

Grizzly Flats Community Services District
Notice of Special Business Meeting of the Board

Date: Wednesday, November 30, 2022

Time: 6:00 PM

Location: The Grizzly Flats CSD Office (4765 Sciaroni Rd., Grizzly Flats, CA)

To participate, call 1-(978)-990-5230 and enter access code 840700#



AGENDA

A. CALL TO ORDER, ROLL CALL OF THE BOARD MEMBERS and SALUTE TO THE FLAG

B. APPROVAL OF THE AGENDA

C. PUBLIC COMMENT: Items not on the agenda

This is an opportunity to express your views on any topic within the jurisdiction of the District in order to inform the Board. Once recognized by the Chair, you will have 3 minutes to speak. No discussion or action can be taken at this time. The Board may refer the matter to staff or determine whether the matter should be included on a future agenda.

D. WALT TYLER ELEMENTARY SCHOOL REBUILD PROJECT

1. Discuss fire flow requirements for rebuilding Walt Tyler Elementary School / Myers (discussion)
2. Discuss establishing a Memorandum Of Understanding (MOU) with Pioneer Union School District for Engineering and District support reimbursement relative to the school rebuild project / Gustafson (discussion/action)

E. ADJOURN

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- *In compliance with the Americans with Disabilities Act, contact Kim Gustafson at gfwater@sbcglobal.net or (530) 622-9626 if you need special assistance to participate in this meeting. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting. (28FR35.102-35.104 ADA Title 11).*
 - *Our next regular Board meeting will be held at the GFCSD office on **Thursday, December 8, 2022, at 6:00 PM.***
This institution is an equal opportunity provider and employer.



Pioneer Fire Protection District Fire Prevention Division

7061 Mt. Aukum Rd. Somerset, CA P.O. Box 128, 95684
Office: (530) 620-4444 Website: <http://pioneerfire.org>

October 24, 2022

Grizzly Flat Community Facilities District (GFCSD)
4765 Sciaroni Rd
Grizzly Flats, CA 95636

Per the request of Joel Bowdan III, P.E.

Re: Walt Tyler Elementary School
6801 Tyler Rd. Grizzly Flat, CA 95636
Fire Flow Request

APN: 041040052

Dear GFCSD:

The potable water system with the purpose of fire protection for this commercial/educational development shall provide a minimum fire flow per building as listed below:

Note:

1. Usually, this project's minimum fire flow requirement would be no less than 1500 GPM per Appendix BB105 (Title 24, Part 9, Appendix BB).
2. This building would not necessarily be sprinklered because it had not been sprinklered in the past, and this is a replacement educational facility in the post-Caldor Fire rebuild area.
3. The DSA-designated representative and designer were willing to install an NFPA 13 sprinkler system in both proposed buildings to decrease the fire flow and meet the code's requirements by utilizing the maximum available water from GFCSD.
4. I believe this would assist as a "same practical effect" for a 1500 GPM Fire Flow in a non-sprinklered building.
5. The table allows for a 75% reduction in the fire flow requirements for a building with an automatic sprinkler system, but the minimum fire flow is still 1500 GPM (see bullet point 1).
6. In this rural community, a 1500 GPM Fire flow for a 3400 square foot building is impossible due to the existing water delivery infrastructure.
 - a. This infrastructure includes a 6" water main, pump, and gravity-fed system.
7. Additionally, the Fire response in this area is approximately 30 minutes for the closest Type 1 engine.
 - a. The community would be better served with an NFPA 13 system that immediately applies a level of water and protection from an active automatic sprinkler system than requiring 1500 GPM from a system that will ideally require 30 minutes to respond to and at least another 5 minutes for "first water."
8. The 2019 Title 24, Part 9, Appendix BB Section BB103.1 allows for "An alternative method of providing water for fire protection or any other alternative, in lieu of providing the water, may be enforced when deemed appropriate by the fire chief and the state fire marshal."
9. With this in mind, I am requesting a 750 GPM Fire flow with the inclusion of an NFPA 13 system for these two educational buildings with the notification and approval of the following:
 - a. California State Fire Marshall's Office (OSFM)
 - b. The Department of the State Architect (DSA)
 - c. The Fire Chief of the PFPD.
10. This amount of fire-flow water represents a significant improvement for the Walt Tyler Elementary School as compared to the level of fire protection in the past.
11. Additional civil improvements are being discussed, such as the addition of a looped water main system and the location of additional proposed hydrants.

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Building A

750 gallons per minute with a minimum residual pressure of 20 psi for a two-hour duration. This requirement is based on a structure up to 3400 square feet in size, Type V-B construction.

Building B

750 gallons per minute with a minimum residual pressure of 20 psi for a two-hour duration. This requirement is based on a structure up to 3000 square feet in size, Type V-B construction.

All structures shall install fire sprinklers in accordance with NFPA 13 and Fire Department requirements. This fire flow rate shall be in excess of the maximum daily consumption rate for this development. A set of engineering calculations reflecting the fire flow capabilities of this system shall be supplied to the Fire Department for review and approval.

This development shall install Dry Barrel Fire Hydrants that conform to Grizzly Flats Community Services District specifications to provide water for fire protection. The spacing between hydrants for this development shall not exceed 300 feet. The Fire Department shall determine the exact location of each hydrant.

Contact The Pioneer Fire Protection District's front office with any questions or schedule inspections and tests (**min. two working days in advance**) at 530-626-3190. Thank you.

Sincerely,

PIONEER FIRE PROTECTION DISTRICT



Kenneth R. Earle
Battalion Chief / Fire Marshal
Work: (530) 620-4444
Cell: (530) 620-5198
kearle@pioneerfire.org

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PBK.com

November 7, 2022

MEETING MINUTES 02

Walt Tyler Elementary School
Pioneer Union Elementary School District

Meeting Date: November 3, 2022

MEMBERS PRESENT

Kelly Howard, Chief Business Officer, Pioneer Union School District
Ken Earle, Battalion Chief/Fire Marshall, Pioneer Fire Protection District
Kin Gustafson, Interim General Manager, Grizzly Flats Community Services District
Nabaz Saieed, Associate Vice President, Michael Baker International
Joel Bowdan III, Technical Manager – Water/Wastewater, Michael Baker International
Jordan Cain, Civil Associate – Water, Michael Baker International
Scott Myers, Vice President of Engineering and Construction Manager, H2O Urban Solutions
Max Medina, Managing Partner, Principal, PBK
Austin Duncklee, Architect, Associate, PBK
Kelly Clancy, Designer, PBK

ITEMS DISCUSSED

- 1.1 Team Introductions
- 1.2 Scott Myers opened the meeting sharing background information on the existing GFCSD water system which was damaged during the Caldor fire. The following was shared by Scott in an email dated 10/28/22 and summarized on the call:
 - A. Prior to the Caldor Fire, GFCSD water system was designed to meet 500 gpm fire flow at all fire hydrants. The water storage in the system has varied due to system design and water quality issues and has ranged between 450,000 gallons to 600,000 gallons. GFCSD lost use of the Tyler Tank (which also included the primary pump station for the pressured zone that serves the school) and Winding Way Tank during the Caldor Fire representing 300,000 gallons of storage. Currently the Forest View Tank is unusable and likely will remain off line. The remaining clearwell is a 200,000 gallon tank, however, it has previously been limited to 75% capacity due to hydraulics, representing current storage of 150,000 gallons for Operation, Emergency & Fire.

- B. The requirement in the letter from Ken Earle, local Fire Marshal for Walt Tyler Elementary shows a proposed 750 gpm fire flow for 2 hour duration, representing 90,000 gallons of water storage reserved for fire protection. This is more than the system was previously designed for, primarily associated with the water distribution system and any dead end cul de sacs or roads of significant length. The Tyler Dr distribution main is looped for the gravity portion of the system and is not looped for the pressure zone in that area. GFCSD would need to run the hydraulic water model and evaluate the ability to meet the higher 750 gpm at 20 psi demand to determine if the distribution system is capable of supporting this demand. The booster pump stations were also damaged during the Caldor Fire. The Tyler Tank and Pump Station supported the fire flows and the pump that was in place would not meet 750 gpm. There is a possibility with the rebuild of the BPS to meet the higher fire flow since the replacement facility has not been designed at this time. The new booster pump station may be located near the district office. There is a possibility to increase the pump size to add some redundancy to the system. This will need to be discussed with the GFCSD Board and possibly FEMA for mitigation to meet the new fire flow requirements and how GFCSD would be able to pay for the increase flow needs

- C. The water utility plan included with the DSA submittal was briefly reviewed. The proposed design includes 2 new fire hydrants and a sprinkler system within the building. It was noted that the campus did not previously contain any fire hydrants on site prior to the Caldor Fire.
 - 1. Scott Noted that increasing the water lines from 6" to 8" or 10" could potentially assist in supporting additional capacity, but noted Modeling needs to be done to see what would help reduce pump curve without headloss. And see how it affects pressure throughout system, especially at dead end zones.

- D. Ken Earle noted that NFPA 1142 would allow us to move the project forward prior to infrastructure being in place. We would need to have a commitment from purveyor that the required pressure would be available once infrastructure is in place. The fire marshal is willing be as flexible as possible with the timing as long as they know the requested fireflows would eventually be met.

- E. Scott noted that the water district is interested in helping the community recover from the Caldor fire and are willing to assist with expediting as much as they can to get the school built.

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- F. PBK requested the hydraulic modeling to be completed within 6 weeks to allow the project to continue moving forward toward DSA approval within the current timeline.
 - 1. Scott noted the timeline seems feasible, but there will be additional costs associated with the modeling that will be somewhere in the range of \$1,500.00 not including fees associated with renting the modeling software.

- G. PBK inquired as to the timeline for the water system upgrades to be complete. Scott estimated 12 to 18 months, and noted that the process has been going fairly slow as they've been working with FEMA and the insurance agency. They have currently been working through damage assessment and their next step is to work on the design of the new system.

- H. GFCSD Board meeting next Thursday, November 19, 2022. PUSD is unavailable to attend as they have a board meeting at the same time that is in conflict. A special board meeting will be setup for the water district and school district to meet and discuss a path forward. Kelly Howard noted that the school district does not have funding available to assist with paying for water district critical infrastructure, and it is unlikely their insurance will be willing to pay for this.
 - 1. Scott mentioned Brian Mullens (Deputy Director of DOT), and will forward contact information along with other contacts to Kelly and Nabaz.

- I. Construction is scheduled to begin in February or March of 2023. It was noted that the upgraded water system will not be in place at this time. However, the existing system can supply 500 GPM to the school for use during construction. An alternative solution that was discussed would include using the existing Tyler tank to store water for use during construction as an inexpensive temporary hydrant.

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J. Next Steps

1. Scott to send fee proposal for hydraulic modeling to Austin / Kelly H. / Kim. Upon receipt of fee proposal team to discuss how to split cost of modeling fees.
2. Austin to schedule special board meeting with the school district and water district.
3. Scott and Kim to send DOT contacts to Nabaz.

The above represents my best interpretation of the spirit and content of the discussions. Please let me know of any requested modifications or corrections as soon as possible.

Prepared by:

AUSTIN DUNCKLEE
Architect, Associate

AD:fi/WTESx2-mm

Attachment: Progress Drawings

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