Subcommittee Report

to the Girdwood Trails Committee

August 14, 2018

Regarding: "Forest Loop" trail

(proposed by the Girdwood Nordic Ski Club)

Report Summary (including recommended GNSC/GTC Agreement)
Goals and Objectives
Forest Loop Trail Specifications
Map of Alignment
Trail Management Objectives

Reviewed and amended, and approved by the Girdwood Trails Committee 9.4.18

See accompanying information which includes meeting agendas, meeting notes, public comments and Appendix with miscellaneous handouts generated and reviewed during Subcommittee meetings held between 4/27-8/10/2018 with seven subcommittee members. Entire report and accompanying documentation was compiled by Eryn Boone, Paul Crews, and Julie Jonas

Subcommittee Report to Trails Committee regarding the Forest Loop

August, 2018

A subcommittee consisting of Eryn Boone (chair), Deb Essex, Peter Zug, Jim Braham, Julie Jonas, Ron Tenny and Paul Crews was appointed in April, 2018 to make a preliminary plan for the alignment, design and construction of a new multi-use trail (originally "Forest Loop"), proposed by the Girdwood Nordic Ski Club (GNSC).

History of Actions and Resolutions:

1. **October 4, 2016:** Girdwood Nordic Ski Club (GNSC) introduces trail proposal to Girdwood Trails Committee (GTC).
2. **June 6, 2017**: Girdwood Trails Committee moves to approve, in concept, Forest Loop Trail with the following conditions:
   1) New Arlberg parking lot and Our Lady of the Snows are dual access options to the trail.
   2) Trail is maximum 10' wide, hardened surface, with targeted maximum width of 14' clearing.
   3) Design minimized visual impact on existing trails
   4) Design minimized environmental impacts
   5) Girdwood Trails Committee has ongoing input on trail design and construction, with specific review and approval once the center line is set. (passes 16 in favor, 6 opposed, 3 abstentions)
3. **June 12, 2017:** Girdwood Land Use Committee moves to recommend a GBOS Resolution of Support for the conceptual plan for the Girdwood Nordic Ski Club to design, build and maintain a Forest Loop Trail with the same conditions (passes 36 in favor, 5 opposed, 3 abstentions).
4. **June 23, 2017**: GBOS votes unanimously to approve Resolution 2017-08
5. **March 27, 2018**: GBOS Special Meeting. GBOS moves to clarify resolution 2017-08 to state that the GTC will vote on the proposed GNSC trail centerline at the April 2018 GTC meeting. The GTC and GNSC are to produce a preliminary trail plan that is recommended by GTC not later than the September 2018 GBOS meeting.
6. **April 3, 2018**: Girdwood Trails Committee moves to approve the proposed approximate alignment as presented by the Girdwood Nordic Ski Club. Approval of the motion is contingent upon an agreement with GNSC to create an appointed subcommittee of GTC and GNSC members. The subcommittee is charged with making a preliminary plan for the alignment, design and construction of the trail. The group will present this plan to the GTC as new business no later than the August GTC meeting.

Summary of subcommittee meetings: See Agenda and Notes from 4/27/2018, 5/24/2018, 6/8/2018, 6/12/2018, 7/10/2018, 7/18/2018, 7/27/2018, 8/10/2018 (each meeting was 2 hours long).

1. Eight (8) meetings to date, covering agenda topics
   a. Subcommittee Goals & Objectives
   b. 5K Loop History
   c. Public Comments, subcommittee responses
   d. Open Meetings Act (OMA)
   e. Trail Width & Class
   f. Trail Alignment (map)
   g. Trail Access route(s)
   h. Trail building techniques and Trail Specifications
   i. Trail Management Objectives (TMO)
   j. Subcommittee's recommendation and agreement for how GTC and GNSC shall move forward in a collaborative manner
   k. Misc (e.g., field research documentation)
   l. Other

Trail Specifications:

See document originally authored by Paul Crews and amended by entire subcommittee.

Trail Management Objectives (TMO):

See TMO.

Alignment

See map, dated 8/10/2018.

Implementation:

1. All subcommittee meetings were publically noticed and held in the Girdwood Community Room and were open to the public. There was a period set aside at each meeting when public comments were taken (three minutes maximum per person). Emailed comments were accepted and read aloud.
2. The Subcommittee's recommendations were arrived at after a long period of time in which many concerns were aired. This trail is being proposed to be built on public land, and the public has requested to be involved – due to the history of GNSC's construction of the 5K Loop. We have learned and worked together to develop this new trail as a welcomed and usable community asset.
3. The Subcommittee presents to the Girdwood Trails Committee (GTC) and the Girdwood Board of Supervisors (GBOS) all documents relevant to their task, including: agendas, meeting notes, public comments, handouts, Trail Specifications, Trail Management Objectives (TMO), alignment map and an agreement (below) that outlines how GNSC and GTC will work in partnership on this project.

Notes:

1. Subcommittee agreed to preliminarily name this loop "Forest Park Loop" in order to reflect that this area is valued, and the intent would be to have this area dedicated as park in the future.
2. Width was a major topic of discussion. Conclusion reached by all subcommittee members is that the trail corridor shall remain within the 10'/14' limit, as previously approved.
3. The subcommittee recognizes the Access Route(s) for the proposed trail will be determined as construction (according to the Trail Specifications) ensues. (Note: "Dual access options" from either Arlberg Road or OLOS church lot were vigorously debated, and some subcommittee members interpreted this as allowing access from both locations; some think it can mean one or the other). Subcommittee agrees that if feasible to build, Arlberg could be the main access point. If this is the case, the access trail behind the church could be smaller. Access point behind church is still desired for trail connectivity.
4. Source of gravel to build the trail was also heavily discussed. Subcommittee agrees that the trail shall be built to the Forest Park Loop Specifications (see paragraph E for parameters regarding gravel).
5. The Trail Alignment agreed upon consists of a trail 4K in length, and follows the approximate route outlined on MAP dated 8/10/2018.

Proposed Agreement for how GTC and GNSC shall move forward in a collaborative manner:

1. GNSC will hire a Project Manager, who will oversee the project by following the approved map dated 8/10/2018, the Trail Specifications, and TMO produced by the subcommittee (and approved by the GTC/GBOS).
2. GTC shall receive monthly updates from GNSC and/or GTC designee throughout the entirety of the project. Topics may include but are not limited to: Timetable, project manager status, trail alignment (and any modifications pending), funding efforts; hiring of contractor (who shall have a good track record, qualifications and experience); trail specifications adherence; stop work orders (if necessary), etc.
3. If requested by either, GNSC and GTC can hold joint meetings with the contractor and/or Project Manager to iron out potential current, ongoing and future issues.

The Subcommittee recommends that construction of the Forest Park Loop moves forward according to: the Forest Park Loop Trail Specifications, Trail Management Objectives (TMO), Trail Alignment (as depicted on map dated 8/10/2018), and the Agreement above.

Girdwood Forest Loop Planning Subcommittee

GOAL

Develop a document that will guide the final routing, planning and construction of the Forest Loop Multiuse Trail. The subcommittee will report to the GTC by August 2018.

OBJECTIVES

1. Select a final trail route plan that protects existing trail alignments while utilizing terrain wisely in order to provide trail users with an enjoyable experience within a natural setting on a trail that has been constructed with minimal impact to the forest.

2. Develop basic trail cross section plans to assure that trail construction will remain within agreed upon clearing limits. Develop a plan to select off trail gravel sources if needed.

3. Develop trail specifications and construction requirements that trail construction contractors and volunteers must follow.

4. Develop a draft TMO.

STRATEGIES

1. Trail Alignment Utilize the services of a professional trail designer as necessary. Advise the designer as to the committee's desires concerning location and density of trail loops, steepness of trail grades in an effort to target the physical and technical abilities of its future user groups, mitigation of tree clearing requirements, a possible desire for the trail to meander through the forest to avoid a "canyon" effect, avoidance of wetlands and other environmentally sensitive areas when possible, and the expense or difficulty of trail construction.

2. **Trail Cross Sections** Develop cross sections that provide for the trail to remain within the agreed upon clearing limits except in areas where cut or fill cross sections dictate that a wider trail cross section is unavoidable. The principles utilized in the development of trail cross sections should consider A) designs that minimize visual impact within the forest B) encourage rapid natural re vegetation on trail fore slopes and back slopes C) minimize the use of off trail gravel sources D) require minimum trail "clean up" at the conclusion of trail construction E) provide adequate trail hardness and width to support occasional motorized maintenance vehicle access F) will be cost effective to build.

3. **Trail Specifications** Develop written design and construction specifications that will clearly communicate to potential construction contractors what the expected construction methods, materials usage, and final trail product will be. (See "Forest Park Loop Trail Specifications" following).

Forest Park Loop Trail Specifications
Girdwood Trails Subcommittee Working Group

Submitted to Forest Loop subcommittee by Paul Crews 4/27/18
Edited by subcommittee 8/10/18 to Final Draft (after 6 previous edits)
Highlighted areas are amendments made by the GTC at their 9/4/18 meeting.

A Except in unavoidable locations the targeted clearing limits for the trail width shall be 14 feet. If it is possible for the trail alignment to pass between two trees that are more than 14 feet apart measured 3 feet above ground level, neither tree shall be cut unless: one or both of the trees is dead or leaning at a dangerous angle, or the location of a third or fourth tree in the immediate vicinity and in the pathway of the two trees in question absolutely requires that one of the trees be cut. The goal is to minimize tree cutting.

Where the trail segments come together, extra care will be taken regarding trail siting, and efforts will be made here to minimize tree cutting, trailbed width, and trail clearing width to ensure that the confluence does not create a deforested aesthetic.

B Trees outside the clearing limits that are dead or leaning precariously and are a hazard of falling across the trail, and trees which are a hazard within skier spill zones may be cut. The stumps of these trees must be cut or ground to forest floor level and covered with topsoil or moss. Limbs on trees within 10 feet of the centerline of the trail may be removed to a height not to exceed 20 feet. Only limbs on the sides of such trees facing the trail may be cut. All debris from cut or removed trees shall be removed from the forest floor and buried beneath the trail or within an approved disposal site. Except in the case of immediate safety, tracks or tires of cutting or grinding equipment shall not go outside the approved clearing limit unless the ground is protected with mats.

C The MAXIMUM width of hardened trail surface should be 10 feet including the trail shoulders. No Rocks exceeding 3 inches in diameter shall be allowed within 4 inches of the trail surface except such rocks may be placed onto the hardened top surface within 18 inches of the trail edges. All rocks on the trail surface or clearing area must be removed, compacted, or pressed flush with the ground surface. A thin layer of native topsoil 18 inches wide shall be placed upon the hardened trail top surface within the area between each shoulder and 42 inches of the trail centerline.

D Cut slopes should not be steeper than 1.5/1 or flatter than 3/1. Logs or rocks may be used as bulk heads to support steep cut and fill slopes. Fill slopes should not be flatter than 4/1 but may be as steep as 1.5/1. Except in areas of side slope cuts, the hardened target surface of the trail should be less than 12 inches above the surrounding forest floor.

E Gravel used to construct the trail prism shall be extracted from beneath the trail within the approved 14 foot clearing limits. There may be areas where adequate gravel is not available beneath the maximum targeted trail/clearing limit (10’/14’). Gravel may need to be imported if

the Girdwood Nordic Ski Club (GNSC) contractor discovers more gravel is necessary to build the trail to these specifications. All gravel extraction shall be obtained in a manner that minimizes forest disturbance. (Note: Extracting gravel from pits outside the 14' wide clearing limit and/or widening the trail are recognized as methods which disturb the forest). Methods/solutions for obtaining gravel from other than beneath the 10'/14' trail corridor must be approved by the Project Manager and the land owner (or designated third party overseer.) Mining gravel from the project area outside the 14 foot clearing limit /trail corridor should only occur if an adequate quantity of gravel from beneath the 14 foot clearing limit is absolutely not available within a reasonable distance of the final deposition location of the additional required gravel. If gravel is extracted outside the 14 foot clearing limit the primary method should be by widening the clearing /excavation limit to a maximum width of 20 feet for short distances only at locations where no additional trees would be required to be removed. The development of any remote extraction sites (gravel pits) within the project area is strongly discouraged. Any and all approved extraction sites must be satisfactorily closed and covered with local organic materials upon job completion. The planting of native trees upon extraction sites (gravel pits) is expected. Access routes to any extraction sites must be reconditioned to a natural state as much as possible. Gravel utilized to construct the Arlberg access route from the paved bike path to the base of Crocket hill shall be imported from outside the project area. Gravel mined from HLB land shall not be utilized off HLB land.

F All cut tree trunks, roots, branches, other excavated or cut debris, and excavated stumps removed from within or outside the clearing limits shall be transported and buried within the approved clearing limits, or if that is not possible only within an approved material extraction site located outside the clearing limits, unless they are used as retaining or bridge structures.

G All protruding roots caused by excavation shall be cut back or covered so that they are not visible from the finished trail.

H All fore slopes and back slopes shall be backfilled or covered with a minimum of three inches of native organic materials. In order to prevent the spread of invasive species, no offsite organic materials may be introduced to the work site.

I All surfaces should be sloped to drain at a minimum of 3% in any direction.

J Full size equipment (large excavators, bulldozers, road hauling trucks) shall not be used for construction or transportation within the job site.

K Except in situations of immediate safety equipment shall not go outside the 14 foot clearing limit unless absolutely unavoidable to complete the project, or to allow access to materials sources or turn around locations.

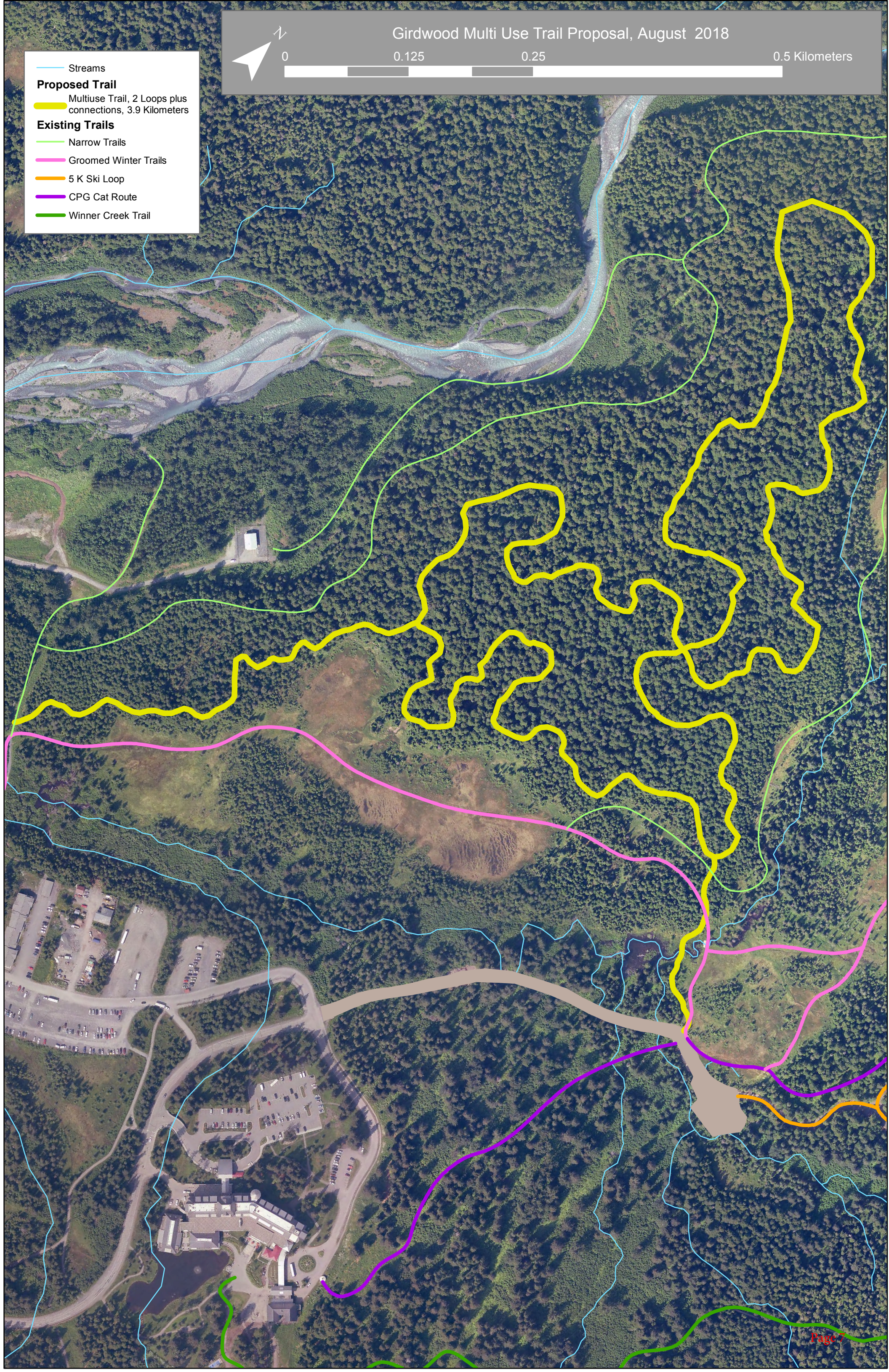
L The forest floor at turn around locations shall be protected with appropriate ground protection mats unless the turnaround locations are approved as trail rest areas. Approved trail

rest areas shall be hardened with mineral soil before job completion. The perimeters of all rest areas must be landscaped with native materials

M Materials extraction sites must be identified and approved by the land owner and project manager.

N The HLB shall assign a third party to oversee construction activities in order to assure compliance with trail plans and specifications.

O Only qualified and experienced contractors shall be considered for this project


Girdwood Multi Use Trail Proposal, August 2018
N
0
0.125
0.25
0.5 Kilometers
Streams
Proposed Trail
Multiuse Trail, 2 Loops plus connections, 3.9 Kilometers
Existing Trails
Narrow Trails
Groomed Winter Trails
5 K Ski Loop
CPG Cat Route
Winner Creek Trail

1.1 Trail Management Objectives Form

Trail Management Objectives (TMO)

Rev. Date: 11/1/2011

Area: N/A | Park Unit: N/A | District: Girdwood

Trail Name: Forest Park Loop | Trail ID: N/A

Trail Beginning Termini: 60* 51' 55N 149*05' 36.9 W1 | Beg. Milepost: 0

Trail Ending Termini: 60* 51' 55N 149*05' 36.9 W1 | End. Milepost: 2.5

Trail Inventory Length: 2.5 Miles | Trail Mileage Source: [ ] Wheel [ ] GPS [x] Map [ ] Unknown

TMO Trail Section (if applicable)

Sec.# | Section Beg. Termini: | Beg. Milepost:

Section End. Termini: | End. Milepost:

Designed Use Objectives

Trail Type (Check one)
- [x] Terra Trail
- [ ] Snow Trail
- [ ] Water Trail

Trail Class (Check one)
- [ ] 1 (Primitive / Undeveloped)
- [ ] 2 (Simple / Minor Development)
- [ ] 3 (Developed / Improved)
- [x] 4 (Highly Developed)
- [ ] 5 (Fully Developed)

Difficulty Rating
(For designed use of bicycle & cross-country ski only; check one.)
- [ ] Easiest (white circle)
- [x] Easy (green circle)
- [ ] Intermediate (blue square)
- [ ] Difficult (black diamond)
- [ ] Most Difficult (dbl. diamond)
- [ ] _____

Elev. Gain / Loss
25 + or - Feet

Level of Use
- [ ] Low (0-10 / day)
- [x] Moderate (10-100 / day)
- [ ] High (100+ / day)

[x] Est. [ ] Act. [ ] Counter

Designed Use
(Check one)
- [ ] Hiker / Pedestrian
- [ ] Pack & Saddle
- [ ] Bicycle
- [ ] Wheelchair (ADA stds.)
- [ ] Motorcycle
- [ ] All-Terrain Vehicle (ATV)
- [ ] Cross-Country Ski
- [ ] Snowmobile
- [ ] Snowshoe
- [ ] Dog Sled
- [ ] Skijor
- [ ] Watercraft: Non-Motorized
- [ ] Watercraft: Motorized
- [x] Multi-Use- uses specified in managed uses section

Design Parameters
(Fill in all that apply)

120	Basic Tread Width, inches
14	Clearing Width, feet above normal max snow level
8-10	Clearing Height, feet
1.5/1	Backslope: 1/1, 2/1, 1/2
0-8	Target Grade, % (>90% of trail)
12	Max. Sustainable Grade, % for distance (ft.) _____
25	Turn Radius Min., feet
	_____

Target Frequency
Maintenance per Year
(Fill in all that apply)

1	Trail Opening
1	Tread Repair
0	Drainage Cleanout
1	Logging Out
1	Brushing
60	Snow Trail Grooming
1	Condition Survey
	_____

TMO Form ASP - Side 1 | Page 1 of 3

Figure 1.1 – Trail Management Objectives Form

Trail Management Objectives (TMO) Part 2

Trail Use Strategies

Rev. Date: 11/1/2011

Managed Use

(Fill in all that apply.)

		Season From (mm/dd)	Season To (mm/dd)
x	Hiker / Pedestrian	01/01	12/31
	Pack & Saddle		
x	Bicycle	01/01	12/31
	Wheelchair		
	Motorcycle		
	All Terrain Vehicle (ATV)		
x	Cross-Country Ski	01/01	12/31
	Snowmobile		
	Dog Sled		
x	Skijoring	01/01	12/31
	Watercraft: Non-Motorized		
	Watercraft: Motorized		

Prohibited Use

(Check if applicable.)

		From Date (mm/dd)	To Date (mm/dd)
x	All Motorized Use	01/01	12/31

(Or fill in all that apply.)

	Hiker / Pedestrian		
x	Pack & Saddle	01/01	12/31
	Bicycle		
	Wheelchair		
x	Motorcycle	01/01	12/31
x	All-Terrain Vehicle (ATV)	01/01	12/31
	Cross-Country Ski		
x	Snowmobile	01/01	12/31
x	Dog Sled	01/01	12/31
	Skijoring		
x	Watercraft: Non-Motorized	01/01	12/31
x	Watercraft: Motorized	01/01	12/31

Other Use

(Optional: Check any that apply.)

		Accept	Discourage	Eliminate
	Hiker / Pedestrian			
	Pack & Saddle			
	Bicycle			
	Wheelchair			
	Motorcycle			
	All-Terrain Vehicle (ATV)			
	Cross-Country Ski			
	Snowmobile			
	Dog Sled			
	Skijoring			
	Watercraft: NonMotorized			
	Watercraft: Motorized			

Special Considerations

(Check any that apply. Provide specifics and reference information below.)

- [ ] Accessible per Current Agency Guidelines
- [ ] Mechanized Tools or Equipment Prohibited
- [ ] Threat., Endang. or Sens. Species (☐Plant /☐Wildlife)
- [ ] Cultural Resource Present
- [x] Easement across Non-Park Land (☐Existing /☒Needed)
- [ ] Existing Permit or Agreement (☐Trail-Specific /☐Area)

Remarks / Reference Information

(Use continuation sheet if needed.)

See map dated 8/10/18.

Completed by: Eryn Boone Title: Trails Subcommitee Chair Date: 9/5/18

Approved by: _____ Title: _____ Date: _____

TMO Form - Side 2 Page 2 of 3

1.2 Trail Management Objective Form Instructions

Rev. Date: 11/1/2011

Trail Name: Forest Park Loop **Trail ID:** N/A

Remarks / Reference Information (Continuation Sheet)

FIELD NOTES: Please describe work done and any changes needed in information database.

See map dated August 10, 2018

Trail begin and trail end coordinates are the Arlberg Parking Area. The trail starts and ends there. There is still a possiblity of trail access behind Our Lady of the Snows Church, this has not been determined yet.

This is a mulit use trail through four seasons. Walkers, snowshoers, bikers, and skiers will be allowed on the trail through all four seasons.

Specification parameters for this trail's design, alignment, and construction are detailed in a "Forest Loop Specifications" document, alignment map, and a "Subcommittee Report to Trails Committee regarding the Forest Loop" document approved by the Girdwood Trails Committee on September 4, 2018 and by the Girdwood Board of Supervisors on XXXX, 2018.

TMO Form - Continuation Page 3 of 3