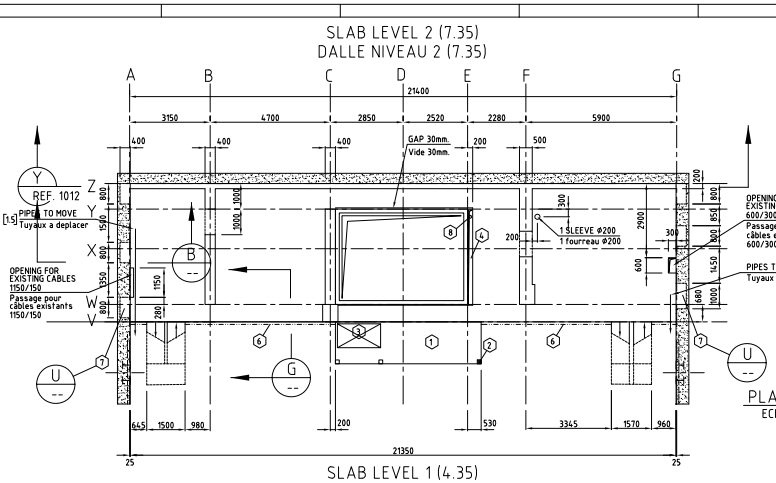


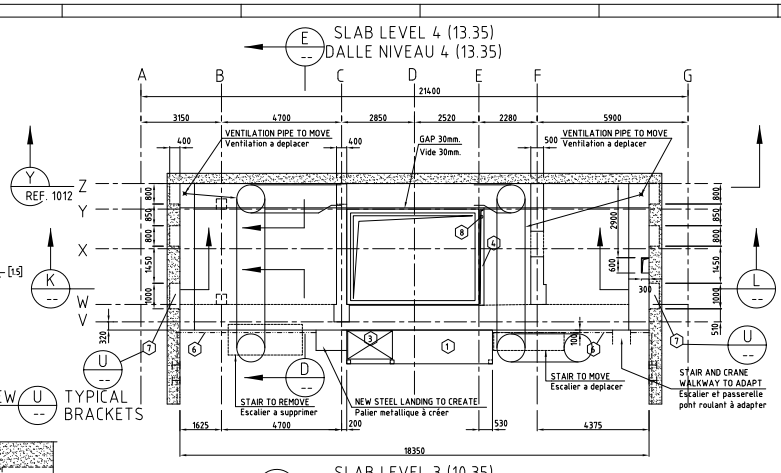


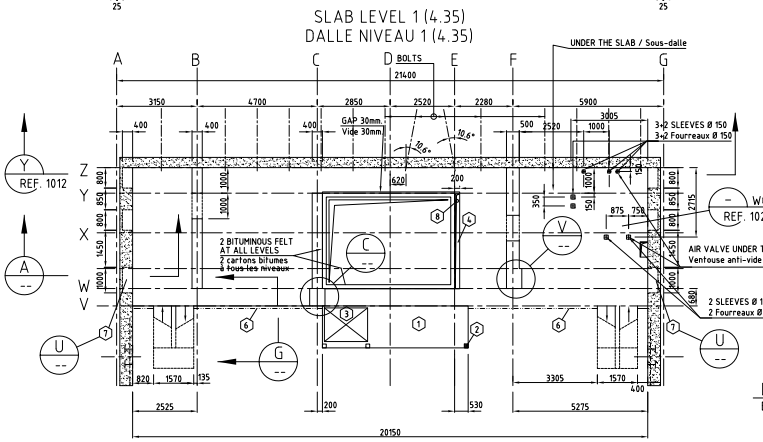


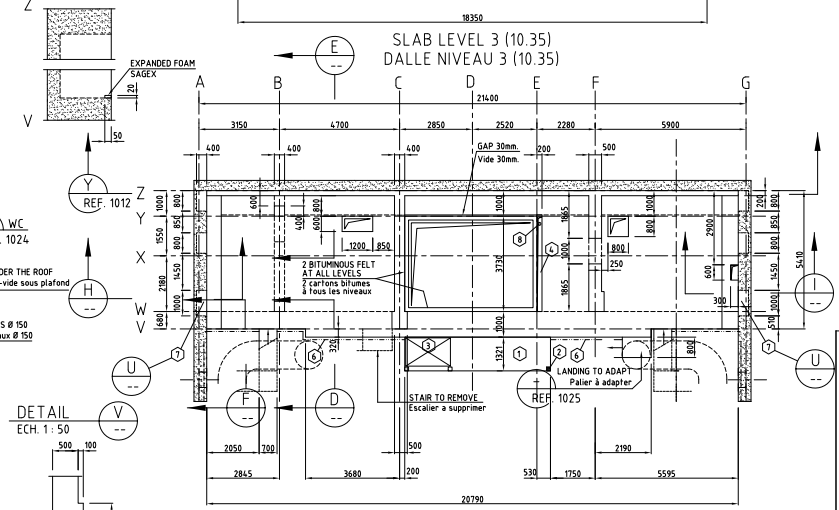


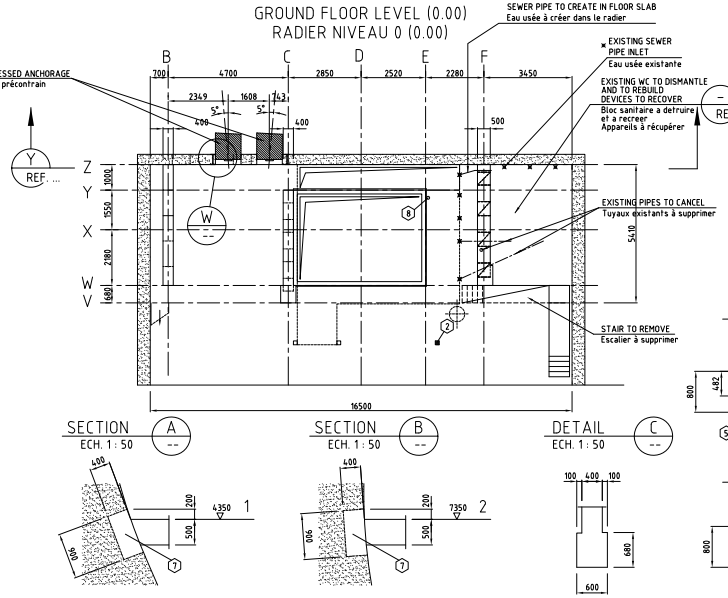








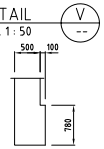


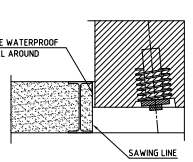


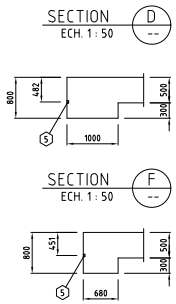


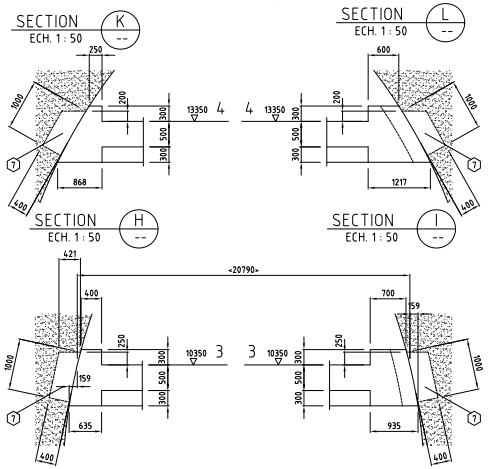


IMPORTANT : DRAFT 'AS-BUILT' DRAWING ONLY INCORPORATING CONTRACTOR ORIGINATED CHANGES
-MAY NOT INCLUDE ENGINEER'S VARIATIONS OR CHANGES
-REFER TO ENGINEER'S SITE INSTRUCTIONS, CIVS, TQ RESPONSES ETC

## 1. NOTES:

1.1 TOUTES LES COTES EXISTANTES DOIVENT ETRE CONTROLEES SUR PLACE.
1.2 TOUTES LES DIMENSIONS EN MM. TOUS LES NIVEAUX EN M.
1.3 CHARGE DE SERVICE SUR LES DALLES = 5KN/M2
1.4 LES OUVERTURES DANS LE TYMPAN SONT EXISTANTES
1.5 DEPLACEMENT PAR CERN
1.6 MURS: VOIR PLAN 2828.1012
1.7 TOUTES LES FISSURES DE LA VOUTE DE LA CAVERNE SITUEES DANS LES ZONES DES APPUIS SERONT INJECTEES

## 2. MATERIAUX:

2.1 BETON: C35/45 (SELON EC2)
2.2 ARMATURES: a) B500B $f_{tk}$ = 500N/mm2 (SELON EC2 ET ENV 10080) b) TYPE SWISS GEWI AVEC RACCORD A MANCHON
2.3 ACIER DE STRUCTURE: S235 JO (SELON EN 10025) L SELON EN 10056-2 U SELON ISO 657-11

## 3. FINITIONS:

3.1 DALLES: F2 / U3
3.2 MURS: F2
3.3 STRUCTURE METALLIQUE: SYSTEME DE PROTECTION 2

## 4. ANCRAGES PERMANENTS:

4.1 ANCRAGES PASSIFS: TYPE SWISS GEWI Ø32mm L= 8.0m CHARGE DE SERVICE = 5t.
4.2 CABLES PRECONTRAINTS: 4 TORONS DE 0.6" = 600mm2 TYPE FREYSSINET T15S OU SIMILAIRE. L LIBRE = 10m. L DE SCELLEMENT = 6.0m. CHARGE DE SERVICE = 50t.

## LEGENDES:

BETON EXISTANT
EXTENSOMETRE
[1.5] VOIR NOTE 1.5
1 STRUCTURE METALLIQUE EXISTANTE CONSERVEE ET MODIFIEE. A FIXER CONTRE LES DALLES NIV. 1 A 4 . VOIR DETAIL PLAN 2828.1025
2 COLONNE METALLIQUE NOUVELLE, DU NIV. 0.00 AU NIV. 13.35 RHS 150 / 150 / 6.3
3 TREMIE A DEPLACER ET ADAPTER AVEC INVERSION DU SENS D'OUVERTURE - VOIR PLAN 2828.1025
4 GAINE 200mm.
5 PROFIL D'ANCRAGE HALFEN 50/34, LE LONG DES DALLES SAUF AU DROIT DES PALIERS METALLIQUES
6 GARDE CORPS RECUPERE OU NOUVEAU DE MEME TYPE
7 ENGRAVURE D'APPUI VOIR PLAN 1026
8 DAINAGE VERTICAL PE Ø115 VOIR AXE "E" PLAN N°1012

1. NOTES:

1.1 ALL EXISTING DIMENSIONS ARE TO BE CHECKED ON SITE
1.2 ALL DIMENSIONS IN MM. ALL LEVELS IN M.
1.3 SERVICE LOAD ON SLABS = 5KN/M2
1.4 THE GABLE HOLES ARE EXISTING
1.5 MOVING BY CERN
1.6 WALLS: SEE DWG 2828.1012
1.7 ALL CRACKS IN THE INTERNAL LINING OF THE CAVERN AND LOCATED NEAR THE BEARING BRACKETS WILL BE INJECTED

## 2. MATERIAL:

2.1 CONCRETE: C35/45 (ACC. TO EC2)
2.2 REINFORCEMENT: a) B500B $f_{tk}$ = 500N/mm2 (ACC. TO EC2 AND ENV 10080) b) TYPE SWISS GEWI WITH COUPLING BOX
2.3 STRUCTURAL STEEL: S235 JO (ACC. TO EN 10025) L ACC. TO EN 10056-2 U ACC. TO ISO 657-11

## 3. FINISH:

3.1 SLABS: F2 / U3
3.2 WALLS: F2
3.3 STRUCTURAL STEEL: PROTECTIVE SYSTEM 2

## 4. DEFINITIVE ANCHORAGES:

4.1 ANCHOR BOLTS: TYPE SWISS GEWI Ø32mm L= 8.0m SERVICE LOAD = 5t.
4.2 PRESTRESSED CABLES: 4 STRANDS OF 0.6" = 600mm2 TYPE FREYSSINET T15S OR SIMILARE FREE LENGTH = 10m. ANCHORAGE LENGTH = 6.0m. SERVICE LOAD = 50t.

## LEGEND:

EXISTING CONCRETE
WIRE STRAIN GAUGE
[1.5] SEE NOTE 1.5
1 EXISTING STEEL STRUCTURE TO KEEP AND MODIFY. TO BE FIXED TO THE NEW SLABS LEVEL 1 TO 4. SEE DETAIL DWG 2828.1025
2 NEW STEEL COLUMN FROM LEVEL 0.00 TO LEVEL 13.35 RHS 150 / 150 / 6.3
3 PASSAGE OPENING TO MOVE AND ADAPT. INVERT OPENING DIRECTION - SEE DWG 2828.1025
4 OPENING 200mm WIDTH
5 ANCHORAGE PROFILE HALFEN 50/34 ALONG THE SLABS EXCEPT WHERE STEEL LANDING EXISTS
6 HANDRAIL RECOVERED FROM EXISTING OR NEW OF THE SAME TYPE
7 BEARING RECESS SEE DWG 1026
8 VERTICAL DRAINAGE PIPE ø115 SEE AXIS "E" DWG 1012

1 : 100 METRIC
5m 0 5m 10m

| Rev. Index | Date | Designed | Drawn | Design Check | Drw. Check | Approved By | Notes | Controlled By |
|---|---|---|---|---|---|---|---|---|
| E | 07/03 | | JPN | | RFM | PR | OFFICIAL DRAWING | MAL |
| D | OCT'01 | SP | DPC | F.POLO | SP | F.POLO | VALID FOR EXECUTION | MAL |
| C | JAN.01 | SP | DPC | F.POLO | SP | F.POLO | VALID FOR EXECUTION | MAL |
| B | 17.08.00 | – | Euroden | – | L.Baquedano | F.Roman | Title box modified | – |
| A | 3.07.00 | – | Estopey | – | Muehlberg | Mellina | Details+Formwork fixed+Drainage pipe n°8 | – |
| –– | 5.10.99 | – | Estopey | – | Muehlberg | Mellina | For comments | – |

Taylor Woodrow amec SPIE Spie Batignolles TPCI

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GIBB sgi INGENIERIE GC

CERN
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
European Laboratory for Particle Physics

LHC PROJECT – CIVIL ENGINEERING
POINT 8, HALL UX 85
GABLE UNDER SHAFT PZ / TYMPAN SOUS PUITS PZ
REINFORCEMENT STRUCTURE / STRUCTURE DE RENFORCEMENT
SLAB / DALLES
FORMWORK / COFFRAGE
CONSULTANCY / SERVICES

Brown & Root Projects Limited HP HIDROTECNICA PORTUGUESA intecsa INTERNACIONAL DE INGENIERIA Y ESTUDIOS TECNICOS, S. A.

Scale: 1/100 1/50 1/20
DRG. No. 28281011_.DWG
AGEA OFFICIAL DRAWING
LEP-JV3128281011 E