

VALUE ENGINEERING PROPOSAL

PROPOSAL NO: S-11

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DESCRIPTION Reduce Number of Control Houses

ORIGINAL DESIGN:

On all four corners of the lock, there will be a control house located in vicinity of the Lock Gates. The control houses will be two stories. The first story will be concrete block and the second story will be metal. (See Drawing Nos. 1 & 2).

PROPOSED DESIGN:

Recommend reducing the number of control houses to one.

With programmable logic controllers (PLC) and closed circuit television (CCTV) system remote control cameras it is practical to operate lock structures from single location. Tow clearance past the gates and any obstructions can be viewed through the (CCTV) system.

With this system, only one central control house and one local control point is needed to adequately operate the project. The local control point can be a single panel or a small modular control house similar to those that exist on parking lots. The central control house could be incorporated into the operations building with one control house at one end of the lock and one local control point at the other end. At any rate, at least two, and probably three of the proposed control houses can be deleted.

A complete discussion and recommendations regarding control houses and systems can be found in ETL 110-2-553, which is available on the network:
(<http://www.usace.army.mil/inet/usace-docs/eng-tech-ltrs/etl110-2-553>).

ADVANTAGES:

1. One point of control for the lock facility.
2. Savings in first cost and future maintenance.

DISADVANTAGES:

None

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DESCRIPTION Reduce Number of Control Houses

JUSTIFICATION:

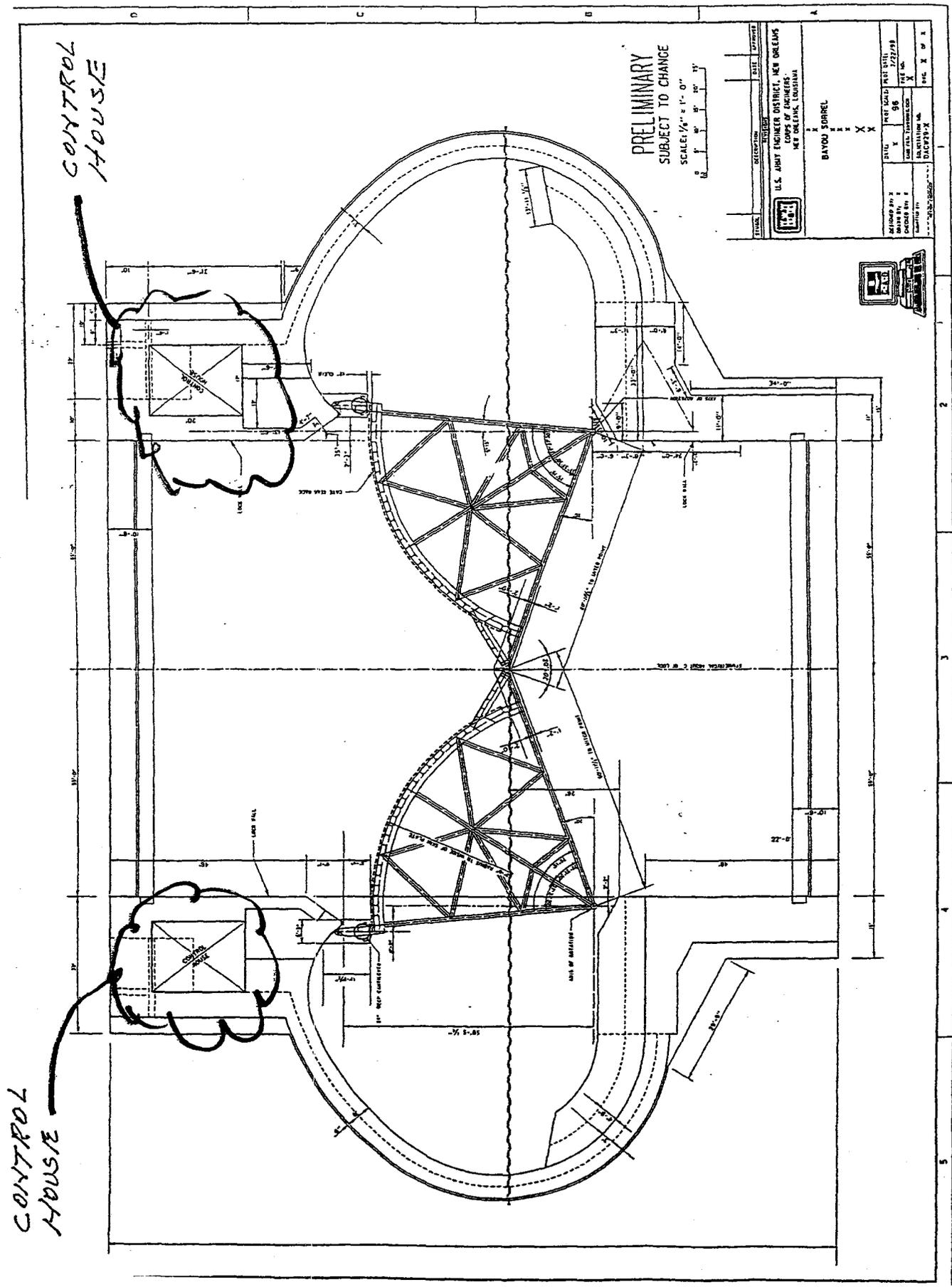
The new project will include a signal and communication system, which will incorporate a closed circuit television system. This will provide a view of significant lock locations on the facility from one control house. Plan drawings indicate that control houses are to be constructed on-site of masonry/metal and are not pre-engineered. The cost estimate, however, states pre-engineered building.

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DRAWING NO. 1



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DRAWING NO. 2

