



100% Design Review  
KABUL UNIVERSITY LAUNDRY FACILITY  
drawings dated September 30, 2010  
WO-LT-0015

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Comment #	Reviewer	Reference	Comment (by Tetra Tech)	Response Code	Response	Back-Check
<b>ARCHITECTURAL DRAWINGS</b>						
A-1	TMH	Arch. Specs	Add Rigid Insulation Section to spec for exterior walls			
A-2	TMH	Arch. Specs	Section for Painting missing, both Interior and Exterior.			
A-3	TMH	Arch. Specs	Add section for Tiles for tiling of floors and walls.			
A-4	TMH	Arch. Specs	Section for Doors and Door Hardware missing.			
A-5	TMH	Arch. Specs	Revise Batt Insulation type to be faced with foil as a vapor barrier to match drawings.			
A-6	TMH	Arch. Specs	Section for painting of metal guard rails and pickets with exterior grade paint is missing.			
A-7	TMH	All Sheets	Revise Disclaimer Note to more accurately reflect agreed upon code deviations. Ex.: " VEC and its affiliates are not liable for complying with sections of the current international code, IBC 2006, per certain allowed deviations from the code as agreed upon with USAID"			
A-8	TMH	A01	Boiler room walls indicate Wall Type 'C', Wall Type 'C' Detail C on A07 does not indicate that the wall is 1 hr. Fire Rated as required by code.			
A-9	TMH	A02,A03	Material Schedule does not indicate any wall insulation as part of the exterior wall construction. The 2006 IBC, Chapter 13 Energy Efficiency, references the International Energy Conservation Code. Table 502 of this code requires a minimum 'R' value of 5.7 for Mass walls above grade, Zone 4, which is the equivalent climate zone for Kabul. Minimum insulation thickness required is 2.5 cm.			
A-10	TMH	A02,A03	Roof note indicates a Pre-Engineered roof system, to date no drawings have been provided for review. Roof decking as shown is self-supporting, calculations are needed to verify that no structural members are needed to support the roof deck.			
A-11	TMH	A04	Door D3 for Boiler Room 105 is a 45 min. rated door, louvers indicated are not allowed. Suggest a wall vent with fire damper, or an exterior wall vent, for make-up air required for the water heater(s).			
A-12	TMH	A04	Revise Finish Schedule to reflect tile used on floors and walls in Rooms 101 Laundry and 104 Restroom. Wall tile to extend to 1.2m high,			
A-13	TMH	A04	Revise Material Schedule to reflect wall and floor tile being used.			
A-14	TMH	A04	Revise metal window note to PVC window.			
A-15	TMH	A04	Add rigid insulation at exterior walls for door and window details.			
A-16	TMH	A05	North Arrow is incorrect			

A-17	TMH	A05	Roof Ventilators indicated on the plan are rotated 90 degrees from the elevations.			
A-18	TMH	A06	Guardrail and handrail ends are to return to their own vertical posts, to ground, or to a wall.			
A-19	TMH	A06	Revise Restroom elevations to reflect wall tile installed to a height of 1.2m			
A-20	TMH	A07	Detail A indicates inner wythe of CMU stopping at 1.2m high. Wall as built extends above ceiling.			
A-21	TMH	A07	Wall Detail A1 indicates metal stud wall, and 1 hour rating at exterior walls. Metal studs are not being used, and exterior walls do not require a fire rating.			
A-22	TMH	A07	Detail B1 indicates a 1 hour rating, this is not required for exterior walls.			
A-23	TMH	A07	Revise Detail E to reflect wall tile on washing machine side of wall. Change "Exterior" to "Interior".			
A-24	TMH	A07	Detail H indicates plywood soffit, suggest metal to match gutters for durability.			
A-25	TMH	A07	Detail I - metal gutters and downspouts need to be galvanized.			
A-26	TMH	A07	Detail I - concrete splash blocks needed at downspouts.			



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 AE - Agree with exception

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<b>CIVIL COMMENTS - LAUNDRY FACILITY BUILDING 29</b>						
C-1	JWH	29-C04	Provide benchmark and survey control data. The laundry building on sheet C05 provides coordinated and elevations for the building. This information is insufficient for layout without existing survey control.			
C-2	JWH	29-C04- C05	Notes and Coordinates not legible			
C-3	JWH	29-C07 & C08	Previous (65%) comments C-22 to C-33 addressed by elimination of sheets. The plans reference movement of these items to the "Civil and Utilities Site Plan" which is not provided.			
C-35	JWH	Engineering & Utility Report	Water and sewer have not been designed. There is no wastewater treatment provided for this facility.			
C-40	JWH	Specifications	Technical specs reviewed. Water and sewer have been removed from this package No additional comments.			



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<b>STRUCTURAL COMMENTS - LAUNDRY FACILITY BUILDING 29</b>						
S1	FRS	Drawings 29-S05	Details 2/S04 & 3/S04 17/S04 indicate non-bearing wall elements as studwall, but not consistent with architectural details on A07. Coordinate and modify graphics as appropriate.			



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<b>MECHANICAL COMMENTS - LAUNDRY FACILITY BUILDING 29</b>						
M-1	CSR	29-M01	A 65% review comment was made regarding possible freezing of pipes in Boiler room and adjacent Restroom A103. Response was made that an freezing damage to an electric hot water heater is unlikely and that exposed piping is run in the laundry facility anyway. This response is noted here that the concern was considered and no heating was added.			
M-2	CSR	29-M01	Transfer grille in Restroom A103 has been deleted from 65% design. Grille is required to provide transfer air for room exhaust fan EF (Door Schedule on 29-A04 indicates door is not fire rated so grille is permissible). Reinstate grille TG(D) and symbol description for the 305mmx203mm grille.			
M-3	CSR	29-M01	The washers are scheduled on this page and included in the specs. as HVAC equipment therefore, show quantity and location of washers on this drawing and include "WM" label.			
M-4	CSR	Design Analysis (Engineering Report and Calculations)	Under Mechanical Section 4.1.d., Equipment Selection and Controls, add a description of the toilet exhaust fan for purpose of compliance with the Mechanical Code ventilation requirements.			
M-5	CSR	Specifications	Technical specs reviewed. No comments.			



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<b>PLUMBING COMMENTS - LAUNDRY FACILITY BUILDING 29</b>						
P-1	GPD	29-C05	Appears the drawing has some plotting issues. Need to verify the size and inverts on the sanitary sewer piping exiting the building has been coordinated with Drawing 29-P01.			
P-2	GPD	29-C05	See comment P-1. Need to verify water service size has been coordinated with Drawing 29-P01.			
P-3	GPD	29-S02	Coordinate western-most pipe sleeve with revised sanitary sewer routing on Drawing 29-P01.			
P-4	GPD	29-P01	For drawing clarity, move text where in conflict with relocated buried sanitary sewer line.			
P-5	GPD	29-P02	Looks like a plotting issue. The hot water piping system has printed faded or screened compared to the cold water piping.			



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<b>ELECTRICAL COMMENTS - LAUNDRY FACILITY BUILDING 29</b>						
E-1	JAS	29-E05	In the last line of Note 2 the word HIGH is misspelled. This comment was made during the 65% review and has NOT been corrected.			
E-2	JAS	29-E06	Detail 2, Note 1 - The reference should be to Structural Drawing 29-S05.			
E-3	JAS	Design Analysis (Engineering Report and Calculations)	Design Analysis reviewed. No comments			
E-4	JAS	Specifications	Technical specs reviewed. No comments.			