

**Matters from Staff Agenda item #\_\_\_\_**

**Meeting Date:** April 19, 2016

**Presenter:** Brian Schilling

**Submitting Dept:** Engineering - Pathways

**Subject:** South Park Loop Pathway – 90 Percent Design Review

**Statement / Purpose:**

Review and approve the 90% plan set for the South Park Loop Pathway Connector project. Obtain public comment and Board input for moving the design forward to final design and project bidding.

**Background / Description (Pros & Cons):**

In 2014, Teton County voters approved funding for the South Park Loop Connector Pathway between the south end of 3 Creek Ranch and the west end of Melody Ranch. This approximately 2.0 mile stretch is the final remaining segment to be completed in the South Park Loop pathway network. Teton County Engineering and Pathways staff have completed initial public outreach and preliminary planning work and have retained Nelson Engineering to prepare civil engineering plans. (Please see the staff report from the 12/7/15 BCC Workshop for a full summary of the public outreach and preliminary planning process). On February 16, 2016, the Board of County Commissioners (BCC) approved the “50% design” and directed staff to move forward to 90% design.

As of March 28<sup>th</sup>, Nelson has completed the 90% civil design plan set and prepared a preliminary construction cost estimate. The 90% design adds significant detail to the construction plans from the 50% stage, but there are no major changes in pathway alignment or crossing locations. The only substantive change to the project from the 50% stage is the addition of a 192-foot long stretch of retaining wall towards the east end of the project (STA 81+19.75 to 83+01.72). The wall was added to increase separation between the pathway and an irrigation ditch to the south in order to minimize any potential disturbance to the ditch during or after construction.

The April 19<sup>th</sup> 90% design review meeting is the seventh of nine scheduled opportunities for public review and input. The review is intended to provide an update on the project design to date and an opportunity for the board and the public to discuss any final design decisions prior to moving the design ahead to final design and project bidding.

The project schedule has slipped slightly from the preliminary schedule (by less than a month total), but staff is optimistic that construction can still begin by the end of June 2016 (see the attached Project Timeline). Pending approval of the 90% design, the project team will continue design work to complete the design and the project manual by early-May, obtain permits and relocate utilities concurrently, and bid the project in May to begin construction in mid-to-late June 2016.

**90% Design Plan Set Summary**

As mentioned above, the 90% design does not feature major changes from the 50% design, but a few of the key components of the pathway design are summarized below.

- General Pathway Alignment (Sheets 3.0 – 3.18)
  - Path connects to the existing 3 Creek Pathway on the west side of South Park Loop (SPL) at approx. STA 1+20
  - Path crosses to east side of SPL at STA 3+00 just south of Rancho Alegre driveway
  - Path stays on east/north side of SPL until approx. STA 75+00
  - Path crosses to south side of SPL at approx. STA 75+00
  - Path terminates at Cortland Dr. at approx. STA 100+40
  - Path is located a minimum of 6’ off the edge of SPL pavement
- SPL Crossing Locations and Design (Sheets 5.0, 5.6, 5.7)
  - General design
    - At-grade crossings
    - User-activated rectangular rapid flashing beacon

- Advance warning signage and striping
    - Piano key crosswalk
    - Speed limit reduced from 35mph to 30mph (a speed study and analysis is currently in progress)
  - Northern crossing between Grand Teton Circle and Rancho Alegre driveway (STA 3+00)
    - Will require regular vegetation trimming to maintain sight lines
    - Location eliminates (or significantly reduces) need for retaining wall on hillside west of SPL, and reduces potential complications of disturbing existing Rancho Alegre driveway embankment
    - Maintain a minimum 350' sight distance in either direction
  - Crossing at STA 75+00
    - Sight distance is good in all directions
    - Relatively simple mid-block crossing
  - Melody Ranch Crossing at STA 105+60
    - Located approximately 500' east of Cortland Dr. along existing pathway
    - Provides mid-block crossing connection to internal Melody Ranch pathway
    - Will require some removal of willows on north side of SPL to improve sight lines
    - Proposes to pave internal Melody Ranch pathway approximately 220' north to Balsam Ln.
- Driveway and Side-street Crossings (Sheets 5.0 – 5.7)
  - Where possible, crossings are set back at least one car length to reduce conflict between pathway users and cars queuing to enter SPL. This was not possible at all crossings.
  - South Park Ranch Road (STA 37+00, Sheets 5.3 and 5.4)
    - Path alignment is set back from SPL to allow for vehicle queuing
    - SPRR is squared up to SPL slightly to reduce speed of northbound right-turning vehicles exiting SPL onto SPRR
    - Existing mailboxes are relocated slightly north onto SPRR to accommodate pathway crossing and a new school bus stop waiting area (improving safety for bus riders by providing a waiting area off the traveled roadway)
  - Existing gravel approaches may be paved approximately 20 feet back to reduce gravel migration onto the pathway
- Retaining Walls (Sheets 4.0 – 4.7)
  - The proposed design has entirely eliminated uphill retaining walls from the design (i.e. there are no retaining walls above the grade of South Park Loop Road or the pathway)
  - There are three notable sections of retaining wall. Wall A is 202' long, Wall B is 315' long, and Wall C is 192' long.
  - Walls are a maximum of approximately 4' above grade and are “downhill” from the pathway so that they will be largely hidden from view by roadway users and adjacent property owners.
  - The retaining walls are necessary to avoid conflicts with utilities, existing vegetation, irrigation ditches, or grading encroachment onto private property.
- Trees
  - There is no permitting requirement to replace trees that are removed as part of the project
  - Tree mitigation is not currently included as part of the project cost estimate, but this could be added to the project if desired. (Direction on location and quantity would be required to explore a mitigation plan and costs).
  - The current design will impact approximately 72 trees on the south side of SPL near Melody Ranch to the west of Cortland Dr.

- Independent of pathway design and construction, the condition of the cottonwood trees in the public right-of-way along South Park Loop should be addressed for public safety reasons
- Utility Conflicts
  - There are several utility poles and guy wires that will need to be relocated.
  - LVE has been consulted and has indicated that the relocations are all feasible
  - LVE utility relocations are proposed to be done prior to bidding and project construction
  - All other utility relocations will be the responsibility of the contractor
- Permitting
  - US Army Corps Preconstruction Notification (for wetland impacts) has been submitted to the Army Corps and is under review.
  - Teton County Planning
    - Zoning Compliance Verification has been submitted to Teton County Planning and is under review
    - Grading and Erosion Control Permit application will be submitted pending approval of the 90% plan set

***Projected Schedule/Timeline for Remaining Project Components***

- April 19 – BCC review 90% plan set
- May 3 – BCC review final plan set and approve advertising for bids
- May 11, 18, 25 – Advertise for bids
- June 1 – Open Bids
- June 7 – BCC approval of Bid Award

**Statement of Strategic Intent addressed by this item (Identify BCC goals accomplished/addressed):**

**Environmental Stewardship**

- Support an integrated and efficient multi-modal transportation system
- Partner and collaborate with local, state, federal and other agencies

**Economic Sustainability**

- Partner to develop economic vitality consistent with community values as expressed in the Comprehensive Plan
- Deliver efficient government services to ensure the safety and welfare of residents and visitors

**Attachments:**

1. Project Timeline (1 page)
2. Link to 90% Phase Plan Set dated 3-25-16 (22mb pdf, 83 pages):  
[http://www.tetonwyo.org/pathways/docs/Capital\\_Projects/Region3-SouthPark/3Creek\\_Melody/SPLR\\_90\\_pct\\_COMPLETE\\_SET.pdf](http://www.tetonwyo.org/pathways/docs/Capital_Projects/Region3-SouthPark/3Creek_Melody/SPLR_90_pct_COMPLETE_SET.pdf)
3. Opinion of Probable Cost (1 page)

**Fiscal Impact:**

There is no immediate fiscal impact to approving the 90% design. Thus far, the design recommendations made by the project team have also happened to be the most cost effective options (crossing locations, reduced retaining wall sections, reduced tree removal, etc.), so overall the project is on track to be well within the available budget. The Engineer’s Opinion of Probable Cost for the 90% design is \$1,342,766, which includes a 10% contingency. This does not include costs for relocation of LVE utilities or possible tree mitigation. The project has more than \$3 million remaining in the SPET funds available for the project, so the project budget is on very solid footing.

**Staff Impact:**

If the 90% design is approved as presented, staff and the consultant will continue the design process to final design and there would be no increase in the amount of work that was already anticipated. If any substantive changes to the 90%

design are recommended, then there would be a potentially large increase (depending on the number and the extent of the changes) to the amount of work required by staff and the consultant. The project would timeline would also have to be adjusted.

**Legal Review:**

There are no items for legal review at this time. Staff is currently working with the Teton County Attorney's Office on a couple items that require future legal review.

**Recommendation:**

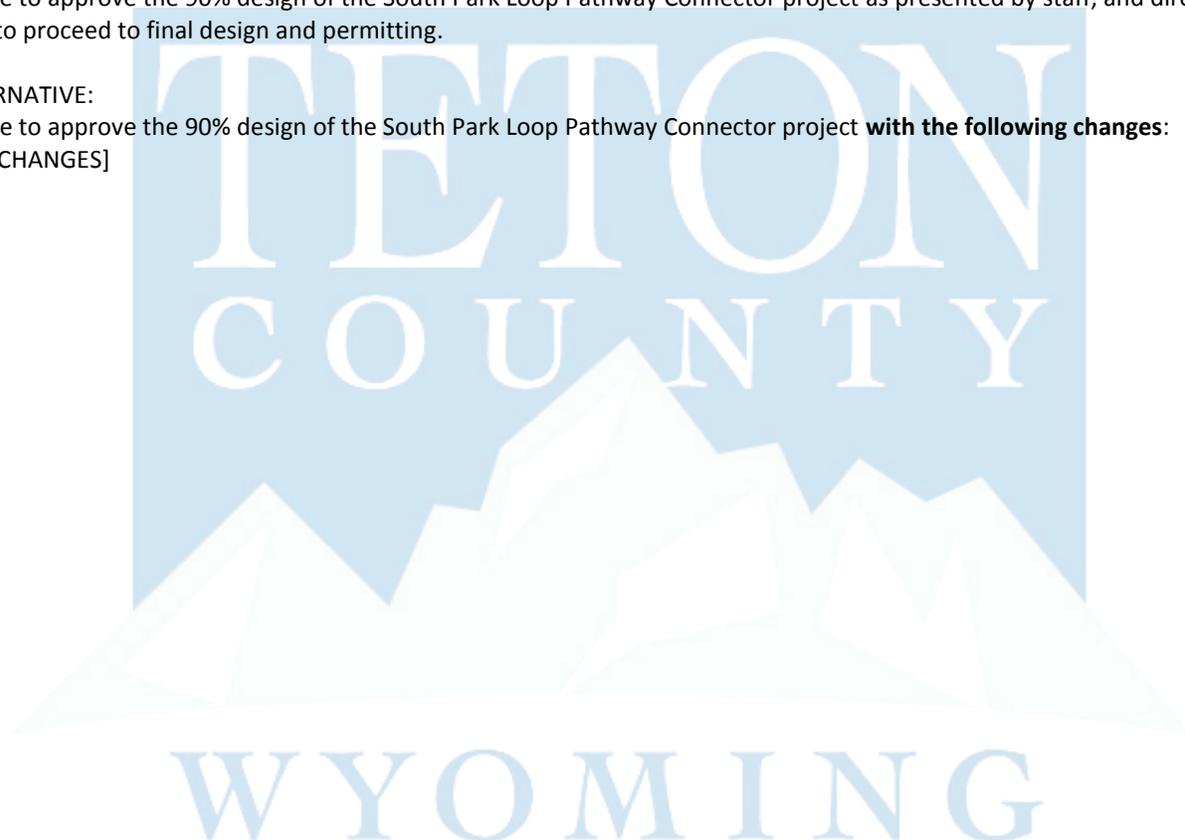
Staff recommends that the Board approve the 90% as presented and direct staff to continue the design process to final construction plans and documents, arrange for relocation of LVE utilities, and submit remaining permitting applications to all applicable agencies.

**Suggested Motion:**

I move to approve the 90% design of the South Park Loop Pathway Connector project as presented by staff, and direct staff to proceed to final design and permitting.

ALTERNATIVE:

I move to approve the 90% design of the South Park Loop Pathway Connector project **with the following changes:**  
[LIST CHANGES]





# SOUTH PARK LOOP PATHWAY PROJECT PLAN

## STAGES OF PROJECT DEVELOPMENT



### PRELIMINARY PLANNING

- Identify project purpose and need
- Corridor assessment and data collection
- Identify alignment alternatives

### PUBLIC COMMENT

- Oct. 17 Public Open House
- Oct. 20 County Commission (BCC) Workshop
- Nov. 12 Public Open House

- Assess alternatives (benefits and impacts)
- Develop concept plan/recommended alternative
- Approve concept plan/recommended alternative

- Dec. 7 BCC/Public Workshop



### CIVIL ENGINEER SELECTION

- Advertise Request for Proposals (Nov. 11, 18, 25)
- Proposals due December 2
- Select consultant by December 9
- Award Civil Engineering contract December 15

### PUBLIC COMMENT

- Present at BCC December 15



### DESIGN AND ENGINEERING

- Start civil design late December/early January
- Take Concept Plan to 50% design by Feb. 2016
- Continue design development to 90%
- 90% design by April 1 2016
- Prepare final plans and bid package

### PUBLIC COMMENT

- February 16 2016 BCC Meeting (50% design)
- April 19 BCC Meeting (90% design)



### CONTRACTING AND CONSTRUCTION

- Present final plans and bid package for approval
- Advertise for construction bids May 11, 18, 25
- Open bids June 1
- Award construction contract June 7

### PUBLIC COMMENT

- May 3 BCC Meeting (Final design)
- June 7 BCC Meeting (Bid Award)



### START CONSTRUCTION JUNE 2016

**SOUTH PARK LOOP CONNECTOR PATHWAY PROJECT  
Bid Schedule with Engineer's Opinion of Construction Cost**

Item No.	Item Description	Unit	Est. Quantity	Unit Price	Total Price
2000.1	Mobilization	LS	1	\$ 69,096.00	\$ 69,096.00
2005.1	Force Account	FA	1	\$ 25,000.00	\$ 25,000.00
2005.2	Force Account - Utility Adjustments	FA	1	\$ 35,000.00	\$ 35,000.00
2005.3	Force Account - Clearing and Grubbing	FA	1	\$ 60,000.00	\$ 60,000.00
2020.1	Temporary Traffic Control	LS	1	\$ 25,000.00	\$ 25,000.00
2030.1	Contractor Stormwater Control	LS	1	\$ 3,000.00	\$ 3,000.00
2030.2	Silt Fence	FT	420	\$ 4.75	\$ 1,995.00
2030.3	Sediment Logs	FT	100	\$ 5.50	\$ 550.00
2075.1	Removal of Pavement	SYD	340	\$ 10.00	\$ 3,400.00
2075.2	Removal of Signs	EA	4	\$ 150.00	\$ 600.00
2075.3	Removal of Fence	LF	100	\$ 6.00	\$ 600.00
2210.1	Unclassified Excavation Above Subgrade	LS	1	\$ 70,000.00	\$ 70,000.00
2210.2	Unclassified Excavation Below Subgrade	CY	150	\$ 60.00	\$ 9,000.00
2210.3	Imported Borrow Excavation	TON	2380	\$ 20.00	\$ 47,600.00
2231.1	Pitrun Subbase	TON	6950	\$ 30.00	\$ 208,500.00
2231.2	Crushed Base	TON	2630	\$ 38.00	\$ 99,940.00
2280.1	Topsoil	SY	10900	\$ 3.00	\$ 32,700.00
2512.1	Plant Mix Bituminous Pavement	TON	1430	\$ 120.00	\$ 171,600.00
2725.1	10" CMP	LF	33	\$ 50.00	\$ 1,650.00
2725.2	12" CMP	LF	9	\$ 50.00	\$ 450.00
2725.3	18" CMP	LF	14	\$ 55.00	\$ 770.00
2725.4	24" CMP	LF	31	\$ 70.00	\$ 2,170.00
2725.5	36" CMP	LF	5	\$ 90.00	\$ 450.00
2725.6	13" X 20" PIPE ARCH CMP	LF	8	\$ 500.00	\$ 4,000.00
2725.7	20" X 36" PIPE ARCH CMP	LF	7	\$ 600.00	\$ 4,200.00
2725.8	10" Flared End	EA	1	\$ 325.00	\$ 325.00
2725.9	12" Flared End	EA	1	\$ 350.00	\$ 350.00
2725.1	18" Flared End	EA	1	\$ 450.00	\$ 450.00
2725.11	24" Flared End	EA	5	\$ 650.00	\$ 3,250.00
2725.12	36" Flared End	EA	1	\$ 700.00	\$ 700.00
2725.13	13"x20" Pipe Arch Flared End	EA	1	\$ 800.00	\$ 800.00
2725.14	20"x36" Pipe Arch Flared End	EA	1	\$ 900.00	\$ 900.00
2776.1	Concrete Flatwork	SF	670	\$ 12.00	\$ 8,040.00
2805.1	Remove and Reset Signs	EA	10	\$ 400.00	\$ 4,000.00
2805.2	Remove and Reset Mailbox	LS	1	\$ 2,000.00	\$ 2,000.00
2805.3	Remove and Reset Fence	FA	1	\$ 10,000.00	\$ 10,000.00
2810.1	Sign Posts, Wood 4x4 in	EA	25	\$ 250.00	\$ 6,250.00
2810.2	Sign Panels, Aluminum	SF	66	\$ 35.00	\$ 2,310.00
2820.1	Pavement Markings	LS	1	\$ 8,000.00	\$ 8,000.00
2834.1	Retaining Wall	SF	3150	\$ 45.00	\$ 141,750.00
2834.2	Structural Fill	TON	1500	\$ 40.00	\$ 60,000.00
2895.1	Geotextile Fabric - Separation and Stabilization - Non-Woven	SY	5000	\$ 1.75	\$ 8,750.00
2900.1	Landscaping	LS	1	\$ 20,000.00	\$ 20,000.00
2900.2	Erosion Control Blanket	SY	3000	\$ 2.50	\$ 7,500.00
2900.3	Trees and Irrigation System	LS	1	\$ -	\$ -
2950.1	Rectangular Rapid Flashing Beacons	EA	3	\$ 15,000.00	\$ 45,000.00
607.2	Pedestrian Rail	LF	725	\$ 18.00	\$ 13,050.00
<b>Opinion of Probable Construction Cost</b>					\$ 1,220,696.00
Contingency				10%	\$ 122,069.60
<b>Recommended Budget for Construction Contact</b>					<b>\$ 1,342,766.00</b>

Force Account amount for Utility Adjustments intended to cover anticipated costs from Contractor and Utility Companies  
Tree Replacement and associated Irrigation Ssystem is not included in the Opinon of Costs