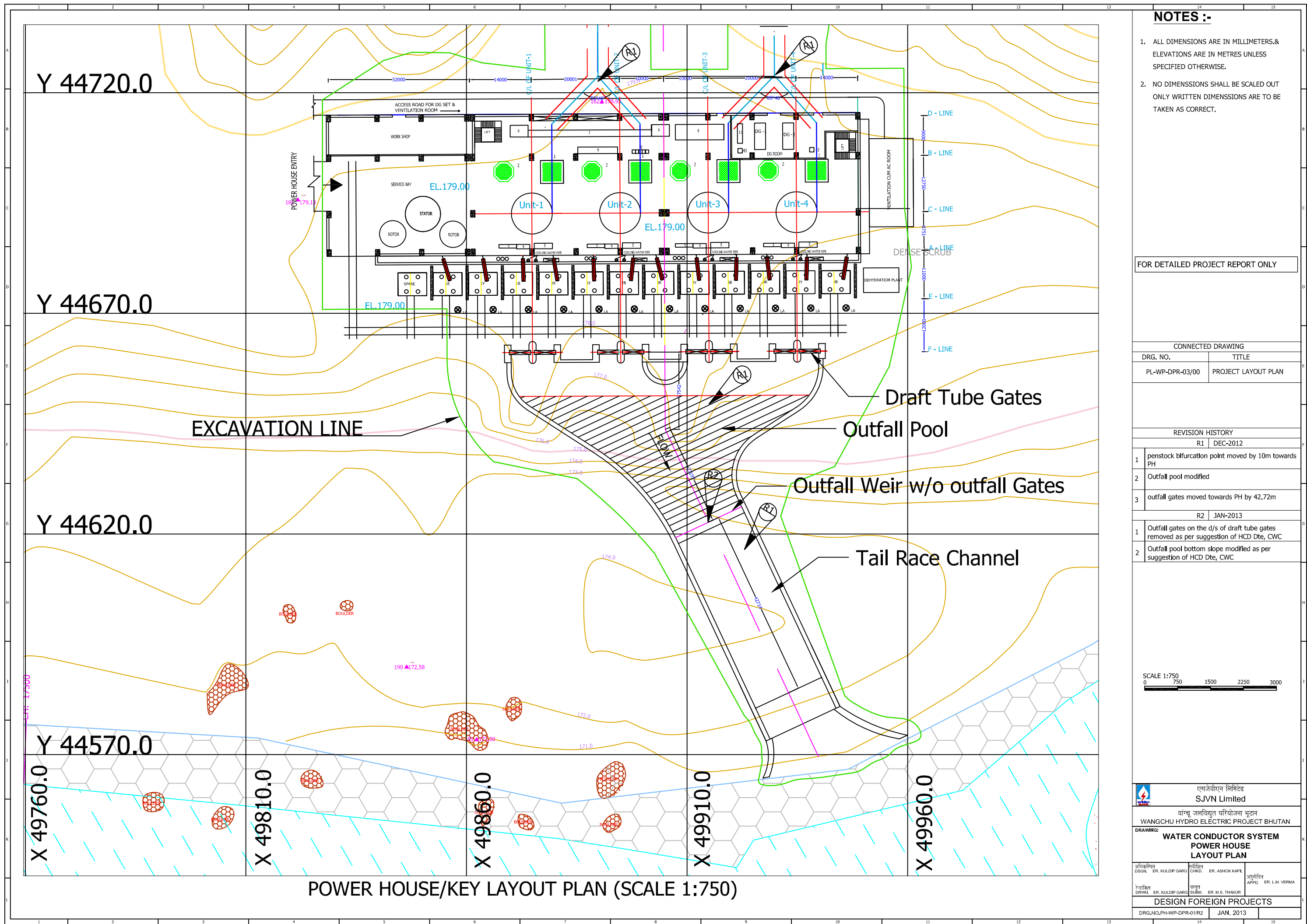




NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETERS,& ELEVATIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
2. NO DIMENSSIONS SHALL BE SCALED OUT ONLY WRITTEN DIMENSSIONS ARE TO BE TAKEN AS CORRECT.

FOR DETAILED PROJECT REPORT ONLY

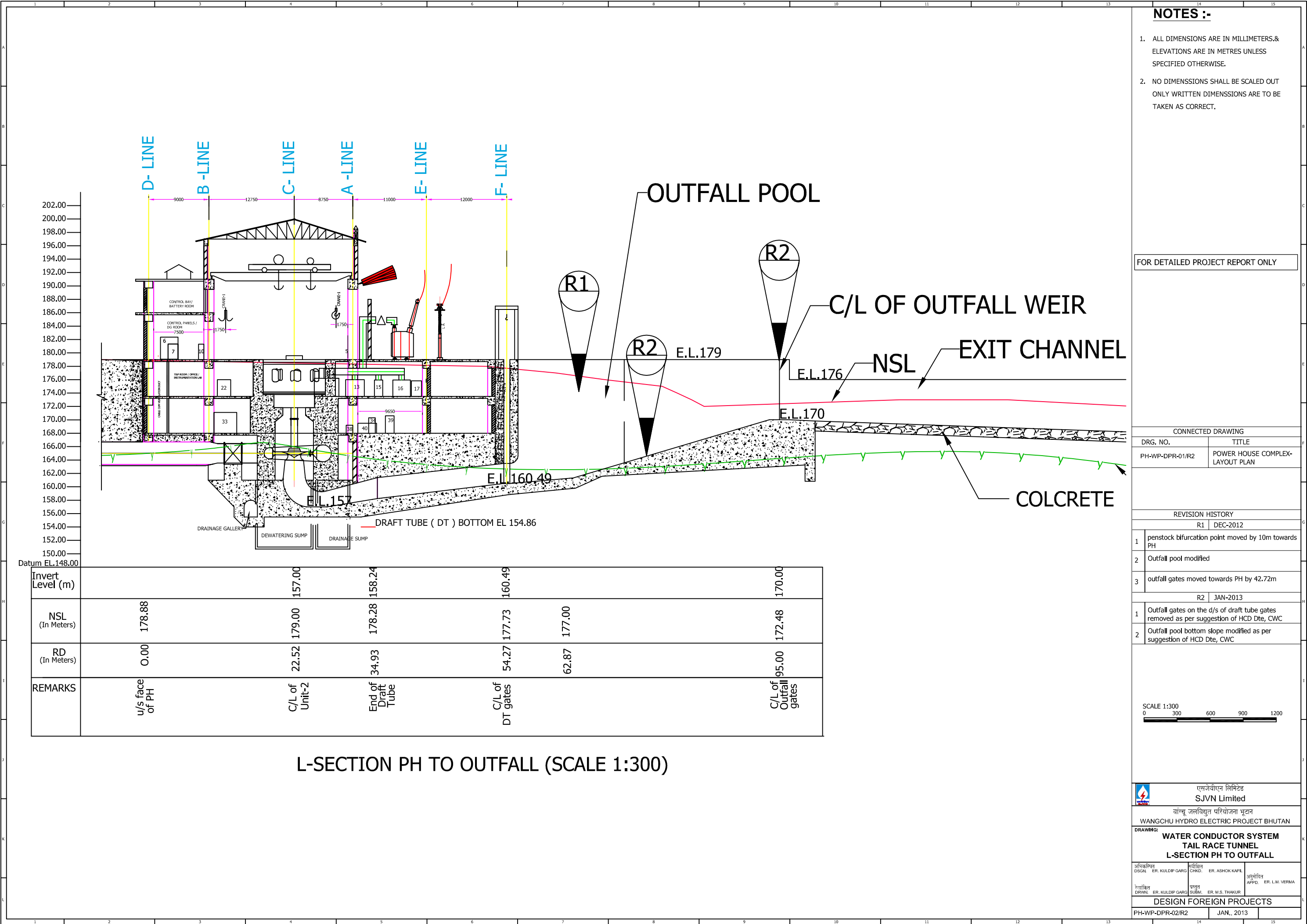
CONNECTED DRAWING	
DRG. NO.	TITLE
PL-WP-DPR-03/00	PROJECT LAYOUT PLAN

REVISION HISTORY	
	R1 DEC-2012
1	penstock bifurcation point moved by 10m towards PH
2	Outfall pool modified
3	outfall gates moved towards PH by 42.72m

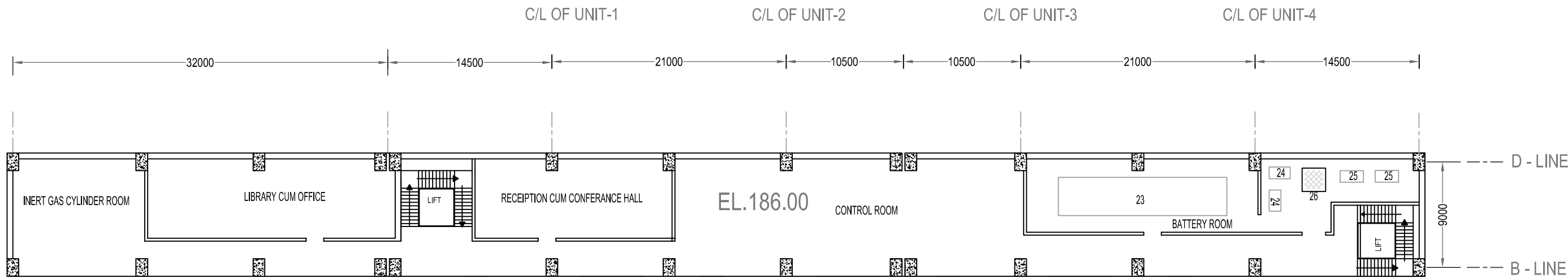
	R2 JAN-2013
1	Outfall gates on the d/s of draft tube gates removed as per suggestion of HCD Dte, CWC
2	Outfall pool bottom slope modified as per suggestion of HCD Dte, CWC

SCALE 1:750
0 750 1500 2250 3000

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वांग्चू जलविद्युत परियोजना भूटान WANGCHU HYDRO ELECTRIC PROJECT BHUTAN	
DRAWING: WATER CONDUCTOR SYSTEM POWER HOUSE LAYOUT PLAN	
अभिवादन DSGN: ER. KULDIP GARG	अनुमोदित APPD: ER. L.M. VERMA
अभिवादन DSGN: ER. KULDIP GARG	अनुमोदित APPD: ER. M.S. THAKUR
DESIGN FOREIGN PROJECTS	
DRG.NO,PH-WP-DPR-01/R2	JAN, 2013



L-SECTION PH TO OUTFALL (SCALE 1:300)



LAY OUT PLAN AT EL.186.00 (CONTROL BAY FLOOR)

NOTES :-

1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

LEGEND :-

SR. NO.	EQUIPMENT / DETAIL
23.	BATTERY BANK
24.	BATTERY CHARGER
25.	DCDB
26.	HATCH FOR CONTROL BAY PANELS AND DCDB (TENTATIVE SIZE 2000X2000)

* TO BE FINALISED DURING DETAIL ENGINEERING

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01D	STATION LAYOUT PLAN AT E.L. 173.50 GENERATOR FLOOR
SJEDWA/DPR/01E	STATION LAYOUT PLAN AT E.L. 168.00 TURBINE FLOOR
SJEDWA/DPR/01F	STATION LAYOUT PLAN AT E.L. 161.00 MIV FLOOR
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01A	CROSS SECTION OF POWER HOUSE
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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SJVN Limited

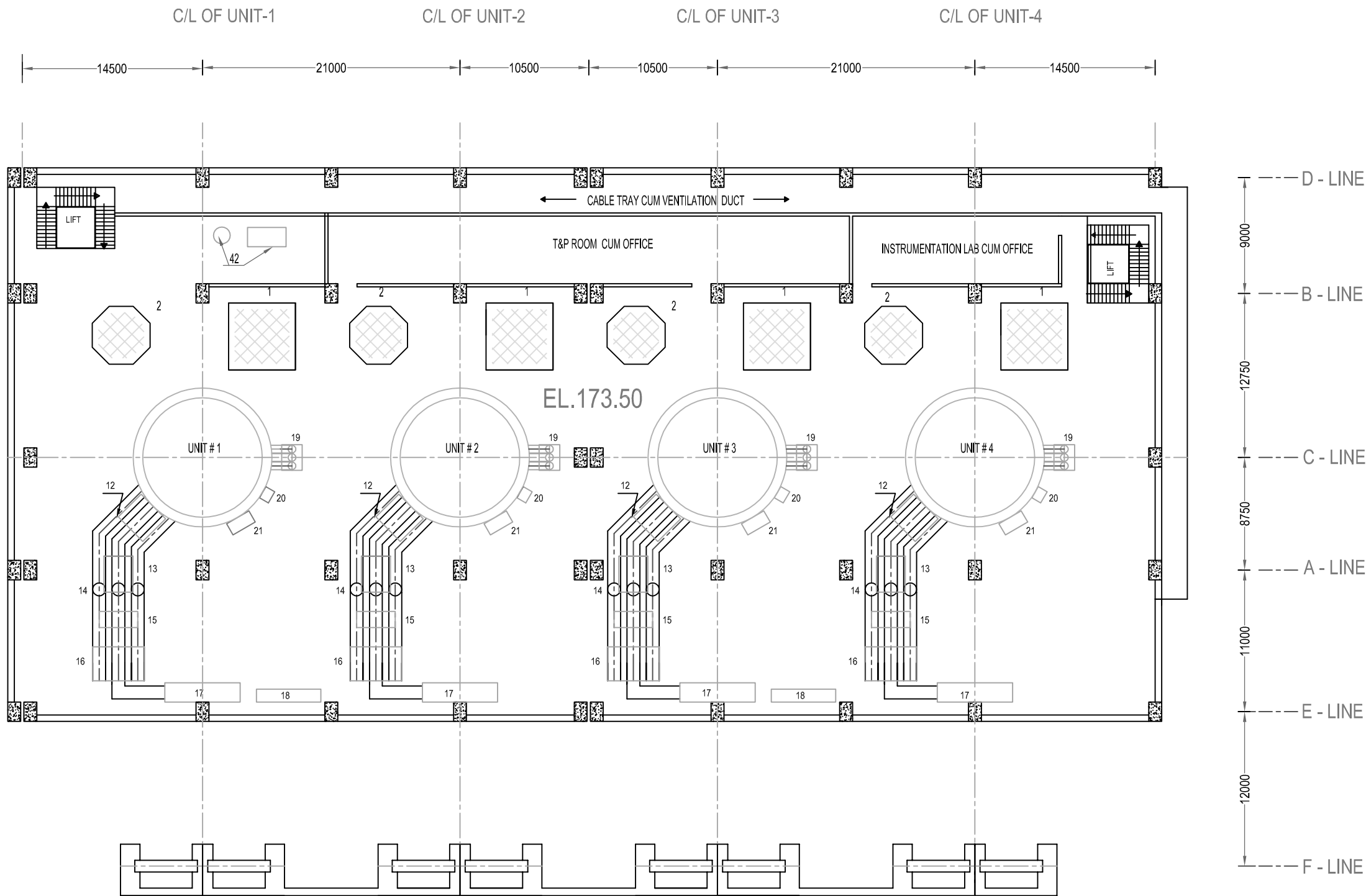
वांग्चू जल विद्युत परियोजना 'भूटान'
WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

STATION LAYOUT PLAN
AT E.L. 186.00 CONTROL BAY FLOOR

आभिकल्पित DSGN. RISHABH DWIVEDI	समीक्षित CHKD. VIKAS MARWAH	अनुमोदित APPD. S. P. PATHAK
रेखांकित DRWN. JAIPAL	प्रस्तुत SUBM. B. S. NEGI	

ELECT. DESIGN DEPTT. SJVN LTD. SHIMLA - 9

DRG. NO. PH-WP-DPR03/00	DEC. 2011	CD
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LAY OUT PLAN AT EL.173.50 (GENERATOR FLOOR)

NOTES :-

1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

LEGEND :-

SR. NO.	EQUIPMENT / DETAIL
1.	HATCH FOR MIV REMOVAL (TENTATIVE SIZE - 5200X5200) *
2.	HATCH FOR RUNNER REMOVAL (TENTATIVE DIA 4500) *
12.	EARTH SWITCH
13.	LAVT
14.	ISOLATED PHASE BUS DUCT
15.	EXCITATION TRANSFORMER
16.	UNIT AUXILIARY TRANSFORMER
17.	UNIT AUXILIARY BOARD
18.	DCDB
19.	NEUTRAL GROUNDING CUBICLE
20.	GAUGE PANEL
21.	GENERATOR AUXILIARY PANEL
42.	LP AIR RECIEVER AND CONTROL PANEL

* TO BE FINALISED DURING DETAIL ENGINEERING

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01E	STATION LAYOUT PLAN AT E.L. 168.00 TURBINE FLOOR
SJEDWA/DPR/01F	STATION LAYOUT PLAN AT E.L. 161.00 MIV FLOOR
SJEDWA/DPR/01G	STATION LAYOUT PLAN AT E.L. 186.00 CONTROL BAY FLOOR
SJEDWA/DPR/01A	CROSS SECTION OF POWER HOUSE
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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SJVN Limited

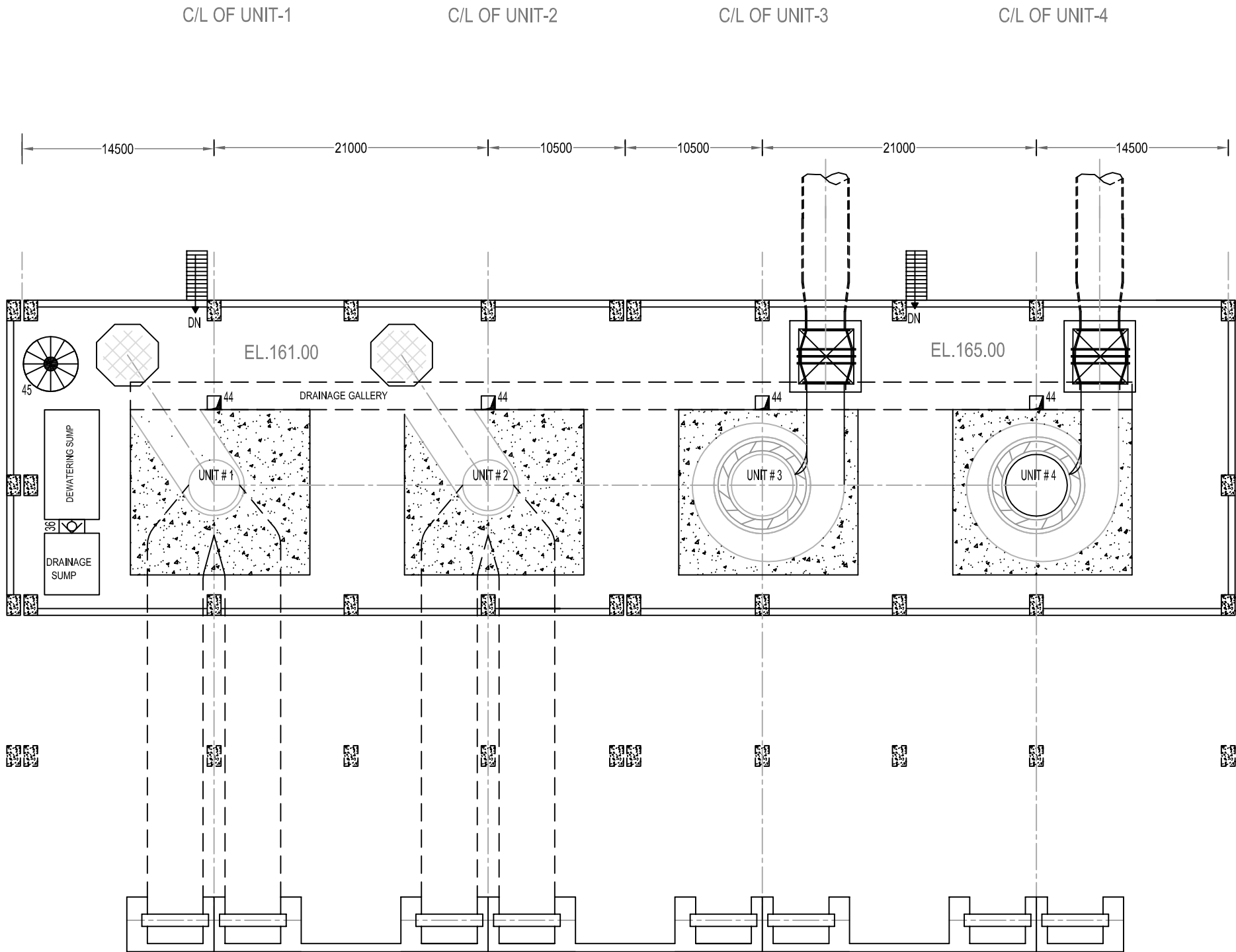
वांग्चू जल विद्युत परियोजना 'भूटान'
WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

STATION LAYOUT PLAN
AT E.L. 173.50 GENERATOR FLOOR

आपिकालित DSGN. RISHABH DWIVEDI	समीक्षित CHKD. VIKAS MARWAH	अनुमोदित APPD. S. P. PATHAK
रेखांकित DRWN. JAIPAL	प्रस्तुत SUBM. B. S. NEGI	

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DRG. NO. PH-WP-DPR05/00 DEC. 2011 CD



NOTES :-

1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

LEGEND :-

SR. NO.	EQUIPMENT / DETAIL
36.	NON RETURN VALVE
44.	MAN HOLE (TENTATIVE SIZE -1000X1000)
45.	STAIRCASE

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01D	STATION LAYOUT PLAN AT E.L. 173.50 GENERATOR FLOOR
SJEDWA/DPR/01E	STATION LAYOUT PLAN AT E.L. 168.00 TURBINE FLOOR
SJEDWA/DPR/01G	STATION LAYOUT PLAN AT E.L. 186.00 CONTROL BAY FLOOR
SJEDWA/DPR/01A	CROSS SECTION OF POWER HOUSE
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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SJVN Limited

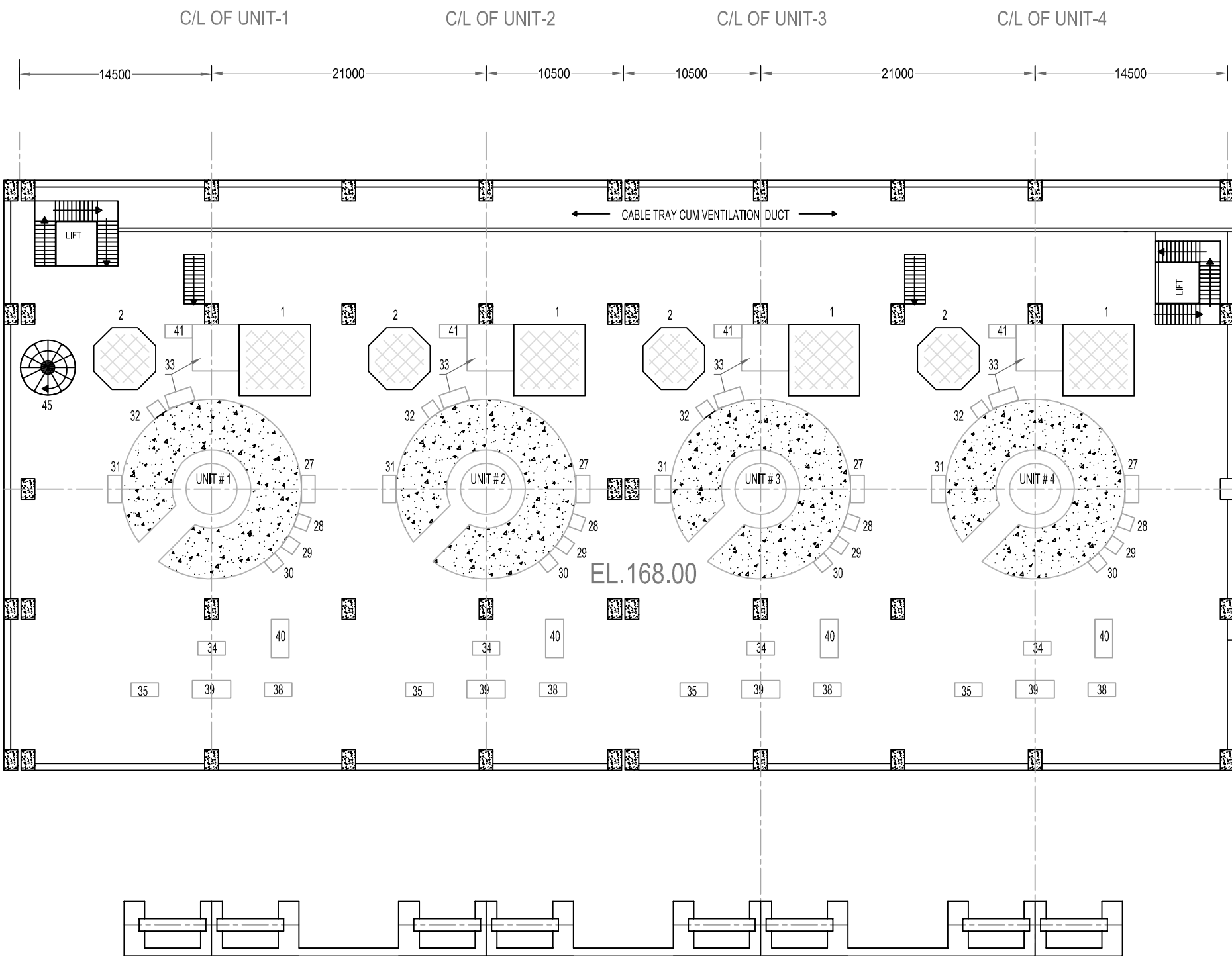
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WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

STATION LAYOUT PLAN
AT E.L. 161.00 MIV FLOOR
& E.L. 165.00 CENTER LINE OF TURBINE

आपिकालित DSGN. RISHABH DWIVEDI	समीक्षित CHKD. VIKAS MARWAH	अनुमोदित APPD. S. P. PATHAK
रेखांकित DRWN. JAIPAL	प्रस्तुत SUBM. B. S. NEGI	

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DRG. NO. PH-WP-DPR06/00 DEC. 2011 CD



AT E.L. 168.00 (TURBINE FLOOR)

NOTES :-

1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

LEGEND :-

SR. NO.	EQUIPMENT / DETAIL
1.	HATCH FOR MIV REMOVAL (TENTATIVE SIZE - 5200X5200) *
2.	HATCH FOR RUNNER REMOVAL (TENTATIVE DIA 4500) *
27.	TURBINE TERMINAL PANEL
28.	VAPOUR EXTRACTION
29.	BRAKE DUST COLLECTOR
30.	HP OIL PUMP
31.	BRAKING AND JACKING SYSTEM
32.	SHAFT SEAL SYSTEM
33.	GOVERNOR AND OIL PRESSURE UNIT
34.	COOLING WATER CONTROL PANEL
35.	PRIMARY COOLING WATER PUMP/MOTOR
38.	SECONDARY COOLING WATER PUMP/MOTOR
39.	COOLING WATER HEAT EXCHANGER
40.	THRUST BEARING HEAT EXCHANGER
41.	NITROGEN BANK
45.	STAIRCASE

* TO BE FINALISED DURING DETAIL ENGINEERING

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01D	STATION LAYOUT PLAN AT E.L. 173.50 GENERATOR FLOOR
SJEDWA/DPR/01F	STATION LAYOUT PLAN AT E.L. 161.00 MIV FLOOR
SJEDWA/DPR/01G	STATION LAYOUT PLAN AT E.L. 186.00 CONTROL BAY FLOOR
SJEDWA/DPR/01A	CROSS SECTION OF POWER HOUSE
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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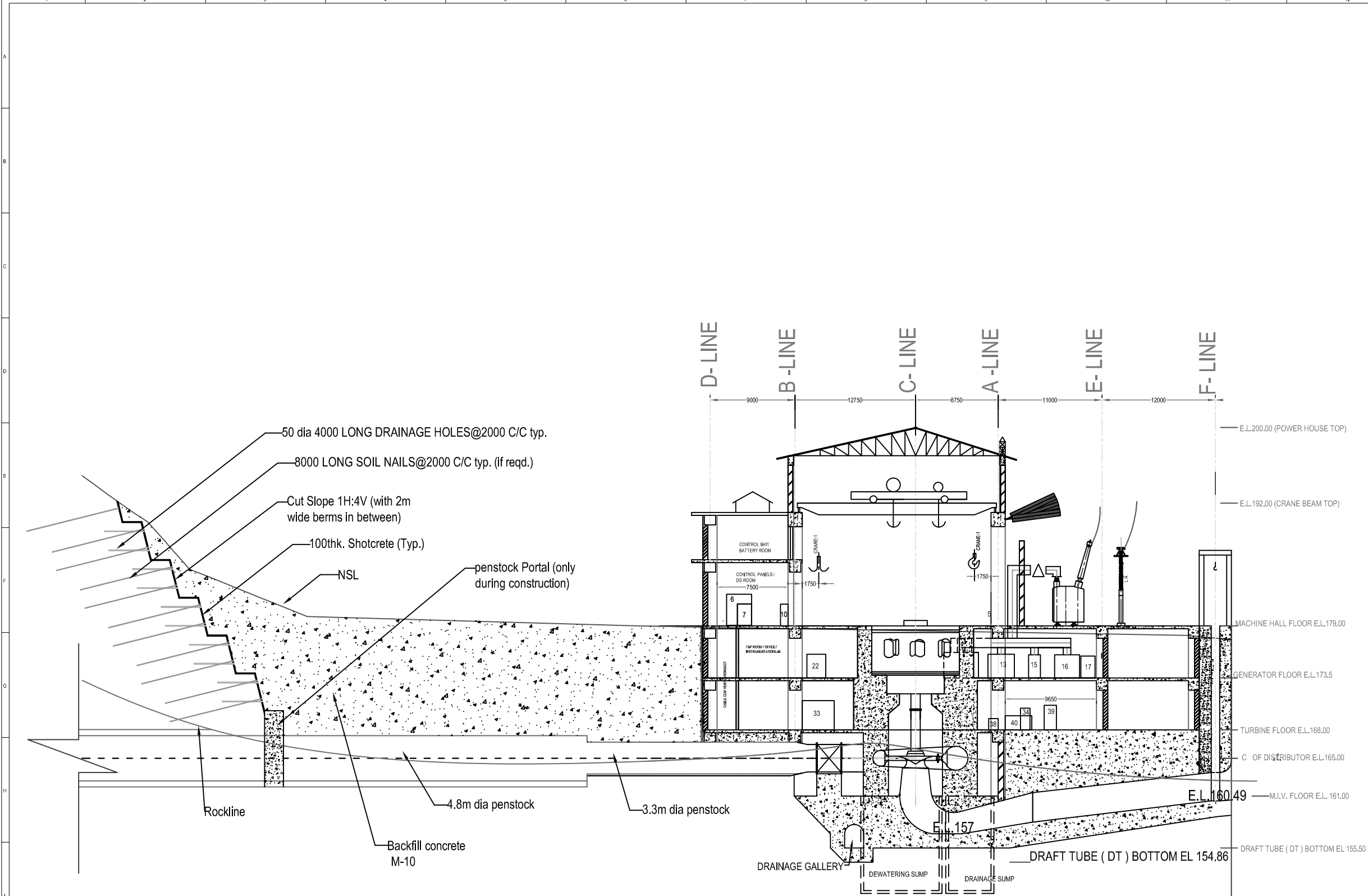
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WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

STATION LAYOUT PLAN
AT E.L. 168.00 TURBINE FLOOR

आभिकल्पित DSGN. RISHABH DWIVEDI	समीक्षित CHKD. VIKAS MARWAH	अनुमोदित APPD. S. P. PATHAK
रेखांकित DRWN. JAIPAL	प्रस्तुत SUBM. B. S. NEGI	

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DRG. NO. PH-WP-DPR07/00 DEC. 2011 CD



CROSS SECTION OF POWER HOUSE

NOTES :-
1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

LEGEND :-	
SR. NO.	EQUIPMENT / DETAIL
6.	STATION SERVICE TRANSFORMER
7.	415 V STATION SERVICE BOARD
10.	LOCAL CONTROL BOARD (LCB)
13.	LAVT
15.	EXCITATION TRANSFORMER
16.	UNIT AUXILIARY TRANSFORMER
17.	UNIT AUXILIARY BOARD
33.	GOVERNOR AND OIL PRESSURE UNIT
34.	COOLING WATER CONTROL PANEL
38.	SECONDARY COOLING WATER PUMP / MOTOR
39.	COOLING WATER HEAT EXCHANGER
40.	THRUST BEARING HEAT EXCHANGER

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01D	STATION LAYOUT PLAN AT E.L. 173.50 GENERATOR FLOOR
SJEDWA/DPR/01E	STATION LAYOUT PLAN AT E.L. 168.00 TURBINE FLOOR
SJEDWA/DPR/01F	STATION LAYOUT PLAN AT E.L. 161.00 MIV FLOOR
SJEDWA/DPR/01G	STATION LAYOUT PLAN AT E.L. 186.00 CONTROL BAY FLOOR
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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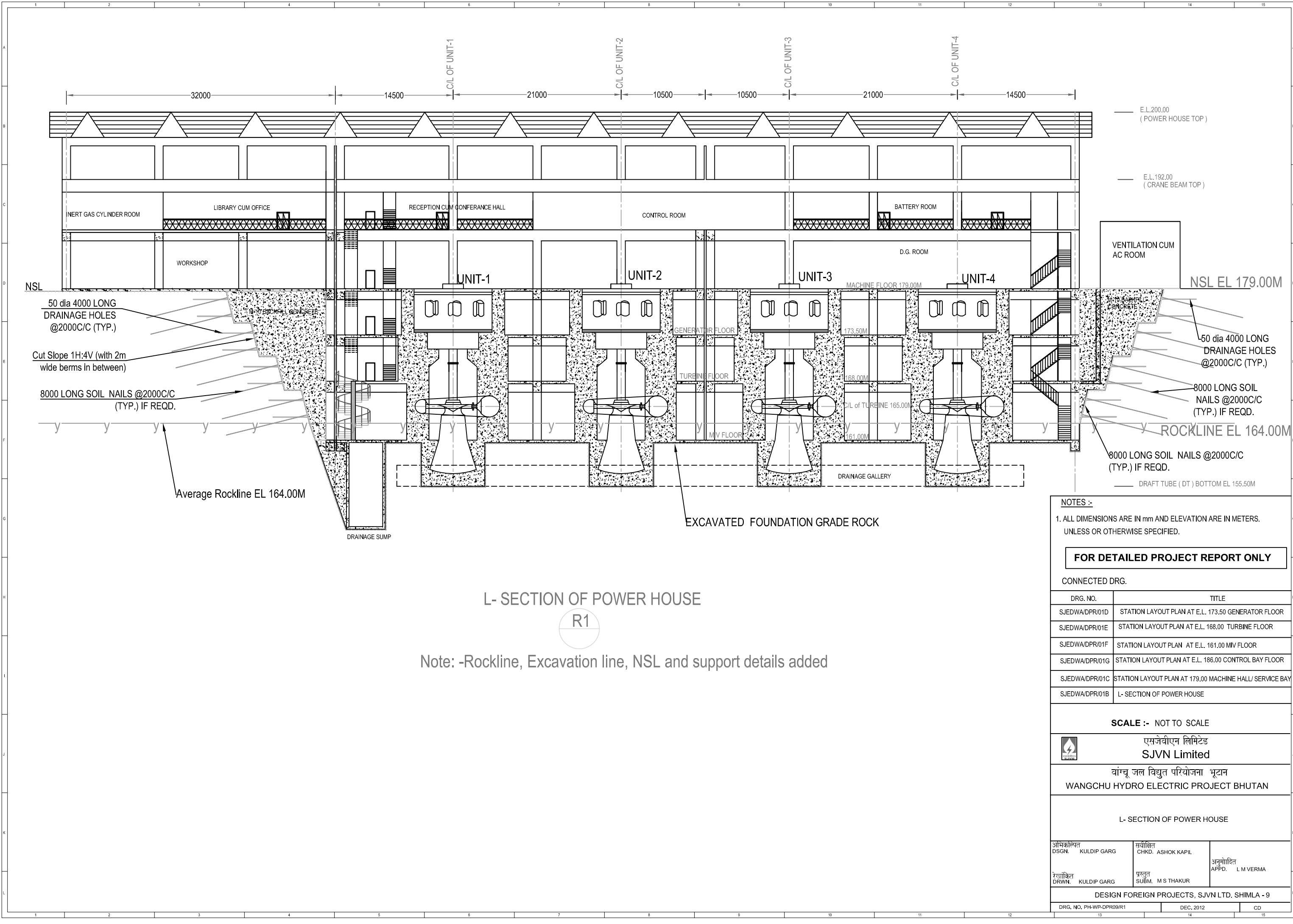
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WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

CROSS SECTION OF POWER HOUSE

अभिेकल्पित DSGN. KULDIP GARG	सर्वोशित CHKD. ASHOK KAPIL	अनुमोदित APPD. L.M.VERMA
भेवांकित DRWN. KULDIP GARG	प्रस्तुत SUBM. M.S.THAKUR	

DESIGN FOREIGN PROJECTS, SJVN LTD. SHIMLA - 9

DRG. NO. PH-WP-DPR08/R1 DEC. 2012 CD



L- SECTION OF POWER HOUSE
R1
Note: -Rockline, Excavation line, NSL and support details added

NOTES :-
1. ALL DIMENSIONS ARE IN mm AND ELEVATION ARE IN METERS.
UNLESS OR OTHERWISE SPECIFIED.

FOR DETAILED PROJECT REPORT ONLY

CONNECTED DRG.

DRG. NO.	TITLE
SJEDWA/DPR/01D	STATION LAYOUT PLAN AT E.L. 173.50 GENERATOR FLOOR
SJEDWA/DPR/01E	STATION LAYOUT PLAN AT E.L. 168.00 TURBINE FLOOR
SJEDWA/DPR/01F	STATION LAYOUT PLAN AT E.L. 161.00 M.V. FLOOR
SJEDWA/DPR/01G	STATION LAYOUT PLAN AT E.L. 186.00 CONTROL BAY FLOOR
SJEDWA/DPR/01C	STATION LAYOUT PLAN AT 179.00 MACHINE HALL/ SERVICE BAY
SJEDWA/DPR/01B	L- SECTION OF POWER HOUSE

SCALE :- NOT TO SCALE



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WANGCHU HYDRO ELECTRIC PROJECT BHUTAN

L- SECTION OF POWER HOUSE

अभिवाचित DSGN. KULDIP GARG	समीक्षित CHKD. ASHOK KAPIL	अनुमोदित APPD. L M VERMA
रेखांकित DRWN. KULDIP GARG	प्रस्तुत SUBM. M S THAKUR	

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DRG. NO. PH-WP-DPR08/R1	DEC, 2012	CD
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