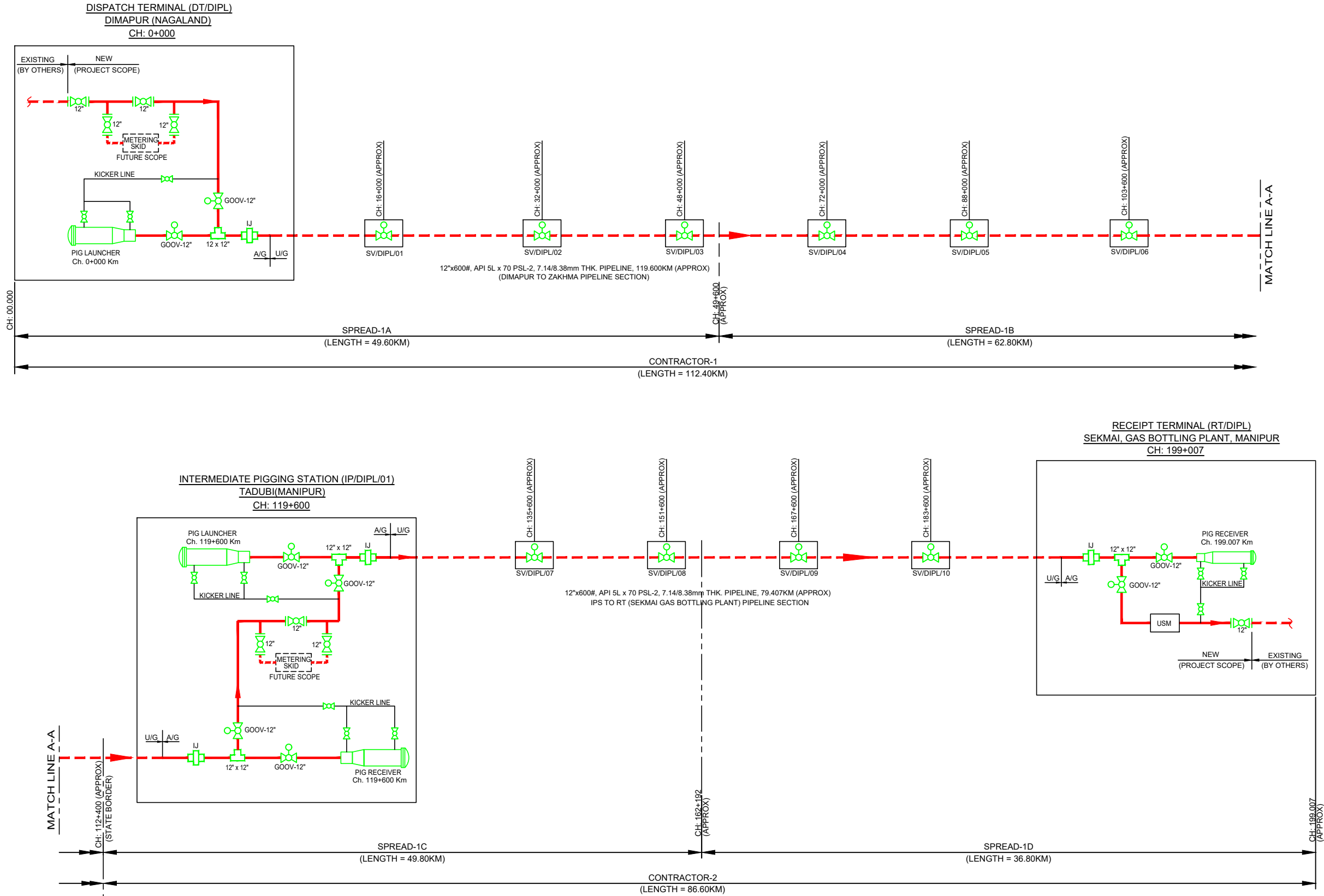


Drawings
(Pipeline Schematic for Siliguri-Gangtok
Pipeline
Pipeline Schematic for Dimapur-Imphal
Pipeline
P&IDs for Siliguri-Gangtok Pipeline
P&IDs for Dimapur-Imphal Pipeline)

PIPELINE SCHEMATIC DIAGRAM FOR NORTH EAST GAS GRID PHASE-III OF IGGL
DIMAPUR-KOHIMA-IMPHAL PIPELINE SECTION (DIPL)
12", 600# X 199.007 KM (APPROX), API 5L x 70 PSL-2



REFERENCE DRAWINGS / DOCUMENTS

| S.NO. | TITLE | NO. |
|-------|--------------------|-------------------------------|
| 1 | PIPELINE ROUTE MAP | C221052-02-PP-RM-2001 |
| 2 | P&ID - DIMAPUR | C221052-02-PC-PID-1001 & 1002 |
| 3 | P&ID - SV-1 | C221052-02-PC-PID-1003 |
| 4 | P&ID - RT | C221052-02-PC-PID-1004 |
| 5 | P&ID - IPS | C221052-02-PC-PID-1005 |

NOTES:-

- THIS PIPELINE SCHEMATIC HAS BEEN DEVELOPED BASED ON SURVEY DATA & DFR DOCUMENT PROVIDED BY IGGL.
- LOCATION OF INTERMEDIATE PIGGING STATION (IPS), SECTIONALIZE VALVE (SV) ARE SHOWN TENTATIVE HERE . EXACT LOCATION OF SV & IPS SHALL BE FINALIZED AT SITE BASED ON AVAILABILITY OF LAND, READILY ACCESSIBILITY, TERRAIN FEATURE ETC.
- BOUNDARY TO BOUNDARY LENGTH HAS BEEN SHOWN IN SCHEMATIC.

LEGEND:-

- : ACTUATED BALL VALVE
- : SV STATION
- : MANUAL VALVE
- : PIG LAUNCHER/RECEIVER
- : PROPOSED UNDER GROUND (UG) P/L
- : PROPOSED ABOVE GROUND (AG) P/L
- AG : ABOVE GROUND
- UG : UNDER GROUND
- P/L : PIPELINE
- TOP : TAP-OFF POINT
- IPS : INTERMEDIATE PIGGING STATION
- DIPL : DIMAPUR-KOHIMA-IMPHAL PIPELINE

PIPELINE DETAILS

| S.No. | ROUTE DESCRIPTION | PIPE SIZE & RATING | MATERIAL | THK. (mm) | LENGTH |
|-------|-------------------------|--------------------|-----------------|-------------|------------|
| 1. | DIMAPUR TO IPS (TADUBI) | 12"x600# | API 5Lx70 PSL-2 | 7.14 / 8.38 | 119.600 KM |
| 2. | IPS TADUBI TO RT | 12"x600# | API 5Lx70 PSL-2 | 7.14 / 8.38 | 79.407 KM |

TOTAL PIPELINE LENGTH - 199.007 KM (APPROX)

| REV. | DATE | DESCRIPTION | PREP. | CHKD. | APPD. |
|------|----------|-----------------------------|-------|-------|-------|
| D2 | 02.05.22 | RE-ISSUED FOR CLIENT REVIEW | JK | MC | HK |
| D1 | 05.04.22 | RE-ISSUED FOR CLIENT REVIEW | RA | MC | HK |
| C1 | 31.03.22 | ISSUED FOR CLIENT REVIEW | RA | MC | HK |
| B1 | 24.03.22 | ISSUED FOR INTERNAL REVIEW | RA | MC | HK |

CLIENT:



PM:



PROJECT:

NORTH EAST GAS GRID PHASE-III OF IGGL

TITLE:
PIPELINE SCHEMATIC DIAGRAM
(DIMAPUR-KOHIMA -IMPHAL PIPELINE SECTION)

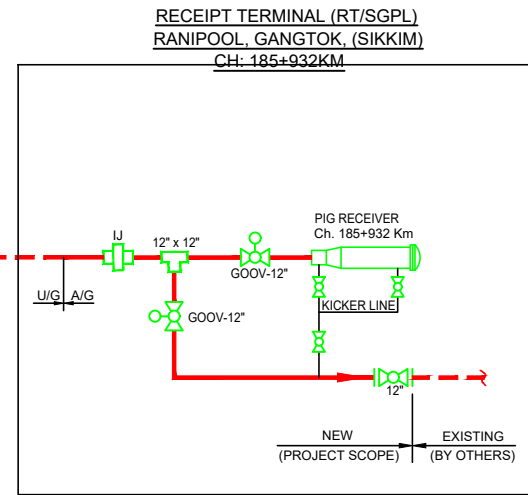
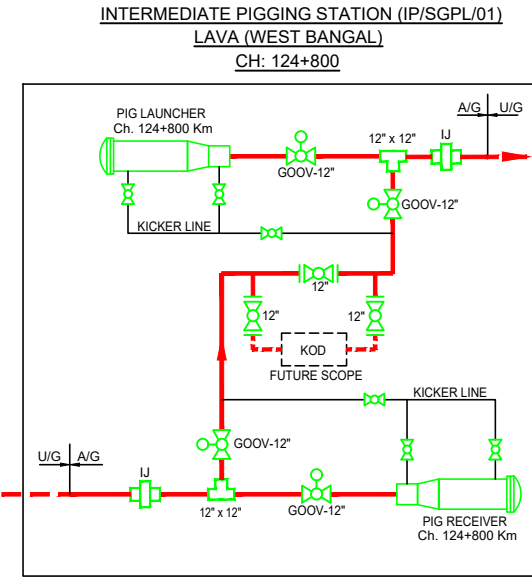
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|--------|---------|--------------------------|--------|
| SCALE: | N.T.S. | TOTAL NO. OF SHTS: | 1 OF 1 |
| SIZE | JOB NO. | DRAWING NUMBER | REV. |
| A1 | C221052 | C221052-DIPL-PP-SCM-2001 | D2 |

CROSSING DETAIL

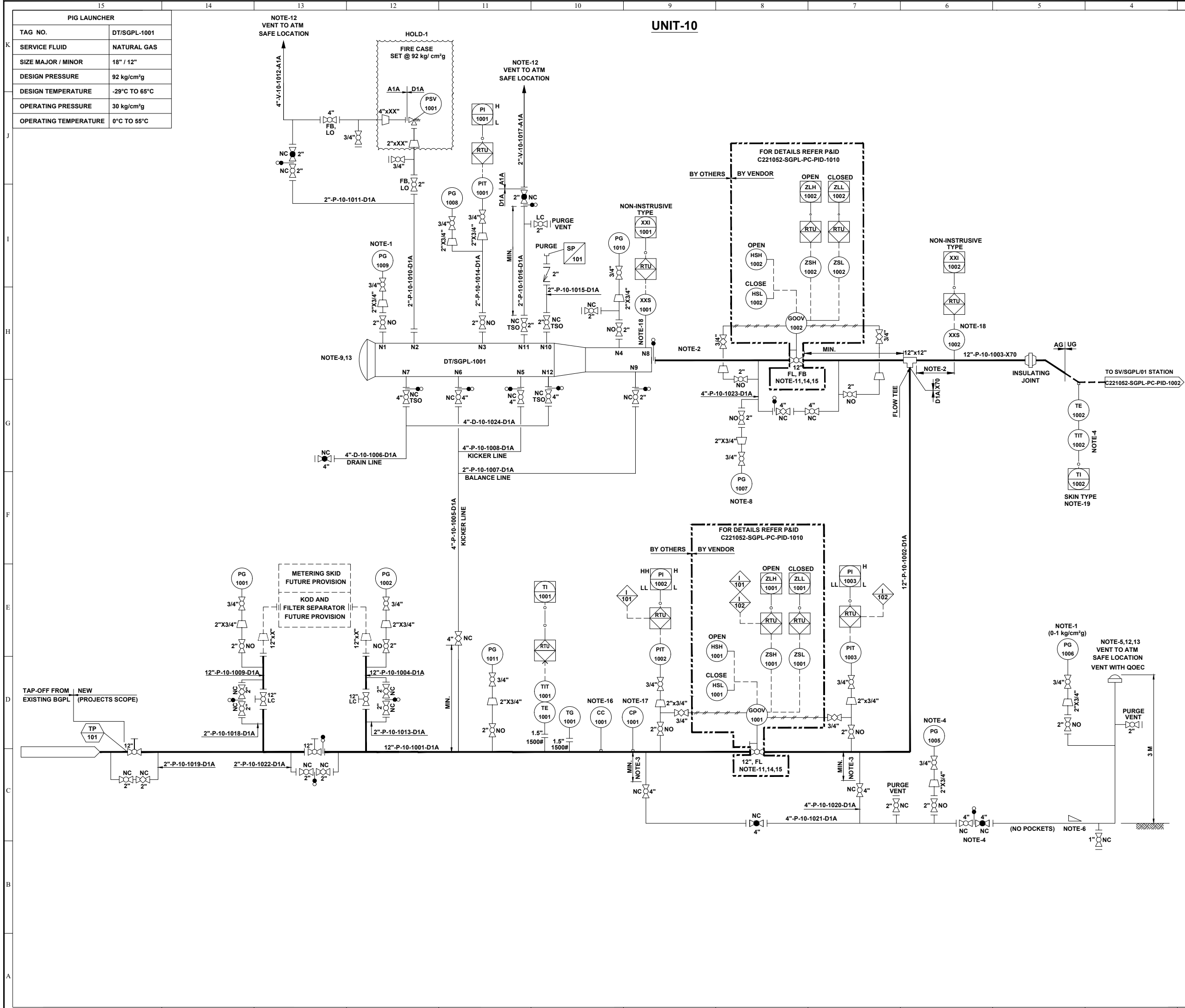
| Sr.No. | CROSSING | PIPELINE ROUTE | WIDTH (M) | CONSTRUCTION METHOD |
|--------|----------|----------------|-----------|---------------------|
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CROSSING DETAIL SHALL BE SHOWN UPON RECEIPT OF SURVEY DATA

12", 600# X 186 KM (APPROX), API 5L x 70 PSL-2

[illegible]

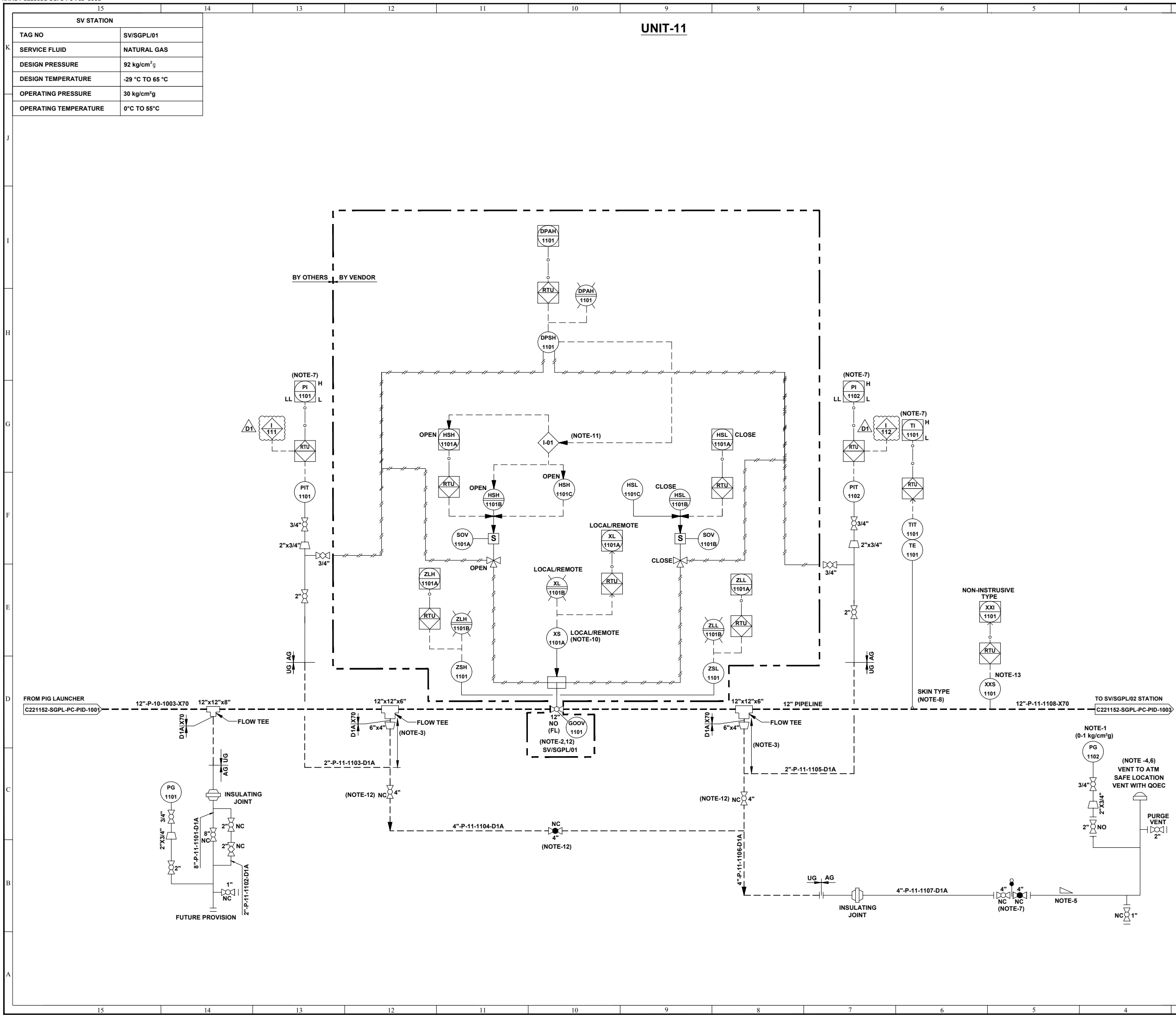
| | | | |
|---|----------------|---------------------------------|---------------|
| PROJECT: | | | |
| NORTH EAST GAS GRID PHASE-III OF IGGL | | | |
| TITLE: | | | |
| PIPELINE SCHEMATIC DIAGRAM (SILIGURI-GANGTOK PIPELINE SECTION) | | | |
| SCALE: | N.T.S. | TOTAL NO. OF SHTS: | 1 OF 1 |
| SIZE | JOB NO. | DRAWING NUMBER | REV. |
| A1 | C221052 | C221052-SGPL-PP-SCM-2001 | D2 |



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|---|----------|--------------------------|--------------------------|-------|--------|
| 3 | | 2 | | 1 | |
| REFERENCE DRAWINGS | | | | | |
| DRAWING TITLE | | | DRAWING NUMBER | | |
| P&ID LEGENDS | | | C221052-00-PC-LGD-1000 | | |
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| GENERAL NOTES:- | | | | | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221052-SGPL". | | | | | |
| 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221052-SGPL" . | | | | | |
| 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | | | | | |
| NOTES :- | | | | | |
| 1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm²g) SHALL BE PROVIDED WITH GAUGE SAVER. | | | | | |
| 2. DISTANCE SHALL BE AT LEAST EQUAL TO THE LENGTH OF THE LONGEST INTELLIGENT PIG. | | | | | |
| 3. BRANCH VALVE SHALL BE LOCATED AT MINIMUM DISTANCE. | | | | | |
| 4. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PG-1005 AND TIT-1002 CAN BE READ DURING VENTING. | | | | | |
| 5. VENT SHALL BE WITH QOEC. | | | | | |
| 6. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF PIPE IF ANY FOR LOW POINT DRAIN CONNECTION. | | | | | |
| 7. JUMPERS SHALL BE PROVIDED ACROSS ALL FLANGES. | | | | | |
| 8. PG-1007 SHALL HAVE A RANGE OF (0-5 kg/cm²g) SHALL BE PROVIDED WITH GAUGE SAVER AND LEAST COUNT OF 0.1 kg/cm²g. . | | | | | |
| 9. PROVISION OF A TROLLEY WITH PUSH ROD & PULLING LINE SHALL BE CONSIDERED TO ASSIST LOADING OR REMOVAL OF PIGS FROM THE SCRAPPER TRAP. | | | | | |
| 10. GAS DETECTORS TO BE PROVIDED IN DOWN WIND DIRECTION NEAR PIG BARRELS TO MONITOR LEAKAGE FROM FAILURE PRONE EQUIPMENTS PARTS,ACCESSORIES,VALVE & PIPES. | | | | | |
| 11. VALVE POSITION SHALL BE FAIL LAST. | | | | | |
| 12. ALL VENTS SHALL BE PROVIDED MIN. 3M HIGH FROM NEAREST HIGHEST OPERATING PLATFORM OR NEARBY STRUCTURE WITHIN 15M WHICHEVER IS HIGHER. NON SPARKING MATERIAL (BRASS) SHALL BE USED FOR FLAPPER TYPE VENT CONNECTION. | | | | | |
| 13. QUICK OPENING END CLOSURE TYPE DOOR CANNOT BE OPENED UNLESS PIG BARREL AND CONNECTED PIPING IS FULLY DEPRESSURIZE. | | | | | |
| 14. NECESSARY I/O's & SIGNAL FOR INTERFACE WITH SCADA SHALL BE DEVELOPED SEPARATELY. | | | | | |
| 15. ACTUATOR DETAILS OF GOOV CONTROL LOGIC SHALL BE AS PER P&ID. | | | | | |
| 16. 'CC' SHALL BE OF WEIGHT LOSS TYPE. | | | | | |
| 17. ONLINE RETRIEVAL TYPE CORROSION MONITORING COUPON AND CORROSION PROBE SHALL BE PROVIDED FURTHER WHEREVER SCADA SYSTEM ARE AVAILABLE, THIS SYSTEM SHALL BE ONLINE SCADA COMPATIBLE OTHERWISE DATA SHALL BE COLLECTED BY OFFLINE DATA LOGGER. | | | | | |
| 18. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES. | | | | | |
| 19. THERMOPAD SHALL BE WELDED TYPE. | | | | | |
| HOLDS:- | | | | | |
| 1. PSVs INLET & OUTLET SIZE ARE UNDER HOLD. SHALL BE FINALISED POST RECEIPT OF VENDOR DATA. | | | | | |
| INTER LOCK:- | | | | | |
| <div><div><div>1</div><div>101</div></div><div>VALVE GOOV-1001 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET.</div></div> | | | | | |
| <div><div><div>1</div><div>102</div></div><div>VALVE GOOV-1001 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET.</div></div> | | | | | |
| <div><div><div><div><div></div><div>VCS QUALITY SERVICES PVT. LTD.</div><div>d</div><div>XVI</div><div></div></div><div>100%</div><div>ISO 9001</div></div></div></div> | | | | | |
| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD | SKP |
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD | SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD | SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD | SKP |
| B1 | 30.04.22 | ISSUED FOR IDC | AK | AD | SKP |
| REV. | DATE | DESCRIPTION | PREP. | CHKD. | APPD. |
| CLIENT: | | | | | |
| <div><div><div><div></div><div>IGGL</div></div></div><div>INDRADHANUSH GAS GRID LIMITED</div></div> | | | | | |
| PMC: | | | | | |
| <div><div><div><div></div><div>Logo of Quality</div></div></div><div>VCS QUALITY SERVICES PVT. LTD.</div></div> | | | | | |
| PROJECT: | | | | | |
| NORTH EAST GAS GRID PHASE-III OF IGGL | | | | | |
| TITLE: | | | | | |
| P&ID FOR DISPATCH TERMINAL DT/SGPL AT SILIGURI | | | | | |
| SCALE: | | N. T. S | TOTAL NO. OF SHTS: | | 1 OF 1 |
| SIZE | JOB NO. | | DRAWING NUMBER | | REV. |
| A1 | C221052 | | C221052-SGPL-PC-PID-1001 | | D1 |

UNIT-11

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|---|-----------------------|-------------------------|--|
| | | 15 | |
| K | SV STATION | | |
| | TAG NO | SV/SGPL/01 | |
| | SERVICE FLUID | NATURAL GAS | |
| | DESIGN PRESSURE | 92 kg/cm ² g | |
| | DESIGN TEMPERATURE | -29 °C TO 65 °C | |
| | OPERATING PRESSURE | 30 kg/cm ² g | |
| | OPERATING TEMPERATURE | 0°C TO 55°C | |



REFERENCE DRAWINGS

| DRAWING TITLE | | DRAWING NUMBER | |
|--|--|------------------------|--|
| P&ID LEGENDS | | C221052-00-PC-LGD-1000 | |
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| GENERAL NOTES:- | | | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". | | | |
| 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". | | | |
| 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | | | |
| NOTES :- | | | |
| 1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm2g) SHALL BE PROVIDED WITH GAUGE SAVER. | | | |
| 2. VALVE SHALL BE FAIL LAST TYPE. | | | |
| 3. MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER. | | | |
| 4. VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES. | | | |
| 5. LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION. | | | |
| 6. VENT SHALL BE WITH QOEC. | | | |
| 7. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1101/1102 & TIT-1101 ON TRANSMITTER CAN BE READ DURING VENTING. | | | |
| 8. THERMOPAD SHALL BE WELDED TYPE. | | | |
| 9. JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES. | | | |
| 10. LOCAL / REMOTE | | | |
| <div><div></div><div>COMMAND ACCEPTED FROM SCADA / PANEL IN LOCAL / MAIN CONTROL ROOM.</div><div>COMMAND ACCEPTED FROM FIELD ONLY.</div></div> | | | |
| 11. THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/ cm ²) ACROSS THE VALVE. | | | |
| 12. BURIED VALVE WITH STEM EXTENSION. | | | |
| 13. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES. | | | |
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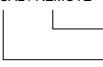
| DRAWING TITLE | | DRAWING NUMBER | |
|---------------|--|------------------------|--|
| P&ID LEGENDS | | C221052-00-PC-LGD-1000 | |
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GENERAL NOTES:-


- ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL".
- ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL".
- ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE.


NOTES :-


- LOW RANGE PRESSURE GAUGE (0-1 kg/cm²) SHALL BE PROVIDED WITH GAUGE SAVER.
- VALVE SHALL BE FAIL LAST TYPE.
- MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER.
- VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES.
- LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION.
- VENT SHALL BE WITH QOEC.
- DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1201/1202 & TIT-1201 ON TRANSMITTER CAN BE READ DURING VENTING.
- THERMOPAD SHALL BE WELDED TYPE.
- JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES.
- LOCAL / REMOTE


- THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/ cm²) ACROSS THE VALVE.
- BURIED VALVE WITH STEM EXTENSION.

INTER LOCK:-


 VALVE GOOV-1201 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET.

 VALVE GOOV-1201 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET.




| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD | SKP |
|------|----------|--------------------------|-------|-------|-------|
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD | SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD | SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD | SKP |
| B1 | 04.05.22 | ISSUED FOR IDC | AK | AD | SKP |
| REV. | DATE | DESCRIPTION | PREP. | CHKD. | APPD. |

CLIENT:



INDRADHANUSH GAS GRID LIMITED

PMC:



VCS QUALITY SERVICES PVT. LTD.

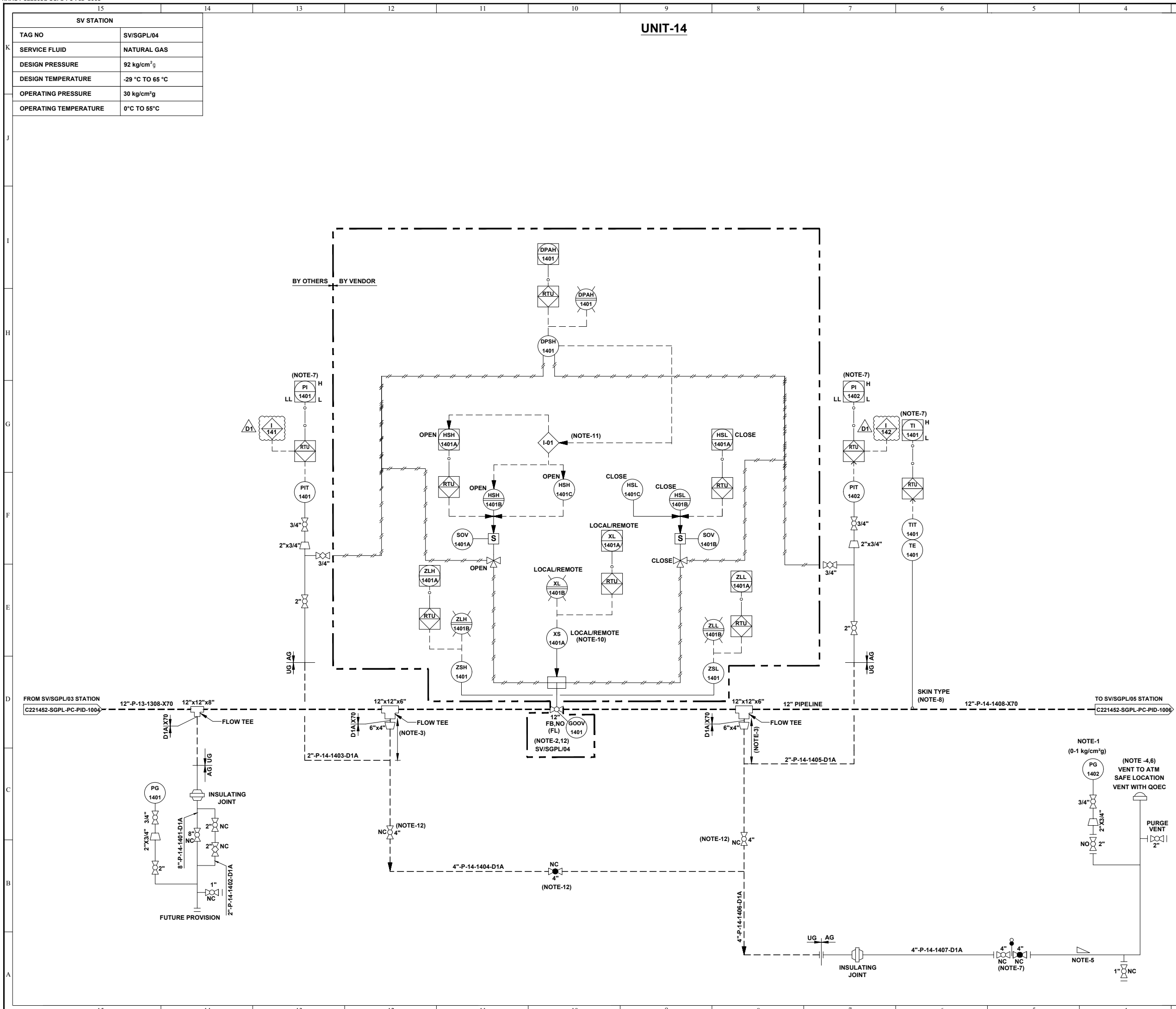
PROJECT:

NORTH EAST GAS GRID PHASE-III OF IGGL

TITLE:

P&ID FOR SV/SGPL/02 STATION AT SILIGURI - GANGTOK PIPELINE

| | | | |
|---------------|----------------|---------------------------|---------------|
| SCALE: | N.T.S | TOTAL NO. OF SHTS: | 1 OF 1 |
| SIZE | JOB NO. | DRAWING NUMBER | REV. |
| A1 | C221052 | C221052-SGPL-PC-PID-1003 | D1 |



REFERENCE DRAWINGS

| DRAWING TITLE | DRAWING NUMBER |
|---------------|----------------|
| P&ID LEGENDS | |
| | |
| | |
| | |
| | |

GENERAL NOTES:-

- ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221352-SGPL".
- ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221352-SGPL".
- ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE.

NOTES :-

- LOW RANGE PRESSURE GAUGE (0-1 kg/cm2g) SHALL BE PROVIDED WITH GAUGE SAVER.
- VALVE SHALL BE FAIL LAST TYPE.
- MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER.
- VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES.
- LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION.
- VENT SHALL BE WITH QOEC.
- DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1401/1402 & TIT-1401 ON TRANSMITTER CAN BE READ DURING VENTING.
- THERMOPAD SHALL BE WELDED TYPE.
- JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES.
- LOCAL / REMOTE

COMMAND ACCEPTED FROM SCADA / PANEL IN LOCAL / MAIN CONTROL ROOM.

COMMAND ACCEPTED FROM FIELD ONLY.

- THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/ cm²) ACROSS THE VALVE.
- BURIED VALVE WITH STEM EXTENSION.

INTER LOCK:-

D1

I 141

VALVE GOOV-1401 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET.

D1

I 142

VALVE GOOV-1401 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET.

QUALITY SERVICES PVT. LTD.

IGGL

XVI

| REV. | DATE | DESCRIPTION | PREP. | CHKD. | APPD. |
|------|----------|--------------------------|-------|-------|-------|
| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD | SKP |
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD | SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD | SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD | SKP |
| B1 | 04.05.22 | ISSUED FOR IDC | AK | AD | SKP |

CLIENT:

IGGL

INDRADHANUSH GAS GRID LIMITED

PMC:

IGGL

VCS QUALITY SERVICES PVT. LTD.








PROJECT:

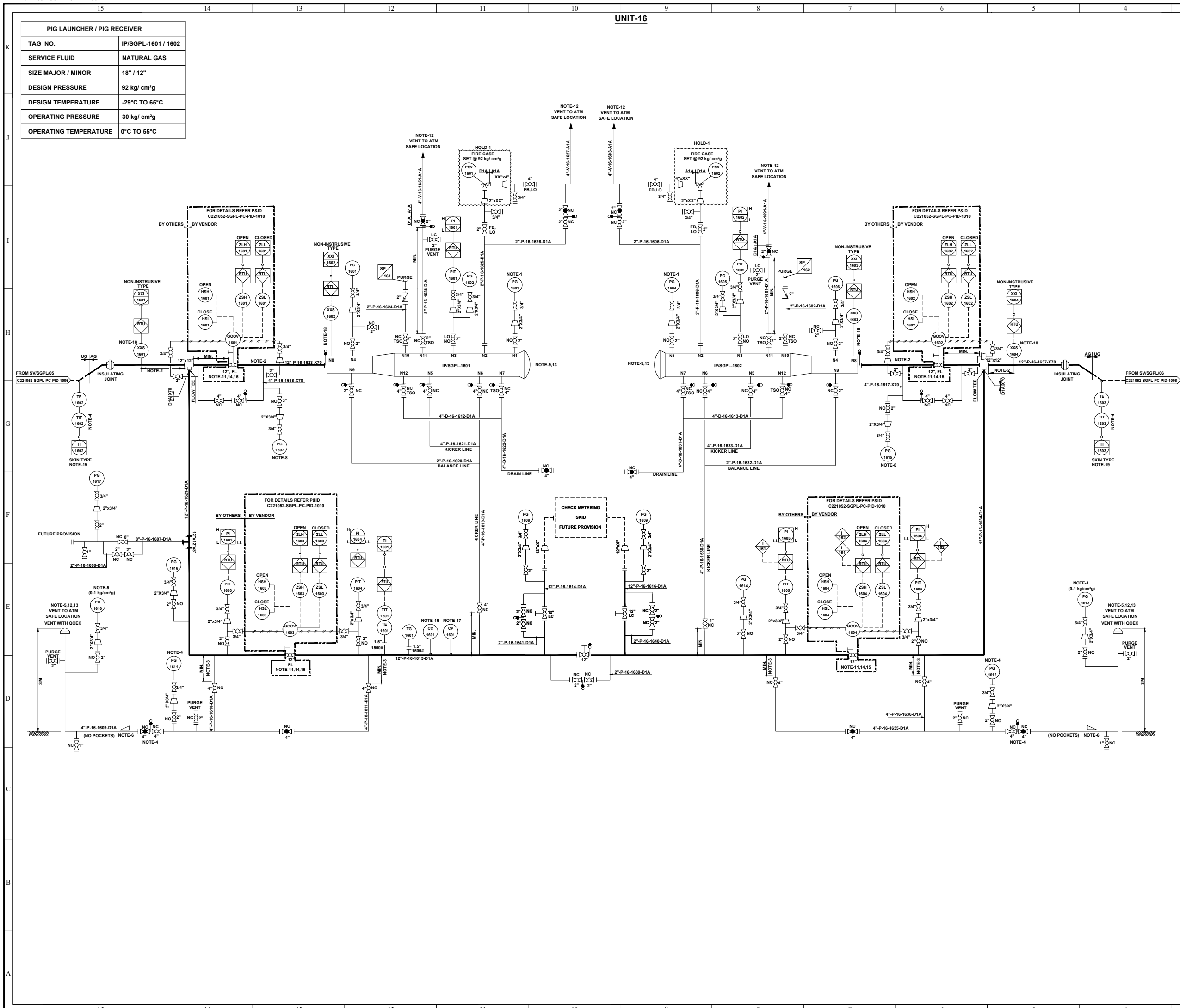
NORTH EAST GAS GRID PHASE-III OF IGGL

TITLE:

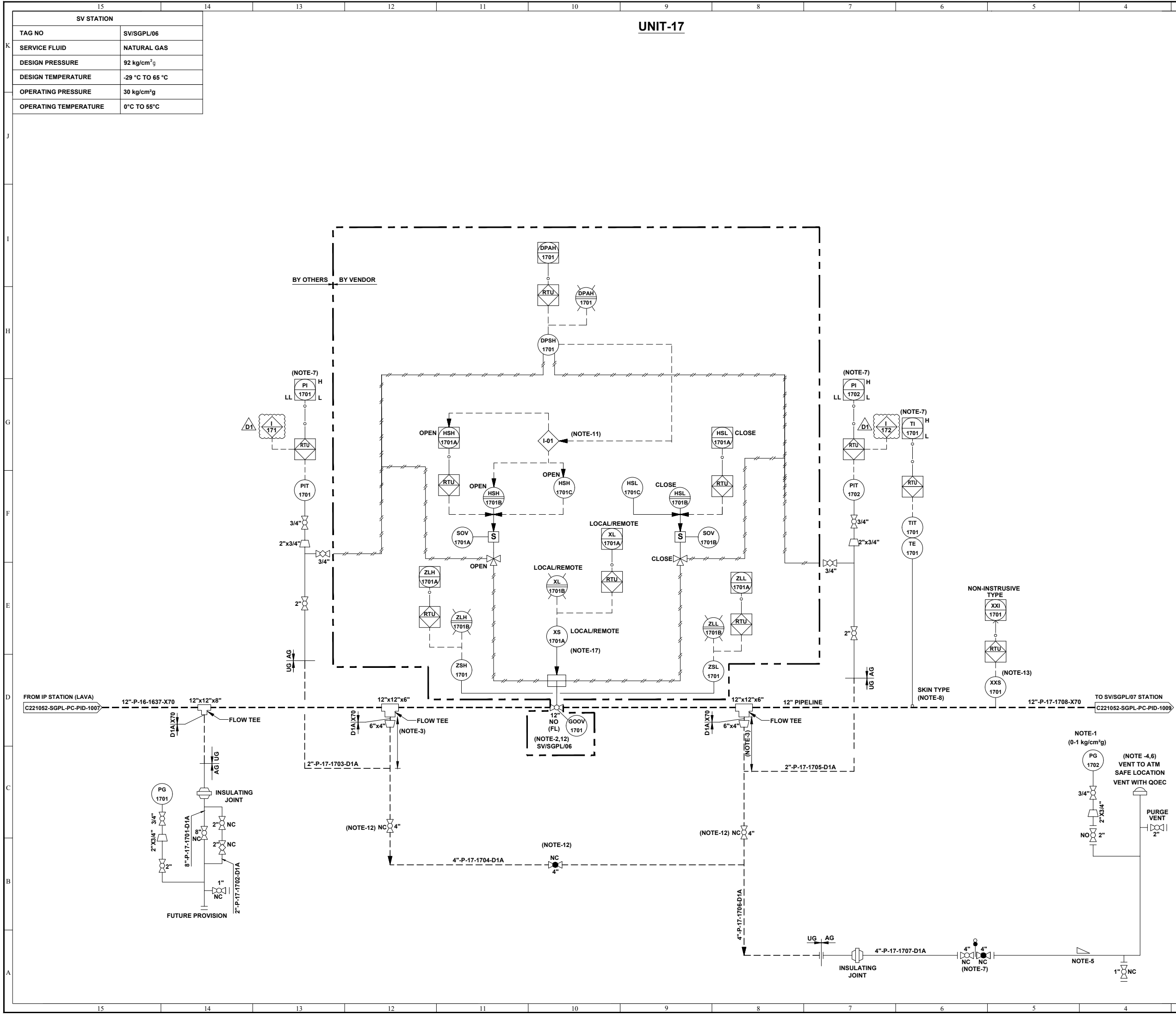
P&ID FOR SV/SGPL/04 STATION AT SILIGURI - GANGTOK PIPELINE

| SCALE: | N.T.S | TOTAL NO. OF SHTS: | 1 OF 1 |
|--------|---------|--------------------------|--------|
| SIZE | JOB NO. | DRAWING NUMBER | REV. |
| A1 | C221052 | C221052-SGPL-PC-PID-1005 | D1 |








| REFERENCE DRAWINGS | | | | |
|---|----------------|----------------------------------|-------|-------------|
| DRAWING TITLE | | DRAWING NUMBER | | |
| P&ID LEGENDS | | C221052-00-PC-LGD-1000 | | |
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| GENERAL NOTES:- | | | | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221352-SGPL". 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221352-SGPL". 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | | | | |
| NOTES :- | | | | |
| 1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm2g) SHALL BE PROVIDED WITH GAUGE SAVER. 2. VALVE SHALL BE FAIL TO STAY FAIL LAST TYPE. 3. MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER. 4. VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES. 5. LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION. 6. VENT SHALL BE WITH QOEC. 7. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1501/1502 & TIT-1501 ON TRANSMITTER CAN BE READ DURING VENTING. 8. THERMOPAD SHALL BE WELDED TYPE. 9. JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES. 10. LOCAL / REMOTE <div style="margin-left: 40px;">  </div> 11. THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/ cm²) ACROSS THE VALVE. 12. BURIED VALVE WITH STEM EXTENSION. 13. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES. | | | | |
| INTER LOCK:- | | | | |
|  | | | | |
| <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  </div> <div> VALVE GOOV-1501 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET. </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;">  </div> <div> VALVE GOOV-1501 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET. </div> </div> | | | | |
|  | | | | |
| | | | | |
| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD SKP |
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD SKP |
| B1 | 04.05.22 | ISSUED FOR IDC | AK | AD SKP |
| REV. | DATE | DESCRIPTION | PREP. | CHKD. APPD. |
| CLIENT: | | | | |
|  INDRADHANUSH GAS GRID LIMITED | | | | |
| PMC: | | | | |
|  VCS QUALITY SERVICES PVT. LTD. | | | | |
| PROJECT: | | | | |
| NORTH EAST GAS GRID PHASE-III OF IGGL | | | | |
| TITLE: | | | | |
| P&ID FOR SV/SGPL/05 STATION AT SILIGURI - GANGTOK PIPELINE | | | | |
| SCALE: N.T.S | | TOTAL NO. OF SHTS: 1 OF 1 | | |
| SIZE | JOB NO. | DRAWING NUMBER | | REV. |
| A1 | C221052 | C221052-SGPL-PC-PID-1006 | | D1 |



| REFERENCE DRAWINGS | |
|---|--------------------------|
| DRAWING TITLE | DRAWING NUMBER |
| P&ID LEGENDS | C221052-00-PC-LGD-1000 |
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| GENERAL NOTES:- | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221052". | |
| 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221052". | |
| 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | |
| NOTES :- | |
| 1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm²g) PROVIDED WITH GAUGE SAVER. | |
| 2. DISTANCE SHALL BE AT LEAST EQUAL TO THE LENGTH OF THE LONGEST INTELLIGENT PIG. | |
| 3. BRANCH VALVE SHALL BE LOCATED AT MINIMUM DISTANCE. | |
| 4. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PG-1611, PG-1612 & TIT-1602 / 1603 CAN BE READ DURING VENTING. | |
| 5. VENT SHALL BE WITH QOEC. | |
| 6. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF PIPE IF ANY FOR LOW POINT DRAIN CONNECTION. | |
| 7. JUMPERS SHALL BE PROVIDED ACROSS ALL FLANGES. | |
| 8. PG-1607 & 1615 SHALL HAVE A RANGE OF (0-5 kg/cm²g) SHALL BE PROVIDED WITH GAUGE SAVER AND LEAST COUNT OF 0.1 kg/cm²g. | |
| 9. PROVISION OF A TROLLEY WITH PUSH ROD & PULLING LINE SHALL BE CONSIDERED TO ASSIST LOADING OR REMOVAL OF PIGS FROM THE SCRAPER TRAP. | |
| 10. GAS DETECTORS TO BE PROVIDED IN DOWN WIND DIRECTION NEAR FLOW METERS, PIG BARRELS TO MONITOR LEAKAGE FROM FAILURE PRONE EQUIPMENTS PARTS, ACCESSORIES, VALVE & PIPES. | |
| 11. VALVE POSITION SHALL BE FAIL LAST. | |
| 12. ALL VENTS SHALL BE PROVIDED MIN. 3M HIGH FROM NEAREST HIGHEST OPERATING PLATFORM OR NEARBY STRUCTURE WITHIN 15M WHICHEVER IS HIGHER. NON SPARKING MATERIAL (BRASS) SHALL BE USED FOR FLAPPER TYPE VENT CONNECTION. | |
| 13. QUICK OPENING END CLOSURE TYPE DOOR CANNOT BE OPENED UNLESS PIG BARREL AND CONNECTED PIPING IS FULLY DEPRESSURIZE. | |
| 14. NECESSARY I/O's & SIGNAL FOR INTERFACE WITH SCADA SHALL BE DEVELOPED SEPARATELY. | |
| 15. ACTUATOR DETAILS OF GOV CONTROL LOGIC SHALL BE AS PER P&ID. | |
| 16. CC SHALL BE OF WEIGHT LOSS TYPE. | |
| 17. ONLINE RETRIEVAL TYPE CORROSION MONITORING COUPON AND CORROSION PROBE SHALL BE PROVIDED FURTHER WHEREVER SCADA SYSTEM ARE AVAILABLE. THIS SYSTEM SHALL BE ONLINE SCADA COMPATIBLE OTHERWISE DATA SHALL BE COLLECTED BY OFFLINE DATA LOGGER. | |
| 18. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES. | |
| 19. THERMOPAD SHALL BE WELDED TYPE. | |
| HOLDS:- | |
| 1. PSVs INLET & OUTLET SIZE ARE UNDER HOLD. SHALL BE FINALISED POST RECEIPT OF VENDOR DATA. | |
| INTER LOCK:- | |
| VALVE GOOV-1604 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET. | |
| VALVE GOOV-1604 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET. | |
| CLIENT: | |
| INDRADHANUSH GAS GRID LIMITED | |
| PMC: | |
| VCS QUALITY SERVICES PVT. LTD. | |
| PROJECT: | |
| NORTH EAST GAS GRID PHASE-III OF IGGL | |
| TITLE: | |
| P&ID FOR IP STATION AT LAVA (WEST BENGAL) | |
| SCALE: | N. T. S |
| TOTAL NO. OF SHTS: | 1 OF 1 |
| SIZE | JOB NO. |
| A1 | C221052 |
| DRAWING NUMBER | C221052-SGPL-PC-PID-1007 |
| REV. | D1 |

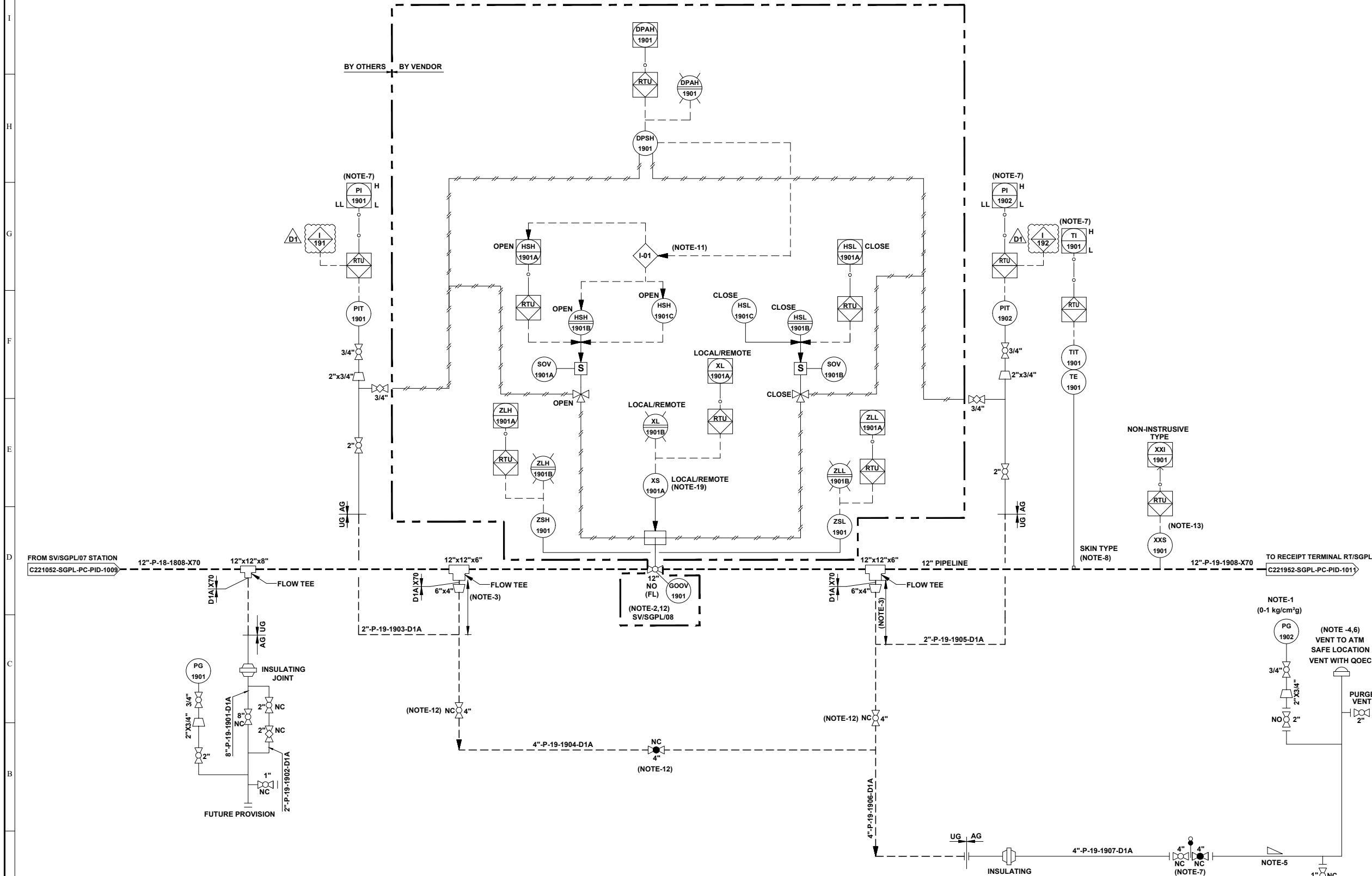


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|--|--|---|------------------------|---|--|
| 3 | | 2 | | 1 | |
| REFERENCE DRAWINGS | | | | | |
| DRAWING TITLE | | | DRAWING NUMBER | | |
| P&ID LEGENDS | | | C221052-00-PC-LGD-1000 | | |
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| | | | | | |
| | | | | | |
| GENERAL NOTES:- | | | | | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". | | | | | |
| 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". | | | | | |
| 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | | | | | |
| NOTES :- | | | | | |
| 1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm2g) SHALL BE PROVIDED WITH GAUGE SAVER. | | | | | |
| 2. VALVE SHALL BE FAIL LAST TYPE. | | | | | |
| 3. MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER. | | | | | |
| 4. VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES. | | | | | |
| 5. LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION. | | | | | |
| 6. VENT SHALL BE WITH QOEC. | | | | | |
| 7. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1701/1702 & TIT-1701 ON TRANSMITTER CAN BE READ DURING VENTING. | | | | | |
| 8. THERMOPAD SHALL BE WELDED TYPE. | | | | | |
| 9. JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES. | | | | | |
| 10. LOCAL / REMOTE | | | | | |
| <div><div></div><div>COMMAND ACCEPTED FROM SCADA / PANEL IN LOCAL / MAIN CONTROL ROOM.</div><div>COMMAND ACCEPTED FROM FIELD ONLY.</div></div> | | | | | |
| 11. THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/ cm ²) ACROSS THE VALVE. | | | | | |
| 12. BURIED VALVE WITH STEM EXTENSION. | | | | | |
| 13. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES. | | | | | |
| INTER LOCK:- | | | | | |
| <div><div><div>1</div><div>171</div></div><div>VALVE GOOV-1701 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET.</div></div> <div><div><div>1</div><div>172</div></div><div>VALVE GOOV-1701 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET.</div></div> | | | | | |
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<div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></d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| REFERENCE DRAWINGS | | | | |
|--|-----------------|----------------------------------|--------------|--------------------|
| DRAWING TITLE | | DRAWING NUMBER | | |
| P&ID LEGENDS | | C221052-00-PC-LGD-1000 | | |
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| GENERAL NOTES:- | | | | |
| 1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". 2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL". 3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGABLE) SHALL BE REDUCED BORE TYPE. | | | | |
| NOTES :- | | | | |
| 1. VALVES UP TO 4" SHALL BE LEVER OPERATED TYPE & ABOVE 4" SHALL BE HYDRAULIC OPERATED TYPE. 2. VALVE SHALL BE FAIL LAST TYPE. 3. MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER. 4. VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES. 5. LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION. 6. VENT SHALL BE WITH QOEC. 7. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1801/1802 & TIT-1801 ON TRANSMITTER CAN BE READ DURING VENTING. 8. THERMOPAD SHALL BE WELDED TYPE. 9. JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES. 10. LOCAL / REMOTE <div style="margin-left: 40px;">  <p style="margin-left: 20px;">COMMAND ACCEPTED FROM SCADA / PANEL IN LOCAL / MAIN CONTROL ROOM.</p> <p style="margin-left: 20px;">COMMAND ACCEPTED FROM FIELD ONLY.</p> </div> 11. THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE (> 3.0 kg/cm²) ACROSS THE VALVE. 12. BURIED VALVE WITH STEM EXTENSION. 13. LOW RANGE PRESSURE GAUGE (0-1 kg/cm²g) SHALL BE PROVIDED WITH GAUGE SAVER. | | | | |
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| INTER LOCK:- | | | | |
| <div style="text-align: center; margin-bottom: 10px;">  D1 </div> <div style="border: 1px dashed black; padding: 5px; margin-bottom: 10px;">  VALVE GOOV-1801 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET. </div> <div style="border: 1px dashed black; padding: 5px;">  VALVE GOOV-1801 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET. </div> | | | | |
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| | | | | |
| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD SKP |
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD SKP |
| B1 | 04.05.22 | ISSUED FOR IDC | AK | AD SKP |
| REV. | DATE | DESCRIPTION | PREP. | CHKD. APPD. |
| CLIENT: | | | | |
|  INDRADHANUSH GAS GRID LIMITED | | | | |
| PMC: | | | | |
|  VCS QUALITY SERVICES PVT. LTD. | | | | |
| PROJECT: | | | | |
| NORTH EAST GAS GRID PHASE-III OF IGGL | | | | |
| TITLE: | | | | |
| P&ID FOR SV/SGPL/07 STATION AT SILIGURI - GANGTOK PIPELINE | | | | |
| SCALE: N.T.S | | TOTAL NO. OF SHTS: 1 OF 1 | | |
| SIZE | JOB NO. | DRAWING NUMBER | REV. | |
| A1 | C221052 | C221052-SGPL-PC-PID-1009 | D1 | |

1

| | BY OTHERS | BY VENDOR |
|-------------------------------|-----------|-----------|
| 1. <u>Accounts receivable</u> | 100 | 100 |
| 2. <u>Accounts payable</u> | 100 | 100 |
| 3. <u>Inventory</u> | 100 | 100 |
| 4. <u>Prepaid expenses</u> | 100 | 100 |
| 5. <u>Accrued liabilities</u> | 100 | 100 |
| 6. <u>Other assets</u> | 100 | 100 |
| 7. <u>Other liabilities</u> | 100 | 100 |
| 8. <u>Equity</u> | 100 | 100 |
| 9. <u>Other</u> | 100 | 100 |
| 10. <u>Total</u> | 1000 | 1000 |



| DRAWING TITLE | DRAWING NUMBER |
|---------------|------------------------|
| P&ID LEGENDS | C221052-00-PC-LGD-1000 |
| | |
| | |
| | |

1. ALL LINE NUMBERING AND EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL".
2. ALL INSTRUMENT TAG NUMBER SHALL BE PRE-FIXED WITH PROJECT CODE & AREA CODE "C221152-SGPL".
3. ALL BALL VALVE IN PIPELINE EXCEPT IN MAIN LINE (PIGGAGE) SHALL BE REDUCED BORE TYPE.

1. LOW RANGE PRESSURE GAUGE (0-1 kg/cm2g) SHALL BE PROVIDED WITH GAUGE SAVER.
2. VALVE SHALL BE FAIL LAST TYPE.
3. MINIMUM DISTANCE SHOULD BE EITHER 1.5D OR 1 METER, WHICHEVER IS HIGHER.
4. VENT SHALL BE LOCATED AT SAFE DISTANCE (MIN. HEIGHT OF 3.0M ABOVE THE HEIGHT WORKING PLATFORM FALLING WITHIN 15.0M RADIUS VENT) AS PER PNGRB GUIDELINES.
5. LOW POINT DRAIN SHALL BE PROVIDED ON DEPRESSURIZATION LINE AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION.
6. VENT SHALL BE WITH QOEC.
7. DEPRESSURIZATION VALVE SHALL BE LOCATED IN SUCH A WAY THAT PIT 1901/1902 & TIT-1901 ON TRANSMITTER CAN BE READ DURING VENTING.
8. THERMOPAD SHALL BE WELDED TYPE.
9. JUMPER SHALL BE PROVIDED ACROSS ALL FLANGES.
10. LOCAL / REMOTE




- COMMAND ACCEPTED FROM SCADA / PANEL IN LOCAL / MAIN CONTROL ROOM.
- COMMAND ACCEPTED FROM FIELD ONLY.

11. THIS INTERLOCK IS PROVIDED TO INHIBIT THE OPENING OF VALVE FROM REMOTE AS WELL AS LOCAL IN CASE OF HIGH DIFFERENTIAL PRESSURE ($> 3.0 \text{ kg/cm}^2$) ACROSS THE VALVE.
12. BURIED VALVE WITH STEM EXTENSION.
13. PIG SIGNALER CONNECTION SHALL BE CLAMP ON TYPES.

191 VALVE GOOV-901 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION INLET.

192 VALVE GOOV-901 SHALL CLOSE ON LOW LOW PRESSURE OF THE PIPELINE AT STATION OUTLET.



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| | | |  |  |  |
| D1 | 27.09.22 | ISSUED FOR DESIGN | SP | AD | SKP |
| C3 | 24.06.22 | ISSUED FOR HAZOP | HS | AD | SKP |
| C2 | 23.05.22 | ISSUED FOR APPROVAL | HS | AD | SKP |
| C1 | 16.05.22 | ISSUED FOR CLIENT REVIEW | AK | AD | SKP |
| B1 | 04.05.22 | ISSUED FOR IDC | AK | AD | SKP |
| REV. | DATE | DESCRIPTION | PREP. | CHKD. | APPD. |


INDRADHANUSH GAS GRID LIMITED

 **VCS QUALITY SERVICES PVT. LTD.**

NORTH EAST GAS GRID PHASE-III OF IGGL

| | |
|--------|---|
| TITLE: | P&ID FOR SV/SGPL/08 STATION AT SILIGURI - GANGTOK PIPELINE |
|--------|---|

| | | | |
|--------------|---------|---------------------------|------|
| SCALE: N.T.S | | TOTAL NO. OF SHTS: 1 OF 1 | |
| SIZE | JOB NO. | DRAWING NUMBER | REV. |
| A1 | C221052 | C221052-SGPL-PC-PID-1010 | D1 |

