

**Standard Form No. 5 Drainage and Stormwater Treatment Scope Approval Form**

Prior to starting a development plan and before the first drainage submittal, a Drainage and Stormwater Treatment Scope Approval Form must be submitted for review and signed by the City Engineer. A signed form shall also be included in every drainage submittal as Attachment A. This Scope Approval Form is for City requirements only. Values may be approximate. The City encourages supporting calculations and figures to be attached.


<b>Project Information</b>	
Project name:	Christie Express Relocation
Project location:	Lot 2 Parcel D Replat of Ski Hill Subdivision
Developer name/contact info:	Steamboat Ski & Resort Corp. Jim Schneider, 970-871-5381, jschneider@steamboat.com
Drainage engineer name/contact info:	Deborah Spaustat, P.E., Landmark Consultants, Inc. debs@landmark-co.com, 970-871-9494
Application Type:	Minor Adjustment
Proposed Land Use:	Open Space & Recreation (OR); Ski Area

<b>Project Site Parameters</b>	
Total parcel area (acres):	0.52-acres (lower terminal), 1.23-acres (upper terminal)
Disturbed area (acres):	0.52-acres (lower terminal), 1.23-acres (upper terminal)
Existing impervious area (acres, if applicable):	0.01-acres (lower terminal), 0.08-acres (upper terminal)
Proposed new impervious area (acres):	0.05-acres (lower terminal), 0.00-acres (upper terminal)
Proposed total impervious area (acres):	0.06-acres (lower terminal), 0.08--acres (upper terminal)
Proposed number of project outfalls:	1
Number of additional parking spaces:	0
Description and site percentage of existing cover/land use(s):	OR - Open Space & Recreation (100%)
Description and site percentage of proposed cover/land use(s):	OR - Open Space & Recreation (100%)
Expected maximum proposed conveyance gradient (%):	Sheet flow slopes up to 50%
Description of size (acres) and cover/land use(s) of offsite areas draining to the site	none



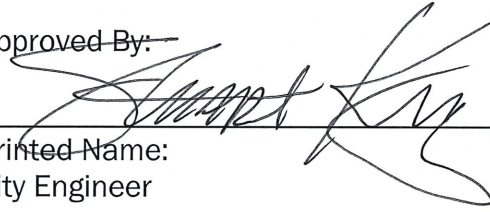
Project Permanent Stormwater Treatment	
Justification of choice of proposed design standard, including how the site meets the constrained redevelopment standard, infiltration test results, etc.	WQCV standard applies to all sites and can be combined to achieve required detention
Concept-level permanent stormwater treatment facility design details (type, location of facilities, proprietary structure selection, treatment train concept, etc.):	Sand filter to be located next to lower terminal
Proposed LID measures to reduce runoff volume:	providing stormwater quality was a primary concern for the site design
Will treatment evaluation include off-site, pass through flow (circle):	YES <b>NO</b>

**Approvals**


12/2021/2021
970-871-9494

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Prepared By: \_\_\_\_\_ Date \_\_\_\_\_ Phone number \_\_\_\_\_  
 (Insert drainage engineer name & firm)

Approved By: 
12/20/2021

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Printed Name: \_\_\_\_\_ Date \_\_\_\_\_  
 City Engineer



12/13/2021

Christie Peak Express Relocation

Deborah Spaustat, P.E.

## Drainage and Stormwater Treatment Scope Approval Narrative

Steamboat Ski Resort Corporation (SSRC) is applying for a Minor Adjustment permit to relocate the lower terminal and mid-station of the Christie Peak Express chairlift at the Steamboat Ski Area. The Minor Adjustment application checklist does not include a drainage study requirement; however, the project team has evaluated the impacts to the existing drainage patterns and included new infrastructure to safely convey runoff to historical discharge points. These drainage improvements include a sand filter/detention pond to treat runoff from the lower terminal and a rock lined swale at the mid-station to collect runoff adjacent to an existing driveway.

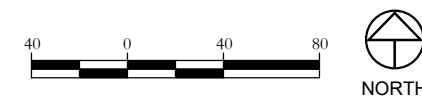
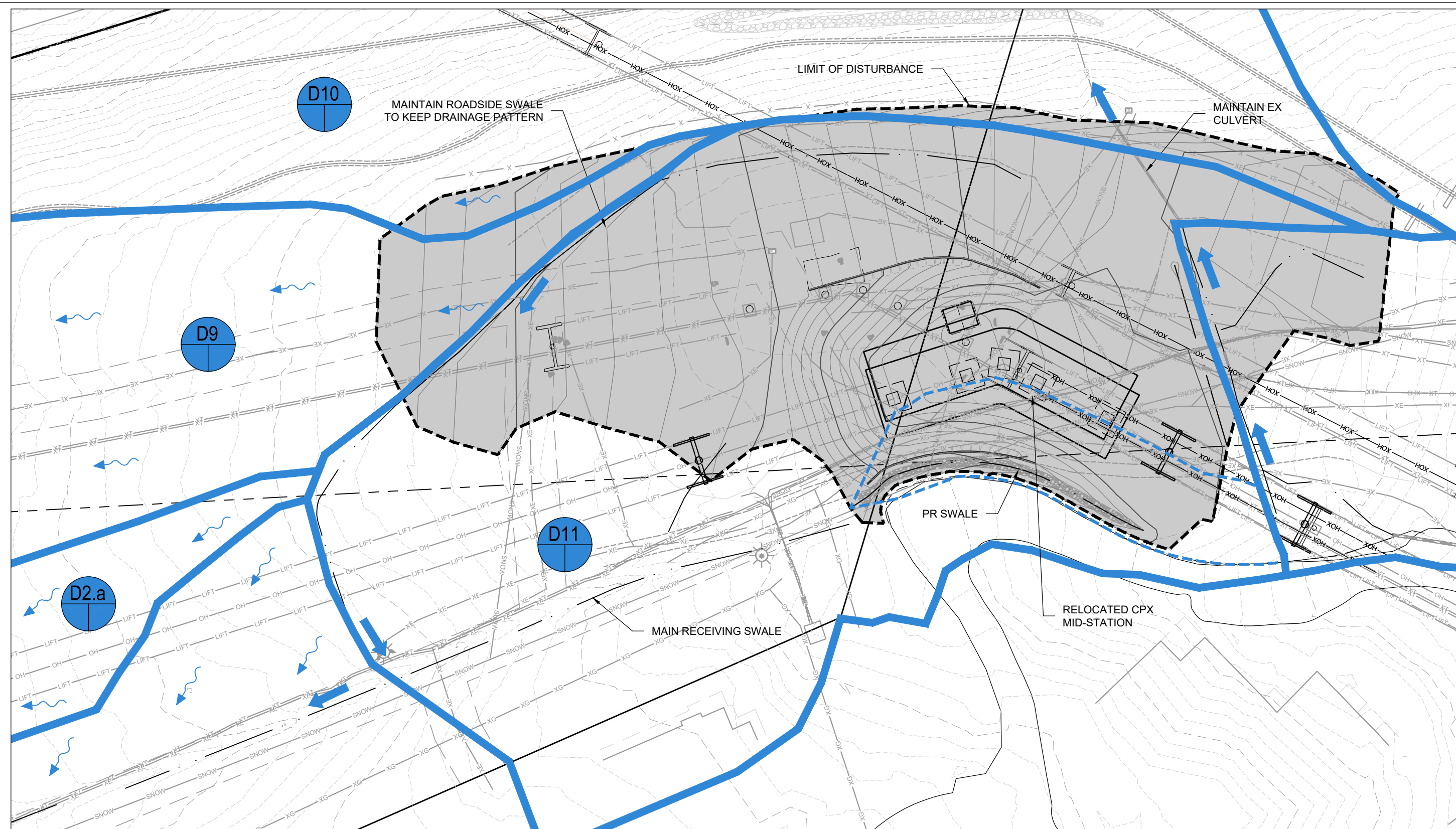
The removal of the lower CPX terminal station is addressed in the Wild Blue Gondola Development Plan. Its relocation in different basin will result in a small increase in runoff that will be mitigated in the detention pond. The terminal station consists of roof structure covering the mechanics of the chairlift operation. Unlike the Silver Bullet Gondola relocation and the new Wild Blue Gondola, no hardscape is proposed for the “maze” or skier access. The area below the roof structure will be largely vegetated ground with the same imperviousness as the rest of the ski slope. The sand filter will treat 81% of the site.

The mid-station will be relocated to a new spot in the same drainage basin, which will not change the imperviousness of the basin or the peak runoffs. Existing drainage swales will be maintained, and a riprap lined swale will be installed on the south side of the basin to collect runoff from the terminal and convey it around the adjacent driveway to the main collector swale. No detention or water quality treatment is proposed for this site.

It is important to note that once construction is complete, any stormwater quality BMP's will be treating mainly roof runoff and vegetated areas with little pollutant potential. The sites will receive very little vehicular traffic.



DRAWING FILENAME: P:\1012-052\Engineering\Drawings\1012-052 DRAIN.dwg LAYOUT NAME: PR MID DATE: Dec 13, 2021 - 11:29am CAD OPERATOR: deb  
LIST OF XREFS: [1012-047-xSite] [1012-052-xSite] [2572-001-xBnd] [Mini Golf] [1012-052-xSite] [1012-052-xEast] [1012-052-xWest-Utilities] [1012-050-xUtl] [WBG BOTTOM TERM PLAN REV D] [WBG MID TERM PLAN REV D]



PROJECT:	1012-052	NO.	DATE:	BY:	DESCRIPTION:
DATE:	12/13/2021				
DRAWN BY:	DCS				
CHECKED BY:					

**REVIEW SET  
NOT FOR CONSTRUCTION  
XX/XX/XX**

These drawings are instruments of service provided by Landmark Consultants, Inc. and are not to be used for any type of construction or contracting unless signed and sealed by a Professional Engineer in the employ of Landmark Consultants, Inc.



**CIVIL ENGINEERS | SURVEYORS**

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Christie Peak Express Relocation  
Drainage and Stormwater Treatment  
Scope Approval Exhibit