

TEACHING RESPONSIBLE EARTH EDUCATION

Remedial Water Strategy

A **Tulane City Center** Project

Situated along the Little Tchefuncta River outside Covington, Louisiana on Lake Pontchartrain's North Shore, Teaching Responsible Earth Education (T.R.E.E.) is an organization that provides curriculum based, environmental education to students in Orleans and adjoining Parishes. Upwards of 50 students in grades 5 and 7 spend 4 to 5 days at T.R.E.E.'s 22.5-acre training ground. Under the instruction of Sue Brown, the executive director, and others, the students are exposed to the systems on Earth through thought provoking activities in the natural environment on site. This engagement creates the impulsion for children to make wiser decisions on how to preserve the diversity of our natural world and to make informed choices to live more lightly on our planet.

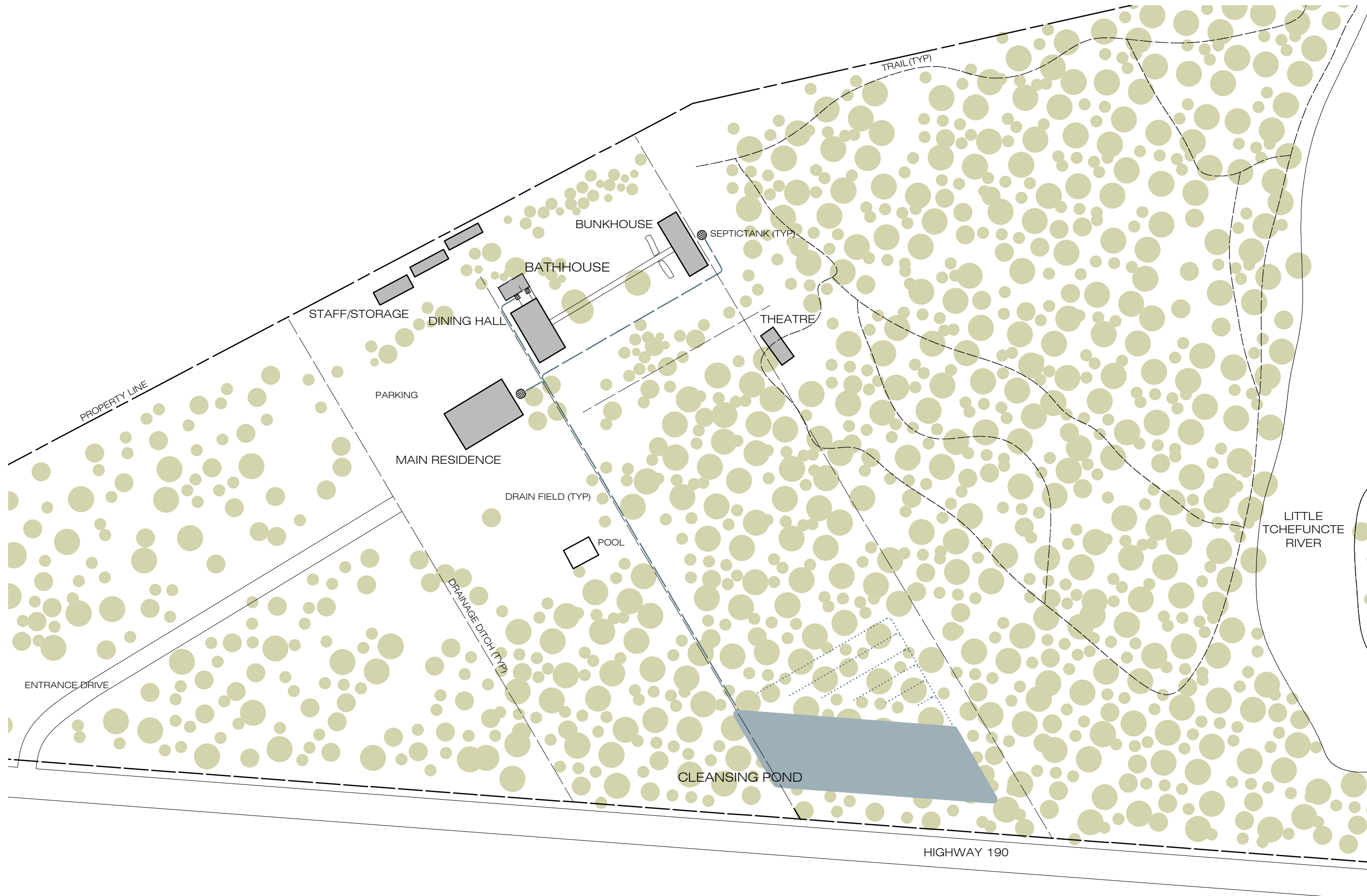
Built in the early 1900s, the facilities at T.R.E.E. have worn through the years and have not been upgraded to accommodate the growing number of students entering the program. Currently, there are only three functioning shower stalls for use by the participants during their days-long stay. As well, the septic systems for all the structures (dining hall, bunk house and main residence and office) are in serious need of fundamental repair and enlargement. While the owners make earnest attempts to maintain the system as is, considering the growth of the program, the need for complete redevelopment of septic and bathing facilities is a must.

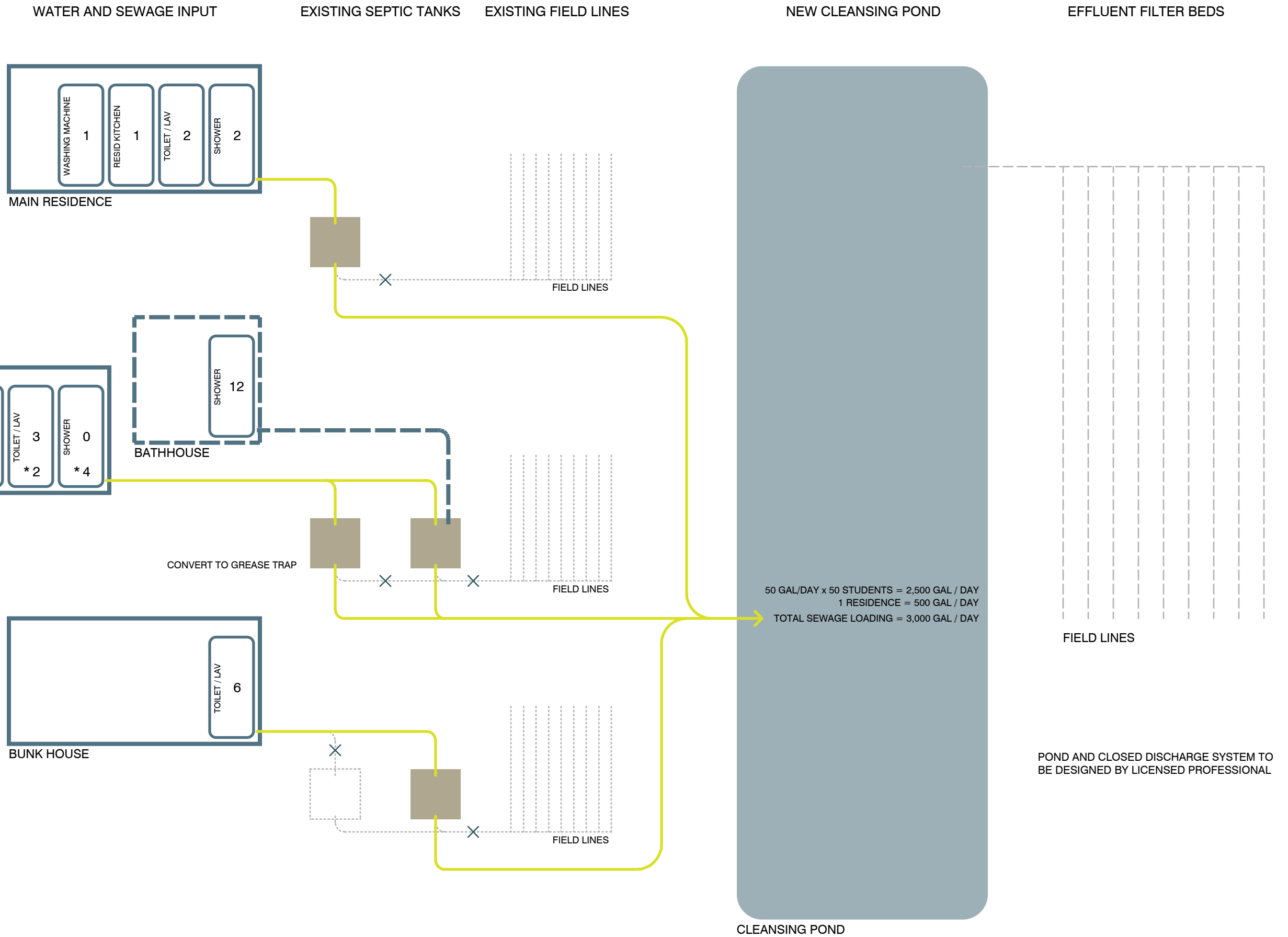
As such, the scheme proposed by the Tulane team is to add a new 12-shower bathhouse, completely renovate the septic system and specify water saving plumbing fixtures throughout. The two components were developed jointly to enhance the programs mission and reinforce the formal order at the site. In this case, a large cleansing pond will take the place of the existing field lines, providing for the students another teaching tool about natural processes, while alleviating the need for costly code-mandated sewage equipment. The bathhouse, a standalone building, is located to formalize the student entry to the facilities. The simple form evokes similar qualities of the existing structures, though tweaked in this case to express raised floor plates required in this flood plane as well as the roofs role in channeling rainwater for use in an entryway didactic water garden.

WETLANDS

5







50 GAL/DAY x 50 STUDENTS = 2,500 GAL / DAY
 1 RESIDENCE = 500 GAL / DAY
 TOTAL SEWAGE LOADING = 3,000 GAL / DAY

CLEANSING POND

POND AND CLOSED DISCHARGE SYSTEM TO BE DESIGNED BY LICENSED PROFESSIONAL

Existing septic to be cleaned and reused as proposed
 Existing field lines to be abandoned

Flow rate amounts determined using current plumbing code (Title S1)

Field lines designed to prevent any discharge meeting "closed" design requirements



DUCKWEED
Lemna minor



DOLLARWEED
Hydrocotyle umbellata



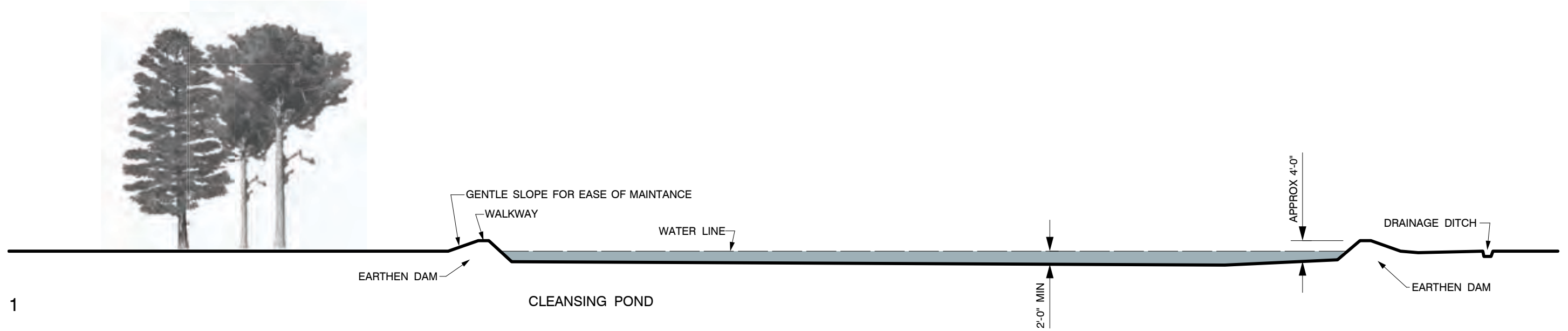
NEEDLEGRASS
Juncus roemerianus

Plant types to be promoted in and around pond to aid in operation of system.

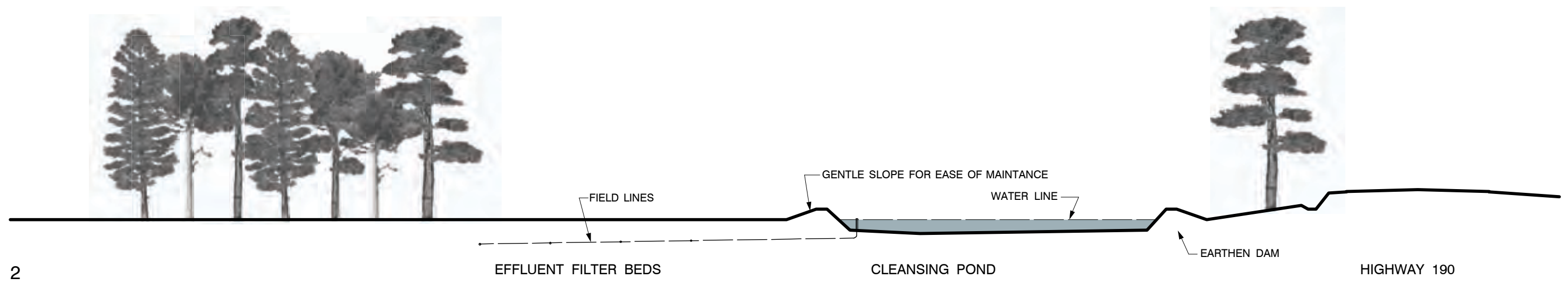


POND AND CLOSED DISCHARGE SYSTEM TO BE DESIGNED BY LICENSED PROFESSIONAL -- EXACT SIZE TO BE DETERMINED

HIGHWAY 190

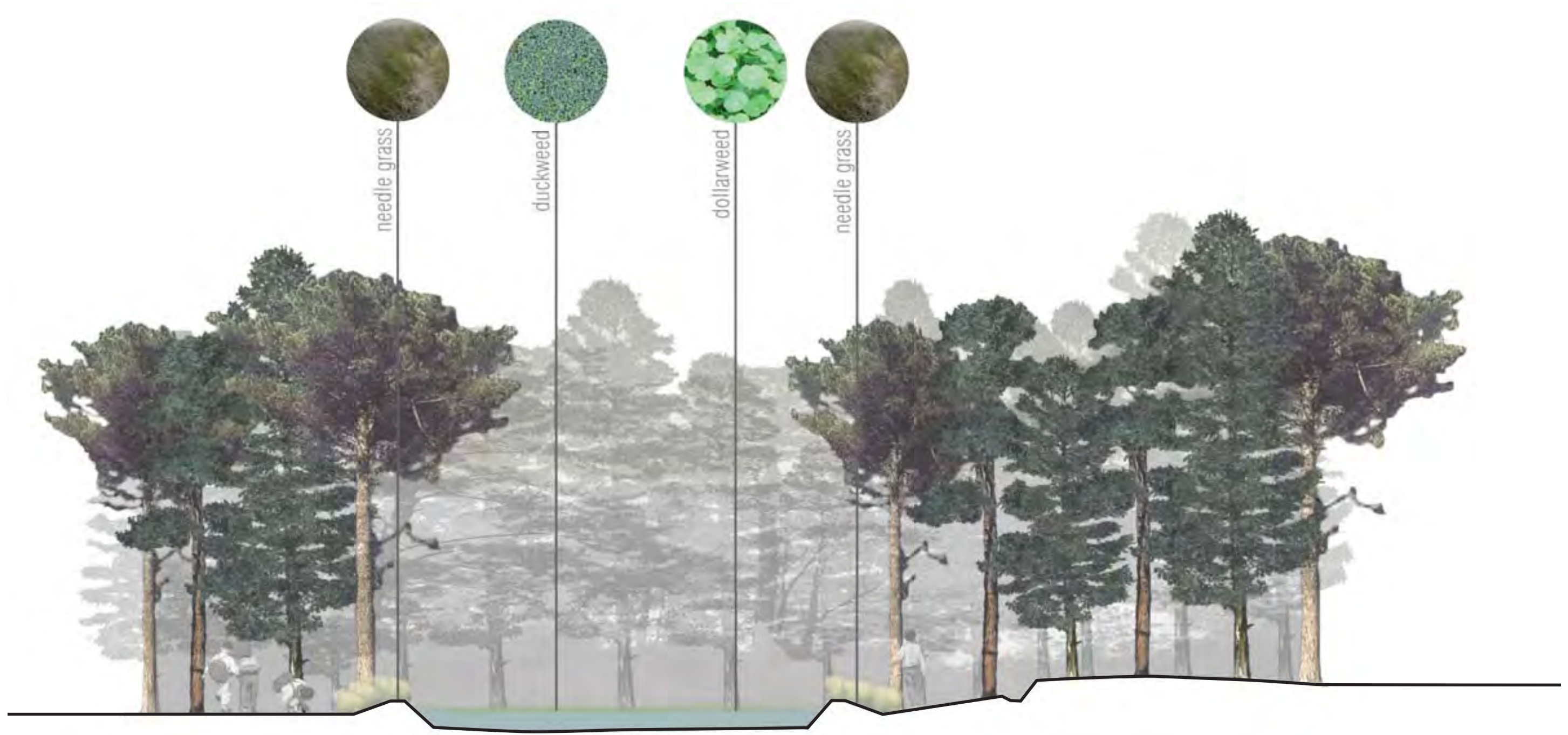


CLEANSING POND SECTION / SCALE 1/32"=1'

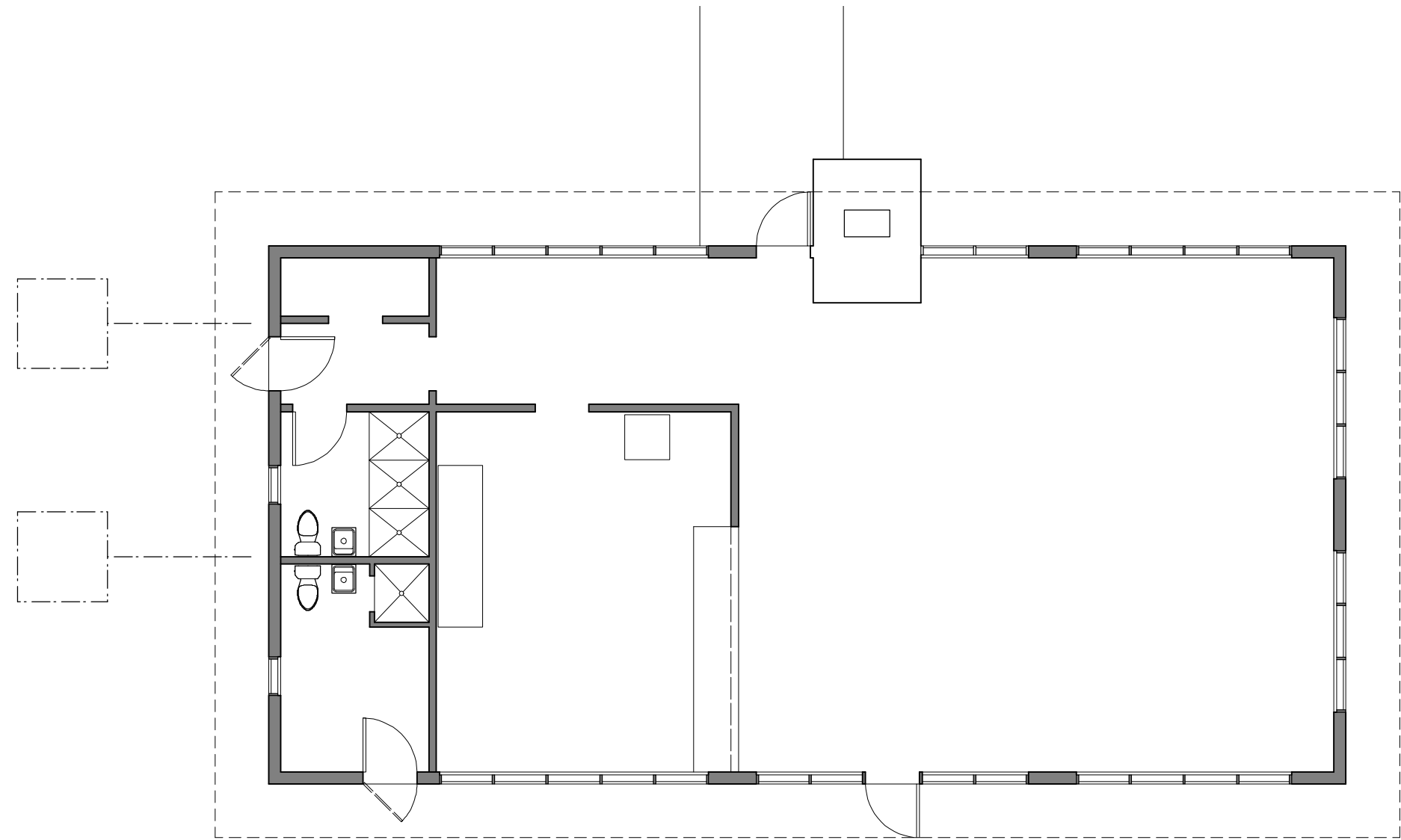


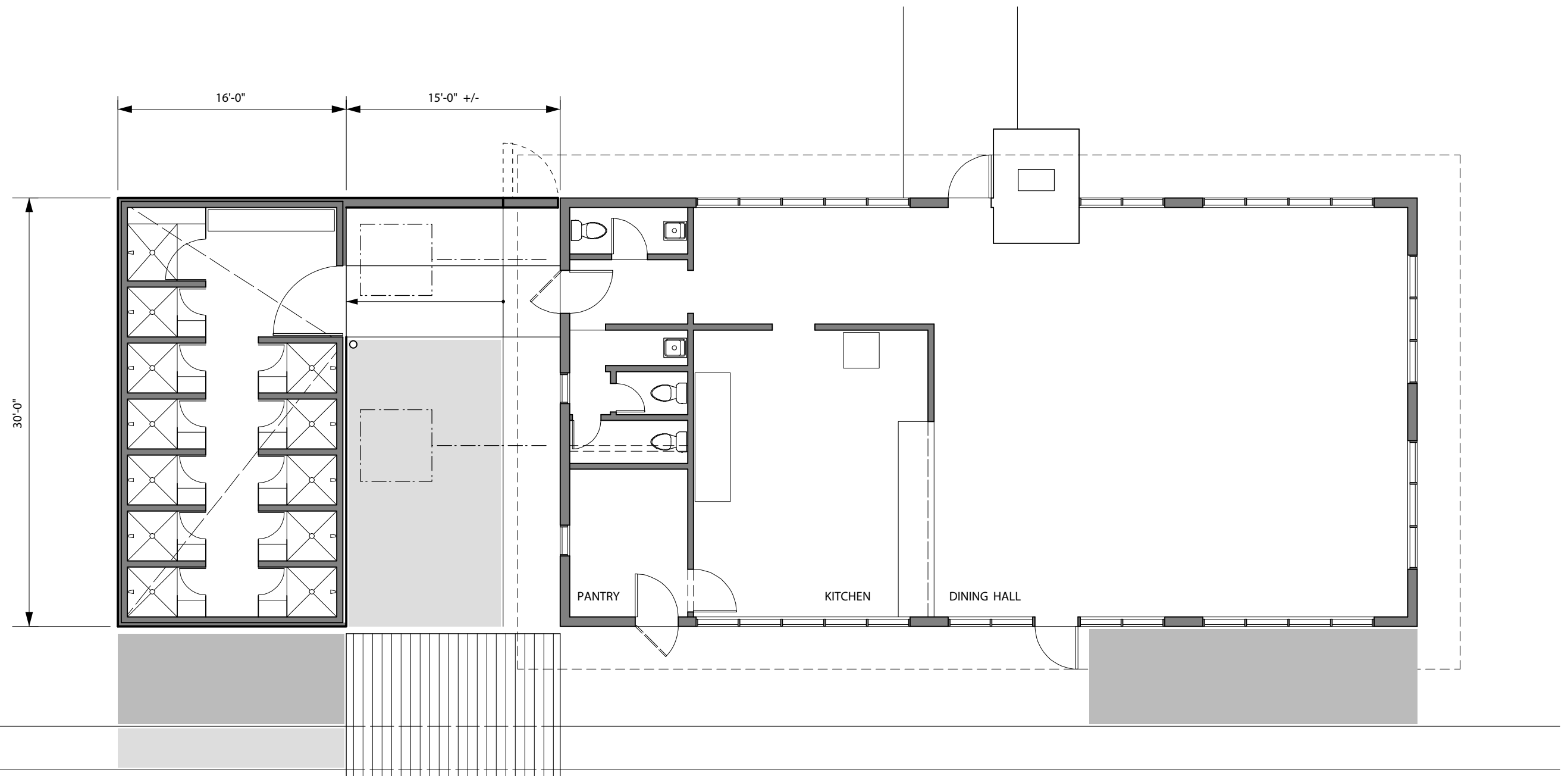
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CLEANING POND SECTION / SCALE 1/32"=1'



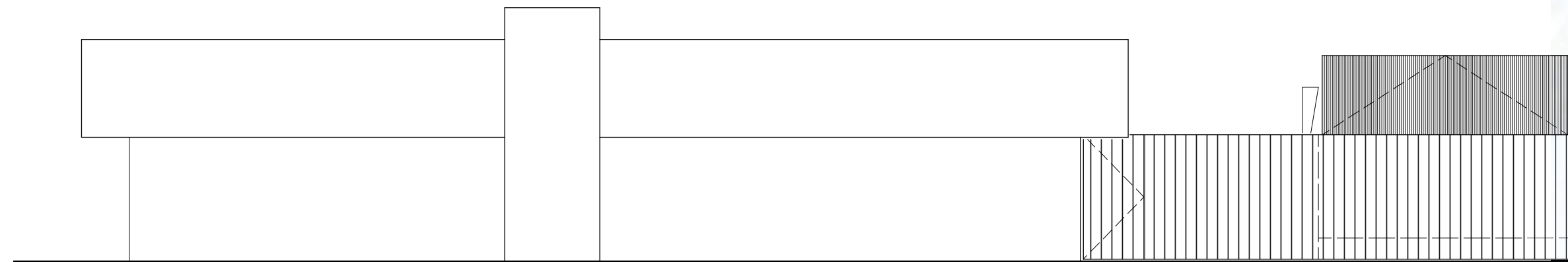
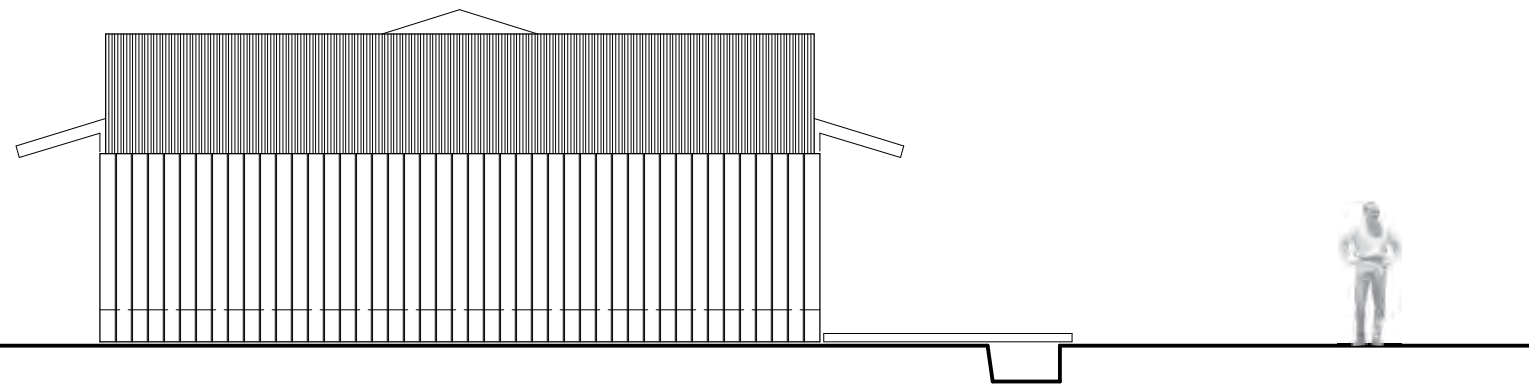
BATHHOUSE





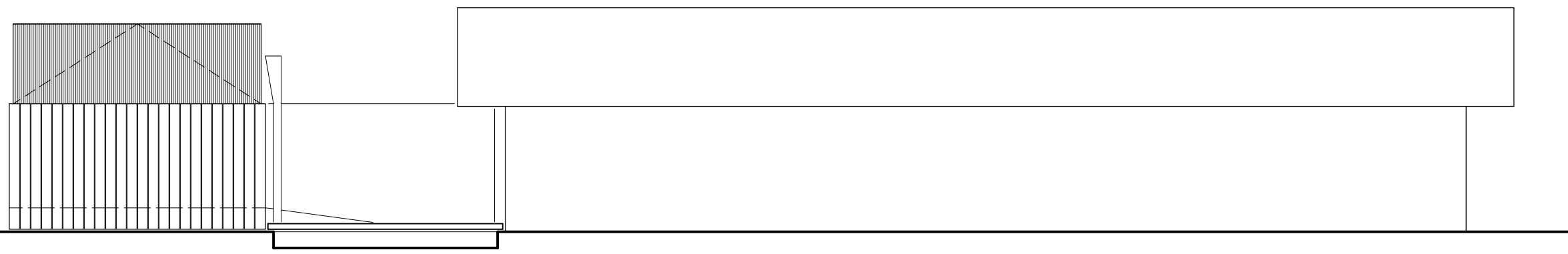
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WEST



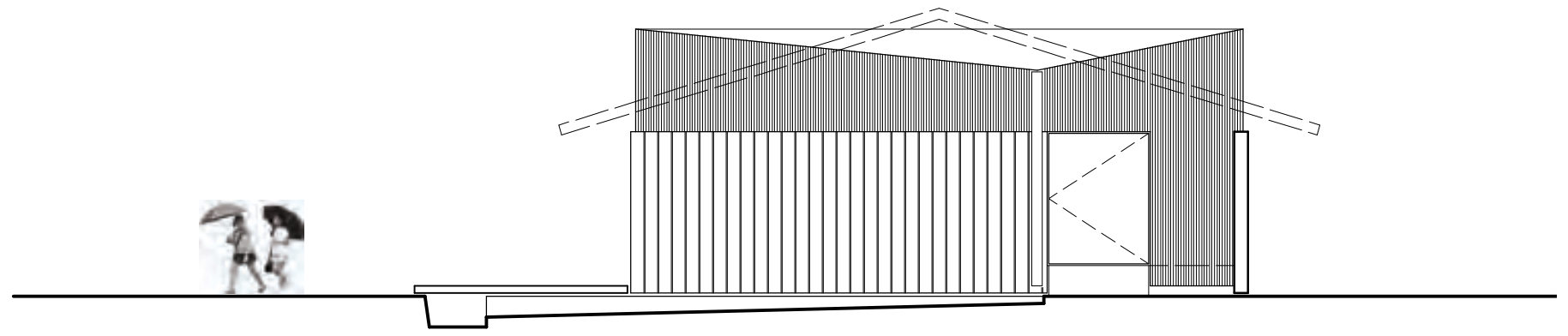
NORTH





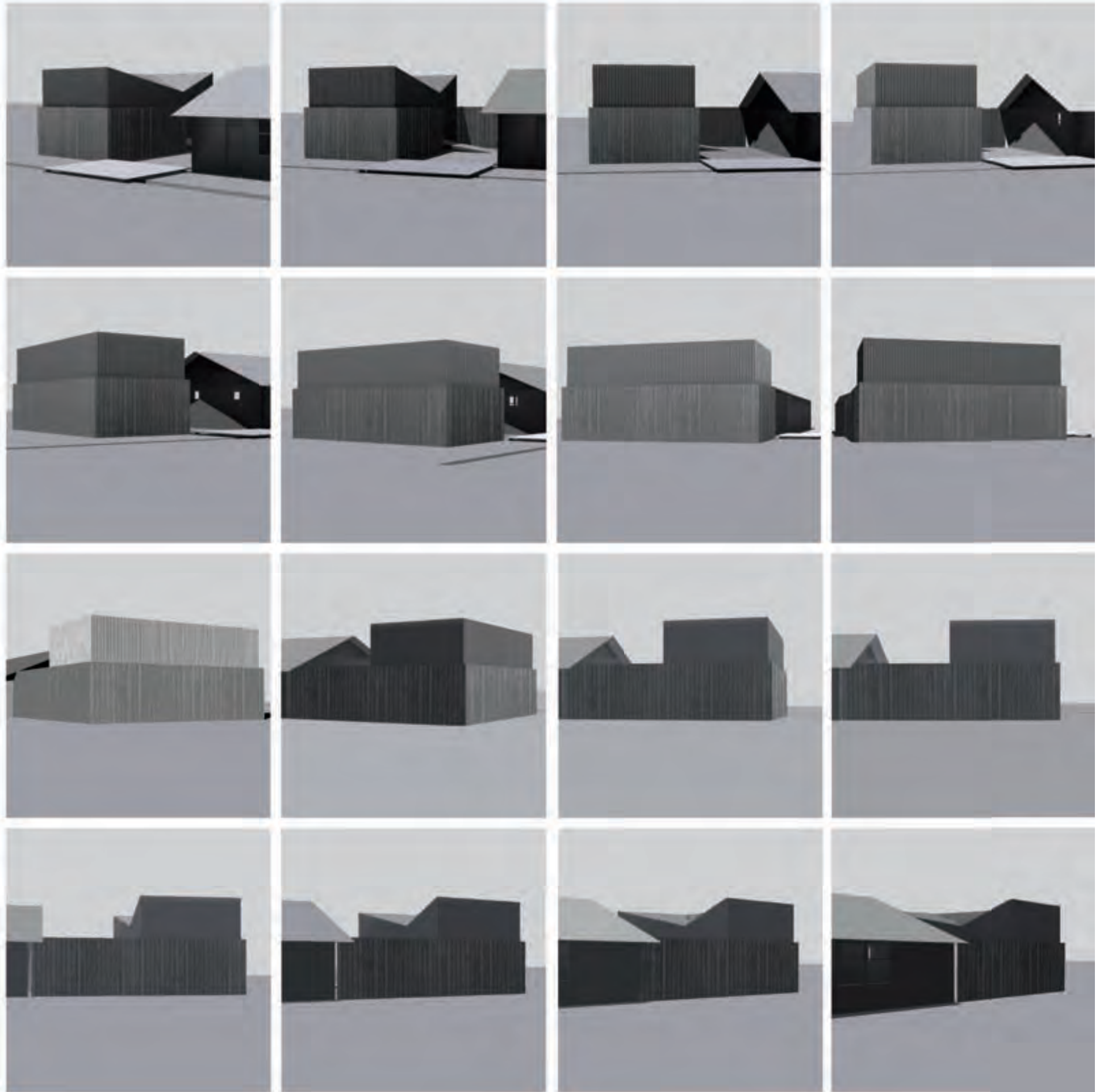
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SOUTH



EAST





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