

**GEOTECHNICAL EVALUATION
FLORENCE PAVEMENT REHABILITATION
FLORENCE HEIGHTS,
FLORENCE GARDENS PHASE 3 AND 4, AND
HUNT HIGHWAY
TOWN OF FLORENCE, ARIZONA**

PREPARED FOR:

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January 18, 2017
Project No. 605256001

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Mr. Elijah Williams, PE
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2045 South Vineyard, Suite 101
Mesa, Arizona 85210

Subject: Geotechnical Evaluation
Florence Pavement Rehabilitation
Florence Heights, Florence Gardens Phase 3 and 4, and Hunt Highway
Town of Florence, Arizona

Dear Mr. Williams:

In accordance with our proposal dated September 20, 2016, Ninyo & Moore has performed a geotechnical evaluation for the above-referenced project. This report presents our findings, conclusions, and geotechnical recommendations for the project.

We appreciate the opportunity to be of service to you during this phase of the project.

Sincerely,
NINYO & MOORE

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TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	1
2. SCOPE OF SERVICES	1
3. PROJECT LOCATION AND DESCRIPTION	2
4. FIELD EXPLORATION AND LABORATORY TESTING	2
5. GEOLOGY AND SUBSURFACE CONDITIONS	3
5.1. Geologic Setting	3
5.2. Subsurface Conditions	4
5.2.1. Asphaltic Concrete	4
5.2.2. Fill	5
5.2.3. Alluvium	5
6. EXISTING PAVEMENT CONDITION	5
7. CONCLUSIONS	8
8. RECOMMENDATIONS	9
8.1. Earthwork	9
8.1.1. Site Preparation	9
8.1.2. Excavations	9
8.1.3. Fill Materials and Reuse of On-site Soils	10
8.1.4. Grading and Pavement Subgrade Preparation	10
8.2. Pavements	12
8.2.1. New Structural Pavement Section Design	12
8.2.2. Design R-value	12
8.2.3. Pavement Design Parameters	13
8.2.4. Recommended New Pavement Sections	16
8.2.5. Alternative Pavement Treatments for Florence Heights Drive	17
9. SITE DRAINAGE	18
10. CONSTRUCTION OBSERVATION AND TESTING	18
11. LIMITATIONS	18
12. REFERENCES	21

Tables

Table 1 – Summary of AC Thickness	4
Table 2 – Summary of AB Thickness	5
Table 3 – Florence Gardens Phase 3 Pavement Condition Survey Summary	6
Table 4 – Florence Gardens Phase 4 Pavement Condition Survey Summary	7
Table 5 – R-Value Summary	13
Table 6 – Traffic Volume Summary	14
Table 7 – Levels of Reliability and Standard Normal Deviates	15
Table 8 – Recommended Structural Pavement Sections	16

Figures

Figure 1 – Site Locations

Figure 2A – Boring Locations – Florence Heights Drive

Figure 2B – Boring Locations – Florence Gardens Phase 3

Figure 2C – Boring Locations – Florence Gardens Phase 4

Figure 2D – Boring Locations – Hunt Highway

Appendices

Appendix A – Boring Logs

Appendix B – Laboratory Testing

Appendix C – 24-hour Traffic Count Data

1. INTRODUCTION

In accordance with our proposal, we have performed a geotechnical and pavement evaluation for a pavement rehabilitation project in Florence, Arizona. The project generally includes pavement reconstruction along Florence Heights Drive, within Florence Gardens Phases 3 and 4, and along Hunt Highway. The purpose of our evaluation was to assess and document the subsurface conditions at the project site and provide engineering recommendations relative to pavement design and construction.

2. SCOPE OF SERVICES

Our scope of services for this project generally included:

- Reviewing of available published and in-house geotechnical reports, topographic information, soil surveys, geologic literature, and aerial photographs of the project area.
- Obtaining Town of Florence right of entry permission.
- Conducting a site visit to perform a visual evaluation of existing pavement conditions at the sites, including residential streets within Florence Gardens Phases 3 and 4 and along Florence Heights Boulevard and Hunt Highway.
- Establishing boring locations in the field, and notifying the underground utilities through Arizona811.
- Arranging for traffic control services during our field operations.
- Coring the existing pavement at 21 locations using an electrical coring machine to evaluate the current pavement thickness.
- Excavating auger borings within each of the cored pavement holes, using hand-operated equipment to depths of approximately 2 feet below ground surface (bgs). The borings were logged in general accordance with industry standard methods, and samples were obtained for laboratory testing.
- Conducting laboratory testing of representative samples obtained from the borings including gradation analysis and Atterberg limits tests.
- Preparing this geotechnical evaluation report.

3. PROJECT LOCATION AND DESCRIPTION

We understand that the Town of Florence intends to provide pavement improvements to four sites as part of the Town's Capital Improvement Plan. These sites generally include:

- Florence Heights Drive: a minor collector street beginning just south of the SR287/SR79B Junction and extending 2,847 feet easterly to North Pinal Parkway Avenue (SR 79). Overlay and shoulder widening are planned.
- Florence Gardens Phase 3: a residential area with local roads generally bounded by North Florence Boulevard, East Washington Street, North Pinal Parkway Avenue (SR79) and East Gila Boulevard. Total interior street length is 5,600 feet: Overlay or reconstruction and minor drainage improvements are planned.
- Florence Gardens Phase 4: a residential area with local roads generally bounded by North Florence Boulevard, East California Boulevard, North Pinal Parkway Avenue (SR79), and East Pinal Way. Total interior street length is 6,518 feet. Overlay or reconstruction and minor drainage improvements are planned.
- Hunt Highway: a minor arterial roadway, beginning at East Franklin Road and extending northerly approximately 1,500 feet. Overlay and shoulder widening are planned.

4. FIELD EXPLORATION AND LABORATORY TESTING

On November 11 and 12, 2016, Ninyo & Moore conducted a subsurface exploration at the site in order to evaluate the existing subsurface conditions and to collect soil samples for laboratory testing. Our evaluation consisted of coring the existing pavement at 21 locations and excavating the subgrade soils using hand auger techniques to an approximate depth of 2 feet below ground surface (bgs) in accordance with the following schedule:

- Four cores and borings along Florence Heights Drive;
- Six cores and borings within Florence Gardens Phase 3;
- Seven cores and borings within Florence Gardens Phase 4; and
- Four cores and borings along Hunt Highway.

Ninyo & Moore personnel logged the borings in general accordance with the Unified Soil Classification System (USCS) and American Society for Testing and Materials (ASTM) D 2488

by observing cuttings and split-spoon samples. Bulk samples were collected from the cuttings and placed in large plastic bags. Soil classifications, detailed soil descriptions, and other pertinent data are presented on the boring logs in Appendix A. The approximate boring locations are depicted on Figure 2.

Samples collected from our borings were transported to the Ninyo & Moore laboratory for geotechnical laboratory analyses. The laboratory analyses included gradation analysis and Atterberg limits, a description of each test method and the laboratory results are presented in Appendix B.

5. GEOLOGY AND SUBSURFACE CONDITIONS

5.1. Geologic Setting

The project site is located in the Sonoran Desert Section of the Basin and Range physiographic province, which is typified by broad alluvial valleys separated by steep, discontinuous subparallel mountain ranges. The mountain ranges generally trend north-south and northwest-southeast. The basins consist of alluvium with thicknesses extending to several thousands of feet.

The basins and surrounding mountains were formed approximately 10 to 18 million years ago during the mid- to late-Tertiary. Extensional tectonics resulted in the formation of horsts (mountains) and grabens (basins) with vertical displacement along high-angle normal faults. Intermittent volcanic activity also occurred during this time. The surrounding basins filled with alluvium from the erosion of the surrounding mountains, as well as from deposition from rivers. Coarser-grained alluvial material was deposited at the margins of the basins near the mountains. The surficial geology of the site is described as Holocene (0 to 10,000 years) active stream channel, terrace, and alluvial fan deposits. Soils within this unit range from undeveloped to moderately developed with thin accumulations of calcium carbonate. (Pearthree et. al, 1988).

5.2. Subsurface Conditions

Our knowledge of the subsurface conditions at the project site is based on our field exploration, laboratory testing, and our general understanding of the geology of the area. The following paragraphs provide a generalized description of the materials encountered.

The boring logs contain our field and laboratory test results, as well as our interpretation of conditions believed to exist between actual samples retrieved. Therefore, these boring logs contain both factual and interpretive information. Lines delineating subsurface strata on the boring logs are intended to group soils having similar engineering properties and characteristics. They should be considered approximate, as the actual transition between soil types (strata) may be gradual. A key to the soil symbols and terms used on the boring logs is provided in Appendix A.

5.2.1. Asphaltic Concrete

Asphaltic concrete (AC) pavement was encountered at the surface of our borings. The AC thickness measured in our borings is summarized in Table 1 below.

Table 1 – Summary of AC Thickness

Location	Approximate AC Thickness (in)
Florence Heights Drive	3 to 4
Florence Gardens Phase 3	1 to 1.25
Florence Gardens Phase 4	0.5 to 1
Hunt Highway	1

The thickness of the pavement between our boring locations may vary and could be different from that encountered in our pavement cores. Aggregate Base Course (AB) was encountered at some boring locations and its thickness was measured between 1.5 and 3 inches, as summarized in Table 2 below.

Table 2 – Summary of AB Thickness

Location	Approximate AC Thickness (in)
Florence Heights Drive	Not encountered
Florence Gardens Phase 3	0 to 3
Florence Gardens Phase 4	0 to 3
Hunt Highway	Not encountered

5.2.2. Fill

Man-made fill soils were encountered in our boring B-15 (North Florence Blvd) below the AC pavement. The fill extended to the boring termination depth of 2 feet and consisted of medium dense to dense silty sand with trace gravel.

5.2.3. Alluvium

Native alluvium was encountered below the AC pavement in our borings except boring B-15, and extended to the boring termination depths. The alluvium generally consisted of medium dense to dense silty and clayey sands with varying amounts of gravel and cobbles in our borings.

6. EXISTING PAVEMENT CONDITION

On November 3, 2016, Ninyo & Moore performed visual condition survey of the roadway pavements within the project limits. The following paragraphs provide a brief description of our observations.

Florence Heights Drive

The existing facility is a two lane roadway AC paved roadway with unpaved shoulders, and generally situated at grade. No side ditches or other drainage improvements were observed along the project alignment. Based on our field observations, the existing pavement exhibited moderate to severe distress in many locations consisting primarily of alligator cracking, longitudinal and transverse cracking, edge cracking, flushing and potholes. The pavement showed signs of past

maintenance such as patching, crack sealing, and a chip seal application. It is our opinion that the distress observed indicates both structural and functional failure of the pavement in many locations.

Florence Gardens Phase 3

The existing AC paved roadways are part of the residential neighborhood. The streets are two-lane with unpaved shoulders and generally situated at grade. Drainage facilities were not observed except for the Florence Boulevard between Pinal Way and Maricopa Boulevard and McFarland Boulevard, where concrete gutter on either side of the roadway was observed. These residential streets exhibited distress consisting of alligator cracking, transverse and longitudinal cracking, potholes, rutting pavement failure. It is our opinion that the distress observed indicates both structural and functional failure of the pavement in many locations. A summary of our observation is presented in the table below.

Table 3 – Florence Gardens Phase 3 Pavement Condition Survey Summary

Street Segment	Distress
Florence Boulevard between Gila Boulevard and Maricopa Boulevard	Alligator and transverse cracking.
Colorado Avenue between Florence Boulevard and McFarland Boulevard	Alligator cracking, potholes, patches.
McFarland Boulevard between Florence Boulevard and Colorado Avenue	Alligator cracking, potholes, patches.
Mississippi Street between Florence Boulevard and Colorado Avenue	Alligator cracking, potholes, patches, pavement failure at some locations.
Colorado Avenue between McFarland Boulevard and Alabama Court	Some alligator cracking.
Alabama Court	Alligator, transverse and longitudinal cracks, potholes, pavement failure at some locations.
Colorado Avenue between Alabama Court and Washington Street	Northern portion severely distressed with alligator cracking, potholes, patching and pavement deformation.
Washington Street	Extensive alligator cracking, potholes, patches.
Idaho Avenue	Extensive alligator cracking, potholes, patches.
Cochise Boulevard between Florence Boulevard and Idaho Avenue	Alligator and irregular cracking.

Florence Gardens Phase 4

The existing AC paved roadways are part of the residential neighborhood. The streets are two-lane with unpaved shoulders and generally situated at grade except for portions of the Florence Boulevard, which is situated in shallow cut. Drainage facilities were not observed except for the Florence Boulevard between California Boulevard and Pennsylvania Ave, where concrete gutter along the west side of the roadway was observed. These residential streets exhibited distress consisting of alligator cracking, transverse and longitudinal cracking, potholes, rutting pavement failure. It is our opinion that the distress observed indicates both structural and functional failure of the pavement in many locations. A summary of our observation is presented in the table below.

Table 4 – Florence Gardens Phase 4 Pavement Condition Survey Summary

Street Segment	Distress
Pennsylvania Avenue east of Florence Boulevard	Alligator and transverse cracking, potholes and patches at some locations.
Lancaster Circle between Idaho Avenue and Casita Circle Drive	Alligator cracking, potholes, patches.
Lancaster Circle between Casita Circle Drive and California Boulevard	Alligator cracking, potholes, patches and pavement failures at the cul-de-sac and Yuma Court.
Yuma Court	Alligator cracking, potholes, patches, pavement failure at some locations.
Colorado Avenue between Lancaster Circle and California Boulevard	Some alligator cracking especially in the southern portion of this segment.
Coconino Avenue between Lancaster Circle and California Boulevard	Alligator cracks, potholes, pavement failure at some locations.
Idaho Avenue between Lancaster Circle and California Boulevard	Alligator cracks, potholes, pavement failure at some locations.
California Boulevard between Lancaster Circle and Florence Boulevard	Alligator cracking, potholes, patches and pavement failure at some locations.
Florence Boulevard between California Boulevard and Pennsylvania Avenue	Extensive alligator and block cracking.

Hunt Highway

The existing facility is a two lane roadway AC paved roadway with 2-foot wide AC shoulders, and generally situated near existing grades with the terrain sloping from the west down to the

east. Shallow side ditches were observed along the west side of the project alignment. The east edge of the roadway was slightly elevated compared to the terrain situated to the east of the roadway. Based on our field observations, the existing pavement exhibited severe distress in many locations consisting primarily of alligator cracking, longitudinal cracking, edge cracking, permanent deformation (rutting), and potholes. It is our opinion that the distress observed indicates both structural and functional failure of the pavement in many locations.

7. CONCLUSIONS

The conclusions presented below are based on the results of our field explorations, pavement condition survey and laboratory testing.

General Conclusions

- The pavements within the project limits exhibit various signs of distress generally including alligator cracking, transverse and block cracking, potholes, permanent deformation (rutting), and pavement structural failure; and
- In many locations, some patching and crack sealing was observed. Some patches have already deteriorated.

Specific Conclusions

- Florence Heights Drive:
 - primary causes of the pavement distress include the pavement age and traffic;
 - drainage deficiencies have been a contributory factor to the pavement distress; and
 - pavement rehabilitation by milling and overlay is possible. However, significant portions of pavement areas will need full-depth pavement reconstruction after milling.
- Florence Gardens Phases 3 and 4:
 - the primary cause of the distress is insufficient thickness of the pavement structural section (1 inch on average);
 - drainage deficiencies have been a contributory factor to the pavement distress; and
 - pavement rehabilitation by milling and overlay is not practicable. Full-depth pavement reconstruction is recommended.

- Hunt Highway:
 - the primary cause of the distress is insufficient thickness of the pavement structural section (1 inch); and
 - pavement rehabilitation by milling and overlay is not practicable. Full-depth pavement reconstruction is recommended.

8. RECOMMENDATIONS

The following sections present our geotechnical recommendations for the project. If the proposed construction is changed from that discussed in this report, Ninyo & Moore should be contacted for additional recommendations.

8.1. Earthwork

The following sections provide our earthwork recommendations. In general, the earthwork specifications contained in Maricopa Association of Governments (MAG), Uniform Standard Specifications and Details for Public Works Construction, as modified by the Maricopa County Department of Transportation Supplement dated January 2015, and by the Town of Florence, are expected to apply, except as noted.

8.1.1. Site Preparation

Construction areas should be cleared of deleterious materials, if any are present, construction debris, vegetation, and any other material that might interfere with the performance or progress of the work. These materials should be disposed of at a legal dumpsite. Existing features that call for relocation or removal and extend below finish grade, if present, should be removed, and the resulting excavations backfilled with compacted engineered fill as discussed in this report.

8.1.2. Excavations

Our evaluation of the excavation characteristics of the on-site soils is based on the results of our exploratory borings, site observations, and experience with similar

materials. In our opinion, excavation of the near surface on-site soils can be accomplished using heavy-duty earthmoving equipment in good operating condition. However, based on the results of our exploration and experience in the projects area, gravel and cobbles should be expected at relatively shallow depths, which may slow the excavation rate. The contractor should be prepared for such conditions.

8.1.3. Fill Materials and Reuse of On-site Soils

On-site and imported soils that exhibit relatively low plasticity indices and very low to low expansive potential are generally suitable for re-use as engineered fill. Relatively low plasticity indices are defined as a PI value of 15, or less, as evaluated by ASTM D 4318.

In addition, suitable fill should not include organic material, construction debris, or other non-soil fill materials. Clay lumps and rock particles should not be larger than 4 inches in dimension. This material should be disposed of off-site or in non-structural areas.

Fill materials in contact with ferrous metals should also have low corrosion potential (minimum resistivity more than 2,000 ohm-cm, chloride content less than 25 parts per million [ppm]). Fill material in contact with concrete should have a soluble sulfate content of less than 0.1 percent.

Based on laboratory test results, the on-site soils exhibited PI values ranging from 0 (non-plastic) to 11. As such, we anticipate that many of on-site soils will be suitable for re-use as engineered fill during construction. The Contractor may elect to perform additional testing prior to construction to better delineate areas of soils not acceptable for reuse as engineered fill.

8.1.4. Grading and Pavement Subgrade Preparation

Prior to the placement of engineered fill, exposed surfaces from excavations should be proof-rolled and carefully evaluated by Ninyo & Moore for the presence of soft, loose,

or wet soils that were not removed as part of the improvement process. Based on this evaluation, additional remediation may be needed. This could include further scarification of the exposed surface. This additional remediation, if needed, should be addressed by the geotechnical consultant during the earthwork operations.

Engineered fill, where necessary, should be placed in lifts not exceeding 8 inches in loose thickness and compacted by appropriate mechanical methods to a relative compaction of 95 percent as evaluated by ASTM D 698 at a moisture content slightly above the laboratory optimum.

As stated previously, our borings disclosed alluvial and fill soils generally consisting of silty and clayey sands with varying percentages of gravel and cobbles. In order to reduce the potential for excessive total and differential movements, we recommend the following subgrade preparation be performed beneath the proposed improvements.

New pavements should be supported on 6 inches or more of improved subgrade. This can be achieved by scarification of the on-site soils, moisture-conditioning and re-compaction to a relative compaction of 95 percent as evaluated by ASTM D 698 at moisture content slightly above the laboratory optimum.

In addition, we recommend that new pavements be supported on imported or on-site soils with an average soil R-value of 35 or more that extends 2 feet or more below the bottom of the base material. The contractor should be aware that zones of soils with lower than recommended R-values may be encountered along the project alignment. This can be remedied by overexcavation and replacement, blending with other soils or lime/cement treatment, as approved by the Engineer.

An earthwork (shrinkage) factor of 10 to 20 percent is estimated. This shrinkage factor range represents an average of the material tested and assumes that materials excavated from the site will be placed as fill. Potential bidders should consider this in preparing estimates and should review the available data to make their own conclusions regarding

excavation conditions. A ground compaction factor of 0.15 feet is recommended for this project.

8.2. Pavements

The following sections provide our recommendations for the pavement treatments. As mentioned in Section 7 above, the recommended pavement treatment is full-depth pavement reconstruction. In addition, for Florence Heights Drive, a mill and overlay option is feasible and discussed below.

8.2.1. New Structural Pavement Section Design

The following sections present our design assumptions and recommendations for the new flexible pavement sections. The pavement sections were developed in general accordance with the Roadway Design Manual issued by the Maricopa County Department of Transportation (Manual) and the Arizona Department of Transportation (ADOT) Preliminary Engineering and Design Manual (PEDM). We assumed that the subgrade preparation recommendations outlined in this report will be employed.

New pavement sections for Florence Heights Drive and Hunt Highway were developed using the traffic count data provided by the Town of Florence. These pavement sections were designed for a 10-year service life. For Florence Gardens Phases 3 and 4, traffic information was not available. For those roadways we used the alternative design method for local and minor collector roads described in Section 10.2.6 of the Manual for a 20-year service life.

8.2.2. Design R-value

The subsurface soils encountered in our borings generally consist of silty and clayey sand with varying amounts of gravel. Table 5 summarizes the laboratory and correlated R-values as measured on soil samples obtained within the upper 2 feet from various borings within the project limits.

Table 5 – R-Value Summary

Boring No.	Sample Location	Plasticity Index	Percent Passing #200 Sieve	Correlated R-value
B-2	Florence Heights Drive	5	30	54
B-4	Florence Heights Drive	0	9	88
B-6	Florence Gardens Phase 3	5	21	62
B-9	Florence Gardens Phase 3	3	22	66
B-11	Florence Gardens Phase 4	11	13	54
B-17	Florence Gardens Phase 4	0	13	84
B-19	Hunt Highway	0	12	54
B-21	Hunt Highway	7	27	37

In accordance with PEDM, generally the design resilient modulus value for subgrade materials should not exceed 26,000 pounds per square inch (psi). Taking this recommendation into consideration and in the interest of conservatism, the design R-value of 35 is recommended for the pavement design for this project in accordance with the Manual and PEDM.

In addition, we recommend that any borrow or imported material used within 2 feet of the finished roadway subgrade have a correlated or laboratory tested R-value not less than the design values presented above.

8.2.3. Pavement Design Parameters

The following sections present our design assumptions and recommendations for the new flexible pavement sections for Florence Heights Drive and Hunt Highway. Florence Gardens Phases 3 and 4 pavements are designed in accordance with the alternative design method for local roads. The alternative pavement design procedure these parameters are not needed.

Traffic Volumes

As mentioned above, traffic information was not available for Florence Gardens Phases 3 and 4. The Town of Florence provided recent 24-hour traffic count data with vehicle classification for the two other projects as follows:

- For Florence Heights Drive the counts were taken on the eastbound and westbound lane between December 6 and 8, 2016; and
- For Hunt Highway the counts were taken on the northbound and southbound lane between January 5 and 9, 2017.

The traffic count data are presented in Appendix C.

Typical values of the traffic growth factors were adopted based on our experience with similar roadway projects and discussions with the Town of Florence. Table 6 below summarizes the traffic volume information used to perform the pavement design assuming that 2017 is the first year of service. Conversion of the different vehicle categories into equivalent single axle loads (ESAL's) was performed in accordance with the manual.

Table 6 – Traffic Volume Summary

Roadway Segment	Approximate ADT per traffic counts (v/d)	Approximate Growth (%)	Design Life (yrs)	Cumulative ESAL's
Florence Heights Drive	2,660	3.0	10	815,500
Hunt Highway	10,540	3.0	10	1,069,000

Resilient Modulus

As discussed in this section above, the design R-value of 35 was assumed for the new pavement section design. Based on PEDM seasonal variation factors of 1.3 and 1.2

were assumed for Florence Heights Drive and Hunt Highway, respectively. The following resilient modulus (M_R) values were estimated:

- 17,984 psi for Florence Heights Drive; and
- 18,869 psi for Hunt Highway.

Drainage Coefficient

A drainage coefficient of 1.0 for fair drainage quality was established based on the Manual.

Standard Deviation and Level of Reliability and Serviceability

A combined standard error of 0.45 was used for the design of flexible pavements in accordance with the Manual. Table 7 below presents the level of reliability and combined standard error for the various roadway segments under consideration for this project. These values were obtained from the Manual.

Table 7 – Levels of Reliability and Standard Normal Deviates

Road Segment	Functional Level of Classification	Level of Reliability %	Combined Standard Error S_o
Florence Heights Drive.	Minor Collector	90	0.45
Hunt Highway	Minor Arterial	95	0.45

Serviceability

Initial serviceability of 4.4 was used for the design of Florence Heights Drive, while a value of 4.5 was used for the design of Hunt Highway. Terminal serviceability values of 2.3 and 2.5 were used for the design of Florence Heights Drive and Hunt Highway, respectively

Structural Coefficients

The following structural coefficients were used for the pavement structure in accordance with the Manual:

- Asphaltic Concrete: 0.42;
- Aggregate Base: 0.12.

8.2.4. Recommended New Pavement Sections

In accordance with the pavement design procedure described in the Manual for flexible pavement design, and using the above parameters, we designed the structural pavement section for the project roadway segments. The recommended structural pavement sections are presented in Table 8 below.

Table 8 – Recommended Structural Pavement Sections

Roadway Segment	Subgrade	Aggregate Base ² (in)	Asphaltic Concrete ³
Florence Heights Drive	6-in scarify and re-compact per Section 8.1.4.	6	1.5 inches of MAG ½ inch mix 2.5 inches of MAG ¾ inch mix
Florence Gardens Phase 3 ¹	6-in scarify and re-compact per Section 8.1.4.	6	2.5 inches of MAG ½ or ¾ inch mix
Florence Gardens Phase 4 ¹	6-in scarify and re-compact per Section 8.1.4.	6	2.5 inches of MAG ½ or ¾ inch mix
Hunt Highway	6-in scarify and re-compact per Section 8.1.4.	6	2 inches of MAG ½ inch mix 2.5 inches of MAG ¾ inch mix

¹ Pavement Section designed using the alternative design method per the Manual Section 10.2.6; Design Chart 101A.

² Per Section 702 of MAG Specifications.

³ Per Section 710 of MAG Specifications, bituminous material performance grade PG 70-10.

Reclaimed Asphalt Pavement (RAP) may be used in base materials and asphalt concrete as specified in Sections 702.1 and 710.2.3 of the MAG Specifications, respectively.

The service life for the reconstructed AC pavement using the re-construction approach as described above is estimated to be on the order of 20 years for the Florence Gardens Phase 3 and 4 projects and 10 years for the Florence Heights Drive project and Hunt Highway project.

8.2.5. Alternative Pavement Treatments for Florence Heights Drive

Alternative pavement rehabilitation treatments are feasible for the Florence Heights Drive project, as described below. Due to the relatively thin AC thickness, no alternative treatments are recommended for the other project segments.

AC Overlay

This rehabilitation treatment is feasible but due to the extensive distress of the existing pavement, it is not recommended. Alligator cracked areas will exhibit reflective cracking potentially followed by pavement structural failure at a relatively early stage of the overlaid pavement life. As such, mill and overlay treatment is recommended as discussed below.

Mill and Overlay

As mentioned previously, mill and overlay pavement treatment is the recommended alternative for Florence Heights Drive. For this alternative, we recommend that the mill depth be 1 inch followed by a tack coat, as appropriate, and a 2.5-inch new AC overlay. This will result in pavement elevations higher by 1.5-inch than the existing pavement. We also recommend application of the pavement fabric interlayer (Sections 321.8.7 and 796.2.1 of the MAG Standard Specifications) on the milled AC surface to help defer reflective cracking and provide a barrier to water infiltration. The use of RAP is permitted subject to Section 710.2.3 of the MAG Specifications.

If the mill an overlay approach is selected for this roadway segment, it will be important that following the milling cracks wider than 1/8-inch be sealed and the milled AC pavement be inspected and evaluated for distress. Where severe distress is observed, the affected area of AC should be removed and full-depth pavement reconstruction

performed using the recommended structural pavement section. Such areas are typically characterized by extensively cracked, disintegrated, yielding and/or otherwise unstable AC.

The pavement service life for the pavement section rehabilitated/reconstructed as described above will depend on many factors affect the pavement performance, including the pavement and subgrade condition at the time of the construction and traffic conditions over the service life of the pavement.

The service life for the reconstructed AC pavement using the mill and overlay approach as described above is estimated to be on the order of 10 years.

9. SITE DRAINAGE

Drainage should be provided to divert water away from the paved surfaces. Surface water should not be permitted to pond on pavement areas. Positive drainage is defined as a slope of 2 percent or more for a distance of 5 feet or more away from the pavements.

10. CONSTRUCTION OBSERVATION AND TESTING

We recommend that the on-site geotechnical representative perform construction-phase observation and testing services for the project. These services should be performed to evaluate exposed subgrade conditions, including the extent and depth of overexcavation (if needed), to evaluate the suitability of proposed borrow materials for use as fill, and to observe placement and test compaction of fill soils. Qualified subcontractors utilizing appropriate techniques and construction materials should perform construction of the proposed improvements.

11. LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty,

expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

12. REFERENCES

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Arizona Department of Transportation (ADOT), 1989, Preliminary Engineering and Design Manual, Materials Section, ADOTM-XII-TWO-C, 3rd Edition, March.

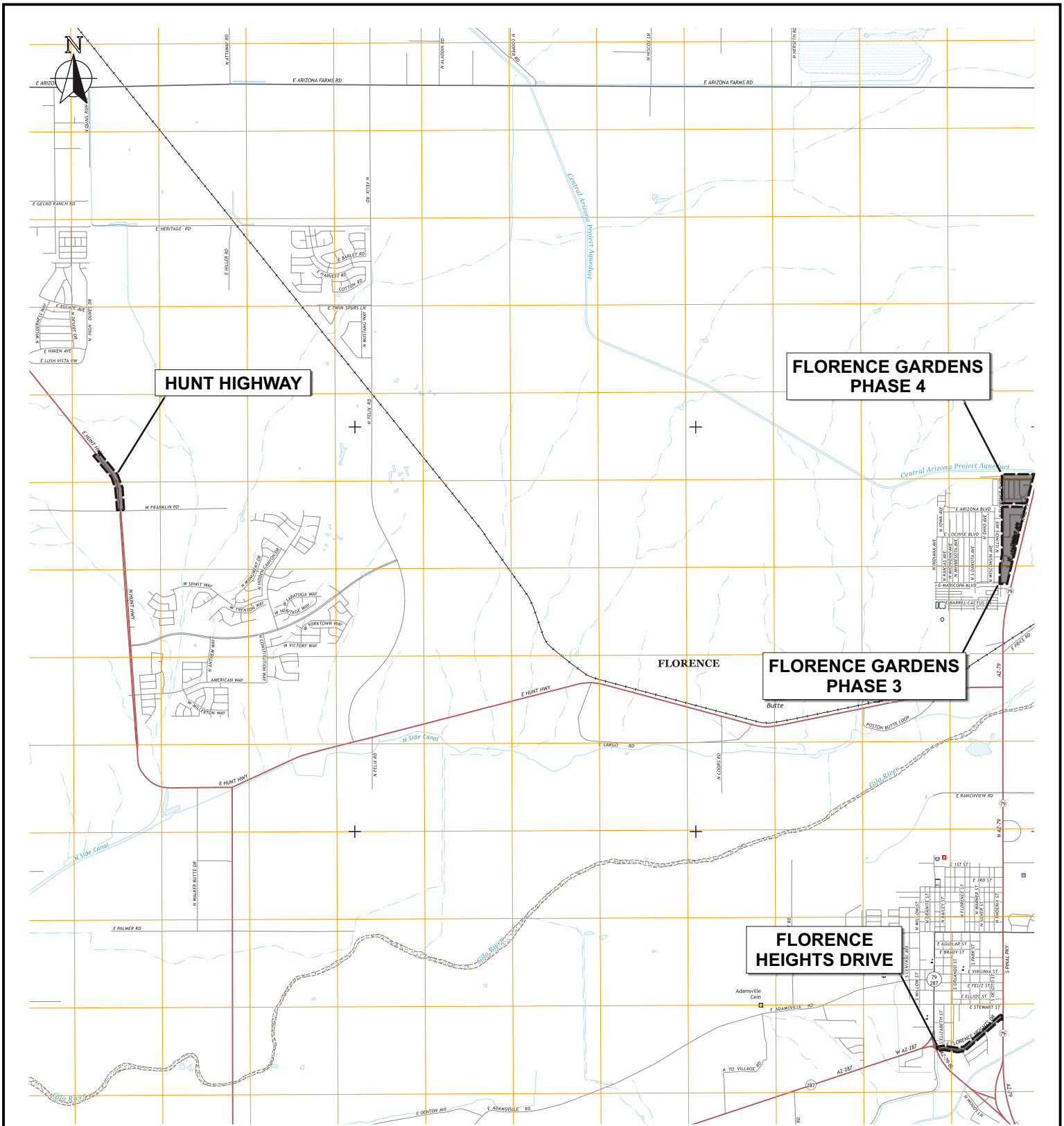
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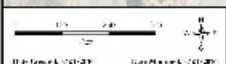


Source: U.S. Geological Survey 7.5 minute topographic map, Florence, Arizona, 2015.

0 5000
 Approximate Scale:
 1 inch = 5000 feet

Note: Dimensions, directions, and locations are approximate.

		SITE LOCATIONS	FIGURE 1
PROJECT NO: 605256001	DATE: 1/18	FLORENCE PAVEMENT REHABILITATION TOWN OF FLORENCE, ARIZONA	



0 500
 Approximate Scale:
 1 inch = 500 feet

Note: Dimensions, directions, and locations are approximate.

Florence Heights Dr Proposed Street Improvements



LEGEND

B-4 Boring Location

Ninyo & Moore

BORING LOCATIONS - FLORENCE HEIGHTS DRIVE

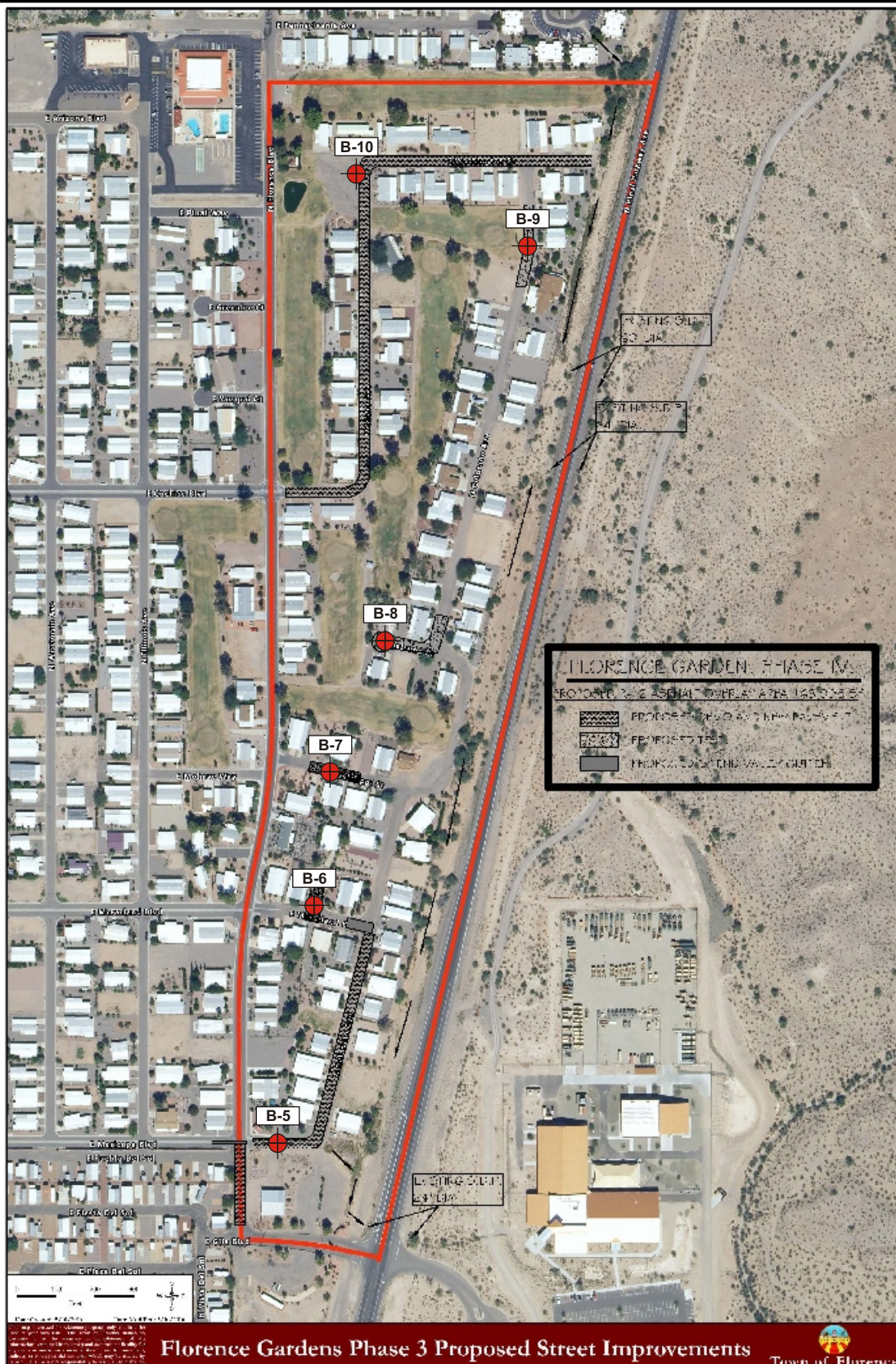
FIGURE

PROJECT NO:
605256001

DATE:
1/18

FLORENCE PAVEMENT REHABILITATION
TOWN OF FLORENCE, ARIZONA

2A



0 400
 Approximate Scale:
 1 inch = 400 feet

Note: Dimensions, directions, and locations are approximate.

LEGEND	
B-10	Boring Location



BORING LOCATIONS - FLORENCE GARDENS PHASE 3

FIGURE

PROJECT NO:
605256001

DATE:
1/18

FLORENCE PAVEMENT REHABILITATION
TOWN OF FLORENCE, ARIZONA

2B



0 300
 Approximate Scale:
 1 inch = 300 feet

Note: Dimensions, directions, and locations are approximate.

LEGEND	
B-17	● Boring Location

Ninyo & Moore

BORING LOCATIONS - FLORENCE GARDENS PHASE 4

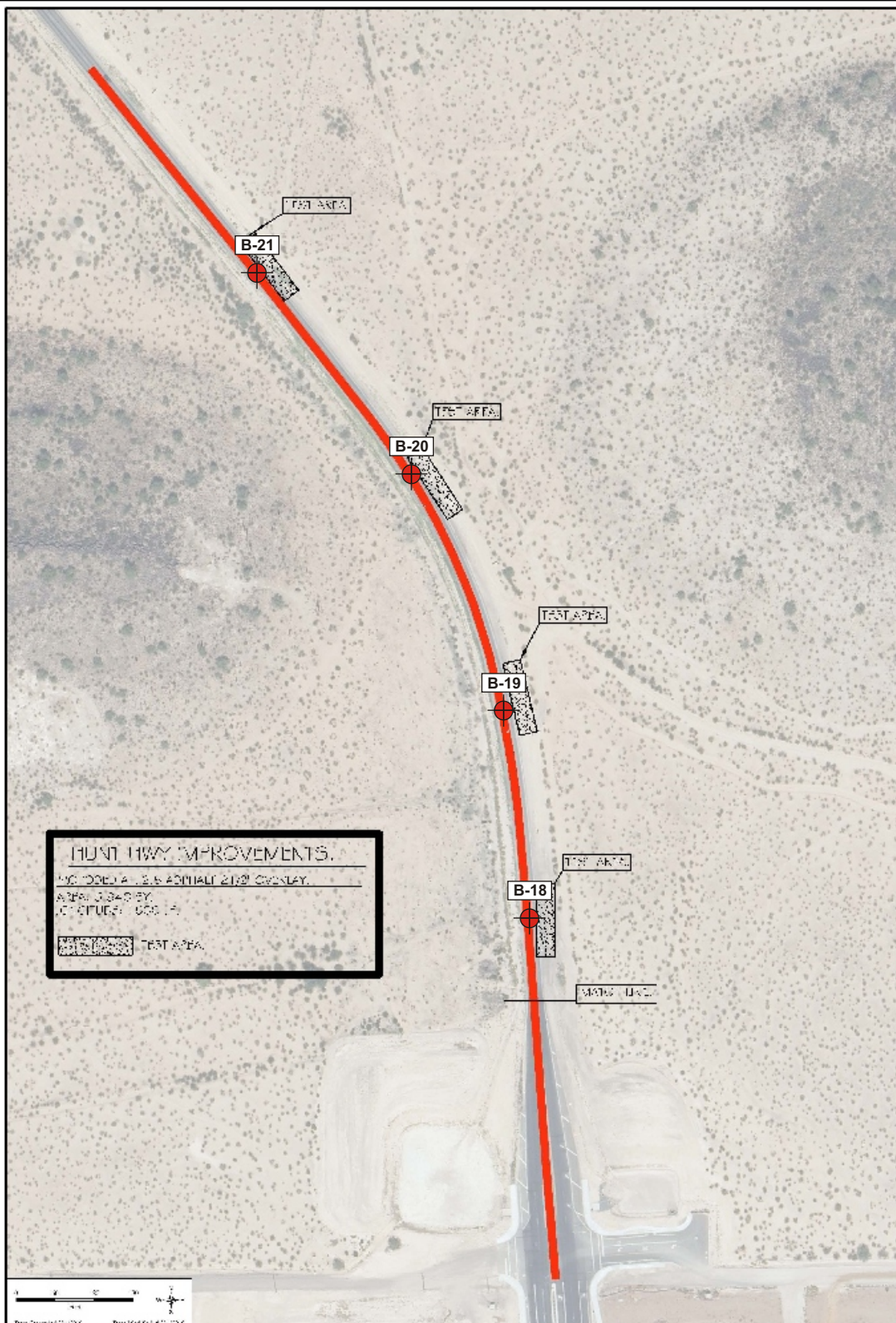
FIGURE

PROJECT NO:
605256001

DATE:
1/18

FLORENCE PAVEMENT REHABILITATION
TOWN OF FLORENCE, ARIZONA

2C



0 240
 Approximate Scale:
 1 inch = 240 feet

Note: Dimensions, directions, and locations are approximate.

LEGEND	
B-21	Boring Location

Hunt Hwy Proposed Street Improvements



Ninyo & Moore

BORING LOCATIONS - HUNT HIGHWAY

FIGURE

PROJECT NO:
605256001

DATE:
1/18

FLORENCE PAVEMENT REHABILITATION
TOWN OF FLORENCE, ARIZONA

2D

APPENDIX A

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory borings. The samples were bagged and transported to the laboratory for testing.

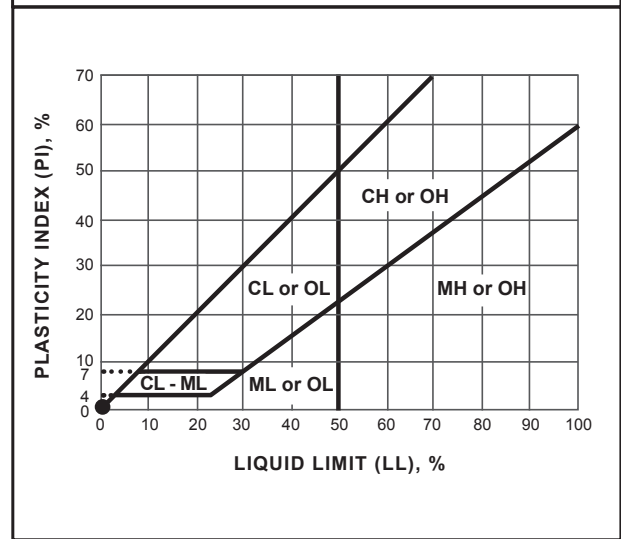
SOIL CLASSIFICATION CHART PER ASTM D 2488

PRIMARY DIVISIONS		SECONDARY DIVISIONS				
		GROUP SYMBOL	GROUP NAME			
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVEL more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL		
			GP	poorly graded GRAVEL		
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt		
			GP-GM	poorly graded GRAVEL with silt		
			GW-GC	well-graded GRAVEL with clay		
		GRAVEL with FINES more than 12% fines	GP-GC	poorly graded GRAVEL with clay		
			GM	silty GRAVEL		
			GC	clayey GRAVEL		
		SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines	GC-GM	silty, clayey GRAVEL	
	SW			well-graded SAND		
	SAND with DUAL CLASSIFICATIONS 5% to 12% fines		SP	poorly graded SAND		
			SW-SM	well-graded SAND with silt		
			SP-SM	poorly graded SAND with silt		
	SAND with FINES more than 12% fines		SW-SC	well-graded SAND with clay		
			SP-SC	poorly graded SAND with clay		
			SM	silty SAND		
	FINE-GRAINED SOILS 50% or more passes No. 200 sieve		SILT and CLAY liquid limit less than 50%	INORGANIC	SC	clayey SAND
		SC-SM			silty, clayey SAND	
CL		lean CLAY				
ORGANIC		ML		SILT		
		CL-ML		silty CLAY		
SILT and CLAY liquid limit 50% or more		INORGANIC	OL (PI > 4)	organic CLAY		
			OL (PI < 4)	organic SILT		
		ORGANIC	CH	fat CLAY		
			MH	elastic SILT		
			OH (plots on or above "A"-line)	organic CLAY		
Highly Organic Soils		OH (plots below "A"-line)	organic SILT			
		PT	Peat			

GRAIN SIZE

DESCRIPTION	SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders	> 12"	> 12"	Larger than basketball-sized
Cobbles	3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	Rock-salt-sized to pea-sized
	Medium	#40 - #10	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	Flour-sized to sugar-sized
Fines	Passing #200	< 0.0029"	Flour-sized and smaller

PLASTICITY CHART



APPARENT DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

Ninyo & Moore

USCS METHOD OF SOIL CLASSIFICATION

Explanation of USCS Method of Soil Classification

PROJECT NO.

DATE

FIGURE

BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
	Bulk	Driven						
0	■							Bulk sample. Modified split-barrel drive sampler. No recovery with modified split-barrel drive sampler. Sample retained by others. Standard Penetration Test (SPT). No recovery with a SPT. XX/XX Shelby tube sample. Distance pushed in inches/length of sample recovered in inches. No recovery with Shelby tube sampler. Continuous Push Sample. Seepage. Groundwater encountered during drilling. Groundwater measured after drilling.
5	■							
10	■							
15	■					 	SM <u>MAJOR MATERIAL TYPE (SOIL):</u> Solid line denotes unit change. CL Dashed line denotes material change.	
20	■						Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface	
								The total depth line is a solid line that is drawn at the bottom of the boring.



BORING LOG

Explanation of Boring Log Symbols

PROJECT NO.

DATE

FIGURE

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-1				
								GROUND ELEVATION	SHEET	OF			
								1,534' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM	LOGGED BY	DM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0								ASPHALT CONCRETE: Approximately 4 inches thick.					
							SC-SM	<u>ALLUVIUM:</u> Brown, dry, medium dense, silty clayey SAND with gravel.					
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE HEIGHTS DRIVE, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-1

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.					
								11/12/16	B-2					
								GROUND ELEVATION	1,530' ± (MSL)	SHEET	1	OF	1	
								METHOD OF DRILLING	Hand Sample/Hand Auger					
								DRIVE WEIGHT	N/A		DROP	N/A		
								SAMPLED BY	DM	LOGGED BY	DM	REVIEWED BY	SDN	
DESCRIPTION/INTERPRETATION														
0								ASPHALT CONCRETE: Approximately 3 inches thick.						
							SC-SM	<u>ALLUVIUM:</u> Brown, dry, medium dense, silty clayey SAND.						
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.						
5														
7.5														
10														



BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE HEIGHTS DRIVE, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-2

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-3				
								GROUND ELEVATION	SHEET	OF			
								1,535' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM	LOGGED BY	DM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0								ASPHALT CONCRETE: Approximately 3 inches thick.					
							SC	<u>ALLUVIUM:</u> Brown, dry, medium dense, clayey SAND; trace coarse gravel.					
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
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BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE HEIGHTS DRIVE, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-3

DEPTH (feet)	Bulk	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>11/12/16</u> BORING NO. <u>B-4</u>
	Driven						SAMPLES
							METHOD OF DRILLING <u>Hand Sample/Hand Auger</u>
							DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>
							SAMPLED BY <u>DM</u> LOGGED BY <u>DM</u> REVIEWED BY <u>SDN</u>
DESCRIPTION/INTERPRETATION							
0							ASPHALT CONCRETE: Approximately 4 inches thick.
					SW-SM		ALLUVIUM: Brown, dry, medium dense, well-graded SAND with silt and gravel.
2.5							Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling.
							<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
5							
7.5							
10							



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE HEIGHTS DRIVE, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-4

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/11/16	B-5				
								GROUND ELEVATION	SHEET	OF			
								1,539' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	<p>ASPHALT CONCRETE: Approximately 1 1/4 inches thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, silty SAND.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-5

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/11/16	B-6				
								GROUND ELEVATION	1,536' ± (MSL)	SHEET	1	OF	1
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A		DROP	N/A	
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, silty SAND, trace gravel, trace caliche nodules.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-6

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/11/16	B-7				
								GROUND ELEVATION	SHEET	OF			
								1,547' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						SM		<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>AGGREGATE BASE: Approximately 2 1/2 inches thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, silty SAND, trace gravel.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-7

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven						11/11/16	B-8				
								GROUND ELEVATION	SHEET	OF			
								METHOD OF DRILLING	1	1			
								Hand Sample/Hand Auger					
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						GC		<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>AGGREGATE BASE: Approximately 1 1/2 inches thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, clayey GRAVEL.</p>					
2.5								<p>Total Depth = 2 feet.</p> <p>Groundwater not encountered during drilling.</p> <p>Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-8

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/11/16	B-9				
								GROUND ELEVATION	SHEET	OF			
								1,552' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						●●●●●	SM	<u>ASPHALT CONCRETE</u> : Approximately 1 inch thick. <u>AGGREGATE BASE</u> : Approximately 3 inches thick. <u>ALLUVIUM</u> : Brown, moist, medium dense, silty SAND with gravel.					
2.5						●●●●●		Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-9

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/11/16	B-10				
								GROUND ELEVATION	1,539' ± (MSL)	SHEET	1	OF	1
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A		DROP	N/A	
								SAMPLED BY	DM/JV	LOGGED BY	DM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						■	SM	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, silty SAND; trace gravel.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 3, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-10

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>11/11/16</u> BORING NO. <u>B-11</u>	
	Bulk	Driven						GROUND ELEVATION <u>1,566' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
								METHOD OF DRILLING <u>Hand Sample/Hand Auger</u>	
								DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
								SAMPLED BY <u>DBM/JV</u> LOGGED BY <u>DBM/JV</u> REVIEWED BY <u>SDN</u>	
DESCRIPTION/INTERPRETATION									
0						■	SC	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, clayey SAND with gravel.</p>	
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>	
5									
7.5									
10									



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-11

DEPTH (feet)	Bulk	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>11/11/16</u> BORING NO. <u>B-12</u>
	Driven						SAMPLES
							METHOD OF DRILLING <u>Hand Sample/Hand Auger</u>
							DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>
							SAMPLED BY <u>DBM/JV</u> LOGGED BY <u>DBM/JV</u> REVIEWED BY <u>SDN</u>
DESCRIPTION/INTERPRETATION							
0						SM	<p><u>ASPHALT CONCRETE</u>: Approximately 1 inch thick.</p> <p><u>ALLUVIUM</u>: Brown, moist, medium dense, silty SAND, trace gravel, trace clay.</p>
2.5							<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes</u>:</p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>
5							
7.5							
10							



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-12

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-13				
								GROUND ELEVATION	SHEET	OF			
								1,567' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM/JV	LOGGED BY	DBM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						●●●●●	SM	<u>ASPHALT CONCRETE</u> : Approximately 1 inch thick. <u>AGGREGATE BASE</u> : Approximately 3 inches thick. <u>ALLUVIUM</u> : Brown, dry, medium dense, silty SAND trace coarse gravel.					
2.5						●●●●●		Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-13

DEPTH (feet)	Bulk	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>11/11/16</u> BORING NO. <u>B-14</u>
	Driven						SAMPLES
							METHOD OF DRILLING <u>Hand Sample/Hand Auger</u>
							DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>
							SAMPLED BY <u>DBM/JV</u> LOGGED BY <u>DBM/JV</u> REVIEWED BY <u>SDN</u>
DESCRIPTION/INTERPRETATION							
0						SM	<p>ASPHALT CONCRETE: Approximately 3/4 inch thick.</p> <p>ALLUVIUM: Brown, moist, medium dense, silty SAND, trace gravel, trace clay, trace caliche nodules.</p>
2.5							<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/11/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>
5							
7.5							
10							



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-14

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.							
								11/12/16	B-15							
								GROUND ELEVATION	1,595' ± (MSL)	SHEET	1	OF	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger							
								DRIVE WEIGHT	N/A		DROP	N/A				
								SAMPLED BY	DBM/JV		LOGGED BY	DBM/JV		REVIEWED BY	SDN	
DESCRIPTION/INTERPRETATION																
0							SM	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>FILL: Brown, moist, medium dense, silty SAND, trace to few coarse gravel.</p>								
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>								
5																
7.5																
10																



BORING LOG

FLORENCE PAVEMENT REHABILITATION
FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-15

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-16				
								GROUND ELEVATION	SHEET	OF			
								1,582' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM/JV	LOGGED BY	DBM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	ASPHALT CONCRETE: Approximately 1/2 inch thick. ALLUVIUM: Brown, dry, medium dense, silty SAND, trace coarse gravel.					
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-16

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-17				
								GROUND ELEVATION	SHEET	OF			
								1,571' ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM/JV	LOGGED BY	DBM/JV	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	ASPHALT CONCRETE: Approximately 1/2 inch thick. ALLUVIUM: Brown, dry, medium dense, silty SAND with gravel.					
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
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BORING LOG

FLORENCE PAVEMENT REHABILITATION
 FLORENCE GARDENS PHASE 4, FLORENCE, ARIZONA

PROJECT NO.	DATE	FIGURE
605256001	1/18	B-17

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-18				
								GROUND ELEVATION	SHEET	OF			
								1,501 ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM	LOGGED BY	DBM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	ASPHALT CONCRETE: Approximately 1 inch thick. ALLUVIUM: Brown, dry, medium dense, silty SAND, few fine to coarse gravel.					
2.5								Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling. <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
HUNT HIGHWAY, FLORENCE, ARIZONA

PROJECT NO.
605256001

DATE
1/18

FIGURE
B-18

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
								11/12/16	B-19				
								GROUND ELEVATION	SHEET	OF			
								1,504 ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM	LOGGED BY	DBM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0						SW-SM		<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, dry, medium dense, well- graded SAND with silt and gravel.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
HUNT HIGHWAY, FLORENCE, ARIZONA

PROJECT NO.
605256001

DATE
1/18

FIGURE
B-19

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven						11/12/16	B-20				
								GROUND ELEVATION	SHEET	OF			
								METHOD OF DRILLING	Hand Sample/Hand Auger	1	1		
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM	LOGGED BY	DBM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SM	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, dry, medium dense, silty SAND, few fine to coarse gravel.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
HUNT HIGHWAY, FLORENCE, ARIZONA

PROJECT NO.
605256001

DATE
1/18

FIGURE
B-20

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven						11/12/16	B-21				
								GROUND ELEVATION	SHEET	OF			
								1,507 ± (MSL)	1	1			
								METHOD OF DRILLING	Hand Sample/Hand Auger				
								DRIVE WEIGHT	N/A	DROP	N/A		
								SAMPLED BY	DBM	LOGGED BY	DBM	REVIEWED BY	SDN
DESCRIPTION/INTERPRETATION													
0							SC-SM	<p>ASPHALT CONCRETE: Approximately 1 inch thick.</p> <p>ALLUVIUM: Brown, dry, medium dense, silty clayey SAND, few coarse gravel.</p>					
2.5								<p>Total Depth = 2 feet. Groundwater not encountered during drilling. Backfilled and asphalt concrete patched on 11/12/16 shortly after completion of drilling.</p> <p><u>Notes:</u></p> <p>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>					
5													
7.5													
10													



BORING LOG

FLORENCE PAVEMENT REHABILITATION
HUNT HIGHWAY, FLORENCE, ARIZONA

PROJECT NO.
605256001

DATE
1/18

FIGURE
B-21

APPENDIX B

GEOTECHNICAL LABORATORY TESTING

Classification

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488. Soil classifications are indicated on the logs of the exploratory borings in Appendix A.

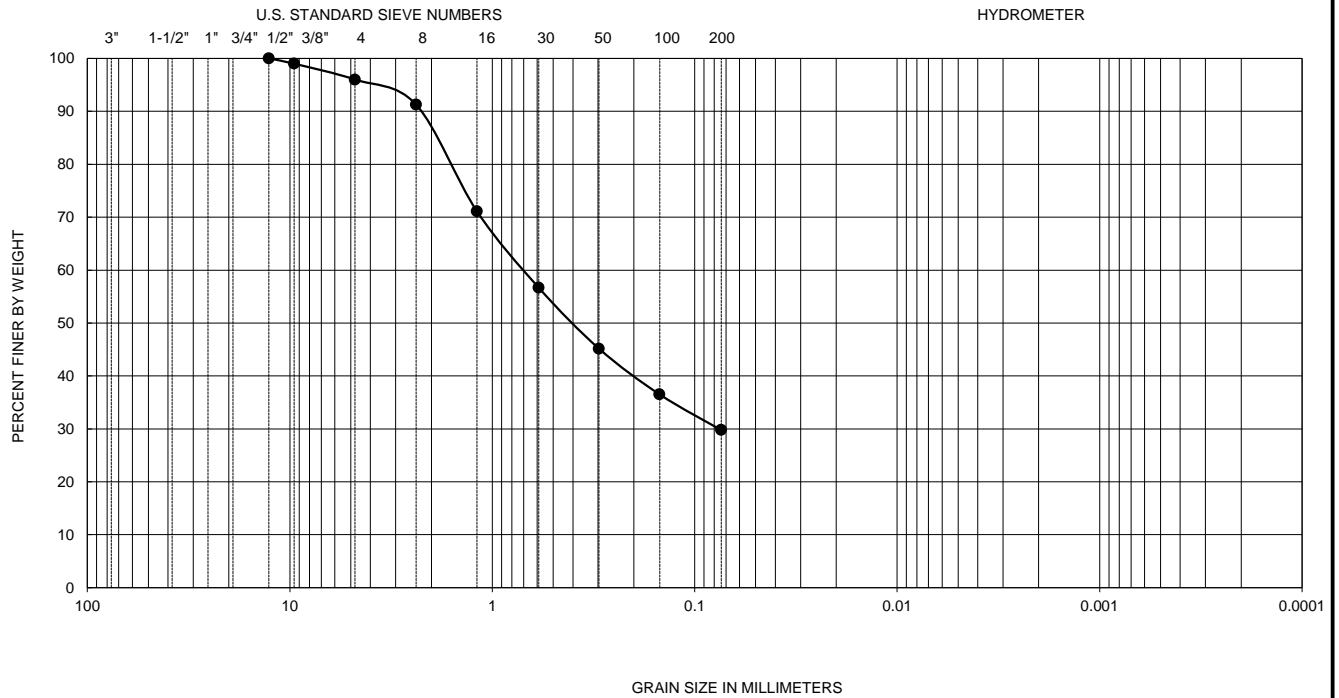
Gradation Analysis

A gradation analysis test was performed on a selected representative soil samples in general accordance with ASTM D 422. The grain-size distribution curves are shown on Figure B-1 through B-8. These test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System.

Atterberg Limits

Tests were performed on selected representative fine-grained soil samples to evaluate the liquid limit, plastic limit, and plasticity index in general accordance with ASTM D 4318. These test results were utilized to evaluate the soil classification in accordance with the Unified Soil Classification System. The test results and classifications are shown on Figure B-9.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

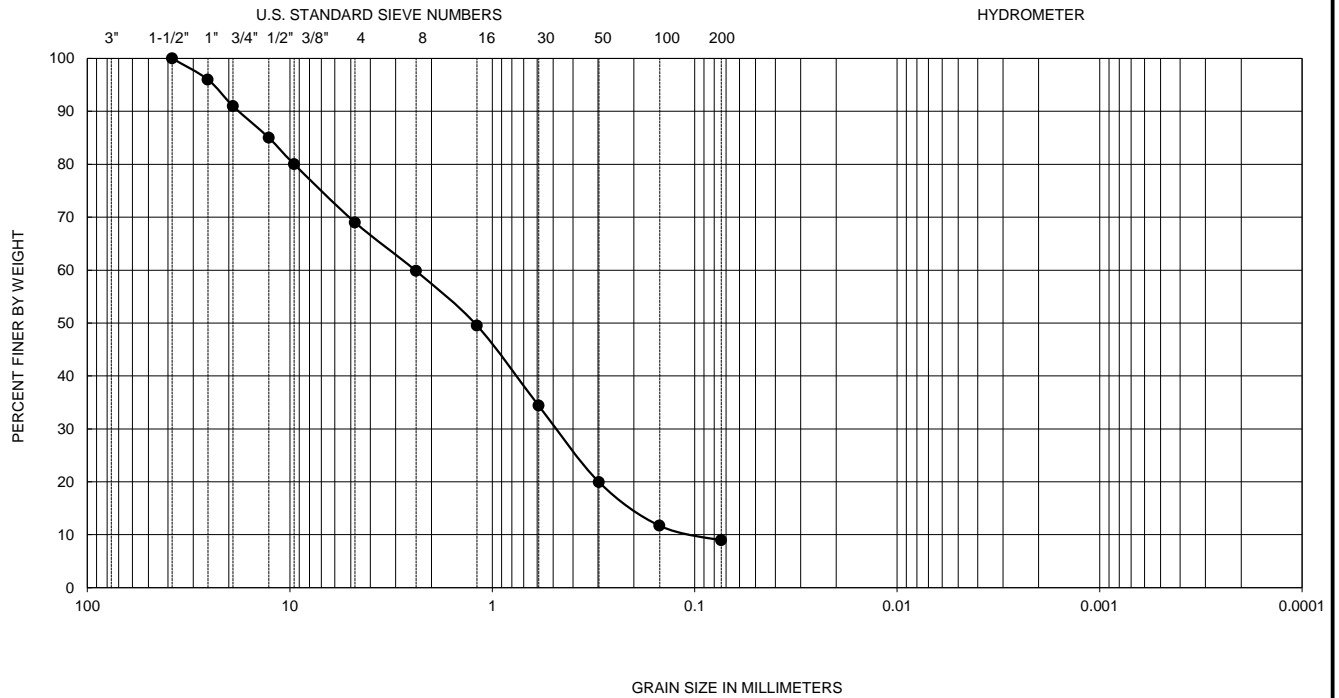


Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-2	0.25-2.0	24	19	5	--	--	--	--	--	30	SC-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-1
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



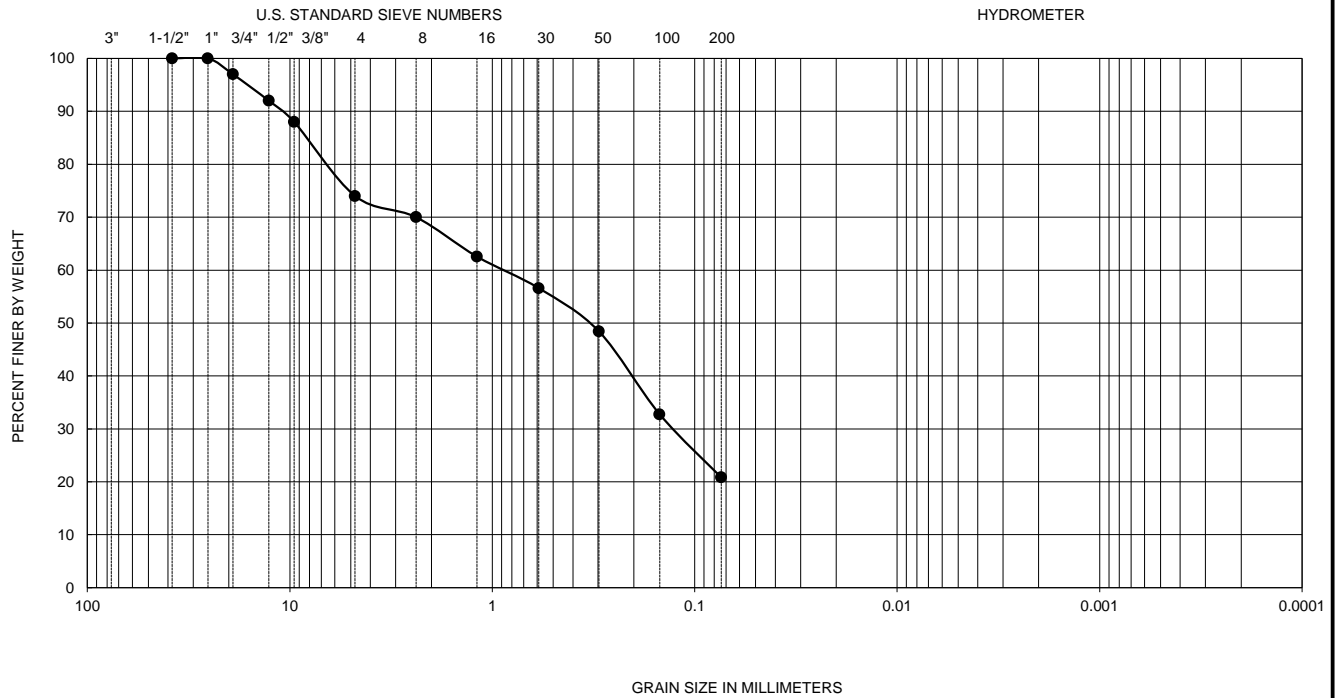
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-4	0.3-2.0	--	--	NP	0.10	0.48	2.30	23.0	1.0	9	SW-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

NP - INDICATES NON-PLASTIC

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-2
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



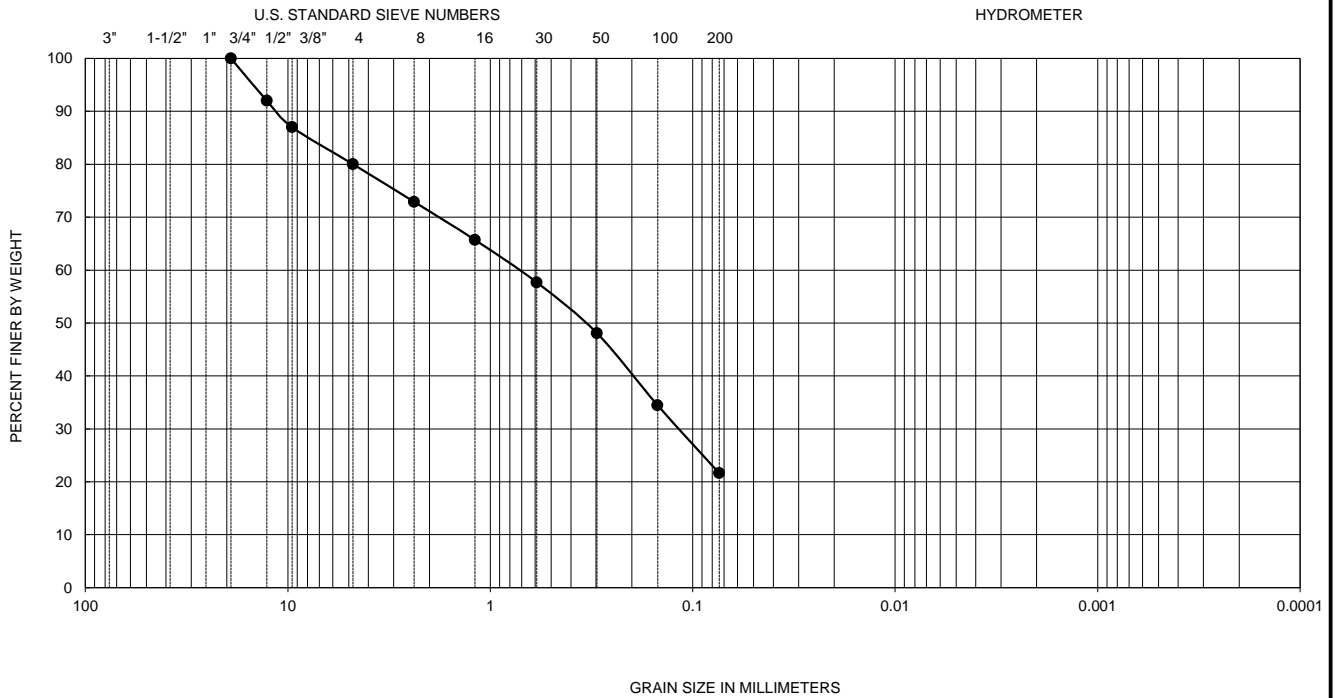
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-6	0.1-2.0	25	20	5	--	--	--	--	--	21	SC-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

NP - INDICATES NON-PLASTIC

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-3
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

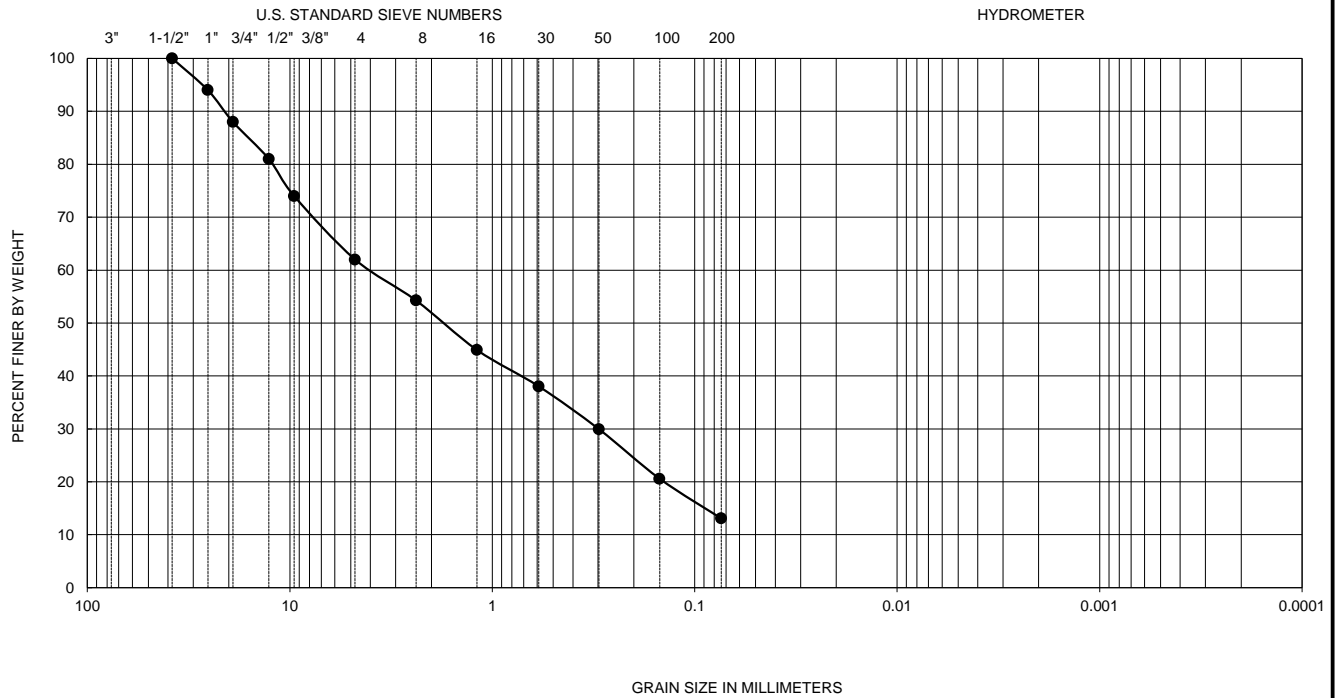


Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-9	0.3-2.0	31	28	3	--	--	--	--	--	22	SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-4
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

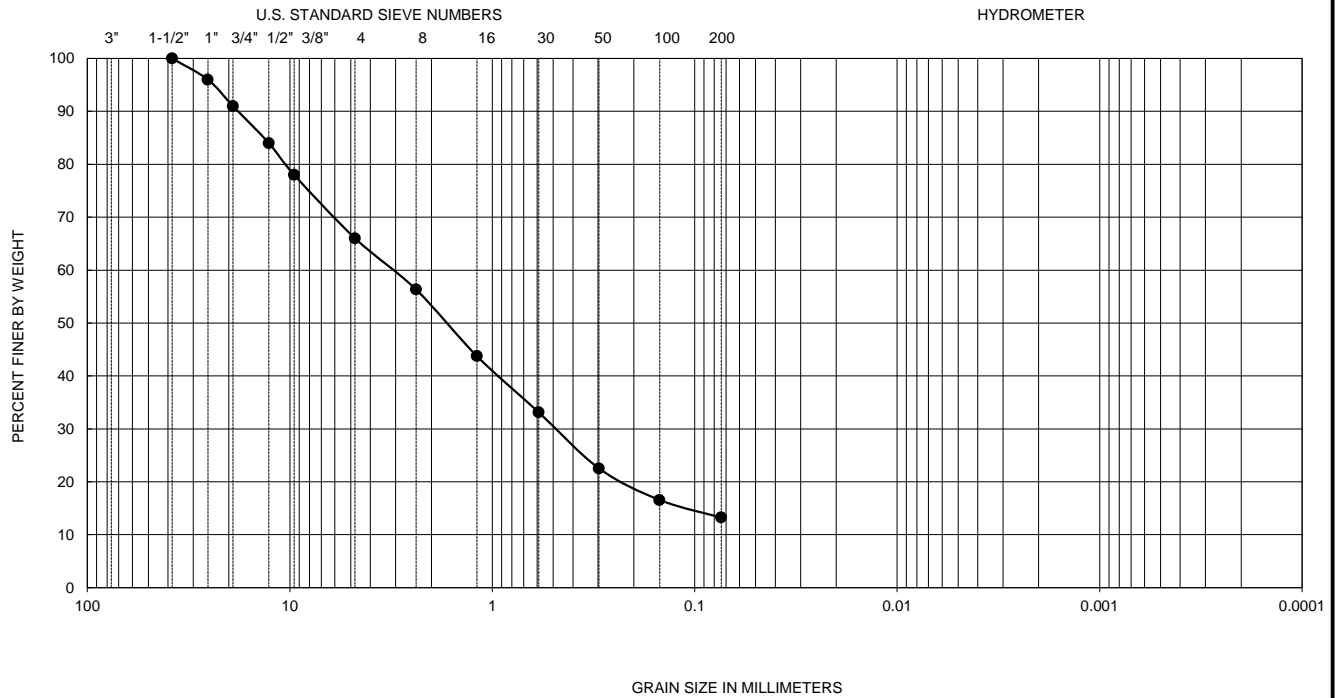


Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-11	0.25-2.0	31	20	11	--	--	--	--	--	13	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore		GRADATION TEST RESULTS	FIGURE
PROJECT NO.	DATE		
605256001	1/18	FLORENCE PAVEMENT REHABILITATION TOWN OF FLORENCE, ARIZONA	B-5

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



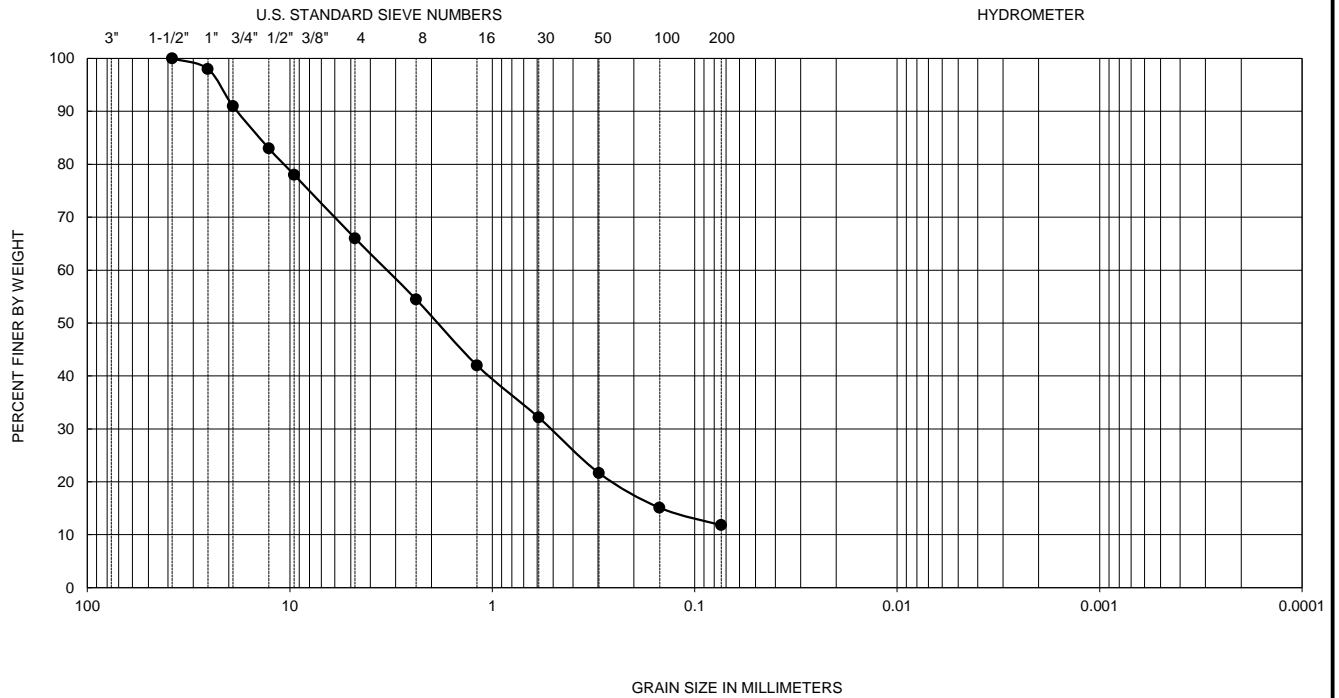
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-17	0.1-2.0	--	--	NP	--	--	--	--	--	13	SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

NP - INDICATES NON-PLASTIC

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-6
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



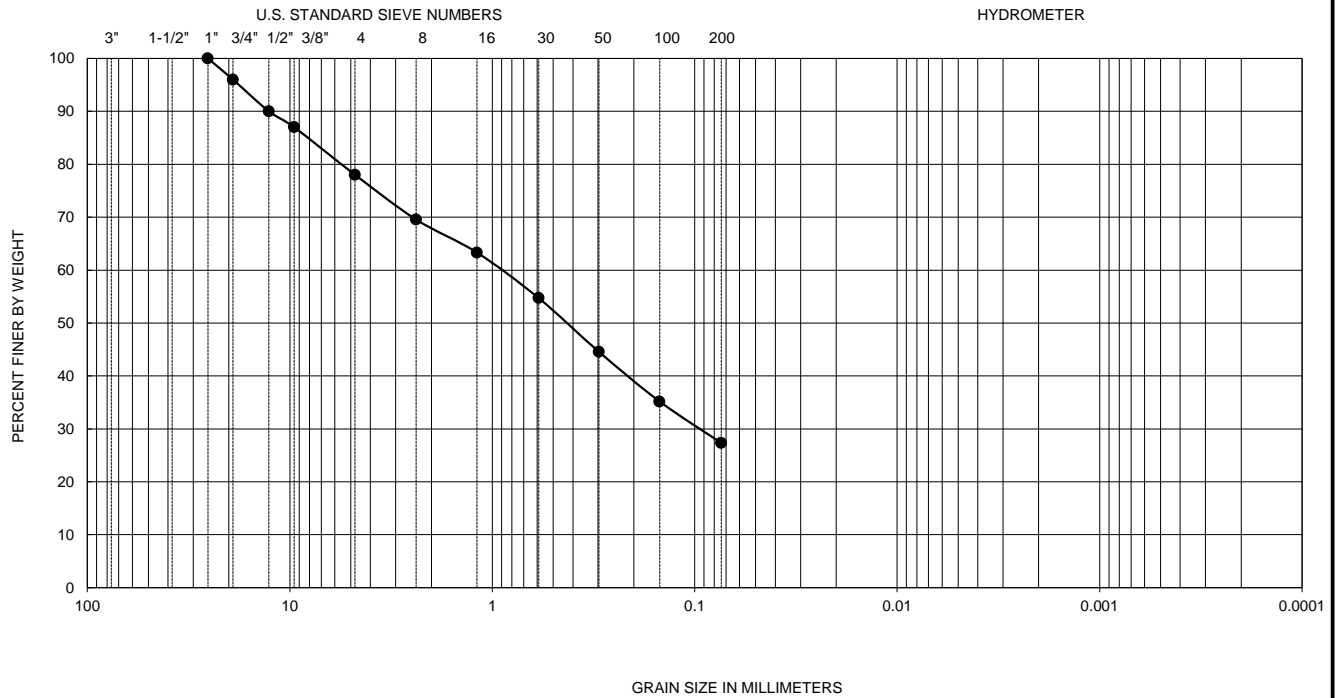
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-19	0.1-2.0	--	--	NP	0.07	0.50	3.20	43.2	1.1	12	SW-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

NP - INDICATES NON-PLASTIC

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-7
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



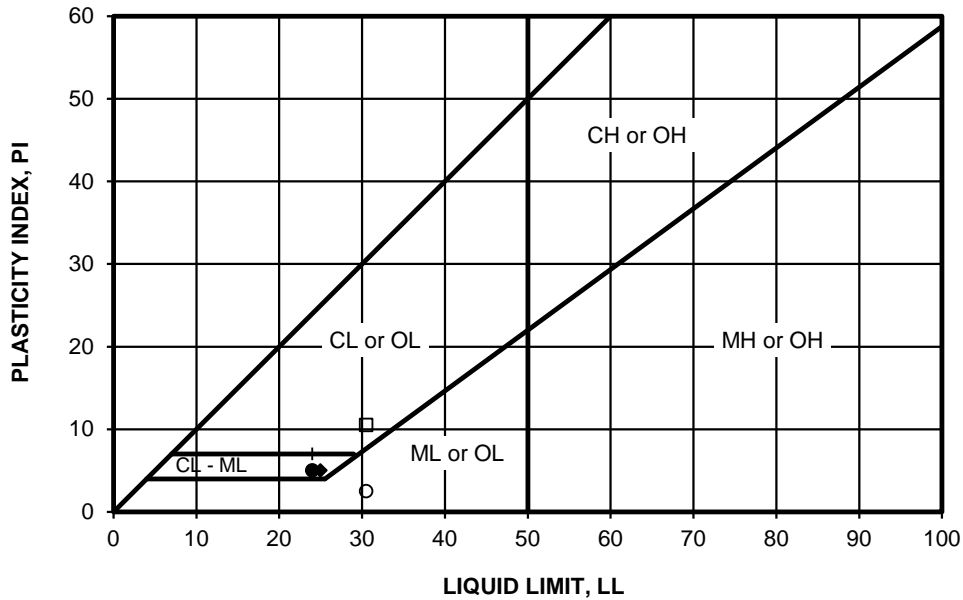
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-21	0.1-2.0	24	17	7	--	--	--	--	--	27	SC-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore		GRADATION TEST RESULTS		FIGURE B-8
PROJECT NO.	DATE	FLORENCE PAVEMENT REHABILITATION		
605256001	1/18	TOWN OF FLORENCE, ARIZONA		

SYMBOL	LOCATION	DEPTH (FT)	LIQUID LIMIT, LL	PLASTIC LIMIT, PL	PLASTICITY INDEX, PI	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS (Entire Sample)
●	B-2	0.25-2.0	24	19	5	CL-ML	SC-SM
■	B-4	0.3-2.0	--	--	NP	ML	SW-SM
◆	B-6	0.1-2.0	25	20	5	CL-ML	SC-SM
○	B-9	0.3-2.0	31	28	3	ML	SM
□	B-11	0.25-2.0	31	20	11	CL	SC
△	B-17	0.1-2.0	--	--	--	ML	SM
×	B-19	0.1-2.0	--	--	NP	ML	SW-SM
+	B-21	0.1-2.0	24	17	7	CL-ML	SC-SM

NP - INDICATES NON-PLASTIC



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4318

Ninyo & Moore

ATTERBERG LIMITS TEST RESULTS

FIGURE

PROJECT NO.
605256001

DATE
1/18

FLORENCE PAVEMENT REHABILITATION
TOWN OF FLORENCE, ARIZONA

B-9

APPENDIX C

24-HOUR TRAFFIC COUNT DATA

Appendix C-1

Florence Heights Drive

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	133	0	83	34	2	5	1	0	3	5	0	0	0	0
9:00 AM	72	0	40	19	1	6	1	0	1	4	0	0	0	0
10:00 AM	62	1	34	16	1	5	0	0	3	2	0	0	0	0
11:00 AM	80	0	33	29	2	7	2	0	0	7	0	0	0	0
12:00 PM	76	0	47	13	2	6	1	0	0	6	1	0	0	0
1:00 PM	135	2	91	27	5	5	0	0	0	4	0	1	0	0
2:00 PM	66	0	38	16	2	7	0	0	0	3	0	0	0	0
3:00 PM	52	0	29	16	0	1	0	0	0	6	0	0	0	0
4:00 PM	59	0	31	23	1	3	0	0	0	1	0	0	0	0
5:00 PM	79	0	50	24	1	2	0	0	1	1	0	0	0	0
6:00 PM	33	0	22	6	2	2	0	0	0	1	0	0	0	0
7:00 PM	27	0	18	7	0	0	0	0	1	1	0	0	0	0
8:00 PM	26	0	21	3	0	1	0	0	0	1	0	0	0	0
9:00 PM	45	0	36	7	0	0	0	0	0	2	0	0	0	0
10:00 PM	10	0	7	0	1	0	0	0	0	2	0	0	0	0
11:00 PM	8	0	8	0	0	0	0	0	0	0	0	0	0	0
12/7/2016														
12:00 AM	10	0	5	4	0	1	0	0	0	0	0	0	0	0
1:00 AM	10	0	4	3	0	0	0	0	0	3	0	0	0	0
2:00 AM	14	0	7	3	0	1	0	0	0	3	0	0	0	0
3:00 AM	9	0	3	3	0	0	0	0	0	3	0	0	0	0
4:00 AM	41	0	21	5	1	4	0	0	0	10	0	0	0	0
5:00 AM	126	1	72	26	5	12	0	0	0	10	0	0	0	0
6:00 AM	134	0	93	29	1	8	0	0	0	3	0	0	0	0
7:00 AM	177	0	120	33	7	11	2	0	1	3	0	0	0	0
Total	1484	4	913	346	34	87	7	0	10	81	1	1	0	0
%		0.3	61.5	23.3	2.3	5.9	0.5	0.0	0.7	5.5	0.1	0.1	0.0	0.0

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	134	0	93	32	1	4	0	0	0	4	0	0	0	0
9:00 AM	70	0	35	24	0	4	0	0	2	5	0	0	0	0
10:00 AM	97	19	46	19	3	3	1	0	1	5	0	0	0	0
11:00 AM	82	1	47	28	1	2	0	0	0	3	0	0	0	0
12:00 PM	91	1	50	22	2	6	0	0	1	9	0	0	0	0
1:00 PM	107	0	62	23	8	6	0	0	1	7	0	0	0	0
2:00 PM	61	1	38	13	0	5	1	0	1	2	0	0	0	0
3:00 PM	61	1	29	23	0	6	0	0	0	2	0	0	0	0
4:00 PM	66	0	39	21	0	1	0	0	1	4	0	0	0	0
5:00 PM	63	0	40	19	1	2	0	0	1	0	0	0	0	0
6:00 PM	29	0	23	3	0	2	0	0	0	1	0	0	0	0
7:00 PM	22	0	16	4	0	0	0	0	0	2	0	0	0	0
8:00 PM	34	1	22	10	0	0	0	0	0	1	0	0	0	0
9:00 PM	57	0	41	12	0	2	0	0	0	2	0	0	0	0
10:00 PM	12	0	10	1	0	0	0	0	1	0	0	0	0	0
11:00 PM	3	0	3	0	0	0	0	0	0	0	0	0	0	0
12/8/2016														
12:00 AM	9	0	5	2	1	0	0	0	0	1	0	0	0	0
1:00 AM	10	0	5	2	0	0	0	0	0	3	0	0	0	0
2:00 AM	14	0	6	2	0	1	0	0	0	5	0	0	0	0
3:00 AM	10	0	6	0	0	1	0	0	0	3	0	0	0	0
4:00 AM	38	0	19	9	2	2	0	0	0	6	0	0	0	0
5:00 AM	153	0	85	42	4	15	0	0	0	7	0	0	0	0
6:00 AM	135	0	93	33	0	6	0	0	1	2	0	0	0	0
7:00 AM	181	0	117	36	4	11	0	0	1	12	0	0	0	0
Total	1539	24	930	380	27	79	2	0	11	86	0	0	0	0
%		1.6	60.4	24.7	1.8	5.1	0.1	0.0	0.7	5.6	0.0	0.0	0.0	0.0

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	118	0	71	39	1	1	0	0	2	4	0	0	0	0
9:00 AM	62	0	32	19	0	4	0	0	1	6	0	0	0	0
10:00 AM	88	0	54	13	5	8	1	0	2	4	0	1	0	0
11:00 AM	88	2	48	24	1	4	0	0	2	7	0	0	0	0
12:00 PM	79	1	44	25	0	3	0	0	1	5	0	0	0	0
1:00 PM	153	1	89	35	7	12	1	0	4	4	0	0	0	0
2:00 PM	65	1	32	19	0	5	0	0	2	6	0	0	0	0
3:00 PM	65	0	38	19	0	4	0	0	1	2	0	1	0	0
4:00 PM	67	0	47	16	0	3	0	0	0	1	0	0	0	0
5:00 PM	64	2	35	22	2	2	0	0	0	1	0	0	0	0
6:00 PM	31	0	21	6	1	1	0	0	0	1	1	0	0	0
7:00 PM	24	0	12	10	0	1	0	0	0	1	0	0	0	0
8:00 PM	28	0	20	4	0	2	0	0	1	1	0	0	0	0
9:00 PM	52	0	40	10	0	1	0	0	0	1	0	0	0	0
10:00 PM	8	0	6	0	1	0	0	0	0	1	0	0	0	0
11:00 PM	6	0	4	0	0	0	0	0	0	2	0	0	0	0
12/9/2016														
12:00 AM	9	0	3	2	0	0	0	0	0	4	0	0	0	0
1:00 AM	15	0	8	4	0	0	0	0	0	3	0	0	0	0
2:00 AM	18	0	9	4	0	2	0	0	0	3	0	0	0	0
3:00 AM	10	0	5	1	0	1	0	0	0	3	0	0	0	0
4:00 AM	37	0	17	8	2	3	0	0	0	7	0	0	0	0
5:00 AM	127	2	77	28	5	12	0	0	0	3	0	0	0	0
Total	1214	9	712	308	25	69	2	0	16	70	1	2	0	0
%		0.7	58.6	25.4	2.1	5.7	0.2	0.0	1.3	5.8	0.1	0.2	0.0	0.0

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	56	0	26	8	9	9	1	0	1	2	0	0	0	0
9:00 AM	48	1	34	8	2	3	0	0	0	0	0	0	0	0
10:00 AM	63	0	34	22	1	5	0	0	0	0	0	0	0	1
11:00 AM	78	1	47	21	0	7	2	0	0	0	0	0	0	0
12:00 PM	80	3	49	15	4	5	1	0	3	0	0	0	0	0
1:00 PM	88	1	58	20	0	5	1	0	3	0	0	0	0	0
2:00 PM	120	1	81	26	1	7	0	0	3	1	0	0	0	0
3:00 PM	150	0	107	33	1	6	0	0	1	2	0	0	0	0
4:00 PM	112	1	78	21	6	6	0	0	0	0	0	0	0	0
5:00 PM	117	0	92	17	0	7	0	0	1	0	0	0	0	0
6:00 PM	64	0	48	13	0	2	0	0	1	0	0	0	0	0
7:00 PM	47	0	34	9	0	3	0	0	0	1	0	0	0	0
8:00 PM	20	0	15	3	0	2	0	0	0	0	0	0	0	0
9:00 PM	38	1	33	2	0	2	0	0	0	0	0	0	0	0
10:00 PM	35	0	24	11	0	0	0	0	0	0	0	0	0	0
11:00 PM	7	0	5	2	0	0	0	0	0	0	0	0	0	0
12/7/2016														
12:00 AM	6	0	5	0	0	1	0	0	0	0	0	0	0	0
1:00 AM	9	0	8	1	0	0	0	0	0	0	0	0	0	0
2:00 AM	4	0	3	0	0	0	0	0	0	1	0	0	0	0
3:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0
4:00 AM	15	0	8	3	0	2	0	0	1	1	0	0	0	0
5:00 AM	28	0	23	1	0	3	0	0	0	1	0	0	0	0
6:00 AM	45	0	35	6	0	4	0	0	0	0	0	0	0	0
7:00 AM	47	2	31	8	1	1	0	0	0	4	0	0	0	0
Total	1279	11	878	252	25	80	5	0	14	13	0	0	0	1
%		0.9	68.6	19.7	2.0	6.3	0.4	0.0	1.1	1.0	0.0	0.0	0.0	0.1

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	67	0	47	8	5	4	0	0	1	2	0	0	0	0
9:00 AM	48	0	34	9	1	2	0	0	1	1	0	0	0	0
10:00 AM	61	0	40	14	0	5	1	0	0	1	0	0	0	0
11:00 AM	64	0	39	13	2	9	0	0	0	1	0	0	0	0
12:00 PM	74	0	48	19	2	4	0	0	1	0	0	0	0	0
1:00 PM	83	1	58	15	1	6	1	0	1	0	0	0	0	0
2:00 PM	122	0	81	30	1	7	1	0	0	2	0	0	0	0
3:00 PM	139	0	101	24	2	7	0	0	1	4	0	0	0	0
4:00 PM	118	0	82	20	6	8	0	0	1	1	0	0	0	0
5:00 PM	131	1	101	26	0	3	0	0	0	0	0	0	0	0
6:00 PM	62	0	49	9	1	3	0	0	0	0	0	0	0	0
7:00 PM	51	0	39	5	1	6	0	0	0	0	0	0	0	0
8:00 PM	27	0	21	3	0	3	0	0	0	0	0	0	0	0
9:00 PM	35	0	28	6	0	0	0	0	0	1	0	0	0	0
10:00 PM	34	1	22	11	0	0	0	0	0	0	0	0	0	0
11:00 PM	5	0	4	1	0	0	0	0	0	0	0	0	0	0
12/8/2016														
12:00 AM	6	0	5	1	0	0	0	0	0	0	0	0	0	0
1:00 AM	5	0	5	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	7	0	4	2	0	0	0	0	1	0	0	0	0	0
3:00 AM	2	0	2	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	20	0	8	4	0	4	1	0	0	3	0	0	0	0
5:00 AM	27	0	20	4	2	0	0	0	0	1	0	0	0	0
6:00 AM	28	1	22	4	0	1	0	0	0	0	0	0	0	0
7:00 AM	61	0	35	15	2	6	0	0	0	3	0	0	0	0
Total	1277	4	895	243	26	78	4	0	7	20	0	0	0	0
%		0.3	70.1	19.0	2.0	6.1	0.3	0.0	0.5	1.6	0.0	0.0	0.0	0.0

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
8:00 AM	41	0	24	6	6	3	0	0	1	1	0	0	0	0
9:00 AM	48	0	32	11	1	2	1	0	0	1	0	0	0	0
10:00 AM	61	1	39	15	0	5	0	0	0	1	0	0	0	0
11:00 AM	75	1	46	22	0	6	0	0	0	0	0	0	0	0
12:00 PM	75	0	51	18	1	3	1	0	1	0	0	0	0	0
1:00 PM	100	1	61	24	0	11	1	0	2	0	0	0	0	0
2:00 PM	137	0	92	37	1	6	0	0	1	0	0	0	0	0
3:00 PM	145	0	104	33	2	5	0	0	0	1	0	0	0	0
4:00 PM	121	0	72	30	7	9	0	0	1	2	0	0	0	0
5:00 PM	134	1	110	17	0	6	0	0	0	0	0	0	0	0
6:00 PM	58	0	46	8	0	3	0	0	1	0	0	0	0	0
7:00 PM	28	0	19	5	1	2	0	0	0	0	0	1	0	0
8:00 PM	27	0	19	7	0	1	0	0	0	0	0	0	0	0
9:00 PM	28	0	19	8	1	0	0	0	0	0	0	0	0	0
10:00 PM	40	0	35	5	0	0	0	0	0	0	0	0	0	0
11:00 PM	5	0	3	2	0	0	0	0	0	0	0	0	0	0
12/9/2016														
12:00 AM	10	0	7	1	0	0	0	0	0	2	0	0	0	0
1:00 AM	5	0	3	2	0	0	0	0	0	0	0	0	0	0
2:00 AM	6	0	5	1	0	0	0	0	0	0	0	0	0	0
3:00 AM	4	0	3	1	0	0	0	0	0	0	0	0	0	0
4:00 AM	9	0	6	3	0	0	0	0	0	0	0	0	0	0
5:00 AM	30	0	18	9	2	0	0	0	0	1	0	0	0	0
Total	1187	4	814	265	22	62	3	0	7	9	0	1	0	0
%		0.3	68.6	22.3	1.9	5.2	0.3	0.0	0.6	0.8	0.0	0.1	0.0	0.0

Daily Volume (Volume factor 0.500)

Interval Start	Sensor A	Sensor B	Combined	Interval Start	Sensor A	Sensor B	Combined
12:00 AM	-	-	-	12:00 PM	53	173	346
12:15 AM	-	-	-	12:15 PM	36	36	72
12:30 AM	-	-	-	12:30 PM	42	42	84
12:45 AM	-	-	-	12:45 PM	42	42	84
1:00 AM	-	-	-	1:00 PM	51	238	476
1:15 AM	-	-	-	1:15 PM	73	73	146
1:30 AM	-	-	-	1:30 PM	52	53	105
1:45 AM	-	-	-	1:45 PM	62	62	124
2:00 AM	-	-	-	2:00 PM	67	202	402
2:15 AM	-	-	-	2:15 PM	46	46	92
2:30 AM	-	-	-	2:30 PM	48	48	96
2:45 AM	-	-	-	2:45 PM	41	40	81
3:00 AM	-	-	-	3:00 PM	70	225	450
3:15 AM	-	-	-	3:15 PM	62	62	124
3:30 AM	-	-	-	3:30 PM	50	50	100
3:45 AM	-	-	-	3:45 PM	43	43	86
4:00 AM	-	-	-	4:00 PM	48	173	346
4:15 AM	-	-	-	4:15 PM	42	42	84
4:30 AM	-	-	-	4:30 PM	44	44	88
4:45 AM	-	-	-	4:45 PM	39	39	78
5:00 AM	-	-	-	5:00 PM	80	202	403
5:15 AM	-	-	-	5:15 PM	50	50	100
5:30 AM	-	-	-	5:30 PM	38	37	75
5:45 AM	-	-	-	5:45 PM	34	34	68
6:00 AM	-	-	-	6:00 PM	32	103	204
6:15 AM	-	-	-	6:15 PM	23	23	46
6:30 AM	-	-	-	6:30 PM	26	26	52
6:45 AM	-	-	-	6:45 PM	22	20	42
7:00 AM	-	110	109	7:00 PM	23	78	156
7:15 AM	-	-	-	7:15 PM	17	17	34
7:30 AM	58	58	116	7:30 PM	20	20	40
7:45 AM	52	51	103	7:45 PM	18	18	36
8:00 AM	80	216	430	8:00 PM	12	47	94
8:15 AM	52	52	104	8:15 PM	12	12	24
8:30 AM	42	42	84	8:30 PM	10	10	20
8:45 AM	42	42	84	8:45 PM	13	13	26
9:00 AM	32	132	264	9:00 PM	22	86	172
9:15 AM	37	37	74	9:15 PM	25	25	50
9:30 AM	27	27	54	9:30 PM	20	20	40
9:45 AM	36	36	72	9:45 PM	19	19	38
10:00 AM	28	140	279	10:00 PM	27	48	95
10:15 AM	31	30	61	10:15 PM	13	13	26
10:30 AM	32	32	64	10:30 PM	6	6	12
10:45 AM	49	49	98	10:45 PM	2	2	4
11:00 AM	38	176	352	11:00 PM	4	15	8
11:15 AM	42	42	84	11:15 PM	2	2	4
11:30 AM	47	48	95	11:30 PM	4	4	8
11:45 AM	49	48	97	11:45 PM	5	5	10

Volume Totals	Sensor A	Sensor B	Combined
12:00 AM - 12:00 PM	774	770	1544
	(50.1%)	(49.9%)	
12:00 PM - 12:00 AM	1590	1584	3174
	(50.1%)	(49.9%)	
24 Hours	2364	2354	4718
	(50.1%)	(49.9%)	

Peak Hours	Sensor A	Sensor B	Combined
12:00 AM - 12:00 PM	242	239	481
Started	7:30 AM	7:30 AM	7:30 AM
Volume	0.76	0.77	0.76
Factor			

Peak Hours	Sensor A	Sensor B	Combined
12:00 PM - 12:00 AM	254	254	508
Started	1:15 PM	1:15 PM	1:15 PM
Volume	0.87	0.87	0.87
Factor			

Daily Volume (Volume factor 0.500)

Interval Start	Sensor A	Sensor B	Combined	Interval Start	Sensor A	Sensor B	Combined
12:00 AM	6	17	12	12:00 PM	46	181	92
12:15 AM	4	3	7	12:15 PM	45	45	90
12:30 AM	2	2	4	12:30 PM	44	44	88
12:45 AM	5	5	10	12:45 PM	46	46	92
1:00 AM	4	26	8	1:00 PM	56	208	56
1:15 AM	2	2	4	1:15 PM	56	56	112
1:30 AM	2	2	4	1:30 PM	44	44	88
1:45 AM	18	18	36	1:45 PM	52	52	104
2:00 AM	2	23	4	2:00 PM	62	194	62
2:15 AM	7	7	14	2:15 PM	52	52	104
2:30 AM	8	8	16	2:30 PM	38	38	76
2:45 AM	6	6	12	2:45 PM	42	42	84
3:00 AM	3	16	6	3:00 PM	71	211	72
3:15 AM	2	2	4	3:15 PM	49	50	99
3:30 AM	1	1	2	3:30 PM	44	44	88
3:45 AM	10	10	20	3:45 PM	47	47	94
4:00 AM	14	75	28	4:00 PM	50	198	50
4:15 AM	11	11	22	4:15 PM	50	50	100
4:30 AM	24	48	24	4:30 PM	60	60	120
4:45 AM	26	26	52	4:45 PM	38	38	76
5:00 AM	28	172	28	5:00 PM	67	195	68
5:15 AM	45	44	89	5:15 PM	56	56	112
5:30 AM	47	47	94	5:30 PM	38	38	76
5:45 AM	52	52	104	5:45 PM	34	34	68
6:00 AM	34	183	34	6:00 PM	31	95	31
6:15 AM	42	42	84	6:15 PM	26	26	52
6:30 AM	35	35	70	6:30 PM	26	26	52
6:45 AM	72	72	144	6:45 PM	12	12	24
7:00 AM	49	242	49	7:00 PM	24	75	24
7:15 AM	64	63	127	7:15 PM	14	14	28
7:30 AM	57	113	56	7:30 PM	22	22	44
7:45 AM	72	72	144	7:45 PM	15	15	30
8:00 AM	55	212	56	8:00 PM	20	63	20
8:15 AM	54	54	108	8:15 PM	18	18	36
8:30 AM	51	51	102	8:30 PM	15	15	30
8:45 AM	52	52	104	8:45 PM	10	10	20
9:00 AM	42	131	42	9:00 PM	27	97	27
9:15 AM	20	20	40	9:15 PM	30	30	60
9:30 AM	36	36	72	9:30 PM	18	18	36
9:45 AM	33	33	66	9:45 PM	22	22	44
10:00 AM	32	174	32	10:00 PM	21	48	21
10:15 AM	43	43	86	10:15 PM	16	16	31
10:30 AM	45	45	90	10:30 PM	7	7	14
10:45 AM	54	54	108	10:45 PM	4	4	8
11:00 AM	37	155	37	11:00 PM	3	8	3
11:15 AM	36	36	72	11:15 PM	0	0	0
11:30 AM	40	40	80	11:30 PM	5	5	10
11:45 AM	42	42	84	11:45 PM	0	0	0

Volume Totals

Sensor A	1426	1420	2846
12:00 AM - 12:00 PM	(50.1%)	(49.9%)	
Sensor B	1573	1575	3148
12:00 PM - 12:00 AM	(50.0%)	(50.0%)	
24 Hours	2999	2995	5994
	(50.0%)	(50.0%)	

Peak Hours

Sensor A	248	247	495
12:00 AM - 12:00 PM	7:15 AM	7:15 AM	7:15 AM
Sensor B	0.86	0.86	0.86
12:00 PM - 12:00 AM	4:30 PM	4:30 PM	4:30 PM
24 Hours	0.82	0.82	0.82

12:00 AM - 12:00 PM

Sensor A	20	63	40	126
Started	4:30 PM	4:30 PM	4:30 PM	4:30 PM
Sensor B	27	97	54	194
Volume	27	97	54	194
Factor	0.82	0.82	0.82	0.82

12:00 PM - 12:00 AM

Sensor A	21	48	42	95
Started	10:00 PM	10:00 PM	10:00 PM	10:00 PM
Sensor B	16	15	15	31
Volume	16	15	15	31
Factor	0.82	0.82	0.82	0.82

Daily Volume (Volume factor 0.500)

Interval Start	Sensor A	Sensor B	Combined	Interval Start	Sensor A	Sensor B	Combined
12:00 AM	6	16	12	12:00 PM	40	164	80
12:15 AM	2	2	4	12:15 PM	41	41	82
12:30 AM	4	4	8	12:30 PM	48	48	96
12:45 AM	4	4	8	12:45 PM	35	35	70
1:00 AM	4	19	4	1:00 PM	64	270	128
1:15 AM	2	2	4	1:15 PM	76	76	152
1:30 AM	9	18	18	1:30 PM	76	76	152
1:45 AM	4	4	8	1:45 PM	54	54	108
2:00 AM	8	29	16	2:00 PM	57	218	113
2:15 AM	5	5	10	2:15 PM	72	72	144
2:30 AM	6	6	12	2:30 PM	44	44	88
2:45 AM	10	10	20	2:45 PM	45	45	90
3:00 AM	6	16	12	3:00 PM	58	221	116
3:15 AM	2	2	4	3:15 PM	54	54	108
3:30 AM	4	4	8	3:30 PM	60	60	120
3:45 AM	4	4	8	3:45 PM	49	49	98
4:00 AM	11	73	22	4:00 PM	48	196	96
4:15 AM	14	14	28	4:15 PM	39	40	79
4:30 AM	20	20	40	4:30 PM	57	57	114
4:45 AM	28	28	56	4:45 PM	52	52	104
5:00 AM	24	24	48	5:00 PM	71	200	142
5:15 AM	50	50	100	5:15 PM	58	58	116
5:30 AM	48	48	96	5:30 PM	42	42	84
5:45 AM	72	71	143	5:45 PM	29	29	58
6:00 AM	30	169	60	6:00 PM	25	92	50
6:15 AM	39	38	77	6:15 PM	28	28	56
6:30 AM	30	30	60	6:30 PM	19	19	38
6:45 AM	70	70	140	6:45 PM	20	20	40
7:00 AM	68	268	136	7:00 PM	18	54	36
7:15 AM	68	69	137	7:15 PM	15	15	30
7:30 AM	62	62	124	7:30 PM	13	13	26
7:45 AM	70	70	140	7:45 PM	8	8	16
8:00 AM	56	167	112	8:00 PM	13	58	26
8:15 AM	49	48	97	8:15 PM	22	22	44
8:30 AM	34	34	68	8:30 PM	9	9	18
8:45 AM	28	28	56	8:45 PM	14	14	28
9:00 AM	38	129	76	9:00 PM	18	82	36
9:15 AM	28	28	56	9:15 PM	32	32	64
9:30 AM	33	32	65	9:30 PM	17	17	34
9:45 AM	30	30	60	9:45 PM	15	15	30
10:00 AM	42	160	84	10:00 PM	33	51	32
10:15 AM	34	34	68	10:15 PM	12	12	24
10:30 AM	46	46	92	10:30 PM	4	4	8
10:45 AM	38	38	76	10:45 PM	2	2	4
11:00 AM	54	176	108	11:00 PM	6	14	6
11:15 AM	38	38	76	11:15 PM	3	3	6
11:30 AM	41	41	82	11:30 PM	1	1	2
11:45 AM	43	43	86	11:45 PM	4	4	8

Volume Totals
 Sensor A 1416 (50.1%)
 Sensor B 1413 (49.9%)
 Combined 2829

12:00 AM - 12:00 PM
 Sensor A 1620 (50.0%)
 Sensor B 1619 (50.0%)
 Combined 3239

24 Hours
 Sensor A 3036 (50.0%)
 Sensor B 3032 (50.0%)
 Combined 6068

Peak Hours

12:00 AM - 12:00 PM
 Started 6:45 AM
 Volume 268
 Factor 0.96

12:00 PM - 12:00 AM
 Started 6:45 AM
 Volume 269
 Factor 0.96

12:00 PM - 12:00 AM
 Started 1:00 PM
 Volume 270
 Factor 0.89

12:00 PM - 12:00 AM
 Started 1:00 PM
 Volume 270
 Factor 0.89

Site: 000000000000
 12/9/2016
 Friday

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Daily Volume (Volume factor 0.500)

Interval Start	Sensor A	Sensor B	Combined	Interval Start	Sensor A	Sensor B	Combined
12:00 AM	6	29	6	12:00 AM - 12:00 PM	352	350	702
12:15 AM	5	5	10	(50.1%)	(49.9%)		
12:30 AM	8	8	16	12:00 PM - 12:00 AM	0	0	0
12:45 AM	10	10	20	24 Hours	352	350	702
1:00 AM	1	24	1	(50.1%)	(49.9%)		
1:15 AM	6	6	12				
1:30 AM	9	9	18				
1:45 AM	8	8	16				
2:00 AM	6	28	6				
2:15 AM	8	8	16				
2:30 AM	10	10	20				
2:45 AM	4	4	8				
3:00 AM	3	17	3				
3:15 AM	2	2	4				
3:30 AM	4	4	8				
3:45 AM	8	8	16				
4:00 AM	8	57	8				
4:15 AM	6	6	12				
4:30 AM	15	15	30				
4:45 AM	28	28	56				
5:00 AM	25	167	25				
5:15 AM	44	43	87				
5:30 AM	52	52	104				
5:45 AM	46	46	92				
6:00 AM	30	30	60				

Peak Hours

12:00 AM - 12:00 PM

Sensor A 5:15 AM 172
 Sensor B 5:15 AM 170
 Combined 5:15 AM 342

Factor 0.83 0.82 0.82

12:00 PM - 12:00 AM

Sensor A -
 Sensor B -
 Combined -

Started -
 Volume -
 Factor -

Appendix C-1

Hunt Highway

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/5/2017
 Thursday

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	26	0	17	7	0	1	0	0	0	1	0	0	0	0
1:00 AM	13	0	12	1	0	0	0	0	0	0	0	0	0	0
2:00 AM	23	0	13	6	0	1	0	0	1	2	0	0	0	0
3:00 AM	37	1	23	9	0	3	0	0	0	1	0	0	0	0
4:00 AM	114	0	81	28	0	1	0	0	2	2	0	0	0	0
5:00 AM	303	6	187	77	1	28	0	0	1	3	0	0	0	0
6:00 AM	401	2	248	98	7	32	1	0	7	6	0	0	0	0
7:00 AM	475	4	308	109	8	29	3	0	9	5	0	0	0	0
8:00 AM	288	2	178	75	2	24	0	1	3	3	0	0	0	0
9:00 AM	297	2	178	78	9	24	2	0	0	4	0	0	0	0
10:00 AM	274	9	163	65	9	20	3	0	2	2	0	1	0	0
11:00 AM	277	17	163	61	11	13	1	0	6	5	0	0	0	0
12:00 PM	354	10	209	92	5	26	3	0	6	3	0	0	0	0
1:00 PM	344	6	227	74	6	23	1	0	3	4	0	0	0	0
2:00 PM	349	7	225	92	6	16	2	0	0	1	0	0	0	0
3:00 PM	326	9	214	77	6	15	0	0	3	2	0	0	0	0
4:00 PM	304	2	203	65	11	20	0	0	3	0	0	0	0	0
5:00 PM	287	3	207	58	6	11	0	0	2	0	0	0	0	0
6:00 PM	225	1	159	52	0	11	1	0	1	0	0	0	0	0
7:00 PM	183	5	127	39	1	11	0	0	0	0	0	0	0	0
8:00 PM	152	2	103	34	0	11	0	0	2	0	0	0	0	0
9:00 PM	134	2	100	28	0	3	0	0	1	0	0	0	0	0
10:00 PM	90	0	61	22	0	4	0	0	0	3	0	0	0	0
11:00 PM	43	1	29	10	0	3	0	0	0	0	0	0	0	0
Total	5319	91	3435	1257	88	330	17	1	52	47	0	1	0	0
%		1.7	64.6	23.6	1.7	6.2	0.3	0.0	1.0	0.9	0.0	0.0	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/6/2017
 Friday

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	29	0	23	6	0	0	0	0	0	0	0	0	0	0
1:00 AM	22	0	14	6	0	2	0	0	0	0	0	0	0	0
2:00 AM	18	0	13	4	0	0	1	0	0	0	0	0	0	0
3:00 AM	26	1	17	4	0	1	0	0	1	1	0	1	0	0
4:00 AM	101	1	75	22	0	2	0	0	0	1	0	0	0	0
5:00 AM	266	5	168	65	0	23	1	0	1	3	0	0	0	0
6:00 AM	351	3	205	97	8	27	4	0	5	2	0	0	0	0
7:00 AM	441	3	304	96	7	18	3	1	5	3	1	0	0	0
8:00 AM	329	1	192	103	2	24	1	0	4	2	0	0	0	0
9:00 AM	282	2	167	83	9	12	1	1	3	4	0	0	0	0
10:00 AM	272	4	154	73	5	20	6	2	6	2	0	0	0	0
11:00 AM	304	4	193	86	3	13	1	0	1	3	0	0	0	0
12:00 PM	327	9	216	64	4	28	0	0	3	1	0	2	0	0
1:00 PM	334	16	209	78	3	22	0	0	3	3	0	0	0	0
2:00 PM	352	4	239	82	3	16	1	0	3	4	0	0	0	0
3:00 PM	332	11	191	89	12	20	0	0	3	6	0	0	0	0
4:00 PM	294	1	207	63	7	14	1	0	1	0	0	0	0	0
5:00 PM	295	8	210	57	1	16	0	0	2	1	0	0	0	0
6:00 PM	266	1	194	55	1	10	0	0	4	1	0	0	0	0
7:00 PM	214	2	140	53	3	11	2	0	3	0	0	0	0	0
8:00 PM	167	1	112	39	0	14	0	0	1	0	0	0	0	0
9:00 PM	175	2	123	40	2	7	0	0	1	0	0	0	0	0
10:00 PM	102	1	78	18	0	5	0	0	0	0	0	0	0	0
11:00 PM	69	0	51	14	0	3	0	0	1	0	0	0	0	0
Total	5368	80	3495	1297	70	308	22	4	51	37	1	3	0	0
%		1.5	65.1	24.2	1.3	5.7	0.4	0.1	1.0	0.7	0.0	0.1	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/7/2017
 Saturday

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	37	0	25	6	0	5	0	0	0	1	0	0	0	0
1:00 AM	21	0	15	3	1	2	0	0	0	0	0	0	0	0
2:00 AM	19	0	15	2	0	1	0	0	0	1	0	0	0	0
3:00 AM	27	0	16	6	0	3	0	0	1	1	0	0	0	0
4:00 AM	59	0	38	15	0	5	0	0	1	0	0	0	0	0
5:00 AM	162	2	102	40	0	12	1	0	3	2	0	0	0	0
6:00 AM	145	2	80	45	0	13	1	0	4	0	0	0	0	0
7:00 AM	172	2	100	50	2	12	0	0	5	1	0	0	0	0
8:00 AM	227	2	139	70	1	10	0	0	2	2	0	0	1	0
9:00 AM	255	10	159	67	2	13	0	0	2	2	0	0	0	0
10:00 AM	261	8	154	72	2	19	1	0	4	1	0	0	0	0
11:00 AM	280	6	177	75	6	14	1	0	1	0	0	0	0	0
12:00 PM	312	1	206	78	4	17	0	0	6	0	0	0	0	0
1:00 PM	344	21	220	73	5	19	1	0	5	0	0	0	0	0
2:00 PM	313	4	222	64	2	18	0	0	3	0	0	0	0	0
3:00 PM	292	7	199	70	2	9	0	0	5	0	0	0	0	0
4:00 PM	281	5	192	71	1	11	0	0	1	0	0	0	0	0
5:00 PM	285	4	206	60	2	10	0	0	3	0	0	0	0	0
6:00 PM	235	0	163	59	1	10	0	0	1	1	0	0	0	0
7:00 PM	189	5	126	49	1	7	0	0	0	1	0	0	0	0
8:00 PM	150	1	106	35	0	8	0	0	0	0	0	0	0	0
9:00 PM	168	2	110	41	0	12	0	0	2	1	0	0	0	0
10:00 PM	133	0	95	19	1	18	0	0	0	0	0	0	0	0
11:00 PM	71	0	46	21	0	3	0	0	1	0	0	0	0	0
Total	4438	82	2911	1091	33	251	5	0	50	14	0	0	1	0
%		1.8	65.6	24.6	0.7	5.7	0.1	0.0	1.1	0.3	0.0	0.0	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/8/2017
 Sunday

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	39	0	31	6	0	2	0	0	0	0	0	0	0	0
1:00 AM	33	0	24	7	0	2	0	0	0	0	0	0	0	0
2:00 AM	28	0	23	3	0	2	0	0	0	0	0	0	0	0
3:00 AM	21	0	18	3	0	0	0	0	0	0	0	0	0	0
4:00 AM	40	0	29	8	0	2	0	0	1	0	0	0	0	0
5:00 AM	139	1	89	39	0	9	0	0	1	0	0	0	0	0
6:00 AM	81	0	53	19	0	9	0	0	0	0	0	0	0	0
7:00 AM	108	1	73	22	1	7	1	0	3	0	0	0	0	0
8:00 AM	170	2	106	47	1	10	0	0	4	0	0	0	0	0
9:00 AM	257	5	169	64	2	12	0	0	5	0	0	0	0	0
10:00 AM	269	3	180	71	2	11	0	0	2	0	0	0	0	0
11:00 AM	291	23	179	65	6	14	1	0	2	0	0	1	0	0
12:00 PM	299	14	197	63	4	15	0	0	6	0	0	0	0	0
1:00 PM	323	23	202	78	3	12	1	0	4	0	0	0	0	0
2:00 PM	289	20	186	63	4	14	0	0	1	1	0	0	0	0
3:00 PM	242	10	164	52	2	14	0	0	0	0	0	0	0	0
4:00 PM	276	3	203	52	2	15	0	0	1	0	0	0	0	0
5:00 PM	243	2	179	52	0	9	0	0	1	0	0	0	0	0
6:00 PM	255	0	188	54	0	10	0	0	3	0	0	0	0	0
7:00 PM	182	2	125	47	0	8	0	0	0	0	0	0	0	0
8:00 PM	136	0	106	28	0	2	0	0	0	0	0	0	0	0
9:00 PM	157	1	112	29	1	13	0	0	1	0	0	0	0	0
10:00 PM	73	0	49	17	2	4	0	0	1	0	0	0	0	0
11:00 PM	42	0	33	7	0	1	0	0	1	0	0	0	0	0
Total	3993	110	2718	896	30	197	3	0	37	1	0	1	0	0
%		2.8	68.1	22.4	0.8	4.9	0.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/9/2017
 Monday

24 Hour Classification

Channel 1

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	22	0	12	7	0	3	0	0	0	0	0	0	0	0
1:00 AM	21	0	15	5	0	0	0	0	0	1	0	0	0	0
2:00 AM	16	0	8	3	0	3	0	0	0	2	0	0	0	0
3:00 AM	36	0	22	9	1	2	0	0	1	1	0	0	0	0
4:00 AM	99	0	63	27	0	8	0	0	1	0	0	0	0	0
5:00 AM	314	4	203	74	0	26	3	0	2	2	0	0	0	0
6:00 AM	386	3	238	96	7	36	0	0	3	3	0	0	0	0
7:00 AM	502	5	334	112	7	27	4	0	7	5	0	1	0	0
8:00 AM	304	2	173	84	3	27	4	0	5	6	0	0	0	0
9:00 AM	300	6	174	89	6	19	1	0	3	2	0	0	0	0
10:00 AM	280	3	176	66	3	20	2	0	6	4	0	0	0	0
11:00 AM	261	3	160	62	6	19	3	0	3	3	0	2	0	0
12:00 PM	284	2	177	75	3	17	1	0	3	5	0	1	0	0
1:00 PM	318	4	216	75	6	12	0	0	4	1	0	0	0	0
2:00 PM	351	5	236	85	3	16	0	0	4	2	0	0	0	0
3:00 PM	306	5	194	79	12	11	3	0	2	0	0	0	0	0
4:00 PM	294	5	209	59	6	13	0	0	2	0	0	0	0	0
5:00 PM	253	3	168	65	5	11	0	0	1	0	0	0	0	0
6:00 PM	208	3	145	50	0	8	0	0	2	0	0	0	0	0
7:00 PM	161	0	107	42	0	11	0	0	1	0	0	0	0	0
8:00 PM	144	1	102	33	3	5	0	0	0	0	0	0	0	0
9:00 PM	126	4	95	21	1	4	0	0	0	1	0	0	0	0
10:00 PM	71	0	55	11	0	3	1	0	0	1	0	0	0	0
11:00 PM	32	0	18	11	0	1	0	0	0	2	0	0	0	0
Total	5089	58	3300	1240	72	302	22	0	50	41	0	4	0	0
%		1.1	64.8	24.4	1.4	5.9	0.4	0.0	1.0	0.8	0.0	0.1	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/5/2017
 Thursday

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	26	0	21	5	0	0	0	0	0	0	0	0	0	0
1:00 AM	21	0	15	5	0	1	0	0	0	0	0	0	0	0
2:00 AM	21	0	14	5	0	0	0	0	0	2	0	0	0	0
3:00 AM	22	1	16	3	0	0	0	0	1	1	0	0	0	0
4:00 AM	53	2	24	20	0	6	0	0	0	1	0	0	0	0
5:00 AM	83	0	54	13	1	8	1	0	2	4	0	0	0	0
6:00 AM	194	5	129	37	6	8	1	3	4	1	0	0	0	0
7:00 AM	271	3	187	47	12	13	5	0	1	1	0	2	0	0
8:00 AM	236	5	160	36	4	23	0	0	4	4	0	0	0	0
9:00 AM	235	5	154	51	6	10	2	0	5	2	0	0	0	0
10:00 AM	327	11	217	61	14	14	2	0	7	1	0	0	0	0
11:00 AM	334	11	219	58	13	20	2	0	4	6	0	1	0	0
12:00 PM	319	4	228	61	5	11	1	0	5	4	0	0	0	0
1:00 PM	316	6	222	57	6	11	1	0	8	5	0	0	0	0
2:00 PM	486	18	319	91	11	35	0	0	7	5	0	0	0	0
3:00 PM	593	15	421	108	10	33	0	0	5	0	0	1	0	0
4:00 PM	486	7	361	77	7	23	0	0	8	3	0	0	0	0
5:00 PM	511	12	365	99	7	23	1	0	3	0	0	0	1	0
6:00 PM	340	5	255	64	1	13	0	0	2	0	0	0	0	0
7:00 PM	262	1	199	44	2	11	1	0	3	1	0	0	0	0
8:00 PM	194	2	158	27	1	2	0	0	3	1	0	0	0	0
9:00 PM	132	2	102	24	1	2	0	0	0	1	0	0	0	0
10:00 PM	125	1	100	21	0	2	0	0	0	1	0	0	0	0
11:00 PM	59	0	49	10	0	0	0	0	0	0	0	0	0	0
Total	5646	116	3989	1024	107	269	17	3	72	44	0	4	1	0
%		2.1	70.7	18.1	1.9	4.8	0.3	0.1	1.3	0.8	0.0	0.1	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/6/2017
 Friday

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	23	1	20	2	0	0	0	0	0	0	0	0	0	0
1:00 AM	24	0	17	5	0	1	0	0	0	0	0	1	0	0
2:00 AM	23	0	20	3	0	0	0	0	0	0	0	0	0	0
3:00 AM	20	1	15	1	0	1	0	0	0	2	0	0	0	0
4:00 AM	47	0	31	10	0	4	0	0	1	1	0	0	0	0
5:00 AM	74	3	53	12	0	4	1	0	0	1	0	0	0	0
6:00 AM	196	2	127	42	8	7	0	3	2	5	0	0	0	0
7:00 AM	236	2	170	40	6	8	1	0	5	2	0	2	0	0
8:00 AM	217	1	157	38	7	6	1	0	3	4	0	0	0	0
9:00 AM	329	2	232	62	6	19	2	0	3	3	0	0	0	0
10:00 AM	306	5	207	60	6	16	3	0	5	3	0	1	0	0
11:00 AM	357	6	249	78	9	9	1	0	5	0	0	0	0	0
12:00 PM	373	5	260	66	8	20	2	0	8	4	0	0	0	0
1:00 PM	373	5	272	62	6	14	1	0	7	5	0	1	0	0
2:00 PM	432	6	296	84	7	26	0	0	7	5	0	1	0	0
3:00 PM	523	10	364	101	6	28	0	0	10	4	0	0	0	0
4:00 PM	456	3	319	98	7	24	1	0	4	0	0	0	0	0
5:00 PM	482	14	340	85	7	28	0	0	7	1	0	0	0	0
6:00 PM	336	3	264	53	1	11	0	0	2	2	0	0	0	0
7:00 PM	240	2	177	40	2	12	0	0	4	3	0	0	0	0
8:00 PM	167	2	138	24	0	3	0	0	0	0	0	0	0	0
9:00 PM	132	0	102	26	0	4	0	0	0	0	0	0	0	0
10:00 PM	131	2	97	26	1	4	0	0	0	1	0	0	0	0
11:00 PM	68	0	53	11	1	3	0	0	0	0	0	0	0	0
Total	5565	75	3980	1029	88	252	13	3	73	46	0	6	0	0
%		1.3	71.5	18.5	1.6	4.5	0.2	0.1	1.3	0.8	0.0	0.1	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/7/2017
 Saturday

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	39	2	26	7	0	3	0	0	0	1	0	0	0	0
1:00 AM	27	0	23	3	0	0	0	0	0	1	0	0	0	0
2:00 AM	22	0	17	4	0	1	0	0	0	0	0	0	0	0
3:00 AM	19	0	15	3	0	1	0	0	0	0	0	0	0	0
4:00 AM	19	1	15	1	0	2	0	0	0	0	0	0	0	0
5:00 AM	61	0	42	14	1	3	0	0	1	0	0	0	0	0
6:00 AM	115	3	80	24	1	4	0	0	1	1	0	0	1	0
7:00 AM	140	0	111	21	3	3	1	0	1	0	0	0	0	0
8:00 AM	169	1	123	30	1	8	1	0	3	2	0	0	0	0
9:00 AM	273	2	186	65	4	10	0	0	6	0	0	0	0	0
10:00 AM	268	14	186	48	3	11	1	1	3	1	0	0	0	0
11:00 AM	304	5	231	44	4	13	2	0	4	1	0	0	0	0
12:00 PM	363	6	261	71	3	19	0	0	3	0	0	0	0	0
1:00 PM	335	17	238	53	7	13	0	0	6	0	0	1	0	0
2:00 PM	386	1	277	82	3	17	2	0	3	1	0	0	0	0
3:00 PM	341	3	254	65	2	14	0	0	1	1	0	1	0	0
4:00 PM	339	14	232	68	3	14	0	0	8	0	0	0	0	0
5:00 PM	344	6	253	67	0	16	0	0	1	1	0	0	0	0
6:00 PM	268	2	185	63	0	13	1	0	4	0	0	0	0	0
7:00 PM	231	6	176	38	0	8	0	0	3	0	0	0	0	0
8:00 PM	147	2	121	20	0	4	0	0	0	0	0	0	0	0
9:00 PM	115	0	85	26	0	3	0	0	0	1	0	0	0	0
10:00 PM	145	2	112	26	0	5	0	0	0	0	0	0	0	0
11:00 PM	57	0	48	8	0	1	0	0	0	0	0	0	0	0
Total	4527	87	3297	851	35	186	8	1	48	11	0	2	1	0
%		1.9	72.8	18.8	0.8	4.1	0.2	0.0	1.1	0.2	0.0	0.0	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/8/2017
 Sunday

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	50	3	36	6	0	3	0	0	1	1	0	0	0	0
1:00 AM	20	0	17	3	0	0	0	0	0	0	0	0	0	0
2:00 AM	16	0	13	3	0	0	0	0	0	0	0	0	0	0
3:00 AM	17	0	15	0	0	1	0	0	0	1	0	0	0	0
4:00 AM	16	0	10	4	0	2	0	0	0	0	0	0	0	0
5:00 AM	34	0	26	8	0	0	0	0	0	0	0	0	0	0
6:00 AM	100	2	80	15	0	3	0	0	0	0	0	0	0	0
7:00 AM	98	0	83	11	1	3	0	0	0	0	0	0	0	0
8:00 AM	128	0	92	27	2	5	0	0	1	1	0	0	0	0
9:00 AM	227	2	170	45	0	10	0	0	0	0	0	0	0	0
10:00 AM	232	3	168	42	2	13	0	0	3	0	0	1	0	0
11:00 AM	320	5	254	47	2	10	0	0	2	0	0	0	0	0
12:00 PM	308	12	216	52	5	16	0	0	7	0	0	0	0	0
1:00 PM	314	13	226	47	1	20	1	0	5	1	0	0	0	0
2:00 PM	379	25	257	71	7	12	2	0	4	1	0	0	0	0
3:00 PM	317	15	222	56	3	19	0	0	2	0	0	0	0	0
4:00 PM	337	13	258	48	1	12	0	0	4	1	0	0	0	0
5:00 PM	262	6	205	44	0	4	0	0	3	0	0	0	0	0
6:00 PM	219	7	170	30	2	9	0	0	1	0	0	0	0	0
7:00 PM	205	1	153	46	0	5	0	0	0	0	0	0	0	0
8:00 PM	139	1	116	20	0	1	0	0	0	1	0	0	0	0
9:00 PM	126	1	95	26	1	2	0	0	1	0	0	0	0	0
10:00 PM	121	0	93	25	0	2	0	0	1	0	0	0	0	0
11:00 PM	52	1	39	11	0	1	0	0	0	0	0	0	0	0
Total	4037	110	3014	687	27	153	3	0	35	7	0	1	0	0
%		2.7	74.7	17.0	0.7	3.8	0.1	0.0	0.9	0.2	0.0	0.0	0.0	0.0

ALL JDF files :
 ALL RDF files :
 ALL Time Mark Traffi :

Site: 000000000000
 1/9/2017
 Monday

24 Hour Classification

Channel 2

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	21	0	15	3	0	3	0	0	0	0	0	0	0	0
1:00 AM	15	0	11	2	0	0	0	0	0	2	0	0	0	0
2:00 AM	13	0	12	1	0	0	0	0	0	0	0	0	0	0
3:00 AM	27	1	17	8	0	0	0	0	0	1	0	0	0	0
4:00 AM	50	0	30	14	0	5	0	0	1	0	0	0	0	0
5:00 AM	102	1	76	13	3	3	0	0	2	3	0	1	0	0
6:00 AM	198	7	137	38	6	7	0	0	3	0	0	0	0	0
7:00 AM	252	1	184	44	8	12	0	0	2	1	0	0	0	0
8:00 AM	193	0	142	35	5	7	0	0	3	1	0	0	0	0
9:00 AM	268	3	196	41	6	15	2	0	4	0	0	1	0	0
10:00 AM	284	0	198	48	6	19	2	2	5	4	0	0	0	0
11:00 AM	303	6	216	49	6	16	0	1	5	3	0	1	0	0
12:00 PM	340	2	251	62	4	14	1	0	2	4	0	0	0	0
1:00 PM	311	5	222	68	1	10	1	0	4	0	0	0	0	0
2:00 PM	409	7	283	81	4	25	0	0	3	4	0	1	0	1
3:00 PM	551	9	389	103	14	24	1	0	7	4	0	0	0	0
4:00 PM	456	7	321	95	7	21	0	0	4	0	0	1	0	0
5:00 PM	482	5	337	109	3	19	1	1	6	0	1	0	0	0
6:00 PM	331	3	251	61	3	12	0	0	0	0	0	1	0	0
7:00 PM	188	0	150	30	0	5	0	0	1	2	0	0	0	0
8:00 PM	137	1	110	20	0	5	0	0	0	1	0	0	0	0
9:00 PM	102	1	85	12	0	3	0	0	0	1	0	0	0	0
10:00 PM	105	0	82	20	0	2	0	0	0	1	0	0	0	0
11:00 PM	41	1	30	10	0	0	0	0	0	0	0	0	0	0
Total	5179	60	3745	967	76	227	8	4	52	32	1	6	0	1
%		1.2	72.3	18.7	1.5	4.4	0.2	0.1	1.0	0.6	0.0	0.1	0.0	0.0