

A G E N D A

PLANNING COMMITTEE

REGULAR MEETING
FRIDAY, OCTOBER 13, 2017, AT 10:30 P.M.
BOARD ROOM – GATEWAY COMPLEX

1. MEETING CALLED TO ORDER: Mary Lou Delpech, Chairman
2. ROLL CALL: Delpech, Birdsall, Brown, and Fredlund
3. APPROVAL OF REPORT: Regular meeting of September 8, 2017 (Attachment)
4. RESIDENTS' FORUM
5. CHAIRMAN'S REPORT
6. UNFINISHED BUSINESS
 - a. Consider options and recommendations for several items the Planning Committee directed staff to research regarding the traffic and pedestrian safety study. (Attachment)
 - 1) Traffic Safety Proposal submitted by Director Brown. (Attachment)
 - 2) Golf Cart Safety document submitted by Director Brown. (Attachment)
7. NEW BUSINESS

None
8. ADJOURNMENT
9. NEXT MEETING: TBD. Friday, November 10, 2017, is a GRF holiday

TO/pj

cc: GRF Board

PLANNING COMMITTEE REPORT

REGULAR MEETING
FRIDAY, SEPTEMBER 8, 2017, AT 1:01 P.M.

A regular meeting of the Planning Committee was convened by the Chairman, Mary Lou Delpech, at 1:01 p.m. on Friday, September 8, 2017, in the Board Room at Gateway Complex.

Present, in addition to the Chairman, were Leslie Birdsall and Carl W. Brown. Melvin C. Fredlund was excused. Also attending were Mary K. Neff, Treasurer, GRF; Timothy O'Keefe, CEO; Dennis Bell, Public Safety Manager; and two residents. Attendance

The Chairman welcomed everyone to the first Planning Committee meeting and provided some background on the formation of the Committee, its purpose, and goals. Chairman's Opening Remarks/

Leslie Birdsall was elected Vice Chairman of the Committee by unanimous consent. Election of Vice Chair

The Chairman opened discussion on the final recommendations from TJKM Traffic Engineering Consultants to improve traffic and pedestrian safety in Rossmoor. Mr. O'Keefe provided background information to the Committee, including comments he receives regularly from residents regarding pedestrian and traffic safety issues. He also explained that he and Mr. Bell included five recommendations from TJKM for the Committee's first review which deal with traffic and pedestrian safety at several key intersections, and two recommendations dealing with traffic speed and golf cart usage. Discussion of Traffic and Pedestrian Safety Recommendations from TJKM Consultants

The Committee then reviewed and discussed the five recommendations addressing pedestrian and traffic safety, and asked Mr. Bell to research additional signage and lane marking options at the gate entrance for further review at next month's meeting. Mr. Brown volunteered to provide more information to staff and the Committee regarding vendors and pricing for pedestrian activated signs, including flashing stop signs, at key intersections in the Gateway Clubhouse area.

The Committee turned to the recommendations dealing with speed and golf cart usage in Rossmoor, including installing golf cart lanes and lane markers in roadways along the golf courses and on a portion of Golden Rain Road. Discussion followed.

Before adjourning, the Chairman announced that future meetings of the Committee will be held on the second Friday of each month at 10:30 a.m. in the Board Room at Gateway following the Golf Advisory Committee's monthly meeting. Therefore, the next regular meeting of the Planning Committee will be held on Friday, October 13, 2017, at 10:30 a.m. in the Board Room at Gateway Complex. Next Mtg. 10/13/17

There being no further business to come before the Committee, the meeting was Adjournment adjourned at 3:10 p.m.

Mary Lou Delpech, Chairman
Planning Committee

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DRAFT

SUMMARY REPORT GOLDEN RAIN FOUNDATION PLANNING COMMITTEE

REPORT PREPARED BY:

Dennis Bell, Public Safety Manager

REQUESTED ACTION/RECOMMENDATION:

Consider options and recommendations for several items the Planning Committee directed staff to research regarding the traffic and pedestrian safety study.

BACKGROUND:

At the September 8, 2017, Planning Committee meeting, Staff presented a number of recommendations regarding the traffic and pedestrian safety study for the Committee's consideration. The Committee prioritized the list and directed to begin researching the recommendations with the priority locations of:

1. S-2 Crosswalk Rossmoor Parkway and Golden Rain Rd.
2. S-3 Crosswalk on Golden Rain Rad at the Gateway Clubhouse Driveway,
3. S-4 Pedestrian Crossing Tice Creek Dr. and Golden Rain Rd.
4. S-5 Crosswalk Tice Creek Dr. and Oakmont.

Staffs researched options for these locations. Staff contacted and spoke to vendors, the City Traffic Engineer and representatives from TJKM. Additionally, staff researched the Manual on Uniform Traffic Control Devices (MUTCD), which is the Federal regulatory document for traffic control devices that is followed by State and Local jurisdictions. While GRF streets are private, it is imperative that GRF follow MUTCD guidelines so that WCPD can enforce the California Vehicle Code on GRF streets.

Based on the research, Staff developed options and recommendations for the Planning Committee's consideration. Below are the options and staff's recommendations:

S-2 Crosswalk Golden Rain Road and Rossmoor Parkway

Option #1 (Traffic Study): Widen the crosswalk to allow for crossing that would bypass the center divider. Approximate cost is \$2,000. When doing this work, all crosswalks at this intersection should be changed to ladder style.

Option #2: Move the entire crosswalk forward (see attachment #1). This option provides greater site distances for vehicles, increasing pedestrian visibility, does not go over the divider, and provides a place for pedestrians to stand to cross at the turn from

Rossmoor Parkway to Golden Rain Rd. However, this reconfiguration would require new ADA ramps and new street markings resulting in an approximate cost of \$25,000. **6a-2**

Option #3: Make no changes/refer back to staff for further study.

Staff Recommendation: Staff recommends widening the crosswalk by two feet and restriping all the crosswalks at this intersection to ladder style.

S-3 Crosswalk Golden Rain Road at the Gateway Driveway

Option #1: (Traffic Study): Remove this mid-block crosswalk. This is a lightly used crossing and because of the configuration of this intersection, this crosswalk increases confusion. This crosswalk was added when the GRF used the Waterford lot for GRF employee parking. The estimated cost to remove this crosswalk and other roadway markings is \$2,000.

Option #2: Make no changes.

Staff Recommendation: Staff recommends removing this crosswalk and the pedestrian roadway markings.

S-4 Pedestrian Crossing Tice Creek Dr. and Golden Rain Rd.

Option #1 (Traffic Study): Raise the crosswalks on the east/west legs of Golden Rain Rd. Doing so would provide greater visibility of pedestrians and the raised crosswalks with help slow vehicles down.

Option #2: The Planning Committee directed staff to research pedestrian activated LED flashing stop signs for this intersection. Since this was not an option in the Traffic Study, staff contacted TJKM. TJKM explained that these types of stops signs were considered, but not recommended as options because of the “light pollution.” TJKM was concerned that these bright flashing lights would disturb the residences on the southwest corner of Golden Rand Rd. and Tice Creek Dr (see attachment #2).

Staff contacted five vendors who sell pedestrian activated solar flashing LED stop signs. Of these vendors only one, Lightguard Systems, works with an installer. Furthermore Lightguard Systems was the only vendor who asked to see driver perspective photos of the intersection and surrounding areas and wanted to discuss the options. Staff sent photos to Lightguard and then discussed the use of the LED stops signs at this intersection. After reviewing the photos and discussing needs with staff, Lightguard would not recommend or sell flashing LED stop signs to the GRF because:

1. The LED lights are so bright (there are 96 LED's per sign) that the lights would create a nuisance for the nearby residences.
2. The trees on three of the corners will interfere with the solar charging, and because of the number of signs there would be a significant power draw.
3. While electrical signs could be installed, the amount of road cuts necessary would make the project cost prohibitive.
4. Stop signs with fewer and dimmer lights are manufactured, but they would be difficult to see and would not be highly visible in daylight.

Lightguard could not recommend other lighted solutions to enhance pedestrian safety as the MUTCD prohibits use of pedestrian warning lights at controlled intersections.

Staff researched the MUTCD and learned that pedestrian warning lights cannot be used at crosswalks controlled by stop signs. Specifically Section 4N.02, In-Roadway Warning Lights at Crosswalks, states that IRWL's shall not be used at crosswalks controlled by yield signs, stop signs, or other traffic control signals.

Option #3: The Planning Committee can direct further study of solutions for this intersection, which would likely involve additional assistance from TJKM.

Option #4: Make no changes to the intersection/refer back to staff for further study.

Staff Recommendation: Staff recommends the further study of Option #1, the raised crosswalks, as suggested by TJKM. TJKM estimated the cost of this project at \$25,000 although staff believes that actual costs will be higher as additional engineering/drainage and ADA work would likely be required.

S-5 Crosswalk Tice Creek Dr. and Oakmont.

Option #1 (Traffic Study): Install two Rapid Rectangular Flashing Beacons (RRFB) at the Crosswalk on Tice Creek Dr. and Oakmont Dr (see attachment #3).

Staff sent Lightguard Systems driver perspective photos of this location and then discussed options. Per the MUTCD RRFB's can be used for the crosswalk in the north/south legs of Tice Creek Dr. as this crosswalk is not controlled by a stop sign. Lightguard said that the intensity of the RRFB lights are low and as such, light pollution for nearby residences would not be a problem.

In its research, staff found information which suggests "RRFBs can significantly increase yielding rates compared to standard pedestrian warning signs alone. Results have shown that motorist yielding can be increased from baselines averaging 5% to 20% with the standard pedestrian warning sign treatment only to sustainable yielding rates of 80% or higher with this device."

The price for the two RRFB's without poles (Lightguard does not sell poles) or installation is approximately \$7,100. Again, Lightguard Systems was the only vendor who works with an installer. Staff did not receive an estimate for the pole or installation.

Option #2: In addition to the Tice Creek Dr. leg, the Planning Committee directed staff to research pedestrian activated lighted signs for the Gateway Parking lot and the Crosswalk at Oakmont. Because the crosswalk on Oakmont is controlled by a stop sign pedestrian warning lights are prohibited by the MUTCD.

Option #3: Make no changes/refer back to staff for further study.

Staff Recommendation: Staff recommends installing two solar, wireless activated RRFB's for the crosswalk on Tice Creek Dr. at Oakmont Dr.

TJKM

Staff spoke to the Principal of TJKM. TJKM will provide GRF with continuing support on a time and materials basis. Costs will be dependent on the staff member(s) assigned and will range from \$55 to \$200 per hour. The assignment of the staff member(s) will be based on the scope of work necessary. TJKM will provide GRF with:

1. Pros and cons of ideas
2. Benefits of the alternative researched
3. Ensure compliance with MUTCD, State and Local laws
4. Focus GRF's approach
5. Provide necessary documentation

ALTERNATIVES AND OPTIONS:

The Committee could select any of the options or staff recommendations, or direct staff to further study alternatives for these locations.

SUBSEQUENT ACTIONS:

Staff will solicit bids on options approved by the Planning Committee. Once obtained, the bids will be submitted to the Finance Committee and the Board of Directors for consideration.

Staff will continue to research the other alternatives approved by the Planning Committee at the September 8, 2017 meeting.

FINANCIAL IMPACT:

Unknown, the actual costs will not be determined until the project(s) is submitted for bid.

ATTACHMENTS:

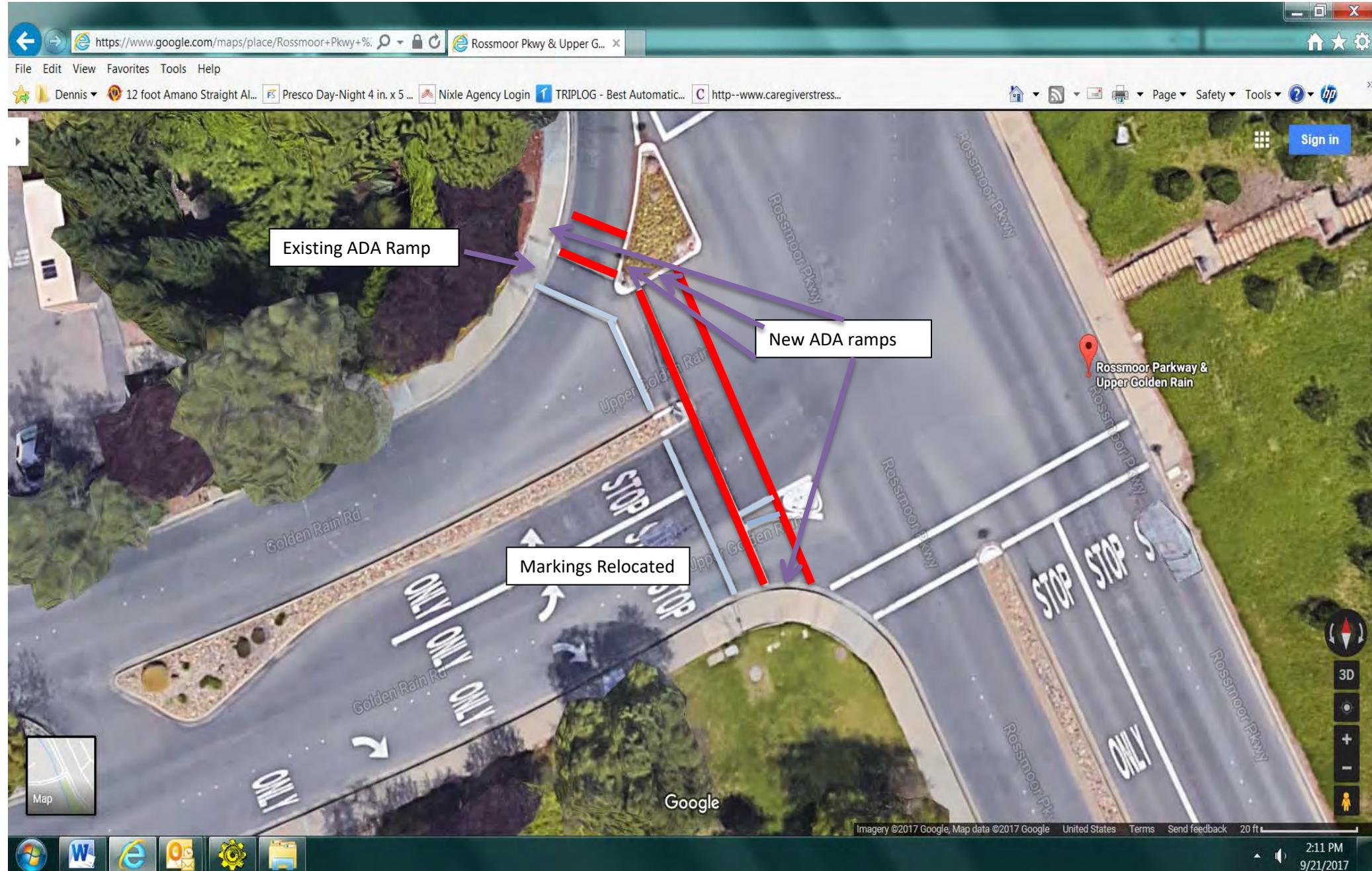
Attachment #1 Reconfigured Golden Rain Rd. and Rossmoor Parkway map
Attachment #2 Map of Tice Creek and Golden Rain Road
Attachment #3 RRFB Example

Attachment #1

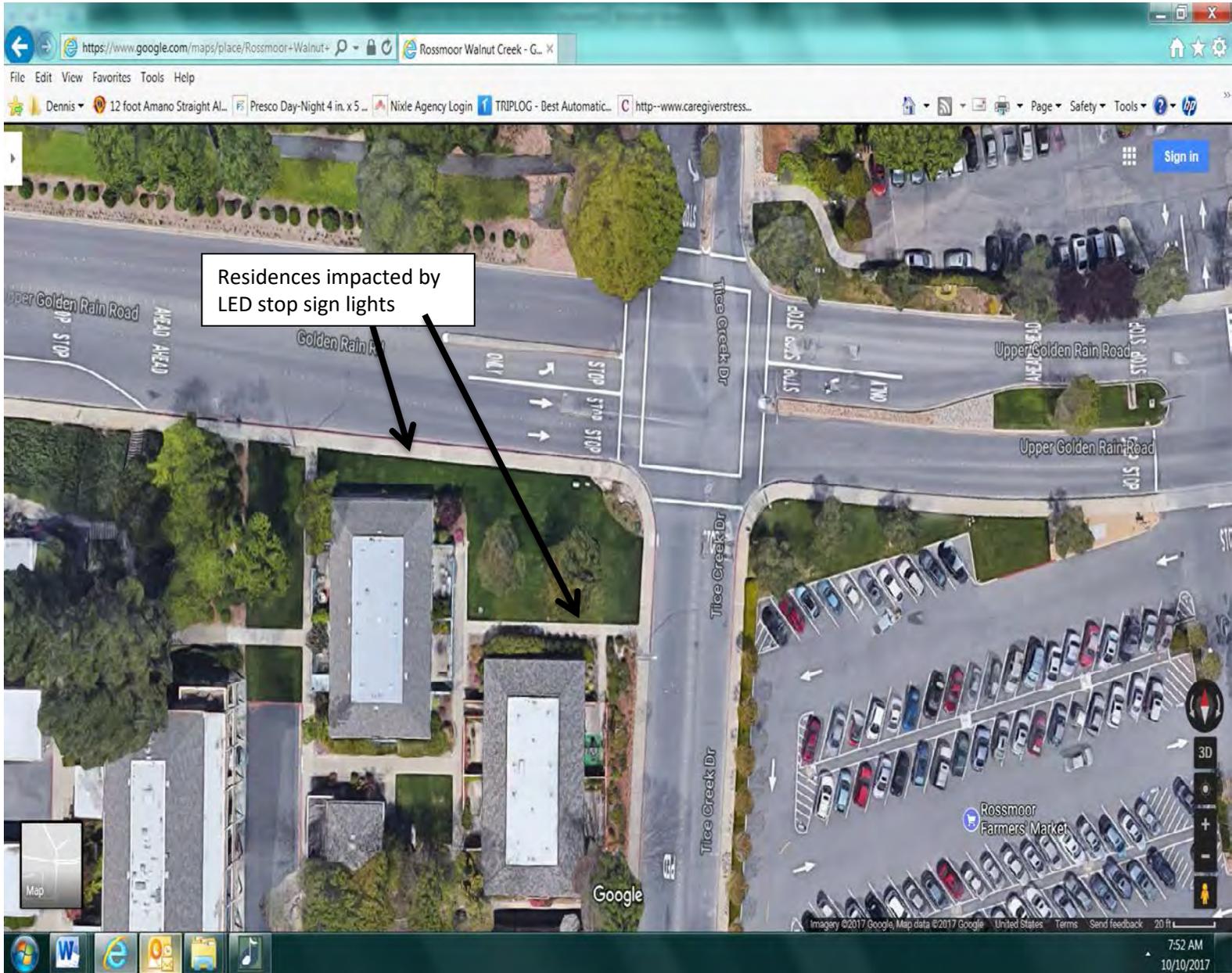
Move and reconfigure crosswalk

Red lines show location of new crosswalk. Grey line is the existin crosswalk.

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Attachment #2



Attachment #3

Example of a solar powered, wireless, pedestrian activated RRFB



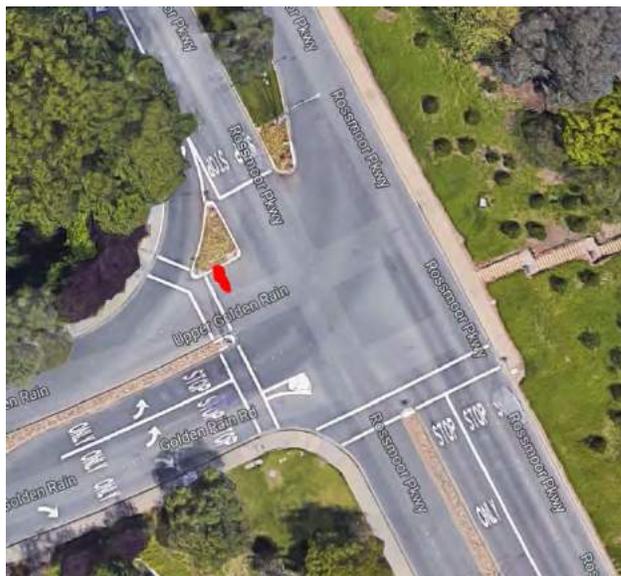
Traffic Safety Phase 1 Alternate Proposal

High incident sites.

Golden Rain and Tice Creek S-4 This may be the most important intersection to work on. The TJKM recommendation only called for the east (#69) and west (#67) sidewalks to be raised. The rationale was that it would give more visual impact and pedestrians would be higher and subsequently more visible. IRWL (In-Roadway Warning Lights) might be more expensive but more effective. It should cost around \$40,000 plus about \$40,000 in labor for a system that is designed for east (#69) with west (#67) and south (#68) with north (#66) crosswalks. Unlike RRFBs (Rectangular Rapidly Flashing Beacon) which are not recommended at intersections. IRWLs are MUTCD approved for intersections and intersections wider than two lanes. This would also have flashing stop signs so that drivers would have eyelevel warnings as well. It was felt that we might look into a system that IRWLs have the advantage in that they are flashing where the driver should be looking not in their peripheral vision. They also can be configured with lights pointing in different directions to meet a number of different configurations. There was some doubt of the effectiveness of the in road lights and a general feeling that the flashing stop signs alone might be just as effective. This would be a single system that activates when a pedestrian wanted to use any crosswalk. It would flash the stop signs with no in-roadway lights. This could be implemented with either 6 or 8 signs. It would have two Tice Creek signs for north and south intersections and 2 stop signs for each direction. We may also want to add another sign facing the other direction in each center median on Golden Rain. The stop signs would replace the existing stop signs but would flash to let people know that they had to pay attention.

S-5 Tice Creek and Oakmont. Crosswalk #34 (south) has been removed. Most pedestrians crossing Tice Creek at this intersection are coming to or from Gateway. This crosswalk offers no distance advantage over crosswalk #32 (north). Using crosswalk #32 via crosswalk #33 (west) across Oakmont may be safer than crossing on the east side at the Gateway parking entrance with traffic coming from all directions. An RRFB (Rectangular Rapidly Flashing Beacon) should never be used at an intersection. RRFBs are designed for traffic coming from two directions only and some engineers contend that they should only be used for two-lane mid-block crosswalks. Because drivers headed northbound on Tice Creek may be too focused on the next intersection at Golden Rain. We should install center lane crosswalk warning signs to remind drivers of not only the crosswalk but the intersection. If at some time if the crosswalk signs are not sufficient we may consider adding rumble strips to the northbound lane or other measures at a later date. A better solution might be to move the crosswalk (#32) which partially terminates in the Gateway parking lot driveway to the north side of the drains. It would also require removing part of the hedge bordering the parking lot and moving the sign to create a pedestrian entrance to the lot that does not use the driveway. This would also involve installing pedestrian warning lights for this crosswalk. One sign each for the north and south traffic on Tice Creek and one at the exit of the Gateway parking lot.

S-2 This site has high traffic volume. It has some unique problems. When approached from Golden Rain (eastbound), drivers do not have a clear picture of which northbound lane cars are in because the Golden Rain roadbed is lower. This creates some right of way confusion. Being a two-lane T intersection some cars in the northbound #3 lane feel that they have the right of way. Golden Rain left turning traffic often does not stay in its lane. Usually it is the #2 lane traffic turning into the Rossmoor Parkway #1 lane (left) which is the lane they are legally supposed to use. Northbound left turning will often turn into the Golden Rain #2 lane interfering with the Rossmoor southbound left turning traffic. This creates a bad merge problem. Installing a barrier across this lane as indicated in red below along with a “Keep Left” sign will fix the problem. This will also make the crosswalk safer.



Fortunately there are good sight distances but drivers concerned with doing the right thing at the intersection may be more focused on vehicle traffic than pedestrian traffic. Widening and possibly ladder striping the crosswalk may help but the use of rumble stripes does not. It seems that vehicles are aware of the intersection so rumble strips will not likely add anything to safety.

S-1 This was listed as more than 1/3 of the accidents but was not listing as a priority. Directing people to the right lanes when entering is a problem and possibly we need other bright minds to work on the problem. We might also need to conduct some trials to determine if a reconfiguration that will reduce the post gate cross merging will work. Even shifting visitors to gates #2 & #3 might help. Residents would use #1 & #4. Gate #3 would accommodate over sized and commercial vehicles and no lanes would be any further than one lane from a guard. Above guardhouse #3 would be a big sign. A visitors sign with arrows pointing to lanes #2 & #3. The visitors portion would be lighted and the two arrows could be individually lit when one lane is closed.



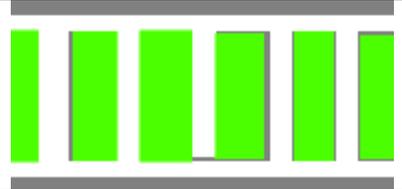
Traffic entering would have a sign on the left “South/East Rossmoor via Rossmoor Parkway” The one on the right would say “North/East Rossmoor via Golden Rain Road”. The oversized vehicle warning sign would stay. The #1 & #4 lanes would be marked on the asphalt “Residents Only” The middle lanes would be marked “Visitors”. In any case visitors would never be more than one lane off and it would eliminate the problem of left merging traffic trying to merge with right merging traffic. The problem with this is that visitors backing up at the gate may block traffic for residents and emergency vehicles especially for the right lane, which due to the creek splits a short distance from the gate. This may mean just passing visitors through the gate without checking when the backup gets too bad.

We could start by re-striping the lanes so that the left lane splits into gates 1 & 2 and then the right lane into gates 3 & 4.

Low Cost Measures

We need to start addressing some of the traffic safety issues starting with simple low cost measures that can be implemented while we study other measures that will take longer to determine what is the best approach and we get the money to pay for them.

Golf cart and pedestrian crossings should be consistently marked through out Rossmoor.

		
Pedestrian crosswalk	Golf cart crossing	Golf cart/pedestrian

All pedestrian crosswalks should be ladder (zebra) striped. Golf cart crossing should be green with white borders. While there is no standard for golf cart crossings, green has become accepted for bicycle and other slower moving vehicles. All golf cart crossings on arterials should be marked with signs as golf cart crossings so that visitors know what they are. Combined golf cart and pedestrian crossing green filled ladder striped crossings and should have both golf cart and pedestrian crossing signs.

Some crosswalks such as S-16 (Lower Golden Rain and Pine Knoll) are hard to see. At times it is in the shadows and the driver coming up Golden Rain toward the Hillside clubhouse just see the more visible crosswalk at the Hillside driveway. Because of the angle of the road coming uphill to a flat intersection this sidewalk is hard to see under ideal conditions. In addition to ladder striping the crosswalk we should also install a pedestrian crossing sign in the center median to make the crosswalk very noticeable. I do not think an advance warning sign is needed in this case after all too many signs are as bad as not enough.

S-8 Upper/Lower Golden Rain split. Move Hillside sign, which partially blocks the view of traffic from Upper Golden Rain.

Northbound on Golden Rain Rd. just after Pine Knoll there is an unnecessary and dangerous merge. Occasionally cars cross over the median into on coming lanes rather than merge. Because of the hill there is very short sight distance making this even more dangerous. Moving the median strip to follow the pavement seam would eliminate the need for the merge. It would also make giving directions easier avoiding confusions at the intersection. The southbound traffic would go a bit further before it splits into two lanes but the change would be inconsequential. While this is a low probably hazard it is one with serious of potentially fatal consequences and would be inexpensive to correct. It will also help with the S-8 intersection. When Silicon Valley Paving repaved this section of the road they initially did not have the merge. Speaking to District B residents they loved not having a merge and would like to go back to the way it was without a merge.

The center line would be changed to follow the seam in the pavement between the two halves of the road and the merge sign would be changed to warn motorists of the left turn only lane,



Future Consideration

Stanley Dollar at Tice Creek S17 See N2 The study recommends raising the entire intersection. These will provide the same visual warning that painted crosswalks do. By the time that a car's front tires hit the ridge they have already hit the pedestrian. Some people feel it is OK just to slow for stop signs, however if you are driving at 5MPH you are going more than 7 feet per second. Just ask the fire department what they feel about raised sidewalks. Independent radar activated flashing stop signs may be a better idea for about the same cost. The estimate to raise the intersection is \$51,000. Solar powered radar activated stop sign are about \$8,200 each. They are mounted on poles, which should reduce the cost to install except that the sign in the southeast corner is too shaded so that it would be best to trench to the northeast corner and put both solar panels on that pole. I don't see how it would cost more than more than \$4,000 each to install even with the trenching. This is still cheaper and more effective. Another possibilities is if the pedestrian activated stop signs at Golden Rain and Tice Creek prove effective and we add a golf cart path paralleling Stanley Dollar we may want to implement the same measures at this intersection.

Golf Cart Safety

In an ideal world Rossmoor would have been designed with alternate routes for golf carts to bypass arterials used by cars and trucks. The main problem with golf carts is that the top speed is much lower than the flow of other traffic on these arterials. This is why golf carts are limited to 25 mph streets. Throughout the vehicle code, street and highway code and traffic design guidelines is it acknowledged that vehicles traveling at speeds much lower than the speed limits are a hazard.

Communities with golf courses are allowed some leeway in setting enforceable speed limits to accommodate golf carts as long as they can establish that it is safe to do so.

*21115. (a) If a local authority finds that a highway under its jurisdiction is located adjacent to, or provides access to, a golf course and between the golf course and the place where golf carts are parked or stored or is within or bounded by a real estate development offering golf facilities and is designed and constructed, so as to **safely** permit the use of regular vehicular traffic and also the driving of golf carts on the highway, the local authority may, by resolution or ordinance, designate the highway or portion of the highway for combined use and prescribe rules and regulations that shall have the force of law. No highway shall be so designated for a distance of more than one mile from the golf course if the highway is not located within a development or beyond the area of a development, provided, the finding of the local authority in this respect shall be conclusive. Upon the designation becoming effective it shall be lawful to drive golf carts upon the highway in accordance with the prescribed rules and regulations. The rules and regulations may establish crossing zones and speed limits and other operating standards but shall not require that the golf carts conform to any requirements of this code with respect to registration, licensing, or equipment, except that if operated during darkness the golf cart shall be subject to the provisions of Section 24001.5 regarding equipment. The rules and regulations shall not be effective until appropriate signs giving notice thereof are posted along the highway affected. A “real estate development offering golf facilities,” for purposes of this section, means an area of single-family or multiple-family residences, the owners or occupants of which are eligible for membership in, or the use of, one or more golf courses within the development by virtue of their ownership or occupancy of a residential dwelling unit in the development.*

(b) For purposes of this section, a “golf cart” includes a low-speed vehicle.

In setting speed limit the starting point is the 85% speed. This is based on the fact that most drivers know what speeds are safe to drive and speed limits should reflect safe driving speeds. Guidelines allow under special circumstances to set speeds as much as 5 mph lower but when we can clock drivers safely driving at speeds as high as 37 mph this is an indication that no matter what we do this road will never be safe for all golf carts.

Narrowing the lanes will decrease the speed but if we cut the standard lanes down to 11 foot wide lanes studies will show that it will reduce the speed by 1 to 3 mph. This is not enough.

When considering golf carts safety and traffic speeds one must design for all golf carts. While many golf carts may go faster some street legal electric golf carts have a top speed of only 12-14 mph. Sections of road with 85% speed as much as 33-37 mph will have 15% of the traffic traveling as much as three times the speed of some golf carts.

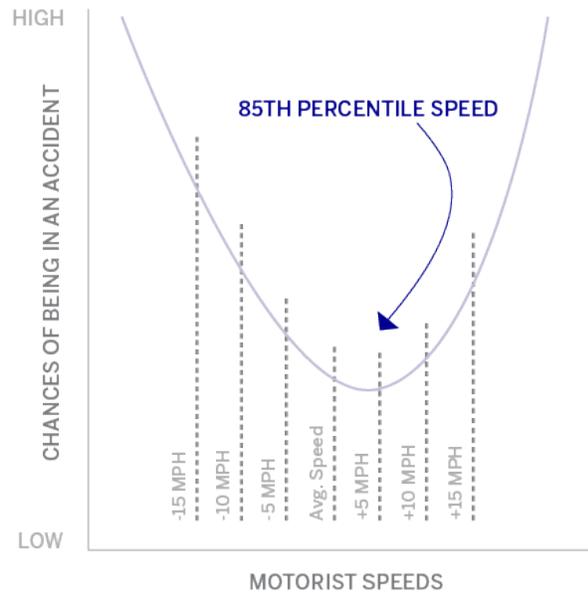
The Myth of Lowering Speed Limits for Safety

It is a common misconception that lowering speed limits make streets and highways safer. In November of 1973 in response to the oil crises and advocates for lower and supposedly safer highways the national speed limit was lowered to 55 mph. During the first couple of month traffic accidents went down but as drivers got used to the new speed limit they increased. Not only did it not significantly reduce oil consumption (less than 1%) but also it actually increased the number of accidents. When the limit was repealed fatalities due to accidents decreased. The problem is that when speed limits are lowered below the designed safe speed some drivers will drive at speed they consider safe and other will drive below the speed limit. As a result it make the street or highway more dangerous because traffic is traveling at disparate speeds.

Ideally traffic should range within 5 mph of the 85% and typically the safest speed limit should be about 8 mph higher not taking other factors into consideration.

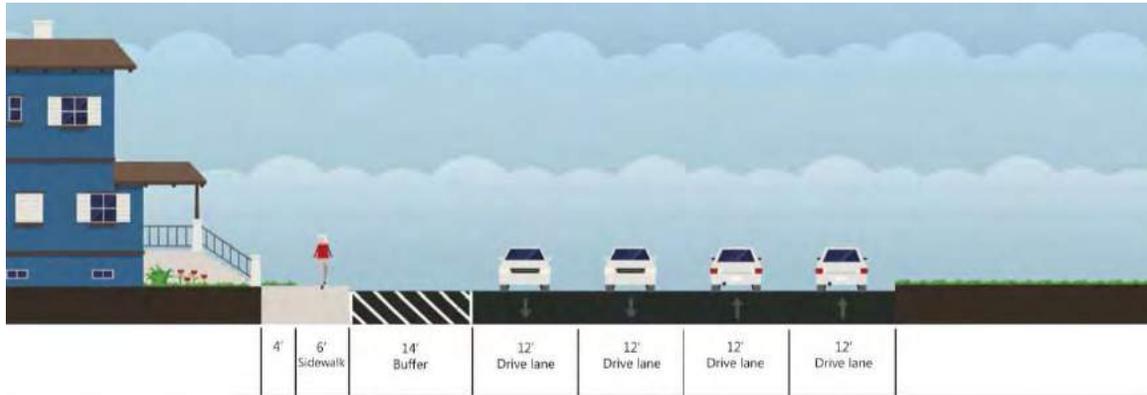
ACCIDENT INVOLVEMENT VS. MOTORIST SPEEDS

Source: "Speed Zoning on Texas Highways" State Department of Highways and Public Transportation, Austin, Texas, October 1990

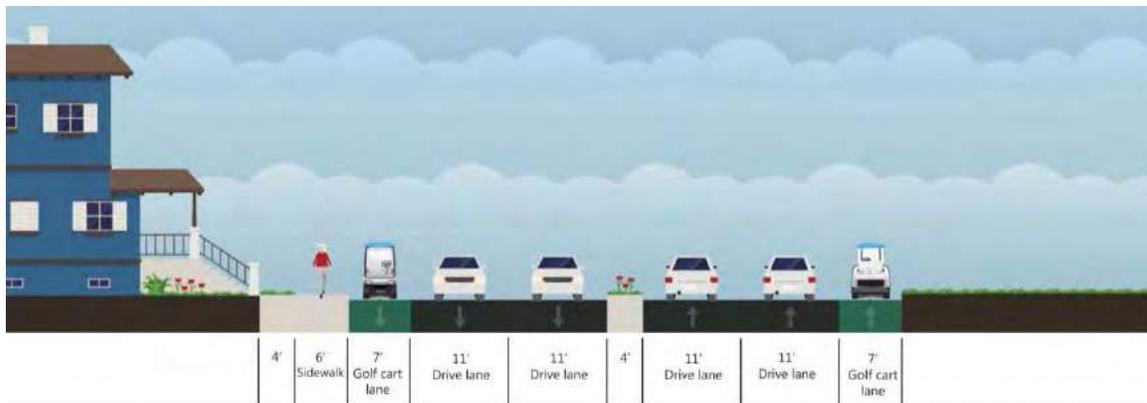


The Problem

Not only is it unsafe for golf carts to use some of our roads such as Golden Rain Rd between Tice Creek and Pine Knoll but while it has a buffer between intersections it has less room at the intersections.



Existing roadway at the widest point.



Proposed golf cart lanes, 11' car lanes and 4' center lanes at widest point.

At the intersection of Tice Creek there are 5 lanes with the turn lane and a center median. Eliminating the left turn lane will misalign the intersection. The eastbound golf cart lane will have to merge before the intersection. The westbound golf cart lane will have to start a ways after the intersection. At the intersection of Oakmont the road narrows. Instead of the 14' buffer on the side there is a center median about 5' wide. This is a loss of about 9' of total road width requiring that the westbound golf cart lane merge back into traffic before the intersection. The same problem exists at Pine Knoll. In other words the golf cart lanes can only run some of the distance between the intersections.



Portions that can be configured for golf lanes (in green)

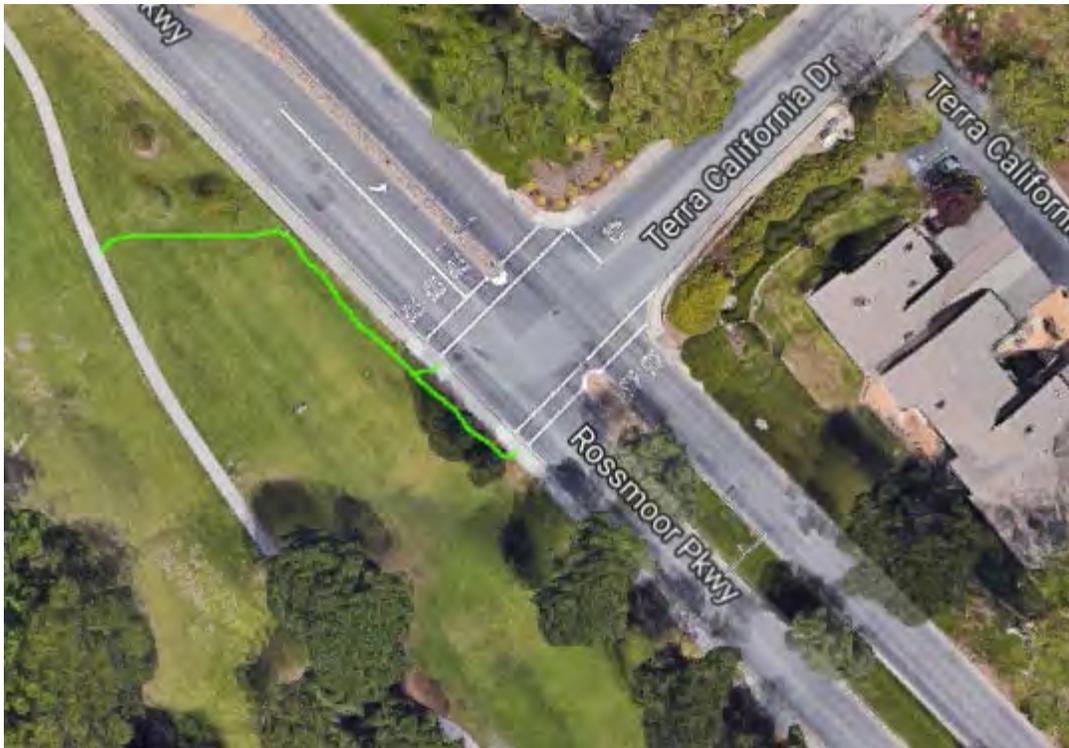
This configuration will most likely make it more dangerous for golf carts because with a road with two lanes each way there is little need for golf cart lanes between intersections because the golf carts will stay to the right. The forced merges add danger as they force golf carts into much faster moving traffic at a fixed location. The golf cart driver must either merge forcing carts to quickly slow or stop in the lane blocking other traffic and then merge and quickly accelerate. The narrowing of the lanes are likely to bring the 85% speed down from 37 mph to about 35 mph which is still unsafe for golf carts especially with merges on inside curves.

Recommendation

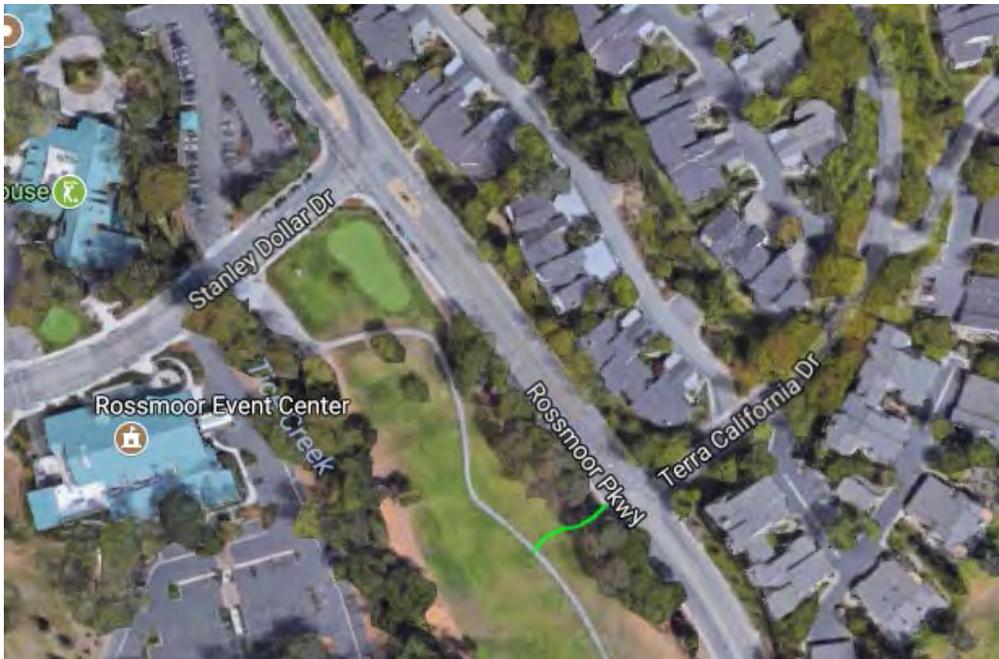
We have problems with the high 85% speed on Golden Rain between Tice Creek and the Upper/Lower split and well as Rossmoor Parkway and Tice Creek south of Avenida Sevela. Many traffic studies indicate that posted speed limits often have little effect on what cars drive. Because these are private roads we could retain the 25 mph speed limit posting but just not ask Walnut Creek to enforce them because it is very unlikely the Walnut Creek will agree that the speed differential is safe because it exceeds other accepted standards. If we decide to maintain the 25 mph speed limit we need to get a letter from the City of Walnut Creek stating that it is safe to allow golf carts on streets with an 85% speed of 35mph or higher in order to implement 21115. However studies show that speed limits set lower than speeds from proper traffic engineering actually increase accidents so it is less safe for vehicle traffic to have these low speed limits. If these are properly set they could also be enforced.

Instead we should recommend alternate routes with slower traffic and supplement our network of alternate routes however we would not ban golf carts from these higher speed private roads. Owners who regularly use the higher speed roads may want to invest in a higher speed golf cart.

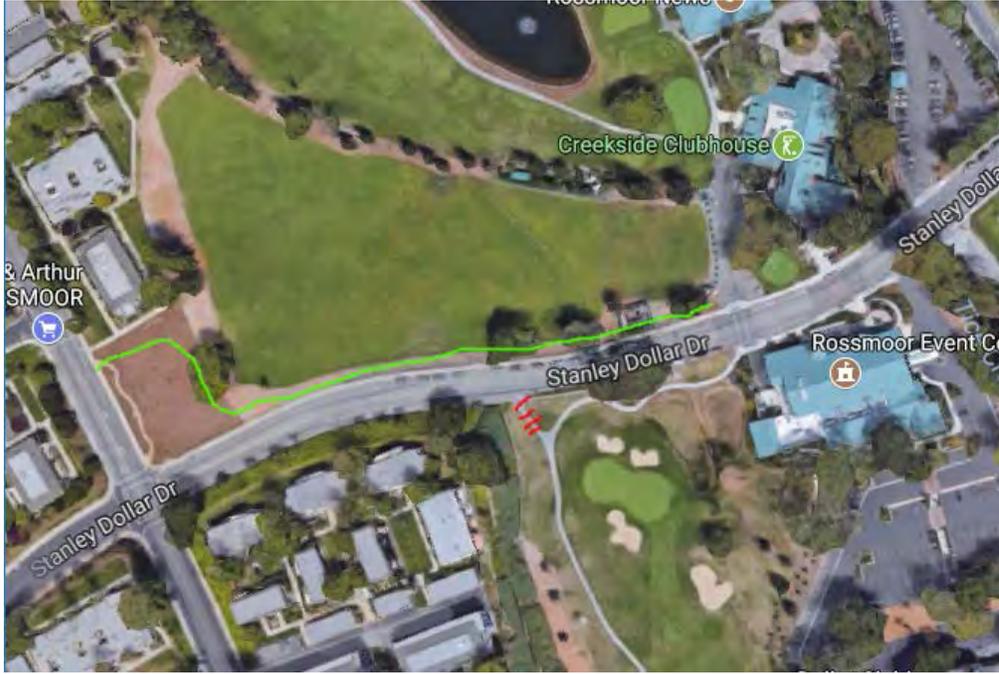
For example Oakmont can be used as an alternate route to Golden Rain between Tice Creek and the Upper/Lower split. Tice Creek south of Avenida Sevilla has a golf cart path paralleling the street. For other areas we need to add new golf cart paths.



Path from the north end of Terra California around the tee to the existing path. There should be room to squeeze around the fire hydrant.



At the south end of Terra California add a path to tie into the existing path.



Add a path from Creekside to Tice Creek entering a distance for the intersection. Remove the dogleg. This is not because of the vehicle speeds but because of the number of golf carts currently using this stretch of Stanley Dollar