

## 6-XQ074.01 Ladies Mile HIF Concept Design Report Addendum 1

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<b>To</b>	Warren Ladbrook
<b>Copy</b>	Ulrich Glasner, Simon Leary, David Sommerville, Reece Gibson and Richard Hilliard
<b>From</b>	Brandon Ducharme
<b>Office</b>	Queenstown Office
<b>Date</b>	1/06/2018
<b>File</b>	6-XQ074.01 Ladies Mile HIF Concept Design Report 28 05 2018 IFR QS and MBIE Rev B: Addendum 1
<b>Attachment</b>	(1) Appendix D - Three Waters Alignment and Capacity Maps 1 06 2018
<b>Subject</b>	Ladies Mile HIF and all other HIF Project Works– Project Status Update and Budgets

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Dear Warren and further reviewing agencies,

Following the recent review meeting held on 1/06/2018 with Rationale, WSP Opus and the QLDC at the QLDC offices in preparation for submission to MBIE for QS survey and Costing review of the Ladies Mile HIF Concept Design Report 28 05 2018 IFR QS and MBIE, please consider the enclosed provisions as an addendum to the concept design package dated Rev B 28 05 2018.

- 1.) In reference to Appendix E - Ladies Mile Howard Drive Roundabout - Cost Estimate, Item **16.1: Post & Rail H5 Timber Retaining Wall (under 1.5m High)** dollar value shall be amended from \$50,000 to \$0.00 as there are no known requirements for further provisions of retaining structures at this stage in concept design.
- 2.) In reference to Appendix E - Ladies Mile Howard Drive Roundabout - Cost Estimate, Item **11.7: Provisional Sum for Pedestrian Solution** title shall be amended from “**Provisional Sum for Pedestrian Solution**” to “**Provisional Sum for Pedestrian Solution and bus stops**”, with no current changes to the dollar values as this provisional sum reflects both the pedestrian solution and bus stops requirement at this stage in design. Note that pending the integrated transport planning scope of work currently being undertaken by WSP Opus provide confidence that overall transport solutions are feasible for the development, this line item is subject to further change pending the outcomes of that report.
- 3.) Report Page 2, *Figure 1: Summary of Development Areas*, as well as Page 8, *Figure 4: Ladies Mile Development area extents for 3 waters design (shown outlined in red)* have been revised by Rationale to reflect the Glenpanel development within this area, and the revised Area 3.1 extents as Henry’s land is at this time determined to be unlikely to proceed, as advised by Rationale on 1/6/2018. See below:

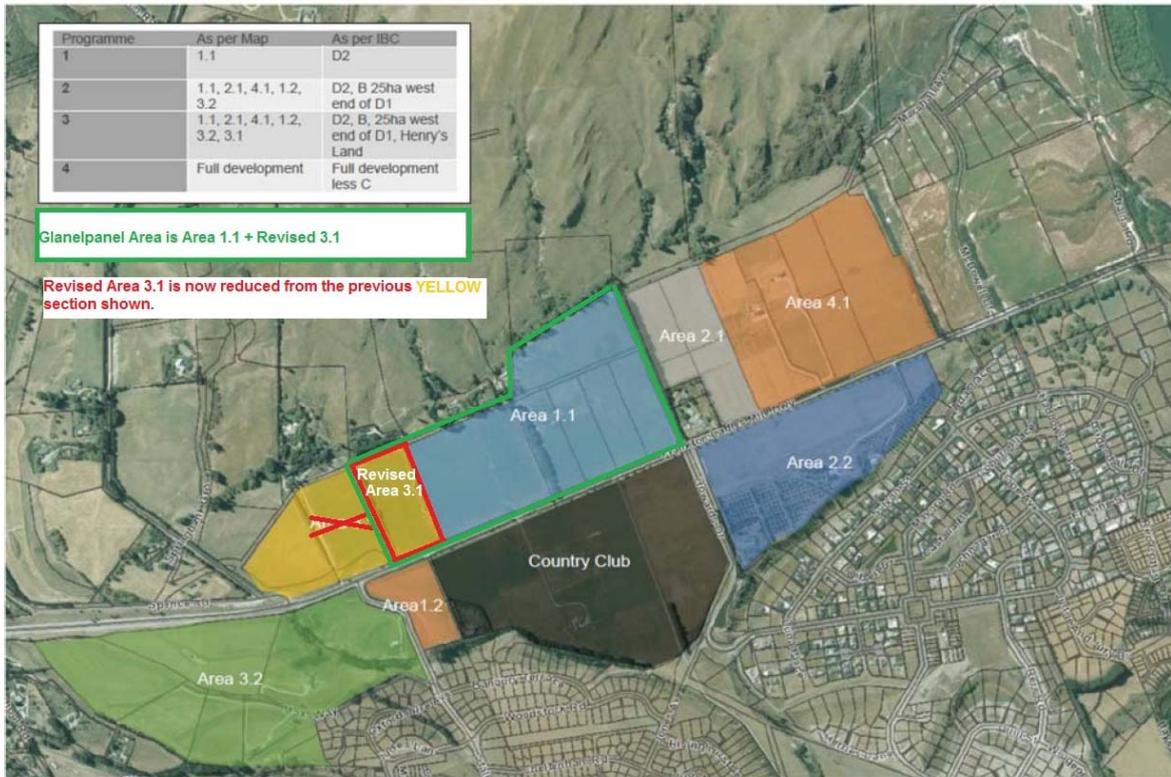


Figure 1: Summary of Development Areas [REVISED 1/06/2018]

- 4.) With respect to the changes in item 3 above, The DN150 Waste Water stub at area 3.1 previously shown on Appendix D - Three Waters Alignment and Capacity Maps 25-05-2018 is thereby not required, and has hence been removed. The removal of this stub is included in the revised Appendix D - Three Waters Alignment and Capacity Maps 01-06-2018 in attachment 1 enclosed in this addendum.
- 5.) With respect to item 4 above, Appendix F - Ladies Mile 3 Waters Cost Estimate REV 1, Item **3.1.3: Supply and install DN150 PVC stub off the existing DN300 into the HIF area 3.1 (across SH, assume trenchless installation)** shall be removed, and the dollar value shall be amended from \$50,000 to \$0.00 to reflect this revisions at this stage in concept design.
- 6.) Note that the Appendix D - Three Waters Alignment and Capacity Maps 25-05-2018 drawing has been further updated so that the nominal pipe sizes indicated match the nominal pipe sizes provided in Appendix F - Ladies Mile 3 Waters Cost Estimate REV 1 line items **2.1.3: Supply, weld and lay DN200 PE100 PN12.5 watermain (includes all valves and fittings and reinstatement)**, as different nomenclatures were previously between both documents to detail the same engineering intent.

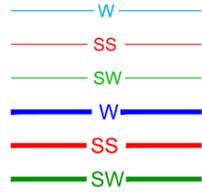
If there are any further questions or concerns in regards to the above, please feel free to contact me directly.

Cheers,

**Brandon Ducharme**

Senior Project Manager  
PMP MBA CMEngNZ CPEng P.Eng

**KEY:**  
 EXISTING WATER SUPPLY  
 EXISTING WASTEWATER  
 EXISTING STORMWATER  
 PROPOSED WATER SUPPLY  
 PROPOSED WASTEWATER  
 PROPOSED STORMWATER



2 x 1000m<sup>3</sup> WATER RESERVOIRS  
 AT RL 423m

1310m DN200 PE100 WATERMAIN TO DELIVER  
 1100m<sup>3</sup>/DAY FROM RESERVOIR TO DEVELOPMENT

2030m DN200 PE100 WATERMAIN TO DELIVER  
 1100m<sup>3</sup>/DAY FROM BORE FIELD TO RESERVOIRS

APPROXIMATELY 28l/s THROUGH 1720m DN280  
 PE100 RISING MAIN TO CONNECT TO EXISTING  
 GRAVITY DN450 STEEL BRIDGE CROSSING

220m DN500 STORMWATER PIPE  
 APPROXIMATE 100 YEAR FLOW OF  
 0.4m<sup>3</sup>/s

PUMP STATION TO PUMP APPROXIMATELY 8l/s  
 THROUGH 360m DN160 PE100 RISING MAIN

150m DN 1050 STORMWATER PIPE  
 APPROXIMATE 100 YEAR FLOW OF 1.2m<sup>3</sup>/s

PUMP STATION TO PUMP APPROXIMATELY 9l/s TO  
 COUNTRY CLUB PUMP STATION AT SOUTH END OF  
 HOWARD DRIVE THROUGH 390m DN160 PE100  
 RISING MAIN. COUNTRY CLUB PUMP STATION IS  
 UNDERSIZED AND WILL NEED TO BE UPGRADED.



**NOT FOR CONSTRUCTION**

CONCEPT

THIS WORK IS BASED ON/INCLUDES LINZ'S DATA WHICH ARE LICENSED BY LAND INFORMATION NEW ZEALAND (LINZ) FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 3.0 NEW ZEALAND LICENCE. AERIAL PHOTOGRAPHY: NZTA STATE HIGHWAY 2011-2012 AERIAL IMAGERY, 0.15M SOURCED FROM KOORDINATES (HTTPS://KOORDINATES.COM/LAYER/4320-NZTA-STATE-HIGHWAY-2011-2012-AERIAL-IMAGERY-015M/) AND LICENSED BY NZ TRANSPORT AGENCY (NZTA) FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 3.0 NEW ZEALAND LICENCE.

Revision	Amendment	Approved	Revision Date
A	CONCEPT DESIGN	A.P.	10.05.2018
B	CONCEPT DESIGN UPDATES	A.P.	25.05.2018
C	CONCEPT DESIGN UPDATES	A.P.	01.06.2018



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Designed: H.T.  
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Approved: A.P.  
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Approved Date: 01.06.2018

Project		QUEENSTOWN LAKES DISTRICT COUNCIL LADIES MILE
Sheet		3 WATERS CONCEPT
Project No.	Sheet No.	Revision
6-QX074.01	H01	C