



Traffic Impact Statement Power Road Park

Southeast Corner of Power Road
and Hobart Street

For Submittal to:
City of Mesa

September 2021

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Mesa, AZ 85201
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**Southeast Corner of Power Road
and Hobart Street**

September 28, 2021



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EXHIBIT 3.09

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INTRODUCTION

The City of Mesa has requested a traffic impact statement during the development review process to assess the impacts of the proposed project on the adjacent roadways. EPS Group has been retained to prepare the traffic impact statement.

The Power Road Park is proposed on the east side of Power Road south of Hobart Street with a portion also extending south of Halifax Drive in Mesa, Arizona. The site comprises approximately 6 acres. Access is proposed on Hobart Street and Halifax Drive. **Figure 1** provides a location map, and **Figure 2** depicts the site plan. The detailed site plan is included in **Appendix A**.

SCOPE OF STUDY

The objectives of the study are the following:

- ❖ Document and evaluate existing traffic conditions.
- ❖ Estimate new traffic generated by the proposed development and assign new trips to street system.
- ❖ Make recommendations, if needed.

EXISTING CONDITIONS

SURROUNDING LAND USE

The proposed site is currently vacant. The site is bordered by single-family subdivisions to the east and south. The Love of Christ Lutheran Church is north of Hobart Street and opposite the proposed site.

DESCRIPTION OF EXISTING TRANSPORTATION SYSTEM

The existing roadway geometry and intersection control is depicted in **Figure 3**. The proposed development will have access to Hobart Street and Halifax Street.

PEDESTRIAN AND BICYCLE FACILITIES

Dedicated bike lanes are provided in both directions on Power Road. Sidewalk is currently not provided adjacent to the site.

TRANSIT FACILITIES

Valley Metro bus route #184 has stops on Power Road just north of Hobart Street.

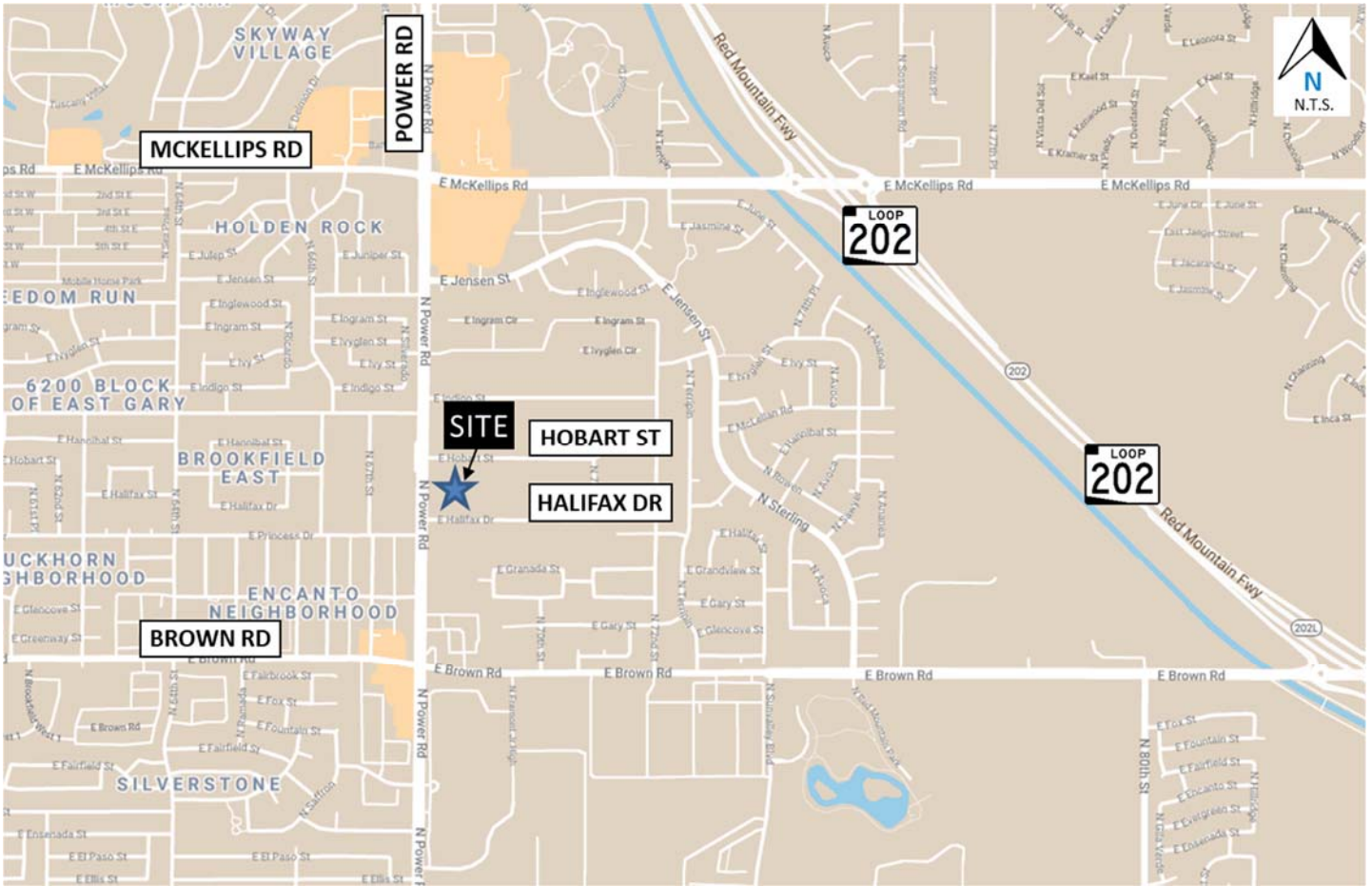


Figure 1: Location Map

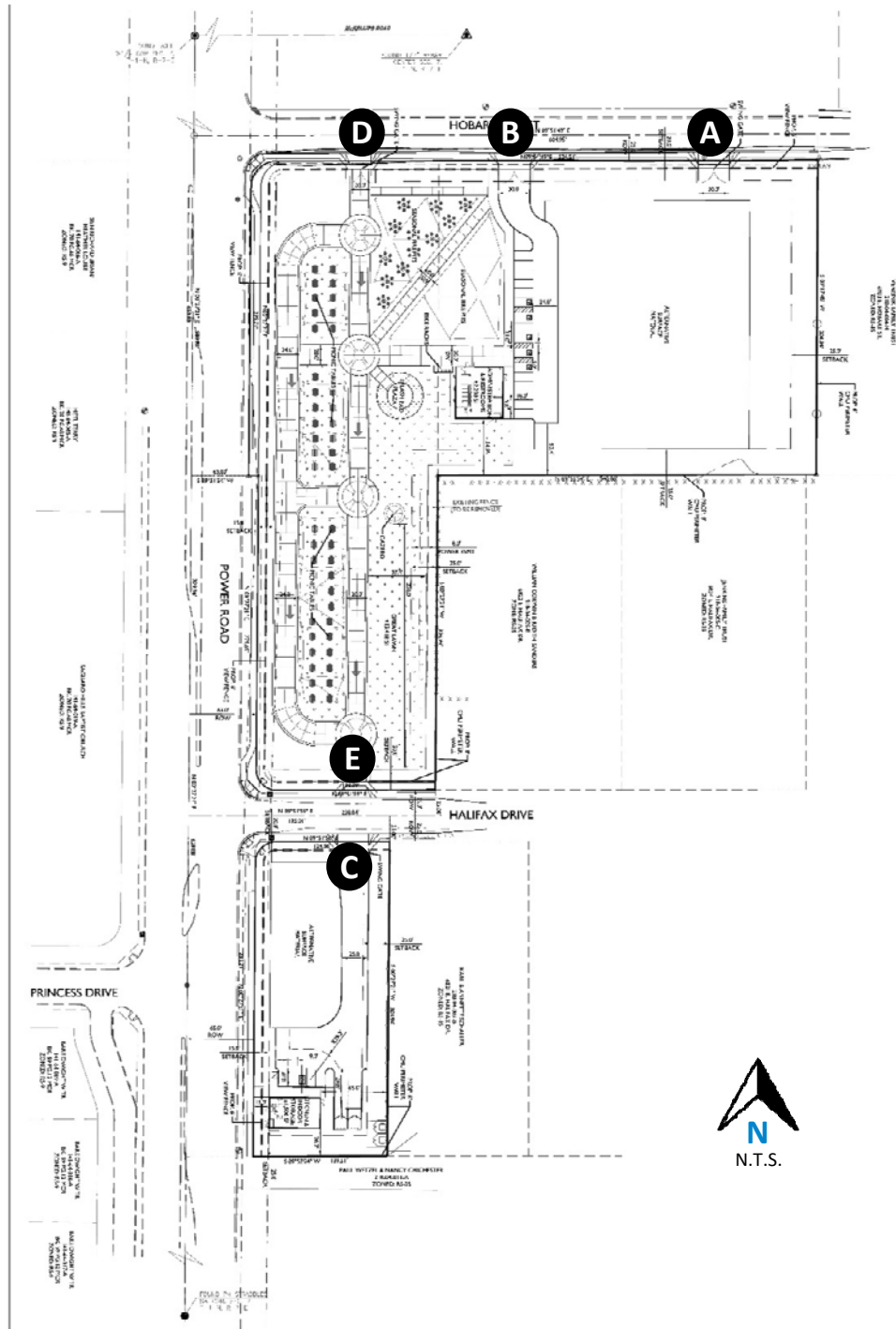


Figure 2: Site Plan



Figure 3: Existing Lane Configuration and Traffic Control

ROADWAYS

Power Road is a six-lane arterial roadway divided by a raised median with dedicated bike lanes in each direction. The posted speed limit is 45 mph. Per the City of Mesa website, the daily traffic count was 26,900 vpd in year 2020.

Hobart Street is a two-lane local street, which provides access to a church and single family homes. There is curb, sidewalk, and street lighting along the church frontage. However, the remainder of the street has no curbs, sidewalks, or street lighting. The speed limit is 25 mph. Hobart Street is controlled by a stop sign at its intersection with Power Road.

Halifax Drive is a two-lane local street, which provides access to single family homes. There are no curbs, sidewalks, or street lighting, and the speed limit is 25 mph. Halifax Drive is controlled by a stop sign at its intersection with Power Road.

PROPOSED DEVELOPMENT

SITE LOCATION, LAND USE, AND ACCESS

The Power Road Park is proposed on the east side of Power Road south of Hobart Street with a portion also extending south of Halifax Drive in Mesa, Arizona. The site comprises approximately 6 acres. Access will be from Hobart Street and Halifax Drive. The site plan is previously depicted in **Figure 2**. A detailed site plan is included in **Appendix A**.

PARKING AND CIRCULATION

The site plan provides a total of 244 parking spaces on-site. As detailed in **Appendix A**, the following areas will provide parking:

- Northeast Corner Overflow – 29 parking spaces
- Northeast Corner Lot – 161 parking spaces
- Great Lawn Overflow – 26 parking spaces
- Southwest Lot – 28 parking spaces

Per Section 11-32-3: PARKING SPACES REQUIRED of the City of Mesa Zoning Ordinance, criteria for required parking is provided for a multitude of different land uses. As provided in Table 11-32-3.A: *Required Parking Spaces by Use*, the following criteria is the most applicable to the proposed development:

Eating and Drinking Establishments (no drive through window) - 1 space per 75 square feet for indoor area, and 1 space per 200 square feet for outdoor seating area

Based on the above criteria of 1 space per 200 feet for outdoor seating area, a total of 177 parking spaces are required. The planned site plan will provide 67 more spaces than this requirement.

The northeast corner parking areas will be accessed from Hobart Street. Three driveways are proposed on Hobart Street. Driveway A and Driveway B will be utilized to access these areas. The driveway nearest to Power Road will serve as an emergency route and may be utilized by event vehicles. Two driveways are provided on Halifax Drive. The driveway to the north will serve as an emergency route and may be utilized by event vehicles. The southwest parking area is provided south of Halifax Drive and is accessed via Driveway C.

The City of Mesa conducted a parking count in April 2021 at the park site during an event. The parking count was conducted on Friday April 23, 2021 and Saturday April 24, 2021 from 5:00 PM to 8:00 PM. Parking for the event was counted each hour. The parking counts are included in **Appendix B**. The maximum parking demand was 251 occupied parking spaces and occurred on Friday evening at 7:00 PM.

To mitigate the potential deficit, dedicated rideshare parking spaces can be provided. The City of Chandler, a similar community, has adopted recommendations for reduced parking requirements based on the provision of dedicated rideshare spaces. Per Section 35-1808 of the Chandler Zoning Code, a reduction of ten (10%) can be considered for each passenger loading zone provided up to a maximum of forty (40%) according to the following guidelines:

- Commercial: 1 loading zone space per 50,000 sq. ft.

Based on these guidelines, a maximum reduction in required parking of up to 10% should be considered.

TRIP GENERATION

The trip generation for the project was estimated utilizing the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition*. The manual contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the manual include average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and generated trips for each categorized land use. The manual provides information for daily and peak hour trips.

The Power Road Park will have a seating area accommodating approximately 432 seats. ITE Land Use Code 932 – High-Turnover (Sit-down) Restaurant was utilized to represent the operation of the seating area.

Table 1 summarizes the trip generation for the proposed development, and **Appendix C** provides the generated trip calculation.

Table 1: Trip Generation

DESCRIPTION OF LAND USE				VEHICLE GENERATED TRIPS						
				Daily	Weekday PM Peak Hour			Saturday PM Peak Hour		
Land Use	ITE LUC	SIZE		Total	Enter	Exit	Total	Enter	Exit	Total
Power Road Park	932	432	Seats	800	164	151	315	121	108	229

Full build-out of the proposed development is anticipated to generate 800 daily trips (entering/exiting) with 315 trips (entering/exiting) during the Friday PM peak hour and 229 trips (entering/exiting) during the Saturday PM Peak Hour.

TRIP DISTRIBUTION AND ASSIGNMENT

The generated trips for the proposed development have been distributed and assigned to the surrounding street system to estimate future traffic from the development. The distribution was based on existing traffic patterns, population areas, and freeway access. The distribution percentages utilized in this analysis are depicted in **Figure 4**. Utilizing the trip generation and distribution, new trips from the proposed development were assigned to the study intersection and are also depicted in **Figure 4**.



Figure 4: Trip Distribution and Site Generated Trips

TRANSPORTATION IMPROVEMENTS

AUXILIARY LANES

When warranted, turn lanes permit separation of conflicting traffic movements and removes the slower turning traffic from the through traffic, thus improving capacity and reducing rear-end crashes. Determining the need for turn lanes is a key element of traffic impact studies.

Deceleration lanes may be provided at retail, multi-family, industrial or commercial sites depending on the size of the site. Hobart Street and Halifax Drive are local streets with low volumes and low speeds, and therefore auxiliary lanes are not required at the site driveways.

The Arterial/Local Street intersections of Power Road and Hobart Street and Power Road and Halifax Drive both have dedicated left-turn lanes in the southbound direction on Power Road. Right-turn lanes are typically not required at an Arterial/Local Street intersection. The City of Mesa Transportation Department determines where to install separate right-turn lanes.

PRINCIPAL FINDINGS AND RECOMMENDATIONS

- ❖ Full build-out of the proposed development is anticipated to generate 800 daily trips (entering/exiting) with 315 trips (entering/exiting) during the Friday PM peak hour and 229 trips (entering/exiting) during the Saturday PM Peak Hour.
- ❖ The projected daily traffic volume from the proposed development is 680 vpd on Hobart Street just east of Power Road, and 120 vpd on Halifax Drive just east of Power Road.
- ❖ The northeast corner parking areas will be accessed from Hobart Street. Three driveways are proposed on Hobart Street. Driveway A and Driveway B will be utilized to access these areas. The driveway nearest to Power Road will serve as an emergency route and may be utilized by event vehicles. Two driveways are provided on Halifax Drive. The driveway to the north will serve as an emergency route and may be utilized by event vehicles. The southwest parking area is provided south of Halifax Drive and is accessed via Driveway C.
- ❖ Adequate visibility shall be provided at all intersections, driveways, and for all traffic control devices. Sight visibility triangles (SVT) are to be drawn on the landscape plans and other plans as applicable, and the designer shall coordinate between the various design components of a project (roadway, landscaping, street lighting, signing, traffic signals, etc.) to ensure that the required visibility is maintained.

APPENDICES

APPENDIX A: Site Plan



APPENDIX B: Parking Counts

PARKING LOT STUDY

	Blue Reg	Blue Handicap	Yellow	Green	Red	Teal	TOTAL
Friday, April 23, 2021							
5:00 PM	15	1	12	0	3	44	75
6:00 PM	29	0	20	0	15	105	169
7:00 PM	81	1	24	0	41	104	251
8:00 PM	76	1	18	0	25	120	240
TOTAL	201	3	74	0	84	373	
Saturday, April 24, 2021							
5:00 PM	11	1	3	0	4	35	54
6:00 PM	17	0	5	0	5	73	100
7:00 PM	24	0	10	0	9	121	164
8:00 PM	26	0	7	0	11	111	155
TOTAL	78	1	25	0	29	340	



APPENDIX C: Trip Generation

Power Road Food Truck Park (21-0327)
Traffic Impact Statement
September 10, 2021

DESCRIPTION OF LAND USE						VEHICLE GENERATED TRIPS						Data Points	AVERAGE RATE or EQUATION						DIRECTIONAL DISTRIBUTION					
						Weekday PM Peak Hour			Saturday PM Peak Hour				Daily	Weekday PM Peak Hour		Saturday PM Peak Hour		Daily		Weekday PM		Sat PM		
Phase	Land Use	ITE Land Use Code (LUC)		SIZE		Enter	Exit	Total	Enter	Exit	Total					Enter	Exit	Enter	Exit	Enter	Exit			
	Power Road Park	932	High-Turnover (Sit-down) Restaurant	432	Seats	164	151	315	121	108	229		4.37		0.73		0.53		50%	50%	52%	48%	53%	47%

Source: ITE Trip Generation Manual 10th Edition

APPENDIX D: City of Mesa Relevant Excerpts

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard	
Residential		
Single Residence, detached or attached, including Manufactured Home Subdivisions	2 spaces per dwelling which may be in tandem with Zoning Administrator approval	
Multiple Residence (Typical)	See sub categories, below	
Apartments, multiple residence condominiums, and mixed-use residential, townhomes, patio homes and similar multiple residence buildings: development site located within ¼ mile radius (1320-feet) of bus rapid transit or light rail station, regardless of bedroom count	9 or fewer total units	1.4 spaces per dwelling unit
	10-25 total units	1.3 spaces per dwelling unit
	26 or more total units	1.2 spaces per dwelling unit
Apartments, multiple residence condominiums, mixed-use residential, townhomes, patio homes, and similar multiple residence buildings: development site not located within ¼ mile radius (1320-feet) of bus rapid transit or light rail station, regardless of bedroom count	2.1 spaces per dwelling unit	
Group Residential (Boarding House, Assisted Living, Group Homes for the Handicapped in excess of 10 persons)	1.2 spaces per dwelling unit for development with distinguishable dwelling units 1.0 space for each room plus 2 additional spaces for development with congregate dining and no distinguishable separate dwelling units	

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard
Group Home for the Handicapped (10 or less persons)	Same as Single Residence
Live-Work Units	2.1 spaces per unit
Residential Care, General (Nursing Home, Hospice)	1.0 space per room or dwelling unit plus 2 additional spaces
RV Parks	1 full-sized space for each RV space, plus 1 guest parking space per 10 (or fraction thereof) RV spaces for the overall development
RV Subdivisions	1 full-sized space and 1 golf cart space for each lot; plus 1 full-sized guest parking space per 10 (or fraction thereof) dwelling units for the overall development
Manufactured Home Parks	2 full-sized space for each lot (may include tandem spaces); plus 1 guest parking space per 10 (or fraction thereof) dwelling units for the overall development
Public Assembly and Schools	
Theaters, auditoriums, assembly halls, places of worship, clubs, lodges and fraternal buildings, funeral homes, community centers, libraries	1 space per 75 square feet used for public assembly

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard
Museums	1 space per 250 square feet used for public assembly plus accessory uses
Stadiums	1 space per 5 seats plus 1 space per 300 square feet for accessory uses
School, kindergarten through 9th grade	1 space per 75 feet for public assembly space, such as auditoriums and theaters, and 1 space per 600 square feet for all other areas
High schools, academies, colleges, universities, trade or vocational schools	1 space per 200 square feet
Health Care	
Medical/dental offices and outpatient clinics	1 space per 200 square feet
Hospitals, hospices, nursing, and convalescent homes	1 space per 400 square feet
Day care centers	1 space per 375 square feet
Group Commercial Developments	
Shell buildings (no specified use)	1 space per 275 square feet
Independent Commercial Buildings and Uses	
General offices, retail, and services	1 space per 375 square feet

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard
General auto repair, garages, service stations, car washes, and drive-through lubrication shops	1 space per 375 square feet, including service bays, wash tunnels, and retail areas
Hotels and motels	1 space per room or suite of rooms with individual exits plus ancillary use requirements
Eating and Drinking Establishments (no drive through window)	1 space per 75 square feet for indoor area, and 1 space per 200 square feet for outdoor seating area
Eating Establishments (with drive-through window and associated queuing drive aisle)	1 space per 100 square feet for indoor area, and 1 space per 200 square feet for outdoor seating area
Outdoor sales and service areas (car lots, plant nurseries, building supplies, etc.)	1 space per 375 square feet of sales and service building, but not less than 4 spaces per use
Temporary Outdoor Uses	
Swap Meets (See Section 11-20-29)	1 space per 300 square feet of designated vendor area
Farmer's Markets (See Section 11-20-29)	1 space per 400 square feet of designated vendor area
Recreation	
Bowling centers	5 spaces per lane plus ancillary use requirements

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard
Golf driving range	1 space per tee plus ancillary use requirements
Miniature golf, amusement parks, batting ranges, and water slides	1 space per 500 square feet of outdoor recreations area plus ancillary use requirements
Health space and clubs, gyms, and tennis, handball, and racquetball courts and clubs	1 space per 100 square feet, excluding courts, plus 2 spaces per court
Skating rinks and dance halls	1 space per 75 square feet used for recreational activities plus ancillary use requirements
Group Industrial Buildings and Uses	
Shell buildings (no specified use)	75% at 1 space per 500 square feet plus 25% at 1 space per 375 square feet
Independent Industrial Buildings and Uses	
Mini-storage (dead storage only)	4 spaces plus 2 for manager's quarters; Drive aisles between buildings shall maintain minimum distance of 24 feet
Warehousing and Storage, excluding Mini-storage	1 space per 900 square feet
Industrial	1 space per 600 square feet
Airport Buildings and Uses	

Table 11-32-3.A: Required Parking Spaces By Use

Use	Minimum Standard
Aircraft Hangars	2 per aircraft, plus ancillary use requirements
Public Facilities and Uses	
Fire stations	1 space per bed, plus 1 space per 75 square feet for Community Room
Police Substations	1 space per 300 square feet, plus 1 space per 75 square feet for Community Room, plus ancillary use requirements

Section 207 - Street Widening

207.1 Projects widening existing pavement are required to provide the necessary design to install and achieve a straight raised crown per Mesa Standard Detail M-19.01.

207.2 Projects widening existing pavement are required to sawcut and remove a two-foot (2') minimum section of the existing pavement continuous along the edge of the existing pavement.

207.3 Projects that are required to widen existing pavement shall provide on the profile view as a minimum, existing centerline and existing edge of pavement grades at one hundred foot (100') intervals.

207.4 When existing paving has been installed without surface course, the developing project shall install surface course to the centerline. The surface course shall be tapered beyond the centerline to provide a smooth transition. The Engineer shall assess the amount of tapering required to make a smooth transition to the existing pavement.

207.5 The Engineer will be required to investigate existing pavement for composition, structural capacity and stability. If after the Engineer's investigation, the City determines the existing pavement section is below current standards, the engineer shall call out a sawcut at the construction centerline and replacement of the existing pavement with new pavement per City standards.

Section 208 – Turn and Deceleration Lanes

208.1 Right- and left-turn lanes for major arterial intersections shall be designed according to the M-46 and M-47 series of the Mesa Standard Details.

208.2 Some arterial-to-arterial intersections may not include a dedicated right-turn lane. The City of Mesa Transportation Department will determine when a right-turn lane will be eliminated from the intersection design. A right-turn lane may be eliminated when the approach includes a wider median with a pedestrian refuge. The right-turn lane may also be eliminated when the added pedestrian crossing time negatively impacts signal timing, or if available approach width is physically constrained.

208.3 A site driveway may be located within the right-turn storage portion of the intersection but should not be within the taper of the right-turn lane. The driveway must not be located closer than one hundred feet (100') from the cross street per Mesa Standard Detail M-42. A deceleration lane may not be developed within this space.

208.4 A dedicated right-turn lane or deceleration lane added at the entrance of a development is beneficial in that it allows entering vehicles to slow down and complete a right turn out of the through traffic flow, reducing the disruption to through traffic caused by driveway activity, and reducing the potential for rear-end accidents.

208.4.1 Deceleration lanes may be provided at retail, multi-family, industrial or commercial sites depending on the size of the site. Generally, deceleration lanes should be provided at retail sites with 40,000 gross square feet or more of building area. Multi-family and private street residential developments should provide deceleration lanes if there are 100 or more units per access point for the site. Industrial parks with 200,000 gross square feet or more of building area, business parks and general office buildings with 100,000 gross square feet or more, and medical office buildings

with 40,000 gross square feet or more should provide deceleration lanes. Smaller developments may need deceleration lanes also, based on site-specific conditions. Institutional sites such as hospitals, schools, colleges, and universities are large enough to warrant deceleration lanes in most cases. Deceleration lanes shall be provided for all of the driveways along a site unless it is mainly used for staff, service and delivery vehicles, and it is separated from the main parking area. A queuing analysis shall be conducted to determine recommended storage lengths for all turn lanes serving the site as well as at adjacent intersections.

208.4.2 A typical deceleration lane for a site driveway shall not be within the taper for the intersection. It shall be designed per Figure 2.2. and provide at least 150 feet of storage, a 100-foot taper or reverse curve, and a 12-foot wide lane. Longer storage or tapers may be necessary depending on the site.

Section 209 - Pavement Tapers

209.1 Projects are required to provide sufficient pavement tapers at all necessary locations (such as the beginning or end of a project) to properly guide traffic.

209.2 The pavement section for tapers shall be per Mesa Standard Detail M-19.01.

209.3 Pavement tapers shall be constructed with a thickened edge per M.A.G. Standard Detail 201.

209.4 **Taper Length Formulas:** Taper lengths for merging traffic (lane drop) situations are calculated by the following formulas:

When the design speed is 40 mph or Less:

$$TL = \frac{W * S^2}{60}$$

When the design speed is 45 mph or greater:

$$TL = W * S$$

TL = Taper Length in Feet
S = Design Speed in Miles per Hour.
The design speed is five (5) mph over the speed limit
W = Width in feet of the offset between the edge of the travel lane and the edge of the lane after the taper

209.5 Taper length for non-merging (lane introduction) traffic situation (such as where pavement widens with traffic) is normally fifty feet (50') minimum. However, there may be some instances when more than fifty-feet (50') of taper may be required. The requirement for a longer taper will be determined on a case-by-case basis by the City.

209.6 The Engineer shall investigate the existing conditions and if determined to be substandard the project shall saw cut and remove any existing pavement tapers when extending or installing new pavement improvements.

Section 210 - Curb and Gutter

210.1 **Vertical Curbing:** Vertical curb and gutter is required in all residential, commercial or industrial subdivisions except Suburban Ranch Residential Subdivisions and except where roll type curb is permitted as discussed below. The vertical height of the curb shall be six-inch (6") on streets unless otherwise approved to match existing (such as what exists within the downtown area). Installation shall be per

210.9 Transverse (crossing) valley gutters are prohibited from being used within the City. If a transverse valley gutter is proposed, it must be approved by the Engineering and Transportation Departments.

210.10 **Landscaping:** Trees shall be a minimum of 7' from the back of curb.

Section 211 - Sight Distance and Visibility

Adequate visibility shall be provided at all intersections, driveways, and for all traffic control devices. Sight visibility triangles (SVT) are to be drawn on the landscape plans and other plans as applicable, and the designer shall coordinate between the various design components of a project (roadway, landscaping, street lighting, signing, traffic signals, etc.) to ensure that the required visibility is maintained.

211.1 Intersection and Driveway Sight Distance

211.1.1 In order to provide the opportunity for vehicles to safely cross a roadway or make left or right turns, adequate sight distance must be provided at all street and driveway intersections. Sight distance must also be provided for left turning traffic turning from the major road. The required intersection sight distance varies according to the traffic speed and width of the major road. A designer may determine the intersection sight distance triangles from their own calculations as long as they are based on the latest edition of the Policy on Geometric Design of Highways and Streets (AASHTO Green Book) and submitted with the plans. The design speed shall be 5 mph higher than the posted speed limit of the road unless approved otherwise by the City Traffic Engineer.

211.1.2 Intersection sight distance triangles for the most common street conditions are shown on [Figure 2.3](#), which is to be used for straight portions of roadway only. For curved portions of roadway or skewed intersections, the designer must calculate the intersection sight distance based on the latest edition of the AASHTO Green Book, or contact the Transportation Department for assistance.

211.1.3 The designer shall consider that other vehicles, such as opposing left-turn vehicles, can block sight distance and the design must account for this possibility. This is particularly evident along curves.

211.1.4 SVTs shall be clear of fences, walls, shrubbery, trees and any other obstructions to vision between a height of two and one-half feet (2.5') and eight feet (8') above the sidewalk or to fourteen feet (14') above the roadway. However, trees may be considered within SVTs as long as they are a single trunk variety with a diameter of no more than twelve inches (12") at full growth, their canopies are planted and maintained at eight feet (8') above the sidewalk or fourteen feet (14') above the roadway, and they are not spaced in a manner that creates a picket fence effect, as determined by the Transportation Department. Any trees that are to be located within SVTs must be reviewed and approved by the Transportation Department. Field changes may be required for the acceptance of a landscaping permit if it is found that the SVT is adversely impacted by new landscaping.

211.2 Visibility of Traffic Control Devices

211.2.1 Stop Signs: All stop signs shall be fully visible to approaching traffic from a distance no less than the stopping sight distance, which is to be calculated per the latest edition of the AASHTO Green Book based on a design speed of 5 mph over the speed limit. Stopping sight distance triangles for approaches controlled by stop signs are shown on Figure 2.4. There shall be no fence, wall, shrubbery, tree, or any other obstruction to vision between a height of two and one-half feet (2.5') and ten feet (10') above the sidewalk within the stopping sight distance triangle approaching a stop sign.

211.2.2 Traffic Signals: Visibility of traffic signal indications shall be maintained per Section 4D.12 of the 2009 Manual on Uniform Traffic Control Devices.

211.2.3 Other Traffic Control Devices: Visibility of all other traffic control devices has to be maintained. For instance, landscaping along a roadway shall be placed in a manner that does not block signing.

211.3 There should not be interference with the line of sight of a driver such as the overgrowth of a plant that is on the edge of the SVT.

Section 212 - Raised Medians

212.1 Raised median islands shall be installed in accordance with the adopted City of Mesa 2040 Transportation Plan as discussed in Section 202.4.

212.2 Median Curbs: Median curb shall be installed per M.A.G. Standard Detail 222, Type "A". In certain situations, the City may require curb and gutter to be constructed per M.A.G. Standard Detail 220, Type "A".

212.3 Median Widths: Median widths shall be as specified by the Transportation Department. Standard widths are sixteen feet (16') from face of curb to face of curb on full width medians and four feet (4') from face of curb to face of curb within a left turn traffic storage area. Median widths at arterial intersections shall vary in width as noted in the M-46 series of Mesa Standard Details.

212.4 Left Turn Lanes: Standard left turn lanes within a median shall have one hundred and fifty (150') of storage and one hundred feet (100') of reverse curve. Left turn lanes within a median at an arterial intersection shall have two hundred and fifty feet (250') of storage and one hundred and twenty feet (120') of reverse curve.

212.5 Termination: Medians shall terminate in a bull nose per M.A.G. Standard Detail 223. Medians shall terminate at a point perpendicular to the curb return adjacent to the median's bullnose, or as directed by the City.

212.6 Median Openings: Raised medians on major streets are provided to reduce conflicts and improve traffic flow. Careful consideration should be given to requests for median cuts to ensure that the purpose of the median is not compromised. There are two (2) types of median openings used in Mesa. The full access opening allows left turns from the street into a site as well as left turns from a site onto the street. The partial access opening allows left turns from the street into a site, but it prohibits left turns from a site onto the street. The partial access opening allows fewer traffic conflicts and has a lower potential for