



Monthly Progress Report –November 2020

City of New Meadows - Water System Improvement Projects

Project Name: *Water Improvement Projects*

Progress Date: *Through November 30, 2020*

Project No.: *197.0010*

Contract: *\$631,500*

Prepared By: *Tim Farrell, P.E., Ed Stowe, P.E.*

Purpose: *Discuss project progress and expenses to date*

This project report reviews the Water System Improvement Project monthly progress and outlines action items required to meet overall project objectives. Budgetary and financial analysis on financial project standing will be presented to City Council on a routine basis. The progress report will be sent to the City Clerk on a monthly basis and presented to City Council as requested by the City.

Project Phasing:

The water project construction will be completed in-line with the following phases, which were updated per the February 24th Council Meeting:

Phase 1: Well Site Land Acquisition and Water Rights (completed 2019): During this phase, the city acquired a parcel of land located at the eastern end of Katherine Street south of the intersection of US 95/SH 55 for construction of a new well and well house.

Phase 2: Distribution Priority Valves and Hydrants (completed 2019): During this phase, all water system isolation valves, most of which were buried, were located and equipped with new valve boxes near the road surface. Valves were exercised to ensure they operated properly, and new valves were added to provide greater control of the system. Sixteen aging fire hydrants were replaced with new fire hydrants, and a section of old, unused distribution main was disconnected from the system. A GIS map of the water and sewer system, including water valve, hydrant, service connection, and manhole locations was developed with the assistance of Idaho Rural Water.

Phase 3: Well No. 5 Drilling (anticipated completion Fall 2020): This portion of the project consists of drilling a new 600-foot deep well (Well No. 5) to serve as a new source of supply for the city. The project was bid out in July 2020. Two bids were received; the low bidder was Dig Well Idaho at \$219,198.44. The contract has been awarded to Dig Well, which is in the process of constructing the well.

Phase 4: Priority Water Main Replacements and Well No. 5 Well House and Facilities: This phase includes construction of a new well house and related piping and equipment for Well No. 5 and connection of the well to the distribution system. It also includes replacement of four

sections of aging distribution piping and related work, including new isolation valves, one new fire hydrant, blowoff connections, and reconnection of customer services.

Phase 5: Booster Station and Water Storage Reservoir Replacement: This phase includes replacement and upsizing of the existing booster station and reservoir located in City Park with a new 1,500-gpm booster station and 350,000-gallon reservoir.

The following sections summarize work completed through the end of the previous month in each portion of the project.

Phase 3 – Well Construction and Water Right Transfers

1. Drilling began on the well and proceeded to 490 feet below ground as of December 5th. Based on the well logs from the two city wells and the school irrigation well, it was anticipated rock would be encountered at 160 feet below ground or less. However, rock was not encountered until drilling reached 300 feet below ground. This required additional 16” temporary casing to keep the bore open as drilling proceeded. The contractor provided pricing for the additional work, which is detailed on Work Change Directive 1.
2. A contract change order was issued to extend the time for substantial completion to 12/31/2020 and final completion through January 2021.
3. It was anticipated drilling would be complete on December 5th, but the cutting teeth on the drill bit were damaged and the contractor is working on either repairing it or purchasing a new bit. There is approximately 1 – 2 days of drilling remaining after the bit is functional again to achieve the target depth of 600 feet.
4. After drilling is completed, geophysical logging will be done to help determine where to place the well screens and the contractor can construct and set the casing string, gravel pack, and surface seal. After the well is complete, it will be pump tested to determine the sustainable production capacity and sampled to verify the water meets federal water quality requirements for public drinking water sources.

Phase 4 – Priority Water Main Replacements and Well No. 5 Well House and Facilities

1. Mountain Waterworks received review comments from DEQ regarding the plans and specifications on the well house. We have addressed these comments internally and will resubmit for approval to bid after the well has been completed and water quality and pump testing data has been collected.

Phase 5 – Booster Station and Water Storage Reservoir Replacement

- Control Engineers is working on completing these plans and specifications incorporating review comments provided by Mountain Waterworks.

Proposed Work for next month (in order of priority):

- Complete Well 5 construction and conduct pump testing and water quality sampling.

- Control Engineers to finalize booster station/reservoir drawings for construction and agency review. Drawings, specifications, and bidding documents for the booster station and reservoir can be submitted for agency review after the electrical and control drawings are finalized.

Action Items:

- None at this time.

City of New Meadows
Water System Improvements Project
Engineering Budget Summary as of 1/13/2020

	Description	Total Budget	Total Budget with Amendments	Total Forecast	MWW Billed to Date	Total Remaining	Percent Complete
Basic Services	Task 01: Study and Report	\$41,500	\$41,500	\$42,951	\$42,951	\$0	100%
	Task 02: Preliminary Design	\$125,000	\$125,000	\$127,203	\$127,203	\$1	100%
	Task 03: Final Design	\$100,000	\$100,000	\$101,899	\$106,362	-\$4,463	104%
	Task 04: Bidding and Negotiation	\$30,000	\$30,000	\$26,346	\$13,144	\$13,202	50%
	Task 05: Construction	\$55,000	\$55,000	\$53,101	\$10,569	\$42,532	20%
	Task 06: Post Construction	\$25,000	\$25,000	\$25,000	\$6,940	\$18,060	28%
	Basic Services Subtotal	\$376,500	\$376,500	\$376,500	\$307,169	\$69,331	81.6%
RPR	Task 07: RPR Services	\$125,000	\$125,000	\$126,000	\$76,738	\$48,262	61%
	Task 09: ITD Inspection & Coordination						
	Task 08: Additional Services (MWW Budget Only)						
Addtl. Services	a) O&M Manual and Record Drawings	\$15,000	\$15,000	\$15,000	\$1,870	\$13,130	12%
	b) Surveying	\$35,000	\$35,000	\$24,152	\$24,152	\$0	100%
	c) Geotechnical	\$10,000	\$10,000	\$10,000	\$4,167	\$5,833	42%
	d) SCADA Programming	\$25,000	\$25,000	\$35,848	\$40,898	-\$5,050	114%
	e) Water Quality Sampling	\$10,000	\$10,000	\$10,000	\$0	\$10,000	0%
	f) Geophysical Well Logging & Camera Survey	\$10,000	\$10,000	\$10,000	\$0	\$10,000	0%
	g) Contract and Funding Administration	\$25,000	\$25,000	\$25,000	\$25,680	-\$680	103%
	Additional Services Subtotal	\$130,000	\$130,000	\$130,000	\$96,767	\$33,233	74%
	Grand Totals	\$631,500	\$631,500	\$631,500	\$480,673	\$150,827	76.1%
Out of Scope	Assistance with Land Acquisition for Well Site				\$4,200		



Total Project Tracking

	Owner	City of New Meadows				
	Engineer	Mountain Waterworks	Through:	11/30/2020		
	LOCATION :	New Meadows, Idaho	BY :	EJS		
Item No.	Project Description	Facility Plan Budget Total	Forecast Total	Amount Allocated to Date	Amount Remaining	
PHASE 1	Phase 1--Distribution					
	1	US-95 Main Replacement Project	\$ 250,000	\$ 281,100	\$ 281,100	\$ -
	2	Valve and Hydrant Replacements	\$ 370,000	\$ 227,500	\$ 227,500	\$ -
	3	GIS Mapping (valves, hydrants, services)	\$ -	\$ 6,240	\$ -	\$ 6,240
	4	Short Distribution Main Replacement Sections	\$ -	\$ 125,000	\$ -	\$ 125,000
PHASE 2	Phase 2--Well Drilling					
	3	Land Acquisition	\$ 90,000	\$ 25,000	\$ 25,000	\$ -
	4	Drill and Construct New Well	\$ 225,000	\$ 260,000	\$ -	\$ 260,000
PHASE 3	Phase 3--Well House, Booster Station and Reservoir					
	5	Construct Well Production Facilities and Install Well Pump	\$ 175,000	\$ 365,000	\$ -	\$ 365,000
	6	Construct New Booster Station	\$ 500,000	\$ 670,000	\$ -	\$ 670,000
	7	Construct New Reservoir	\$ 750,000	\$ 430,000	\$ -	\$ 430,000
	8	SCADA System Upgrades	\$ 150,000	\$ 60,000	\$ -	\$ 60,000
SUMMARY	GENERAL CONSTRUCTION SUBTOTAL		\$ 2,510,000	\$ 2,450,000	\$ 533,600	\$ 1,916,400
	9	Administrative, Omissions and Contingency	\$ 251,000	\$ 307,000	\$ -	\$ 307,000
	GENERAL CONSTRUCTION TOTAL WITH CONTINGENCY		\$ 2,761,000	\$ 2,757,000	\$ 533,600	\$ 2,223,400
	10	Engineering Basic Services	\$ 376,500	\$ 376,500	\$ 307,169	\$ 69,331
	11	Engineering Additional Services	\$ 125,500	\$ 130,000	\$ 96,767	\$ 33,233
	12	Construction Inpection/Resident Project Representative	\$ 125,500	\$ 125,000	\$ 76,738	\$ 48,262
	ENGINEERING & INSPECTION SUBTOTAL		\$ 627,500	\$ 631,500	\$ 480,673	\$ 150,827
	TOTAL ESTIMATED PROJECT COST		\$ 3,388,500	\$ 3,388,500	\$ 1,014,273	\$ 2,374,227
	Percentage Complete, out of total funding package		29.9%			
	Construction Percent Contingency		12.2%			