



Memorandum

DATE: October 15, 2015

TO: Board of Public Works

FROM: Mark Radtke, Director of Public Works *MR*

RE: Third Street Bridge Railing Design Recommendation

The Third Street Bridge at the east end of Jefferson Park is scheduled for replacement in 2016-2017 with the assistance of State and Federal Local Bridge Project grant funds. The design consultant, Ayres Associates, is nearing the final stages of design and needs a decision regarding the bridge railing design in order to finalize the design and meet the plan submittal date established by WisDOT.

Ayres recently presented us with updated cost information regarding the railing options in order for the Board to make a final decision on the railing design. There are three different parapet wall types with 6 optional styles of railing that could be utilized on two of the wall types. Enclosed are images of each wall type and the various railings for your consideration.

At the Public Involvement Meeting held in April, the different railing types were explained and the public was encouraged to submit written comments regarding the bridge project, including a preference for any particular bridge railing feature. In checking with Ayres, there have been no written comments received as of this date regarding the railing types. They have however had communication with Tom Grade, a nearby Brighton Drive resident and artist who has expressed a deep interest in the design aesthetics of the bridge, including the railing design.

I have met with Mr. Grade several times in the past few months to discuss the available railing alternatives and the potential for local artwork to be incorporated into the railing design. Tom indicated he had met with a group of the Brighton Drive area residents and they did have a preferred railing type for the new bridge. He also informed me of his idea to have local students create artwork associated with the local area (history, ecology or architecture related, e.g.) that would be metal cast as images and inserted into the outside face of the bridge wing walls. This artwork feature has been approved by Ayres and would not increase the cost of the bridge as long as the size of the inserts fit within the chosen railing type dimensions. The cost of creating the artwork would be funded by private donations.

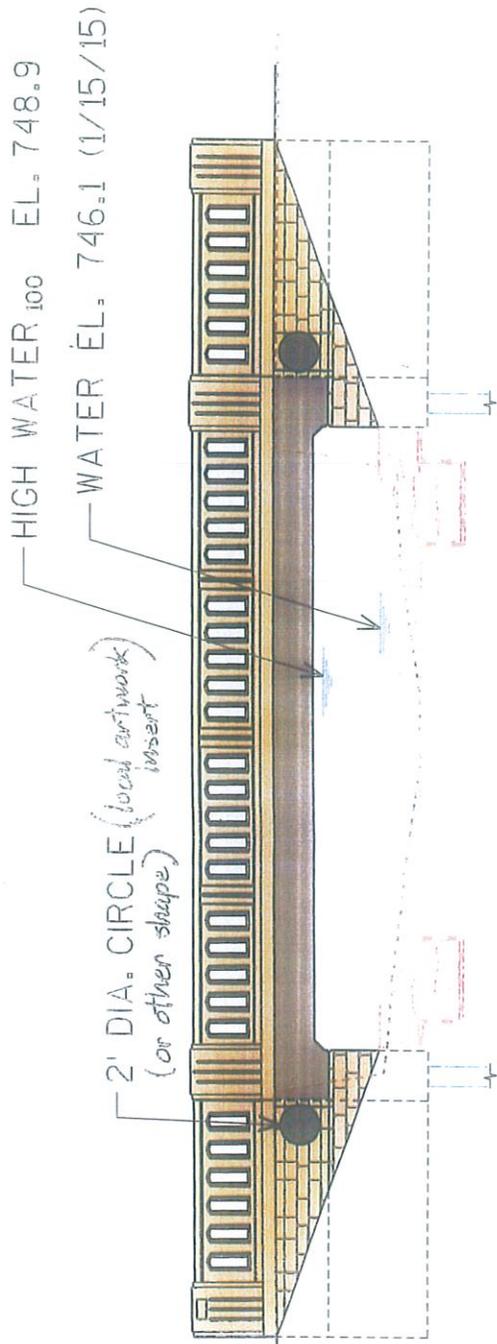
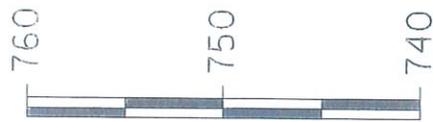
At this point, a decision on the artwork does not need to be made but I wanted to inform the Board of the proposal to include it in the bridge design. I think it will create greater local interest and provide a long lasting tribute to our locally involved students.

The railing preferred by Mr. Grade's local Brighton Drive group is the Texas Rail option in tandem with either a plain concrete or random cut stone formliner wing wall finish. This rail has a lower profile and allows for the most visibility from the bridge. The scale of this rail also seems to better fit the size of the proposed bridge in comparison to the other options.

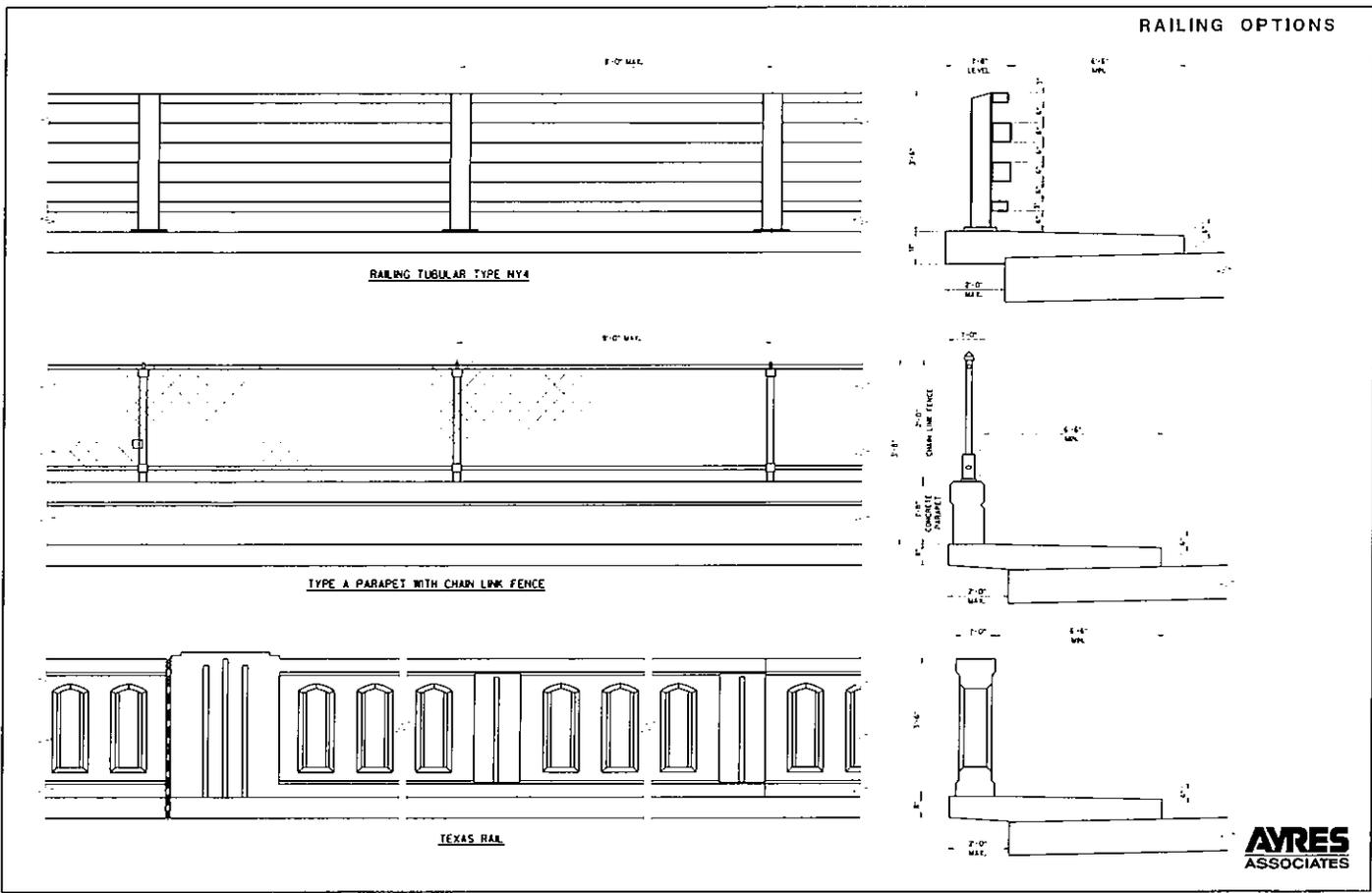
There are some minor cost factors to consider in the choice of railing. Because of the intricacies of the Texas Rail, there is an estimated additional cost of \$5,000 - \$10,000, of which the City would be responsible for 20% (\$1,000 - \$2,000). The rail and wing walls would be stained at an estimated additional local cost portion of \$500. The staining costs would exist for any railing selection that includes a stained wall facing.

Enclosed are the various railing options for consideration. Knowing my limitations as an engineer, I place a great deal of value on the input received from a local resident artist and the group of residents with whom he met. On that basis, and considering railing profile height, scale to the bridge size, and allowed visibility, I recommend the selection of the Texas Rail with a stained random cut stone pattern wing wall.

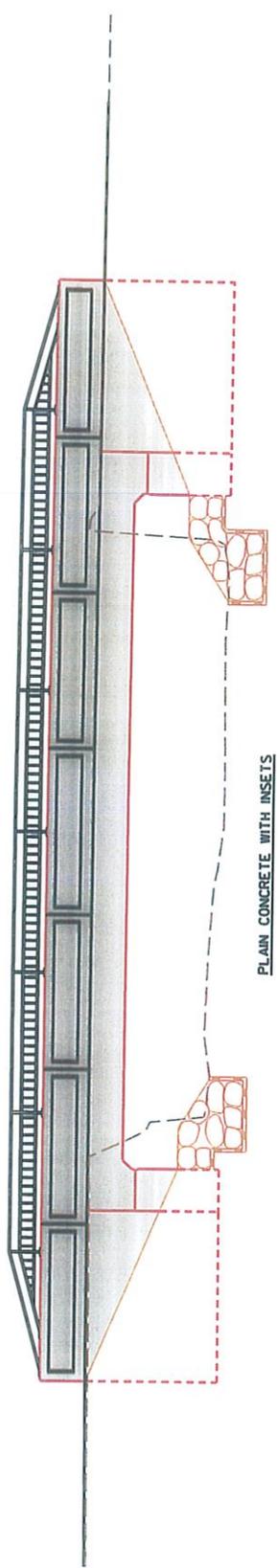
Enclosures



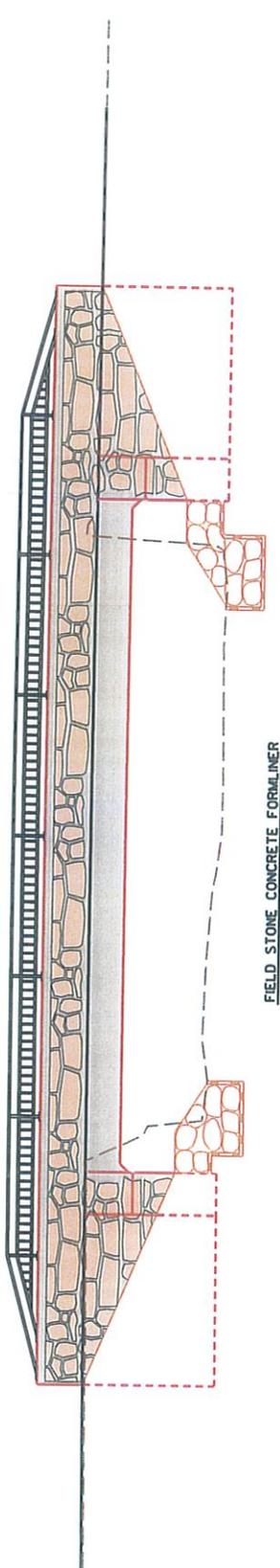
TEXAS RAIL OPTION
(Recommended)



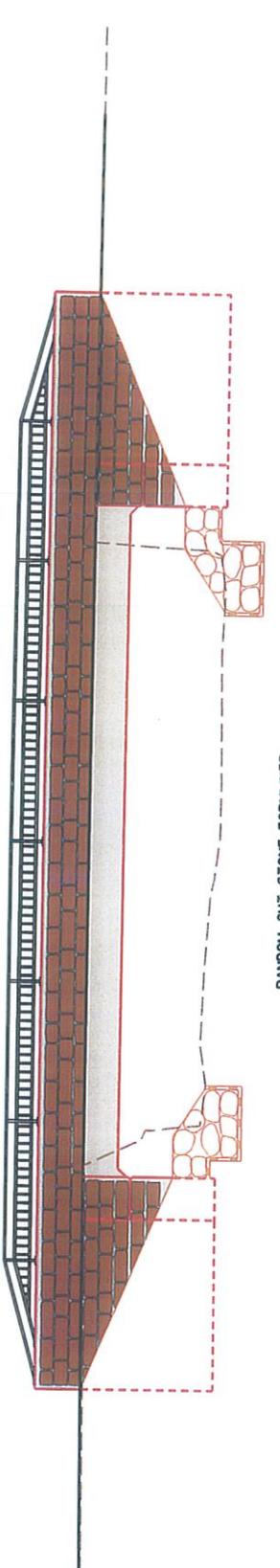
Parapet Wall Options



PLAIN CONCRETE WITH INSETS

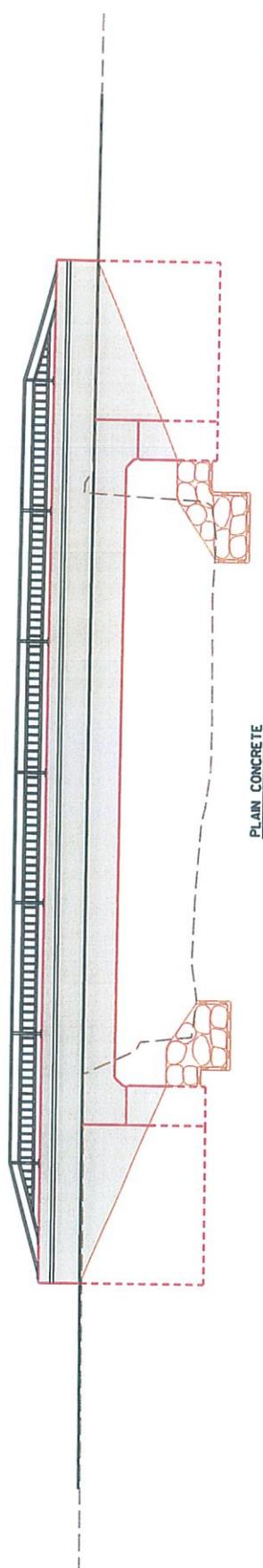
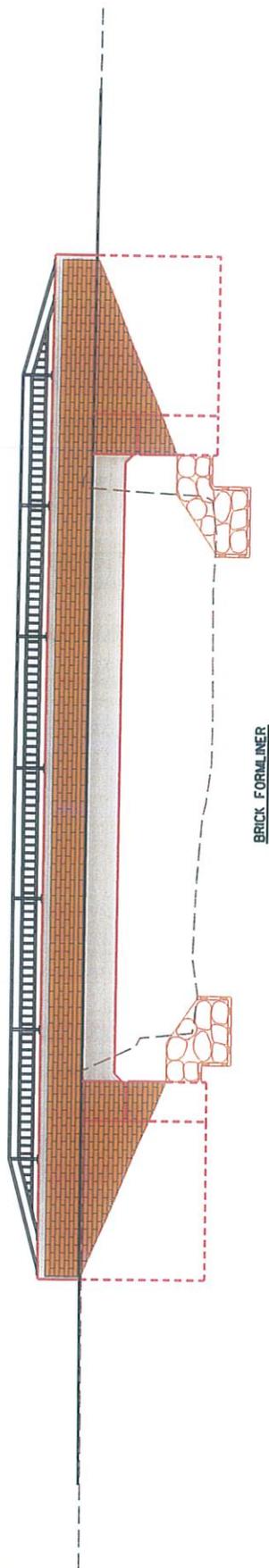
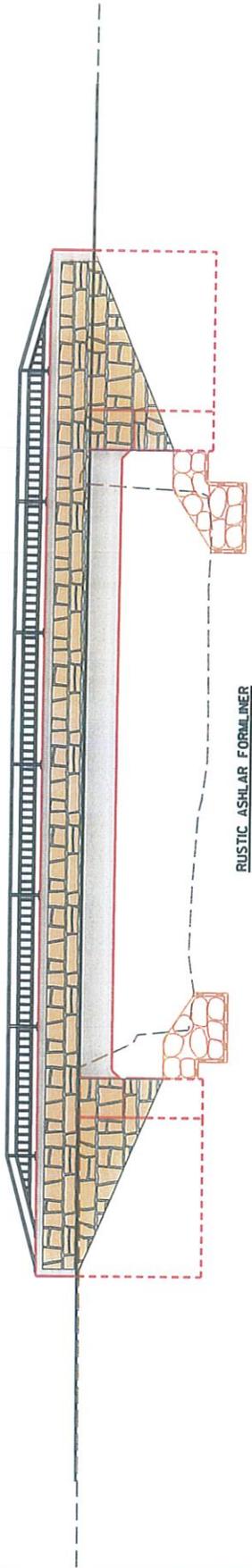


FIELD STONE CONCRETE FORMLINER



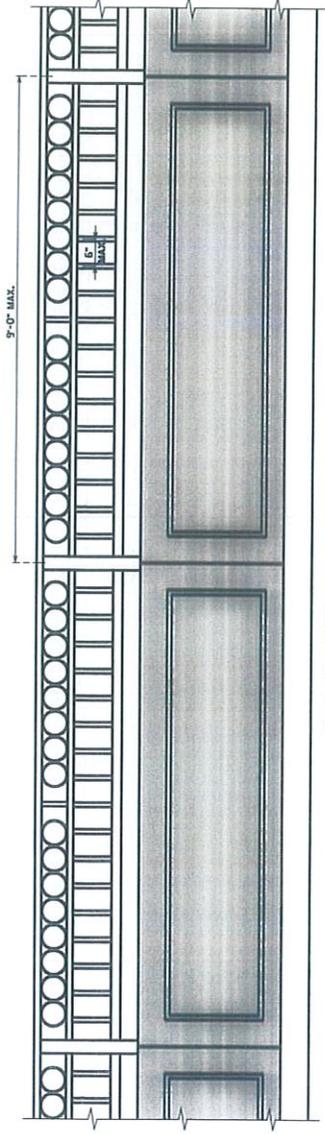
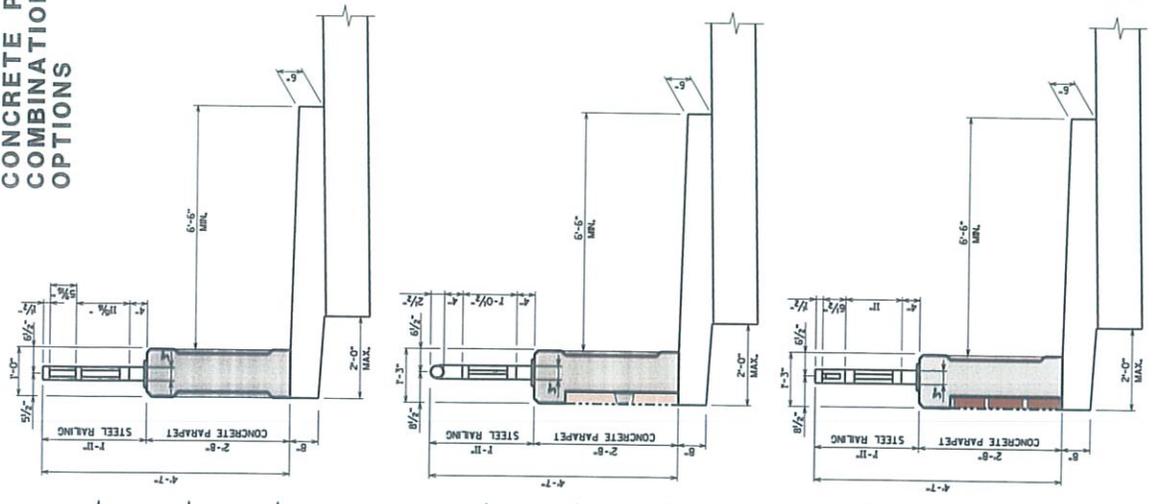
RANDOM CUT STONE FORMLINER

Other optional wall/rail bridge elevations (1)

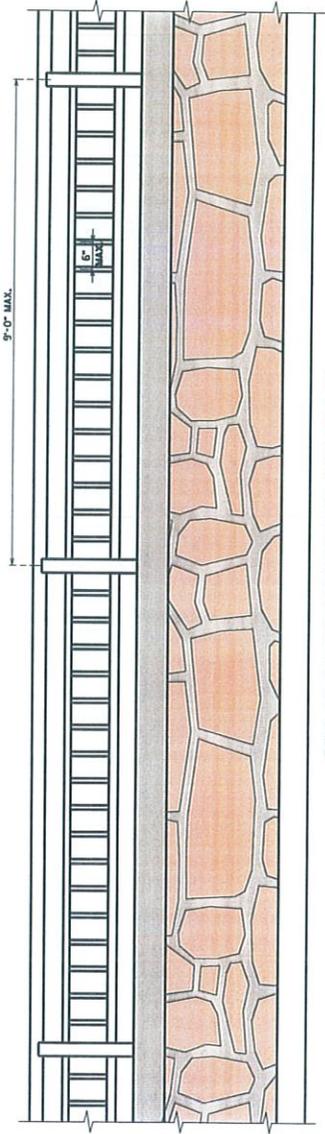


Other optional wall/rail bridge elevations (2)

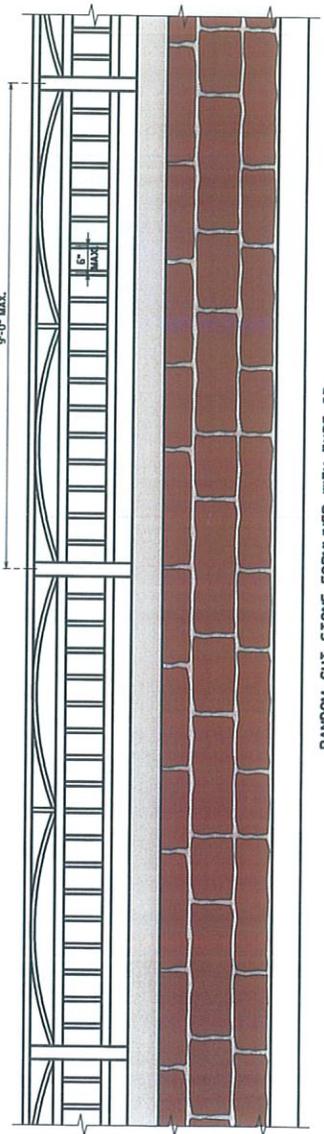
CONCRETE PARAPET & COMBINATION RAILING OPTIONS



PLAIN CONCRETE WITH INSETS WITH TYPE C1



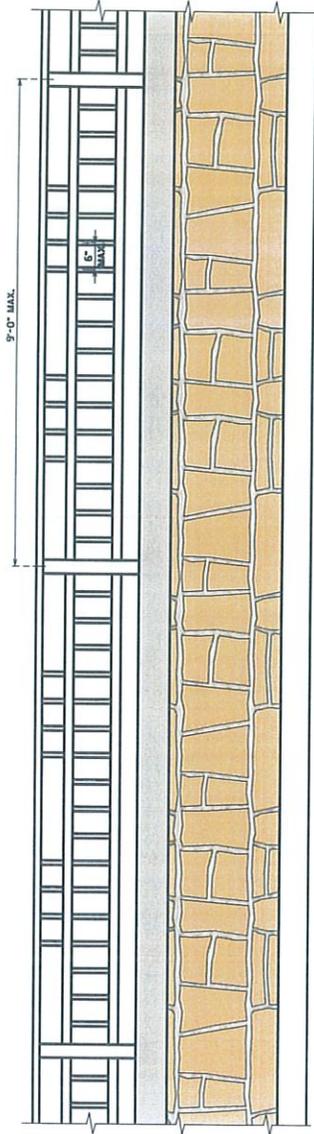
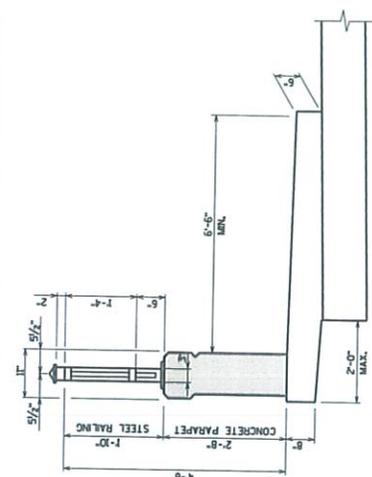
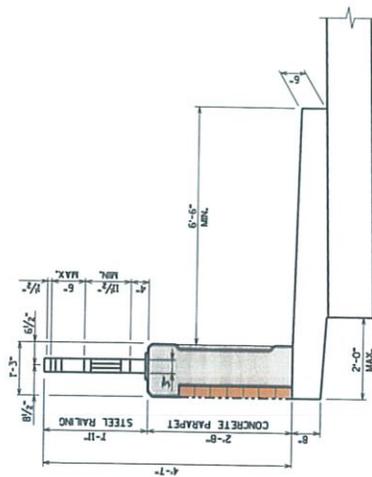
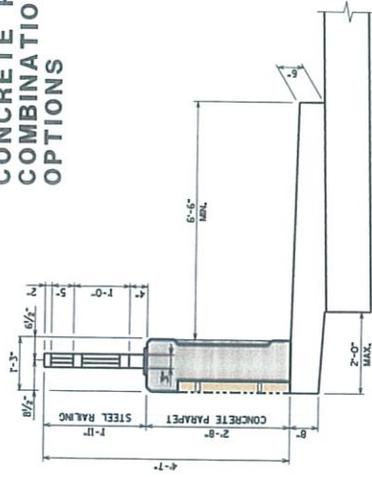
FIELD STONE CONCRETE FORMLINER WITH TYPE C2



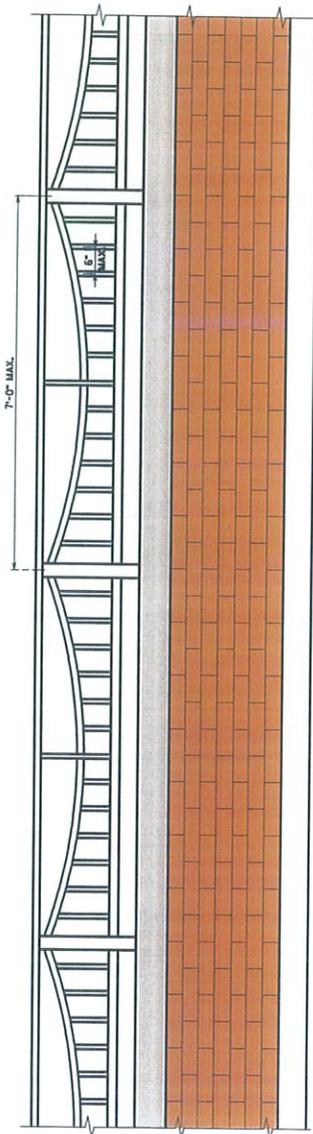
RANDOM CUT STONE FORMLINER WITH TYPE C3

Wall/Rail Combination Examples (1)

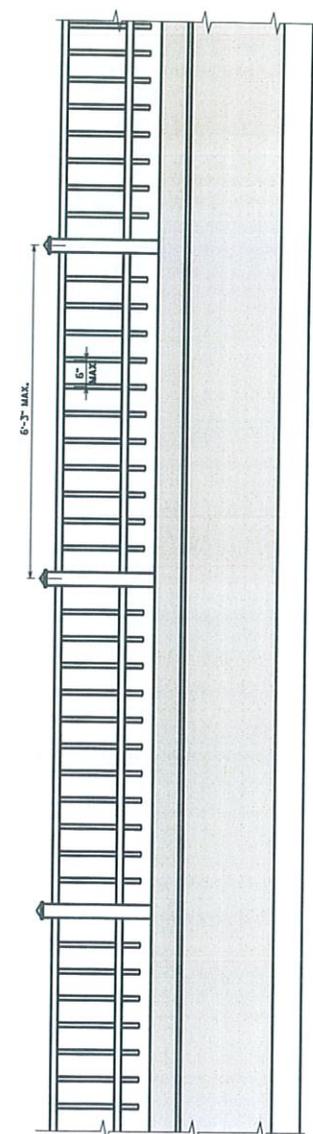
CONCRETE PARAPET & COMBINATION RAILING OPTIONS



RUSTIC ASHLAR FORMLINER WITH TYPE C4



BRICK FORMLINER WITH TYPE C5



PLAIN CONCRETE WITH TYPE C6



Wall/Rail Combination Examples (2)