



ROOSEVELT RIDGE

P R I V A T E R E S E R V E

Infrastructure Committee (RRIC)

Status Report

May 2018

Ted Bertele

Draft 2

Work In progress



- HOA Directors
 - Jeff Keicher
 - jeffreymkeicher@msn.com
 - Mike Wallace
 - mikewallace.Houston@gmail.com
 - Ted Bertele
 - tberte@msn.com
- HOA Legal
 - Jessica Miller
- HOA Infrastructure Committee Members
 - Ted Bertele
 - Andy Bramante
 - Lee Mayberry
 - Others?
- Beautification Team
 - Lee Mayberry to head up this effort
 - Need volunteers / members



- Provide recommendations, solicit quotes, manage contracts & supervise work
 - Roosevelt Ridge Road (only HOA controlled road)
 - Front gate and other access control points
 - Surveillance System (DVR)
 - Community facilities (island)
 - Coordinate with Security Committee for various activities (like berms and obstacles)
- At no point is the RRIC authorized to act on behalf of the HOA board without written (email) approval. In particular the execution of contracts. Managed expectations and good communication are key.



- Financials & Budgets - refresher
- Roosevelt Ridge Road
 - Base
 - Side roads, culverts and drainage
 - Plowing Contract
- Beautification
- Front Gate
 - Schematic
 - Repairs & Improvements
 - Future issues
- Surveillance System
 - Schematic
 - Repairs & Improvements
 - Future
- Centralized disposal
- Forestry Management
- Fire Prevention



2018 Projects & Balance Sheet (HOA annual meeting slides)

- Road Maintenance 5,950*
 - Grading 3,500*
 - Additional road work 2,450*
 - Entryway 1,200*
 - Tree work only (Magnolia) 1,200*
 - Project Management ~~2,000*~~
 - RRIC volunteers 0
 - Total 7,150*
- With current assumptions additional \$14-25k available

Roosevelt Ridge Homeowners Association	
Balance Sheet	
As of December 31, 2017	
	Dec 31, 17
ASSETS	
Current Assets	
Checking/Savings	
1st Bank HOA Checking	39,110.71
1st Bank HOA Savings	9,528.32
Total Checking/Savings	48,639.03
Accounts Receivable	
Accounts Receivable	-100.00
Total Accounts Receivable	-100.00
Other Current Assets	
Undeposited Funds	100.00
Total Other Current Assets	100.00
Total Current Assets	48,639.03
TOTAL ASSETS	48,639.03
LIABILITIES & EQUITY	
Equity	
Retained Earnings	83,835.83
Net Income	-35,196.80
Total Equity	48,639.03
TOTAL LIABILITIES & EQUITY	48,639.03

Continue the discussion regarding budgeting projects

* Updated by Ted



Budget Discussion (HOA Annual Meeting slides)

CY 2018 Estimate Expenses		
HOA Expenses	Description	Notes
\$ 1,800.00	Phone / Internet	CY 2018 Est
\$ 300.00	Bank Service Charges	CY 2018 Est
\$ 450.00	Dues & Subscriptions	CY 2018 Est
\$ 300.00	Postage & Handling Fees	CY 2018 Est
\$ 3,500.00	Legal	CY 2018 Est
\$ 800.00	Book Keeping	CY 2018 Est
\$ 1,500.00	Accounting	CY 2018 Est
\$ 300.00	Gas / Electric	CY 2018 Est
\$ 8,950.00	Total Expenses	
HOA Maintenance	Description	Notes
\$ 3,500.00	Road Grading & Ditching (BD)	RR Road only
\$ 250.00	Demarcation	
\$ 1,200.00	Culvert Blow out (BD)	Culvert filled in
\$ 500.00	Break Rock (BD)	tbd
\$ 750.00	Ditch terracing / erosion ctrl	
\$ 4,500.00	Plowing (BD)	1 Mile of RRR
\$ (2,250.00)	Plowing (HOA Credit)	Assume 50%
\$ 1,200.00	Entry way & tree work	
\$ 450.00	Project Mngt (Ted Ltd)	phased out
\$ 10,100.00	Total Maintenance	
HOA Repair	Description	Notes
\$ -	Road base (1 mile @ 4 in)	Erosion, plowing
\$ 1,200.00	Gate bypass barrier	16ft locked gate
\$ 650.00	Surveillance System	Trench new cable
\$ 1,850.00	Total Repairs	
\$ 13,450.00		
\$ 28,980.00	Dues Income (2017 PL)	
\$ 15,530.00	Budget for additional projects	

CY 2017 Expenses (work done / expenses incurred)		
HOA Expenses	Description	Notes
\$ 1,822.21	Phone / Internet	2017 PL Sheet
\$ 294.62	Bank Service Charges	2017 PL Sheet
\$ 123.56	Gate Service Subscription	DGO Access Invoice
\$ 439.00	Dues & Subscriptions	2017 PL Sheet
\$ 300.00	Postage & Handling Fees	2017 PL Sheet
\$ 5,105.00	Legal	2017 PL Sheet
\$ 787.50	Book Keeping	2017 PL Sheet
\$ 1,676.00	Accounting	2017 PL Sheet
\$ 296.32	Gas / Electric	2017 PL Sheet
\$ 10,844.21	Total Expenses	
HOA Maintenance	Description	Notes
\$ 5,000.00	Road Grading (BD)	Invoice 2133
\$ 2,000.00	Culvert Installs (BD)	Invoice 2133
\$ 1,200.00	Culvert Blow out (BD)	Invoice 2133
\$ 1,350.00	Break Rock (BD)	Invoice 2133
\$ 600.00	Gate Hammerhead (BD)	Invoice 2133
\$ 1,075.00	Plowing (BD)	Invoice 2064
\$ 2,100.00	Plowing (BD)	Invoice 2017
\$ 2,800.00	Maintenance (Burt Dibble)	No Invoice
\$ 2,080.00	Tree Work (Magnolia)	Invoice 20170824
\$ 600.00	Project Mngt (Ted Ltd)	No Invoice
\$ 493.73	Project Mngt (Ted Ltd)	Invoice 20170718
\$ 2,716.00	Project Mngt (Ted Ltd)	Invoice 20170902
\$ 1,475.00	Project Mngt (Ted Ltd)	Invoice 20171213
\$ 23,489.73	Total Maintenance	
HOA Repair	Description	Notes
\$ 6,720.00	Gate Repairs (CO Premier)	Invoice 10752
\$ 4,350.00	Concrete Down Payment	Invoice 2189
\$ 2,735.00	Concrete Prep (BD)	Invoice 2189
\$ 7,000.00	Concrete Work (BD / Adams)	Invoice 2189
\$ 3,776.06	Surveillance System (SSS)	Invoice 2938
\$ 24,581.06	Total Repairs	
\$ 58,915.00	Total Incurred Expense for 2017	
\$ 28,980.00	Dues Income (2017 PL)	
\$ (29,935.00)	Net income / loss	

* Updated by Ted



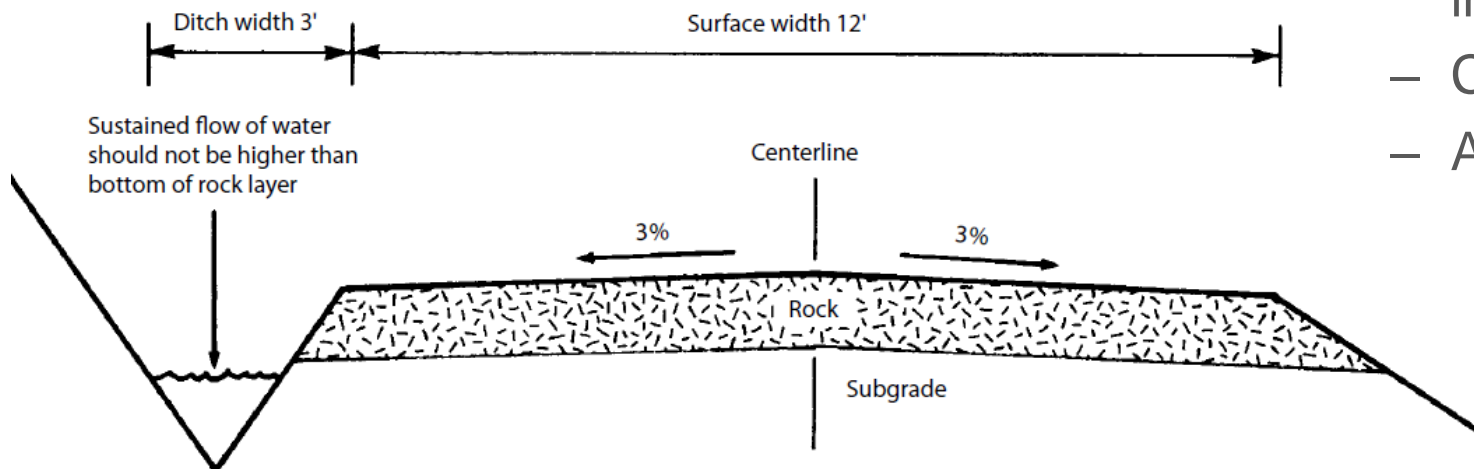
- Issues
 - Increased user traffic (including high speed users) & construction equipment
 - Trespassers on ORVs and Jeeps driving on wet early season roads
 - Gradual loss of road base material creating erosion and sediment issues
 - Improper side road construction and drainage
 - Missing and/or full culverts requiring more ditching and erosion mitigation
- Resurfacing with new material
 - Road base makes plowing less costly, reduces maintenance costs, reduces washouts, less damage from heavy equipment, less dust, better road surface...
 - Graded roads have about a 6 month service life depending on rain / snow
 - Options included more road base, magnesium chloride, recycled asphalt and paving
 - Roosevelt Ridge Road is just over 2 miles from end to end



- Ted, Burt & Steve (BD) conducted an extensive survey of all the roads (except San Juan) in May.
 - \$2,080 to Magnolia Tree Service to remove deadfall, shrubs & growth along RRR in preparation of grading and ditching
 - \$8,950 to Black Diamond to install 2 culverts, break rocks & grade the road with existing materials & modify the entryway
- Black Diamond also did the gate repair excavation and site prep. They subcontracted out the concrete to Adams.
 - \$7,000 Concrete pad, 6 in thick, Rebar #4 24 in OC, two pours Epoxy / broom finish, thicker edges for heavy traffic
 - \$10,735 Excavation, prep, two dump trucks of road base and bypass road install.



- Crowned roads
 - Center elevated to drain water off half the road to the outside and half the road to an inside ditch
 - The slope of the crown quickly drains water off the road or to the ditchline
 - Systems of ditches and cross-drains to control the water
 - Proper maintenance of the road surface, ditches, and cross-drains is critical to their effectiveness.
- Contractor Recommendations
 - Take control of the water first
 - Sift out and/or break rocks
 - Grade the subgrade adding or removing material as required
 - Ditch the edges, flush culverts and add tiered rock to control sediment and erosion
 - Add road base (class 6, 3/4" rock?), 4-6 inches
 - Compact the surface
 - Add smaller crusher as necessary





- Contractor info:
 - Black Diamond, located very close and has the right equipment, but some concerns about quality. Better supervision and oversight would help significantly
 - www.blackdiamondexcavating.com
 - Grapes and Sons, do not want to bid the project. They are better suited to larger projects, but did recommend BD.
 - www.grapesandsons.com
 - Coal Creek Excavation, would like to have them quote again. No past experience and previous quotes were higher than BD
 - www.coalcreekexcavation.com
 - Larry Sterling Excavating, potential contractor. Limited equipment. Community members have reached out for project proposals, have not heard back.



Option 1 – Road Base Install

- Maintenance (BD Quote)
 - Rock Breaking as required
 - \$135 x 10 hrs = \$1,350
 - Rip rap for drainage
 - \$200 x 4 loads estimated = \$800
 - Install Rip Rap
 - \$125 x 16hrs = \$2,000
 - Grading w/ Existing (2 miles of road)
 - \$3,500 / mile
 - Culvert Install or blowout
 - \$1,985 as req.
- Improvements (BD / AF&S)
 - 1 mile road base (4" x 16ft) \$28k
 - 1 mile emplace & Compact \$15k

- Project cost is \$50k for 1 mile
- Project cost is \$95k for entire road
- Ted's recommendation
 - Finance and or special assessment
 - Stop wasting money on maintenance

Loan amount	Monthly Payments	Loan amount	Monthly Payments
\$ 50,000	\$ 787.97	\$ 96,000	\$ 1,512.90
Loan term in years		Loan term in years	
6	Total Principal \$50,000 Paid	6	Total Principal \$96,000 Paid
Or		Or	
Loan term in months	Total Interest \$6,733.66 Paid	Loan term in months	Total Interest \$12,928.62 Paid
72	4.25 %	72	4.25 %

Our road is actually wider than 16 ft, so likely to need more material



Recycled Asphalt

- Significant cost increase, mostly in transport
- Preferred approach, but probably too expensive

Recycled Concrete

- Not recommend, creates a significant amount of dust
- Higher transportation costs

Road Width	Road Length		Road Base thickness		Road Base	
Feet	Miles	Feet	Feet	Inches	Cubic Feet	Cubic Yards
16	1	5280	0.333	4	28160	1043
Conversions		Material Required	Cost	Transport	Total	Source
tons / yard		Tons	\$/ton	\$/ton	\$	
Class 6 Base	1.55	1617	\$ 7.00	\$ 10.00	\$ 27,482.1	AF&S
Recycled Asphalt	1.72	1794	\$ 6.62	\$ 18.85	\$ 45,690.5	ARA
Class 6 Concrete	1.25	1304	\$ 6.55	\$ 18.85	\$ 33,114.1	ARA
Recycled Asphalt	1.72	1794	\$ 7.95	\$ 16.25	\$ 43,412.3	ARS / SGS
Class 6 Concrete	1.25	1304	\$ 7.95	\$ 16.25	\$ 31,549.6	ARS / SGS
Dirt	1.7	1773	\$ -	\$ -	\$ -	

AF&S – in Idaho Springs (proximity results in lower transport costs) and only do rock



- Black Diamond recommended Martin Marietta, made contact with their estimator on 9/11/17.
- Various concepts being explored, key issues
 - Roosevelt Ridge Road is the only road that does not need any work prior to paving (i.e. ditches placed, culverts in, sufficiently wide, trees removed...)
 - Requires soil engineering and sampling to determine how thick the asphalt should be and any mixture of road base and asphalt.
 - Some mixture of road base and pavement recommended (cost efficient)
 - Side roads will require improvements (already quoted by BD and Magnolia) to include additional culvers, widening, removing trees, ditching, and surface prep.
 - Cost with pavement is tied heavily to crude oil prices (volatile)

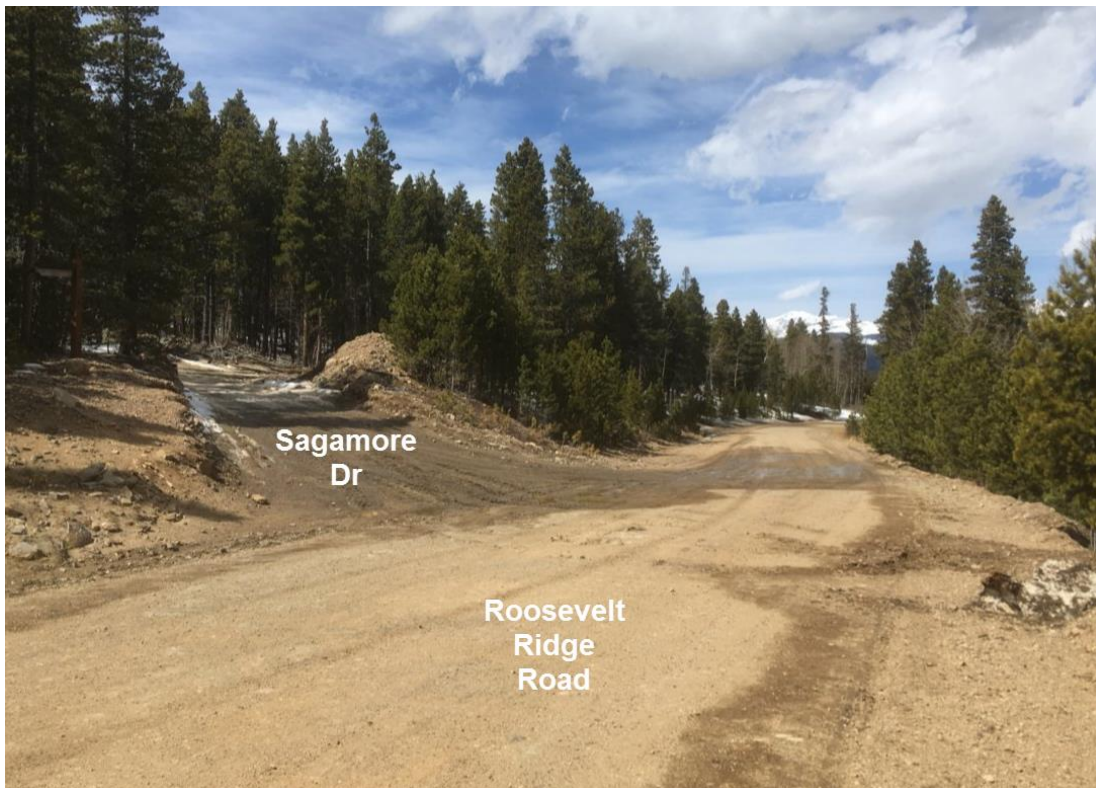


Option 3 - Paving Estimate

- Preliminary Estimate Details
 - 16 ft wide road (5.3 yards)
 - \$8,000 to move heavy equipment
 - \$10,000 for grading, culvert repair, rock crush, shoulder work
 - \$4,000 for soil engineering
 - Sub grade prep is \$4/sq yard
 - Asphalt is \$4.75 / sq yard / in thickness
 - Assumes 5 inches of pavement
 - 1 mile of road = 5.3 yards by 1760 yards = 9,300 sq yards
 - Roosevelt Ridge Road is 2.5 miles long
- Equipment and Prep Cost
 - \$8k + \$10k + \$4k = \$22k
- Paving per mile per inch thick
 - \$44,308
- 5 inches of pavement
 - \$227,540
- Paving Roosevelt Ridge Road
 - \$568,850
- Options
 - Remove 2 inches of pavement and add 3-4 inches of road base, we can save about \$80,000
- Paving April thru October

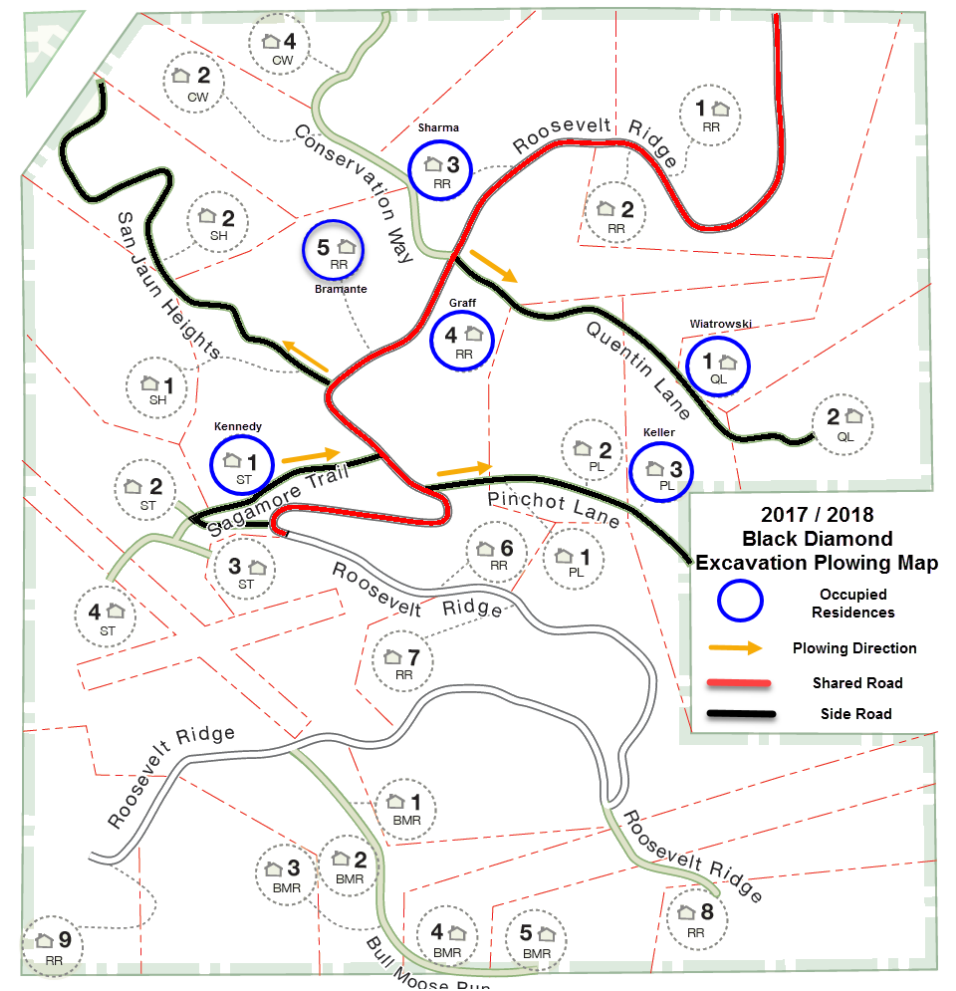


- We need to control the water
- Side roads / driveways need to ensure run-off is controlled.
- Recommend to board locations for culverts and ditching





- Roosevelt Ridge road current plowing in red
- Blue circles are occupied dwellings and will require access over the winter
- Home owners will be responsible for plowing their own side roads
 - The side roads have a preferred plow direction (downhill)
 - Sagamore needs to be plowed in a loop, since the single leg is an uphill run
- Contact Black Diamond for individual plowing contracts
- Currently, plowed length is approximately 1.1 miles





- Updated quote from Black Diamond (10/17/17 discussion):
 - \$375 per snow at depths of 4 to 12 in
 - \$150-\$200/hr at depths > 12 inches (Shared and Side Roads)
 - Each side road will be about \$100 per snow event, this is mostly due to difficult plowing conditions on these side roads.
 - Costs associated with plowing around equipment and debris will be assessed at \$100/hr.
- Notes
 - 2016 BD plowed about 12 times. 2015, it was about 20 times.
 - Plowing is required at 4+ inches, otherwise you get ice and the next plowing will require heavy equipment and more cost
 - Plowing is required throughout the year (maintained surfaces), otherwise heavy equipment will be required at additional cost
 - It is not reasonable to “plow up the top when you need access”. Drifting snow, ice and heavy equipment may be required that add significant cost.



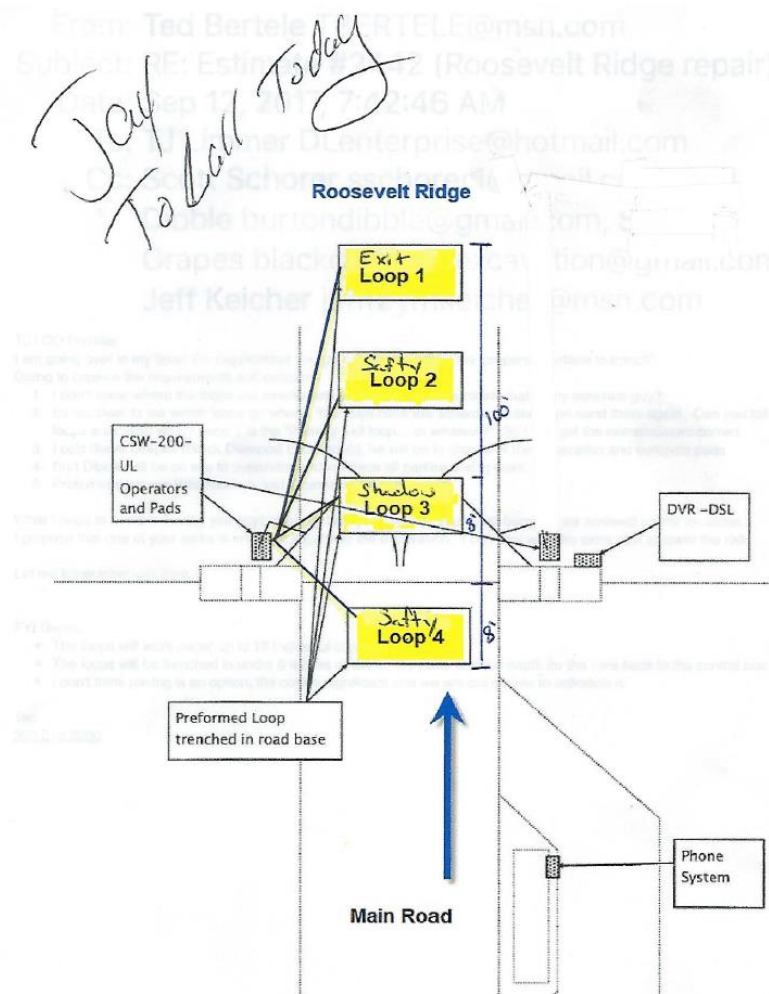
Entryway Beautification Spring 2018

- Lee willing to take the lead on this – bottom line, its ugly up front...
- Options to consider
 - Black Diamond does xeriscaping. Recommend taking down the fencing, pulling weeds, adding rocks to the terraces, and re-mulching the beds
 - We can plant flowers or other plants along entryway, BBB Seed in Boulder has various mixes suitable for high altitude conditions, recommend seeding now.
 - Remove fencing
 - Reposition railroad ties
 - Rock retaining wall
 - Mulch beds





- DGO Access was the original installer
- Colorado Premier Gate conducted a system diagnostic in May and quoted:
 - Initial assessment that the system is in great shape
 - \$6,000 to trench the road and replace the four ground loops
 - \$450 for a new receiver and \$45 per remote (supports 400+ remotes)
 - Ground loops buried in concrete
 - Work Completed October 18th 2017
 - RR personnel on site to supervise
 - RR personnel ordering and programming remotes (liftmaster 893Max)





Bypass road

- Keep for construction traffic to reduce wear and tear
- 16 ft width
- Locked gate secured to lodge pole pines
- John Kennedy to add boulders



Status: Bypass road secured as of 5/13/18



- Black Diamond / Adam Concrete pads for ground loops
 - \$7,000 Concrete pad, 6 in thick, Rebar #4 24 in OC, two pours Epoxy / broom finish, thicker edges for heavy traffic
 - 4,500 psi concrete, good for vehicles up to 96,000 lbs
 - 800 sq ft, a 20 x 32 main gate pad, 20 x 12 outer loop pad
 - CO Premier Gate supervised the pouring
 - Concrete work completed 10/18/17, 2-3 week full cure
 - Black Diamond added road base and final clean up
 - A bypass road was added to allow traffic around the construction site. This road will be secured with a gate and utilized for heavy construction equipment. It is the home owner's responsibility to ensure their construction traffic uses this bypass lane. Any damage to the pads will be the responsibility of the home owner.
 - This is one instance where costs seems to get out of control. This project went about 50% over budget for contractors.



- POTS (Plain Old Telephone Service) lines provide traditional voice communication, aka the call feature
- Add Programming (data) for the DKS 1830 and Access Plus Series with the DKS IM Server Modem™ interface – this is old school
- We pay an annual fee (\$100?) to DGO access to provide this circuit and connectivity.
- Need to upgrade the 1830 series controller using Ethernet and or Cellular Wireless.
- Recommend discussions with Colorado Premier Gate or we do the work ourselves.
- <https://www.doorking.com/accessories/connection-options>



Remote status

- Ted orders off of Amazon
- Submits expense reports
- Programs
- Secures in lock box or distributes to members
- Karen invoices (\$40/each)
- Another batch was ordered to take care of
 - Keller (did not communicate with HOA)
 - Anderson (new owner of lot 7)
 - BD needs one
 - One spare

RR Front Rate Remote Status 5/14/18

Location	Name	Ordered	Programmed	Status	Invoice?
4	Bramante	Yes	Yes	Delivered	Yes
14	Bramante	Yes	Yes	In Lock Box	Yes
6	Fujji	Yes	Yes	In Lock Box	Yes
13	Gordon	Yes	Yes	In Lock Box	Yes
9	Graf	Yes	Yes	Delivered	Yes
16	Graf	Yes	Yes	Delivered	Yes
5	Keller	Yes	Yes	Delivered	Yes
12	Mayberry	Yes	Yes	In Lock Box	Yes
11	Pure	Yes	Yes	In Lock Box	Yes
3	Sharma	Yes	Yes	Delivered	Yes
8	Twining	Yes	Yes	In Lock Box	Yes
15	Twining	Yes	Yes	In Lock Box	Yes
7	unknown				
1	Waitrowski	Yes	Yes	Delivered	Yes
2	Waitrowski	Yes	Yes	Delivered	Yes
10	Wallace	Yes	Yes	In Lock Box	Yes
17	Witczak	Yes	Yes	In Lock Box	Yes
tbd	Keller	Yes	No	Need Programing	Yes
tbd	Black Diamond	Yes	No	Need Programing	No
tbd	Anderson	Yes	No	Need Programing	Pending
tbd	Unallocated	Yes	No	Need Programing	Pending



- DGO Access quoted
 - \$2,700 for camera and DVR upgrades
 - Not recommended, for comparison purposes only
 - DGO was prior vendor, had quality / reliability issues
- Security Surveillance Systems quote
 - \$3,780 that includes: 4 Channel Ultra video, audio, and pictures
 - 3 HD visible and IR cameras with motorized lens to replace existing cameras. These will be positioned to capture faces, vehicles and license plates.
 - System can be wired to the internet and provide users with real time video, images to mobile devices and diagnostics
 - Sample videos and images shown on next slide
 - Preliminary installation completed
 - CenturyLink fixed the internet connection (no high speed available)



Drop box videos with representative resolution

https://www.dropbox.com/s/mkp4jmx6p02pah6/Maaliki%20Auto_35_20170321111852781.mp4?dl=0

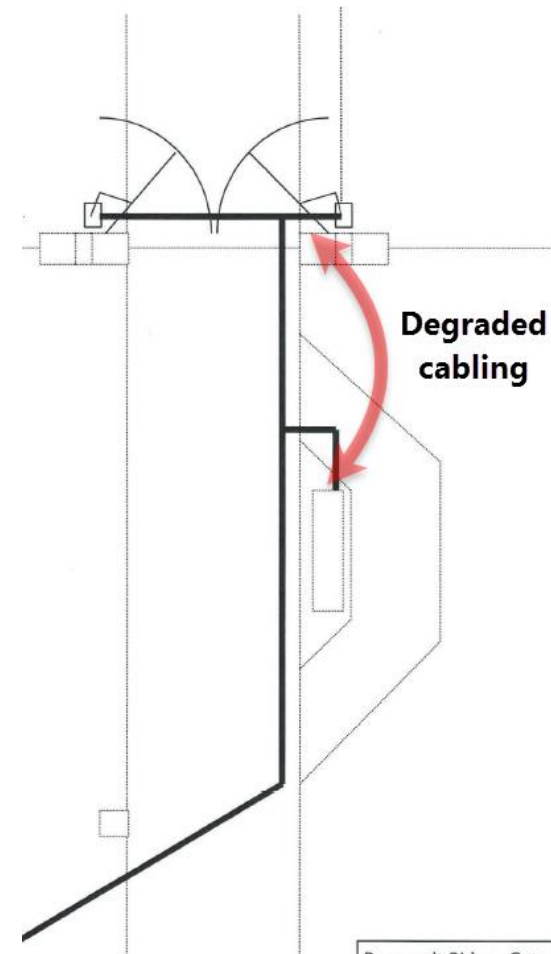
https://www.dropbox.com/s/zpzs2t3kij3uey2/court%20yard%20Bukly_41_20170614163209505.mp4?dl=0



Low Light Image

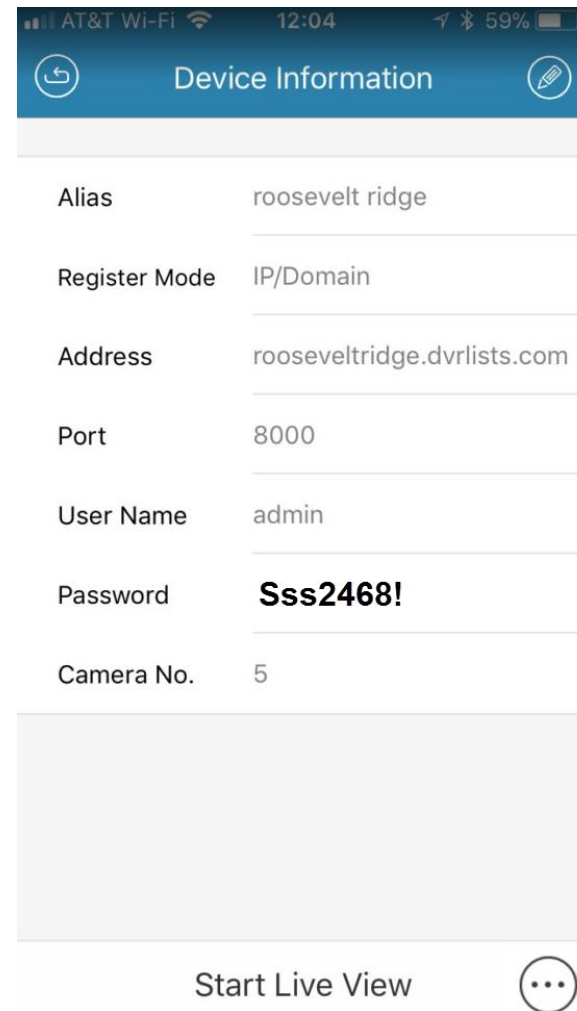


- Existing Wiring issues
 - 4 cameras in the system, 2 cameras are on the island
 - Keypad camera is transmitting poorly and the island mounted camera cable is severed
 - Suspect heavy equipment crushed the conduit
- Options
 - Trench from and rewire cameras (\$1,000)
 - RF the signal to the control box (\$2,000)
 - Do nothing and only monitor the two cameras at the gate
- Internet Access (CenturyLink DSL 1.5 / 0.9 mbps)
 - Roosevelt Ridge does have phone and internet at the gate
 - Technician on site 10/20 & now running
 - Low speed does not support the full functionality of the video system, but users should be able to log in and view
- SSS Camera troubleshooting continues on 11/2





- Video System NVMS 7000 App
 - Search the app on itunes or google play (android)
 - Settings are on the right →
 - Access to live feeds and recorded video
 - Limited bandwidth, connection is slow!!!



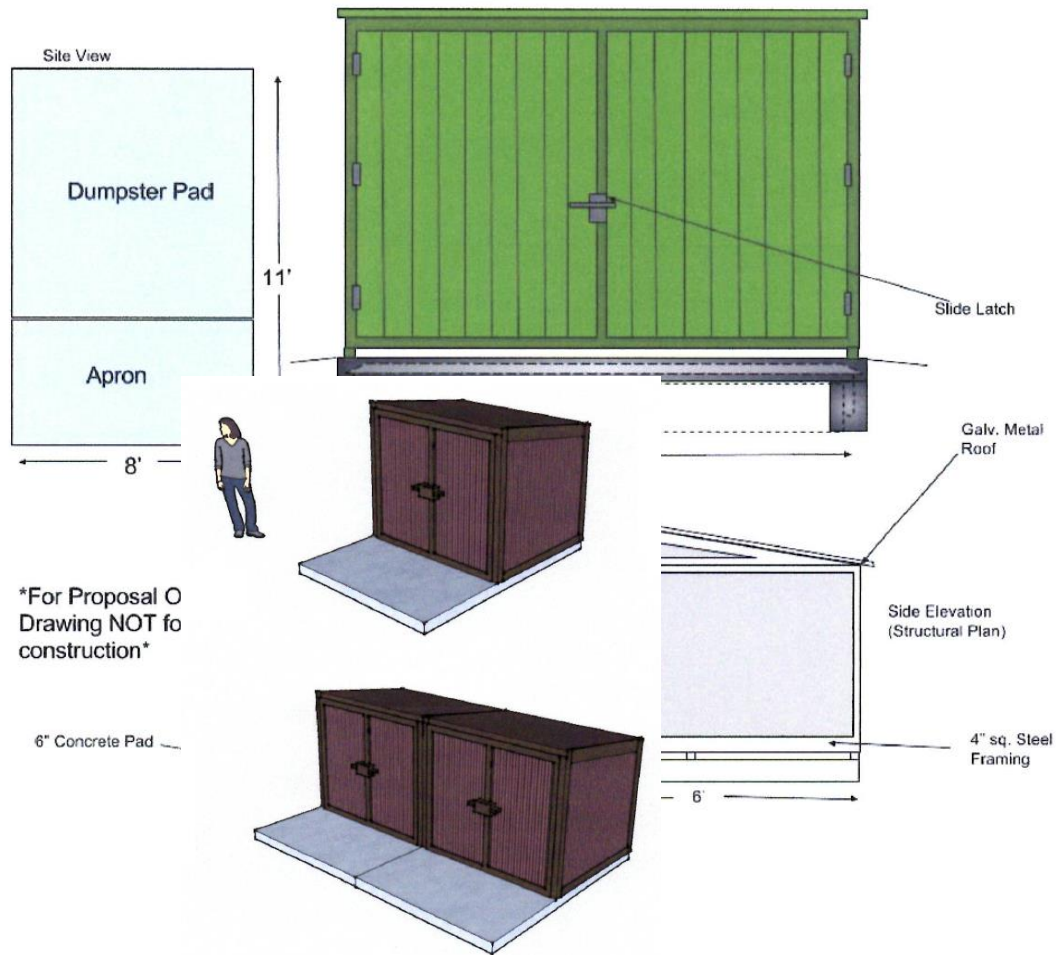


- Centralized Trash
 - We considered building a slab and trash receptacle inside the gate, but would make access for trash company difficult, and no one would want this on their property
 - The original design considered a trash and fire fighting vehicle location at the entryway
- Proposal
 - Locate trash receptacle outside of gate
 - Lockable, with code shared to HOA and trash company
 - Expandable, see diagram
 - Paid for by?





Attachment A: Rollinsville Development Dumpster Enclosure 3/26/17
SP

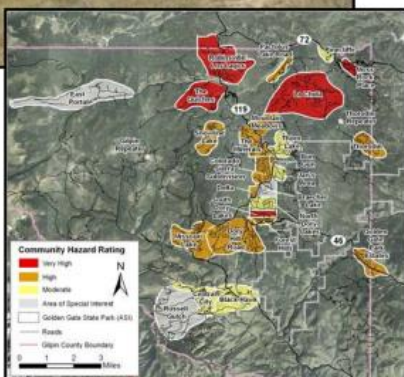


- Quote (3/26/17)
 - \$1,500 NRE / Design work
 - \$3,750 for the slab (single)
 - \$7,625 for the shed / enclosure
- Schedule is 4 weeks ARO
- Exclusions
 - Excess excavation (>30 inches) for footings
 - Permitting & Inspection
 - Weather delays



GILPIN COUNTY, COLORADO

Community Wildfire Protection Plan



Prepared for:
Gilpin County, Colorado

Submitted By:
Anchor Point
Boulder, Colorado
May 2009

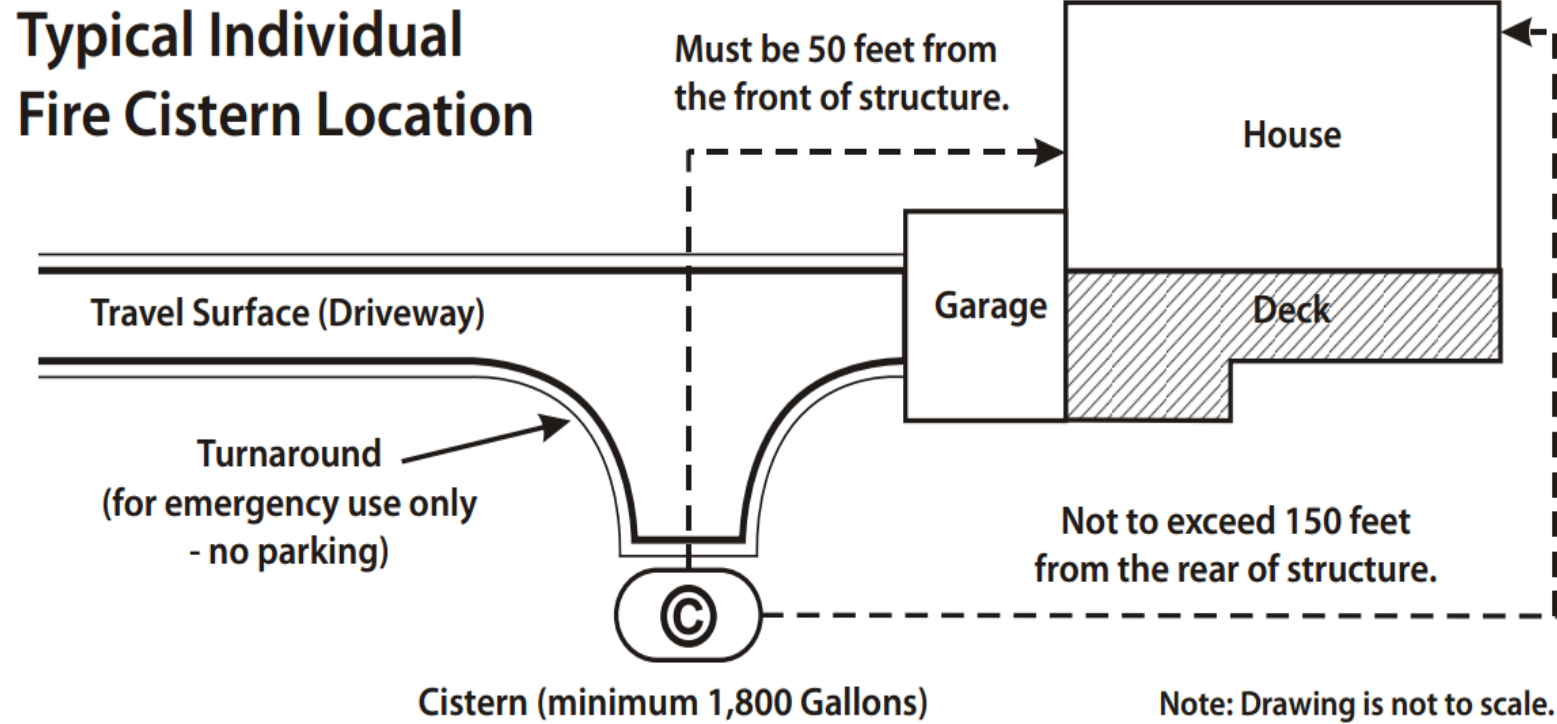
- Recommend Reviewing literature and implementing a plan
- Individual home owners review their properties and create zones
- HOA to consider the edges / creating defensible spaces
- Magnolia Tree Service can provide consultation & quoting for specific projects
- Timbeline Fire Chief Paul Ondr recently recommended a 30,000 gal cistern on Roosevelt Ridge – expensive!



- Gilpin County has no rules in place to mandate any exterior fire suppression systems (yet)
- Boulder County has new construction guidelines which is consistent with the national standards
- National Standards notes:
 - Buried to prevent freezing / damage
 - Small community cisterns are > 10,000 Gal
 - Large community 30,000 gal / 3 miles of road
 - Individual cisterns are 1,800 to 2,400 gal
 - Requires other water sources to backfill
- RR HOA objectives to create defensible spaces



Typical Fire Cistern





- Internet Access (CenturyLink DSL 1.5 / 0.9 mbps)
 - Roosevelt Ridge does have phone and internet at the gate, \$170/month
 - Issues with internet access (was not working)
 - Ted troubleshoot the connection and replaced the DSL modem
 - Technician on site 10/20 & now running
 - Low speed does not support the full functionality of the video system, but users should be able to log in and view
- Always looking for a better option
 - Hughes net
 - Rise broadband
 - Others?



- Mail Boxes
 - Individual home owners must contact Gilpin Post Office:
 - Address: 145 Clear Creek St, Black Hawk, CO 80422
 - Phone:(303) 582-5252
 - Owners must deal with re-keying, setting up mail, and interface with the USPS. This cannot be delegated to a 3rd party.
 - The cost per individual lock change is \$45
 - We have been in contact with the Black Hawk Post Office since October 2017 to replace the parcel locker lock. As of May 2018, they still have not dealt with the issue. Numerous calls from various residents...



Individual / Shared Driveway Improvement Options

- Quentin Lane Option
 - Cut trees down on uphill side
 - Grade road
 - Add a culvert and ditch roads
 - Add hammerhead / turn-out
 - Black Diamond: \$4,500
 - Magnolia Tree Service: \$1,040
-
- Sagamore Trail Option
 - Cut trees, 7 ft per side
 - Fix the Grade
 - Fix the turn to RRR and knock down the hump
 - Turnout / hammerhead at dog leg
 - Black Diamond: \$6,000
 - Magnolia Tree Service \$1,560
- Pinchot Lane Option
 - Widen section by 5 ft
 - Turnout / Hammerhead
 - Drain / ditches
 - Black Diamond \$1,500
 - Magnolia Tree Service \$1,040
- Bull Moose Run Option
 - Knock down the hump at the turn
 - Remove boulder (may be able to do it during the rock breaking day)
 - Grade to the road to the top of the first hill.
- San Juan heights
 - TBD

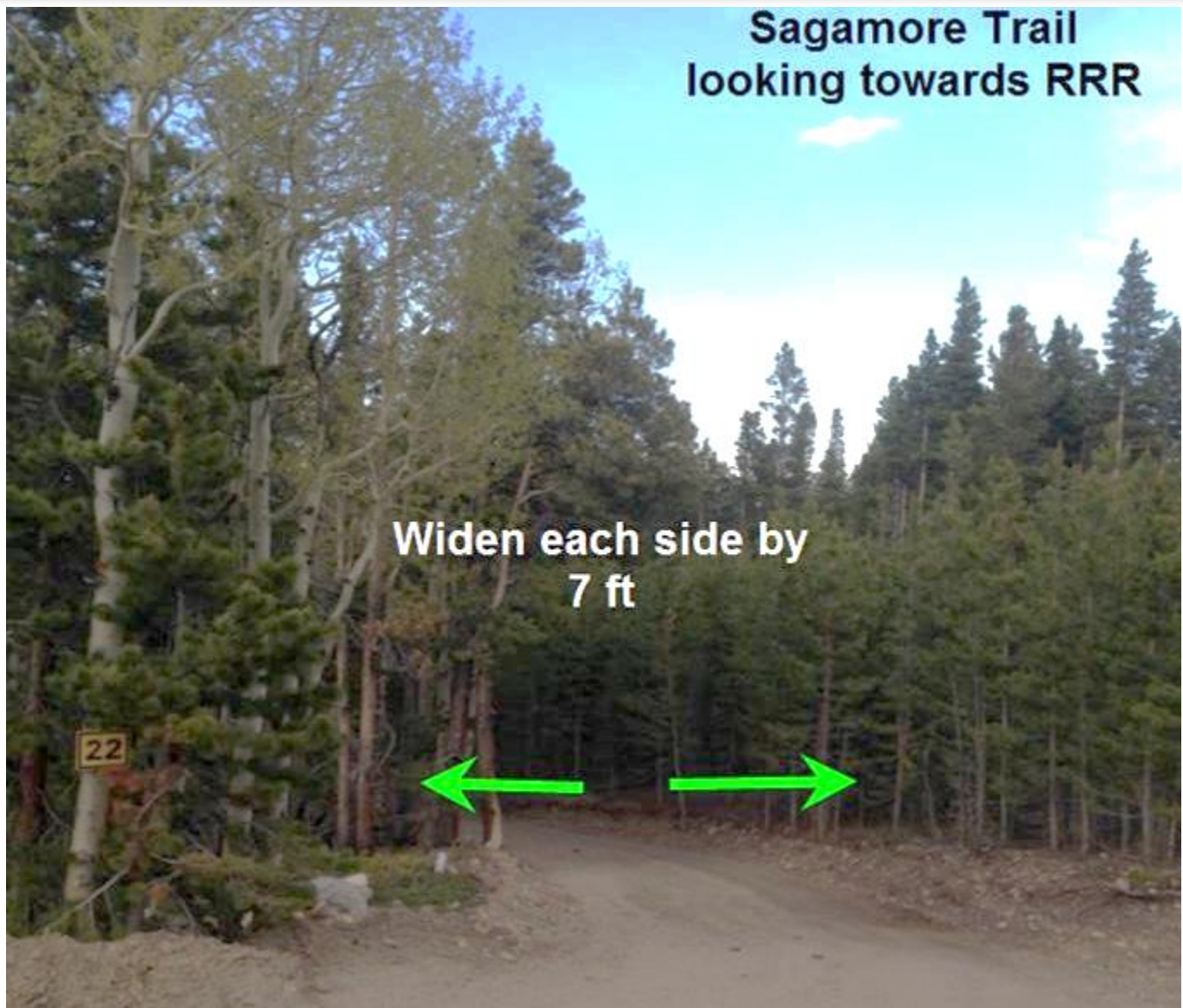


Pinchot Lane Images



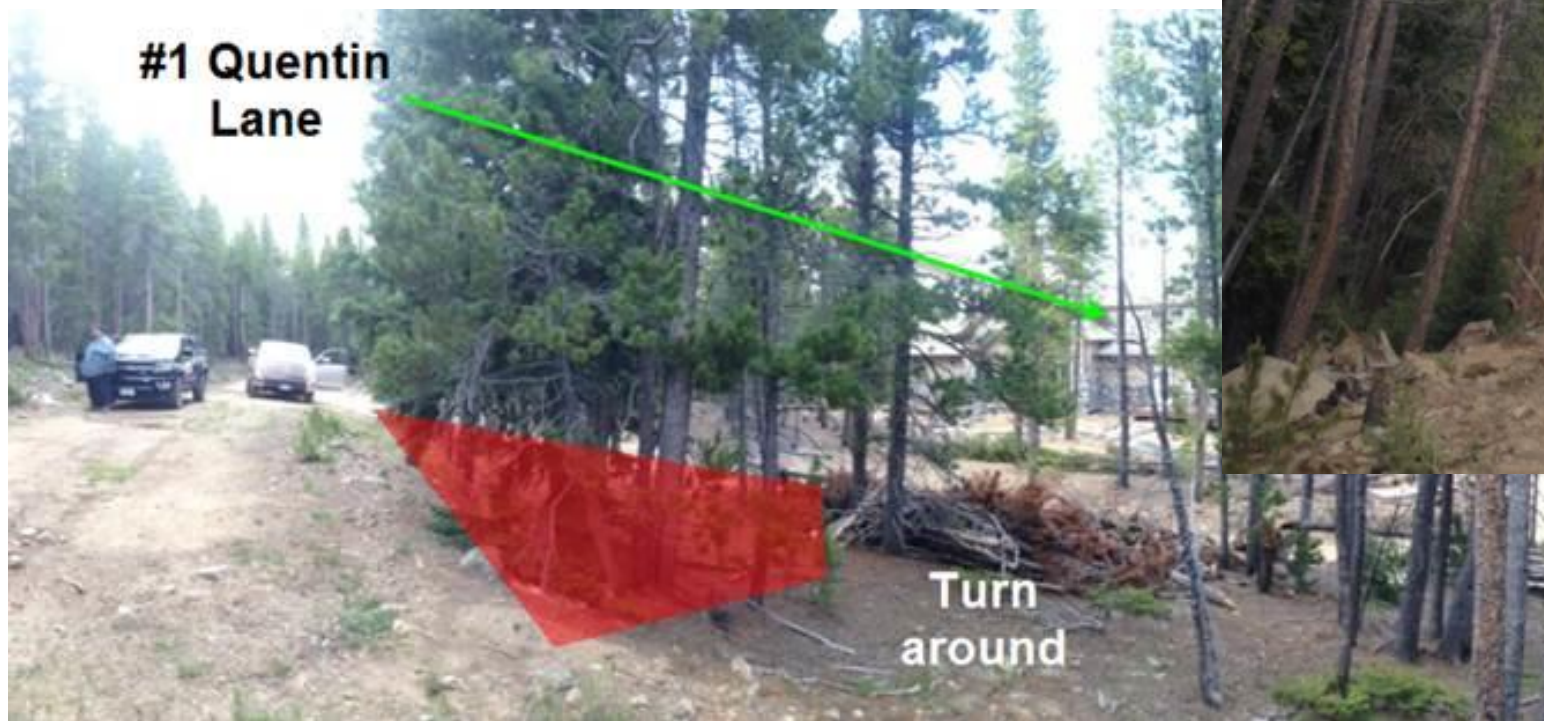


Sagamore Trail





Quentin Lane





Individual Owners: Remote Camera Installation

- RR HOA installing remote cameras at known access / trespassing locations.
- These cameras will be serviced by RR on a periodic basis. Images will be reviewed by the HOA and actions taken as necessary.
- Cameras will be in enclosed security boxes with locks, reasonably camouflaged, and require ladder / tree climbing skills.
- Estimated cost is \$160 / unit
- If Home Owners are interested in having their property monitored, please contact the HOA for additional details.
- Possible locations include San Juan Heights, Gate bypass, RRR cul-de-sac, Bull Moose Run.



Stealth Cam G42NG





Dump Truck Hauling Capacities and material properties

- Aluminum end dump trailer available to haul 25 ton loads and up to 50 yards of mulch or other light materials in 1 load.



Compaction Rates for our Products

Class 6 3/4" Base	1.55 tons/cubic yard
Asphalt Base	1.72 tons/cubic yard
1-1/2" x 3/4" rock	1.10 tons/cubic yard
Dirt	1.70 tons/cubic yard

Ton Amounts per Truck Load

Belly Dump or End Dump.....	23-25 tons
Tandem.....	13-15 tons
Bobtail / Single Axle.....	3-8 tons



- Albert Frei & Sons; Rick Foster (303) 913 6796 www.albertfreiandsons.com
- ARS; Roy (303) 346 8280 www.arscompanies.com
- Allied Sales; Russ Hawkins (303) 289-3366 www.alliedrecycle.com

Road Width	Road Length		Road Base thickness		Road Base	
Feet	Miles	Feet	Feet	Inches	Cubic Feet	Cubic Yards
16	1	5280	0.333	4	28160	1043
Conversions		Material Required	Cost	Transport	Total	Source
tons / yard		Tons	\$/ton	\$/ton	\$	
Class 6 Base	1.55	1617	\$ 7.00	\$ 10.00	\$ 27,482.1	AF&S
Recycled Asphalt	1.72	1794	\$ 6.62	\$ 18.85	\$ 45,690.5	ARA
Class 6 Concrete	1.25	1304	\$ 6.55	\$ 18.85	\$ 33,114.1	ARA
Recycled Asphalt	1.72	1794	\$ 7.95	\$ 16.25	\$ 43,412.3	ARS / SGS
Class 6 Concrete	1.25	1304	\$ 7.95	\$ 16.25	\$ 31,549.6	ARS / SGS
Dirt	1.7	1773	\$ -	\$ -	\$ -	



- Black Diamond Estimate (Fall 2017)
- Materials:
 - 4" of base material delivered \$14.6k / mile (1,950 tons / mile)
 - 6" of base material delivered \$22k / mile (2,900 tons / mile)
 - **Market Price \$7.58 / ton delivered???**
- Surface Prep and Installation
 - Road base installation cost is \$30k/mile
 - Total cost for 4" base and prep is about \$45k / mile
- **What's wrong with this quote?**
 - **This did not include transportation... this more than doubles the material estimate!**
- Issues:
 - Often times its very difficult to get reasonable accurate quotes from local providers.
 - Difficult to contact or get a response
 - Unorganized
 - Not detail oriented on the front end
 - Contracts typically are over-run, behind schedule, and variable quality
 - Cost, Schedule, Quality – pick two (if you are lucky)



- Equipment rates, collected from various invoices and quotes.

- | | |
|------------------------------|----------|
| – TV340 | \$125/hr |
| – H35 Machine | \$100/hr |
| – Compactor | \$85/hr |
| – Tandem Dump road base load | \$495 |
| – Equipment Mobilization | \$450 |
| – Rock Breaker | \$135/hr |
| – Grader | |
| – Dump Truck | |

