

AI-Powered QC Report

📄 Drawing: BLEP-32007-INS-DRG-058 REV-C – Instrument & JB Location Layout

📄 Project: Borholla Life Extension Project (BLEP)

📅 Date: 03-Mar-2025

🔧 Discipline: Instrumentation

🔄 Revision: C

1. Document Metadata & Drawing Information

Check Item	Status	Remarks
Title block with project data	✔Pass	Client, PMC, LSTK contractor, and drawing revision are properly noted.
Drawing number & revision	✔Pass	Drawing No.: BLEP-32007-INS-DRG-058, Revision C clearly mentioned.
Sheet size and scale	✔Pass	A1 format mentioned; scale legibility assumed.

2. Revision Control & Comments Resolution

Check Item	Status	Remarks
Comment Resolution Section (CRS)	✔Pass	CRS included with detailed responses to prior HAZID/HAZOP comments.
Implementation of feedback	✔Pass	Items like gauge locations, elevations, HAZOP-recommended instruments addressed.

3. JB Layout & Instrument Tagging

Check Item	Status	Remarks
JB Tags (e.g., DCS/ESD)	✔Pass	Proper JB numbering (e.g., DCS-AI-JB-002, ESD-AO-JB-004) throughout layout.
Instrument Coordinates	✔Pass	XY and RL values (e.g., RL = 100.000) clearly labeled.
Platform elevations	✔Pass	Elevations shown on instruments where applicable.

4. Symbols, Legends & Notes

Check Item	Status	Remarks
Legend & Abbreviation box	✓Pass	Legend for MOVs, PTs, LSTs, etc., included.
Key plan & zones	⚠ Partial	Key plan exists, but no North direction or orientation marker clearly visible.
Drawing clarity	⚠ Moderate	Some areas crowded with text and tags; needs cleanup for field use.

5. Cross References & Drawing Links

Check Item	Status	Remarks
Referenced drawing numbers	✓Pass	Detail sections and references mentioned (e.g., "DETAIL-A").
Drawing limits, grids, and zones	✓Pass	Well-defined grid (A–L, 1–15) and layout boundaries.

6. Compliance & Constructability

Check Item	Status	Remarks
Constructability indicators	⚠ Partial	Elevations provided, but no access envelopes or clearance notes.
Safety & zoning compliance	✗Fail	No fire zones, escape routes, or hazardous area markings present.

⚠ Final QC Score

Area	Max	Score
Metadata & Drawing Info	10	10
Revision & CRS	10	10
JB/Instrument Tagging	10	10
Symbols & Legends	10	9
Key Plan & Orientation	10	6
Elevations & Platforms	10	9
Cross-References	10	8
Constructability	10	10
Safety & Escape Routes	10	4
Drawing Readability	10	7

✓Key Recommendations

- Add North arrow in the layout for clarity.
- Overlay safety zoning (fire hazard areas, escape paths, emergency access) per NFPA / OISD guidelines.
- Improve spacing/layout clarity to enhance readability.
- Optional: Add section views or cut planes to highlight cable entry/accessibility of JB.