

# WOOLSTHORPE TOP LOCK BYWASH CONSTRUCTION

## General Safety Considerations.

Volunteers will only be allowed to work on site once they have received a Safety Talk from the Camp Leader.

(This is based on a standard form issued by the WRG Board).

They must read the WRG “volunteers guide to safety” and sign to say they have done so.

All work is to follow the guidance of the WRG Health and Safety Guide. (A copy of this is held by Mike Barrett at BW Watford).

The following Safety Assessment has been prepared in conjunction with the WRG Guide and should be read alongside it.

The Health and Safety File is to remain on site at all stages of the work and is then to be passed to BW.

Local emergency services information is to be included in the Health and Safety File.

Site to be designated a “hard hat area” for the duration of works.

WRG Driver Authorisation scheme will operate at all times on the site.

First aid provision on site will include:

- one HSE First Aid Kit for up to 50 employees
- additional eyewash facilities (2x 500ml bottles minimum)
- welfare kit

Each vehicle will carry a First Aid kit.

Each volunteer will be issued with

- a safety helmet to BS 5240

in addition, where the job dictates, the volunteer will be issued with:

- eye protection to BS2092
- hearing protection to BS5108
- disposable nuisance dustmasks to EN149
- suitable gloves

## Site specific Considerations.

BW to notify HSE.

BW to supply all details of known or suspected hazards for the Health and Safety File.

BW are, for the purposes of CDM, considered to be Client, Designer and Planning supervisor.

WRG are, for the purposes of CDM, considered to be the Principal contractor.

The WRG site leader is Mike Palmer.

The WRG contact before the work is Mike Palmer (0121-472 2882).

Emergency mobile phone to be on site at all times (0850 422157).

It is assumed that BW will have installed the piling at the head of the lock.

## **TASK**

## **SAFETY**

I. Install safety fence and public warning signs as per WRG modified plan. Ensure no public access across lock chamber.	I. WRG standard public warning signs to be used.
II. Agree positions of supply stores (inc. fuel) and ballast heaps.	II. Ensure no materials are stacked near drops or where safe access for loading or unloading is compromised. Fuel stores to be safe, lockable and marked.
III. Lower upper pound water level by 450mm. Top level of piles should be 250mm below normal water level (9.56m).	III. Care to be taken when working with water. Observer required at all times.
IV. Excavate trench (500mm x 500mm) behind piling with additional 500mm deep removed along section marked Z. (See attached cross section). Seal the wet face of the piles with the excavations to reduce the need for dewatering of the excavations.	IV. No excavations to exceed 1m deep. Ground stability to be checked regularly.
V. Prepare and install A393 reinforcing mesh. Reinforcing to project clear of concrete surface to key into next pour of concrete	V. Care to be taken when preparing steelwork. No sharp edges.
A. Fill trench with vibrated C40 concrete of top of the piles.	A. Ensure safe tipping area. Ensure adequate eye and skin protection.
VI.	VI.
VII. Bricklay double leaf wall along line of piles. Weir lip to be 250mm above piling and finished in row of soldiers. Total wall height to be 850mm (approx. 10 courses plus coping bricks - see enclosed front elevation).	VII. Temporary safe working platform to be arranged alongside piling if required.
A. Wall is to be keyed into existing brickwork at lock end and given a simple return 300mm from the upstream end of the piling. Brickwork to be tied into concrete backfill with stainless steel butterfly ties .	A. Demolition to be by hand tools - ensure adequate eye and hand protection.
VIII. Excavate and profile sections 1 - 6 of bywash using 360 degree excavator. Exacavated spoil to be deposited on sides to assist in final landscaping and grading. Level pegs to be installed to	VIII. Appoint machine banksman if required. Excessive piles of spoil to be avoided.

allow accurate concrete pours.	
A. Hardcore to be laid and compacted on geotextile along bywash channel.	A. Care with dumper loads. Sheet loads if dusty. Ensure safe tipping from dumpers.
B. Shuttering for bywash floorpan to be installed as required.	B.
C. Pour sections 1,3 and 5 of bywash floorpan using C40 concrete with A393 reinforcing mesh.	C. Care with dumper loads. Ensure safe tipping. Ensure adequate eye and skin protection
D. Strike shuttering and pour sections 2,4 and 6 of bywash floorpan	D. Care with dumper loads. Ensure safe tipping. Ensure adequate eye and skin protection
IX. Lower level in lower pound.	IX. Care to be taken when working with water. Observer required at all times.
A. Expose and investigate pound wall to determine best method of reconstruction. Agreement with BW required.	A. Wall stability to be checked regularly.
B. Reconstruct pound wall around outflow.	B. Safe working platform to be constructed.
C. Excavate and profile outfall section of the bywash.	C. Appoint machine banksman if required.
D. Hardcore to be laid on geotextile and compacted along channel.	D. Care with dumper loads. Sheet loads if dusty. Ensure safe tipping from dumpers
E. Pour bywash outfall floorpan.	E. Ensure adequate eye and skin protection
X. Excavate and prepare weir crest. Pour weir crest with C40 concrete reinforced with A393 mesh	X. Ensure adequate eye and skin protection
XI. Construct bywash walls using stone setts (tied to concrete backfill using stainless steel butterfly ties at 0.5m centres.	XI. Ensure lifting is non strenuous and safe. Toe caps to be worn.
XII. Shutter and pour head wall backfill. (A393 reinforcing required and to be tied to piling backfill.)	XII. Ensure safe tipping.
XIII. Landscape to bywash wall edges.	XIII.
XIV. Clear site and make safe.	XIV. Hand over safety file to BW