14.0}$

Curves of 100% Saturation
 for Specific Gravity Equal to:

- 2.80
- 2.70
- 2.60



COMPACTION 053-0126.0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

Source of Material
 Description of Material
 Test Method

RW 02 2.50
Light Brown
A-6 (4) CLAY LOAM
ASTM D1557 Method C

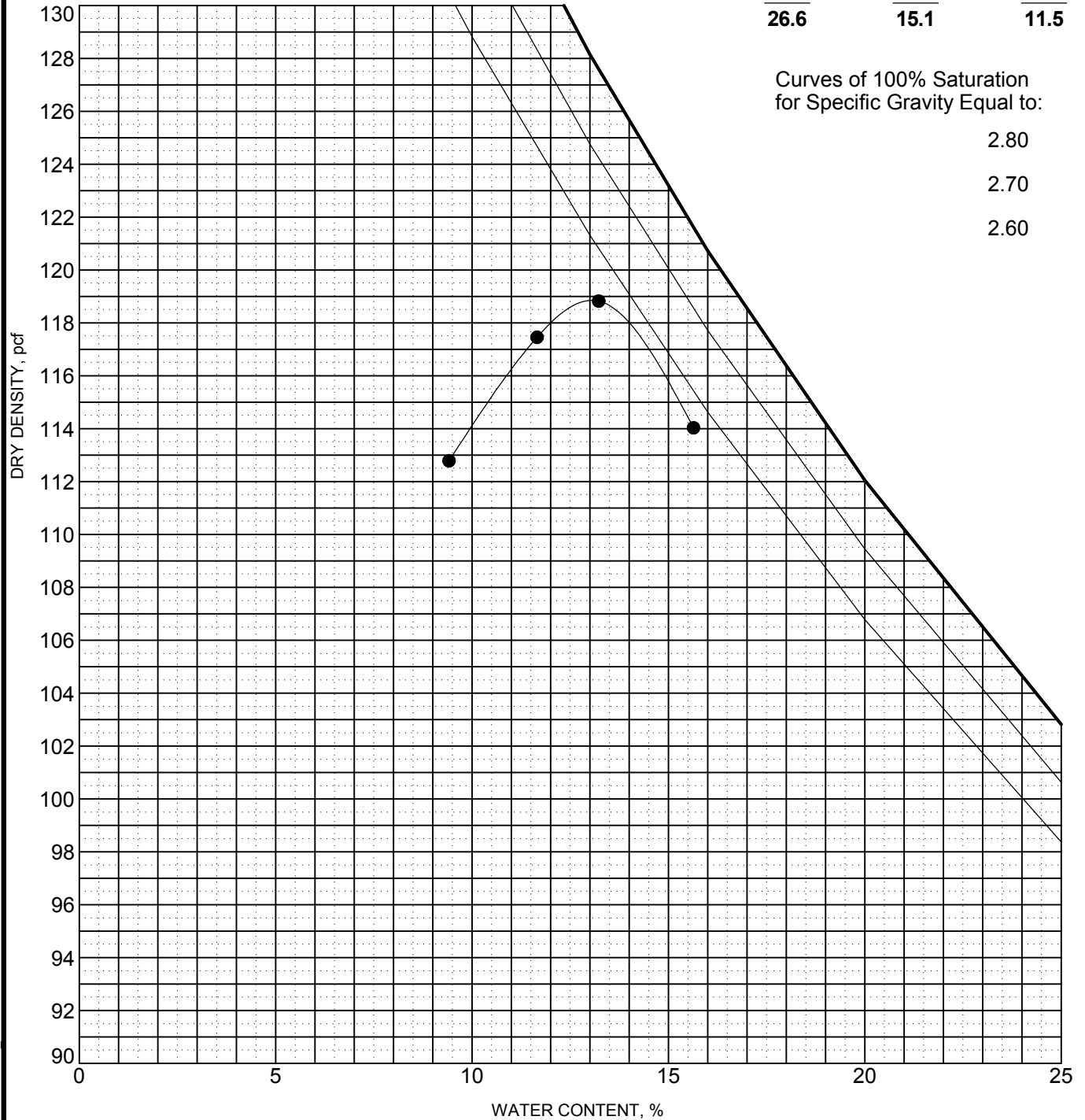
TEST RESULTS
 Standard Dry Density 118.8 pcf
 Optimum Water Content 13.0 %

ATTERBERG LIMITS

$\frac{LL}{26.6}$ $\frac{PL}{15.1}$ $\frac{PI}{11.5}$

Curves of 100% Saturation
 for Specific Gravity Equal to:

- 2.80
- 2.70
- 2.60



COMPACTION 053-0126.0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

Source of Material
 Description of Material
 Test Method

RW 02 9.50
Medium Brown
A-6 (4) CLAY LOAM
ASTM D1557 Method C

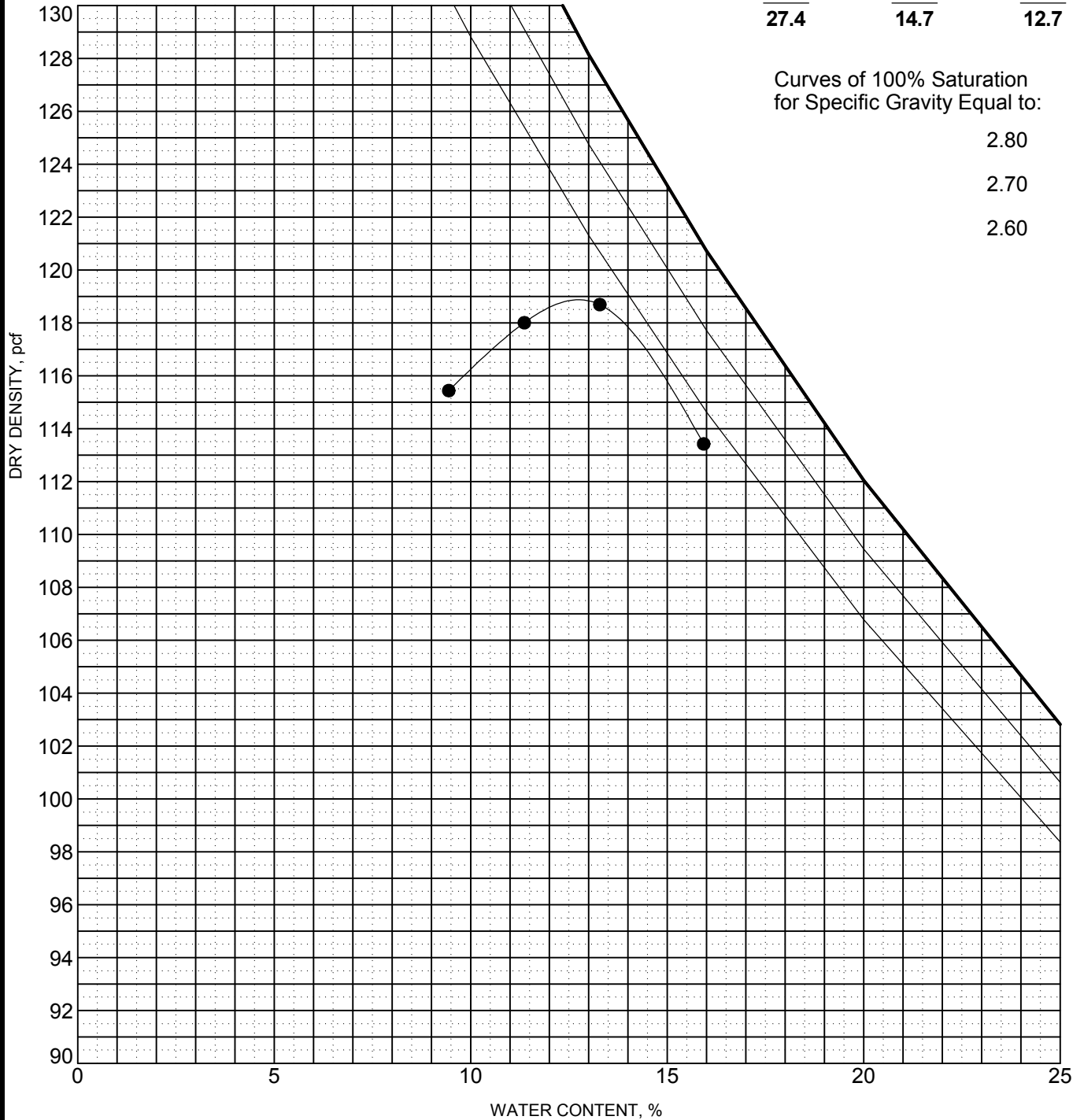
TEST RESULTS
 Standard Dry Density 118.9 pcf
 Optimum Water Content 12.8 %

ATTERBERG LIMITS

$\frac{LL}{27.4}$ $\frac{PL}{14.7}$ $\frac{PI}{12.7}$

Curves of 100% Saturation
 for Specific Gravity Equal to:

- 2.80
- 2.70
- 2.60



COMPACTION 053-0126.0127.GPJ IL DOT.GDT 7/21/17



**Illinois Department
 of Transportation**
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

Source of Material
 Description of Material
 Test Method

RW 03 2.50
Medium Brown
A-6 (6) CLAY LOAM
ASTM D1557 Method C

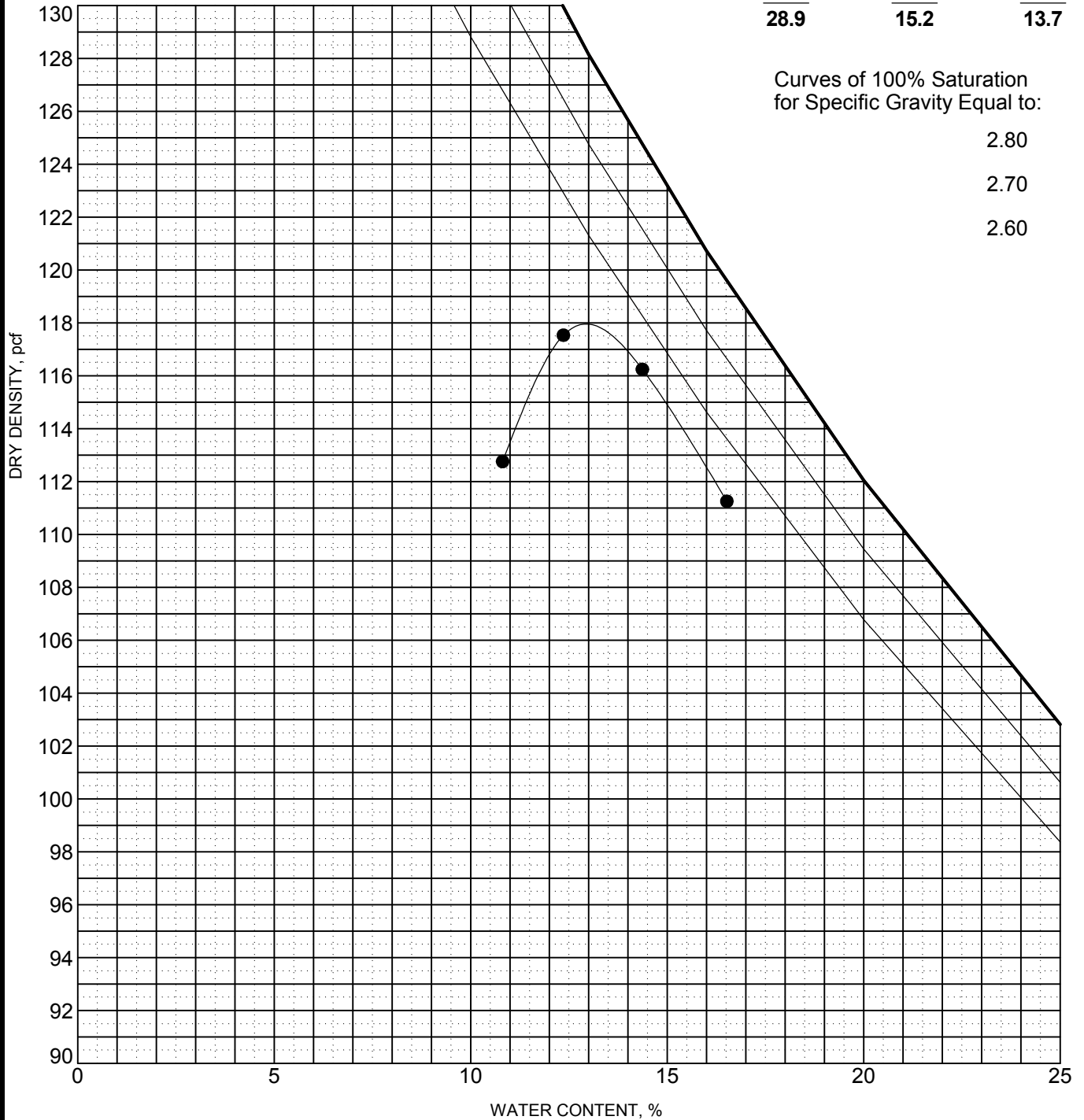
TEST RESULTS
 Standard Dry Density 117.9 pcf
 Optimum Water Content 12.9 %

ATTERBERG LIMITS

LL PL PI
28.9 15.2 13.7

Curves of 100% Saturation
 for Specific Gravity Equal to:

- 2.80
- 2.70
- 2.60



COMPACTION 053-0126.0127.GPJ IL DOT.GDT 7/21/17



**Illinois Department
 of Transportation**
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

Source of Material
 Description of Material
 Test Method

RW 04 2.50
Medium Reddish Brown
A-6 (7) CLAY LOAM
ASTM D1557 Method C

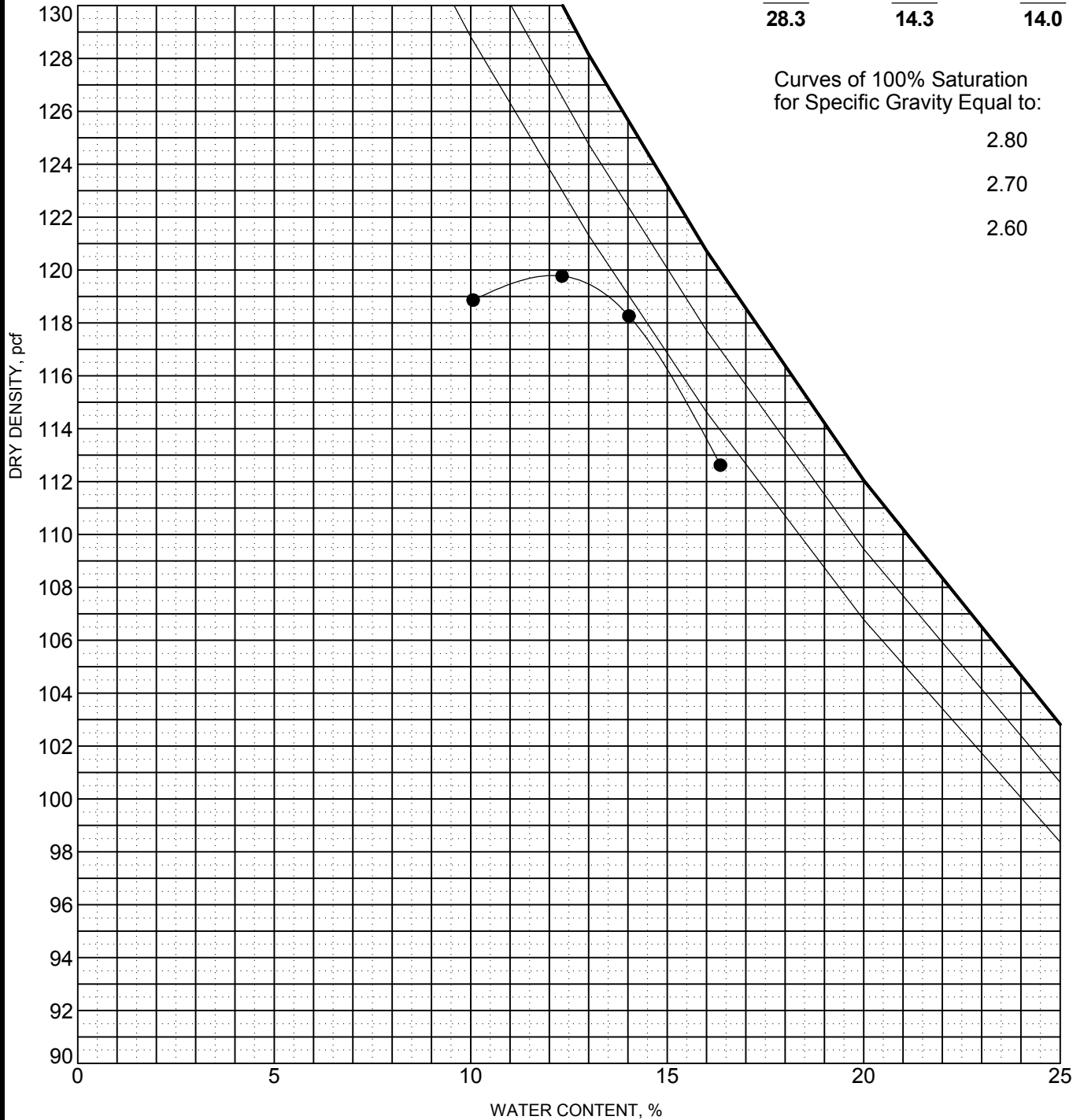
TEST RESULTS
 Standard Dry Density 119.7 pcf
 Optimum Water Content 12.2 %

ATTERBERG LIMITS

LL PL PI
28.3 14.3 14.0

Curves of 100% Saturation
 for Specific Gravity Equal to:

- 2.80
- 2.70
- 2.60



COMPACTION 053-0126, 0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston

Source of Material
 Description of Material
 Test Method

RW 04 10.00
Light Reddish Brown
A-6 (6) CLAY LOAM
ASTM D1557 Method C

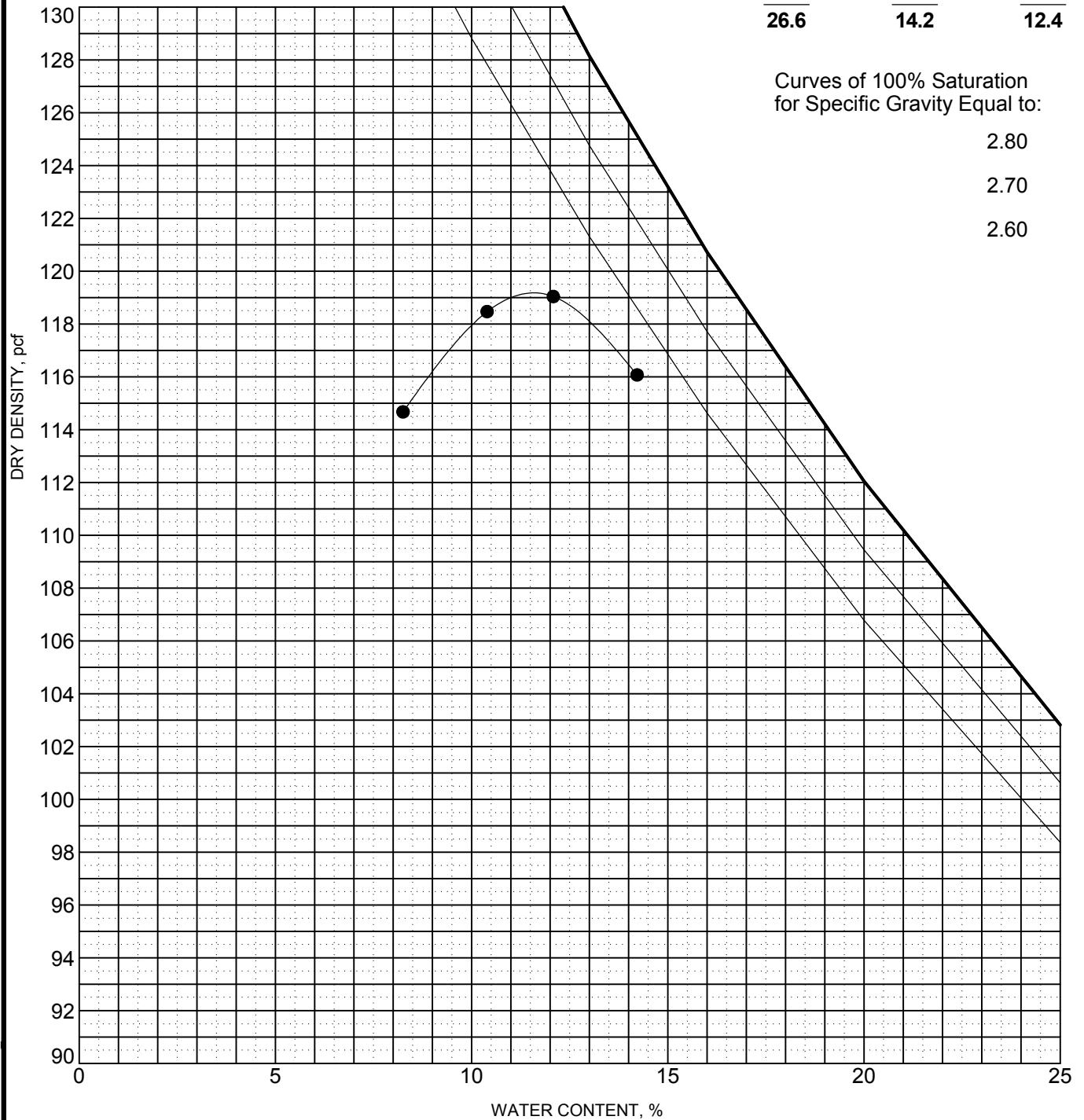
TEST RESULTS
 Standard Dry Density 119.2 pcf
 Optimum Water Content 11.6 %

ATTERBERG LIMITS

LL PL PI
26.6 14.2 12.4

Curves of 100% Saturation
 for Specific Gravity Equal to:

2.80
 2.70
 2.60



COMPACTION 053-0126, 0127.GPJ IL DOT.GDT 7/21/17



Illinois Department of Transportation
 Division of Highways
 Illinois Department of Transportation

MOISTURE-DENSITY RELATIONSHIP

Route: FAI-55 (I-55)
 Section: (53-4,5)RS-1&I
 County: Livingston