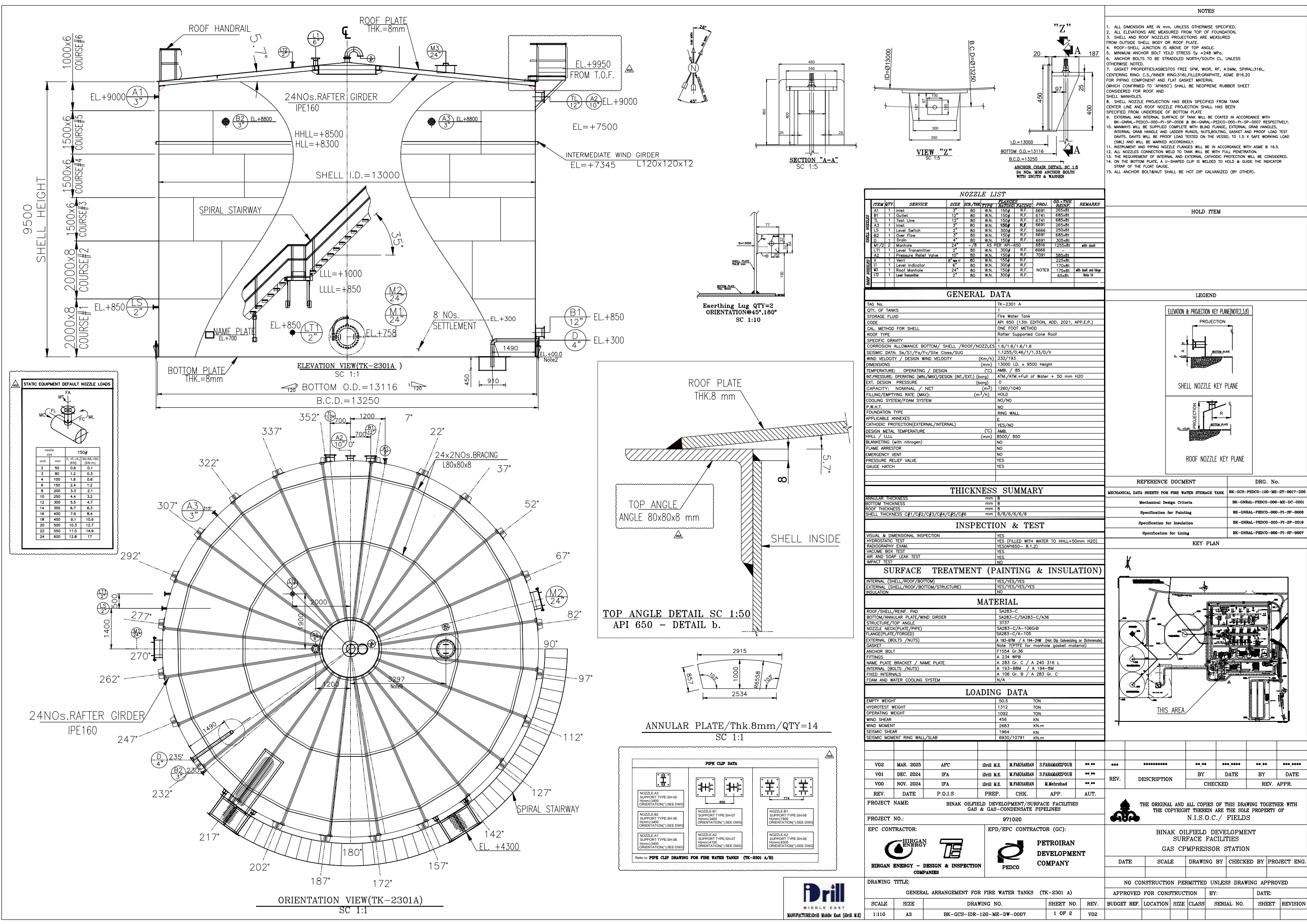






- NOTES
- ALL DIMENSION ARE IN mm, UNLESS OTHERWISE SPECIFIED.
  - ALL ELEVATIONS ARE MEASURED FROM TOP OF FOUNDATION.
  - SHELL AND ROOF NOZZLES PROJECTIONS ARE MEASURED FROM OUTSIDE SHELL BODY OR ROOF PLATE.
  - ROOF-SHELL JUNCTION IS ABOVE OF TOP ANGLE.
  - MINIMUM ANCHOR BOLT YIELD STRESS  $S_y = 248 \text{ MPa}$ .
  - ANCHOR BOLTS TO BE STRADDLED NORTH/SOUTH CL. UNLESS OTHERWISE NOTED.
  - GASKET PROPERTIES: ASBESTOS FREE SPW, WOOD, RF, 4.5MM, SPIRAL-316L, CENTERING RING: C.S./INNER RING-316L, FILLER: GRAPHITE, ASME B16.20 FOR PIPING COMPONENT AND FLAT GASKET MATERIAL. (WHICH CONFORMED TO "API 650") SHALL BE NEOPRENE RUBBER SHEET CONSIDERED FOR ROOF AND SHELL MANHOLES.
  - SHELL NOZZLE PROJECTION HAS BEEN SPECIFIED FROM TANK CENTER LINE AND ROOF NOZZLE PROJECTION SHALL BE SPECIFIED FROM UNDERSIDE OF BOTTOM PLATE.
  - EXTERNAL AND INTERNAL SURFACE OF TANK WILL BE COATED IN ACCORDANCE WITH BK-GNRL-PEDCO-000-PI-SP-0006 & BK-GNRL-PEDCO-000-PI-SP-0007 RESPECTIVELY.
  - MANWAYS WILL BE SUPPLIED COMPLETE WITH BLIND FLANGE, EXTERNAL GRAB HANDLES, INTERNAL GRAB HANDLE AND LADDER RUNGS, NUTS, BOLTING, GASKET AND PROOF LOAD TEST SWIRTS. SWIRTS WILL BE PROOF LOAD TESTED ON THE VESSEL TO 1.5 X SAFE WORKING LOAD (SWL) AND WILL BE MARKED ACCORDINGLY.
  - INSTRUMENT AND PIPING NOZZLE FLANGES WILL BE WITH FULL PENETRATION.
  - ALL NOZZLES CONNECTION WELD TO TANK WILL BE IN ACCORDANCE WITH API 650.
  - ON THE BOTTOM PLATE, A U-SHAPED CLIP IS WELDED TO HOLD & GUIDE THE INDICATOR STRAP OF THE FLOAT GAUGE.
  - ALL ANCHOR BOLT/NUT SHALL BE HOT DIP GALVANIZED (BY OTHER).

NOZZLE LIST

| ITEM | QTY. | SERVICE               | SIZE | SC | THK    | TYPE    | PROJ. | OB. THK | REMARKS                     |
|------|------|-----------------------|------|----|--------|---------|-------|---------|-----------------------------|
| A1   | 1    | Inlet                 | 3"   | 80 | W.N.   | 150#    | R.F.  | 6691    | 265x81                      |
| B1   | 1    | Outlet                | 12"  | 80 | W.N.   | 150#    | R.F.  | 6741    | 685x81                      |
| TL   | 1    | Test Line             | 12"  | 80 | W.N.   | 150#    | R.F.  | 6741    | 685x81                      |
| A3   | 1    | Inlet                 | 3"   | 80 | W.N.   | 150#    | R.F.  | 6691    | 265x81                      |
| LS   | 1    | Level Switch          | 2"   | 80 | W.N.   | 300#    | R.F.  | 6666    | 250x81                      |
| B2   | 1    | Over Flow             | 3"   | 80 | W.N.   | 150#    | R.F.  | 6691    | 685x81                      |
| D    | 1    | Drain                 | 4"   | 80 | W.N.   | 150#    | R.F.  | 6691    | 305x81                      |
| M1/2 | 2    | Manhole               | 24"  | -  | AS PER | API-650 |       | 6616    | 1255x81 with draft          |
| LT1  | 1    | Level Transmitter     | 2"   | 80 | W.N.   | 300#    | R.F.  | 6666    |                             |
| A2   | 1    | Pressure Relief Valve | 10"  | 80 | W.N.   | 150#    | R.F.  | 7091    | 585x81                      |
| V    | 1    | Vent                  | 8"   | 80 | W.N.   | 150#    | R.F.  |         | 225x81                      |
| LI   | 1    | Level Indicator       | 6"   | 80 | W.N.   | 300#    | R.F.  |         | 170x81                      |
| M    | 1    | Roof Manhole          | 24"  | 80 | W.N.   | 150#    | R.F.  | NOTE9   | 175x81 with draft and slope |
| LT2  | 1    | Level Transmitter     | 2"   | 80 | W.N.   | 300#    | R.F.  |         | 65x81 Note 11               |

GENERAL DATA

|                                                       |                                            |
|-------------------------------------------------------|--------------------------------------------|
| TAG No.                                               | TK-2301 A                                  |
| QTY. OF TANKS                                         | 1                                          |
| STORAGE FLUID                                         | Fire Water Tank                            |
| CODE                                                  | API 650 (13th EDITION, ADD. 2021, APP.E.)  |
| CAL. METHOD FOR SHELL                                 | ONE FOOT METHOD                            |
| ROOF TYPE                                             | Rafter Supported Cone Roof                 |
| SPECIFIC GRAVITY                                      | 1                                          |
| CORROSION ALLOWANCE BOTTOM/ SHELL / ROOF/NOZZLES      | 1.6/1.6/1.6/1.6                            |
| SEISMIC DATA: $S_s/S_1/F_o/F_v$ Site Class/SUG        | 1.1255/0.46/1/1.33/D/II                    |
| WIND VELOCITY / DESIGN WIND VELOCITY                  | (km/h) 232/193                             |
| DIMENSION                                             | (mm) 13000 I.D. x 9500 Height              |
| TEMPERATURE: OPERATING / DESIGN                       | (°C) AMB. / 85                             |
| INT.PRESSURE: OPERATING (MIN./MAX)/DESIGN (INT./EXT.) | (barg) ATM./ATM.+Full of Water + 50 mm H2O |
| EXT. DESIGN PRESSURE                                  | (barg) 0                                   |
| CAPACITY: NOMINAL / NET                               | (m <sup>3</sup> ) 1260/1040                |
| FILLING/EMPTYING RATE (MAX)                           | (m <sup>3</sup> /h) HOLD                   |
| COOLING SYSTEM/FOAM SYSTEM                            | NO/NO                                      |
| P.W.H.T.                                              | NO                                         |
| FOUNDATION TYPE                                       | RING WALL                                  |
| APPLICABLE ANNEXES                                    | E                                          |
| CATHODIC PROTECTION (EXTERNAL/INTERNAL)               | YES/NO                                     |
| DESIGN METAL TEMPERATURE                              | (°C) AMB.                                  |
| HULL / LULL                                           | (mm) 8500/ 850                             |
| BLANKETING (with nitrogen)                            | NO                                         |
| FLAME ARRESTOR                                        | NO                                         |
| EMERGENCY VENT                                        | NO                                         |
| PRESSURE RELIEF VALVE                                 | YES                                        |
| GAUGE HATCH                                           | YES                                        |

THICKNESS SUMMARY

|                   |                     |
|-------------------|---------------------|
| ANNULAR THICKNESS | mm 8                |
| BOTTOM THICKNESS  | mm 8                |
| ROOF THICKNESS    | mm 8                |
| SHELL THICKNESS   | mm 8/17/8/2/8/5/8/6 |

INSPECTION & TEST

|                                 |                                          |
|---------------------------------|------------------------------------------|
| VISUAL & DIMENSIONAL INSPECTION | YES                                      |
| HYDROSTATIC TEST                | YES (FILLED WITH WATER TO HULL+50mm H2O) |
| RADIOGRAPHY EXAM.               | YES (API650 - B.1.2)                     |
| VACUUM BOX TEST                 | YES                                      |
| AIR AND SOAP LEAK TEST          | YES                                      |
| IMPACT TEST                     | NO                                       |

SURFACE TREATMENT (PAINTING & INSULATION)

|                                        |                 |
|----------------------------------------|-----------------|
| INTERNAL (SHELL/ROOF/BOTTOM)           | YES/YES/YES     |
| EXTERNAL (SHELL/ROOF/BOTTOM/STRUCTURE) | YES/YES/YES/YES |
| INSULATION                             | NO              |

MATERIAL

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| ROOF/SHELL/REIN. PAD             | SA283-C                                                   |
| BOTTOM/ANNULAR PLATE/WIND GIRDER | SA283-C/SA283-C/A36                                       |
| STRUCTURE/TOP ANGLE              | S137                                                      |
| NOZZLE NECK (PLATE/PIPE)         | SA283-C/A-106G/B                                          |
| FLANGE (PLATE/FORGED)            | SA283-C/A-105                                             |
| EXTERNAL (BOLTS /NUTS)           | A 193-87M / A 194-2HM (Hot Dip Galvanizing or Dichromate) |
| GASKET                           | Note 7 (PTFE for manhole gasket material)                 |
| ANCHOR BOLT                      | F1554 Gr.36                                               |
| FITTINGS                         | A 234 WBR                                                 |
| NAME PLATE BRACKET / NAME PLATE  | A 283 Gr. C / A 240 316 L                                 |
| INTERNAL (BOLTS /NUTS)           | A 193-88M / A 194-8M                                      |
| FIXED INTERVALS                  | A 106 Gr. B / A 283 Gr. C                                 |
| FOAM AND WATER COOLING SYSTEM    | N/A                                                       |

LOADING DATA

|                               |                 |
|-------------------------------|-----------------|
| EMPTY WEIGHT                  | 50.5 TON        |
| HYDROTEST WEIGHT              | 1312 TON        |
| OPERATING WEIGHT              | 1092 TON        |
| WIND SHEAR                    | 456 KN          |
| WIND MOMENT                   | 2683 KN.m       |
| SEISMIC SHEAR                 | 1964 KN         |
| SEISMIC MOMENT RING WALL/SLAB | 6930/10791 KN.m |

REVISION

| REV. | DATE      | P.O.I.S | PREP.       | CHK.        | APP.           | AUT. |
|------|-----------|---------|-------------|-------------|----------------|------|
| VO2  | MAR. 2025 | APC     | idhili M.E. | M.PAKHARIAN | S.FARAMARZPOUR | ***  |
| VO1  | DEC. 2024 | IFA     | idhili M.E. | M.PAKHARIAN | S.FARAMARZPOUR | ***  |
| VO0  | NOV. 2024 | IFA     | idhili M.E. | M.PAKHARIAN | M.Mohrshad     | ***  |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: GENERAL ARRANGEMENT FOR FIRE WATER TANKS (TK-2301 A)

SCALE: 1:110

SIZE: A3

DRAWING NO.: BK-GCS-IDR-120-ME-DW-0007

SHEET NO.: 1 OF 2

REV.: VO2

HOLD ITEM

LEGEND

ELEVATION & PROJECTION KEY PLANE (NOTE 2.3.8)

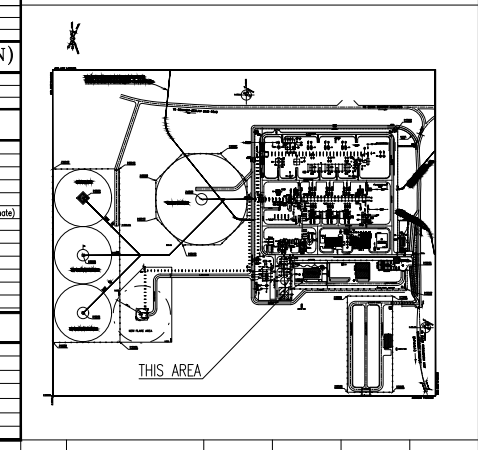
PROJECTION

SHELL NOZZLE KEY PLANE

ROOF NOZZLE KEY PLANE

REFERENCE DOCUMENT

|                                                    |                                 |
|----------------------------------------------------|---------------------------------|
| MECHANICAL DATA SHEETS FOR FIRE WATER STORAGE TANK | BK-GCS-PEDCO-120-ME-DT-0017-005 |
| Mechanical Design Criteria                         | BK-GNRL-PEDCO-000-ME-DC-0001    |
| Specification for Painting                         | BK-GNRL-PEDCO-000-PI-SP-0006    |
| Specification for Insulation                       | BK-GNRL-PEDCO-000-PI-SP-0019    |
| Specification for Lining                           | BK-GNRL-PEDCO-000-PI-SP-0007    |



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BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE: SCALE: DRAWING BY: CHECKED BY: PROJECT ENG.

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

BUDGET REP. LOCATION SIZE CLASS SERIAL NO. SHEET REVISION