

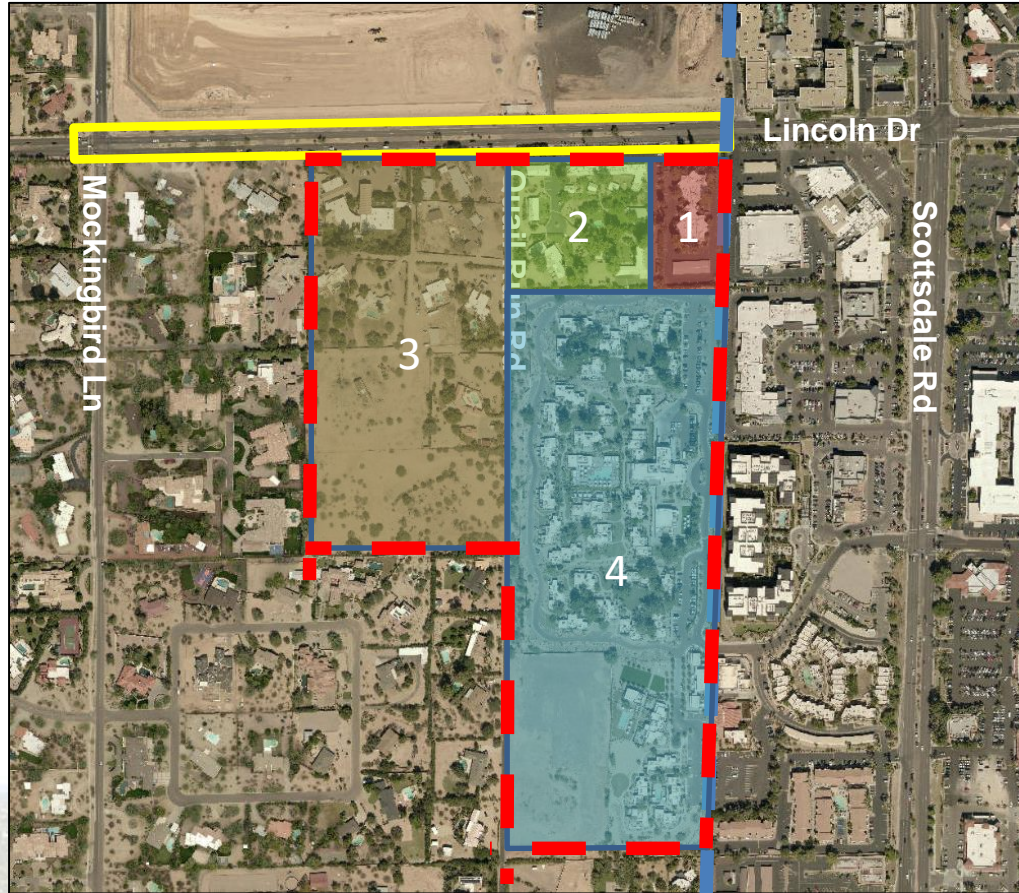
# **TOWN OF PARADISE VALLEY**

## **Lincoln Drive Median Improvements**

**February 28, 2019**



# PROJECT LIMITS



Town Limits 

Project Limits 

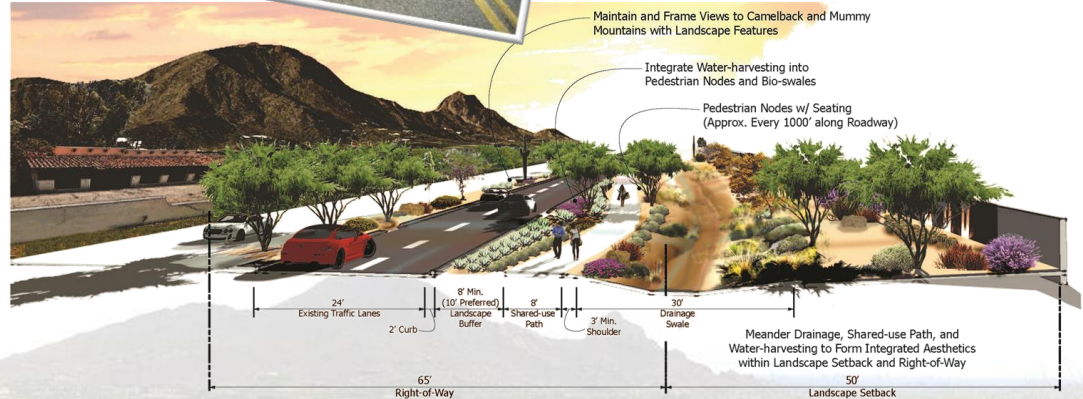
South Lincoln  
Development Area 

1	Lincoln Medical Plaza
2	Smoke Tree Resort
3	South Lincoln Development
4	Andaz Resort



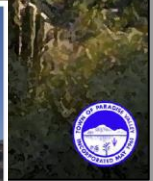
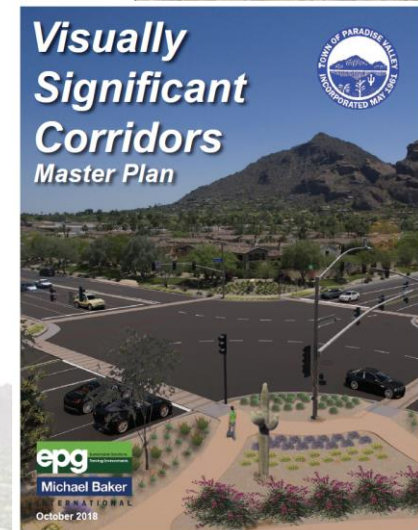
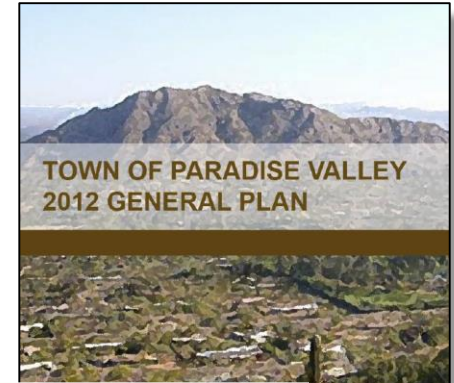
# PROJECT SCOPE

- **Reconstruct Lincoln Drive between Mockingbird Lane and Town Limits**
- **Improvement include:**
  - **Landscaped Medians**
  - **Traffic Signal at Quail Run**
  - **Sewer Line Extension**
  - **Meandering Sidewalks**
  - **Landscaping**
  - **Drainage Structures**



# DESIGN CONSIDERATIONS

- What drives design?
  - General Plan, specifically Mobility Element
  - Five Star Development Agreement
  - Engineering Standards (AASHTO, CoS, MCDOT)
  - Visually Significant Corridors Master Plan
  - Ultimate Buildout of Corridor



# LINCOLN MEDIAN ACCESS: TIMELINE

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## September 13, 2018 Town Council Meeting

- Lincoln Roadway Improvements 30% Design Concept Outlined
- Median improvements necessary regardless of development on south side of Lincoln Dr.
- Full Median from Mockingbird to Town Limits
- Westbound Left In Only at Applewood Pet Resort's East Entrance
- Staff to research safe access options for Lincoln Medical Plaza and Smoke Tree Resort

## December 6, 2018 Town Council Work Study

- Left In/Left Out for Applewood Pet Resort at East Entrance
- Option #1: Left In/Left Out for both Lincoln Medical Plaza & Smoke Tree Resort
- Option #2: Shared Access (Left In/Left Out) for Lincoln Medical Plaza & Smoke Tree Resort
- Option #3: Raised Median (Right In/Right Out Only) for Lincoln Medical Plaza & Smoke Tree Resort

## January 24, 2019 Town Council Work Study

- Left In/Left Out for Applewood Pet Resort at West Entrance
- Shared Access for Lincoln Medical Plaza & Smoke Tree Resort To Accommodate Vehicle Storage & Deceleration
- Evaluate 40mph Speed Limit
- Evaluate Pedestrian Safety
- Provide Median Options from Mockingbird Lane to Quail Run Road
- Provide Full Median Options
- Provide Two Way Left turn Lane Option for Smoke Tree Resort & Lincoln Medical Plaza Access



# KIMLEY-HORN FIELD OBSERVATIONS

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**Kimley-Horn conducted field observations on Tuesday October 30<sup>th</sup> during the morning (7:30am to 8:30am) and evening from (4:30pm to 5:45pm). Key observations:**

- Eastbound traffic backed up past both Lincoln Medical Plaza entrances and the eastern Smoke Tree Resort entrance.
- Three of these events were observed in the AM peak hour and five were observed in the PM peak hour.
- Traffic backup occurred in inner most eastbound lane.
- Outside lane was free flowing.
- Eastbound traffic that was backed up provided gaps for left turning vehicles which caused “near miss collisions”.



# KIMLEY-HORN FIELD OBSERVATIONS

Eastbound Lincoln Drive traffic backup past Smoke Tree Resort eastern entrance.



# SPEED LIMIT EVALUATION

## Traffic Volume and Speed Data Collection

- Traffic counters were set out the week of January 14<sup>th</sup>.
- Weekday westbound 85<sup>th</sup> percentile speed was 43 mph
- Weekday eastbound 85<sup>th</sup> percentile speed was 40 mph
- Weekday average westbound traffic was 6,800 vpd
- Weekday average eastbound traffic was 4,700 vpd
- Current speed limit is appropriately set a 40 mph

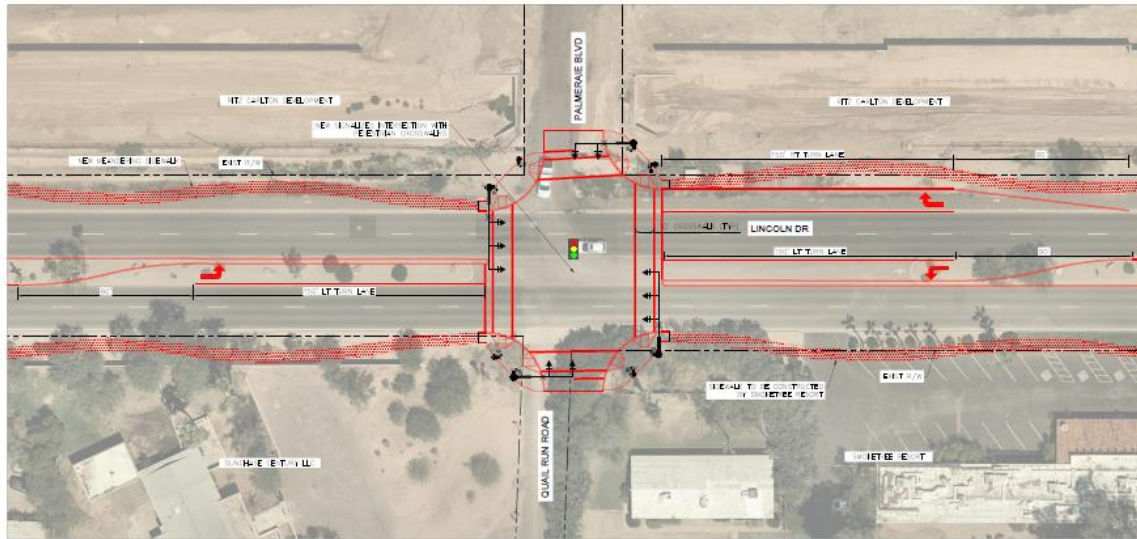
The 3<sup>rd</sup> party traffic engineer recommends keeping the posted speed limit at 40mph based upon speed data collected, proposed median improvement options and proposed development along the corridor.





# PEDESTRIAN SAFETY

The Lincoln Roadway Improvements will include meandering sidewalks on both the north and south sides of Lincoln Dr. as well as a signalized intersection at Quail Run Rd. with crosswalks. The Smoke Tree Resort and Lincoln Medical redevelopment projects will include sidewalks with their respective construction.



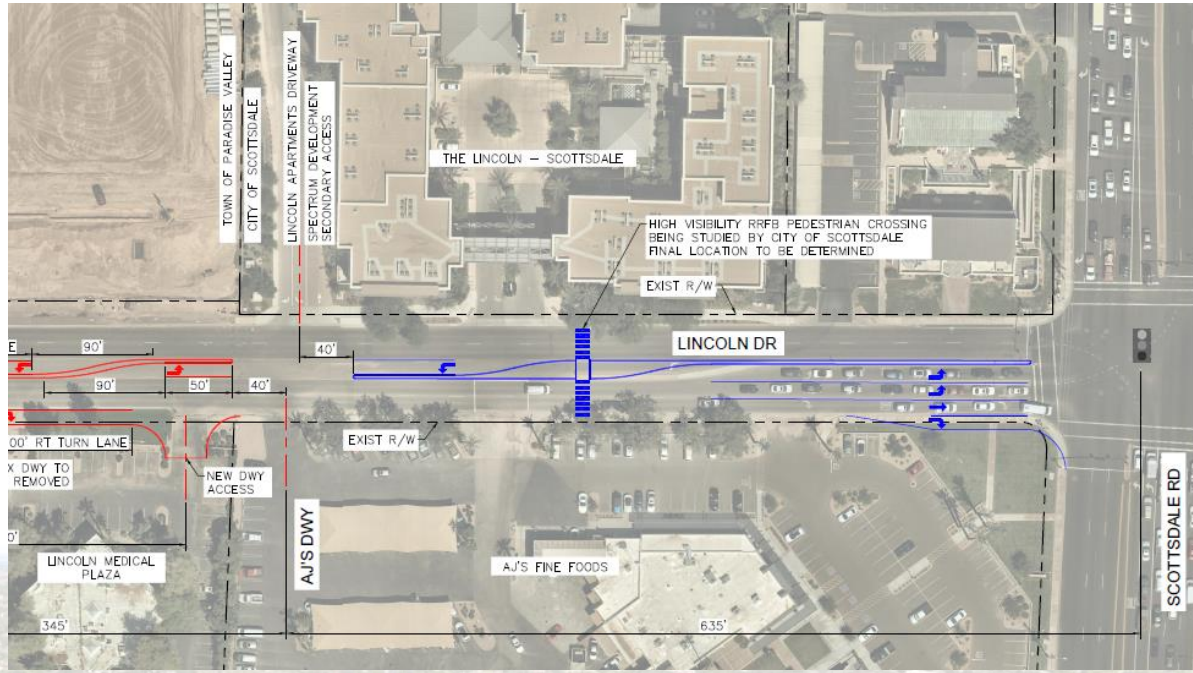
**LEGEND**  
 [Symbol] SIGNALIZED INTERSECTION  
 [Symbol] MEANDERING SIDEWALK  
 [Symbol] SIDEWALK



# PEDESTRIAN SAFETY

## Potential City of Scottsdale Median and Crosswalk Improvements

- Extend Median Across Lincoln Apartment's and AJ's Center Entrances
- Provide Pedestrian Crosswalk with Median Refuge and Rectangular Rapid Flash Beacon (RRFB)



# POTENTIAL CONFLICT POINTS

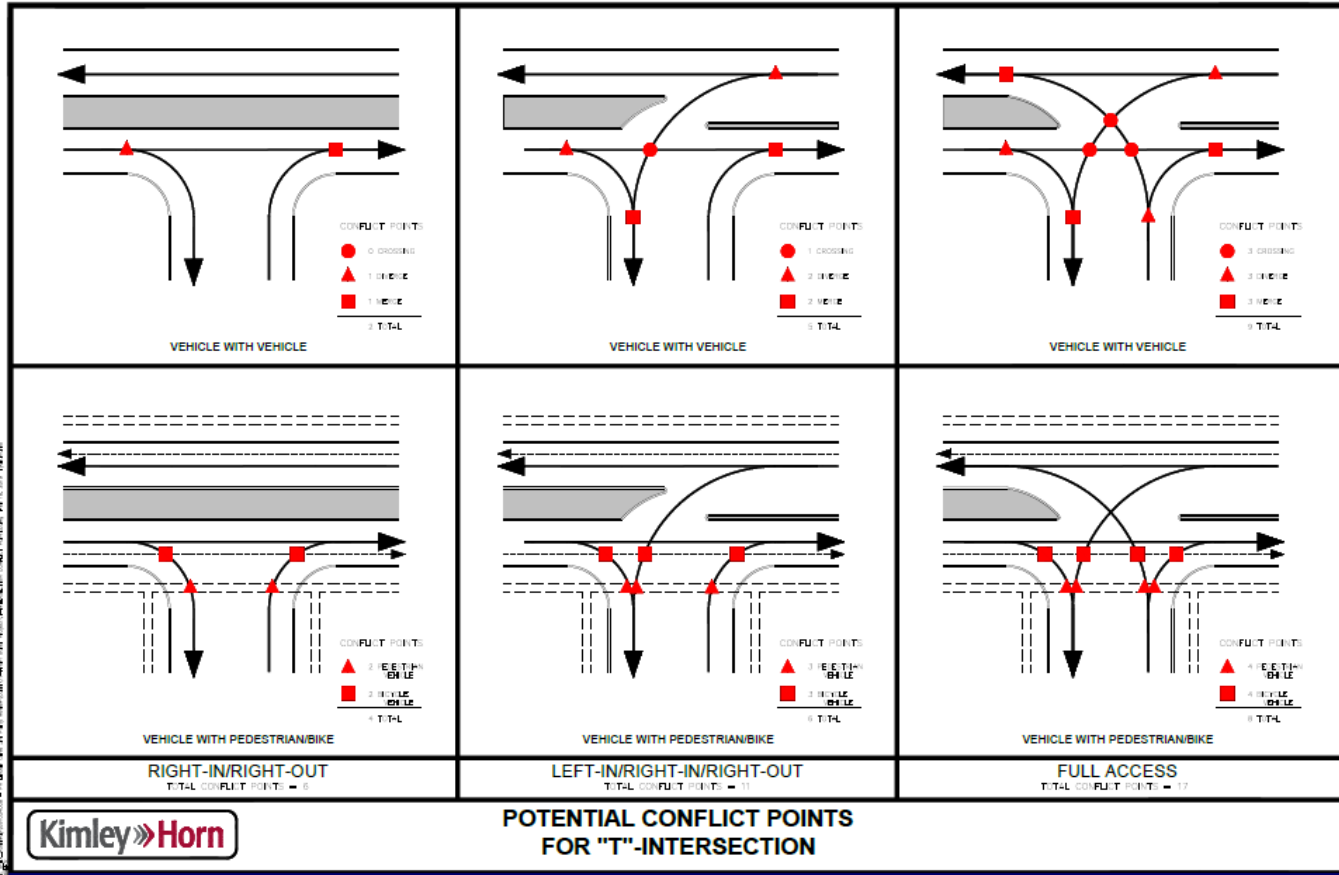
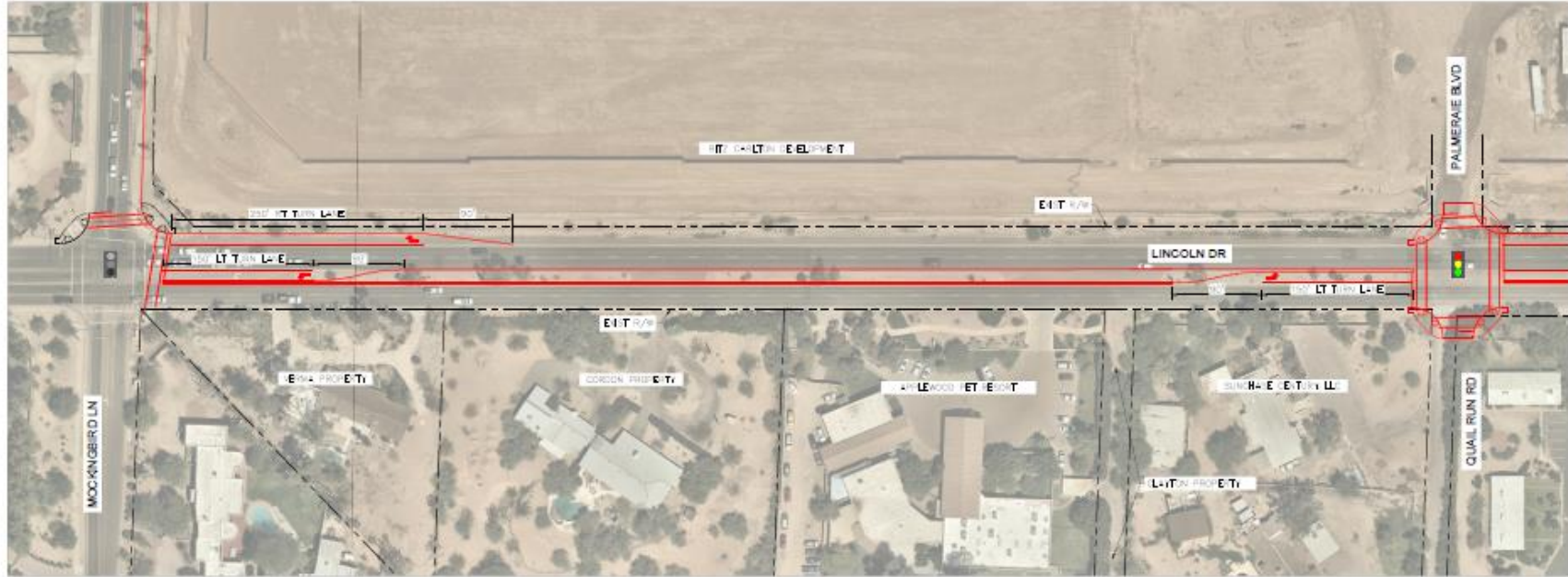


Figure 2-14: Potential Conflict Points for T-Intersections. Source: Kimley-Horn and Associates, Inc. (2002).



# MOCKINGBIRD LN. TO QUAIL RUN RD.



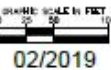
**LEGEND**

- EXISTING SIGNAL WITH E. DEVELOPMENT CROSSING
- NEW SIGNAL WITH E. DEVELOPMENT CROSSING

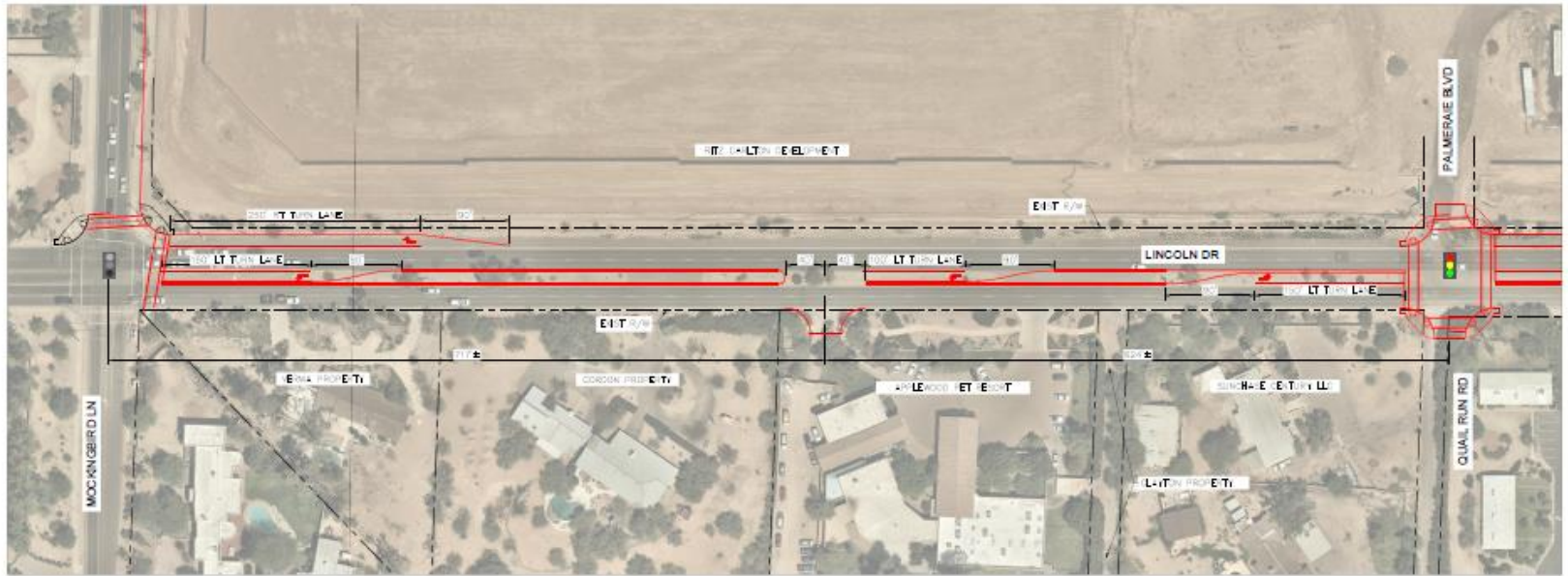
## Option #1





LINCOLN DRIVE - MOCKINGBIRD LN TO QUAIL RUN RD  
(FULL MEDIAN, NO BREAKS)



# MOCKINGBIRD LN. TO QUAIL RUN RD.



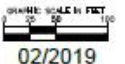
**LEGEND**

-  EXISTING SIGNAL WITH EXISTING CROSSING
-  NEW SIGNAL WITH EXISTING CROSSING

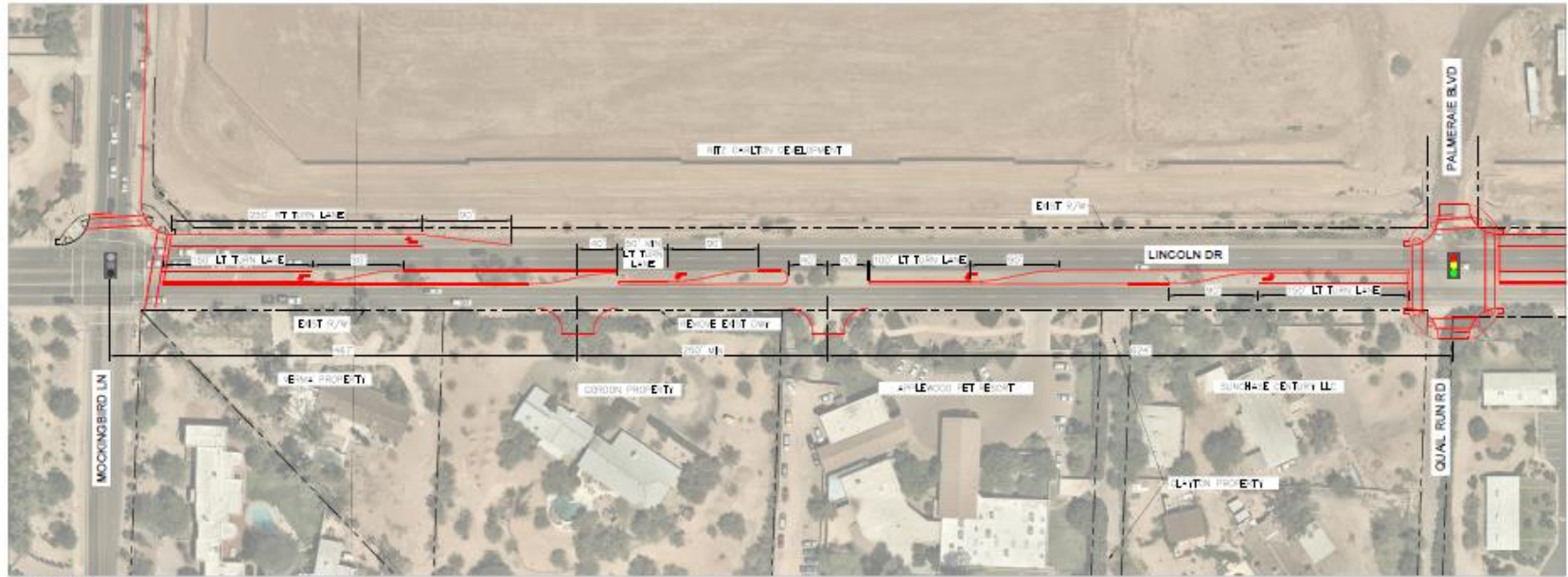
## Option #2



LINCOLN DRIVE - MOCKINGBIRD LN TO QUAIL RUN RD  
 (FULL ACCESS MEDIAN BREAK AT APPLEWOOD WESTERN DRIVEWAY)



# MOCKINGBIRD LN. TO QUAIL RUN RD.

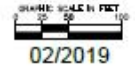


- LEGEND**
- EXISTING SIGNAL WITH EXISTING CROSSING
  - NEW SIGNAL WITH EXISTING CROSSING
  - LEFT TURN LEFT IN / RIGHT IN / RIGHT OUT ONLY
  - NO MEDIAN BREAK

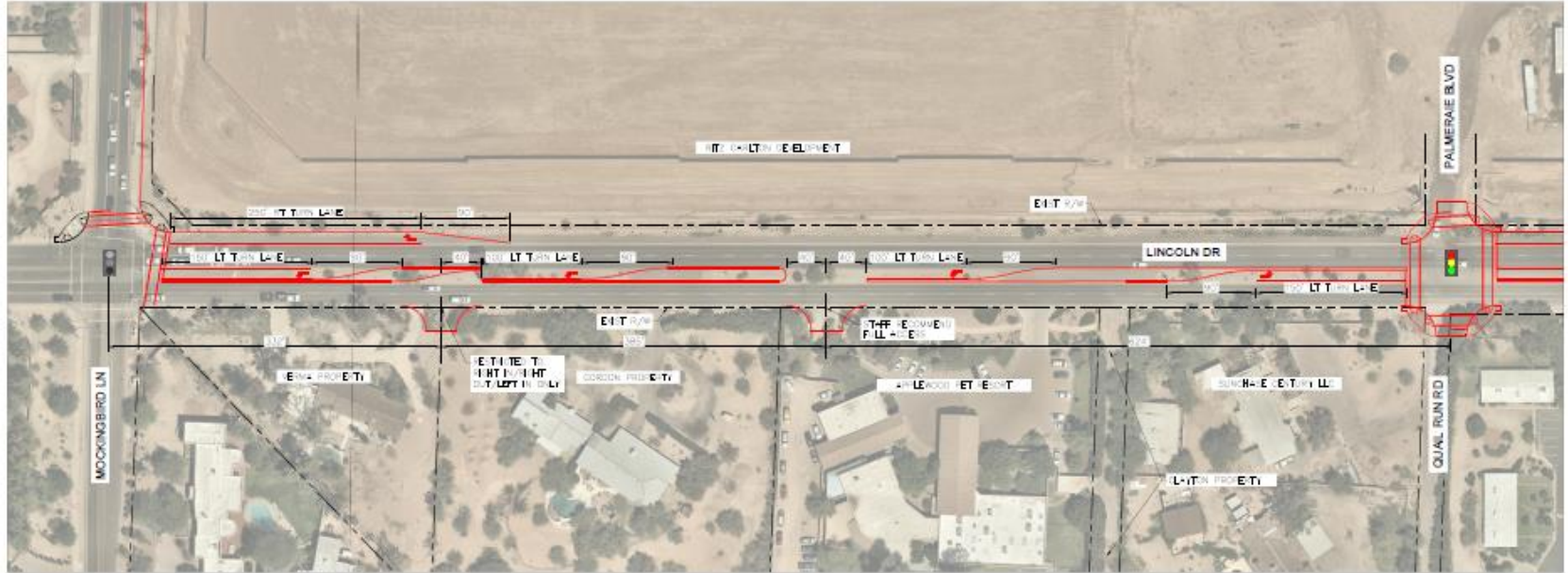
## Option #3



LINCOLN DRIVE - MOCKINGBIRD LN TO QUAIL RUN RD  
 (LEFT IN / RIGHT IN / RIGHT OUT MEDIAN BREAK AT GORDON DRIVEWAY)



# MOCKINGBIRD LN. TO QUAIL RUN RD.

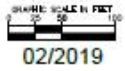


- LEGEND**
- EXISTING SIGNAL WITH EXISTING CROSSING
  - NEW SIGNAL WITH EXISTING CROSSING

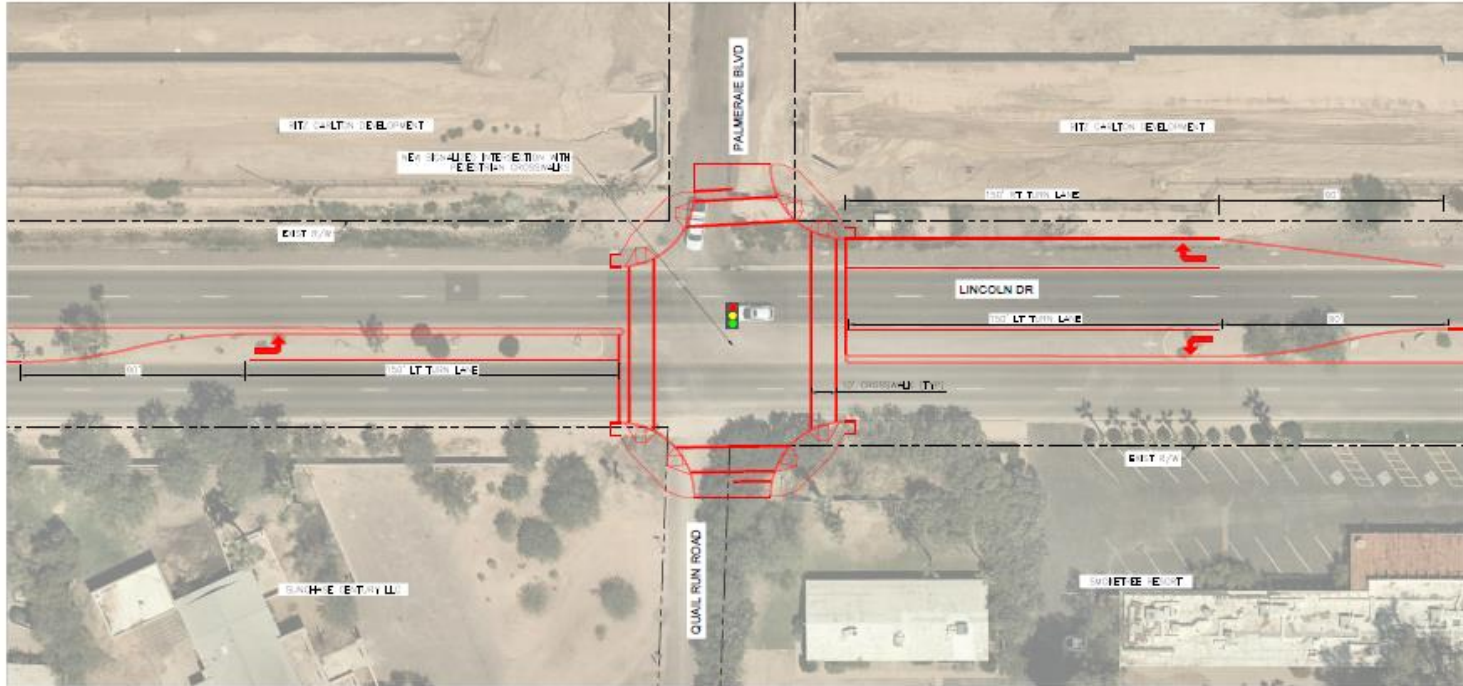
## Option #4



LINCOLN DRIVE - MOCKINGBIRD LN TO QUAIL RUN RD  
 (LEFT IN / RIGHT IN / RIGHT OUT SHARED ACCESS MEDIAN BREAK AT VERMA/GORDON)



# LINCOLN DR. & QUAIL RUN RD. INTERSECTION

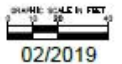


**LEGEND**

 TRAFFIC LIGHT WITH TRAFFIC SIGNAL

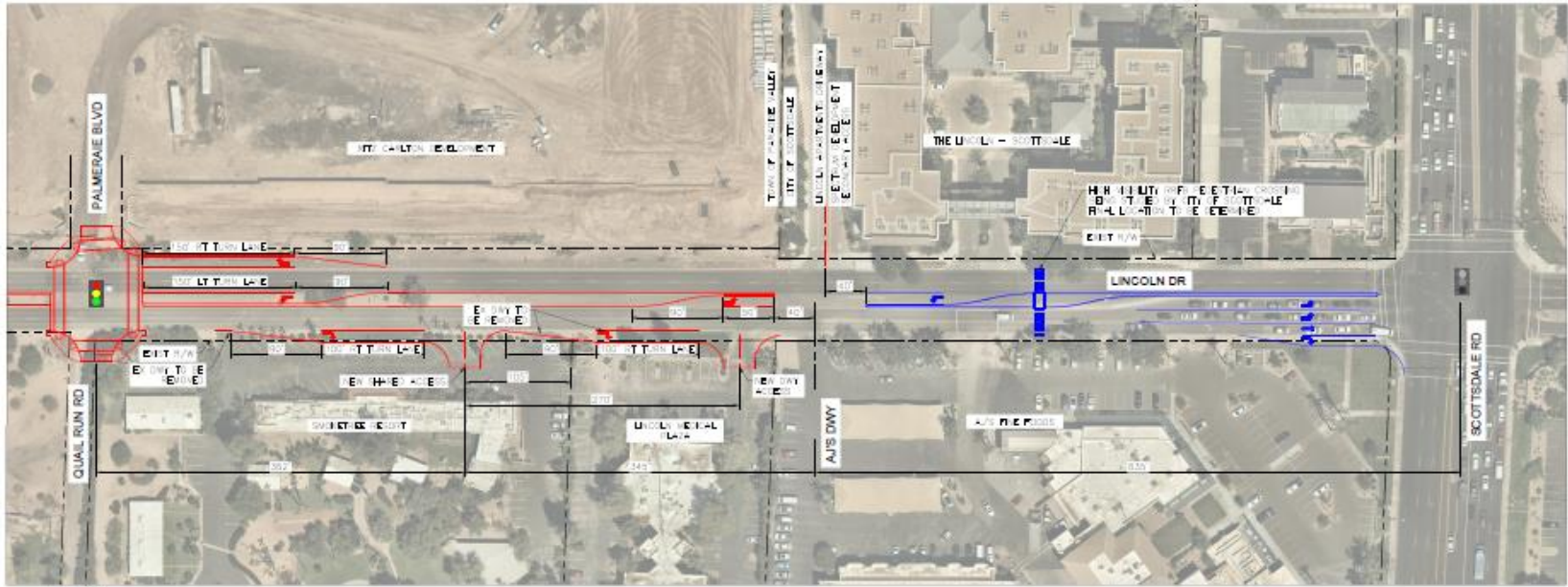


LINCOLN DRIVE AND QUAIL RUN RD  
INTERSECTION IMPROVEMENTS





# QUAIL RUN RD. TO SCOTTSDALE RD.

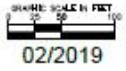


- LEGEND**
- EXISTING SIGNAL WITH FEETWAY CROSSING
  - NEW SIGNAL WITH FEETWAY CROSSING
  - TOWN OF PARADISE VALLEY IMPROVEMENTS
  - CITY OF SCOTTSDALE POTENTIAL IMPROVEMENTS

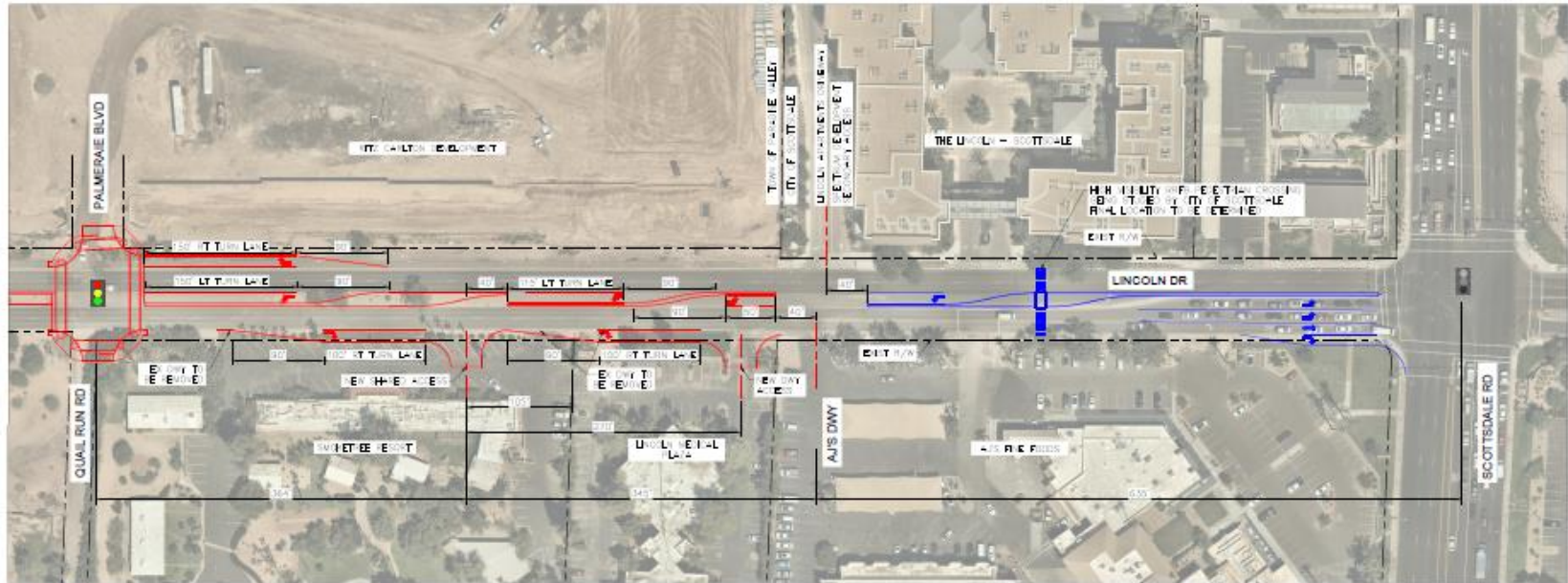
## Option #1



LINCOLN DRIVE - QUAIL RUN RD TO SCOTTSDALE RD  
(FULL MEDIAN, NO BREAKS)



# QUAIL RUN RD. TO SCOTTSDALE RD.



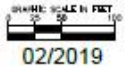
**LEGEND**

- EXISTING SIGNAL WITH PROPOSED CROSSING
- NEW SIGNAL WITH PROPOSED CROSSING
- TOWN OF PARADISE VALLEY IMPROVEMENTS
- CITY OF SCOTTSDALE POTENTIAL IMPROVEMENTS

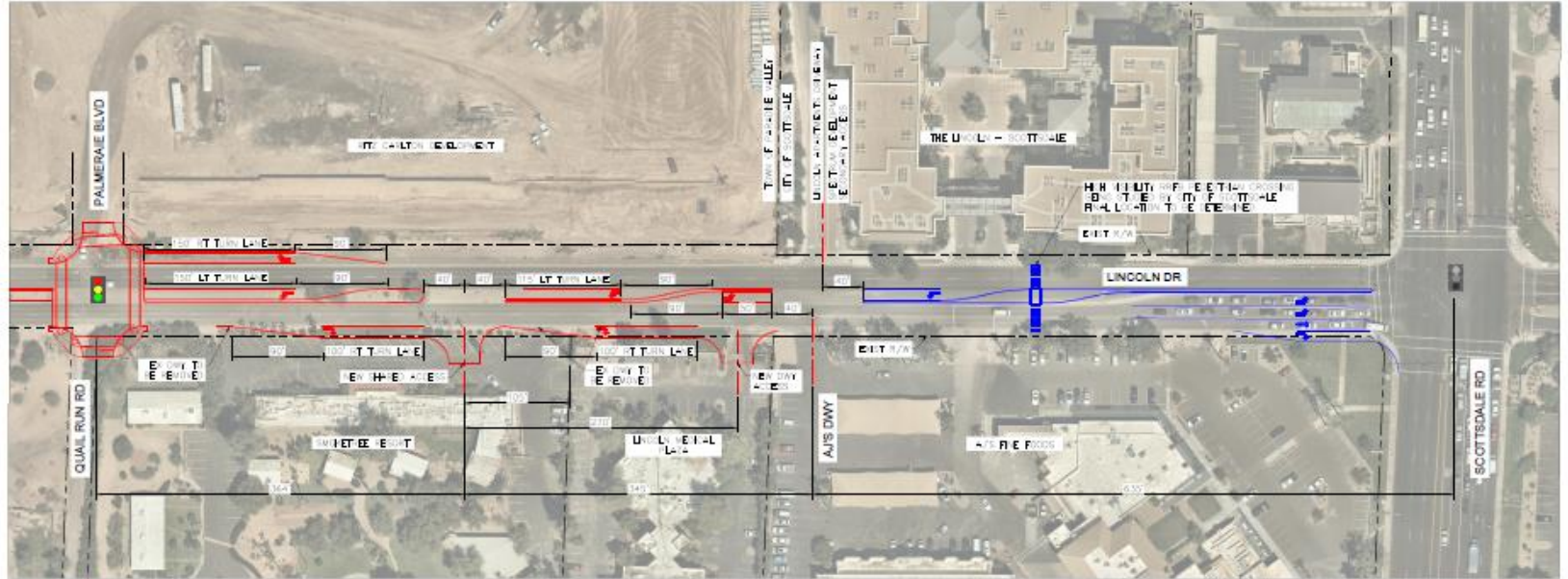
## Option #2



LINCOLN DRIVE - QUAIL RUN RD TO SCOTTSDALE RD  
 (LEFT IN / RIGHT IN / RIGHT OUT SHARED ACCESS FOR SMOKETREE/LINCOLN MEDICAL)



# QUAIL RUN RD. TO SCOTTSDALE RD.



- LEGEND**
- EXISTING SIGNAL WITH SECTION CROSSING
  - EXISTING SIGNAL WITH SECTION CROSSING
  - TOWN OF PARADISE VALLEY IMPROVEMENTS
  - CITY OF SCOTTSDALE POTENTIAL IMPROVEMENTS

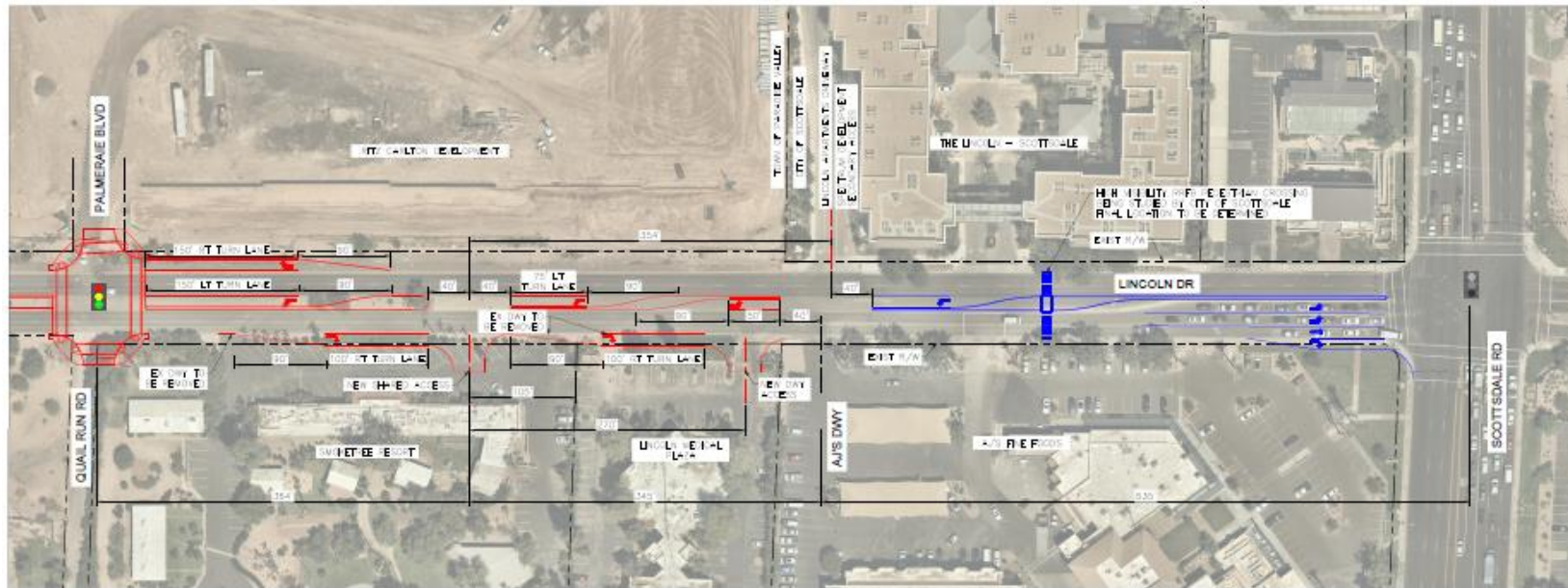
## Option #3



LINCOLN DRIVE - QUAIL RUN RD TO SCOTTSDALE RD  
(FULL MEDIAN BREAK SHARED ACCESS FOR SMOKETREE/LINCOLN MEDICAL)



# QUAIL RUN RD. TO SCOTTSDALE RD.



**LEGEND**

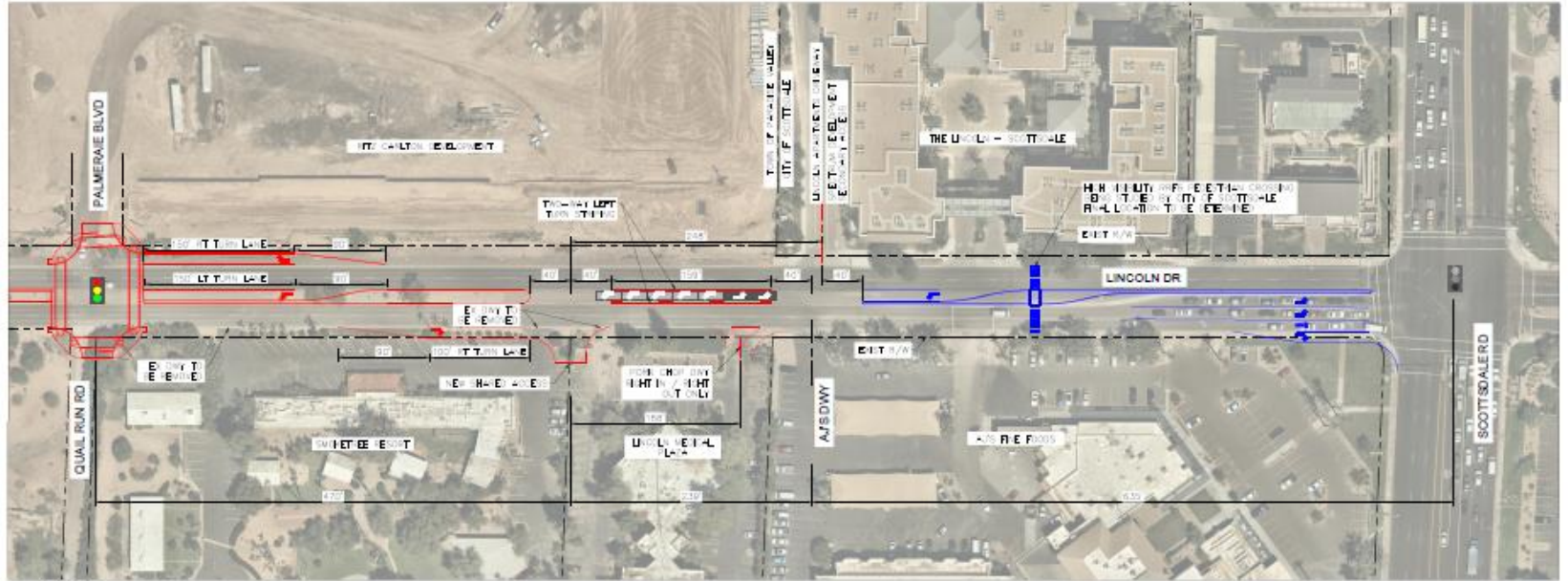
- EXISTING SIGNAL WITH RED/WHITE CROSSING
- NEW SIGNAL WITH RED/WHITE CROSSING
- TOWN OF PARADISE VALLEY JURISDICTION
- CITY OF SCOTTSDALE JURISDICTION

## Option #4

LINCOLN DRIVE - QUAIL RUN RD TO SCOTTSDALE RD  
(FULL MEDIAN BREAK AT SMOKETREE)



# QUAIL RUN RD. TO SCOTTSDALE RD.



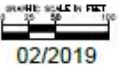
**LEGEND**

- EXISTING SIGNAL WITH CENTER CROSSING
- NEW SIGNAL WITH CENTER CROSSING
- TOWN OF PARADISE VALLEY IMPROVEMENTS
- CITY OF SCOTTSDALE PROPOSED IMPROVEMENTS
- BACKGROUND LOT TURN 64' DOUBLE STRIKE
- BACKGROUND LOT TURN 64' DOUBLE STRIKE

**Option #5 (Not supported by Town Staff)**



LINCOLN DRIVE - QUAIL RUN RD TO SCOTTSDALE RD  
 (FULL SHARED ACCESS ON SMOKETREE/LINCOLN MEDICAL PARCEL LINE)



# LINCOLN DR. MEDIAN OPTIONS

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## Mockingbird Ln. to Quail Run Rd.\*

- Option #1: Full Median (Right In/Right Out Access Only For All Properties)
- Option #2: Full Access at Applewood Pet Resort West Entrance Only
- Option #3: Full Access at Applewood Pet Resort West Entrance and Left In at Gordon Property
- Option #4: Full Access at Applewood Pet Resort West Entrance and Left In at Verma/Gordon Property Line

## Quail Run Rd. to Scottsdale Rd.\*

- Option #1: Full Median (Right In/Right Out Access Only For All Properties)
- Option #2: Left In Only Shared Access for Smoke Tree Resort and Lincoln Medical Plaza
- Option #3: Shared Full Access for Smoke Tree Resort and Lincoln Medical Plaza
- Option #4: Full Access for Smoke Tree Resort and Right In/Right Out Access For Lincoln Medical Plaza
- Option #5: Two Way Left Turn Lane Along Smoke Tree Resort and Lincoln Medical Plaza Frontage

\* All options meet driveway spacing and required deceleration and storage lengths for turn lanes with the exception of Option #5 (TWLTL)



# QUESTIONS?

