



# Summit Estates at Fischer Road Repair and Maintenance Options

Prepared by the Select Committee  
on Finance

8/11/23

# Presentation Outline



- Committee Members & Scope
- Evaluation of Roads
- Components of a Road
- Chip Seal vs. Asphalt Overlay
- Alternatives Identified
- Advantages & Disadvantages of Each Alternative
- Gated vs. Ungated Communities
- Status of Drainageways
- Cost Comparisons
- Financial Considerations
- Conclusions



# Committee Scope

## **Committee Members:**

- Bill Blasingame, John Law, Mike Harlin & Rhonda Yanosky

## **Scope:**

- Assess roads, their condition, repair and maintenance alternatives, and projected costs/expenses.
- Assess POA income and expenses and its ability to meet financial needs and risks
- Evaluate funding and revenue alternatives
- Report to the Board summarizing Committee's assessments and evaluations and recommendations

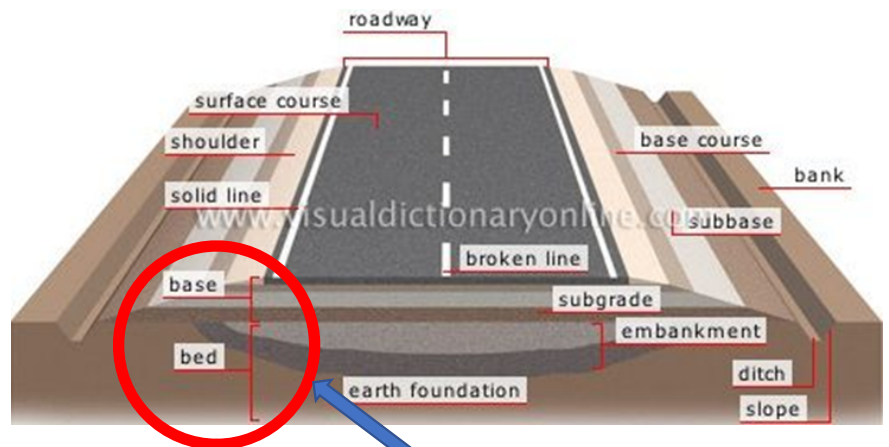
# Committee Evaluation of Roads



- The Committee concurs with the evaluation and priority system prepared by the Board
- Roads will continue to deteriorate, and priorities may change depending upon traffic volume, construction activities and weather conditions
- Some minor maintenance is occurring (typically cold patch); however, it is not sufficient to prevent continued deterioration.
- If no additional action is taken, the road base (which is in good shape) will begin deteriorating and the community will experience a much larger expense to repair both the road base and the surface.

This presentation is primarily concerned with maintenance, repair and replacement of the surface course with either chip seal or asphalt overlay

# Components of Roads



Failure to maintain the road surface (chip seal or asphalt) overlay may eventually result in deterioration and costly repair of the base and bed layers in addition to the surface.

## Chip Seal vs. Asphalt Overlay

### Chip Seal

- Chip Seal is a pavement surface treatment that combines one or more layer(s) of asphalt with one or more layer(s) of fine aggregate.
- Typically, chip seal roads can last anywhere from **5 to 10 years** with proper maintenance and upkeep.
- Regular maintenance such as crack sealing, patching, and resealing can extend the life of a chip seal road.

### Asphalt Overlay

- Comal County typically uses a 1.5" asphalt layer on a good base (our base is generally good)
- An asphalt overlay can last anywhere from 10 to 25 years, with proper maintenance and upkeep.
- Regular maintenance every 2-4 years such as crack sealing, pothole repair, and sealcoating can help to extend the life of an asphalt overlay.

Questions?

# Repair and Maintenance Options Evaluated



1. Do nothing/no dues increase - maintain with cold patch with rotating volunteers
- 2a. Chip seal length of road each year based on a \$200-\$400/year dues increase
- 2b. Asphalt a length of road each year based on \$200-\$400/year dues increase
- 3a. Chip seal the entire subdivision and pay with an assessment
- 3b. Asphalt the entire subdivision and pay with an assessment
4. Use a combination of asphalt and chip seal on the entire subdivision with an assessment
5. Transfer the subdivision roads to the county

## 1. Do nothing

### Advantages

- Lowest cost
- Keeps the gate

### Disadvantages

- Vehicle damage and road hazards
- Reduced home values
- Eventual deterioration of road base with major expense to replace base layers and restore back to chip seal or asphalt overlay (complete road rebuild)
- Repairs will be more costly in the future due to inflation
- Limited volunteer participation in routine maintenance



# Neglected Roadway Maintenance



Chip seal



Dirt



Dirt

## 2a. Chip seal length of road each year based on a \$200-\$400/year dues increase

### Advantages

- Fixed cost stream
- Requires a majority vote
- Provides some maintenance of roads and road base
- A longer section of roadway can be chip sealed than asphalt overlay (4,100 ft vs. 2,200 ft @ \$300/year increase).
- Keeps the gate

### Disadvantages

- Only a limited portion of the roadway can be paved each year.
- Existing unpaved sections are approaching end of life and will continue to deteriorate including road base
- Must pay for an upgrade to asphalt overlay if the roads transition to the county
- Shorter life span than asphalt overlay
- Continued vehicle damage and road hazards
- Reduced home values
- Patchwork roads
- Rapidly deteriorates in cul de sacs.

## 2b. Asphalt a length of road each year based on \$200-\$400 / year dues increase

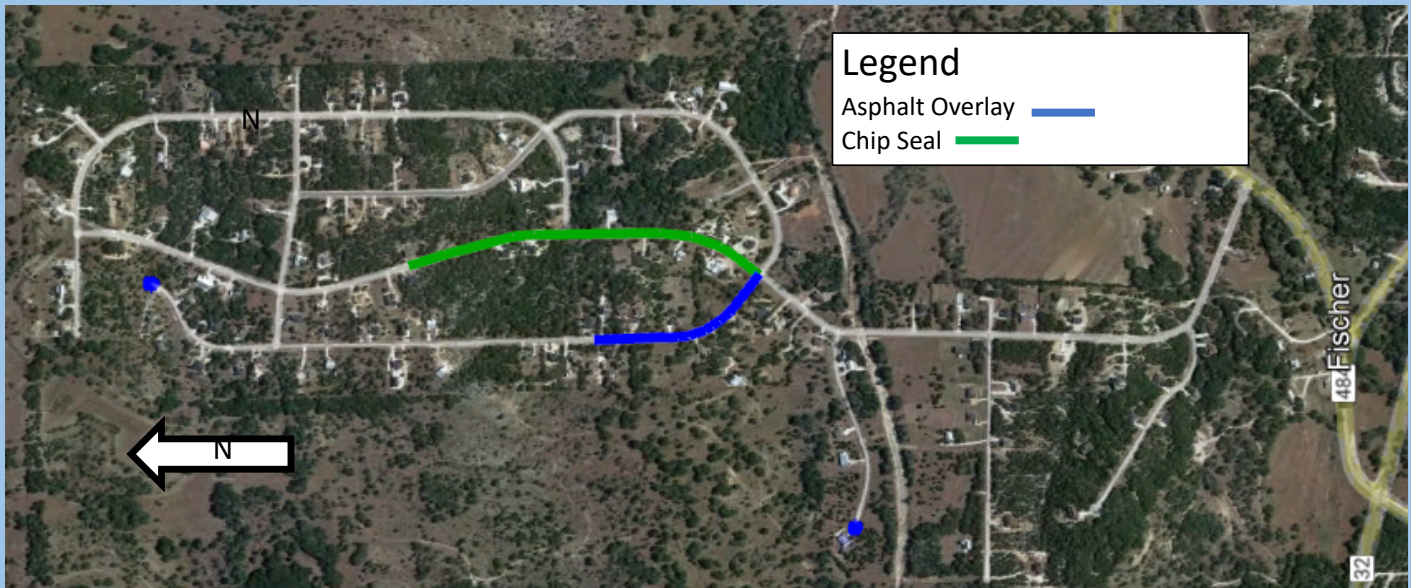
### Advantages

- Fixed cost stream
- Requires a majority vote
- Provides some maintenance of roads and road base
- Longer life than chip seal
- Lower transition costs - asphalt sections may not need to be replaced if the roads are transitioned to the county in the future
- Keeps the gate
- Much longer lifespan in cul de sacs than chip seal
- Looks better/more substantial

### Disadvantages

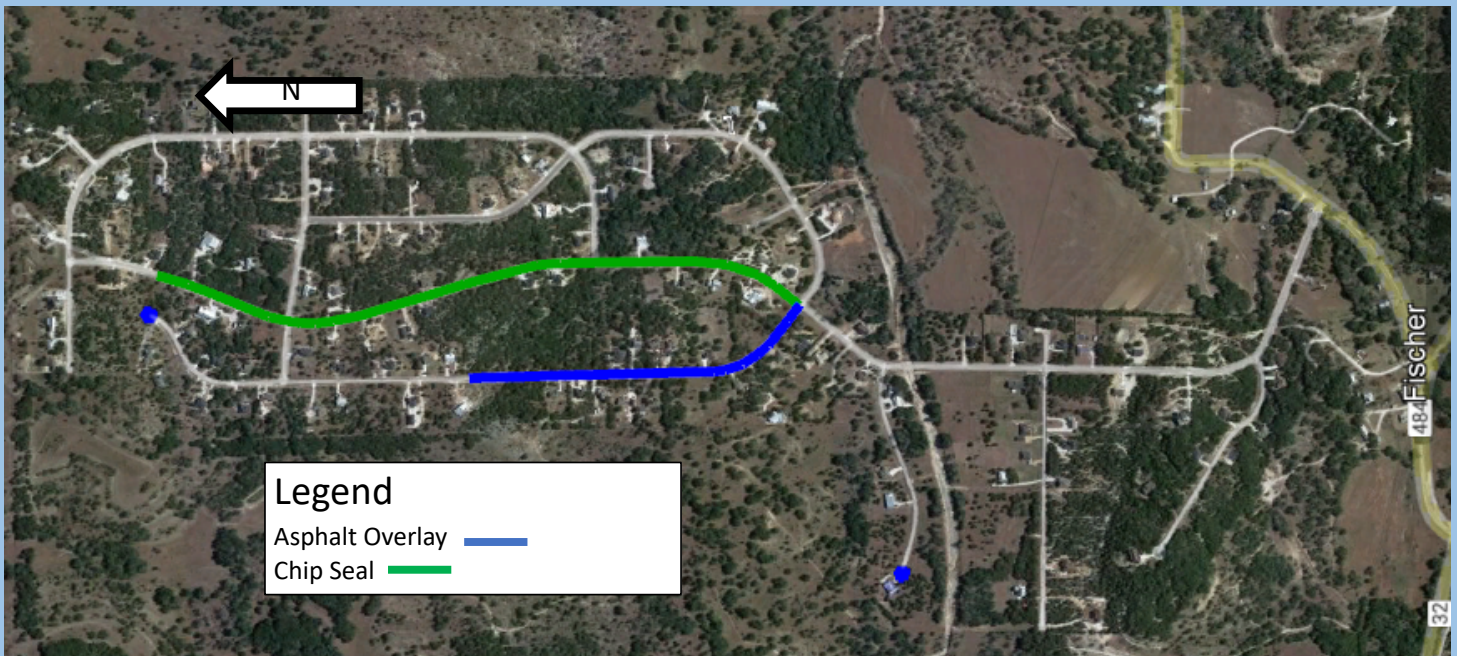
- Only a limited portion of the roadway can be paved each year.
- Existing unpaved sections are approaching end of life and will continue to deteriorate including road base
- Vehicle damage and road hazards
- Reduced home values
- A shorter section of roadway can be than asphalt overlayed vs. chip sealed(2,200 ft vs. 4,100 ft @ \$300/year increase).
- Patchwork roads

# Options 2a and 2b @ \$200/year Increase



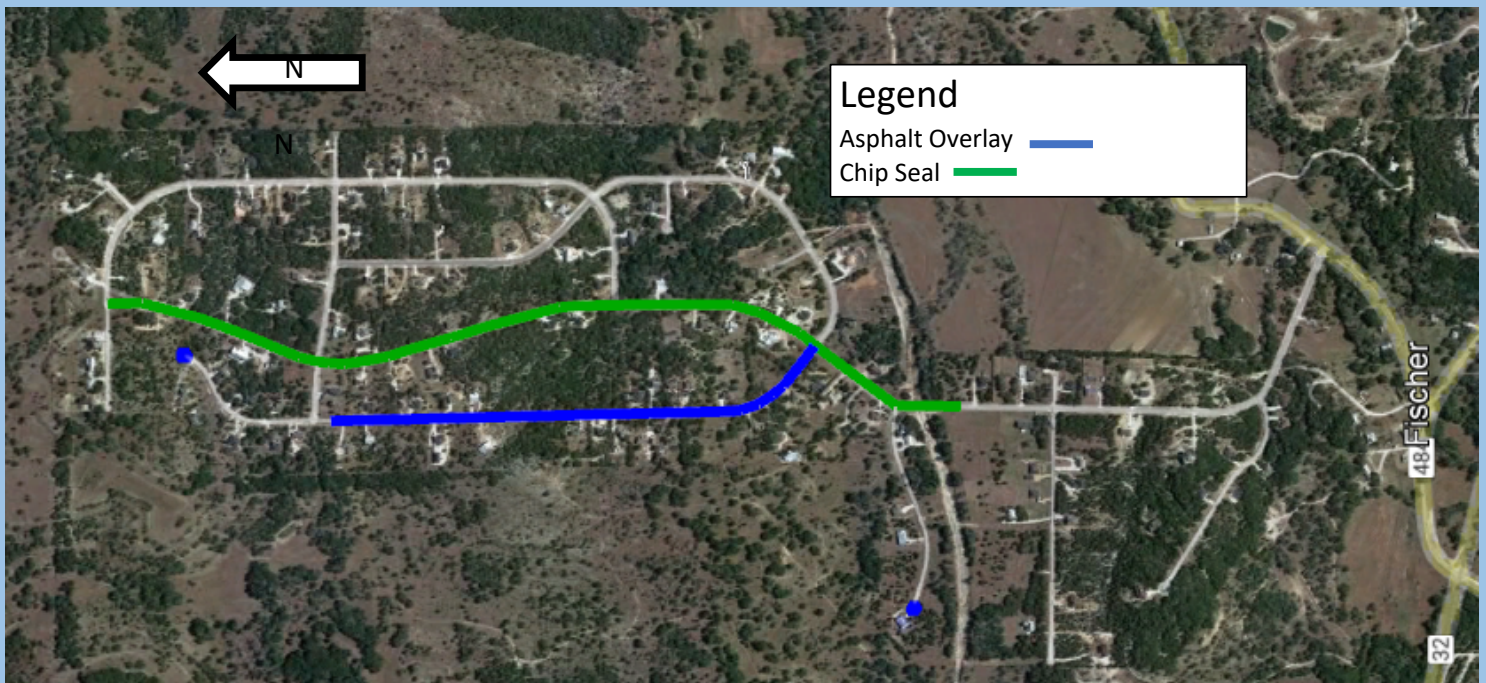
Asphalt overlay - Complete avg. of 1,250 ft/year or 5%. Appx. 19+ year cycle  
Chip seal - Complete avg. of 2,400 ft/year or 9%. Appx. 10+ year cycle

# Options 2a and 2b @ \$300/year Increase



Asphalt overlay - Complete avg. of 2,200 ft/year or 8%. Appx. 11+ year cycle  
Chip seal - Complete avg. of 4,100 ft/year or 15%. Appx. 7+ year cycle

# Options 2a and 2b @ \$400/year Increase



Asphalt overlay - Complete avg. of 3,225 ft/year or 12%. Appx. 8+ year cycle  
Chip seal - Complete avg. of 5,700 ft/year or 21%. Appx. 5+ year cycle

### 3a. Chip seal the entire subdivision and pay with an assessment\*

#### Advantages

- Complete new road surface
- Less expensive than asphalt overlay
- Repairs existing deterioration
- Stops road hazards and vehicular damages
- Maintains or increases home values
- Keeps the gate

#### Disadvantages

- Requires an assessment
- Shorter life than asphalt overlay and must be redone in 5-10 years
- Rapidly deteriorates in cul de sacs.
- If the roads are transitioned to the county all chip seal roads will have to be redone to asphalt at owner's expense

\*An assessment (also known as a special assessment) is an amount that a property owner is required to pay a Property Owners' Association (POA) or the county. Assessments are used by POAs to cover the cost of unexpected or unbudgeted costs.

## 3b. Asphalt the entire subdivision and pay with an assessment

### Advantages

- Complete new road surface
- Longer life span than chip seal must be redone in 10-25 years vs. 5-10 years.
- Repairs existing deterioration
- Stops road hazards and vehicular damages
- Maintains or increases home values
- Facilitates transition to county roads
- Keeps the gate
- Much longer lifespan in cul de sacs than chip seal

### Disadvantages

- Requires an assessment
- More expensive than chip seal



## 4. Use a combination of asphalt and chip seal on the entire subdivision with an assessment

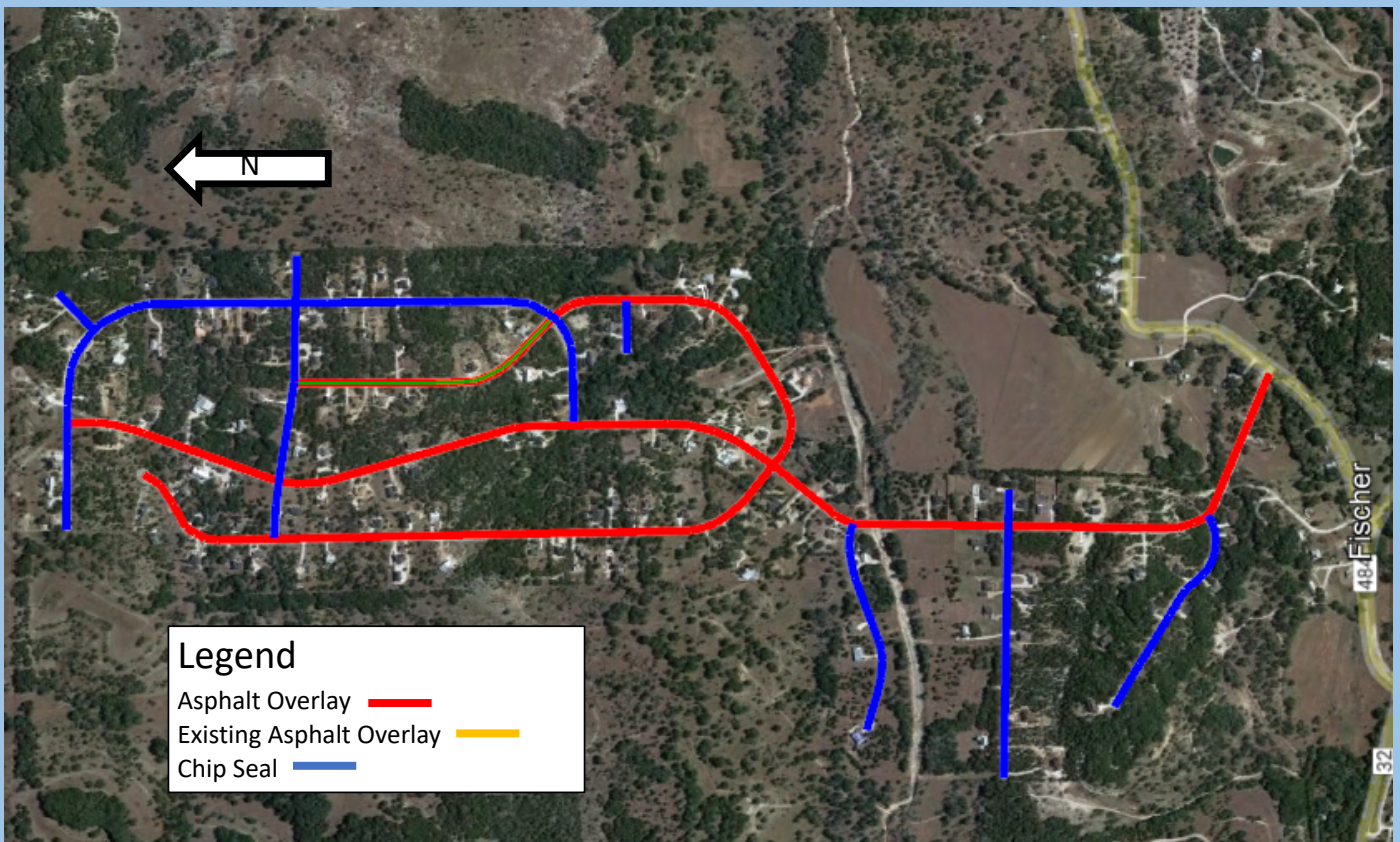
### Advantages

- Complete new road surface
- Surface tailored to road use.
- Lower assessment costs
- Repairs existing deterioration
- Stops road hazards and vehicular damages
- Maintains or increases home values
- Less costly transition to county roads
- More expensive than chip seal--Less expensive than Asphalt.
- Keeps the gate

### Disadvantages

- Requires an assessment
- Some residents adjacent to chip seal portions may feel that they are slighted because some people have asphalt overlay and pay the same amount.
- Requires more frequent upkeep than asphalt alone on a regular basis.
- Chip Seal surfaces will need to be repaired/redone more frequently than asphalt.

# Option 4



## Criteria and Process for Transfer of Road to the County



- Must be approved by a judge and typically requires a > 85-90% approval vote for conversion to county roads.
- The County will not accept chip seal roadways for conversion to county roads.
- Even if we had our roads newly chip sealed, the County or the subdivision would have to have to apply 1.5" of hot mix and pay for it either through either a special POA assessment or a county assessment to complete the transfer.
  - Our bylaws would require a 66% majority vote to approve a special assessment.
  - The county can agree to front the cost of upgrading the roads. We would pay it back over time (typically less than 10 years) as an assessment against each lot.

*Source: David Vollbrecht, Comal County Engineer, March 29, 2023*

## 5. Transfer the subdivision roads to the county

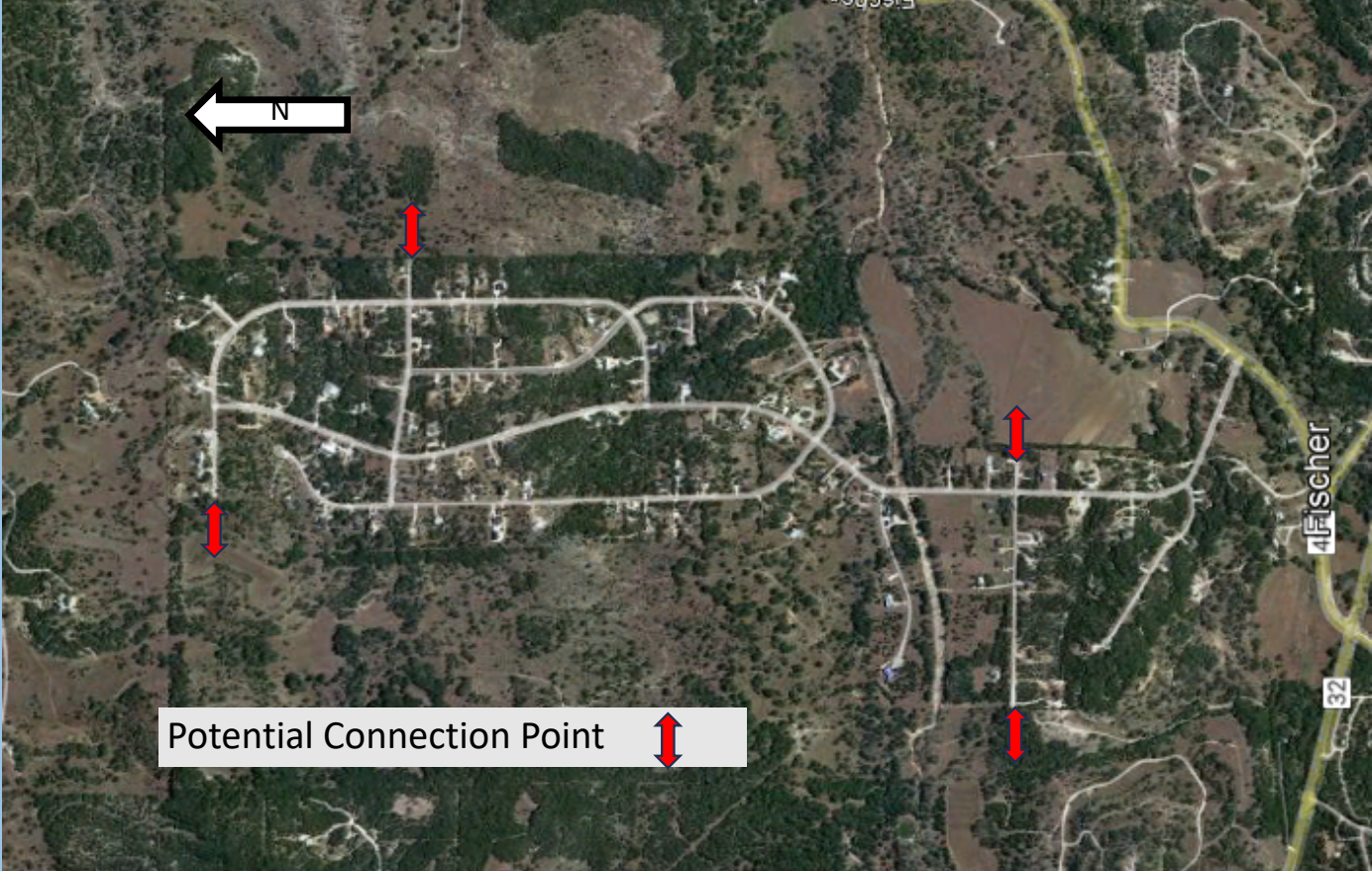
### Advantages

- Complete new road surface
- Lowest 10-year cost (except do nothing)
- Repairs existing deterioration
- Stops road hazards and vehicular damages
- Maintains or increases home values due to improved roadways
- No finance costs
- No additional maintenance costs
- Drainageways, culverts and bridges will be maintained by the County
- Reduced risk of major repair expense to the community due to flood damage

### Disadvantages

- Must have  $\geq 85 - 90\%$  approval vote
- Requires an assessment to pay for the following:
  - Must upgrade to 100% 1.5" asphalt overlay
  - Must replace signs
  - Must remove some or all entranceway large stones
  - Remove gate
  - Culvert repair
- Multiple year period (2-4 years) to start due to process
- Increased crime rate
- Increased traffic
- Potentially lower home values – no gate
- May have to connect to other subdivisions and businesses
- Maintenance may be sub-par
- Tax lien on every lot in the subdivision

# Potential Connection Points



# Gated vs. Ungated Communities



## Crime in Gated Communities

- Burglaries decreased by 33%

Addington, Lynn & Rennison, Callie. (2013). Keeping the Barbarians Outside the Gate? Comparing Burglary Victimization in Gated and Non-Gated Communities. Justice Quarterly, 32. 168-192.

## Traffic

- Gated communities have fewer cars and traffic. Traffic is mostly visitors, delivery people, and contractors, to name a few. Fewer cars result in quieter streets.

## Property Values

- The property values of gated communities are also typically higher than those outside the gates. Some real estate experts estimate that gates can add \$30,000 or more to property values.

Gated Community Premiums and Amenity Differentials in Residential Subdivisions, E.L.Radetskiy, R.W. Spahr & M.A. Sunderman, published online 6/17/20. Cited in multiple articles.

# Status of Drainageways



Dams, culverts and drainageways have not ben routinely maintained.

## **Dams**

- The subdivision has 2 detention dams designed to reduce downstream peak flood flows from 100-year storm
- Remove trees and brush & keep inlets and outlets clean

## **Drainageways/Channels & Culverts**

- Designed to pass flows from the 100-year storm.
- Remove trees, brush and remind homeowners not to place materials in drainageways. Address localized erosion & sedimentation in channels. Repair drop structures.
- Restore downstream slopes from culverts and remove debris and sediment from inlets and culverts. Repair cracked headwalls and undercutting..

## **Carper's Creek Bridge on Let's Roll**

- The bridge appears to be in good shape.

## **Costs**

- Assume \$20,000 for restoration to original condition and \$10,000/year thereafter. This cost assumes community labor participation.

Questions?

# Cost Comparisons



Option	Option Description	Cost to Individual Owners										Total
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
NA	Drainageway maintenance	\$75	\$38	\$39	\$40	\$41	\$42	\$44	\$45	\$46	\$48	<b>\$457</b>
1	Do nothing - maintain with cold patch	\$100	\$103	\$106	\$109	\$113	\$116	\$119	\$123	\$127	\$130	<b>\$1,146</b>
2a	Chip seal length of road each year based on a \$300/year dues increase	\$475	\$450	\$463	\$477	\$491	\$506	\$521	\$537	\$553	\$570	<b>\$5,043</b>
2b	Asphalt a length of road each year based on \$300/year dues increase	\$475	\$450	\$463	\$477	\$491	\$506	\$521	\$538	\$555	\$573	<b>\$5,044</b>
3a	Chip seal the entire subdivision and pay with an assessment	\$2,134	\$162	\$167	\$170	\$175	\$179	\$2,498	\$189	\$194	\$199	<b>\$6,067</b>
3b	Asphalt the entire subdivision and pay with an assessment	\$3,215	\$292	\$296	\$300	\$305	\$310	\$314	\$319	\$324	\$329	<b>\$6,005</b>
4	Use a combination of asphalt and chip seal on the entire subdivision with an assessment	\$2,794	\$141	\$145	\$151	\$154	\$158	\$882	\$584	\$173	\$178	<b>\$5,727</b>
5	Transfer the subdivision roads to the county	\$584	\$575	\$578	\$582	\$585	\$589	\$593	\$138	\$142	\$146	<b>\$4,513</b>

Note 1: The costs presented herein are solely for comparison purposes and may vary depending on local contractor demand, material prices and roadway condition at the time of repairs. All options are escalated equally.

Note 2: Costs shown for Options 2a through 5 include base dues and drainageway maintenance costs.



## Financing Considerations



- Annual Dues Income (@ 100 and 264 lots) – \$26,400
- Operating Expenses- \$22,620 (included \$4,000 for general maintenance)
- Balance – \$3,780
- Uncommitted emergency reserves - \$26,000
- Aside from the do nothing alternative, most options will require roughly \$500,000 to \$750,000 over a ten-year period.
- The current balance would generate \$37,800 over a ten-year period
- Fundraising efforts typically raise \$1,000 to \$10,000 and are suitable for small community projects and not roadway repairs.



## Select Finance Committee Conclusions & Recommendations

- The current funding for road, dams and drainageways maintenance and is woefully short
- Doing nothing to maintain the roads will result in vehicle damage, road hazards, reduced home values and eventual deterioration of road base with a much larger expense to replace base layers in addition to chip seal or asphalt overlay
- Except for doing nothing and transferring the roads to the county the ten-year costs are all around \$6,000 for the other options. Transferring the roads to the county is \$1,500 less, but this could be more than offset by declines in home values though loss of the gate.
- It is unlikely that 85 - 90% of the community would vote to eliminate the gate so transferring the roads to the county would probably not be successful. However, this should be confirmed by survey once the options are presented.
- The options which maintain the gate require an incremental increase in dues or assessments



## Select Finance Committee Conclusions & Recommendations

- The Committee suggests Option 3b as the best long-term option for quality roads (asphalt overlay w/assessment)
  - Chip seal is the least cost surface overlay but only has a life expectancy of 1/2 to 1/3 of asphalt overlay.
  - The ten-year cost differences do not appear to be significant.
  - Best assurance of long-term protection of community investments/assets (don't have to come up with a large sum of money 5-10 years from now).
  - Build asphalt seal coat/crack maintenance costs into annual dues so additional assessments are not needed.
- Second best is Option 2a chip seal with a \$300-\$400 dues increase for roads. Cul de sacs should have an asphalt overlay even if we select chip seal as the primary overlay.
- Restore drainageway capacities, remove trees and brush, address sedimentation and repair structures (appx. \$45/year). Use community volunteer labor as much as possible
- Ensure funds generated for maintenance of roadways and drainageways are not able to be utilized for other purposes
- The community should decide the course of action prior to 2024 to have the lowest long-term cost

## Additional Select Finance Committee Conclusions & Recommendations



- Base dues of \$100 won't support future increases in operations cost. They should be allowed to increase based on either actual/projected costs or an index (e.g., consumer price index).
- There is very limited enthusiasm in our community to routinely participate in volunteer chip seal roadway repairs. We should consider adding additional dues for contractor maintenance of chips seal roads if chip seal options are selected.
- Fundraising efforts typically raise \$1,000 to \$10,000 and are suitable for small community projects and not roadway repairs and major maintenance. We recommend the establishment of a Fundraising Committee for funding small community improvement projects
- Establish a reserve fund.

# Supplemental Information



# Cost Assumptions



- Width of Road – 22 ft
- Cost of chip seal - \$6.03 yd<sup>2</sup> (from recent informal quote 4/23)
- Cost of 1.5" Hot Asphalt Overlay - \$10.00 yd<sup>2</sup> (Conversation with D. Volbrecht, Comal County engineer on 3/29/23)
- Cost per square foot for asphalt seal coating and crack sealing in Texas - \$0.15 – 0.25 ft<sup>2</sup> or \$1.35 - 2.25/yd<sup>2</sup> (ChatGPT)
- Cost for maintenance of chip seal – none (cold patch & volunteer labor assumed)
- Assumed Escalation Rate - 3.00%
- Project Contingency - 10%
- Asphalt seal coat and crack seal every 4 years (ranges from 2-4 years)
- Asphalt assumed to have a 10-25 year life
- Chip seal assumed to have a 7-year life (ranges from 5-10 years)
- All Cul de Sacs are asphalted
- County payback period is 7 years (would be less than 10 years per D. Volbrecht, Comal County engineer on 3/29/23)
- Dues increase at escalation rate
- Community maintenance of chip seal roadways, dams and drainageways
- Dues
  - Base Dues -\$100/year
  - 2024 incremental dues increase for roads -\$200-\$400/year
  - Average drainage maintenance dues increase - \$46/year
  - Total Annual Dues - \$300-\$500/year

## Neighborhood Facts & Assumptions



- Dues - \$100/year
- Number of Lots – 266
- Number of Homes – 160
- Estimated number of homes at completion – 250
- Length of Road – 28,848 ft or 5.3 mi.
- Current surface – chip seal except 1,750 ft of asphalt overlay on Stars and Stripes

# SEF Growth

