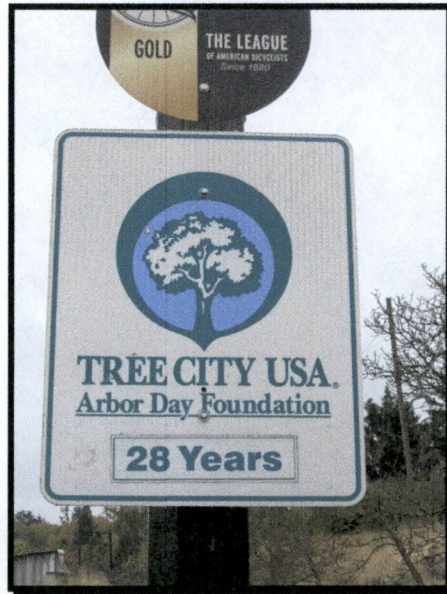


Submitted to the Ashland City Council August 20, 2019

Trees, Private Property and the Proposed TID Canal Piping Project



Proudly displayed at Ashland's North Entrance

Background – How did we get here?

The current canal-piping project was initiated primarily because of excess *E. coli* presence and water loss.

E. coli:

- A decade old study comprised of only 15 samples tested for total *E. coli* formed the body of reference material.
- Of the many thousands of subspecies of *E. coli* only about 100 (~0.1%) are deleterious to humans. These 15 samples were not tested for deleterious subspecies.
- Nine of the 15 samples were below the threshold for concern and the remaining 6 showed elevated but highly erratic values.
- Ultra violet (UV) light, including that found in the sun's spectrum, has the characteristic of acting as a biocide. *E. coli* are susceptible to UV radiation when exposed to sunlight but thrive in dark places such as pipes.

Water Loss:

- Of the 1300 acre feet (~423,000,000 gallons) of water purchased by Ashland from TID each year, it has been hypothesized that approximately 14% (~62,000,000 gallons) is "lost".
- Approximately 2% is attributed to evaporation. This is a reasonable number.
- The balance is attributed to loss through seepage through unlined sections and cracks in existing lining. This is not a reasonable number because...
- No apparent accounting for beneficial usage along the canal was factored in, such as...
 - The approximate 98 Ashland residences that pay for, receive and legally use TID water from this 2-mile section of the TID canal.
 - The whole-facility irrigation at Southern Oregon University
 - The irrigation water for Ashland parks *et cetera*.

Summary: Incomplete basic information and a reliance on a limited decade old study appear to be the foundation for initiation of this canal-piping project.

Current Status and Impending Action

- A starting budget of \$1.1 million has thus far ballooned to about \$4 million and most likely growing. It appears that this number does not account for restoration of private property damaged during the execution of this project nor any potential law suits that may arise therefrom.
- The timeline for this project is multi-year.
- Disruptive:
 - Tearing up and removal of ~1.5 miles of existing concrete liner.
 - Tearing up of our streets to replace existing buried pipes.
 - Damage to private property
 - Destruction and removal of hundreds of trees.

Ashland's Trees

For years our fine city has displayed the sign seen on the first page for all to see as they arrive in Ashland from the north entrance. Moreover, the city has rules on tree removal to assure that we properly retain the beautiful forest heritage that helps make Ashland so pleasant to live in.

Antithetical to this is the direct and collateral damage that will needlessly be inflicted on this heritage if the proposed Canal Piping Project is enacted as *currently planned*.

It is my understanding that the project requires removal of all existing piping and replacing it with new pipe. This will not only entail ripping up street sections that cross the existing canal but also an underground piped section of approximately

0.4 miles in length that not only goes adjacent to, but also through private properties and structures. It was my interest to observe and photograph as many of these locations that were accessible from public street view. It will be the objective herein to address this facet of the proposed project as displayed by the following maps and photos.

Maps

- Map 1 - gives an overview of a large portion of the project's extent including the longest extent of underground piping in the work area (box area)
- Map 1 Detail – displays a blowup of the boxed area in Map 1 covering Elkader, Emma, Mountain, and Beech streets. The pink numbers 1-7 indicate locations of photos 1-7 included.

Photos

(pink arrows indicate the path of TID pipe)

- | | |
|----------------------------|---------------------------|
| 1. Elkader looking NW | 5 Mountain looking NW |
| 2. Emma looking NW | 6. Beech looking east-ish |
| 3. Emma looking NW at curb | 7 Beech looking west-ish |
| 4. Mountain looking SE | |

Inspection of these photos, comprising only a small portion of this 0.4 mile underground piped interval, let alone the balance of the 2 mile canal, indicates that the claim of only damaging or removing one hundred or so trees throughout the project seems to fall far short of reality. Moreover and importantly, homeowners and their private property will surely be adversely impacted (i.e. see Photos 2 & 4...) including property values and their quality of life.

Conclusions, Requests and Suggestions

Conclusions

- Ashland's portion of the TID canal's renovation plan was predicated on an incomplete decade-old study of limited scope and sampling.
- Water-loss budgets apparently did not factor in beneficial use of TID water such as legal residential use, irrigation of the campus of Southern Oregon University, and Ashland parks and other public green spaces.
- Long-term project duration, ever expanding costs to taxpayers, destruction of innumerable trees, and damage to and depreciation of private property should cause pause for concern.

Requests

- Photos 1-7 are just ink on paper, a mere 2-dimensional representation of reality. I urge each of you to set aside the spreadsheets, the executive summaries, and even this, and enter the 3-dimensional world of reality represented in these photos. Go to the location of Photo 2 and see both

the magnitude of the trees before you as well as the potential disruption and damage to multiple private properties.

- While there, go to Starlight, where the project starts, and walk the ditch canal for a hundred yards or so and observe the tree loss there, a mere fraction of the remaining 1.5 miles of canal. Also observe the successful newly resurfaced canal segment.
- Finally enter Ashland from the north and as you pass the sign on page one of this document ask yourself “..if my vote will lessen the message of that sign or allow us to proudly claim such for yet the decades to come.”

Suggestions

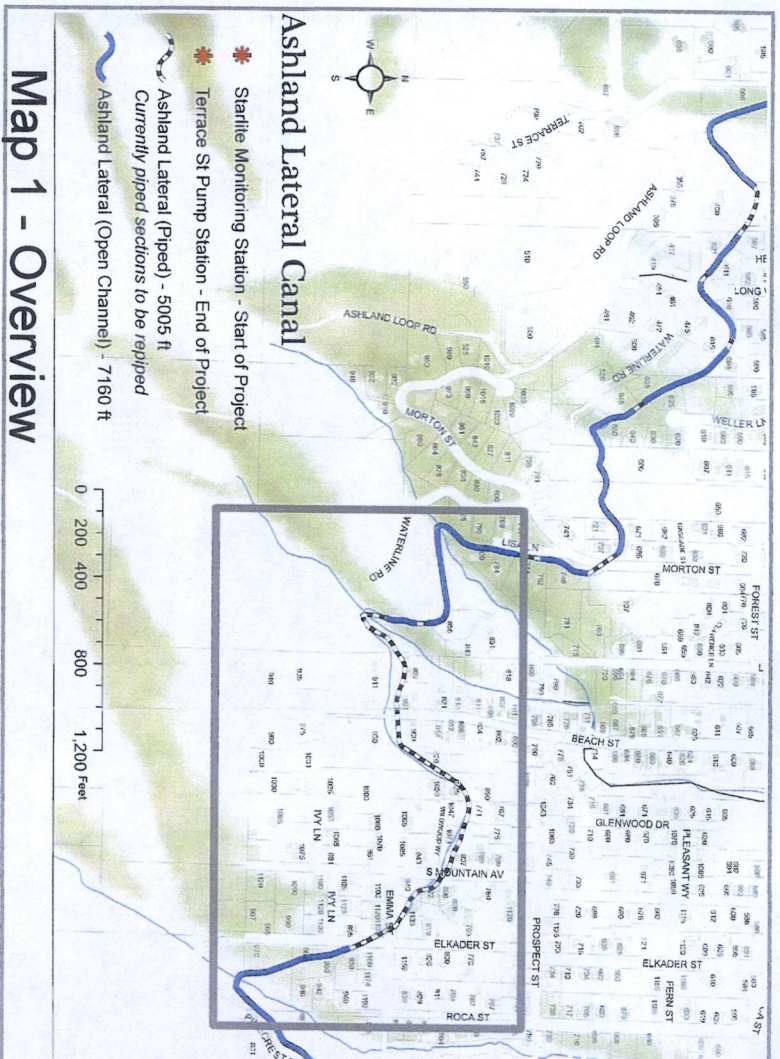
- Allow yourself a fair and equal evaluation of modern engineering methods and new and durable technology for canal construction. These methods and technologies can...
 - Be done in 4 months, not several years
 - Can coat the insides of existing pipes thus eliminating the need for the disruption of roads and private property.
 - Few if any trees will need to be cut down
 - Quoted costs are about 40% of existing estimated budgets of \$4 million for the current plan.
 - Open-channel flow improved by this technology will curtail seepage and allow natural light's UV component to help impede *E. coli* growth.
 - Finally – please do not allow yourself to be rushed to judgment and approve the current project without considering the relevant factors above.

Fire Control and Public Safety – This is Critical

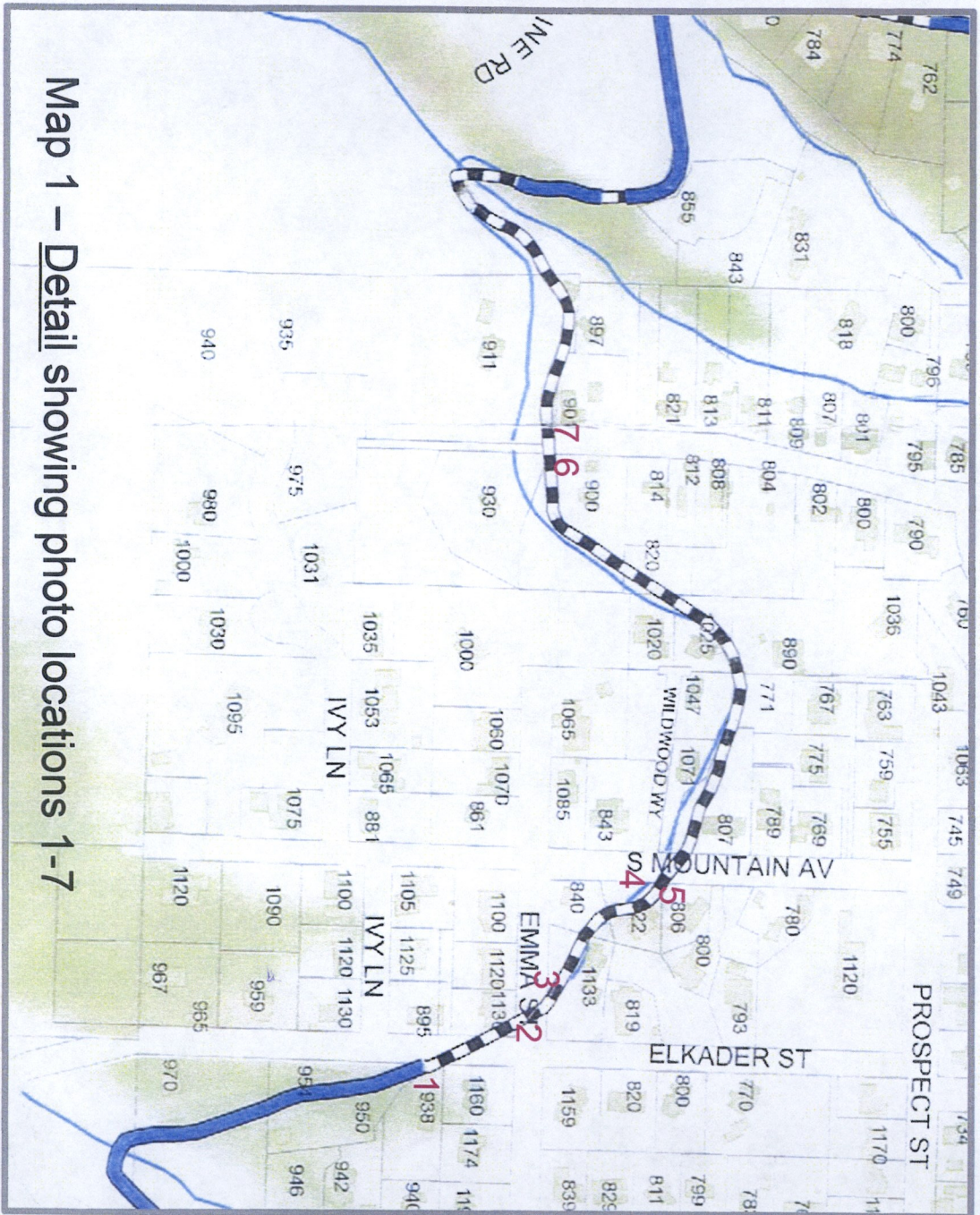
Water flows in the TID canal before, during, and normally after fire season and constitutes a critical resource for fire fighting. In open-channel flow, such as now, the Ashland Fire Department can access the TID canal for water via suction hoses. This is not theoretical! Recent personal communication with the Ashland Fire Department indicates that not only can they access and use TID water from the present canal system, they presently conduct monthly training drills doing exactly that so that they respond to fires as need using this resource.

This cannot be done from buried water pipes!

Sincerely, *Terry A. Nelsen,*
Ashland



Map 1 - Overview



Map 1 - Detail showing photo locations 1-7





Photo 3



Photo 4





Photo 7