

## **DESIGN UPDATE FOR THE SNUG HARBOR PAVING AND BIKE TRAIL PROJECT**

The Alaska Department of Transportation and Facilities (ADOT&PF) submitted the initial proposal to the Programming Decision Committee (PDC). This committee consists of the FHWA, ADOT&PF, and the Alaska Municipal League. The initial proposal was to provide bike passage, pave a gravel surface, fix erodible slopes, and provide a view point facility.

The Federal Highway Administration (FHWA) has completed preliminary design and environmental documentation for the project, named AK PFH 59(1) Snug Harbor Paving and Bike Trail and located on Snug Harbor Road in Cooper Landing. The project begins at the Sterling Highway Intersection and ends at the Campus Road Intersection (1.8 miles).

During the design process, several public meetings were held to distribute information and obtain feedback. The design was then refined, based on comments from the public involvement process. During the public involvement process, changes were made to the initial proposal. Below are excerpts from the initial proposal and explanations of how the proposal has been refined after considering public input.

- *The bike path would be within the current Right of Way.*

The bike path is designed within the current Right of Way, but additional Right of Way easements (permanent and temporary) are needed to fix slopes, provide room for construction and utility relocation, and provide minor adjustments to driveways based on bike path or realignment/widening.

- *Construct 1.8 miles of paved bike trail with 1.1 miles to be separated. 0.7 miles may be a mix of shoulder and separated pathway.*

The separated bike path will start at the road leading to the Kenai Lake Baptist Church on the north side of the Snug Harbor Road, and cross the Snug Harbor Road at the east edge of the Post Office entrance. Pedestrians and bicyclists can access the Post Office using the existing paved parking area, or cross Snug Harbor Road to continue the path to end at the Kenai Lake Baptist Church Road. The bike path will cross in front of the emergency response structures across from the Post Office. Signs will be added to warn pedestrians and bicyclists. This route was chosen to avoid removing the trees which screen the view of the Post Office, avoid wetlands, provide a smoother transition to the beginning and end of the bike trail, minimize impacts to vehicles accessing the Post Office, and possibly connect to future planned bike paths.

The bike path will continue to be separated from the roadway (approximately 0.8 miles of separated bike path), until it reaches the utility easement located on the south side of the Snug Harbor Road before Lake Shore Lane intersection. This provides a safer roadway crossing than at Lake Shore Lane. Starting at this crossing, the separated bike path will turn into 4-foot paved shoulders on both sides of the road to allow room for bicyclists and pedestrians. The corridor is limited by terrain, right-of-way, and budget so shoulders were designed instead of a separated bike path.

- *Pave 0.7 miles of gravel road*

The road will be paved to the Campus Road intersection with 4-foot shoulders added.

- *Resolve drainage needs. Culverts would be installed or corrected to allow for fish passage and/or reduce siltation. There are no bridges and it is doubtful any would be required. However, there are several serious drainage/fish passage/wetland issues that would need to be addressed.*

The culvert at Shackelford Creek is the only fish passage identified for this section of roadway. The two culverts extended beyond the roadway that allowed the road to be widened. Concrete headwalls will be added to increase the width for the 4 foot shoulders. Minimal disturbance will occur to the stream and existing pavement.

The public meeting feedback flushed out maintenance needs of two culverts under the existing pavement. Since the scope of the project did not include repairing or replacing culverts under the existing pavement, these culverts will not be repaired. A culvert at Dixon Creek is noted to have glaciation issues. Based on hydraulic recommendations, a 42-inch culvert is proposed for the bike path. Upsizing the culvert under the existing pavement and the associated roadway reconstruction is beyond the scope and funding of this project.

The drainage correction for glaciation at the Post Office would be costly and outside the scope and funds of this project. The design proposed at the Post Office would not worsen the current drainage.

The smaller culverts in the gravel-surfaced area would be replaced with 24 inch diameter culverts.

The separated bike path will generally follow the existing terrain, except when fills are needed to install drainage culverts.

- *Resolve ADA and ABA needs*

Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) guidelines were used in the design of the bike path. Since the bike path follows the roadway grade, profile grades exceeding 5 % are allowed as ADA and ABA exceptions when Right of Way restrictions exist. To provide slopes limited by a 5% vertical grade, the paths would have to be moved outside the Right of Way limits.

- *Resolve interpretive opportunities. One vehicular wayside overlook will be paved with exhibits for viewing the Kenai Lake, Chugach National Forest and the Turagin National Historic Area. This will include approximately three exhibits.*

Interpretive opportunities were considered during the design process. Two proposed turnouts along the gravel road were considered for interpretive sites, but were rejected. The cut slopes near these turnouts were eroding and the roadway alignment was moved to avoid these slopes, making the turnouts too small to be used.

Current funding levels did not allow for a turnout and kiosk. The proposal suggests discouraging the use of illegal camping and partying in the wide area near Campus Lane Road which can be accomplished by adding a ditch.

- *Provide Right of Way study. Road encroachment/land owner trespass will be resolved when 0.2 miles of road is properly construction to reduce serious driveway safety issues and unstable slopes on the roadway.*

The ADOT&PF will be verifying existing Right of Way and providing Right of Way acquisition when necessary.

- *Resolve safety needs. At MP 1.2, the road winds along the steep, unstable bank on the south and abut/overlaps on four lots to the north. Serious safety issues exist where road traffic and home owners are entering and existing “blind driveways.”*

Roadway alignment was adjusted to provide more room for private approaches at MP 1.2. Additional excavation with improved material lined with geotextile fabric will improve the roadway in that area. Rock inlay will be installed to protect eroding cut slopes.

- *Severely erosive cutbanks along .1 mile of road will need to be stabilized.*

The roadway alignment at the large silty cut near the end of the project was moved to avoid new impacts to the slopes and that alignment has been approved by ADOT&PF. The repair to this slope with rock inlays is funded.

Other concerns arising from public involvement:

- Contract will be written to preserve trees if possible. The separated bike path will be 8-foot paved width with 2-foot gravel shoulders.
- The bike path will be signed for bicyclist and pedestrians. If motorized use is identified as a significant problem in the future, additional funding may be requested to correct the problem under a future call for projects.
- Providing an arched bridge for the bike path instead of the 42-inch culvert at Dixon Creek. An arched bridge would be more expensive, both in design and construction.

The proposed plan set has been provided to the ADOT&PF for Right of Way acquisition. Necessary utility relocation is planned for the summer of 2015.. Construction is currently expected to be in summer of 2016.