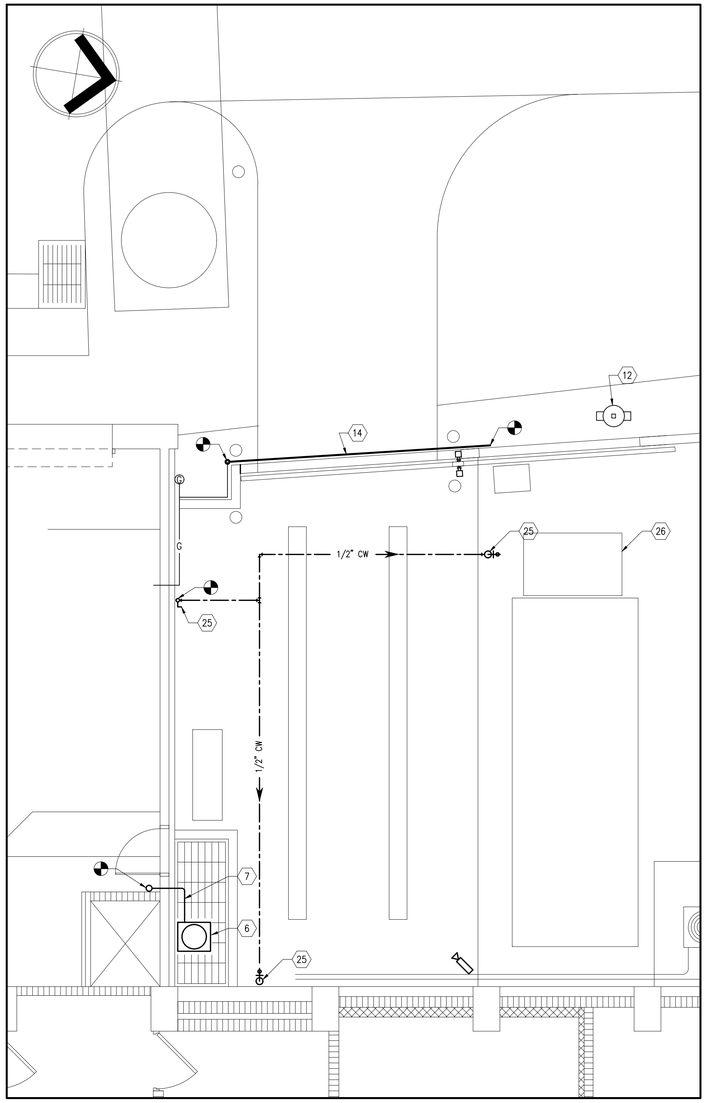


PLUMBING PLAN

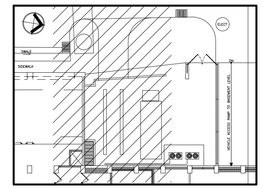
SCALE: 1/4" = 1' - 0"

PLUMBING GENERAL NOTES

1. ALL PLUMBING WORK SHALL BE IN STRICT ACCORDANCE WITH THE DEPARTMENT OF HEALTH OF P.R., THE PUERTO RICO BUILDING BUILDING CODE, AND THE SPECIFICATIONS ISSUED FOR THIS PROJECT. ALL PIPING SHALL BE FITTED WITH EARTHQUAKE RESTRAINTS AS PER UBC & IPC, LATEST VERSION.
2. SIZES SHOWN IN FIXTURE SCHEDULE ARE MINIMUM AND SHALL BE INCREASED AS NECESSARY TO COMPLY WITH CODES REQUIREMENTS OR AS SHOWN IN THE DRAWINGS.
3. THE PLUMBING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING WATER SERVICE PIPE AND CONNECT TO IT WITH PROPER SIZE AS SHOWN IN THE DRAWING.
4. ALL VALVES NOT EXPOSED SHALL BE PROVIDED WITH ACCESS IN THE WALL OR FLOOR FOR OPERATION AND MAINTENANCE.
5. LONG SWEEP BENDS OR LONG SWEEP FITTINGS SHALL BE PROVIDED AT THE BASE OF ALL STACKS.
6. SINGLE AND DOUBLE SANITARY TEES AND QUARTER BENDS SHALL BE USED IN DRAINAGE LINES ONLY WHERE THE DIRECTION OF FLOW IS FROM THE HORIZONTAL TO THE VERTICAL.
7. ALL HORIZONTAL PORTIONS OF SOIL, WASTE STACKS & BRANCHES SHALL SLOPE 1/8" PER FOOT, EXCEPT FOR SIZES 3" & SMALLER THAT SHALL BE 1/4" PER FOOT.
8. ALL PIPES SHALL BE ADEQUATELY SUPPORTED ON HANGERS OR CARRIERS AS REQUIRED. HANGERS SHALL BE PLACED 8 APART FOR SIZES UP TO 4" AND 10 FT. APART ON SIZES LARGER THAN 4", EXCEPT THAT CAST IRON SOIL PIPE SHALL BE SUPPORTED AT EACH LENGTH. VERTICAL RISERS AND STACKS SHALL BE SUPPORTED AT EACH FLOOR LEVEL WITH RISER CLAMPS, EXCEPT AS OTHERWISE NOTED.
9. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS PIPES UP TO 4" DIA. NOT LESS THAN 4" FOR LARGER PIPES.
10. THE CONTRACTOR SHALL FURNISH AND SET IN PLACE BEFORE CONCRETE POURING, ALL NECESSARY SLEEVES FOR WASTE OR SOIL, AND COLD WATER LINES. THESE SLEEVES SHALL BE AS SPECIFIED.
11. THE PLUMBING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF PIPING TO AVOID ANY INTERFERENCE WITH PIPING AND/OR EQUIPMENT BEING INSTALLED BY OTHER CONTRACTORS.
12. FOR FIXTURES AND/OR EQUIPMENT NOT LISTED IN THE SCHEDULE, SEE ARCHITECTURAL DRAWINGS.
13. THESE NOTES AS WELL AS THE LEGEND AND DETAILS APPLY TO ALL PLUMBING WORK FOR THE PROJECT.
14. ALL WATER PIPING ABOVE GROUND SHALL BE TYPE "L" HARD DRAWN COPPER OR CPVC.
15. ALL SOLVENT CEMENT SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURERS, ASTM AND NSF RECOMMENDATIONS.
16. ALL PVC DWV PIPES AND FITTINGS SHALL BE SCHEDULE 40.
17. CONTRACTOR SHALL SUBMIT PRE-ENGINEERED SEISMIC RESTRAINTS FOR ALL ABOVE GROUND PIPING AS PER ISAT, MASON INDUSTRIES OR APPROVED EQUAL STANDARDS. SAID SUBMITTAL SHALL BE WATER STAMPED BY LICENSED ENGINEER IN THE COMMONWEALTH PF P.R..
18. ALL FITTINGS FOR SANITARY, WASTE, STORM AND DRAIN LINES SHALL BE SPIGOT END.
19. THE PLUMBING CONTRACTOR SHALL SECURE APPROVAL AND ADVICE FROM THE ARCHITECT AND STRUCTURAL ENGINEER FOR THE LOCATION OF PIPES INSIDE WALLS OR SLABS.
20. CONTRACTOR SHALL INSTALL A COMPLETE PLUMBING SYSTEM AS SHOWN IN DRAWINGS AND CALLED FOR IN THE SPECIFICATIONS.
21. SUBMIT FOR ENGINEER'S APPROVAL, LITERATURE OF PIPES MATERIAL, VALVES, FLOOR DRAINS, FIXTURES, ETC BEFORE ORDERING.
22. THE CONTRACTOR SHALL PROVIDE PROTECTION FOR THE SURFACES OF ALL PLUMBING FIXTURES FROM DAMAGE BEFORE, DURING AND AFTER THEIR INSTALLATION AND UNTIL WORK IS COMPLETED AND ACCEPTED.
23. PLUMBING FIXTURES SHALL NOT BE USED FOR THE STORAGE OF TOOLS OR MATERIALS, NOR AS SUPPORTS OR PLATFORM. EVERY PRECAUTION SHALL BE TAKEN DURING CONSTRUCTION TO AVOID DAMAGE TO FIXTURES AND FITTINGS.
24. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF THE WORK AND INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, PIPING AND FIXTURES.
25. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS ARE NOT DEFINITELY FIXED BY DIMENSIONS AND ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE CONTRACTOR AT THE PROJECT AND SHALL BE ILLUSTRATED IN THE REQUIRED SHOP DRAWINGS FOR THE ARCHITECTS APPROVAL BEFORE ACTUAL INSTALLATION.
26. THE SPECIFICATIONS AND DRAWINGS CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION, ANY APPARATUS, MATERIAL OR WORK NOT SHOWN ON THE DRAWINGS OR SPECIFICATIONS BUT NECESSARY TO MAKE THE PLUMBING WORK COMPLETE SHALL BE PROVIDED BY CONTRACTOR WITH NO ADDITIONAL COST AS IF SPECIFICALLY CALLED FOR BY THESE CONTRACT DOCUMENTS.
27. CONTRACTOR SHALL VERIFY IN THE FIELD ALL INVERT AND GRADE ELEVATIONS AND MAKE ANY NECESSARY ADJUSTMENTS AS REQUIRED BY THE FIELD CONDITIONS, AND REQUIRED TO OBTAIN THE PROPER SLOPE.
28. THE CONTRACTOR MUST INSPECT PROJECT SITE AND MUST COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO SUBMITTING HIS PROPOSAL FOR THIS WORK. AFTER CONTRACT IS AWARDED, NO EXTRAS WILL BE ALLOWED FOR COORDINATION OR PROJECT SITE CONDITIONS.
29. ALL CUTTING REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT WILL BE DONE BY THIS CONTRACTOR, ANY CUTTING OF STRUCTURE MUST BE APPROVED BY STRUCTURAL ENGINEER PRIOR TO WORK COMMENCEMENT.
30. ALL PIPING WELDS/SOLDER SHALL BE OF PHOSPHORUS FREE TYPE
31. CONTRACTOR SHALL INCLUDE APPROPRIATE TRAPS AS PER CODE REQUIREMENTS, NO EQUIPMENT SHALL BE INSTALLED WITHOUT TRAPS (EXCEPT WASHING MACHINE).
32. ROUGH-IN FOR TOILET FIXTURES, WHEN IN CONCRETE SLAB, SHALL INCORPORATE A LEGITIMATE CLOSET BEND FITTING.
33. CONTRACTOR SHALL ALWAYS INSTALL LONG RADIUS ELBOWS AND BOSTON TEES AT ANY CHANGE OF DIRECTION OF SEWER PIPE. SHORT RADIUS ELBOWS SHALL NOT BE ALLOWED.
34. ALL SHOWER AND TUB-SHOWER COMBINATION VALVES SHALL BE BALANCED PRESSURE VALVES THAT CONFORM TO THE REQUIREMENTS OF ASSE 1016 OR CSA CAN/CSA-B125. VALVES SHALL BE EQUIPPED WITH A MEANS TO LIMIT THE MAXIMUM SETTING OF THE VALVE TO 120°F(49°C), WHICH SHALL BE FIELD ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONTRACTOR SHALL INSTALL WATER HAMMER ARRESTORS AS SHOWN IN ISOMETRIC.
35. CONTRACTOR SHALL PERFORM PLUMBING RELATED INSTALLATIONS UNDER THE DIRECT SUPERVISION OF A MASTER PLUMBER AS A MEASURE TO GUARANTEE COMPLIANCE WITH APPLICABLE CODES AND INSTALLATION STANDARDS.
36. CONTRACTOR SHALL OBTAIN THE CERTIFICATION OF A MASTER PLUMBER AS PER LAW 38 OF FEBRUARY 2002. THIS CERTIFICATION SHALL ASCERTAIN THE CORRECTNESS OF THE PLUMBING INSTALLATION.
30. THE CONTRACTOR MUST COORDINATE WITH OTHER TRADES.
31. THE CONTRACTOR MUST INFORM THE ENGINEER OF ANY DEVIATION TO THESE DRAWINGS.
32. THE CONTRACTOR MUST KEEP A SET OF DRAWINGS WITH ALL THE DEVIATIONS MADE DURING CONSTRUCTION TO ENSURE AN ACCURATE AS BUILT SET.
33. IF ANY EXISTING FINISHES ARE DISTURBED BECAUSE OF WORK UNDER THIS CONTRACT, THEY MUST BE RESTORED TO THEIR ORIGINAL CONDITION AFTER ALL WORKS ARE PERFORMED. ALL EXISTING EQUIPMENT AND MATERIAL BEING DEMOLISHED AND REMOVED DURING THE CONSTRUCTION SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER.
34. IT IS THE INTENT OF THE CONTRACT DRAWINGS TO CALL FOR A COMPLETE, TESTED AND OPERATIONAL ELECTRICAL SYSTEM. ANY MINOR DETAILS NOT SHOWN BUT REQUIRED FOR THE PROPER FUNCTION AND OPERATION OF THE SYSTEM SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
35. HE CONTRACTOR SHALL NOTIFY THE OWNER IN ADVANCE OF ANY IMPAIRMENTS TO THE BUILDING'S FUNCTIONS RESULTING FROM THE WORK UNDER THIS CONTRACT.
36. ALL ROOF OPENINGS, WALL OPENINGS, SUPPORTS, SPACE ARRANGEMENTS, FLOOR PADS, ANCHORING, AND MECHANICAL PROVISIONS ARE BASED ON PRELIMINARY INFORMATION FROM THE SPECIFIED MANUFACTURER. THE CONTRACTOR SHALL VERIFY ALL THE ABOVE INFORMATION USING THE MANUFACTURERS CERTIFIED DRAWINGS FOR THE EQUIPMENT TO BE INSTALLED, AND MAKE MODIFICATIONS AS REQUIRED WITH THE APPROVAL OF THE OWNER AND THE ENGINEERS.
37. MAKE ALL PROVISIONS NECESSARY TO PREVENT CORROSION RESULTING FROM CONTACT BETWEEN DISSIMILAR METALS.

LEGEND – PLUMBING AND ELECTRICAL

1. RELOCATE HYDRAULIC PUMP POWER FEEDER AND INSTALL NEW NEMA 3R DISCONNECT SWITCH. COORDINATE WITH OWNER FOR FINAL CONNECTION TO PUMP CONTROL PANEL.
2. .
3. DIVIDING WALL; MASONRY OR LOUVER; TBA.
4. .
5. .
6. RELOCATE AC CONDENSING UNIT AND INSTALL ON WALL-HUNG PLATFORM; EXTEND POWER FEEDER TO NEW LOCATION.
7. RELOCATE AC REFRIGERANT PIPING; INSTALL NEW INSULATION WITH WEATHER RESISTANT MASTIC.
8. .
9. POWER FEEDER FOR GATE MOTOR THROUGH NEMA-3R DISCONNECT SWITCH; ALLOW 100 LF OF CONDUIT AND WIRE TO POWER PANEL.
10. .
11. .
12. RELOCATED FIRE HYDRANT; SEE LEGEND 16 IN DRAWING D-1.
13. .
14. FUEL GAS PIPING RELOCATED 24" UNDERGROUND; INSTALL SUITABLE PIPING PROTECTION AND WARNING RIBBON; SEE LEGEND 13 IN DRAWING D-1.
15. .
16. .
17. INSTALL CONDUIT AND RAIN TIGHT JUNCTION BOX. ALLOW 100 LF OF CONDUIT AND FISH WIRE; COORDINATE WITH OWNER.
18. NEMA-3R DISCONNECT SWITCH FOR FUTURE FUEL PUMP (BY OWNER) COORDINATE WITH OWNER FOR FEEDER SIZE. ALLOW 100 LF OF CONDUIT AND WIRING.
19. WALL PACK LUMINARIES; RE-PURPOSE FEEDERS FROM EXISTING REMOVED LUMINARIES.
20. .
21. EXISTING REFRIGERANT PIPING AND POWER CONDUITS TO REMAIN; PROVIDE PROTECTION DURING CONSTRUCTION.
22. .
23. .
24. .
25. ½" DOMESTIC WATER AND HOSE BIBBS; COPPER TYPE-K WITH FLARED FITTINGS. BURY PIPE 12" BELOW SLAB BOTTOM. PROVIDE SAND BEDDING AND COVERAGE 6" ALL AROUND PIPE.
26. FUEL DISPENSING CABINET; SEE SPECIFICATION ON THIS DRAWING.
27. .
28. .
29. .
30. .



KEY PLAN

NOT TO SCALE

FUEL DISPENSING CABINET

3

1. FACTORY MADE SYSTEM AND INDIVIDUAL COMPONENTS SHALL BE UL-LISTED AND LABELED, AND NFPA COMPLIANT.
2. CABINET:
   - 2.1. ALL STEEL CONSTRUCTION WITH POWDER COAT FINISHED INTERIOR AND EXTERIOR.
   - 2.2. STURDY PIANO HINGE DOOR W/GASKETED ENCLOSURE.
   - 2.3. LOCKING DOOR HARDWARE.
   - 2.4. REINFORCED AS NEEDED TO SUPPORT EQUIPMENT.
   - 2.5. WATERTIGHT CONDUIT AND PIPING PENETRATIONS.
   - 2.6. LIGHTED INTERIOR.
3. EQUIPMENT:
   - 3.1. PUMP: ELECTRICALLY OPERATED 35 GPM VS 60' TDH; 240V / 1PH / 60HZ.
   - 3.2. COALESCING FILTER
   - 3.3. MECHANICAL METER IN GALLONS
   - 3.4. ¾" DIAMETER X 50' HOSE WITH BREAKAWAY FITTINGS.
   - 3.5. SPRING REWIND HOSE REEL.
   - 3.6. NOZZLE WITH SWIVEL.
   - 3.7. ROLLER ASSEMBLY WITH HOSE STOP.
   - 3.8. GROUND REEL WITH 50' GROUNDING WIRE AND CLIP.

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PROFESSIONAL SEAL:

PROJECT

WORLD PLAZA - RELOCALIZACIÓN COMPACTADORA DE BASURA

SAN JUAN
Puerto Rico

REVISIONS

Rev	Date	Description
0	15 NOV 23	NEW DRAWING
1	15 FEB 24	GENERAL REVISION
2	15 FEB 24	GENERAL REVISION
3	21 OCT 24	PRE-BID NOTES

File Name: .

Scale: AS SHOWN Date: FEB 2023

DRAWING TITLE

PLUMBING

DRAWING NO.

P-1