



PHILIPPINE GENERAL HOSPITAL
The National University Hospital
University of the Philippines Manila
OFFICE OF ENGINEERING AND TECHNICAL SERVICES
Taft Avenue, Manila

*PHIC-Accredited Health Care Provider
ISO 9001:2008 Certified*

**Project Title: VITAL REHABILITATION OF WATERLINE SYSTEM OF
CHARITY WARDS AND OLD OR (EXPOSED PIPES)**

Location: PHILIPPINE GENERAL HOSPITAL

SCOPE OF WORKS & SPECIFICATIONS

GENERAL REQUIREMENTS

1. GENERAL CONDITIONS

- 1.1. The Contractor shall furnish all the materials, labor, tools, equipment, and supervision for the completion of all the works of the Project as indicated on the plans, specifications, and contract documents.
- 1.2. The Contractor shall visit and carefully examine the site and check all the possible interference and conditions affecting the works.
- 1.3. Extra care must be observed during demolition and installation works to avoid damage to the existing facilities. Any damage thereof shall be the responsibility of the Contractor and shall immediately be repaired/restored or replaced to the satisfaction of the Owner at the expense of the Contractor.
- 1.4. The Contractor shall engage under him, a registered Civil Engineer, Mechanical Engineer, Sanitary Engineer or Registered Master Plumber to supervise his work. The Project Engineer or Supervisor shall remain at all times in the construction sites.
- 1.5. The Plans and Specifications shall be interpreted only by a competent registered Engineer. The Contractor is enjoined to confer with the Project Engineer of OETS on drawings/items he failed to understand before submitting his bid. No excuses shall be entertained for misinterpretation of the Plans and Specifications after the award of the Contract. All work as deemed provided by the OETS shall be carried out properly by the Contractor.
- 1.6. The Plans and Specifications are complimentary to each other, whatever is not mentioned in one but mentioned in the other shall be considered as if mentioned in both and shall be carried out properly by the Contractor.

- 1.7. Any inconsistency or discrepancy between the Plans and Specifications shall be brought immediately to the attention of the OETS Project Engineer/s who shall decide on the correct version of the two.
- 1.8. No addition or alteration that will result in a change order from the contract shall be allowed without the approval of the PGH Administration. The Contractor shall bring the case to the OETS Project Engineer/s.
- 1.9. One set of the Plans, Specifications, and Log Book shall always be kept at the job site to be available to the Project Inspector or his representative upon his request during the construction period.
- 1.10. Prior to the installation of any item or material the Contractor shall submit a sample with complete specifications to OETS for evaluation. In case of testing, the Contractor shall notify the OETS and End-user at least one week in advance of making the required tests so that arrangements can be made for their presence to witness the tests. The necessary materials, labor, devices, and all others required to conduct such tests at no additional cost to the Owner.
- 1.11. The Contractor is solely responsible for the safety, protection, and security of his personnel, the works, equipment, installations, and the like. The Contractor shall adopt or apply the protective measures in accordance with the standards set by the Safety Organizations and the Department of Labor Standards.
- 1.12. The Contractor must install, construct and proceed to proper engineering matters upon construction simultaneously in every building indicated in plans.
- 1.13. The contractor has the capacity to assign an appropriate number of individuals to each building simultaneously, ensuring that they are capable of carrying out the required activities.
- 1.14. The Contract Period of this project is **100 CALENDAR DAYS**

2. SITE WORKS

2.1 Demolition/Chipping

2.1.1 The procedures proposed for the accomplishment of chipping/demolition or removal works shall be submitted for approval. The procedures shall provide for the safe conduct of the work, removal, and disposition of materials specified to be salvaged, protection of property that is to remain undisturbed, coordination with other work in progress, and timely disconnection of utility services.

2.2 Disposition of dismantled materials

2.2.1 Regular disposal of debris must be done to avoid accumulation. Cleanliness must be observed and maintained always. Dismantled materials that could still be recycled will be

turn-over to OETS while the others will be for the disposal of the Contractor with the proper clearance of all concerned

3. FINISHES SCOPE OF WORKS & MATERIALS

3.1. Walls

- a) Painting of plain cement walls and wood walls. Painting of affected wall due to coring & chipping

3.2 Ceiling (If necessary)

- a) Repair and repainting of existing ceiling if affected by the installation.
- b) Board shall be 6mm thick Marine plywood, class "A".

3.3 Painting (for the chipped wall & floors)

All painting works shall be done with the use of First Class or Class "A" quality paints. Before any painting is done all surfaces shall be cleaned, smoothed and freed from dust, dirt, grease, mortar, rust and other foreign substances where paint shall be spread evenly and carefully.

3.4 Cladding of Exposed Pipes

All cladding works shall be done using Galvanized Steel sheet #22. Before proceeding to cladding, contractor should submit a shop drawing to OETS Engineer, pipe should be fix or secure by means of c-clamp, surface preparation, measurement and cutting, fasten the G.I sheets, painted based on the color of wall, and Cleaning up any debris or waste materials generated during the cladding process.

Schedule of Painting Works

- | | |
|--------------------------|---|
| a. Concrete wall surface | - Gloss Latex Paint in three (3) coats. |
| b. Ceiling | - Flat Wall Enamel Paint in three (3) coats |

3.5 Other Finishes

- a. Laminates shall be Class "A"
- b. Granite shall be cut-to-dimension size (CDS).

4. PLUMBING WORKS

4.1 Scope

- a) Provision of water line
- b) Supply and installation of Waterline pipe, fittings, and accessories to complete the system.
- c) Tapping to new exposed water line to water meter (WM) of the existing waterline riser of the building for the tapping of the upper floor pipeline. Contractor must submit methodology for tapping to existing fixture to water meter
- d) Replacement of damaged existing angle valve in every plumbing fixture

4.2 General

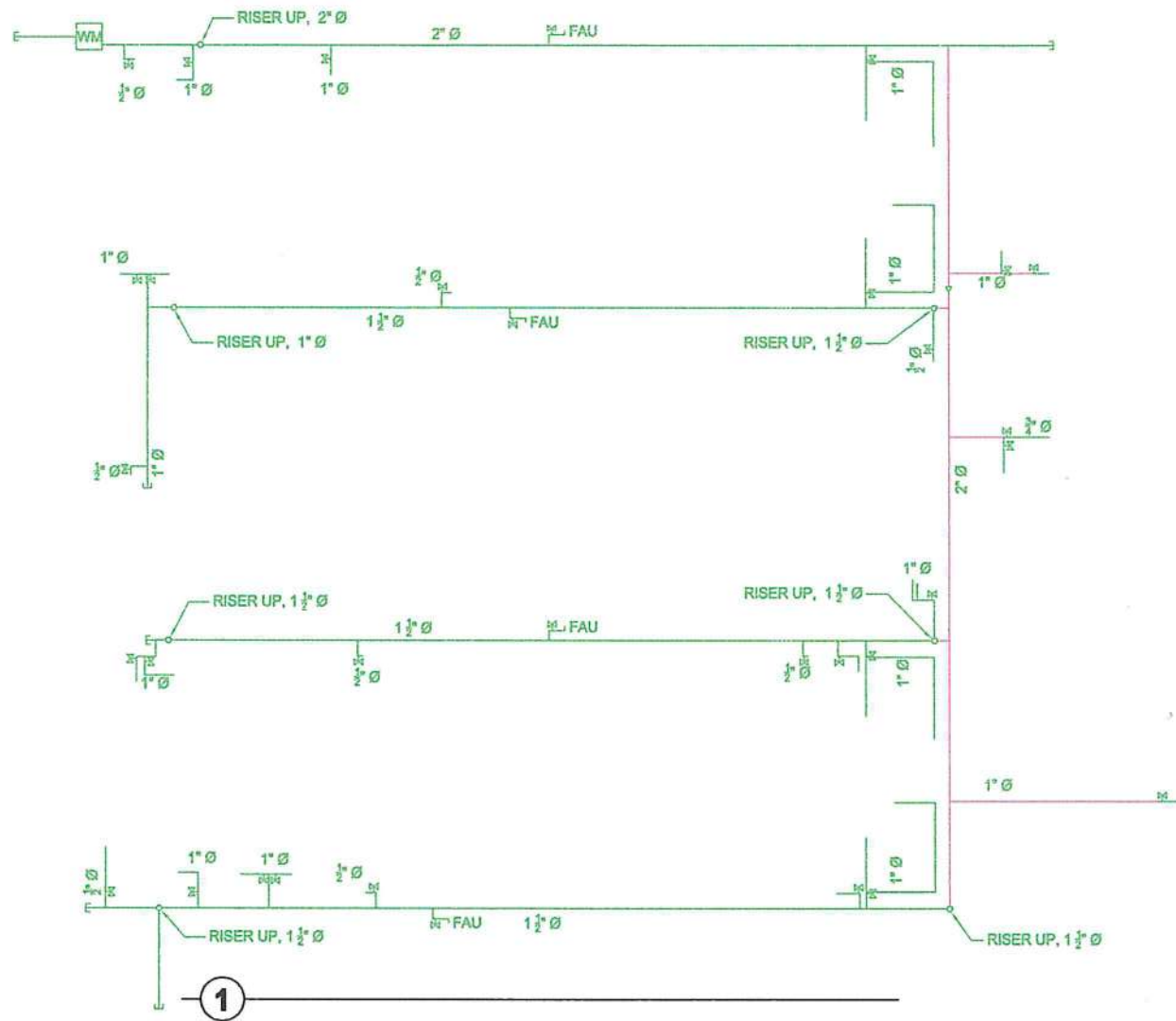
The project drawing shows the general requirements as to sizes, arrangement, the extent of piping, and the location of the equipment. Unless otherwise indicated or specified herein, work shall be accomplished in accordance with the Revised National Plumbing Code.

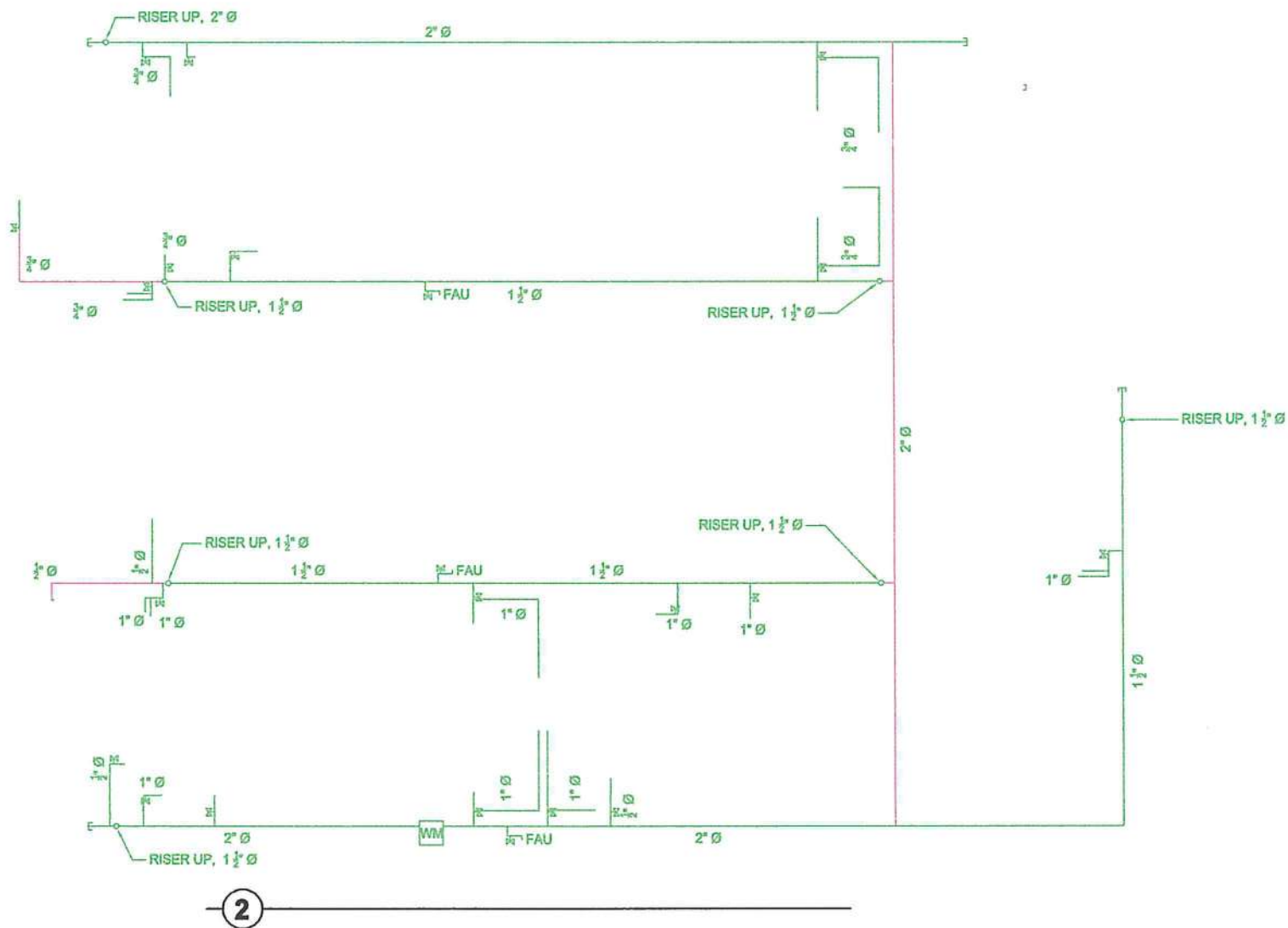
4.3 Standard Products

Materials and equipment furnished under this specification shall be standard products of Manufacturer regularly engaged in the provision.

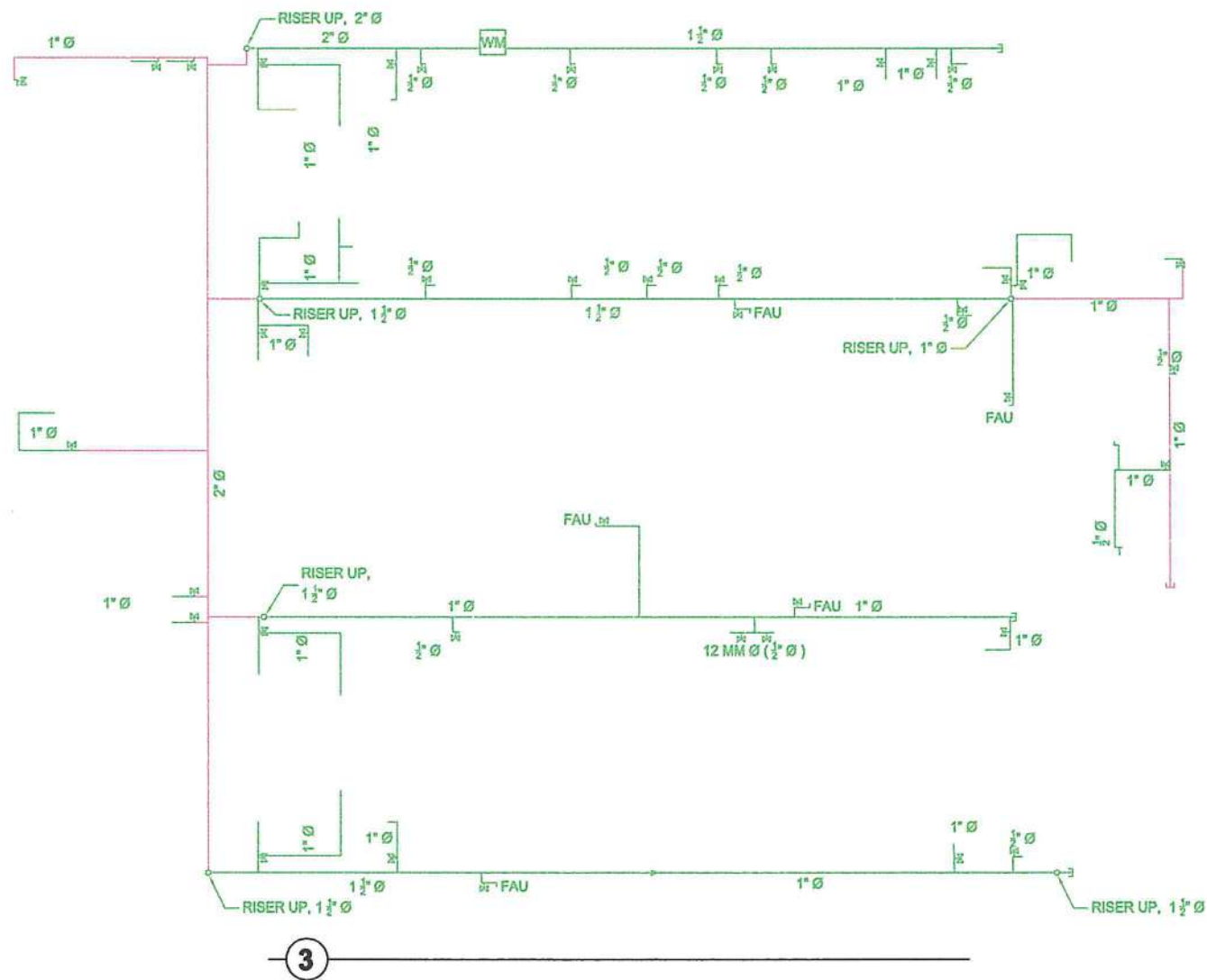
4.4 Materials

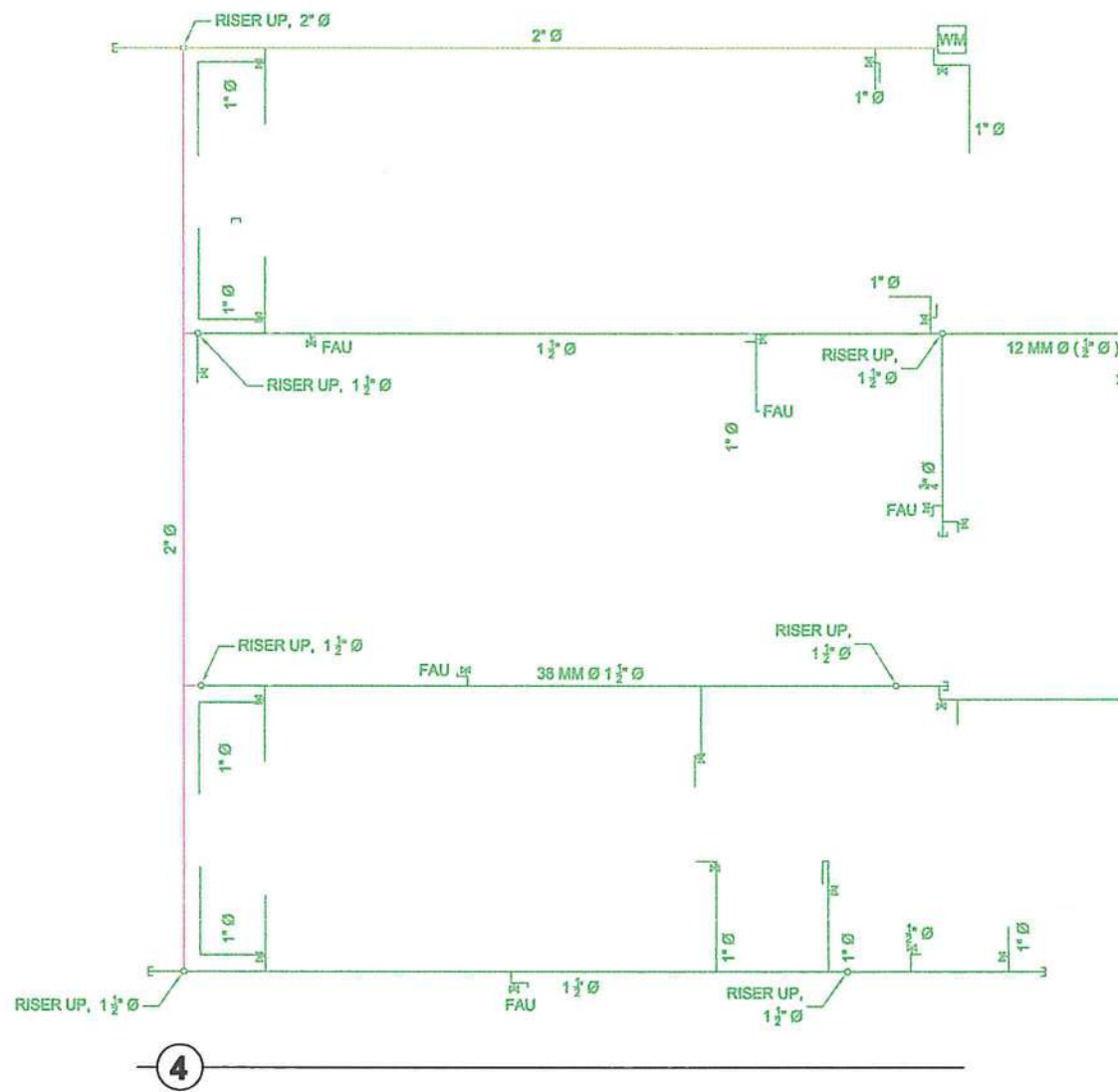
- a. All pipes shall be installed as indicated on plans; any relocation required proper execution of other trades should be with prior approval of the OETS Engineer.
- b. Sizes of water supply pipes to fixtures shall be in accordance with the manufacturer's instructions.
- c. The Contractor shall verify all existing pipes at the site and coordinate the works of the water service connecting point.
- d. All pipes sizes are in millimeters and dimensions are in meters unless otherwise specified.
- e. Cold Water Line - Use PPR PN20.
- f. Gate Valves - Conforming to ASTM 80-120, heavy duty.

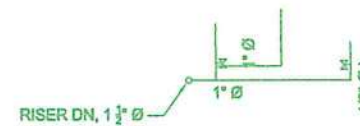
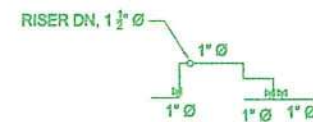
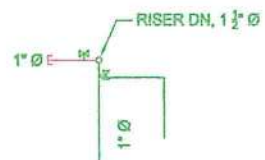
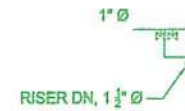
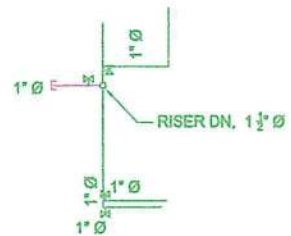




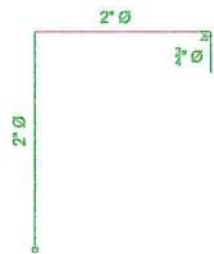
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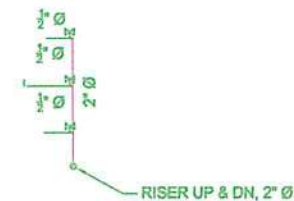
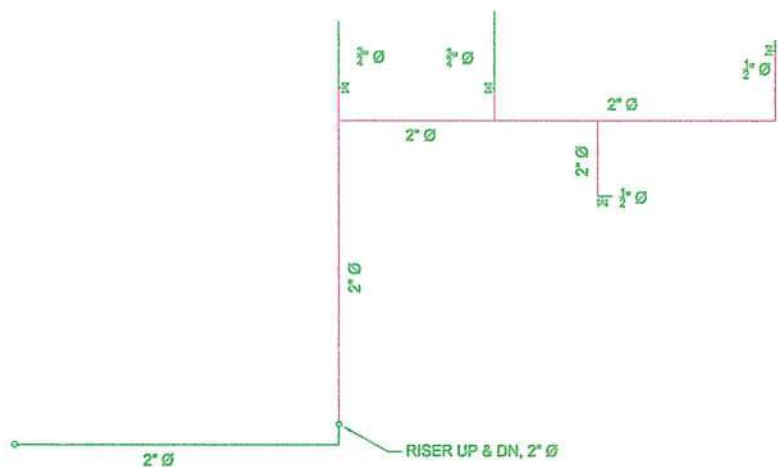




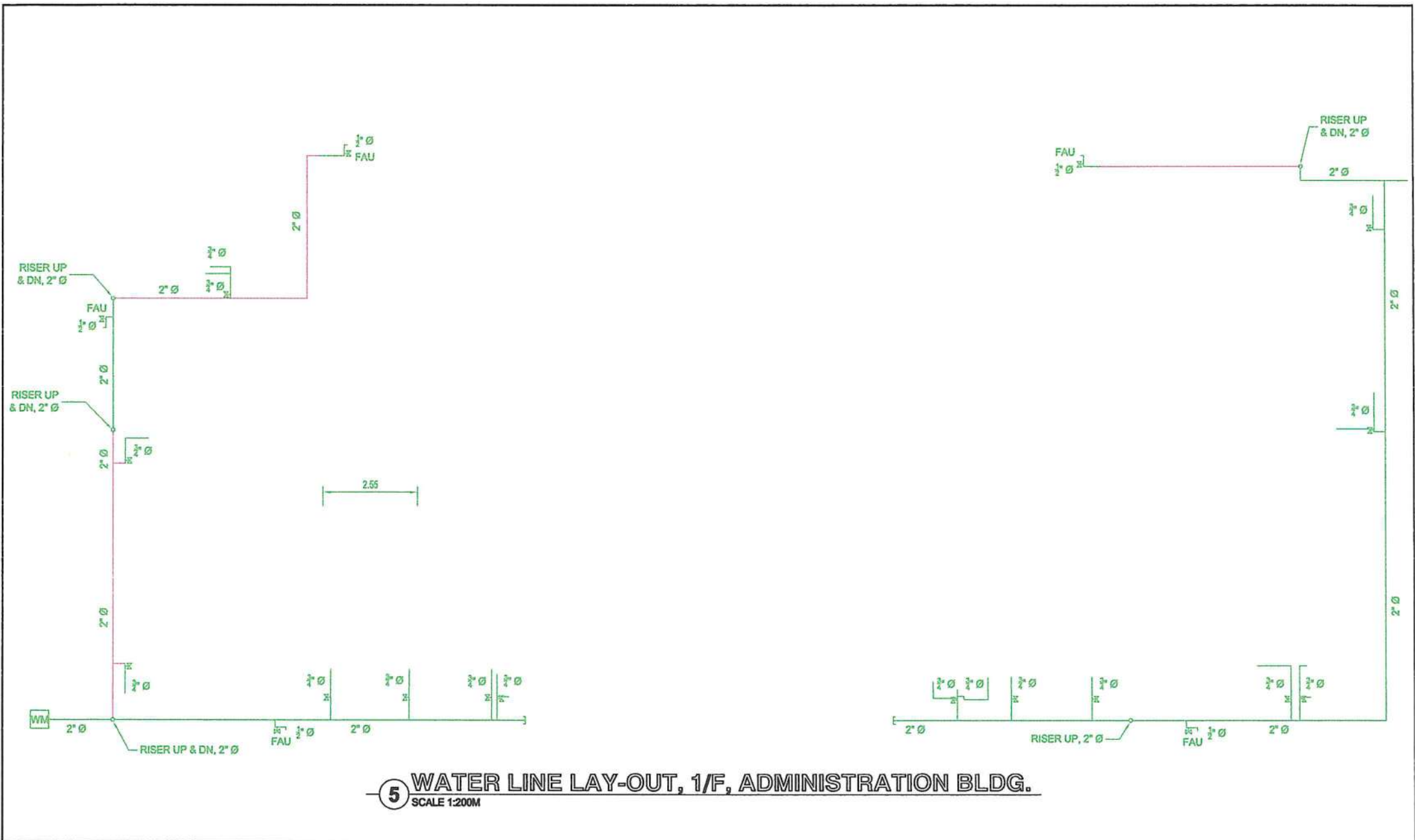
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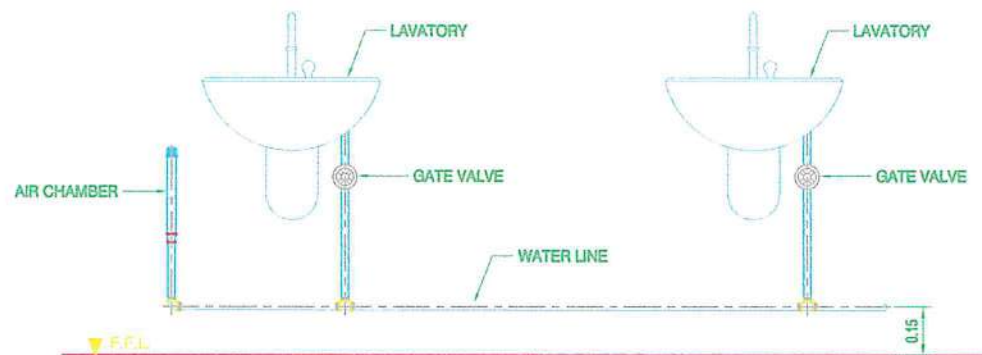


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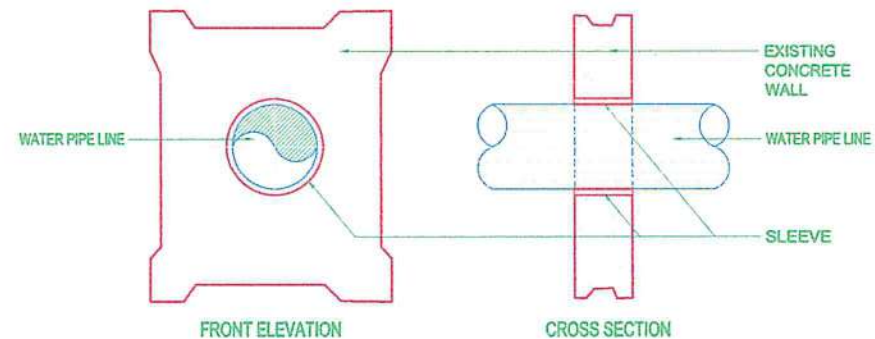


5 WATER LINE LAY-OUT, 2/F, ADMINISTRATION BLDG.
SCALE 1:200M

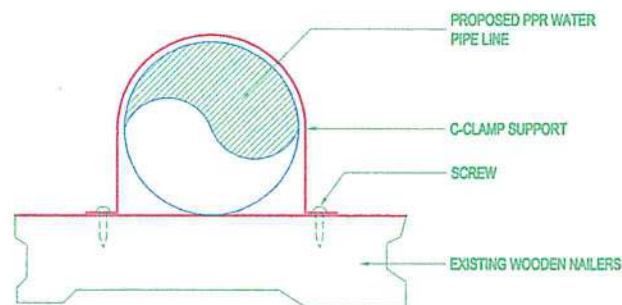




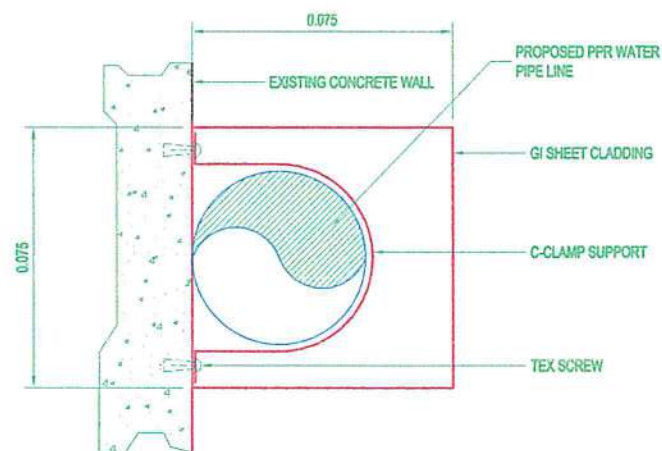
ELEVATION DETAIL OF WATER LINE AT LAVATORY



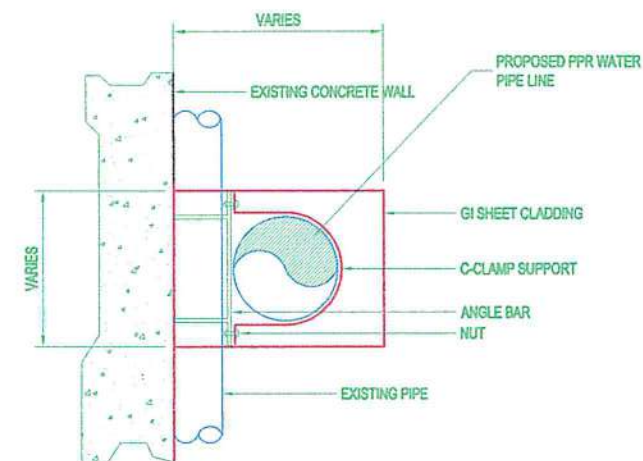
DETAIL OF WATER PIPE AT WALL



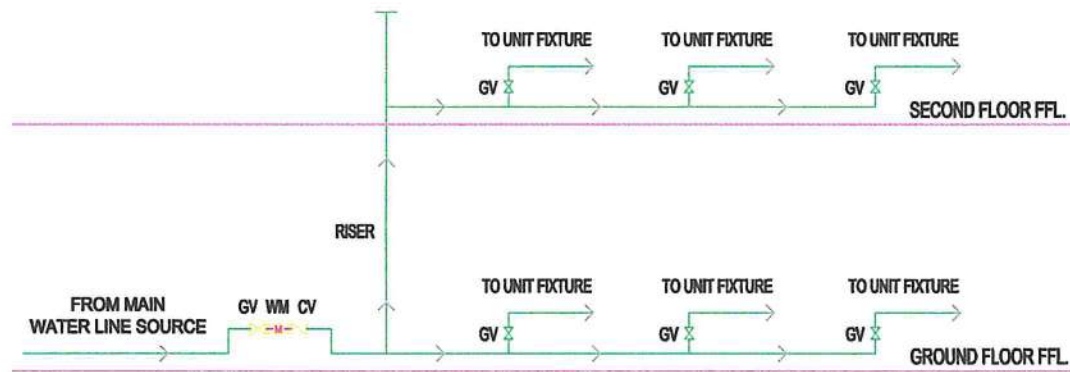
CROSS SECTION DETAIL OF WATER PIPE LINE ON CEILING



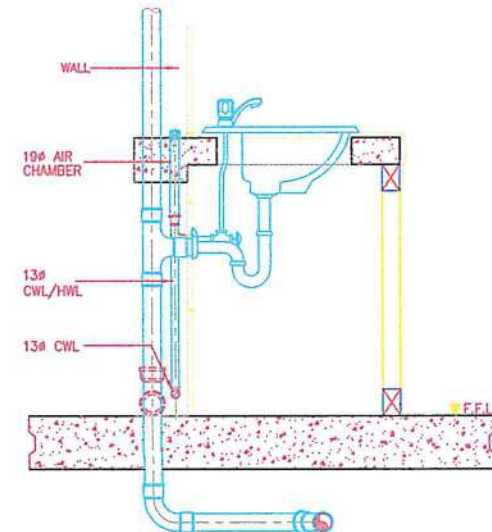
CROSS SECTION DETAIL OF WATER PIPE LINE ON CONCRETE WALL



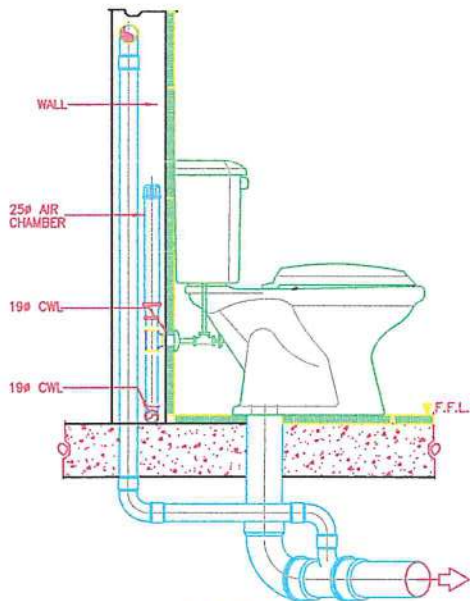
CLADDING SECTION WITH EXISTING PIPE



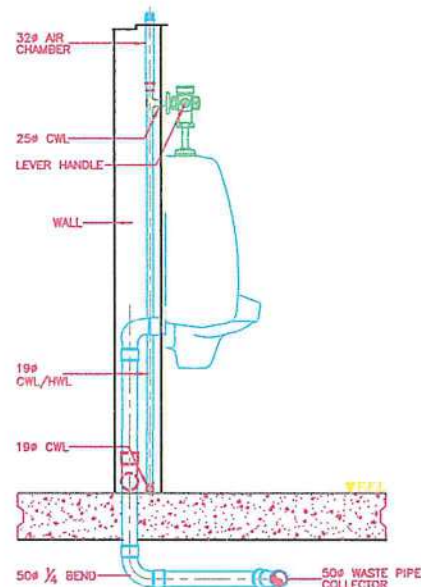
WATER FLOW DIAGRAM



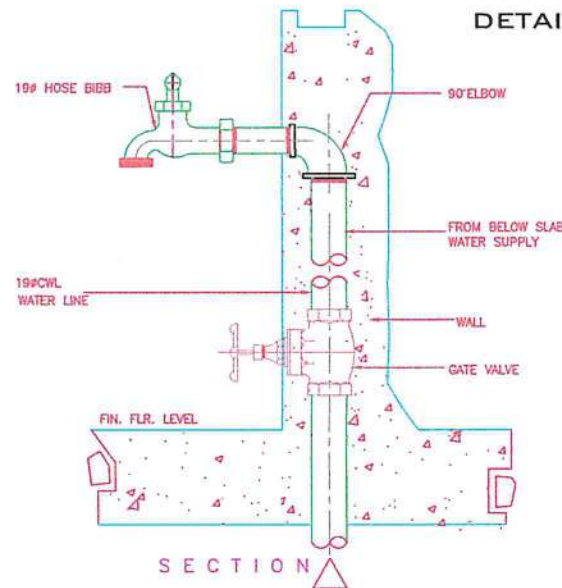
**SECTION
DETAIL OF LAVATORY**



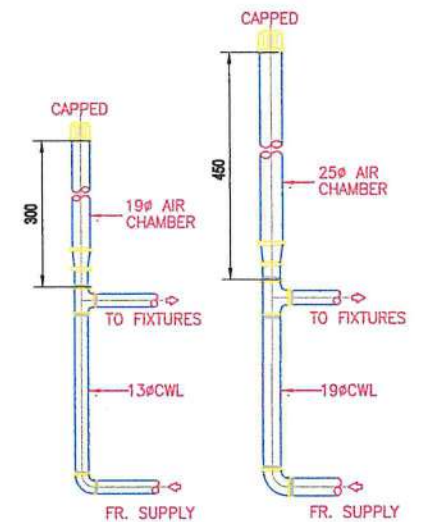
**SECTION
DETAIL OF WATER CLOSET**



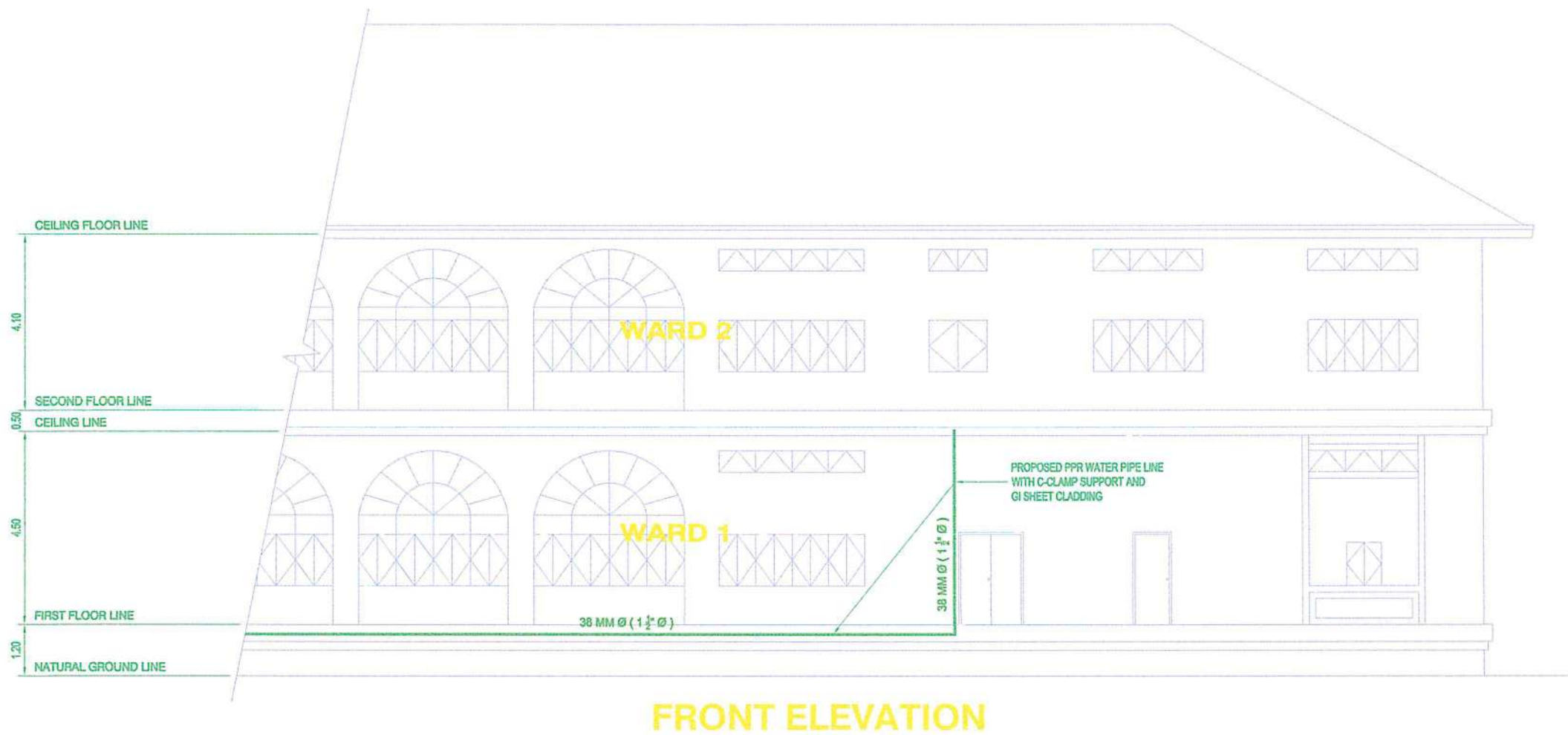
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DETAIL OF URINAL**

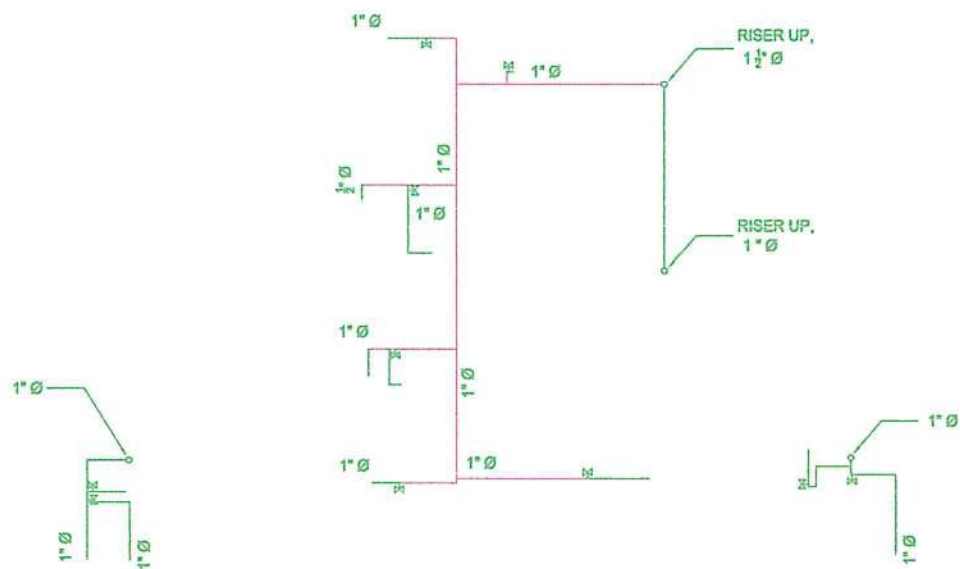


**SECTION
DETAIL OF HOSE BIBB**

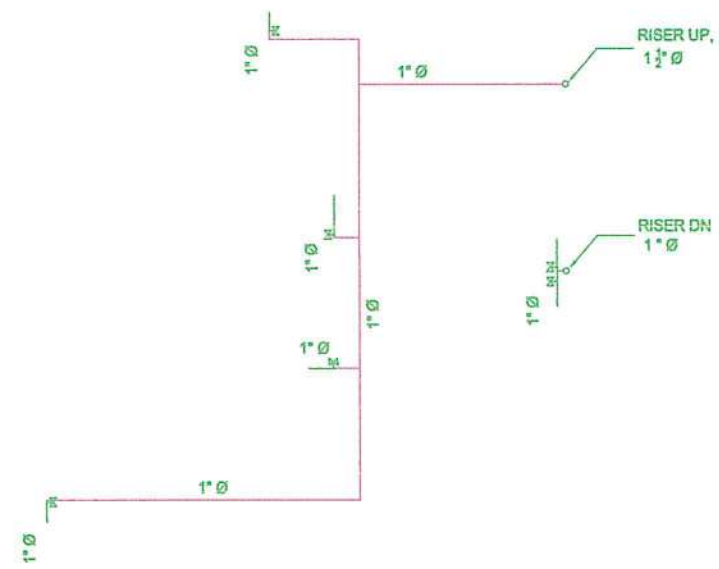


DETAIL OF AIR CHAMBER

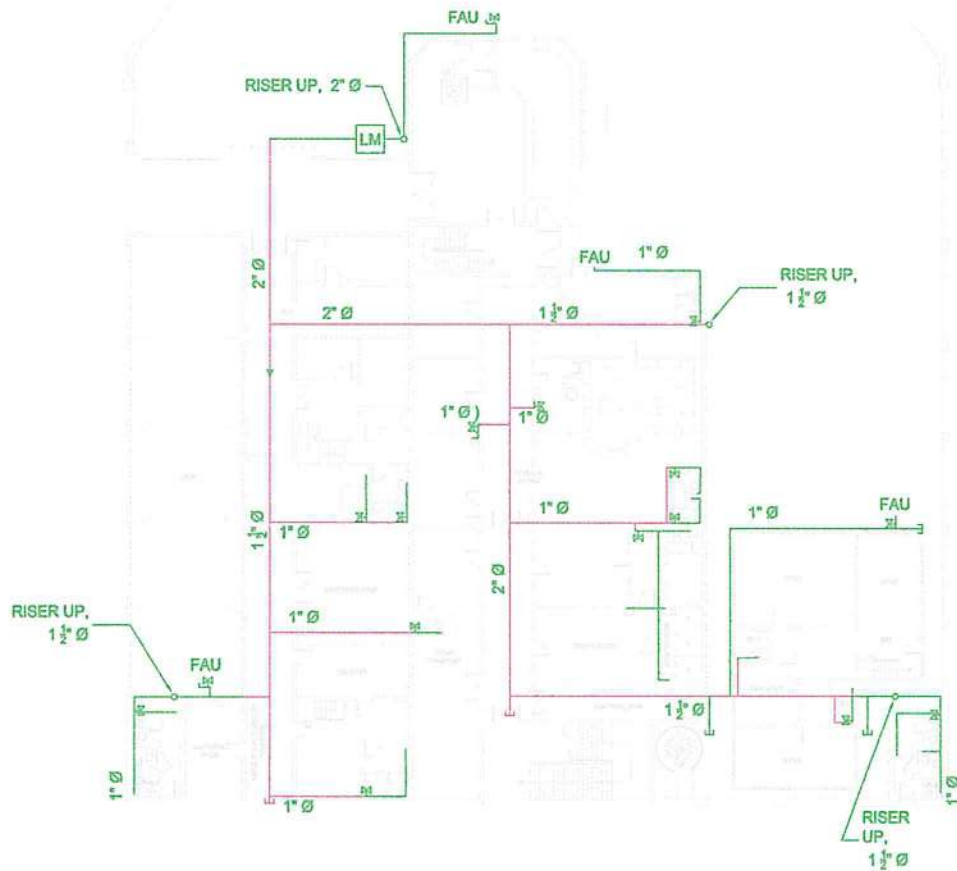




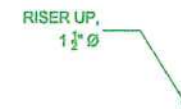
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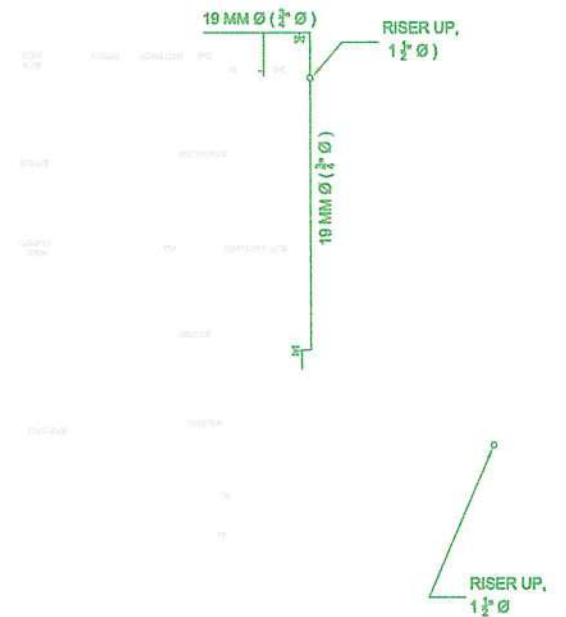
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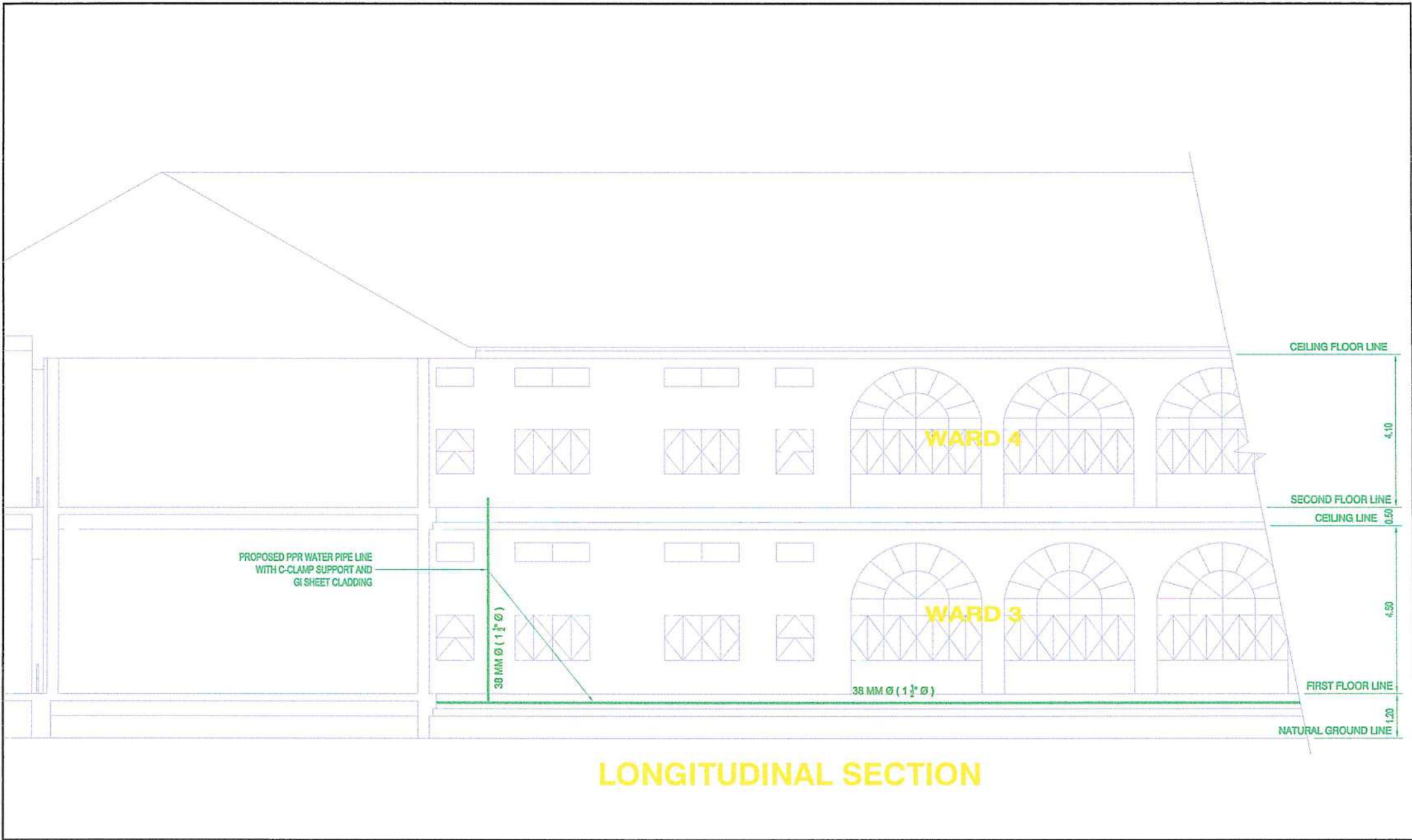
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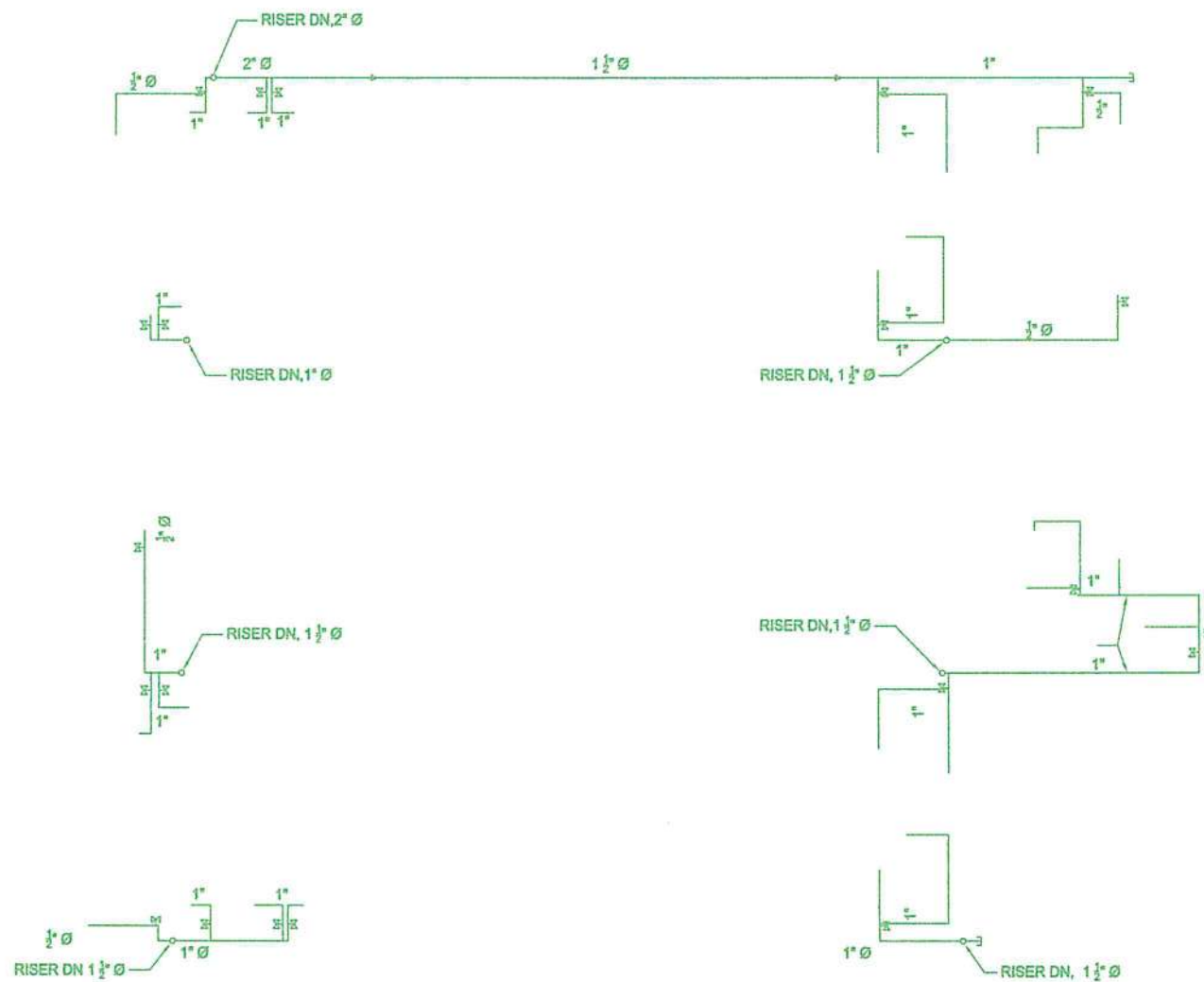


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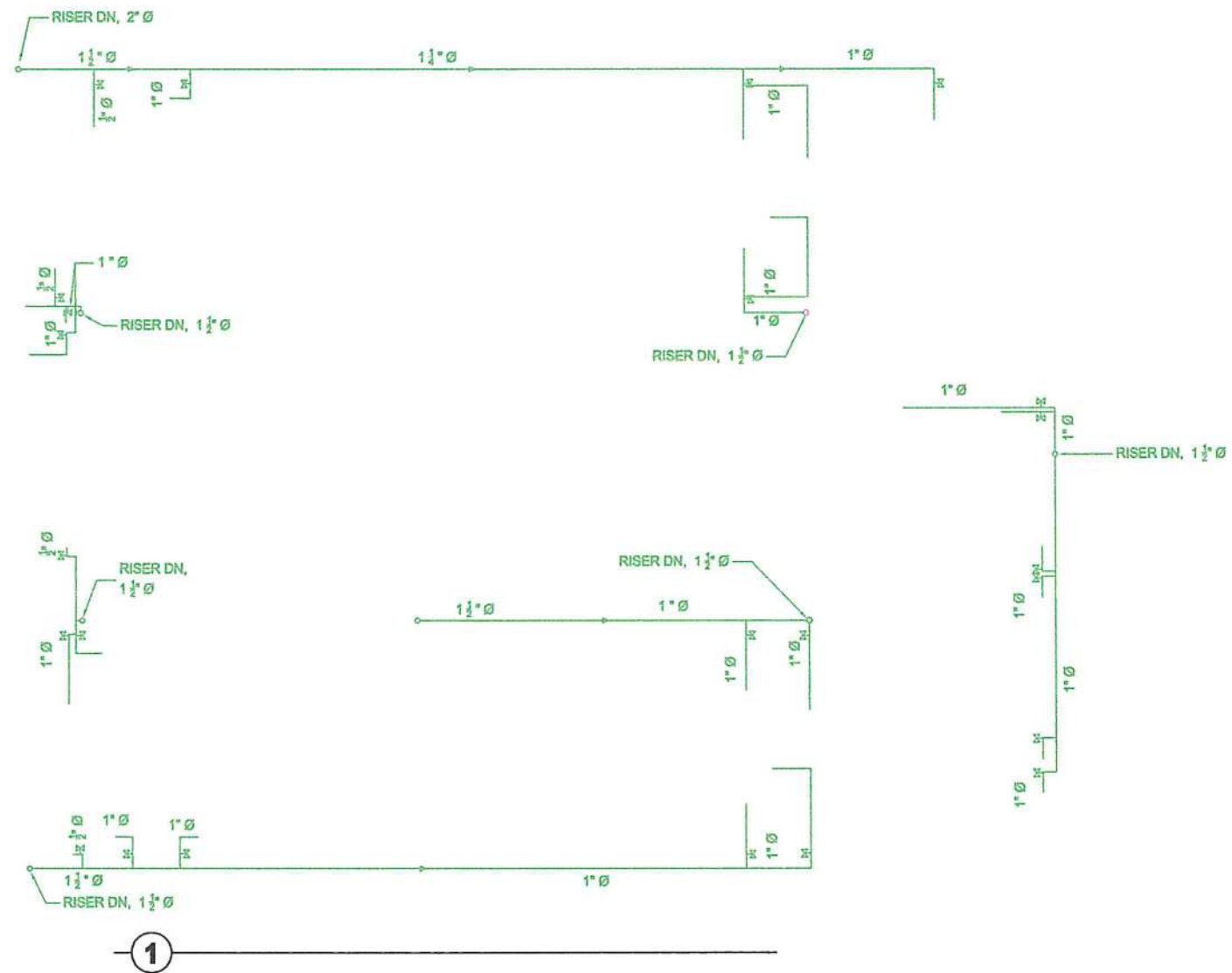


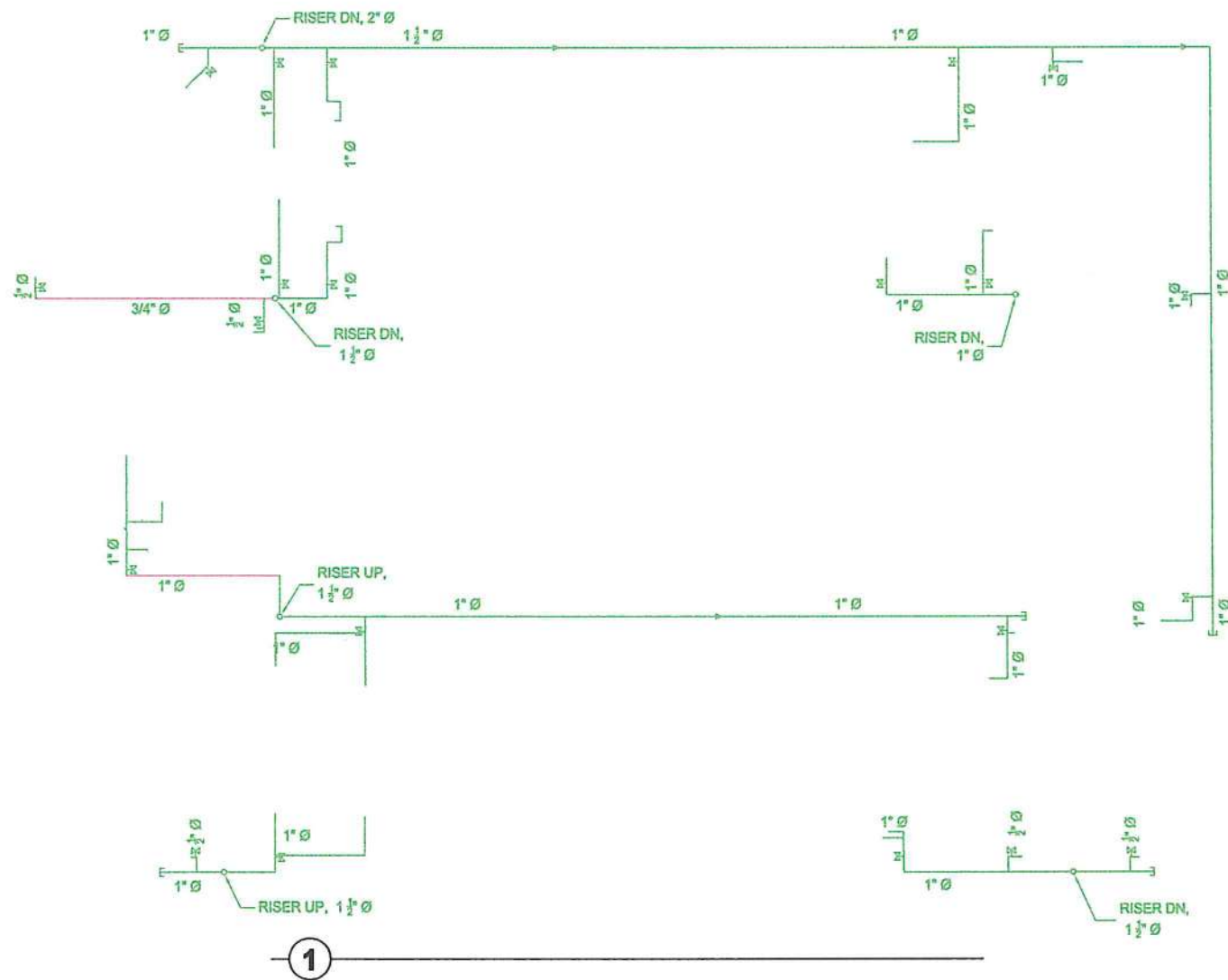
RISER UP,
1½" Ø






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