



NORTH COAST RESOURCE PARTNERSHIP 2018/19 IRWM Project Application

The North Coast Resource Partnership (NCRP) 2018/19 Project Application Instructions and additional information can be found at the NCRP 2018/19 Project Solicitation webpage (<https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>). Please fill out grey text boxes and select all the check boxes that apply to the project. Application responses should be clear, brief and succinct.

Project Applications will be accepted until 5:00 pm, March 8, 2019. It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email to kgledhill@westcoastwatershed.com

If you have questions, need additional information or proposal development assistance please contact:

- Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235
- Tribal Projects: Sherri Norris, NCRP Tribal Coordinator at sherri@cieaweb.org or 510.848.2043

Project Name: Covelo CSD Collection System and WWTP Improvements

A. ORGANIZATION INFORMATION

1. Organization Name: Covelo Community Services District (CCSD)

2. Contact Name/Title

Name: Dane Downing

Title: General Manager

Email: covelocsd@hotmail.com

Phone Number (include area code): (707) 983-6888

3. Organization Address (City, County, State, Zip Code):

P.O. Box 65, Covelo, CA 95428

4. Organization Type

☒ Public agency

- ☐ Non-profit organization
- ☐ Public utility
- ☐ Federally recognized Indian Tribe
- ☐ California State Indian Tribe listed on the Native American Heritage Commission's California Tribal Consultation List
- ☐ Mutual water company
- ☐ Other:

5. Authorized Representative (if different from the contact name)

Name:

Title:

Email:

Phone Number (include area code):

6. Has the organization implemented similar projects in the past? ☒ yes ☐ no

Briefly describe these previous projects.

CCSD has previously worked with the NCRP and has received Proposition 50 and Reinvestment Act funding for projects at the WWTP and within the collection system. Unfortunately, due to some design and construction errors on these projects, in addition to some naturally aging infrastructure, additional changes are necessary to improve the function of the Covelo wastewater collection system and treatment plant.

7. List all projects the organization is submitting to the North Coast Resource Partnership for the 2018/19 Project Solicitation in order of priority.

There are two major components to this project: 1) Collection System Improvements 2) Wastewater Treatment Plant Improvements. Both of these components are being submitted under this single application. The projects address several components including mitigating I&I in the system, upgrading the WWTP facilities to improve ammonia reduction (nitrification) through the plant, equipment protection that was omitted during the initial upgrade, and solar power at the WWTP to reduce GHG emissions and benefit the economic situation of this severely disadvantaged community.

8. Organization Information Notes:

The Covelo Community Services District (CCSD) was formed in 1960 to remedy health issues that were associated with septic systems contaminating well waters. The CCSD was formed to construct a collection system and treatment plant. The CCSD has been in continuous operation ever since and has, over the decades, taken measures to maintain, repair, and update its facilities. The CCSD's sole purpose is to maintain the health and safety of the community through the proper collection and treatment of the community's sewage. There are 265 service connections to the collection system which gravity flows to the facultative-type Treatment Plant.

B. ELIGIBILITY

1. North Coast Resource Partnership and North Coast IRWM Objectives

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

☒ Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation

- ☒ Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation
- ☐ Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

GOAL 2: ECONOMIC VITALITY

- ☒ Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing
- ☐ Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT

- ☒ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity
- ☒ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

GOAL 4: BENEFICIAL USES OF WATER

- ☐ Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, and recreational uses while minimizing impacts to sensitive resources
- ☒ Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities
- ☒ Objective 10 - Protect groundwater resources from over-drafting and contamination

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE

- ☒ Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health
- ☒ Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY

- ☐ Objective 13 - Improve flood protection and reduce flood risk in support of public safety

2. Does the project have a minimum 15-year useful life?

- ☒ yes ☐ no

If no, explain how it is consistent with Government Code 16727.

3. Other Eligibility Requirements and Documentation

CALIFORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE

- a) Does the project that directly affect groundwater levels or quality?
- ☒ yes ☐ no
- b) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
- ☒ yes ☐ no

CASGEM COMPLIANCE

- a) Does the project overlie a medium or high groundwater basin as prioritized by DWR?
☐ yes ☒ no
- b) If Yes, list the groundwater basin and CASGEM priority:
- c) If Yes, please specify the name of the organization that is the designated monitoring entity:
- d) If there is no monitoring entity, please indicate whether the project is wholly located in an economically disadvantaged community.
☒ yes ☐ no

URBAN WATER MANAGEMENT PLAN

- a) Is the organization required to file an Urban Water Management Plan (UWMP)?
☐ yes ☒ no
- b) If Yes, list the date the UWMP was approved by DWR:
- c) Is the UWMP in compliance with AB 1420 requirements?
☐ yes ☐ no
- d) Does the urban water supplier meet the water meter requirements of CWC 525?
☐ yes ☐ no
- e) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

AGRICULTURAL WATER MANAGEMENT PLAN

- a) Is the organization – or any organization that will receive funding from the project – required to file an Agricultural Water Management Plan (AWMP)?
☐ yes ☒ no
- b) If Yes, list date the AWMP was approved by DWR:
- c) Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?
☐ yes ☐ no

SURFACE WATER DIVERSION REPORTS

- a) Is the organization required to file surface water diversion reports per the requirements in CWC Part 5.1 Division 2?
☐ yes ☒ no
- d) If Yes, will the organization be able to provide SWRCB verification documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

STORM WATER MANAGEMENT PLAN

- a) Is the project a stormwater and/or dry weather runoff capture project?
☐ yes ☒ no
- b) If yes, does the project benefit a Disadvantaged Community with a population of 20,000 or less?
☐ yes ☐ no
- e) If No, will the organization be able to provide documentation that the project is included in a Stormwater Resource Plan that has been incorporated into the North Coast IRWM Plan, should the project be selected as a Priority Project?

☐ yes ☐ no

C. GENERAL PROJECT INFORMATION

1. Project Name: Covelo CSD Collection System and WWTP Improvements

2. Eligible Project Type under 2018/19 IRWM Grant Solicitation

- ☐ Water reuse and recycling for non-potable reuse and direct and indirect potable reuse
- ☐ Water-use efficiency and water conservation
- ☐ Local and regional surface and underground water storage, including groundwater aquifer cleanup or recharge projects
- ☐ Regional water conveyance facilities that improve integration of separate water systems
- ☒ Watershed protection, restoration, and management projects, including projects that reduce the risk of wildfire or improve water supply reliability
- ☐ Stormwater resource management projects to reduce, manage, treat, or capture rainwater or stormwater
- ☐ Stormwater resource management projects that provide multiple benefits such as water quality, water supply, flood control, or open space
- ☐ Decision support tools that evaluate the benefits and costs of multi-benefit stormwater projects
- ☐ Stormwater resource management projects to implement a stormwater resource plan
- ☐ Conjunctive use of surface and groundwater storage facilities
- ☐ Decision support tools to model regional water management strategies to account for climate change and other changes in regional demand and supply projections
- ☒ Improvement of water quality, including drinking water treatment and distribution, groundwater and aquifer remediation, matching water quality to water use, wastewater treatment, water pollution prevention, and management of urban and agricultural runoff
- ☐ Regional projects or programs as defined by the IRWM Planning Act (Water Code §10537)
- ☐ Other:

3. Project Abstract

Reducing I&I into the collection system will ease the burden of extremely high flows through the WWTP during winter/rainy periods. When flows are high, not only is the treatment often insufficient, but the plant may be forced to surface water discharge toxic effluent into the nearby Grist Creek, as happened in 2017 (failed toxicity test). Part 2 of the project is to make improvements to the WWTP itself to improve the overall treatment and reduce the toxic ammonia in the plant's effluent.

4. Project Description

The I&I portion of the project tackles several areas of the collection system (CS) that were not included in the most recent 2008 CS upgrade, as well as some of the issues that were caused during the replacement of sections of the CS in 2008. All 4 portions of the CS that are included in this project have been specifically identified as areas with significant I&I by CCSD's operator using CCSD's CCTV equipment and visual inspection. The 4 areas include:

1: 600 LF of sewer main on Commercial St, which was replaced during the 2008 upgrade. Unfortunately, the ROW portions of the laterals along this main were not replaced; recent inspections have concluded that

approximately 40 GPM I&I is coming from these 60+ year old laterals. Thus, this project would replace 8- 4" ACP laterals with 4" SDR-35 from the mainline to the cleanouts.

2: 510 LF of old ACP along Commercial Street, which was not replaced in 2008. This 510 LF section has been observed contributing approximately 40 gpm I&I into the CS. Also, this 510 LF segment is without a midpoint MH, prohibiting CCSD from CCTVing this full segment. Thus, this project would replace the 510 LF of 6" ACP with 6" SDR-35, 4- 4" ACP laterals with 4" SDR-35 from the main to the COs & add a MH in the middle of the 510 LF segment.

3: East Lane(not replaced in 2008). A 217 LF portion of this East Lane sewer has been identified as contributing approximately 20 gpm I&I to the CS. In addition to this segment, there are 3 MHs which exhibit significant I&I. Thus, this project would replace the 217 LF of 6" ACP with 6" SDR-35, 3- 4" ACP laterals with 4" SDR-35 main to CO, replace one MH and seal around the pipe penetrations on 2 of the other existing MHs.

4: 1,100 LF along the far South end of Commercial St and towards the WWTP. This section has been observed contributing approximately 40 gpm I&I into the CS. Also, within this 1,100 LF segment are 4 manholes, which are visibly allowing I&I into CS. All of these MHs are over 60 years old and should be replaced. Thus, this project would replace this 1,100 LF of 8" ACP sewer with 8" SDR-35, 2-4" ACP laterals with 4" SDR-35 & replace 4 leaking manholes.

Summing all the I&I discussed in the 4 areas of concern, this project aims to reduce approximately 0.2 MGD of wet weather I&I. This, for a plant with ADF around 0.03 to 0.04 MGD and max flows around 0.35 MGD, means addressing over 65% of the I&I entering the CS and limit need for surface water discharge.

The 2nd half of this project involves upgrades to the WWTP. Due to some design flaws of the existing system, the WWTP encounters short circuiting through the primary oxidation pond and their wetlands and insufficient nitrogen removal. Adjustments of inlets and outlets through various portions of the WWTP, separation of some of the treatment facilities (wetlands and perc pond), the installation of aerators/mixers in the primary oxidation pond will all help improve the treatment capacity and maintenance abilities of the WWTP.

5. Specific Project Goals/Objectives

Goal 1: Reduce Inflow and Infiltration Entering the Collection System.

Goal 1 Objective: Allow stormwater to recharge the groundwater instead of ending up at the WWTP. Also, during dry weather, these fixes will limit the amount of sewage leaking out of the pipes contaminating groundwater.

Goal 1 Objective: Reduce the amount of flow that needs to be handled/treated at the wwtp, reducing the extreme oversight of the WWTP that is currently required during wet weather, including bypass pumping at times.

Goal 1 Objective: Reduced flows will allow for better treatment at the WWTP.

Goal 1 Objective: Greatly reduce chances of needing to perform a SWD that could be toxic to the aquatic ecosystem (as happened in 2017) & requires costly testing, unless improvements are also made at the WWTP.

Goal 2: Provide Improved Treatment at the WWTP.

Goal 2 Objective: Relocating inlets and outlets in the primary oxidation pond (OP1) will reduce short circuiting through the OP1, improving hydraulic retention time and treatment.

Goal 2 Objective: Adding aerators/mixers to the OP1 will provide better mixing, forcing OP1 to act more like the intended complete mix reactor while increasing DO for better BOD removal and nitrification-toxic NH₃.

Goal 2 Objective: Relocating inlets and outlets in the secondary oxidation pond (OP2) will reduce short circuiting through the OP2, improving hydraulic retention time and treatment.

Goal 2 Objective: Separating the wetlands into two separate trains and replanting the wetlands will reduce short circuiting through the wetlands, improving hydraulic retention time and treatment.

Goal 3: Provide Improved Operation Capabilities and Function at the WWTP

Goal 3 Objective: Removing the bentonite clay liner at the bottom of and separating the single percolation pond into two will allow for improved percolation & maintenance-so that one pond can be service while the other operates

Goal 3 Objective: Installing a canopy over the ozone disinfection equipment will protect the recently installed, essential and expensive ozone equipment. This was neglected in the most recent 2009 design and upgrade.

Goal 3 Objective: Installation of solar panels on the proposed canopy for the ozone will increase CCSD's self-reliance and economics by saving on power costs, while reducing GHG emissions.

Additional Goals & Objectives (List)

6. Describe how the project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected.

Obj 1: All components of this project are proposed by the CCSD, specifically the GM and the Wastewater Operator who have lived and worked in Covelo for decades and know the area, the watersheds and needs of the community.

Obj 2: Project addresses deficiencies in previous NCRP funded project

Obj 4: Project benefits the Community of Covelo, a SDAC

Obj 6: By addressing the I&I into the system, CCSD hopes to eliminate the possibility of ever having to surface water discharge (SWD), the last SWD proved to be toxic. The WWTP improvements will directly address the toxicity issues, should CCSD need to SWD again.

Obj. 7: Project improves water quality for the salmonid habitat in Grist Creek and receiving waters.

Obj 9&10: CCSD is a SDAC and the wwtp project will improve discharge of ammonia/nitrates to the groundwater supply

Obj. 11&12: Addition of solar panels at wwtp will promote local energy independence and mitigate CCSDs contribution to climate change by reducing GHG emissions.

7. Describe the need for the project.

The CCSD is a rural, economically challenged community that is unable to provide the needed revenue and capital for upgrades to its sewage treatment system. These needed upgrades cause increased operating costs each year. The collection system has I & I issues which compromise the treatment facility's capacity; thus, in some years, requiring the District to discharge to the creek. This process is extremely expensive in time and resources for the District. The last time surface discharge was required the District was forced to raise rates (in 2017) by \$15 a month to offset the testing and administrative costs. In addition this project is designed to decrease electricity costs by installing a solar system. Also, this project will redesign the treatment plant ponds to increase water treatment efficiency thus reducing processing costs and time of the influent. Lastly, these improvements will allow the District moratorium to be lifted allowing increased revenue from new development.

8. List the impaired water bodies (303d listing) that the project benefits:

Grist Creek is part of the Eel River HU, Middle Fork HA, Eden Valley and Round Valley HSAs. This waterbody is listed as impaired by temperature and sediment siltation on the 2014-2016 303(d) list.

Causes include Flow Alteration/Regulation/Modification, Nonpoint Source, Removal of Riparian Vegetation, Erosion/Siltation, Flow Alteration/Regulation/Modification, and Removal of Riparian Vegetation. TMDL development is still planned to address these impairments.

9. Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action? ☐ yes ☒ no

If so, please describe?

10. Describe the population served by this project.

The District's service population is approximately 430 with an estimated Median Household Income of \$23,600, according to the US Census.

11. Does the project provide direct water-related benefits to a project area comprised of Disadvantaged Communities or Economically Distressed Communities?

- ☒ Entirely
- ☐ Partially
- ☐ No

List the Disadvantaged Community(s) (DAC)

Covelo

12. Does the project provide direct water-related benefits to a project area comprised of Severely Disadvantaged Communities (SDAC)?

- ☒ Entirely
- ☐ Partially
- ☐ No

List the Severely Disadvantaged Community(s)

Covelo

13. Does the project provide direct water-related benefits to a Tribe or Tribes?

- ☐ Entirely
- ☐ Partially
- ☒ No

List the Tribal Community(s)

If yes, please provide evidence of support from each Tribe listed as receiving these benefits.

14. If the project provides benefits to a DAC, EDA or Tribe, explain the water-related need of the DAC, EDA or Tribe and how the project will address the described need.

The Covelo WWTP had an upgrade in 2009 that addressed several of their concerns at the time. Unfortunately, some holes were left in the system. And after operating for 10 years post upgrades, those deficiencies have become increasingly obvious. The proposed project will correct the water related need of the District.

15. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities in the North Coast region? ☒ yes ☐ no

If yes, please explain.

The addition of solar panels is intended to provide all, in most cases, of the power that will be required to run the WWTP. This will eliminate, or nearly eliminate, all GHG emissions from the WWTP.

16. Describe how the project contributes to regional water self-reliance.

The valley's aquifer is supplied and recharged only by the rains and snow melt which falls within the mountains that defines the valley. The entire valley uses this aquifer exclusively for all of its municipal, commercial, and agricultural needs. Covelo Community Services District provides the only other consistent groundwater recharge function. Though it is supplemental to the rain and snow melt, it is known that every source of water recharge is significant. The discharge permit allows CCSD to percolate into the aquifer with disinfected effluent via ozone. The District essentially produces discharge water that is cleaner than any of the valley's existing ground, surface, and recharge waters.

17. Describe how the project benefits salmonids, other endangered/threatened species and sensitive habitats.

Both parts of the project benefit salmonids. If the I&I is reduced, as proposed, the need to perform a surface water discharge is expected to be all but eliminated. Therefore, wastewater with toxic ammonia levels will not be directly entering the habitats. The WWTP Improvements portion of the project will directly address reducing ammonia levels in the effluent in the case a surface water discharge be required.

18. Describe local and/or political support for this project.

100% support because CCSD is under a District-wide, temporary, Mitigatable-Moratorium (MM) due to the winter I&I and the WWTP shortfalls. And since the community has reached its limit for increasing monthly rates, the only way to mitigate these issues is through external funding. This MM has limited the ability of development, which has become a contentious issue for District members wanting to provide teacher, senior & affordable housing, cottage industries & small to medium scale commercial.

19. List all collaborating partners and agencies and nature of collaboration.

We are a Special District in an unincorporated part of Northeastern Mendocino County and our jurisdiction does not interface with many other agencies or public entities. As mentioned in 18 above, this project would address the issues which prompted the current MM and therefore, people within CCSD would be 100% supportive of the project, as they are very much in favor of being able to develop needed economic support facilities and industry and to eliminate any future rate increases.

20. Is this project part or a phase of a larger project? ☐ yes ☒ no

Are there similar efforts being made by other groups? ☐ yes ☒ no

If so, please describe?

If funds are not available for both portions of this project during this round, this project could be phased into addressing the I&I concerns in this Round 1 and then addressing the treatment concerns at the WWTP in Round 2 or another funding source.

21. Describe the kind of notification, outreach and collaboration that has been done with the County(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable.

none

22. Describe how the project provides a benefit that meets at least one of the Statewide Priorities as defined in the 2018 IRWM Grant Program Guidelines and Tribal priorities as defined by the NCRP?

Protect and restore important ecosystems- improving treatment and reducing ammonia in the WWTP effluent will help protect life in the Grist Creek and downstream water bodies.

Increase operational and regulatory efficiencies- by making these improvements at the wastewater treatment plant, Covelo CSD's only operator will be able to spend more time on other important components of the system, instead of continuously trying to put out fires from excessive I&I, balancing extreme flows at the WWTP, making sure the expensive ozone equipment is protected, trying to get new wetland plants to start growing, etc. The operator will also have more flexibility and opportunity for maintenance within the plant by separating both the wetlands and the percolation pond into two separate sections each.

23. Project Information Notes:

Currently, Covelo CSD's only operator is faced with managing inefficiencies, deficiencies and gaps that are a result of a partially failed previous upgrade and replacements of portions of the collection system. These inefficiencies significantly reduce the amount of beneficial work that the operator is able to complete on a regular basis. And because of Covelo's economic status, CCSD cannot afford the rate increase that would be necessary to hire additional operational staff. Assisting CCSD with the collection system and wastewater treatment plant improvements described in this application would free time up for Covelo's operator to perform routine daily operations and fine tune treatment, providing better, safer effluent to the groundwater and/or Grist Creek, which feeds into the Middle Fork Eel River, a State (1972) and Federal (1981) designated Wild and Scenic River .

D. PROJECT LOCATION

1. Describe the location of the project

Geographical Information

A project map of all components of the project is included in the "CCSD_Supporting_Documentation.pdf". The project components are primarily located along Commercial Street, behind East Lane and at the CCSD WWTP.

2. Site Address (if relevant):

75997 Covelo Rd, Covelo, CA 95428

3. Does the applicant have legal access rights, easements, or other access capabilities to the property to implement the project?

☒ Yes If yes, please describe

☐ No If No, please provide a clear and concise narrative with a schedule, to obtain necessary access.

☐ NA If NA, please describe why physical access to a property is not needed.

4. Project Location Notes:

E. PROJECT TASKS, BUDGET AND SCHEDULE

1. **Projected Project Start Date:** 3/1/20
Anticipated Project End Date: 8/31/22

2. **Will CEQA be completed within 6 months of Final Award?**

☐ Yes State Clearinghouse Number:

☐ NA, Project is exempt from CEQA

☐ NA, Not a Project under CEQA

☒ NA, Project benefits entirely to DAC, EDA or Tribe, or is a Tribal local sponsor. [Projects providing a water-related benefit entirely to DACs, EDAs, or Tribes, or projects implemented by Tribes are exempt from this requirement].

☐ No

3. **Please complete the CEQA Information Table below**

Indicate which CEQA steps are currently complete and for those that are not complete, provide the estimated date for completion.

CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	n	N/A
Notice & invitation to consult sent to Tribes per AB52		
Notice of Preparation		
Draft EIR/MND/ND		
Public Review		
Final EIR/MND/ND		
Adoption of Final EIR/MND/ND		
Notice of Determination		
N/A - not a CEQA Project		

If additional explanation or justification of the timeline is needed or why the project does not require CEQA, please describe.

Project will qualify for exemption from CEQA. CCSD to file Notice of Exemption with County by Fall 2020.

4. **Will all permits necessary to begin construction be acquired within 6 months of Final Award?**

☐ Yes

☒ NA, Project benefits entirely to DAC, EDA, Tribe, or is a Tribal local sponsor

☐ No

5. PERMIT ACQUISITION PLAN

Type of Permit	Permitting Agency	Date Acquired or Anticipated
Caltrans Encroachment Permit	Caltrans	12/31/20
Report of Waste Discharge	North Coast RWQCB	12/31/20
Building/Electrical Permit	Mendocino County	12/31/20

Type of Permit	Permitting Agency	Date Acquired or Anticipated

For permits not acquired: describe actions taken to date and issues that may delay acquisition of permit.

6. Describe the financial need for the project.

CCSD has maximized their capacity to take on any more loans as they still have 30 years to pay off the last one. The CCSD is unable to increase rates any more than they already have, given the severely economically depressed population which is served. A final note: The CCSD suffered a real loss in value of its system due to the design and construction errors which occurred during the previous repair and upgrade project. A total of \$1.5M, for which they are still paying the loan.

7. Is the project budget scalable? ☒ yes ☐ no

Describe how a scaled budget would impact the overall project.

If the project is scaled, it could be done so that the I&I concerns and the addition of the canopy for ozone equipment with the solar panels discussed herein are addressed in this Phase 1. Phase 2 of this project would address the improvements to the WWTP.

8. Describe the basis for the costs used to derive the project budget according to each budget category.

Category A tasks' cost are based on hourly rates and anticipated effort of CCSD staff primarily. Category C tasks' costs are based on Engineer's Estimate for tasks for similar projects. Category D tasks' costs are based on previous construction projects and estimates provided from a solar installer.

9. Provide a narrative on cost considerations including alternative project costs.

The work within the collection system is fairly straightforward, as it is replacement in kind. For the WWTP Upgrades, several options were considered and the proposed modifications had the greatest benefit for the least cost.

10. List the sources of non-state matching funds, amounts and indicate their status.

N/A

11. List the sources and amount of state matching funds.

N/A

12. Cost Share Waiver Requested (DAC or EDA)? ☒ yes ☐ no

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the water-related need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits that address a water-related need of a DAC/EDA. The Covelo CSD is a severely disadvantaged community with a median household income of just under \$23,600, based on US Census American Community Survey 5 year estimates from 2013-2017.

13. Major Tasks, Schedule and Budget for NCRP 2018 IRWM Project Solicitation

Please complete MS Excel table available at <https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>; see instructions for submitting the required excel document with the application materials.

14. Project Tasks, Budget and Schedule Notes:

F. PROJECT BENEFITS & JUSTIFICATION

1. Does the proposed project provide physical benefits to multiple IRWM regions or funding area(s)?

☐ yes ☒ no

If Yes, provide a description of the impacts to the various regions.

2. Provide a narrative for project justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits. List any studies, plans, designs or engineering reports completed for the project. Please see the instructions for more information about submitting these documents with the final application.

The District conducted CCTVing through the collection system and also conducted visual inspections. The I&I project addresses the identified high priority areas as identified by CCSD inspection work. The District failed acute toxicity testing in 2017 during periods of high rainfall due to high levels of ammonia in the District effluent, which was caused by high I&I into the collection system and short circuiting within the treatment ponds. The District work with a solar installer to evaluate the benefits of solar to the operation of the WWTP, with findings that much of the power needs could be met with the solar system installed over the ozone unit. In the supporting attachments, the overall project locations are identified in Exhibit A: Project Areas. The preliminary design for the I&I improvements for Priority Areas 1 through 4 are included in Exhibit B. The improvements to the WWTP are shown in Exhibit C.

3. Does the project address a contaminant listed in AB 1249 (nitrate, arsenic, perchlorate, or hexavalent chromium)? ☒ yes ☐ no

If yes, provide a description of how the project helps address the contamination.

The WWTP project will improve nitrification and denitrification through the plant, reducing ammonia and nitrates discharged to groundwater.

4. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes consistent with AB 685? ☒ yes ☐ no

If Yes, please describe.

the Community relies on individual groundwater wells its potable supply. The proposed project will reduce potential nitrate contamination to groundwater, which protects the water supply for this severely disadvantaged community.

5. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation? ☒ yes ☐ no

If Yes, please describe.

Yes, the District is one of the only wastewater treatment plants in California which uses ozone as it's disinfecting process. The electrical demand for such infrastructure is quite high, this project will provide a shade cover and solar panels for the ozone unit to create a carbon neutral sewage treatment facility.

6. For each of the Potential Benefits that the project claims complete the following table to describe an estimate of the benefits expected to result from the proposed project. [See the NCRP Project Application Instructions, Potential Project Benefits Worksheet and background information to help complete the table. The NCRP Project Application, Attachment B includes additional guidance, source materials and examples from North Coast projects.]

PROJECT BENEFITS TABLE

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Water Supply				
Avoided Electrical Costs- Solar	39,680	kWh	18,000	US dollars
Water Quality				
Ammonia Reduction	no toxicity violatio	Change in Conc		
Nitrate Reduction	protect groundwater	Change in Conc		
Other Ecosystem Service Benefits				
Other Benefits				
Carbon Emissions Reductions from Reduced Electricity Use	39,680	kWh	\$157	\$US in CO2 equiv
Decreased Operation and Maintenance Costs		Project Specific		

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units

7. Project Justification & Technical Basis Notes:

Solar Panels provide an immediate cost savings to CCSD while reducing the carbon footprint of the CCSD.

Improved Treatment (Ammonia and Nitrate Reduction)= Mitigating possibility of toxic effluent to Grist Creek during surface water discharge. Improving TN levels discharged through percolation pond improves groundwater quality.

Decreased O&M= reduce staff overtime to manage high flows at the WWTP during wet weather. Also, if SWD is not required, CCSD will not need to perform additional toxicity tests, which cost approximately \$15k each time and take hours of operator time.

Major Tasks, Schedule and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Covelo CSD Collection System and WWTP Improvements
 Organization Name: Covelo Community Services District

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
A	Category (a): Direct Project Administration								
1	Administration	In cooperation with the County of Humboldt sign a sub-grantee agreement for work to be completed on this project. Develop invoices with support documentation. Provide audited financial statements and other deliverables as required.	Invoices, audited financial statements and other deliverables as required	0%	\$35,000.00	\$0.00	\$35,000.00	3/1/20	4/25/22
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$3,000.00	\$0.00	\$3,000.00	5/30/20	8/28/20
3	Labor Compliance Program	Execute service agreement with Labor Compliance Program company	Submission of Labor Compliance Program	0%	\$25,200.00	\$0.00	\$25,200.00	3/1/20	4/25/22
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	\$4,500.00	\$0.00	\$4,500.00	4/25/22	4/24/25
B	Category (b): Land Purchase/Easement								
1	N/A			0%	\$0.00	\$0.00	\$0.00		
C	Category (c): Planning/Design/Engineering/Environmental Documentation								
1	Preliminary Design	Engineer to prepare approximately 30% Design Plans	Preliminary Design Plans	0%	\$60,000.00	\$0.00	\$60,000.00	5/29/20	8/28/20
2	Final Design	Engineer to prepare 100% bid ready Plans and Specifications	Final Design Plans and Specifications	0%	\$132,000.00	\$0.00	\$132,000.00	8/31/20	12/31/20
3	Environmental Documentation: CEQA Requirements	Project is anticipated to be eligible for a CEQA Categorical Exemption (CE). Under this task, the CE would be prepared and filed with Mendocino County and the state clearinghouse. Compliance with AB 52 would also be conducted under this task.	CEQA CE stamped by Mendocino County and the State Clearinghouse AB 52 Compliance documentation	0%	\$1,970.00	\$0.00	\$1,970.00	5/29/20	12/31/20
4	Building and Electrical	Preparation of Building and Electrical Permits, which will need to be acquired from Mendocino County for the ozone canopy and addition of solar	Building and Electrical Permits	0%	\$1,500.00	\$0.00	\$1,500.00	5/29/20	12/31/20
5	Caltrans Encroachment Permit	Prepare Caltrans Encroachment Permit	Caltrans Encroachment Permit	0%	\$7,560.00	\$0.00	\$7,560.00	5/29/20	12/31/20
6	Report of Waste Discharge	Prepare Report of Waste Discharge, identifying modifications from existing NPDES permit	Report of Waste Discharge/modified NPDES permit	0%	\$12,000.00	\$0.00	\$12,000.00	5/29/20	12/31/20
D	Category (d): Construction/Implementation								
1	Construction Administration/ Inspection	Develop advertisement for bids and contract documents; conduct pre-bid contractors meeting; perform evaluation of bids; award contract. Complete tasks necessary to administer construction contract. Keep daily records of construction activities, inspection, and progress. Conduct project construction photo-monitoring, respond to requests for information, develop work directives, develop contract change orders, conduct regular construction site meetings and conduct invoice reviews	Summary of Bids and Contract Award Monthly progress reports submitted to the City including construction status, change orders, and pay recommendations	0%	\$165,000.00	\$0.00	\$165,000.00	3/31/21	4/29/22
2	Construction Implementation	Equipment mobilization, clearing, grubbing, minor site grading, erosion control. Temporary signage. Develop and enforce traffic control plan. Installation of site piping, tank foundation construction, tank erection, tank disinfection and installation of cathodic protection and telemetry. Water tank shop drawing approval, manufacture, and delivery. (See Detail on "Detail Budget Breakdown" task)	Notice of completion filed with Mendocino County Clerk	0%	\$1,941,016.00	\$0.00	\$1,941,016.00	3/31/21	4/29/22
3	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: Annual water loss reports from FGCSO, annual site photos showing site stability.	Annual Monitoring Report for three years after construction completion.	0%	\$0.00	\$0.00	\$0.00	3/31/21	4/29/22
4	Project Close Out	Inspect project components and establish that work is complete. Verify that all project components have been installed and are functioning as specified will be conducted as part of construction inspection and project closeout. Conduct project completion photo monitoring. Prepare record drawings.	Record Drawings Pre-project site photos Construction Photos Post-project site photos	0%	\$24,000.00	\$0.00	\$24,000.00	3/31/21	4/29/22
Total North Coast Resource Partnership 2018/19 IRWM Grant Request					\$2,412,746.00	\$0.00	\$2,412,746.00		
Requested Budget is Scaled by Elimination of the WWTP Improvements portion of the project. The Requested Budget without the WWTP Improvements is:					\$1,514,922.00	\$0.00	\$1,514,922.00		
Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.					no	\$0.00	no		

Collection System and WWTP Improvements

#	Item Name	Unit Quantity	Unit of Measure	Unit Cost	Cost Estimate Total
1	A(1) Administration	700	HR	\$ 50	\$ 35,000
2	A(2) Monitoring Plan	100	HR	\$ 30	\$ 3,000
3	A(3) Labor Compliance Program	210	HR	\$ 120	\$ 25,200
4	A(4) Reporting	150	HR	\$ 30	\$ 4,500
5	C(1) Preliminary Project Design	500	HR	\$ 120	\$ 60,000
6	C(2) Final Project Design	1100	HR	\$ 120	\$ 132,000
7	C(3) Environmental Compliance - CEQA CE	16	HR	\$ 120	\$ 1,920
7	C(3) Environmental Compliance - CEQA CE Filing Fee	1	LS	\$ 50	\$ 50
8	C(4) Building and Electrical Permit	1	LS	\$ 1,500	\$ 1,500
9	C(5) Caltrans Encroachment Permit	63	HR	\$ 120	\$ 7,560
10	C(6) Report of Waste Discharge	100	HR	\$ 120	\$ 12,000
11	D(1) Construction Management	1100	HR	\$ 150	\$ 165,000
12	D(2) WWTP Mobilization/Demobilization	8	DAY	\$ 4,000	\$ 32,000
13	D(2) PG&E Utility Fee	1	LS	\$ 15,000	\$ 15,000
14	D(2) Potholing	60	EA	\$ 450	\$ 27,000
15	D(2) WWTP Demolition	1	LS	\$ 50,000	\$ 50,000
16	D(2) I&I Mobilization	1	LS	\$ 50,000	\$ 50,000
17	D(2) Sawcut and Remove Existing Pavement	5860	SF	\$ 3	\$ 17,580
18	D(2) 8-inch PVC Sanitary Sewer	1100	LF	\$ 200	\$ 220,000
19	D(2) 6-inch PVC Sanitary Sewer	727	LF	\$ 180	\$ 130,860
20	D(2) 4" Lateral and Cleanout	16	EA	\$ 6,000	\$ 96,000
21	D(2) 6" Lateral and Cleanout	1	EA	\$ 8,000	\$ 8,000
22	D(2) Traffic Control and Plan	1	LS	\$ 40,000	\$ 40,000
23	D(2) Erosion Control	1	LS	\$ 8,000	\$ 8,000
24	D(2) Clearing and Grubbing	1	LS	\$ 5,000	\$ 5,000
25	D(2) Sanitary Sewer Manhole	6	EA	\$ 10,000	\$ 60,000
26	D(2) Remove Existing Manhole	5	EA	\$ 1,000	\$ 5,000
27	D(2) Bypass Pumping	1	LS	\$ 20,000	\$ 20,000
28	D(2) Pavement Marking/Striping	1	LS	\$ 5,000	\$ 5,000
29	D(2) Tie into Existing Manhole	5	EA	\$ 3,000	\$ 15,000
30	D(2) Shoring and Trench Safety	1	LS	\$ 15,000	\$ 15,000
31	D(2) HMA	7660	LS	\$ 20	\$ 153,200
32	D(2) Demolition and Disposal (Existing Facilities)	2000	LF	\$ 20	\$ 40,000
33	D(2) Fill Soil for Treatment Wetlands	2950	CY	\$ 20	\$ 59,000
34	D(2) Replant Treatment Wetlands	1	LS	\$ 10,000	\$ 10,000
35	D(2) Wetlands Outlet Structures/Modifications	2	EA	\$ 8,000	\$ 16,000
36	D(2) OP1 Outlet Structure w/ Weir Gate	1	EA	\$ 12,000	\$ 12,000
37	D(2) OP2 Outlet Structure w/ Weir Gate	1	EA	\$ 12,000	\$ 12,000
38	D(2) 10" PVC within WWTP	860	LF	\$ 120	\$ 103,200
39	D(2) 8" PVC within WWTP	1815	LF	\$ 100	\$ 181,500
40	D(2) 6" PVC within WWTP	500	LF	\$ 80	\$ 40,000
41	D(2) 8" Valves	2	EA	\$ 4,500	\$ 9,000
42	D(2) 5 Hp Aerator/Mixer	3	EA	\$ 15,000	\$ 45,000
43	D(2) Ozone Structure	1	LS	\$ 50,000	\$ 50,000
44	D(2) Solar Panels	1	LS	\$ 60,000	\$ 60,000
45	D(2) Percolation Pond 1/2 Separation	1	LS	\$ 75,000	\$ 75,000
46	D(2) Project Signage	1	LS	\$ 2,500	\$ 2,500
47	D(2) Construction Project Contingency (15%)	1	LS	\$ 253,176	\$ 253,176
48	D(3) Project Closeout	200	HR	\$ 120	\$ 24,000
TOTAL BASE PROJECT ESTIMATE				\$	2,412,746

Collection System Improvements Only

#	Item Name	Unit Quantity	Unit of Measure	Unit Cost	Cost Estimate Total
1	Administration	600	HR	\$ 50	\$ 30,000
2	Monitoring Plan	75	HR	\$ 30	\$ 2,250
3	Labor Compliance Program Consultant	150	HR	\$ 120	\$ 18,000
4	Reporting	100	HR	\$ 30	\$ 3,000
5	Preliminary Project Design	250	HR	\$ 135	\$ 33,750
6	Final Project Design	450	HR	\$ 135	\$ 60,750
7	Environmental Compliance - CEQA	34	HR	\$ 120	\$ 4,080
8					
9	Caltrans Encroachment Permit	63	HR	\$ 120	\$ 7,560
10					
11	Construction Management	600	HR	\$ 150	\$ 90,000
12					
13					
14	Potholing	40	EA	\$ 450	\$ 18,000
15					
16	I&I Mobilization	1	LS	\$ 50,000	\$ 50,000
17	Sawcut and Remove Existing Pavement	5860	SF	\$ 3	\$ 17,580
18	8-inch PVC Sanitary Sewer	1100	LF	\$ 200	\$ 220,000
19	6-inch PVC Sanitary Sewer	727	LF	\$ 180	\$ 130,860
20	4" Lateral and Cleanout	16	EA	\$ 6,000	\$ 96,000
21	6" Lateral and Cleanout	1	EA	\$ 8,000	\$ 8,000
22	Traffic Control and Plan	1	LS	\$ 40,000	\$ 40,000
23	Erosion Control	1	LS	\$ 4,000	\$ 4,000
24	Clearing and Grubbing	1	LS	\$ 5,000	\$ 5,000
25	Sanitary Sewer Manhole	6	EA	\$ 8,500	\$ 51,000
26	Remove Existing Manhole	5	EA	\$ 1,000	\$ 5,000
27	Bypass Pumping	1	LS	\$ 10,000	\$ 10,000
28	Pavement Marking/Striping	1	LS	\$ 5,000	\$ 5,000
29	Tie into Existing Manhole	5	EA	\$ 3,000	\$ 15,000
30	Shoring and Trench Safety	1	LS	\$ 15,000	\$ 15,000
31	HMA	5860	LS	\$ 20	\$ 117,200
32	Demolition and Disposal (Existing Facilities)	2000	LF	\$ 20	\$ 40,000
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43	Ozone Structure	1	LS	\$ 50,000	\$ 50,000
44	Solar Panels	1	LS	\$ 60,000	\$ 60,000
45					
46	D(2) Project Signage	1	LS	\$ 2,000	\$ 2,000
47	D(2) Construction Project Contingency (15%)	2	LS	\$ 143,946	\$ 287,892
48	D(3) Project Closeout	150		\$ 120	\$ 18,000
TOTAL BASE PROJECT ESTIMATE				\$	1,514,922

Scaling by eliminating WWTP Improvements Reduced \$
Total By:

897,824

EXHIBIT A:
PROJECT AREAS

CCSD Project Areas

Legend

Feature 1



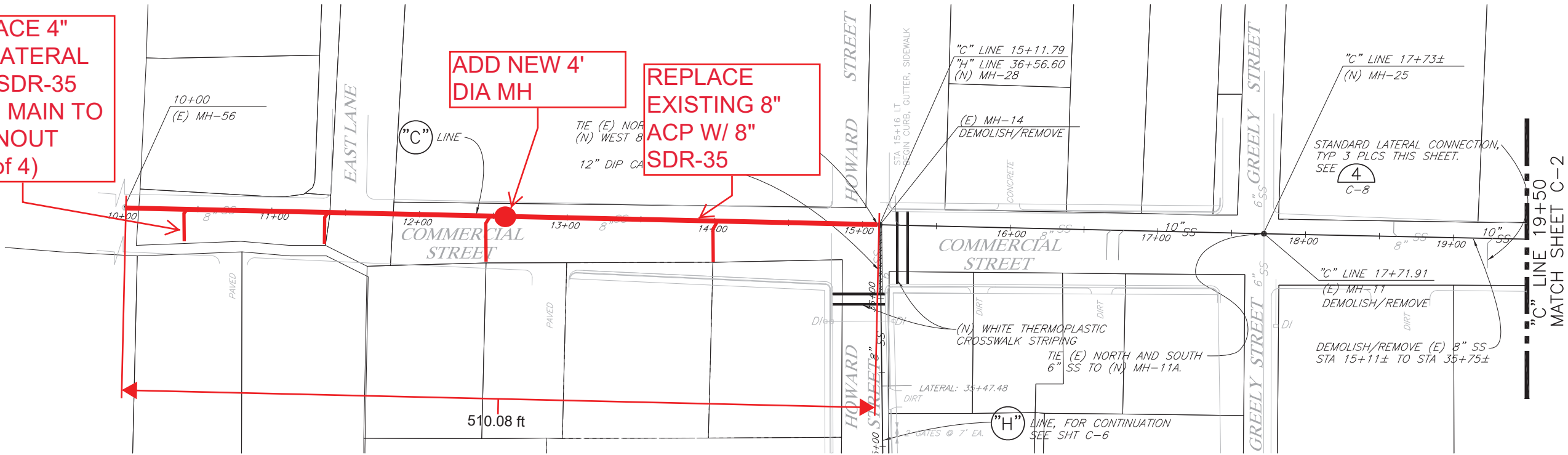
EXHIBIT B:
AREAS OF I&I CONCERN
AND PROPOSED UPGRADES

I&I AREA OF CONCERN #1.

REPLACE 4" ACP LATERAL W/ 4" SDR-35 FROM MAIN TO CLEANOUT (TYP of 4)

ADD NEW 4' DIA MH

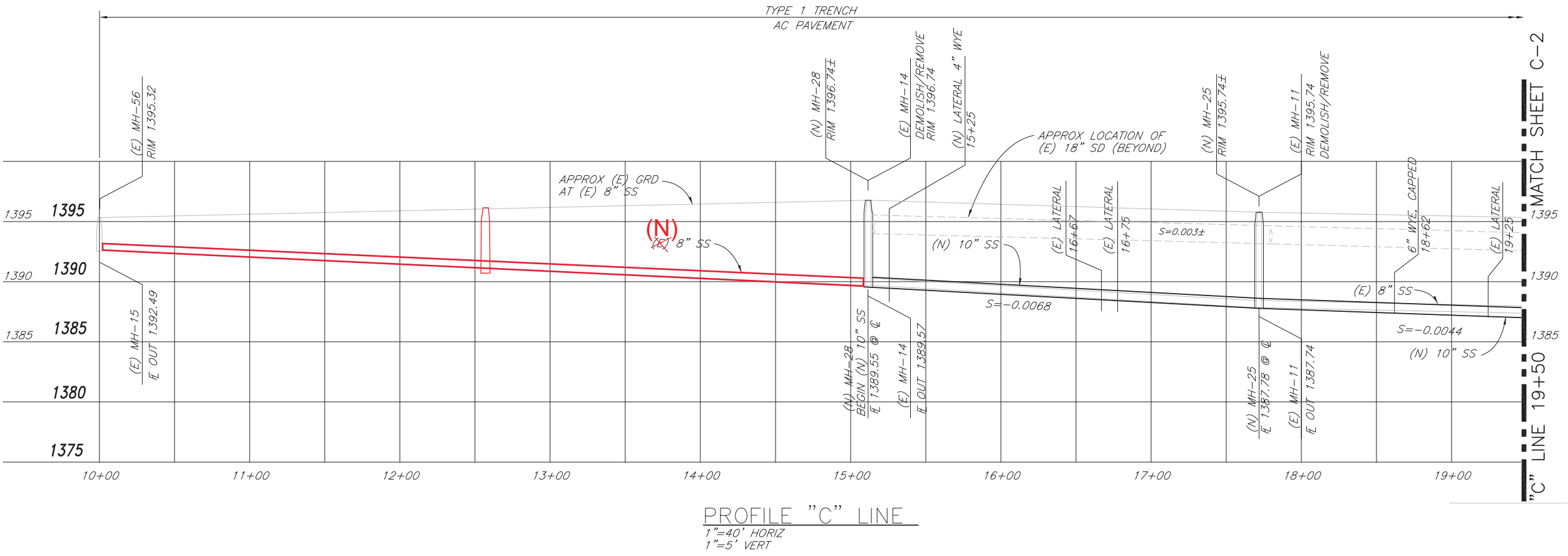
REPLACE EXISTING 8" ACP W/ 8" SDR-35



- NOTE
- 1. SALVAGE (E) MANHOLE COVERS AND FRAMES TO COVELO CSD.
 - 2. REPAINT TRAFFIC STRIPING AS NEEDED
 - 3. COMMERCIAL STREET; 100% SLURRY BACKFILL

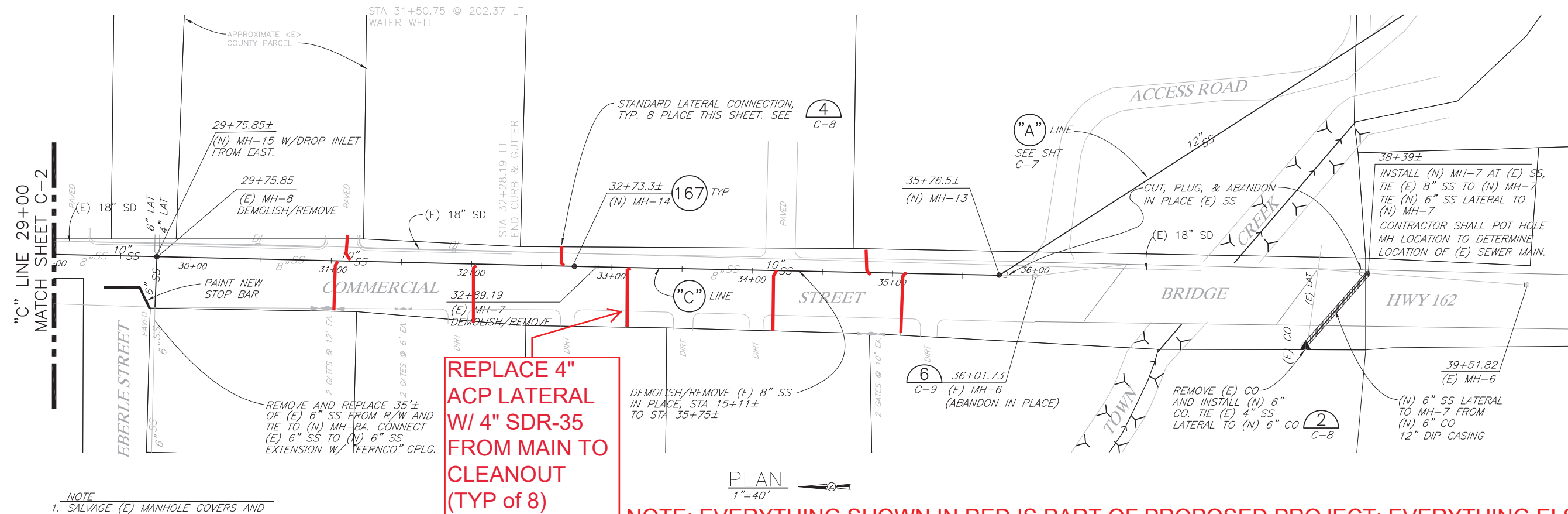
PLAN
1"=40'

NOTE: EVERYTHING SHOWN IN RED IS PART OF PROPOSED PROJECT; EVERYTHING ELSE IS EXISTING.



PROFILE "C" LINE
1"=40' HORIZ
1"=5' VERT

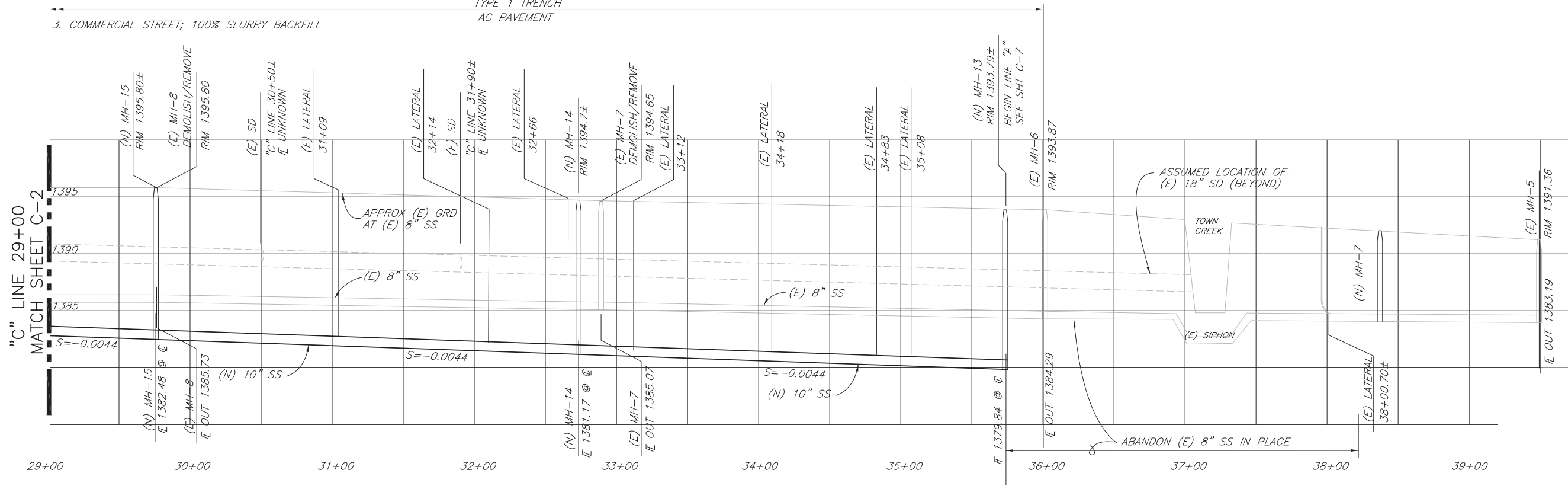
I&I AREA OF CONCERN #2.



- NOTE
1. SALVAGE (E) MANHOLE COVERS AND FRAMES TO COVELO CSD.
 2. REPAINT TRAFFIC STRIPING AS NEEDED
 3. COMMERCIAL STREET; 100% SLURRY BACKFILL

TYPE 1 TRENCH
AC PAVEMENT

NOTE: EVERYTHING SHOWN IN RED IS PART OF PROPOSED PROJECT; EVERYTHING ELSE IS EXISTING.



PROFILE "C" LINE
1"=40' HORIZ
1"=5' VERT

I&I AREA OF CONCERN #3

East Lane

Legend

□ Feature 1

REPLACE
(E) MH

REPLACE 217
LF 6" ACP W/ 6"
SDR-35

SEAL
PENETRATION
S OF (E) MHs

162

East Ln

Dingman St

Google Earth

© 2018 Google



300 ft

NOTE: EVERYTHING SHOWN IN RED IS PART OF PROPOSED PROJECT; EVERYTHING ELSE IS EXISTING.

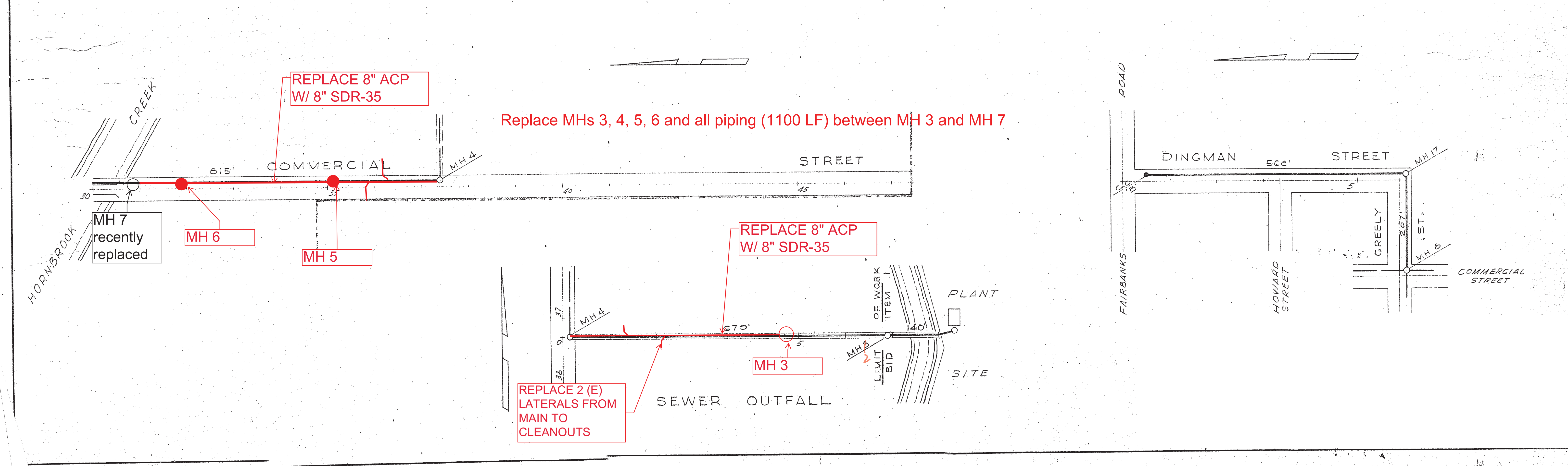
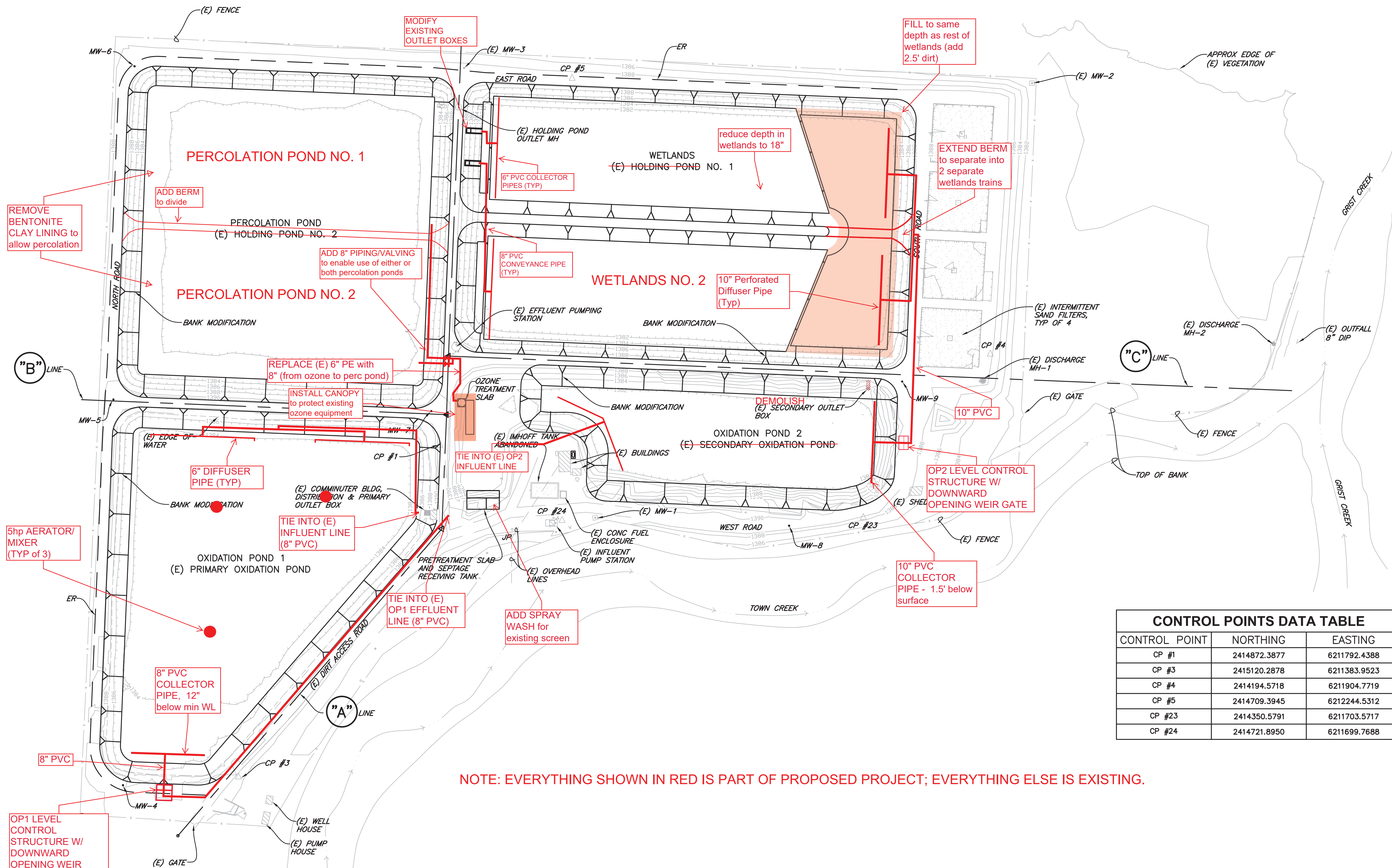


EXHIBIT C:
WASTEWATER TREATMENT PLANT
PROPOSED IMPROVEMENTS



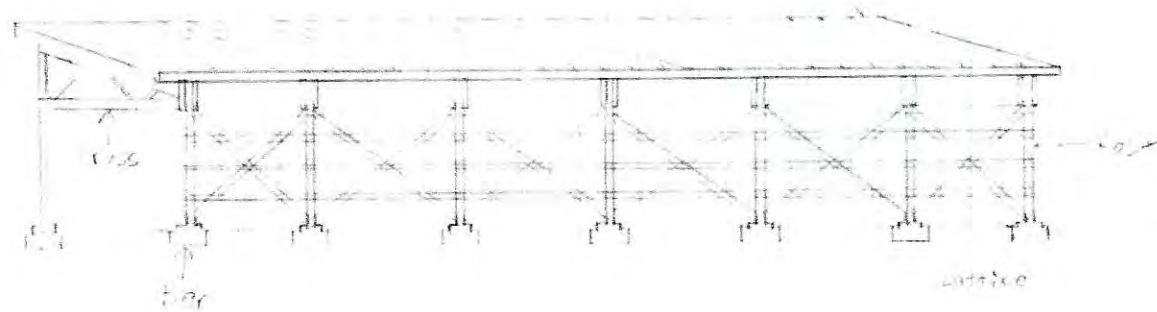
CONTROL POINTS DATA TABLE		
CONTROL POINT	NORTHING	EASTING
CP #1	2414872.3877	6211792.4388
CP #3	2415120.2878	6211383.9523
CP #4	2414194.5718	6211904.7719
CP #5	2414709.3945	6212244.5312
CP #23	2414350.5791	6211703.5717
CP #24	2414721.8950	6211699.7688

NOTE: EVERYTHING SHOWN IN RED IS PART OF PROPOSED PROJECT; EVERYTHING ELSE IS EXISTING.

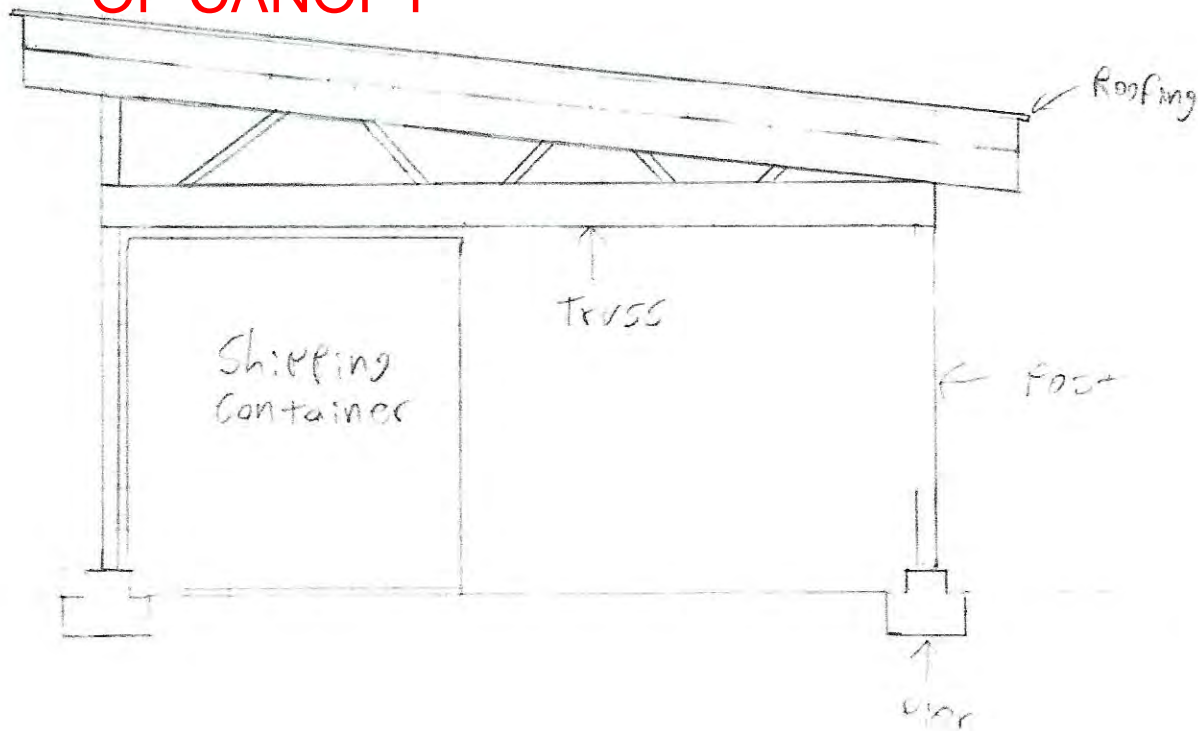
PLAN
1"=60'
N

CREATIVE CONSTRUCTION

OZONE CANPOPY.



SOLAR PANELS WILL LAY ALL ACROSS ROOF OF CANOPY



707/ 354-2222

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