

**TRAFFIC IMPACT & MITIGATION ANALYSIS
CATEGORY 2**

**McDowell-Hayden Retail
NEC E McDowell Road & N Hayden Road
Scottsdale, Arizona**

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TRAFFIC IMPACT & MITIGATION ANALYSIS
McDowell-Hayden Retail Development
NEC E McDowell Road & N Hayden Road, Scottsdale, Arizona

I. INTRODUCTION

The purpose of this study is to conduct a Category 2 Traffic Impact & Mitigation Analysis (TIMA) for a proposed construction of 2 fast-food restaurants with drive-throughs, on an approximately 1.4-acre vacant parcel located at northeast corner of E McDowell Road & N Hayden Road, in Scottsdale, Arizona. Figure 1 is a map of project location.



The proposed development includes construction of 2 fast-food restaurants with drive-throughs on a 1.4-acre vacant parcel. Pad A will include 2750 SF building + patio and a drive-through. Pad B will include a 4350 SF building + patio and a drive-through.

A preliminary scoping meeting with Mr. Philip Kercher, at the City of Scottsdale Traffic Engineering; it was indicated that a “scaled down” Category 2 Impact & Mitigation Analysis is required; to include (1) a trip generation analysis, and (2) assessment of traffic volumes on E McDowell Road and E Commerce Court. The project horizon will be limited to buildout and other study components such as review of the crash history is not required.

II. EXECUTIVE SUMMARY

This Traffic Impact & Mitigation Analysis is intended for the evaluation of traffic impacts from the construction of 2 fast-food restaurants with drive-throughs with total gross are of 2750 SF and 4350 SF respectively, located within on a 1.4-acre vacant parcel at SEC of E McDowell Road and N Hayden Road. This project will be constructed in a single phase with project opening in 2022.

ITE Trip Generation, 10th Edition, Land Use Code (LUC) 934 – Fast-Food Restaurant with Drive-Through (per 1000 SF) is used for the calculations of the new trips. The proposed restaurants are expected to generate 3344 daily trips, 286 AM peak trips (7-9 AM), 364 Mid-day trips (12-1 PM) and 223 PM peak trips (4-6 PM) before adjustments. A substantial portion (49% in AM peak & 50% in Mid-day & PM peaks) of the new trips are “passer-by” type which are already embedded in the current stream of traffic, resulting in an adjusted net new trips of 146 in the AM, 182 in Mid-day, and 116 in PM peaks. Driveway volumes are not adjusted for passer-by trips.

A scoping discussion with City of Scottsdale Traffic Engineering staff determined the requirements for the study methodology as a “scaled down” Category 2 TIMA with build-out as the project horizon year.

This vacant parcel has been previously planned with direct access on E McDowell Road and E Commerce Road, and cross-access to N Hayden Road. The previously planned access points have deceleration and storage lanes with adequate capacity to accommodate the opening day traffic volumes. Traffic study found that the proposed development will not have a significant adverse impact on the adjacent streets and intersections. The signalized intersections of E McDowell Road and N Hayden Road will operate with an acceptable level-of-service for the opening year. The unsignalized intersection of E McDowell Road and N Commerce Court/N 81st Street, will experience some minor higher delays for the southbound movements which is expected for an unsignalized intersection, but will operate efficiently. The existing single right-in/right-out driveway on E McDowell Roads will operate safely and efficiently with stop-controlled conditions. A new proposed driveway and the existing joint-access driveway on E Commerce Court, will also operate efficiently.

To safeguard against potential queuing onto E McDowell Road, the drive-throughs have a counter-clockwise circulation with entrances at the farthest distance from E McDowell Road. The drive-through lanes can store 8 vehicles with potential spill-over capacity in the parking lot. Any potential spill-over will only be isolated to E Commerce Court, with no impact to E McDowell Road or N Hayden Road.

Based on the findings, it is concluded that the proposed development will not have a significant impact on the existing surrounding transportation facilities and off-site transportation improvements are not required.

III. PROPOSED DEVELOPMENT

The existing 1.4-acre vacant parcel is located on the south side of McDowell Road, on the east side of the existing Circle K gas station. Pad A will include 2750 SF (2400 SF building + 350 SF patio) fast-food restaurant with a drive-through and Pad B will include a 4350 SF (4000 SF building + 350 SF patio) fast-food restaurant with a drive-through.

Three (3) access driveways are proposed. A single existing right-in/right out driveway on E McDowell Road, and 2 driveways on E Commerce Court which include a new driveway and a joint-use driveway with Circle K, as depicted on Figures 2. Cross-access is provided through Circle parking lot, east to N Hayden Road from the proposed development.

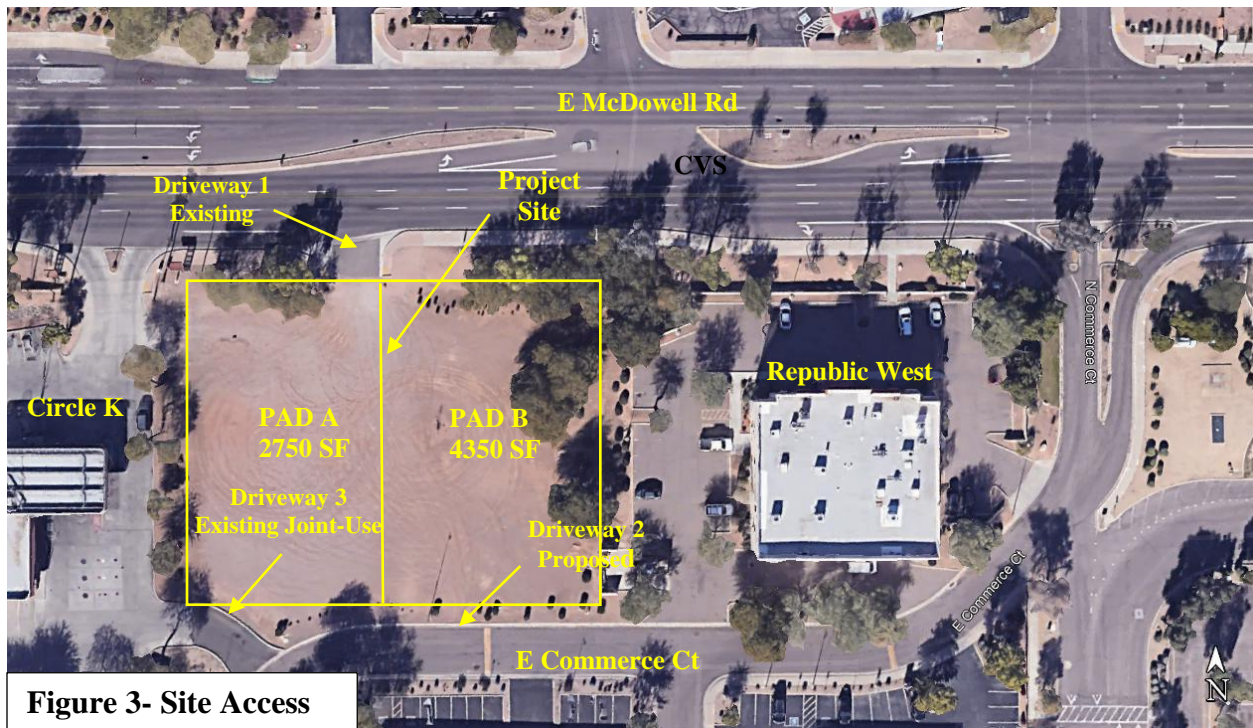


Figure 3- Site Access

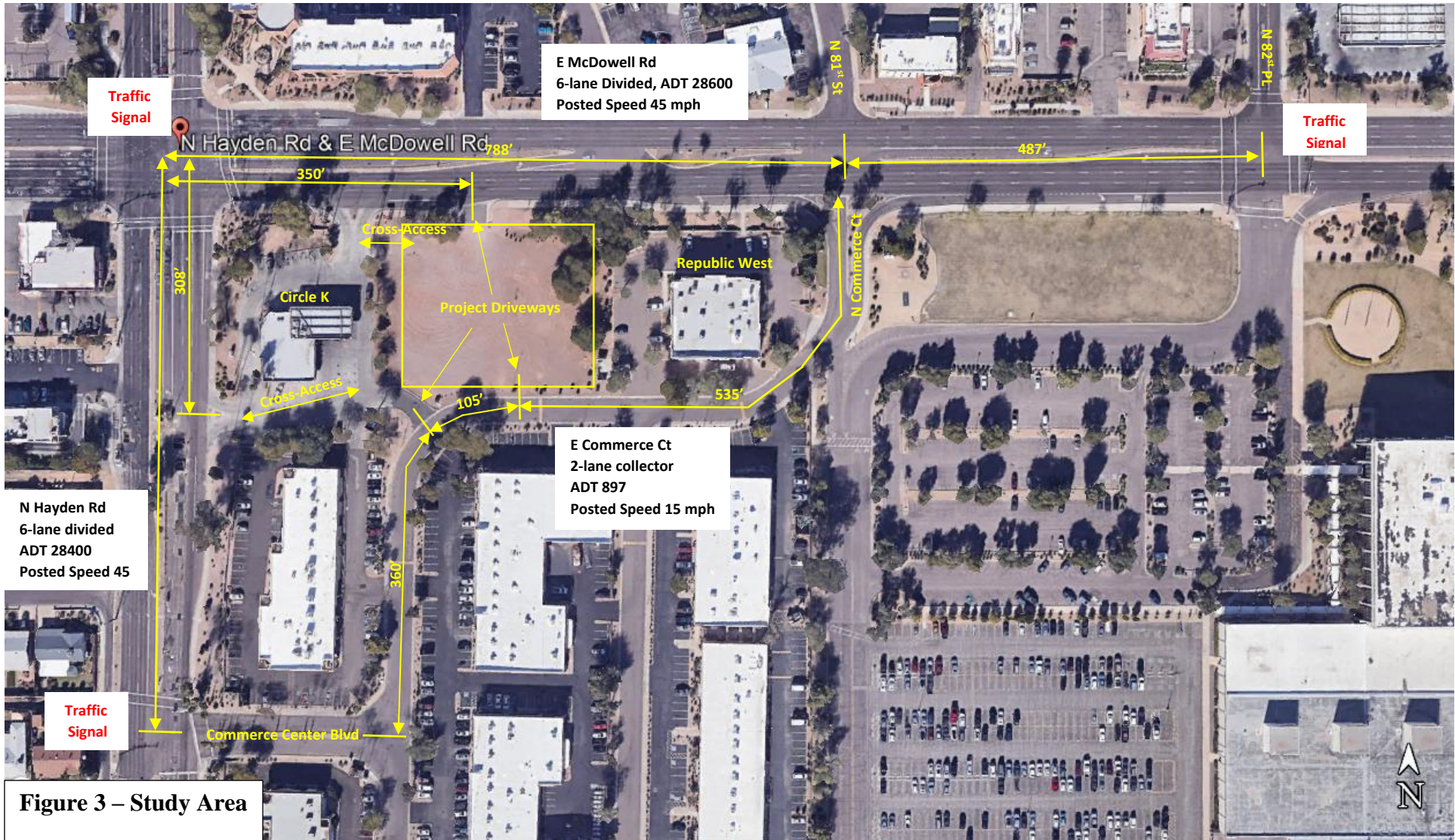
IV. STUDY AREA

The area is characterized as a build-out urban condition with a mix of commercial, industrial, and residential developments. Subject vacant property is located in-between 2 fully developed sites with planned right-in/right out access on E McDowell Road. Cross-access is provided to the east through Circle K and to the south at the existing signal at N Hayden Road & Commerce Center Boulevard.

E McDowell Road in this vicinity is a 6-lane divided arterial with posted speed of 45 mph and ADT of 28,600 (City of Scottsdale) which currently operates below designed capacity for a 6-lane arterial. Medians provide managed access to streets and driveways.

E Commerce Court is a 2-lane winding collector with ADT of 897 (TEC 7/2021) and posted speed of 15 mph and speed bumps. The intersection of E McDowell Road and N Commerce Road/N 81st St is unsignalized. South of the proposed development, E Commerce Court intersects with Commerce Center Boulevard which is signalized at N Hayden Road. This signal will provide a safe inbound/outbound for the proposed development.

Figure 3 depicts the study area and various characteristics of the adjacent transportation facilities and details.



V. TRIP GENERATION & DISTRIBUTION

A. Trip Generation

ITE Trip Generation, 10th Edition, Land Use Code (LUC) 934 – Fast-Food Restaurant with Drive-Through (per 1000 SF GLA) is used for the calculation of new trips. Table 1 is a summary of the average rates for the proposed LUC 934 used for the calculations and Tables 2 is a summary of the daily and the AM, Mid-Day, and PM peak hour trips (7-9 AM, 11-1 PM, and 4-6 PM). The Mid-day peak (12-1 PM) is provided by ITE for the PM peak of the generator . Fitted curve solutions are not available for this category and the average rates are used for the calculations.

| ITE LUC 934- Fast-Food Restaurant with Drive-Through | | | | | | | | | | | |
|--|-----|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|
| Daily | | | AM Peak Hour | | | Mid-Day Peak | | | PM Peak Hour | | |
| Avg. Rate | In | Out | Avg. Rate | In | Out | Avg. Rate | In | Out | Avg. Rate | In | Out |
| 470.95 | 50% | 50% | 40.19 | 51% | 49% | 51.36 | 51% | 49% | 32.67 | 52% | 48% |

Table 1- ITE Trip Generation LUC Average Rates

| Proposed Development | GFA/ 1000 SF | Daily | AM Peak | Mid-day Peak | PM Peak |
|---|--------------|------------------|----------------|----------------|----------------|
| Pad A - 2750 SF LUC 934-Fast-food w/DT | 2.75 | 1295 | 111 | 141 | 90 |
| | | 647 in/648 out | 56 in/55 out | 72 in/69 out | 47 in/43 out |
| Pad B - 4350 SF LUC 934-Fast Food w/DT | 4.00 | 2049 | 175 | 223 | 142 |
| | | 1025 in/1024 out | 89 in/86 out | 114 in/109 out | 74 in/68 out |
| Totals = | | 3344 | 286 | 364 | 232 |
| | | 1672 in/1672 out | 146 in/140 out | 186 in/178 out | 121 in/111 out |

Table 2- Summary of Proposed Trips

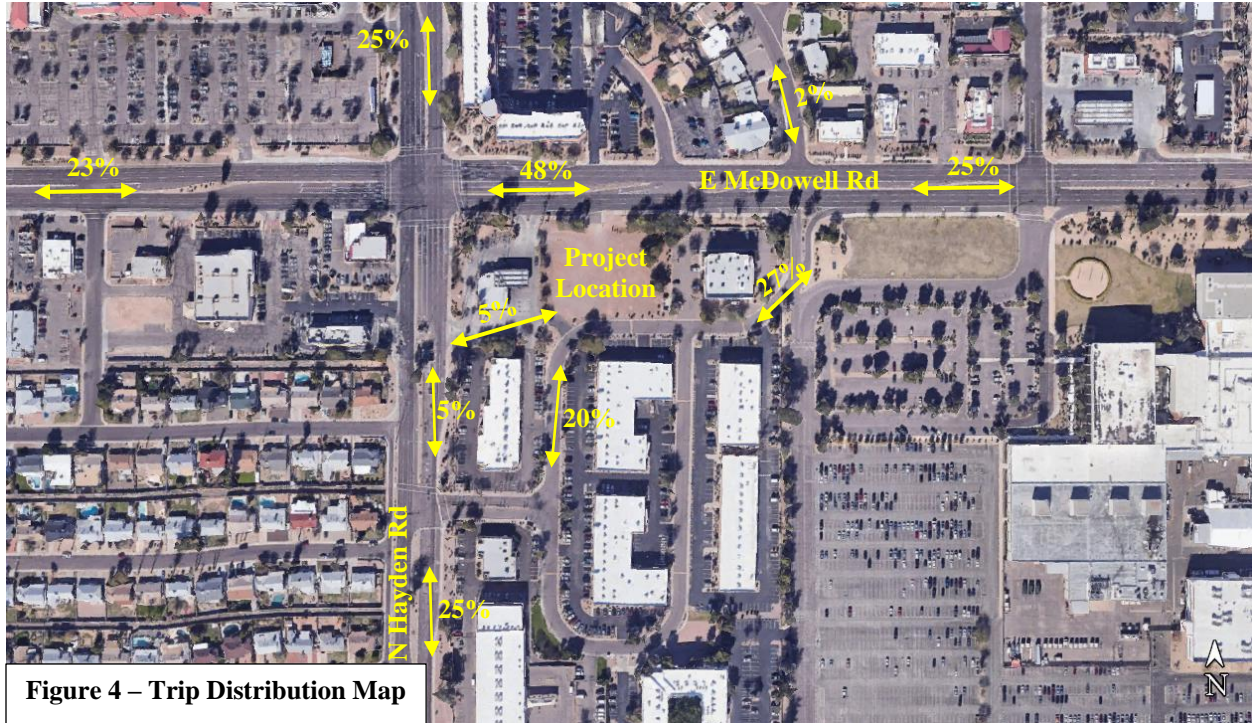
As summarized in Table 2, the proposed redevelopment is expected to generate 3344 daily trips, 286 AM peak trips (7-9 AM), 364 Mid-day peak trips (11-1 PM) and 232 PM peak trips (4-6 PM). It should be noted that fast-food restaurants with drive-through land use category generally contain a high percentage of “passer-by” trips, which are already embedded within the existing stream of traffic on adjacent streets. According to ITE’s estimates, for this type of land use, a 49% rate will apply to the AM peak and a 50% will apply to the PM peak. Mid-day peak rate is not provided and is assumed to be at 50%. Passer-by trips do not affect the project driveway volumes. “Internal capture” which accounts for trips between various land uses within the shopping center is assumed to be small and is ignored for these calculations. Table 3 below indicates the adjustment and the “adjusted net new” trips.

| ITE LUC | AM Peak 49% | | | Mid-Day Peak 50% | | | PM Peak 50% | | |
|---------------------|-------------|---------|---------|------------------|---------|---------|-------------|---------|---------|
| | Total | Pass-by | Net New | Total | Pass-by | Net New | Total | Pass-by | Net New |
| Pad A – 2750 SF GFA | 111 | 54 | 57 | 141 | 71 | 70 | 90 | 45 | 45 |
| Pad B – 4350 SF GFA | 175 | 86 | 89 | 223 | 111 | 112 | 142 | 71 | 71 |
| Totals | 286 | 140 | 146 | 364 | 182 | 182 | 232 | 116 | 116 |

Table 3- Pass-by Trip Adjustment

B. Trip Distribution

Trip distribution for the proposed fast-food restaurants is expected to be nearly evenly distributed from all directions, given the location of the site and build-out conditions. The median openings, driveway locations and turn restrictions, greatly impact the circulation within the immediate project area as patrons use the most efficient and safest way to reach their destination. Figure 4 depicts the projected distribution for the proposed development.



C. Trip Assignment

Based on trip distribution percentages, Figure 7 depicts the projected project volumes at driveways and critical network locations within the area of influence. Figure 8 depicts the combined opening day background traffic volumes plus the new trips for the project.

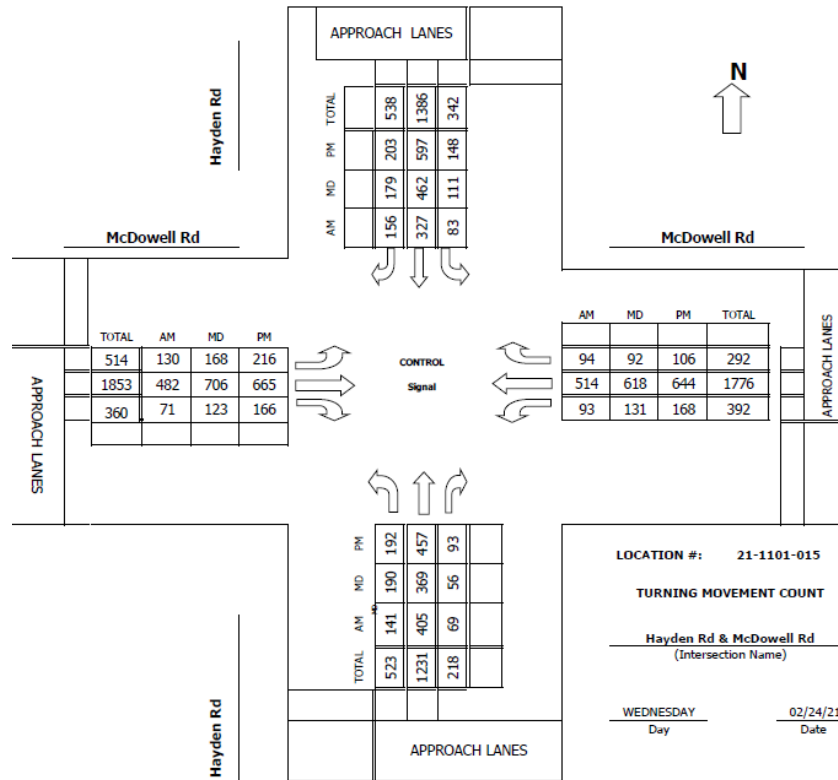
D. Growth Rate

City of Scottsdale's historic counts for 2010-2018, show approximately 1.5% growth per year for the affected section of E McDowell Road. This rate is used for adjustment of data from 2021 source year to 2022 opening background year.

E. Traffic Data

For this study, turning movement counts were collected for the intersection of E McDowell Road and E Commerce Court, on Tuesday, July 20, 2021, for the 7-9 AM, 11-1 PM, and 4-6 PM. In addition, a 24-hour directional count was collected on E Commerce Court near the proposed development.

City of Scottsdale provided a recent turning movement count (collected in February 2021) for AM, Mid, and PM peaks, for the intersection of E McDowell Road and N Hayden Road.



Copies of traffic data are provided in the Appendix of this report. Figure 5 depicts a summary of the traffic data for the current baseline conditions for various daily peaks. Figure 6 depicts the 2022 opening year background data based on the baseline and adjusted for the projected growth rate.

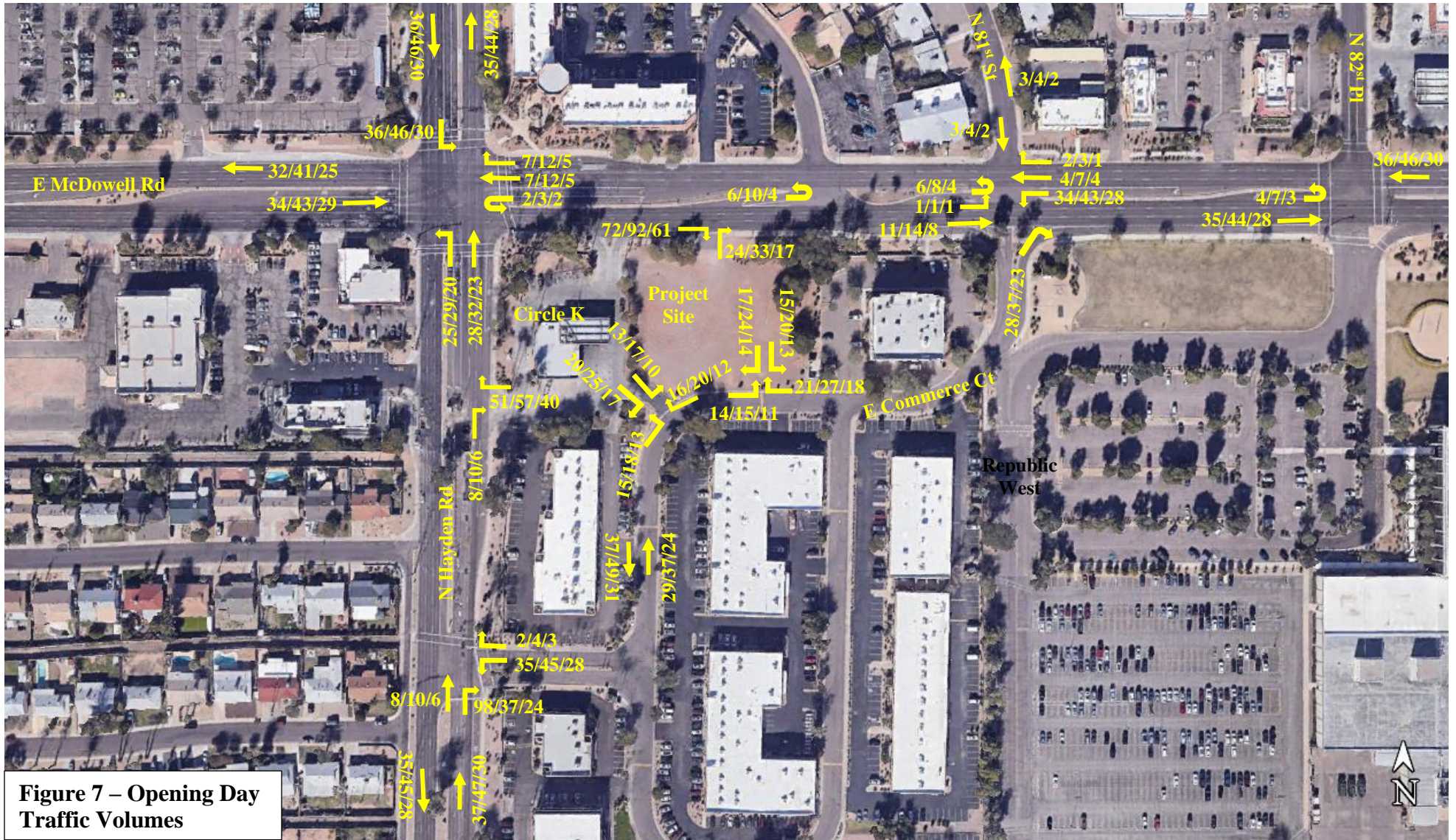
Pedestrian and bicycle traffic are low during the peak traffic periods as illustrated in Figure 5, at the intersection of E McDowell Road and E Commerce Court, with no recorded north-south crossings, crossing E McDowell Road.



Traffic Impact & Mitigation Analysis, Category 2 – McDowell-Hayden Retail, SEC McDowell Rd & Hayden Rd, Scottsdale, Arizona



Traffic Impact & Mitigation Analysis, Category 2 – McDowell-Hayden Retail, SEC McDowell Rd & Hayden Rd, Scottsdale, Arizona





VI. TRAFFIC ANALYSIS

A. Intersection Levels-of-Service

SYNCHRO 11.0 with HCM 6th Edition, is used to evaluate the levels-of-service (LOS) for the intersection of E McDowell Road at N Hayden Road and E McDowell Road and N Commerce Court/ E Elm Road. SYNCHRO outputs are provided in the Appendix. A description for each scenario is provided below:

- 1) 2021 Baseline – 2021 volumes & existing geometry.
- 2) 2022 Background – 2022 background volumes & existing geometry.
- 3) 2022 Total Project – 2022 total (background + project) volumes & existing geometry.

Tables 4 & 5, summarize the intersection levels-of-service and operational conditions for the AM, Mid and PM peak hours for the baseline, background, and total project scenarios.

| Evaluation Scenario | Peak | Int. LOS | Intersection Approaches LOS | | | | | | | | | | | |
|---------------------|------|----------|-----------------------------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|
| | | | EB | | | WB | | | NB | | | SB | | |
| | | | Lt. | Thru | Rt. | Lt. | Thru | Rt. | Lt. | Thru | Rt. | Lt. | Thru | Rt. |
| 2021 Baseline | AM | B | C | B | B | C | B | B | C | B | B | C | B | B |
| | Mid | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | PM | C | C | C | D | C | C | C | C | C | C | C | C | C |
| 2022 Background | AM | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | Mid | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | PM | C | C | C | D | C | C | C | C | C | C | C | C | C |
| 2022 Total | AM | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | Mid | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | PM | C | C | C | D | C | C | C | C | C | C | C | C | D |

Table 4 – E McDowell Road at N Hayden Road Intersection Evaluation

| Evaluation Scenario | Peak Period | Intersection Approaches LOS | | | |
|---------------------|-------------|-----------------------------|-------|-------|-------------|
| | | EB LT | WB LT | NB RT | SB TH/LT/RT |
| 2021 Baseline | AM | B | B | B | B |
| | Mid | B | B | B | B |
| | PM | B | C | B | D |
| 2022 Background | AM | B | B | B | B |
| | Mid | B | B | B | B |
| | PM | B | C | B | D |
| 2022 Total | AM | B | B | B | D |
| | Mid | B | B | B | D |
| | PM | B | C | C | E |

Table 5 – E McDowell Road at N Commerce Ct/N 81st St (Unsignalized)

As the results illustrate, the addition of the new trips from the proposed development will not have a significant impact on signalized intersection of E McDowell Road and N Hayden Road. The intersections will operate with an acceptable level-of-service “C” with the addition of the new trips for 2022 opening year. The unsignalized intersection of E McDowell Road and N Commerce Court/N 81st Street will experience some minor delay increase for the southbound movement as expected when crossing a 6-lane divided arterial. However, the increase will not result in failure. It should be noted that the capacity analysis assumes crossing the entire 6-lane section at once and does not consider the median refuge where vehicles can safely stop while crossing.

B. Roadway Capacity

The proposed development will have a relatively minor impact on this segment of E McDowell Road and will operate at acceptable level-of-service after the opening in 2022. The access management in the vicinity of the intersection with N Hayden Road, redirect the critical left turn and crossing movements for the driveway on E McDowell Road. It should be noted that almost one-half of all projected trips are the “passer-by” type which are currently present in the volumes.

The impact on E Commerce Court will be at a higher rate due to the project driveways. But the higher traffic volumes will not result in capacity failure. As E Commerce Court functions as a connector to provide internal access to various businesses by design, the increased volumes and lower speeds are acceptable. The critical issue on E Commerce Road is the occasional queuing that may result from turning movements and the operation of the drive-through lanes.

C. Intersection Auxiliary Lane Capacity

The intersection analysis discussed in the preceding section, also evaluated the intersection turn lanes. The LOS associated with the turning movements were summarized in tables 4 & 5. The anticipated queues for each auxiliary lane for the peak conditions, after addition of project trips (2022 Total Traffic Volumes) are summarized in Table 8. All distances are approximate and were obtained using available aerials. As summarized in Table 6, for the intersection of E McDowell Road & N Hayden Road, all turn lanes will have more than adequate capacity to store waiting vehicles during the highest peak hours, for the opening day scenario.

| Description | NBL | SBL | EBL | WBL |
|---------------------------------------|-----|-----|-----|-----|
| Available Storage Length, Feet | 400 | 400 | 520 | 400 |
| Highest Peak Hour Volume (2022 Total) | 222 | 180 | 219 | 173 |
| 2-Minute Queue (120 Second Cycle) | 7.4 | 6.0 | 7.3 | 5.8 |
| Design Vehicle Length, Feet | 25 | 25 | 25 | 25 |
| Queue (2-Minute Queue), Feet | 185 | 150 | 183 | 145 |

Table 6 – E McDowell Road & N Hayden Road Left Turn Storage

For the unsignalized intersection of E McDowell Road and N Commerce Road/N 81st Street, for the worst-case scenario of opening day mid-day and PM peaks, SYNCHRO predicts ample storage for the critical left and right turn storage. Tables 7 & 8 summarize delays and queuing for the intersection turn lanes during mid-day and PM.

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 541 | 495 | - | - | 514 | - | - | 203 |
| HCM Lane V/C Ratio | 0.147 | 0.051 | - | - | 0.142 | - | - | 0.129 |
| HCM Control Delay (s) | 12.8 | 12.7 | - | - | 13.2 | - | - | 25.3 |
| HCM Lane LOS | B | B | - | - | B | - | - | D |
| HCM 95th %tile Q(veh) | 0.5 | 0.2 | - | - | 0.5 | - | - | 0.4 |

Table 7 – Delays & Queuing for Opening Day Mid-Day Peak

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 414 | 439 | - | - | 353 | - | - | 110 |
| HCM Lane V/C Ratio | 0.192 | 0.042 | - | - | 0.209 | - | - | 0.188 |
| HCM Control Delay (s) | 15.7 | 13.6 | - | - | 17.9 | - | - | 45.1 |
| HCM Lane LOS | C | B | - | - | C | - | - | E |
| HCM 95th %tile Q(veh) | 0.7 | 0.1 | - | - | 0.8 | - | - | 0.7 |

Table 8 – Delays & Queuing for Opening Day PM Peak

D. Internal Queuing

The proposed drive-through lanes will have a counter-clockwise circulation with entrances located at the farthest points from E McDowell Road with intent to minimize potential spill-over onto this major arterial. Drive-through Lane provide storage for 8 vehicles and additional storage within the parking lots to contain queuing during high demand. It is anticipated that some slow-down and queuing will occur on E Commerce Court potentially during peak demand periods but will not impact E McDowell Road. Figure 3 depicts the separation distances to E McDowell Road, to the east & north at 535 feet and to the south at 360 feet, on E Commerce Court.

E. Access Driveways

There are 3 driveways for the proposed development, 1 existing right-in/right-out on E McDowell Road, and 2 on E Commerce Court, one of which is an existing joint-use driveway with Circle K. Cross-access to N Hayden Road is also provided at 2 locations.

Existing Driveway on E McDowell Road

As shown on Figure 9, the right-in/right-out driveway on E McDowell Road will primarily serve the trips from the north and the west. This driveway currently has 150 feet right turn lane which extends past the Circle K driveway. This right turn lane will provide ample storage capacity for the right turning vehicles from the west. The highest peak hour volumes of 92 vehicles during the mid-day peak will require 75 feet of storage (3 vehicles & 25 feet), assuming a 2-minute cycle.



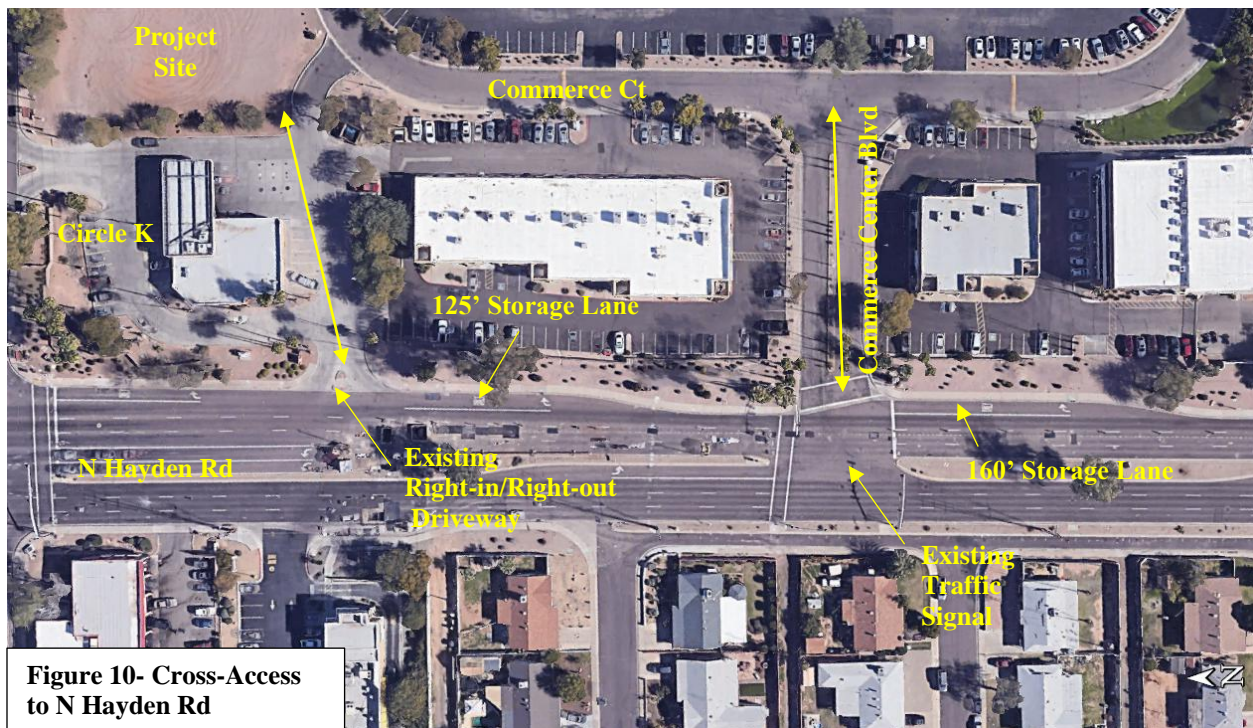
**Figure 9-E McDowell Rd
Right in/Right-out Driveway**

Driveways on E Commerce Road

The 2 driveways on E Commerce Court, will primarily serve the trips from the east and the south. As previously shown on Figure 3, the proposed new driveway to Pad B, is located approximately 535 feet from E McDowell Road, on E Commerce Court. The second existing joint-use driveway is located approximately 100 feet farther west for Pad A. There are no exiting auxiliary lanes for these driveways, and they are not required because of the intended function of the street with low speed of 15 mph and presence of speed bumps.

Access to N Hayden Road

The proposed site has cross-access to N Hayden Road at 2 points as shown in Figure 10 below.



These cross-access points will allow traffic to access the proposed site from N Hayden Road without the need to enter & exit from E McDowell Road. Both access points have ample right turn deceleration and storage lanes.

VII. ASSESSMENT OF IMPACT

As illustrated in the analysis section, the proposed development will not have a significant impact on the adjacent streets and intersections. Tables 5 & 6 reflect the expected levels-of-service; for the “before” and “after” the addition of the new trips from the project. A significant portion of projected new trips are “passer-by” type that are already embedded in the current stream of traffic. All impacted turn lanes are expected to have adequate storage capacity for the increased volumes. The affected segment of E McDowell Road will operate with an acceptable level-of-service after addition of the new trips. Therefore, it is concluded that off-site transportation improvements are not required.

VIII. CONCLUSION & RECOMMENDATION

In conclusion, the proposed development will not have a significant adverse impact to adjacent streets and intersections, as illustrated in this report. It is therefore concluded that the current transportation network will adequately support the addition of the net new traffic volumes from the proposed development.

Because of previously planned site direct access and cross-access, trips to and from the site will have safe access to E McDowell Road and N Hayden Road, as illustrated in this report. The direct access and cross-access points have adequate deceleration and storage lanes capable of supporting the additional trips. Therefore, additional off-site improvements are not required.

APPENDIX

PROJECT DIRECTORY

ARCHITECT:
 RKA ARCHITECTS, INC.
 2233 EAST THOMAS ROAD
 PHOENIX, ARIZONA 85016
 CONTACT: NEIL FEASER
 PHONE: (602) 955-3900
 FAX: (602) 955-0496
 E-MAIL: nfeaser@rkaa.com

SITE DATA

PARCEL NUMBER: 131-09-002N
 EXISTING ZONING: C-3
 SITE AREA: 1.397 ACRES (60,885 S.F.)

PROPOSED USE: RETAIL / RESTAURANTS
 CONSTRUCTION TYPE: V-B

BUILDING AREA:
 PAD A: RESTAURANT WITH DRIVE THRU 2,400 S.F.
 PAD A: PATIO SEATING 350 S.F.
 PAD B: RETAIL-RESTAURANT WITH DRIVE THRU 4,000 S.F.

TOTAL BUILDING AREA: 6,750 S.F.
 MAX. ALLOWABLE F.A.R. 0.80
 F.A.R. PROVIDED: 0.11
 MAX. BUILDING HEIGHT: 36'-0"
 BUILDING HEIGHT PROVIDED: 30'-0"

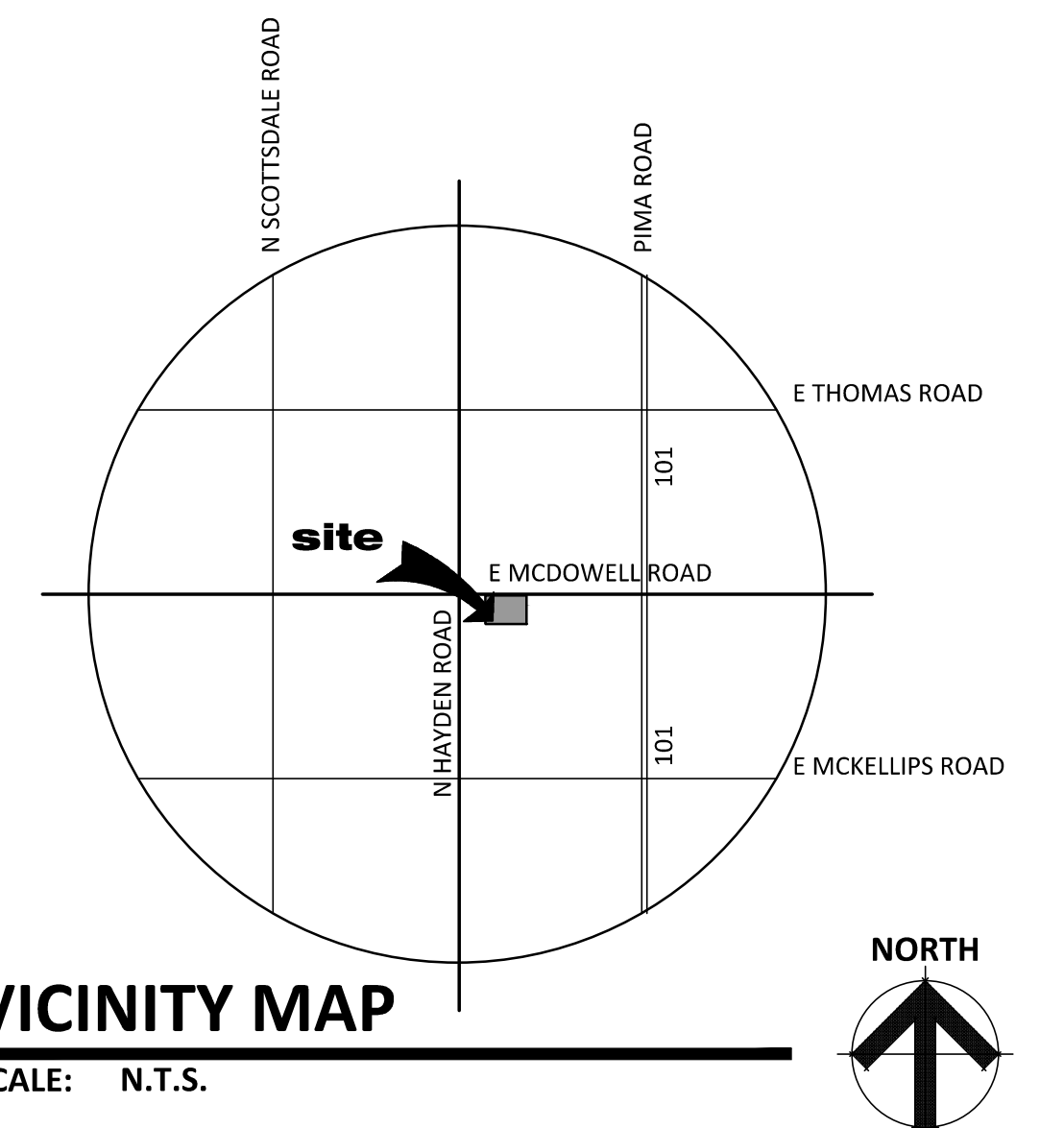
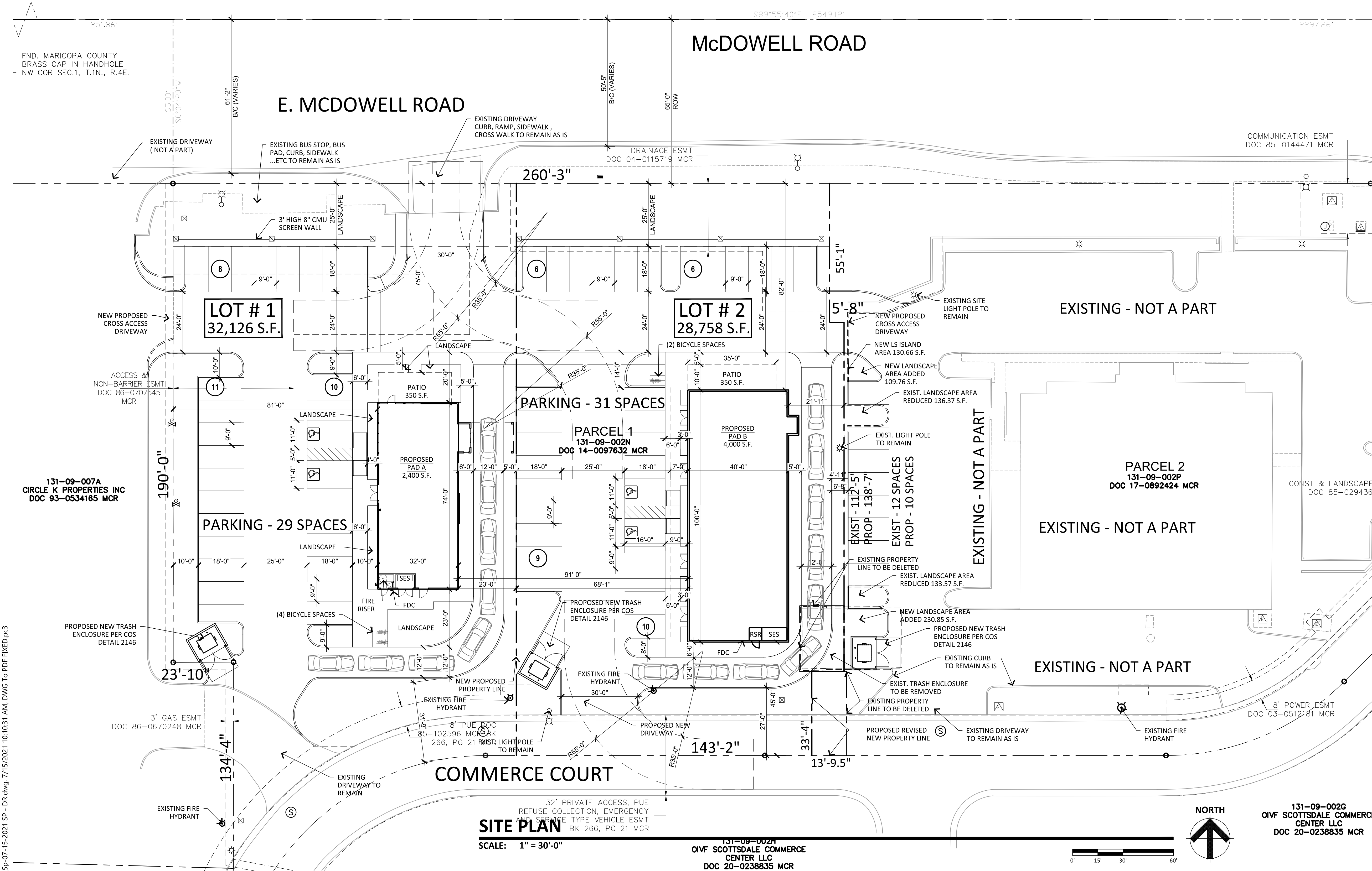
OPEN SPACE REQUIRED:
 UP TO 12' HEIGHT - 60,885 X 0.10 6,088.5 S.F.
 ABOVE 12' - 60,885X0.004(30-12) 4,383.7 S.F.
 TOTAL OPEN SPACES REQUIRE: 10,472.2 S.F.
 TOTAL FRONT OPEN SPACES REQUIRE: 50% 5,236.1 S.F.

PARKING REQUIRED:
 PAD-A: RESTAURANT: 1 PER 120 S.F. - 2400/120 20 SPACES
 PAD-A: OUTDOOR PATIO - (350 S.F.-350 / 350) 00 SPACES
 PAD-B: RESTAURANT: 1 PER 120 S.F. - 2400 / 120 20 SPACES
 PAD-A: OUTDOOR PATIO - (350 S.F.-350 / 350) 00 SPACES
 PAD-B: RETAIL: 1 PER 250 S.F. - 1600 / 250 07 SPACES
 TOTAL PARKING REQUIRED: 47 SPACES

PARKING PROVIDED:
 PAD-A 29 SPACES
 PAD-B 31 SPACES
 TOTAL PARKING PROVIDED: 60 SPACES

ACCESSIBLE SPACES REQUIRED: 03 SPACES
 ACCESSIBLE SPACES PROVIDED: 04 SPACES

BICYCLE SPACES REQUIRED: 10% - MIN. 2 06 SPACES
 BICYCLE SPACES PROVIDED: 06 SPACES



MCDOWELL - HAYDEN RETAIL
 8101 E MCDOWELL ROAD SCOTTSDALE AZ 85257
 E OF SEC OF MCDOWELL RD AND HAYDEN RD
 DATE: 07-15-2021 (PRELIMINARY)

SP-1 A
 RKA# 18107.00



P:\18000\18107\Drawings\Design Development\SP-07-15-2021.SP - DR.dwg, 7/15/2021 10:10:31 AM, DWG To PDF FIXED.plt

Site Code: 2
Station ID:
E COMMERCE CT W.O N COMMERCE CT

| Start Time | 20-Jul-21 Tue | EB | WB | | | | | | | Total |
|-------------|------------------|---------|-------|----------|---|---|---|---|---|-------|
| 12:00 AM | | 12 | 7 | | | | | | | 19 |
| 01:00 | | 5 | 2 | | | | | | | 7 |
| 02:00 | | 3 | 7 | | | | | | | 10 |
| 03:00 | | 0 | 4 | | | | | | | 4 |
| 04:00 | | 3 | 6 | | | | | | | 9 |
| 05:00 | | 7 | 12 | | | | | | | 19 |
| 06:00 | | 6 | 28 | | | | | | | 34 |
| 07:00 | | 9 | 34 | | | | | | | 43 |
| 08:00 | | 24 | 41 | | | | | | | 65 |
| 09:00 | | 17 | 38 | | | | | | | 55 |
| 10:00 | | 18 | 24 | | | | | | | 42 |
| 11:00 | | 27 | 33 | | | | | | | 60 |
| 12:00 PM | | 33 | 31 | | | | | | | 64 |
| 01:00 | | 23 | 30 | | | | | | | 53 |
| 02:00 | | 33 | 14 | | | | | | | 47 |
| 03:00 | | 36 | 28 | | | | | | | 64 |
| 04:00 | | 38 | 29 | | | | | | | 67 |
| 05:00 | | 42 | 29 | | | | | | | 71 |
| 06:00 | | 29 | 21 | | | | | | | 50 |
| 07:00 | | 26 | 13 | | | | | | | 39 |
| 08:00 | | 17 | 18 | | | | | | | 35 |
| 09:00 | | 11 | 15 | | | | | | | 26 |
| 10:00 | | 13 | 16 | | | | | | | 29 |
| 11:00 | | 10 | 5 | | | | | | | 15 |
| Total | | 442 | 485 | | | | | | | 927 |
| Percent | | 47.7% | 52.3% | | | | | | | |
| AM Peak | - | 11:00 | 08:00 | - | - | - | - | - | - | 08:00 |
| Vol. | - | 27 | 41 | - | - | - | - | - | - | 65 |
| PM Peak | - | 17:00 | 12:00 | - | - | - | - | - | - | 17:00 |
| Vol. | - | 42 | 31 | - | - | - | - | - | - | 71 |
| Grand Total | | 442 | 485 | | | | | | | 927 |
| Percent | | 47.7% | 52.3% | | | | | | | |
| ADT | | ADT 897 | | AADT 897 | | | | | | |

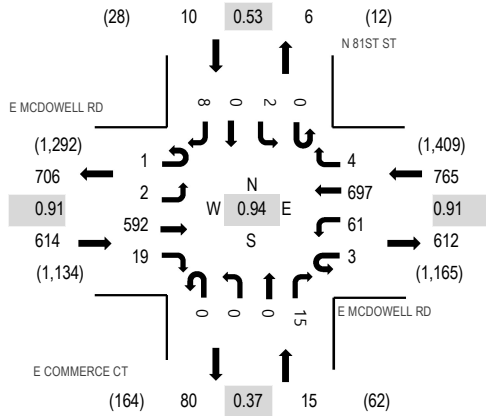
Location: 1 E COMMERCE CT & E MCDOWELL RD AM

Date: Tuesday, July 20, 2021

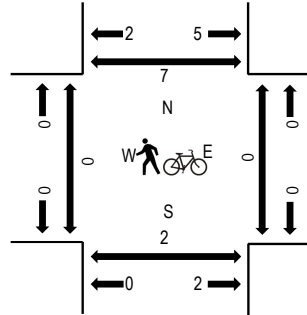
Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

| Interval Start Time | E MCDOWELL RD Eastbound | | | | E MCDOWELL RD Westbound | | | | E COMMERCE CT Northbound | | | | N 81ST ST Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | | | |
|------------------------|----------------------------|------|-------|-------|----------------------------|------|-------|-------|-----------------------------|------|------|-------|-------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|----|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South | North | |
| 7:00 AM | 0 | 0 | 119 | 2 | 0 | 15 | 125 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 4 | 272 | 1,265 | 0 | 0 | 1 | 1 |
| 7:15 AM | 0 | 0 | 107 | 3 | 2 | 19 | 138 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 7 | 278 | 1,361 | 0 | 0 | 1 | 1 |
| 7:30 AM | 0 | 4 | 159 | 7 | 0 | 20 | 153 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 0 | 1 | 355 | 1,387 | 0 | 0 | 1 | 2 |
| 7:45 AM | 0 | 1 | 143 | 5 | 1 | 16 | 192 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 360 | 1,404 | 0 | 0 | 0 | 2 |
| 8:00 AM | 1 | 0 | 161 | 6 | 1 | 18 | 173 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 2 | 368 | 1,368 | 0 | 0 | 1 | 2 |
| 8:15 AM | 0 | 0 | 128 | 5 | 0 | 14 | 150 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 304 | | 0 | 0 | 0 | 3 |
| 8:30 AM | 0 | 1 | 160 | 3 | 1 | 13 | 182 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 0 | 1 | 372 | | 0 | 0 | 1 | 0 |
| 8:45 AM | 0 | 1 | 114 | 4 | 0 | 14 | 157 | 1 | 0 | 0 | 0 | 0 | 31 | 0 | 1 | 0 | 1 | 324 | | 0 | 0 | 0 | 0 |
| Count Total | 1 | 7 | 1,091 | 35 | 5 | 129 | 1,270 | 5 | 0 | 0 | 0 | 0 | 62 | 0 | 7 | 0 | 21 | 2,633 | | 0 | 0 | 5 | 11 |
| Peak Hour | 1 | 2 | 592 | 19 | 3 | 61 | 697 | 4 | 0 | 0 | 0 | 0 | 15 | 0 | 2 | 0 | 8 | 1,404 | | 0 | 0 | 2 | 7 |

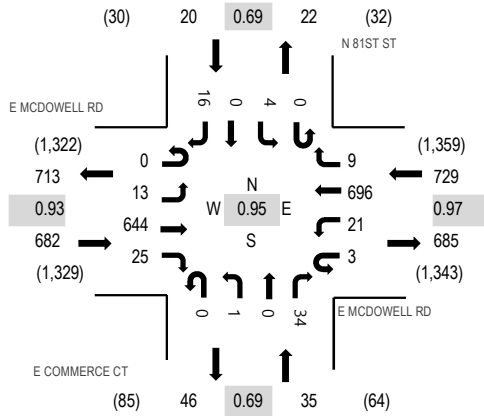
Location: 1 E COMMERCE CT & E MCDOWELL RD Noon

Date: Tuesday, July 20, 2021

Peak Hour: 12:15 PM - 01:15 PM

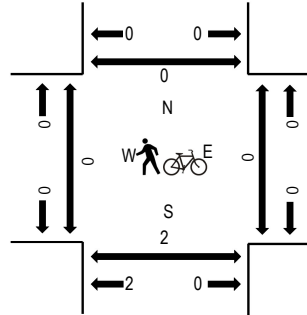
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

| Interval Start Time | E MCDOWELL RD Eastbound | | | | E MCDOWELL RD Westbound | | | | E COMMERCE CT Northbound | | | | N 81ST ST Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | | |
|------------------------|----------------------------|------|-------|-------|----------------------------|------|-------|-------|-----------------------------|------|------|-------|-------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South | North |
| 11:30 AM | 0 | 1 | 156 | 4 | 0 | 6 | 170 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 2 | 348 | 1,395 | 0 | 1 | 0 | 0 |
| 11:45 AM | 0 | 1 | 146 | 8 | 3 | 8 | 142 | 1 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 317 | 1,414 | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 2 | 161 | 2 | 1 | 4 | 160 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 6 | 345 | 1,432 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 174 | 8 | 0 | 7 | 171 | 4 | 0 | 0 | 0 | 13 | 0 | 2 | 0 | 6 | 385 | 1,466 | 0 | 0 | 1 | 0 |
| 12:30 PM | 0 | 2 | 154 | 11 | 0 | 7 | 181 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 3 | 367 | 1,387 | 0 | 0 | 1 | 0 |
| 12:45 PM | 0 | 3 | 143 | 4 | 0 | 4 | 169 | 2 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 5 | 335 | | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 8 | 173 | 2 | 3 | 3 | 175 | 3 | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 2 | 379 | | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 1 | 162 | 3 | 0 | 4 | 127 | 3 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 306 | | 0 | 0 | 1 | 0 |
| Count Total | 0 | 18 | 1,269 | 42 | 7 | 43 | 1,295 | 14 | 0 | 1 | 0 | 63 | 0 | 4 | 0 | 26 | 2,782 | | 0 | 1 | 3 | 0 |
| Peak Hour | 0 | 13 | 644 | 25 | 3 | 21 | 696 | 9 | 0 | 1 | 0 | 34 | 0 | 4 | 0 | 16 | 1,466 | | 0 | 0 | 2 | 0 |

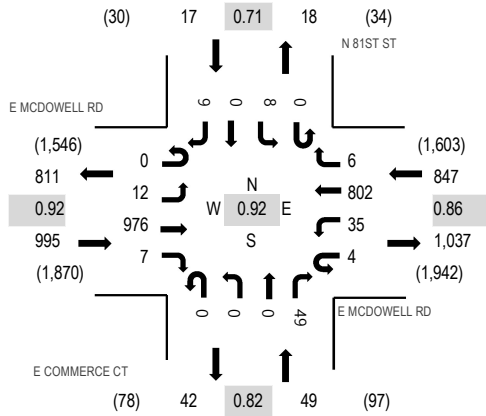
Location: 1 E COMMERCE CT & E MCDOWELL RD PM

Date: Tuesday, July 20, 2021

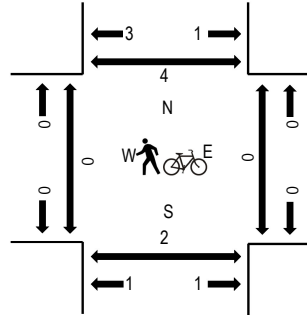
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

| Interval Start Time | E MCDOWELL RD Eastbound | | | | E MCDOWELL RD Westbound | | | | E COMMERCE CT Northbound | | | | N 81ST ST Southbound | | | | Total | Rolling Hour | Pedestrian Crossings | | | |
|------------------------|----------------------------|------|-------|-------|----------------------------|------|-------|-------|-----------------------------|------|------|-------|-------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
| | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | | | West | East | South | North |
| 4:00 PM | 0 | 1 | 222 | 4 | 0 | 7 | 189 | 2 | 0 | 0 | 0 | 19 | 0 | 2 | 0 | 1 | 447 | 1,692 | 0 | 0 | 0 | 2 |
| 4:15 PM | 1 | 1 | 188 | 2 | 1 | 3 | 219 | 0 | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 2 | 429 | 1,724 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 2 | 235 | 6 | 0 | 5 | 160 | 5 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 3 | 425 | 1,813 | 0 | 1 | 1 | 0 |
| 4:45 PM | 0 | 3 | 205 | 5 | 0 | 4 | 159 | 2 | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 1 | 391 | 1,894 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 4 | 268 | 0 | 1 | 3 | 183 | 1 | 0 | 0 | 0 | 15 | 0 | 3 | 0 | 1 | 479 | 1,908 | 0 | 0 | 1 | 3 |
| 5:15 PM | 0 | 2 | 272 | 2 | 1 | 5 | 214 | 3 | 0 | 0 | 0 | 15 | 0 | 3 | 0 | 1 | 518 | | 0 | 0 | 1 | 0 |
| 5:30 PM | 0 | 3 | 243 | 4 | 1 | 11 | 231 | 2 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 5 | 506 | | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 3 | 193 | 1 | 1 | 16 | 174 | 0 | 0 | 0 | 0 | 14 | 0 | 1 | 0 | 2 | 405 | | 0 | 0 | 0 | 0 |
| Count Total | 1 | 19 | 1,826 | 24 | 5 | 54 | 1,529 | 15 | 0 | 0 | 0 | 97 | 0 | 14 | 0 | 16 | 3,600 | | 0 | 1 | 3 | 6 |
| Peak Hour | 0 | 12 | 976 | 7 | 4 | 35 | 802 | 6 | 0 | 0 | 0 | 49 | 0 | 8 | 0 | 9 | 1,908 | | 0 | 0 | 2 | 4 |



Pedestrian & Bicycle Study

N-S STREET: Hayden Rd
E-W STREET: McDowell Rd

Date: 02/24/21
Day: WEDNESDAY

City: Scottsdale
Project #: 21-1101-01

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 6:30 AM | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 |
| 7:00 AM | 1 | 0 | 0 | 2 |
| 7:15 AM | 4 | 0 | 3 | 1 |
| 7:30 AM | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 1 | 0 |
| 8:00 AM | 2 | 0 | 0 | 0 |
| 8:15 AM | 1 | 0 | 1 | 3 |
| TOTAL | 8 | 0 | 5 | 6 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 6:30 AM | 0 | 0 | 0 | 1 |
| 6:45 AM | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 |
| 7:30 AM | 1 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 1 |

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 1 | 0 | 1 | 1 |
| 11:30 AM | 2 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 1 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 1 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 1 |
| 12:45 PM | 0 | 0 | 1 | 0 |
| TOTAL | 4 | 0 | 3 | 2 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 1 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 1 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 1 |

| PEDESTRIANS | | | | |
|--------------|-----------|----------|-----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 1 | 0 | 1 | 0 |
| 4:15 PM | 5 | 0 | 2 | 0 |
| 4:30 PM | 1 | 0 | 2 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 3 | 0 | 3 | 0 |
| 5:15 PM | 0 | 2 | 3 | 4 |
| 5:30 PM | 3 | 0 | 1 | 0 |
| 5:45 PM | 1 | 0 | 0 | 0 |
| TOTAL | 14 | 2 | 12 | 4 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:00 PM | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 1 | 1 |
| 4:45 PM | 0 | 3 | 0 | 3 |
| 5:00 PM | 0 | 0 | 0 | 1 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 2 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 3 | 1 | 5 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↔ | |
| Traffic Vol, veh/h | 3 | 592 | 19 | 64 | 697 | 4 | 0 | 0 | 15 | 2 | 0 | 8 |
| Future Vol, veh/h | 3 | 592 | 19 | 64 | 697 | 4 | 0 | 0 | 15 | 2 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 643 | 21 | 70 | 758 | 4 | 0 | 0 | 16 | 2 | 0 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 762 | 0 | 0 | 664 | 0 | 0 | - | - | 322 | 1163 | 1570 | 381 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 900 | 900 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 263 | 670 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 509 | - | - | 567 | - | - | 0 | 0 | 575 | 205 | 110 | 527 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 234 | 355 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 660 | 454 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 509 | - | - | 567 | - | - | - | - | 575 | 180 | 96 | 527 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 180 | 96 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 233 | 311 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 638 | 451 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.1 | 1 | 11.4 | 14.8 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 575 | 509 | - | - | 567 | - | - | 380 |
| HCM Lane V/C Ratio | 0.028 | 0.006 | - | - | 0.123 | - | - | 0.029 |
| HCM Control Delay (s) | 11.4 | 12.1 | - | - | 12.2 | - | - | 14.8 |
| HCM Lane LOS | B | B | - | - | B | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.4 | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↙ | ↑↑↑ | ↗ | ↙ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 13 | 644 | 25 | 24 | 696 | 9 | 0 | 0 | 34 | 4 | 0 | 16 |
| Future Vol, veh/h | 13 | 644 | 25 | 24 | 696 | 9 | 0 | 0 | 34 | 4 | 0 | 16 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 700 | 27 | 26 | 757 | 10 | 0 | 0 | 37 | 4 | 0 | 17 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 767 | 0 | 0 | 727 | 0 | 0 | - | - | 350 | 1122 | 1569 | 384 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 814 | 814 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 308 | 755 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 506 | - | - | 529 | - | - | 0 | 0 | 552 | 217 | 110 | 525 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 268 | 390 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 621 | 415 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 506 | - | - | 529 | - | - | - | - | 552 | 191 | 102 | 525 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 191 | 102 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 260 | 371 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 563 | 403 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|----|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.4 | | | 12 | | | 14.8 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 552 | 506 | - | - | 529 | - | - | 389 |
| HCM Lane V/C Ratio | 0.067 | 0.028 | - | - | 0.049 | - | - | 0.056 |
| HCM Control Delay (s) | 12 | 12.3 | - | - | 12.2 | - | - | 14.8 |
| HCM Lane LOS | B | B | - | - | B | - | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0.1 | - | - | 0.2 | - | - | 0.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 12 | 976 | 7 | 39 | 802 | 6 | 0 | 0 | 49 | 8 | 0 | 9 |
| Future Vol, veh/h | 12 | 976 | 7 | 39 | 802 | 6 | 0 | 0 | 49 | 8 | 0 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 1061 | 8 | 42 | 872 | 7 | 0 | 0 | 53 | 9 | 0 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 879 | 0 | 0 | 1069 | 0 | 0 | - | - | 531 | 1410 | 2055 | 440 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 960 | 960 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 450 | 1095 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 448 | - | - | 362 | - | - | 0 | 0 | 422 | 146 | 55 | 483 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 212 | 333 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 510 | 288 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 448 | - | - | 362 | - | - | - | - | 422 | 114 | 47 | 483 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 114 | 47 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 206 | 294 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 433 | 280 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.7 | | | 14.8 | | | 25.9 | | |
| HCM LOS | | | | | | | B | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 422 | 448 | - | - | 362 | - | - | 191 |
| HCM Lane V/C Ratio | 0.126 | 0.029 | - | - | 0.117 | - | - | 0.097 |
| HCM Control Delay (s) | 14.8 | 13.3 | - | - | 16.3 | - | - | 25.9 |
| HCM Lane LOS | B | B | - | - | C | - | - | D |
| HCM 95th %tile Q(veh) | 0.4 | 0.1 | - | - | 0.4 | - | - | 0.3 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↙ | ↑↑↑ | ↗ | ↙ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 3 | 601 | 19 | 65 | 707 | 4 | 0 | 0 | 15 | 2 | 0 | 8 |
| Future Vol, veh/h | 3 | 601 | 19 | 65 | 707 | 4 | 0 | 0 | 15 | 2 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 653 | 21 | 71 | 768 | 4 | 0 | 0 | 16 | 2 | 0 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 772 | 0 | 0 | 674 | 0 | 0 | - | - | 327 | 1179 | 1592 | 386 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 912 | 912 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 267 | 680 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 504 | - | - | 561 | - | - | 0 | 0 | 571 | 200 | 106 | 523 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 229 | 351 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 656 | 449 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 504 | - | - | 561 | - | - | - | - | 571 | 175 | 92 | 523 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 175 | 92 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 228 | 306 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 633 | 446 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.1 | 1 | 11.5 | 14.9 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 571 | 504 | - | - | 561 | - | - | 374 |
| HCM Lane V/C Ratio | 0.029 | 0.006 | - | - | 0.126 | - | - | 0.029 |
| HCM Control Delay (s) | 11.5 | 12.2 | - | - | 12.3 | - | - | 14.9 |
| HCM Lane LOS | B | B | - | - | B | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.4 | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↔ | |
| Traffic Vol, veh/h | 13 | 654 | 25 | 24 | 706 | 9 | 1 | 0 | 34 | 4 | 0 | 16 |
| Future Vol, veh/h | 13 | 654 | 25 | 24 | 706 | 9 | 1 | 0 | 34 | 4 | 0 | 16 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 711 | 27 | 26 | 767 | 10 | 1 | 0 | 37 | 4 | 0 | 17 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 777 | 0 | 0 | 738 | 0 | 0 | 1098 | - | 356 | 1136 | 1590 | 389 |
| Stage 1 | - | - | - | - | - | - | 739 | - | - | 824 | 824 | - |
| Stage 2 | - | - | - | - | - | - | 359 | - | - | 312 | 766 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | 6.44 | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 7.34 | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.74 | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | 3.82 | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 501 | - | - | 523 | - | - | 224 | 0 | 547 | 213 | 107 | 521 |
| Stage 1 | - | - | - | - | - | - | 301 | 0 | - | 263 | 385 | - |
| Stage 2 | - | - | - | - | - | - | 579 | 0 | - | 617 | 410 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 501 | - | - | 523 | - | - | 204 | - | 547 | 187 | 99 | 521 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 204 | - | - | 187 | 99 | - |
| Stage 1 | - | - | - | - | - | - | 293 | - | - | 256 | 366 | - |
| Stage 2 | - | - | - | - | - | - | 532 | - | - | 559 | 399 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.4 | | | 12.1 | | | 14.9 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | 547 | 501 | - | - | 523 | - | - | 384 |
| HCM Lane V/C Ratio | 0.068 | 0.028 | - | - | 0.05 | - | - | 0.057 |
| HCM Control Delay (s) | 12.1 | 12.4 | - | - | 12.2 | - | - | 14.9 |
| HCM Lane LOS | B | B | - | - | B | - | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0.1 | - | - | 0.2 | - | - | 0.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 12 | 990 | 7 | 40 | 814 | 6 | 0 | 0 | 49 | 8 | 0 | 9 |
| Future Vol, veh/h | 12 | 990 | 7 | 40 | 814 | 6 | 0 | 0 | 49 | 8 | 0 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 1076 | 8 | 43 | 885 | 7 | 0 | 0 | 53 | 9 | 0 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 892 | 0 | 0 | 1084 | 0 | 0 | - | - | 538 | 1431 | 2085 | 446 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 975 | 975 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 456 | 1110 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 441 | - | - | 356 | - | - | 0 | 0 | 417 | 142 | 52 | 479 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 207 | 328 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 506 | 283 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 441 | - | - | 356 | - | - | - | - | 417 | 110 | 44 | 479 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 110 | 44 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 201 | 288 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 428 | 275 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.8 | | | 14.9 | | | 26.5 | | |
| HCM LOS | | | | | | | B | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 417 | 441 | - | - | 356 | - | - | 186 |
| HCM Lane V/C Ratio | 0.128 | 0.03 | - | - | 0.122 | - | - | 0.099 |
| HCM Control Delay (s) | 14.9 | 13.4 | - | - | 16.5 | - | - | 26.5 |
| HCM Lane LOS | B | B | - | - | C | - | - | D |
| HCM 95th %tile Q(veh) | 0.4 | 0.1 | - | - | 0.4 | - | - | 0.3 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 10 | 612 | 19 | 99 | 711 | 6 | 0 | 0 | 45 | 2 | 3 | 8 |
| Future Vol, veh/h | 10 | 612 | 19 | 99 | 711 | 6 | 0 | 0 | 45 | 2 | 3 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 665 | 21 | 108 | 773 | 7 | 0 | 0 | 49 | 2 | 3 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|------|--------|---|--------|---|------|------|------|------|
| Conflicting Flow All | 780 | 0 | 0 | 686 | 0 | 0 | - | - | 333 | 1281 | 1701 | 390 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 993 | 993 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 288 | 708 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 499 | - | - | 553 | - | - | 0 | 0 | 566 | 174 | 91 | 520 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 201 | 322 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 638 | 436 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 499 | - | - | 553 | - | - | - | - | 566 | 133 | 72 | 520 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 133 | 72 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 197 | 259 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 570 | 426 | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|----|--|------|--|
| HCM Control Delay, s | 0.2 | | 1.6 | | 12 | | 26.7 | |
| HCM LOS | | | | | B | | D | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 566 | 499 | - | - | 553 | - | - | 180 |
| HCM Lane V/C Ratio | 0.086 | 0.022 | - | - | 0.195 | - | - | 0.079 |
| HCM Control Delay (s) | 12 | 12.4 | - | - | 13.1 | - | - | 26.7 |
| HCM Lane LOS | B | B | - | - | B | - | - | D |
| HCM 95th %tile Q(veh) | 0.3 | 0.1 | - | - | 0.7 | - | - | 0.3 |

HCM 6th TWSC
6: N Commerce Ct

07/26/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↔ | |
| Traffic Vol, veh/h | 23 | 668 | 25 | 67 | 713 | 12 | 0 | 0 | 73 | 4 | 4 | 16 |
| Future Vol, veh/h | 23 | 668 | 25 | 67 | 713 | 12 | 0 | 0 | 73 | 4 | 4 | 16 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 726 | 27 | 73 | 775 | 13 | 0 | 0 | 79 | 4 | 4 | 17 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 788 | 0 | 0 | 753 | 0 | 0 | - | - | 363 | 1268 | 1731 | 394 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 928 | 928 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 340 | 803 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 495 | - | - | 514 | - | - | 0 | 0 | 541 | 177 | 87 | 517 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 223 | 345 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 594 | 394 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 495 | - | - | 514 | - | - | - | - | 541 | 130 | 71 | 517 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 130 | 71 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 212 | 296 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 481 | 374 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.4 | | | 1.1 | | | 12.8 | | | 25.3 | | |
| HCM LOS | | | | | | | B | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 541 | 495 | - | - | 514 | - | - | 203 |
| HCM Lane V/C Ratio | 0.147 | 0.051 | - | - | 0.142 | - | - | 0.129 |
| HCM Control Delay (s) | 12.8 | 12.7 | - | - | 13.2 | - | - | 25.3 |
| HCM Lane LOS | B | B | - | - | B | - | - | D |
| HCM 95th %tile Q(veh) | 0.5 | 0.2 | - | - | 0.5 | - | - | 0.4 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↑↑↑ | ↗ | ↘ | ↑↑↑ | | | | ↗ | | ↕ | |
| Traffic Vol, veh/h | 17 | 998 | 7 | 68 | 818 | 7 | 0 | 0 | 73 | 8 | 2 | 9 |
| Future Vol, veh/h | 17 | 998 | 7 | 68 | 818 | 7 | 0 | 0 | 73 | 8 | 2 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | Yield | - | - | None |
| Storage Length | 85 | - | 172 | 220 | - | - | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 1085 | 8 | 74 | 889 | 8 | 0 | 0 | 79 | 9 | 2 | 10 |

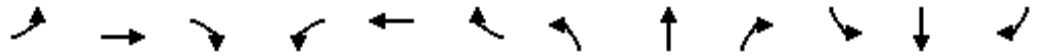
| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|---|------|--------|------|------|
| Conflicting Flow All | 897 | 0 | 0 | 1093 | 0 | 0 | - | - | 543 | 1511 | 2170 | 449 |
| Stage 1 | - | - | - | - | - | - | - | - | - | 1041 | 1041 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 470 | 1129 | - |
| Critical Hdwy | 5.34 | - | - | 5.34 | - | - | - | - | 7.14 | 6.44 | 6.54 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | - | - | - | 7.34 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | - | - | - | 6.74 | 5.54 | - |
| Follow-up Hdwy | 3.12 | - | - | 3.12 | - | - | - | - | 3.92 | 3.82 | 4.02 | 3.92 |
| Pot Cap-1 Maneuver | 439 | - | - | 353 | - | - | 0 | 0 | 414 | 127 | 46 | 477 |
| Stage 1 | - | - | - | - | - | - | 0 | 0 | - | 186 | 305 | - |
| Stage 2 | - | - | - | - | - | - | 0 | 0 | - | 496 | 277 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 439 | - | - | 353 | - | - | - | - | 414 | 83 | 35 | 477 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | - | - | - | 83 | 35 | - |
| Stage 1 | - | - | - | - | - | - | - | - | - | 178 | 241 | - |
| Stage 2 | - | - | - | - | - | - | - | - | - | 384 | 266 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 1.4 | | | 15.7 | | | 45.1 | | |
| HCM LOS | | | | | | | C | | | E | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 414 | 439 | - | - | 353 | - | - | 110 |
| HCM Lane V/C Ratio | 0.192 | 0.042 | - | - | 0.209 | - | - | 0.188 |
| HCM Control Delay (s) | 15.7 | 13.6 | - | - | 17.9 | - | - | 45.1 |
| HCM Lane LOS | C | B | - | - | C | - | - | E |
| HCM 95th %tile Q(veh) | 0.7 | 0.1 | - | - | 0.8 | - | - | 0.7 |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑↔ | | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↔ | |
| Traffic Volume (veh/h) | 130 | 482 | 79 | 93 | 514 | 94 | 141 | 405 | 69 | 83 | 327 | 156 |
| Future Volume (veh/h) | 130 | 482 | 79 | 93 | 514 | 94 | 141 | 405 | 69 | 83 | 327 | 156 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 141 | 524 | 86 | 101 | 559 | 102 | 153 | 440 | 75 | 90 | 355 | 170 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 298 | 946 | 152 | 261 | 1036 | 322 | 305 | 1111 | 345 | 247 | 692 | 311 |
| Arrive On Green | 0.09 | 0.21 | 0.21 | 0.08 | 0.20 | 0.20 | 0.09 | 0.22 | 0.22 | 0.07 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3456 | 4432 | 714 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3445 | 1550 |
| Grp Volume(v), veh/h | 141 | 400 | 210 | 101 | 559 | 102 | 153 | 440 | 75 | 90 | 350 | 175 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1742 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1591 |
| Q Serve(g_s), s | 1.9 | 5.2 | 5.4 | 1.4 | 4.9 | 2.7 | 2.1 | 3.7 | 1.9 | 1.2 | 4.6 | 4.9 |
| Cycle Q Clear(g_c), s | 1.9 | 5.2 | 5.4 | 1.4 | 4.9 | 2.7 | 2.1 | 3.7 | 1.9 | 1.2 | 4.6 | 4.9 |
| Prop In Lane | 1.00 | | 0.41 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.97 |
| Lane Grp Cap(c), veh/h | 298 | 727 | 372 | 261 | 1036 | 322 | 305 | 1111 | 345 | 247 | 684 | 320 |
| V/C Ratio(X) | 0.47 | 0.55 | 0.56 | 0.39 | 0.54 | 0.32 | 0.50 | 0.40 | 0.22 | 0.36 | 0.51 | 0.55 |
| Avail Cap(c_a), veh/h | 451 | 1504 | 770 | 382 | 2154 | 669 | 521 | 2667 | 828 | 382 | 1641 | 767 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.7 | 17.5 | 17.5 | 21.9 | 17.8 | 16.9 | 21.6 | 16.7 | 16.0 | 22.0 | 17.7 | 17.9 |
| Incr Delay (d2), s/veh | 1.2 | 0.7 | 1.3 | 0.9 | 0.4 | 0.6 | 1.3 | 0.2 | 0.3 | 0.9 | 0.6 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 1.7 | 1.9 | 0.5 | 1.6 | 0.9 | 0.8 | 1.2 | 0.6 | 0.5 | 1.5 | 1.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 22.8 | 18.1 | 18.9 | 22.8 | 18.2 | 17.5 | 22.9 | 16.9 | 16.3 | 22.9 | 18.3 | 19.3 |
| LnGrp LOS | C | B | B | C | B | B | C | B | B | C | B | B |
| Approach Vol, veh/h | | 751 | | | 762 | | | 668 | | | 615 | |
| Approach Delay, s/veh | | 19.2 | | | 18.7 | | | 18.2 | | | 19.3 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.1 | 16.8 | 8.3 | 16.6 | 8.9 | 16.0 | 8.8 | 16.1 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 5.5 | 26.0 | 5.5 | 22.0 | 7.5 | 24.0 | 6.5 | 21.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 3.2 | 5.7 | 3.4 | 7.4 | 4.1 | 6.9 | 3.9 | 6.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.8 | 0.0 | 3.1 | 0.1 | 2.8 | 0.1 | 3.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 18.9 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

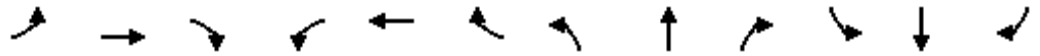
HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 168 | 706 | 123 | 131 | 618 | 92 | 190 | 369 | 56 | 111 | 462 | 179 |
| Future Volume (veh/h) | 168 | 706 | 123 | 131 | 618 | 92 | 190 | 369 | 56 | 111 | 462 | 179 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 183 | 767 | 134 | 142 | 672 | 100 | 207 | 401 | 61 | 121 | 502 | 195 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 477 | 1003 | 174 | 461 | 1144 | 355 | 483 | 1075 | 334 | 445 | 730 | 274 |
| Arrive On Green | 0.14 | 0.23 | 0.23 | 0.13 | 0.22 | 0.22 | 0.14 | 0.21 | 0.21 | 0.13 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3456 | 4379 | 759 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3655 | 1372 |
| Grp Volume(v), veh/h | 183 | 595 | 306 | 142 | 672 | 100 | 207 | 401 | 61 | 121 | 466 | 231 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1734 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1623 |
| Q Serve(g_s), s | 3.4 | 11.5 | 11.6 | 2.6 | 8.3 | 3.7 | 3.9 | 4.7 | 2.2 | 2.2 | 8.9 | 9.3 |
| Cycle Q Clear(g_c), s | 3.4 | 11.5 | 11.6 | 2.6 | 8.3 | 3.7 | 3.9 | 4.7 | 2.2 | 2.2 | 8.9 | 9.3 |
| Prop In Lane | 1.00 | | 0.44 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.85 |
| Lane Grp Cap(c), veh/h | 477 | 779 | 397 | 461 | 1144 | 355 | 483 | 1075 | 334 | 445 | 680 | 324 |
| V/C Ratio(X) | 0.38 | 0.76 | 0.77 | 0.31 | 0.59 | 0.28 | 0.43 | 0.37 | 0.18 | 0.27 | 0.69 | 0.71 |
| Avail Cap(c_a), veh/h | 491 | 919 | 468 | 491 | 1379 | 428 | 491 | 1451 | 451 | 491 | 968 | 461 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 27.6 | 25.3 | 25.4 | 27.6 | 24.4 | 22.6 | 27.7 | 23.8 | 22.8 | 27.7 | 26.1 | 26.3 |
| Incr Delay (d2), s/veh | 0.5 | 3.2 | 6.6 | 0.4 | 0.5 | 0.4 | 0.6 | 0.2 | 0.3 | 0.3 | 1.2 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 4.5 | 5.0 | 1.0 | 3.0 | 1.3 | 1.5 | 1.7 | 0.8 | 0.9 | 3.4 | 3.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 28.1 | 28.6 | 32.0 | 27.9 | 24.9 | 23.0 | 28.3 | 24.0 | 23.1 | 28.0 | 27.3 | 29.2 |
| LnGrp LOS | C | C | C | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1084 | | | 914 | | | 669 | | | 818 | |
| Approach Delay, s/veh | | 29.5 | | | 25.1 | | | 25.3 | | | 28.0 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.6 | 20.8 | 13.9 | 22.1 | 14.3 | 20.0 | 14.2 | 21.8 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 20.0 | 10.0 | 19.0 | 10.0 | 20.0 | 10.0 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.2 | 6.7 | 4.6 | 13.6 | 5.9 | 11.3 | 5.4 | 10.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 2.1 | 0.2 | 2.5 | 0.2 | 2.7 | 0.2 | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 27.2 | | | | | | | | |
| HCM 6th LOS | | | | C | | | | | | | | |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

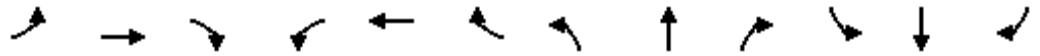
07/25/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑↔ | | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↔ | |
| Traffic Volume (veh/h) | 216 | 665 | 166 | 168 | 644 | 106 | 192 | 457 | 93 | 148 | 597 | 203 |
| Future Volume (veh/h) | 216 | 665 | 166 | 168 | 644 | 106 | 192 | 457 | 93 | 148 | 597 | 203 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 235 | 723 | 180 | 183 | 700 | 115 | 209 | 497 | 101 | 161 | 649 | 221 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 463 | 924 | 227 | 456 | 1144 | 355 | 460 | 1165 | 362 | 450 | 851 | 285 |
| Arrive On Green | 0.13 | 0.23 | 0.23 | 0.13 | 0.22 | 0.22 | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 |
| Sat Flow, veh/h | 3456 | 4088 | 1006 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3782 | 1265 |
| Grp Volume(v), veh/h | 235 | 601 | 302 | 183 | 700 | 115 | 209 | 497 | 101 | 161 | 583 | 287 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1689 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1643 |
| Q Serve(g_s), s | 4.7 | 12.3 | 12.5 | 3.6 | 9.1 | 4.5 | 4.1 | 6.2 | 3.9 | 3.1 | 11.9 | 12.1 |
| Cycle Q Clear(g_c), s | 4.7 | 12.3 | 12.5 | 3.6 | 9.1 | 4.5 | 4.1 | 6.2 | 3.9 | 3.1 | 11.9 | 12.1 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.77 |
| Lane Grp Cap(c), veh/h | 463 | 770 | 382 | 456 | 1144 | 355 | 460 | 1165 | 362 | 450 | 766 | 370 |
| V/C Ratio(X) | 0.51 | 0.78 | 0.79 | 0.40 | 0.61 | 0.32 | 0.45 | 0.43 | 0.28 | 0.36 | 0.76 | 0.78 |
| Avail Cap(c_a), veh/h | 476 | 883 | 438 | 467 | 1311 | 407 | 467 | 1366 | 424 | 467 | 910 | 439 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.8 | 26.9 | 27.0 | 29.4 | 25.8 | 24.0 | 29.6 | 24.4 | 23.6 | 29.4 | 26.8 | 26.9 |
| Incr Delay (d2), s/veh | 0.9 | 4.0 | 8.4 | 0.6 | 0.7 | 0.5 | 0.7 | 0.2 | 0.4 | 0.5 | 3.2 | 7.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 4.9 | 5.4 | 1.4 | 3.4 | 1.6 | 1.6 | 2.3 | 1.4 | 1.2 | 4.7 | 5.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.6 | 30.9 | 35.5 | 30.0 | 26.5 | 24.6 | 30.3 | 24.7 | 24.0 | 29.9 | 30.0 | 34.1 |
| LnGrp LOS | C | C | D | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1138 | | | 998 | | | 807 | | | 1031 | |
| Approach Delay, s/veh | | 32.1 | | | 26.9 | | | 26.0 | | | 31.1 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.1 | 22.9 | 14.3 | 22.7 | 14.4 | 22.7 | 14.4 | 22.6 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 19.8 | 10.0 | 19.2 | 10.0 | 19.8 | 10.2 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.1 | 8.2 | 5.6 | 14.5 | 6.1 | 14.1 | 6.7 | 11.1 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.6 | 0.2 | 2.2 | 0.2 | 2.5 | 0.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 29.3 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd





































07/25/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑↔ | | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↔ | |
| Traffic Volume (veh/h) | 132 | 489 | 72 | 94 | 522 | 95 | 143 | 411 | 70 | 84 | 332 | 158 |
| Future Volume (veh/h) | 132 | 489 | 72 | 94 | 522 | 95 | 143 | 411 | 70 | 84 | 332 | 158 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 143 | 532 | 78 | 102 | 567 | 103 | 155 | 447 | 76 | 91 | 361 | 172 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 883 | 127 | 465 | 926 | 288 | 524 | 1013 | 314 | 444 | 605 | 271 |
| Arrive On Green | 0.15 | 0.20 | 0.20 | 0.13 | 0.18 | 0.18 | 0.15 | 0.20 | 0.20 | 0.13 | 0.18 | 0.18 |
| Sat Flow, veh/h | 3456 | 4507 | 650 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3450 | 1546 |
| Grp Volume(v), veh/h | 143 | 400 | 210 | 102 | 567 | 103 | 155 | 447 | 76 | 91 | 356 | 177 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1753 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1592 |
| Q Serve(g_s), s | 2.3 | 6.6 | 6.7 | 1.6 | 6.3 | 3.5 | 2.4 | 4.7 | 2.5 | 1.4 | 5.9 | 6.3 |
| Cycle Q Clear(g_c), s | 2.3 | 6.6 | 6.7 | 1.6 | 6.3 | 3.5 | 2.4 | 4.7 | 2.5 | 1.4 | 5.9 | 6.3 |
| Prop In Lane | 1.00 | | 0.37 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.97 |
| Lane Grp Cap(c), veh/h | 515 | 667 | 343 | 465 | 926 | 288 | 524 | 1013 | 314 | 444 | 597 | 279 |
| V/C Ratio(X) | 0.28 | 0.60 | 0.61 | 0.22 | 0.61 | 0.36 | 0.30 | 0.44 | 0.24 | 0.20 | 0.60 | 0.63 |
| Avail Cap(c_a), veh/h | 564 | 1056 | 544 | 564 | 1583 | 492 | 564 | 1667 | 517 | 564 | 1111 | 520 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.1 | 22.4 | 22.5 | 23.6 | 23.1 | 22.0 | 23.1 | 21.6 | 20.7 | 23.9 | 23.3 | 23.4 |
| Incr Delay (d2), s/veh | 0.3 | 0.9 | 1.8 | 0.2 | 0.7 | 0.8 | 0.3 | 0.3 | 0.4 | 0.2 | 1.0 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.8 | 2.4 | 2.6 | 0.6 | 2.3 | 1.2 | 0.9 | 1.7 | 0.8 | 0.5 | 2.2 | 2.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.4 | 23.3 | 24.3 | 23.9 | 23.8 | 22.7 | 23.4 | 21.9 | 21.1 | 24.1 | 24.2 | 25.8 |
| LnGrp LOS | C | C | C | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 753 | | | 772 | | | 678 | | | 624 | |
| Approach Delay, s/veh | | 23.6 | | | 23.6 | | | 22.1 | | | 24.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.4 | 18.2 | 12.7 | 18.0 | 13.8 | 16.7 | 13.6 | 17.1 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 20.0 | 10.0 | 19.0 | 10.0 | 20.0 | 10.0 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 3.4 | 6.7 | 3.6 | 8.7 | 4.4 | 8.3 | 4.3 | 8.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 2.4 | 0.1 | 2.6 | 0.2 | 2.4 | 0.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 23.5 | | | | | | | | |
| HCM 6th LOS | | | | C | | | | | | | | |





































HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |   |    | |   |    |  |   |    |  |   |    |   |
| Traffic Volume (veh/h) | 171 | 717 | 125 | 133 | 627 | 93 | 193 | 375 | 57 | 113 | 469 | 182 |
| Future Volume (veh/h) | 171 | 717 | 125 | 133 | 627 | 93 | 193 | 375 | 57 | 113 | 469 | 182 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 186 | 779 | 136 | 145 | 682 | 101 | 210 | 408 | 62 | 123 | 510 | 198 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 475 | 1009 | 175 | 460 | 1153 | 358 | 480 | 1080 | 335 | 444 | 736 | 276 |
| Arrive On Green | 0.14 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 | 0.14 | 0.21 | 0.21 | 0.13 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3456 | 4379 | 759 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3655 | 1373 |
| Grp Volume(v), veh/h | 186 | 604 | 311 | 145 | 682 | 101 | 210 | 408 | 62 | 123 | 474 | 234 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1734 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1623 |
| Q Serve(g_s), s | 3.5 | 11.8 | 11.9 | 2.7 | 8.5 | 3.7 | 3.9 | 4.9 | 2.3 | 2.3 | 9.1 | 9.5 |
| Cycle Q Clear(g_c), s | 3.5 | 11.8 | 11.9 | 2.7 | 8.5 | 3.7 | 3.9 | 4.9 | 2.3 | 2.3 | 9.1 | 9.5 |
| Prop In Lane | 1.00 | | 0.44 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.85 |
| Lane Grp Cap(c), veh/h | 475 | 784 | 399 | 460 | 1153 | 358 | 480 | 1080 | 335 | 444 | 685 | 327 |
| V/C Ratio(X) | 0.39 | 0.77 | 0.78 | 0.32 | 0.59 | 0.28 | 0.44 | 0.38 | 0.18 | 0.28 | 0.69 | 0.72 |
| Avail Cap(c_a), veh/h | 488 | 913 | 465 | 488 | 1369 | 425 | 488 | 1442 | 447 | 488 | 961 | 458 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 27.8 | 25.5 | 25.6 | 27.8 | 24.5 | 22.7 | 28.0 | 23.9 | 22.9 | 27.9 | 26.2 | 26.4 |
| Incr Delay (d2), s/veh | 0.5 | 3.5 | 7.1 | 0.4 | 0.5 | 0.4 | 0.6 | 0.2 | 0.3 | 0.3 | 1.3 | 3.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 4.6 | 5.2 | 1.0 | 3.1 | 1.3 | 1.5 | 1.8 | 0.8 | 0.9 | 3.5 | 3.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 28.4 | 29.0 | 32.7 | 28.2 | 25.0 | 23.1 | 28.6 | 24.1 | 23.2 | 28.2 | 27.5 | 29.6 |
| LnGrp LOS | C | C | C | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1101 | | | 928 | | | 680 | | | 831 | |
| Approach Delay, s/veh | | 29.9 | | | 25.3 | | | 25.4 | | | 28.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.6 | 21.0 | 13.9 | 22.3 | 14.3 | 20.3 | 14.2 | 22.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 20.0 | 10.0 | 19.0 | 10.0 | 20.0 | 10.0 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.3 | 6.9 | 4.7 | 13.9 | 5.9 | 11.5 | 5.5 | 10.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 2.2 | 0.2 | 2.4 | 0.2 | 2.7 | 0.2 | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 27.4 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |   |    | |   |    |  |   |    |  |   |    |   |
| Traffic Volume (veh/h) | 219 | 675 | 168 | 171 | 654 | 108 | 195 | 464 | 94 | 150 | 606 | 206 |
| Future Volume (veh/h) | 219 | 675 | 168 | 171 | 654 | 108 | 195 | 464 | 94 | 150 | 606 | 206 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 238 | 734 | 183 | 186 | 711 | 117 | 212 | 504 | 102 | 163 | 659 | 224 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 461 | 929 | 229 | 454 | 1152 | 358 | 458 | 1172 | 364 | 448 | 857 | 286 |
| Arrive On Green | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 |
| Sat Flow, veh/h | 3456 | 4086 | 1007 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3783 | 1264 |
| Grp Volume(v), veh/h | 238 | 610 | 307 | 186 | 711 | 117 | 212 | 504 | 102 | 163 | 592 | 291 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1689 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1643 |
| Q Serve(g_s), s | 4.8 | 12.6 | 12.8 | 3.7 | 9.3 | 4.6 | 4.2 | 6.3 | 3.9 | 3.2 | 12.1 | 12.4 |
| Cycle Q Clear(g_c), s | 4.8 | 12.6 | 12.8 | 3.7 | 9.3 | 4.6 | 4.2 | 6.3 | 3.9 | 3.2 | 12.1 | 12.4 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.77 |
| Lane Grp Cap(c), veh/h | 461 | 774 | 384 | 454 | 1152 | 358 | 458 | 1172 | 364 | 448 | 771 | 372 |
| V/C Ratio(X) | 0.52 | 0.79 | 0.80 | 0.41 | 0.62 | 0.33 | 0.46 | 0.43 | 0.28 | 0.36 | 0.77 | 0.78 |
| Avail Cap(c_a), veh/h | 473 | 878 | 435 | 464 | 1303 | 404 | 464 | 1358 | 421 | 464 | 905 | 437 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.0 | 27.1 | 27.2 | 29.7 | 25.9 | 24.1 | 29.8 | 24.5 | 23.6 | 29.6 | 27.0 | 27.1 |
| Incr Delay (d2), s/veh | 0.9 | 4.3 | 9.1 | 0.6 | 0.7 | 0.5 | 0.7 | 0.3 | 0.4 | 0.5 | 3.4 | 7.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 5.1 | 5.6 | 1.5 | 3.5 | 1.6 | 1.7 | 2.3 | 1.4 | 1.3 | 4.8 | 5.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.0 | 31.4 | 36.2 | 30.3 | 26.7 | 24.6 | 30.6 | 24.8 | 24.0 | 30.1 | 30.4 | 34.8 |
| LnGrp LOS | C | C | D | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1155 | | | 1014 | | | 818 | | | 1046 | |
| Approach Delay, s/veh | | 32.6 | | | 27.1 | | | 26.2 | | | 31.6 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.2 | 23.1 | 14.3 | 22.9 | 14.4 | 22.9 | 14.4 | 22.8 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 19.8 | 10.0 | 19.2 | 10.0 | 19.8 | 10.2 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.2 | 8.3 | 5.7 | 14.8 | 6.2 | 14.4 | 6.8 | 11.3 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.6 | 0.2 | 2.2 | 0.2 | 2.5 | 0.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 29.6 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

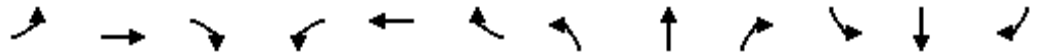
HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 132 | 523 | 72 | 96 | 529 | 100 | 168 | 439 | 70 | 120 | 332 | 158 |
| Future Volume (veh/h) | 132 | 523 | 72 | 96 | 529 | 100 | 168 | 439 | 70 | 120 | 332 | 158 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 143 | 568 | 78 | 104 | 575 | 109 | 183 | 477 | 76 | 130 | 361 | 172 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 511 | 891 | 121 | 465 | 933 | 290 | 535 | 945 | 293 | 499 | 603 | 270 |
| Arrive On Green | 0.15 | 0.20 | 0.20 | 0.13 | 0.18 | 0.18 | 0.15 | 0.19 | 0.19 | 0.14 | 0.17 | 0.17 |
| Sat Flow, veh/h | 3456 | 4548 | 616 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3450 | 1546 |
| Grp Volume(v), veh/h | 143 | 423 | 223 | 104 | 575 | 109 | 183 | 477 | 76 | 130 | 356 | 177 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1759 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1592 |
| Q Serve(g_s), s | 2.3 | 7.1 | 7.2 | 1.7 | 6.4 | 3.7 | 2.9 | 5.2 | 2.5 | 2.1 | 6.0 | 6.4 |
| Cycle Q Clear(g_c), s | 2.3 | 7.1 | 7.2 | 1.7 | 6.4 | 3.7 | 2.9 | 5.2 | 2.5 | 2.1 | 6.0 | 6.4 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.97 |
| Lane Grp Cap(c), veh/h | 511 | 667 | 345 | 465 | 933 | 290 | 535 | 945 | 293 | 499 | 595 | 278 |
| V/C Ratio(X) | 0.28 | 0.63 | 0.65 | 0.22 | 0.62 | 0.38 | 0.34 | 0.50 | 0.26 | 0.26 | 0.60 | 0.64 |
| Avail Cap(c_a), veh/h | 559 | 1047 | 541 | 559 | 1570 | 487 | 559 | 1652 | 513 | 559 | 1102 | 515 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.4 | 22.8 | 22.9 | 23.9 | 23.3 | 22.2 | 23.3 | 22.6 | 21.6 | 23.5 | 23.5 | 23.7 |
| Incr Delay (d2), s/veh | 0.3 | 1.0 | 2.0 | 0.2 | 0.7 | 0.8 | 0.4 | 0.4 | 0.5 | 0.3 | 1.0 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.8 | 2.6 | 2.8 | 0.6 | 2.3 | 1.3 | 1.1 | 1.9 | 0.9 | 0.8 | 2.2 | 2.3 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.7 | 23.8 | 24.9 | 24.1 | 23.9 | 23.0 | 23.7 | 23.1 | 22.0 | 23.8 | 24.5 | 26.1 |
| LnGrp LOS | C | C | C | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 789 | | | 788 | | | 736 | | | 663 | |
| Approach Delay, s/veh | | 24.1 | | | 23.8 | | | 23.1 | | | 24.8 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.4 | 17.4 | 12.8 | 18.1 | 14.1 | 16.8 | 13.6 | 17.3 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 20.0 | 10.0 | 19.0 | 10.0 | 20.0 | 10.0 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.1 | 7.2 | 3.7 | 9.2 | 4.9 | 8.4 | 4.3 | 8.4 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.6 | 0.1 | 2.7 | 0.2 | 2.4 | 0.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 23.9 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

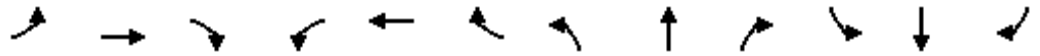
07/25/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑↔ | | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↔ | |
| Traffic Volume (veh/h) | 171 | 760 | 125 | 136 | 639 | 105 | 222 | 407 | 57 | 159 | 469 | 182 |
| Future Volume (veh/h) | 171 | 760 | 125 | 136 | 639 | 105 | 222 | 407 | 57 | 159 | 469 | 182 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 186 | 826 | 136 | 148 | 695 | 114 | 241 | 442 | 62 | 173 | 510 | 198 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 471 | 1042 | 171 | 457 | 1184 | 368 | 479 | 1039 | 323 | 467 | 732 | 275 |
| Arrive On Green | 0.14 | 0.24 | 0.24 | 0.13 | 0.23 | 0.23 | 0.14 | 0.20 | 0.20 | 0.14 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3456 | 4421 | 723 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3655 | 1373 |
| Grp Volume(v), veh/h | 186 | 635 | 327 | 148 | 695 | 114 | 241 | 442 | 62 | 173 | 474 | 234 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1740 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1623 |
| Q Serve(g_s), s | 3.5 | 12.5 | 12.7 | 2.8 | 8.7 | 4.3 | 4.6 | 5.4 | 2.3 | 3.3 | 9.3 | 9.7 |
| Cycle Q Clear(g_c), s | 3.5 | 12.5 | 12.7 | 2.8 | 8.7 | 4.3 | 4.6 | 5.4 | 2.3 | 3.3 | 9.3 | 9.7 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.85 |
| Lane Grp Cap(c), veh/h | 471 | 803 | 410 | 457 | 1184 | 368 | 479 | 1039 | 323 | 467 | 681 | 325 |
| V/C Ratio(X) | 0.40 | 0.79 | 0.80 | 0.32 | 0.59 | 0.31 | 0.50 | 0.43 | 0.19 | 0.37 | 0.70 | 0.72 |
| Avail Cap(c_a), veh/h | 483 | 903 | 462 | 483 | 1355 | 421 | 487 | 1426 | 443 | 483 | 946 | 451 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.2 | 25.7 | 25.8 | 28.2 | 24.5 | 22.8 | 28.6 | 24.9 | 23.6 | 28.2 | 26.6 | 26.8 |
| Incr Delay (d2), s/veh | 0.5 | 4.3 | 8.6 | 0.4 | 0.5 | 0.5 | 0.8 | 0.3 | 0.3 | 0.5 | 1.3 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 5.0 | 5.7 | 1.1 | 3.2 | 1.5 | 1.8 | 2.0 | 0.8 | 1.3 | 3.5 | 3.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 28.8 | 30.0 | 34.3 | 28.6 | 25.0 | 23.2 | 29.4 | 25.1 | 23.9 | 28.7 | 27.9 | 30.2 |
| LnGrp LOS | C | C | C | C | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 1148 | | | 957 | | | 745 | | | 881 | |
| Approach Delay, s/veh | | 31.1 | | | 25.3 | | | 26.4 | | | 28.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.2 | 20.6 | 14.0 | 22.9 | 14.4 | 20.3 | 14.3 | 22.6 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 20.0 | 10.0 | 19.0 | 10.1 | 19.9 | 10.0 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.3 | 7.4 | 4.8 | 14.7 | 6.6 | 11.7 | 5.5 | 10.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.3 | 0.2 | 2.2 | 0.3 | 2.7 | 0.2 | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 28.1 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 3: E McDowell Rd & N Hayden Rd

07/25/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑↔ | | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↑ | ↔ | ↔↔ | ↑↑↔ | |
| Traffic Volume (veh/h) | 219 | 704 | 168 | 173 | 659 | 113 | 215 | 487 | 94 | 180 | 606 | 206 |
| Future Volume (veh/h) | 219 | 704 | 168 | 173 | 659 | 113 | 215 | 487 | 94 | 180 | 606 | 206 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 238 | 765 | 183 | 188 | 716 | 123 | 234 | 529 | 102 | 196 | 659 | 224 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 458 | 950 | 225 | 452 | 1168 | 363 | 458 | 1160 | 360 | 454 | 855 | 286 |
| Arrive On Green | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 | 0.13 | 0.23 | 0.23 |
| Sat Flow, veh/h | 3456 | 4122 | 977 | 3456 | 5106 | 1585 | 3456 | 5106 | 1585 | 3456 | 3783 | 1264 |
| Grp Volume(v), veh/h | 238 | 630 | 318 | 188 | 716 | 123 | 234 | 529 | 102 | 196 | 592 | 291 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1702 | 1695 | 1728 | 1702 | 1585 | 1728 | 1702 | 1585 | 1728 | 1702 | 1643 |
| Q Serve(g_s), s | 4.8 | 13.1 | 13.3 | 3.7 | 9.4 | 4.9 | 4.7 | 6.7 | 4.0 | 3.9 | 12.2 | 12.5 |
| Cycle Q Clear(g_c), s | 4.8 | 13.1 | 13.3 | 3.7 | 9.4 | 4.9 | 4.7 | 6.7 | 4.0 | 3.9 | 12.2 | 12.5 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.77 |
| Lane Grp Cap(c), veh/h | 458 | 784 | 390 | 452 | 1168 | 363 | 458 | 1160 | 360 | 454 | 769 | 371 |
| V/C Ratio(X) | 0.52 | 0.80 | 0.81 | 0.42 | 0.61 | 0.34 | 0.51 | 0.46 | 0.28 | 0.43 | 0.77 | 0.78 |
| Avail Cap(c_a), veh/h | 466 | 868 | 432 | 461 | 1295 | 402 | 466 | 1357 | 421 | 461 | 900 | 434 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.3 | 27.2 | 27.3 | 29.9 | 25.9 | 24.2 | 30.2 | 25.0 | 23.9 | 30.0 | 27.2 | 27.3 |
| Incr Delay (d2), s/veh | 1.0 | 5.1 | 10.4 | 0.6 | 0.7 | 0.5 | 0.9 | 0.3 | 0.4 | 0.7 | 3.5 | 7.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 5.4 | 6.0 | 1.5 | 3.5 | 1.7 | 1.9 | 2.5 | 1.4 | 1.5 | 4.9 | 5.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.2 | 32.3 | 37.7 | 30.5 | 26.6 | 24.7 | 31.1 | 25.2 | 24.3 | 30.6 | 30.7 | 35.2 |
| LnGrp LOS | C | C | D | C | C | C | C | C | C | C | C | D |
| Approach Vol, veh/h | | 1186 | | | 1027 | | | 865 | | | 1079 | |
| Approach Delay, s/veh | | 33.5 | | | 27.1 | | | 26.7 | | | 31.9 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.3 | 23.0 | 14.3 | 23.3 | 14.4 | 22.9 | 14.4 | 23.1 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 19.9 | 10.0 | 19.1 | 10.1 | 19.8 | 10.1 | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.9 | 8.7 | 5.7 | 15.3 | 6.7 | 14.5 | 6.8 | 11.4 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.7 | 0.2 | 2.0 | 0.2 | 2.4 | 0.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 30.1 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |