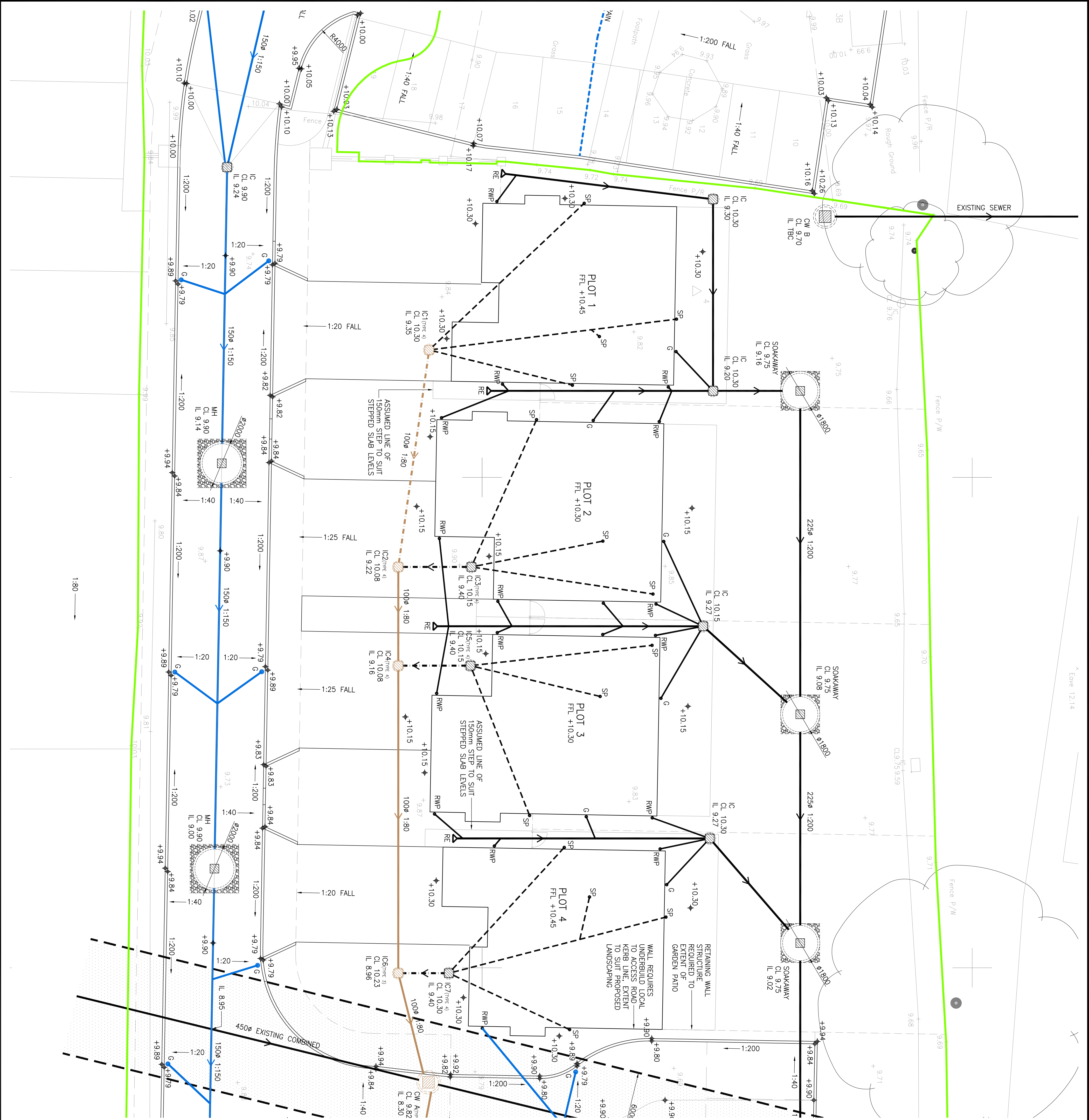




DRAINAGE NOTES:

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, ENGINEERS' AND OTHER SPECIALISTS' DRAWINGS

THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS AND LEVELS AND FOR CONFIRMING THE GIVEN LEVEL OF OUTFALL INTO PUBLIC SEWER, WATERCOURSE OR OTHER DETAIL

REFER TO ARCHITECT FOR ALL SETTING OUT

WORK TO FIGURED DIMENSION ONLY: DO NOT SCALE

ALL WORKS TO BE IN ACCORDANCE WITH BS EN1252, BRITISH STANDARD FOR DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS AND THE BUILDING REGULATIONS, SEWERS FOR ADOPTION 7th EDITION AND THE WELSH MINISTERS STANDARDS

ALL CLAY PIPEWORK AND FITTINGS TO BE PLAIN AND VITRIFIED CLAY WITH FLEXIBLE POLYPROPYLENE COUPLINGS AS HEPMORTH SUPERSLEEVE OR MAYLOR DENSILEVE. ALL CONCRETE PIPEWORK TO BE TO BS5911

ALL GRAVITY PVCU PIPEWORK TO BE TO BS4660 OR BS4491 WHERE RELEVANT UNLESS NOTED OTHERWISE

TRENCHES FOR PIPEWORK UNDER ROADS AND ACCESSWAYS TO BE BACKFILLED WITH GRANULAR MATERIAL IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY

ALL PIPES UNDER ROADS AND ACCESSWAYS WITH DEPTH LESS THAN 1200mm TO HAVE 150mm CONCRETE BED & SURROUND

ALL PIPES TO BE LAID ON CLASS 5 GRANULAR BED AND SURROUND

POLYPROPYLENE ACCESS CHAMBERS TO BE MIN. 225 DIA FOR DEPTHS UP TO 600mm AND A MIN. 450 DIA. FOR DEPTHS UP TO 1000mm

ALL CHAMBER AND MANHOLE COVERS AND FRAMES IN ROADS AND ACCESSWAYS TO BE TO BS EN 124 CLASS D400. IN GARDENS, FOOTWAYS AND LANDSCAPED AREAS TO BE TO CLASS B125

MINIMUM PIPE DIAMETER UNDER ROADS AND ACCESSWAYS TO BE 150mm UNO

FOUL WATER - ALL PIPES BENEATH BUILDINGS AND FROM SYPS, GULLIES AND WC CONNECTIONS TO ACCESS CHAMBERS TO BE 100mm AT A MINIMUM GRADIENT OF 1:40 UNLESS NOTED OTHERWISE.

SURFACE WATER - MIN. GRADIENT OF 100mm PIPE BETWEEN ACCESS CHAMBERS/RODDING EYES OUTSIDE BUILDINGS TO BE 1:100 UNO

CONNECTION TO EXISTING PUBLIC SEWER MANHOLE TO BE AGREED WITH WELSH WATER

CDM REGULATIONS 2007

IN LINE WITH THE ABOVE REGULATIONS WE ARE OBLIGED TO INFORM THE CONTRACTOR OF THE RISKS THAT MAY BE ENCOUNTERED IN THE CONSTRUCTION OF THESE WORKS. ALL DESIGN WORK HAS BEEN CARRIED OUT WITH HEALTH & SAFETY ASPECTS GIVEN FULL CONSIDERATION. WHEREVER POSSIBLE RISKS HAVE BEEN ELIMINATED FROM THE DESIGN. HOWEVER DUE TO THE VERY NATURE OF THIS TYPE OF WORK IT IS NOT POSSIBLE TO REMOVE ALL RISKS FROM THE DESIGN.

WE WOULD ALSO RESPECTFULLY REMIND THE CONTRACTOR OF HIS OBLIGATIONS TO TAKE ALL REASONABLE STEPS ENSURING THAT ONLY COMPETENT WORKERS WHO HAVE A VALID SAFETY POLICY ARE EMPLOYED. THEY SHOULD ALSO PROVIDE SATISFACTORY RESPONSES AT CONSTRUCTION STAGE AS TO THE MANNER IN WHICH THEY DEAL WITH THE ELEMENTS OF RISK INVOLVED IN THIS TYPE OF WORK AND IN PARTICULAR THOSE HIGHLIGHTED BY HALTEC (CHESTER) LIMITED BELOW:-

1. SUPPORT/TREATMENT FOR ALL EXCAVATION WORK
2. GUARDING TO EDGES OF EXCAVATIONS TO PREVENT PEOPLE, MATERIALS AND VEHICLES FALLING INTO EXCAVATIONS.
3. GUARDING OF EXCAVATIONS OUTSIDE WORKING HOURS TO PREVENT UNAUTHORISED ACCESS.
4. UNDERMINING TO ADJACENT ROADS OR STRUCTURES.
5. CONTAINED SPACE OPERATIONS.
6. DEALING WITH EXISTING SERVICES.
7. TRAFFIC MANAGEMENT ON EXISTING HIGHWAYS
8. PROCEDURE TO BE FOLLOWED IN EVENT OF ACCIDENT OR EMERGENCY.
9. METHOD OF WORKING WHERE CONTAMINATED GROUND IS PRESENT ON SITE.
10. CONFIRMATION WILL BE REQUIRED THAT ALL OPERATIVES ARE ADEQUATELY TRAINED, AND COPIES OF RELEVANT CERTIFICATES TO BE SUPPLIED.

THE ABOVE LIST IS BY NO MEANS EXHAUSTIVE BUT IT DOES HIGHLIGHT OPERATIONS THAT PRESENT A RISK CONTRACTORS AND THE GENERAL PUBLIC.

Client

BLUEOAK ESTATES

Project

DARLANDS COURT
CHESTER

Drawing Title

DRAINAGE GA
SURFACE AND FOUL WATER
(SHEET 2 OF 3)

HAITEC

CONSULTING CIVIL AND STRUCTURAL ENGINEERS

TEL: 01244 853883 FAX: 01244 853892

E-MAIL: design@haltec-chester.co.uk

Drawn

Scale

Date

Checked

DRB

AS SHOWN @ A1

FEB '14

JDH

Purpose of Issue

PRELIMINARY

Dwg No

GN0585-02

Revision

P6

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

JDH

PLOTS 1&4 : SLAB FTL'S 10.45

P5

03.03.14

DRB

JDH

RE-DESIGN : SLAB FTL'S 10.30 TYPICAL

P4

28.02.14

DRB

JDH

SOAKAWAY DESIGN

P3

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P2

27.02.14

DRB

JDH

UPDATED - WELSH WATER COMMENTS

P1

19.02.14

DRB

JDH

PRELIMINARY DRAINING ISSUE

Rev

Date

Dwn

Chk

Details

P6

04.03.14

DRB

<