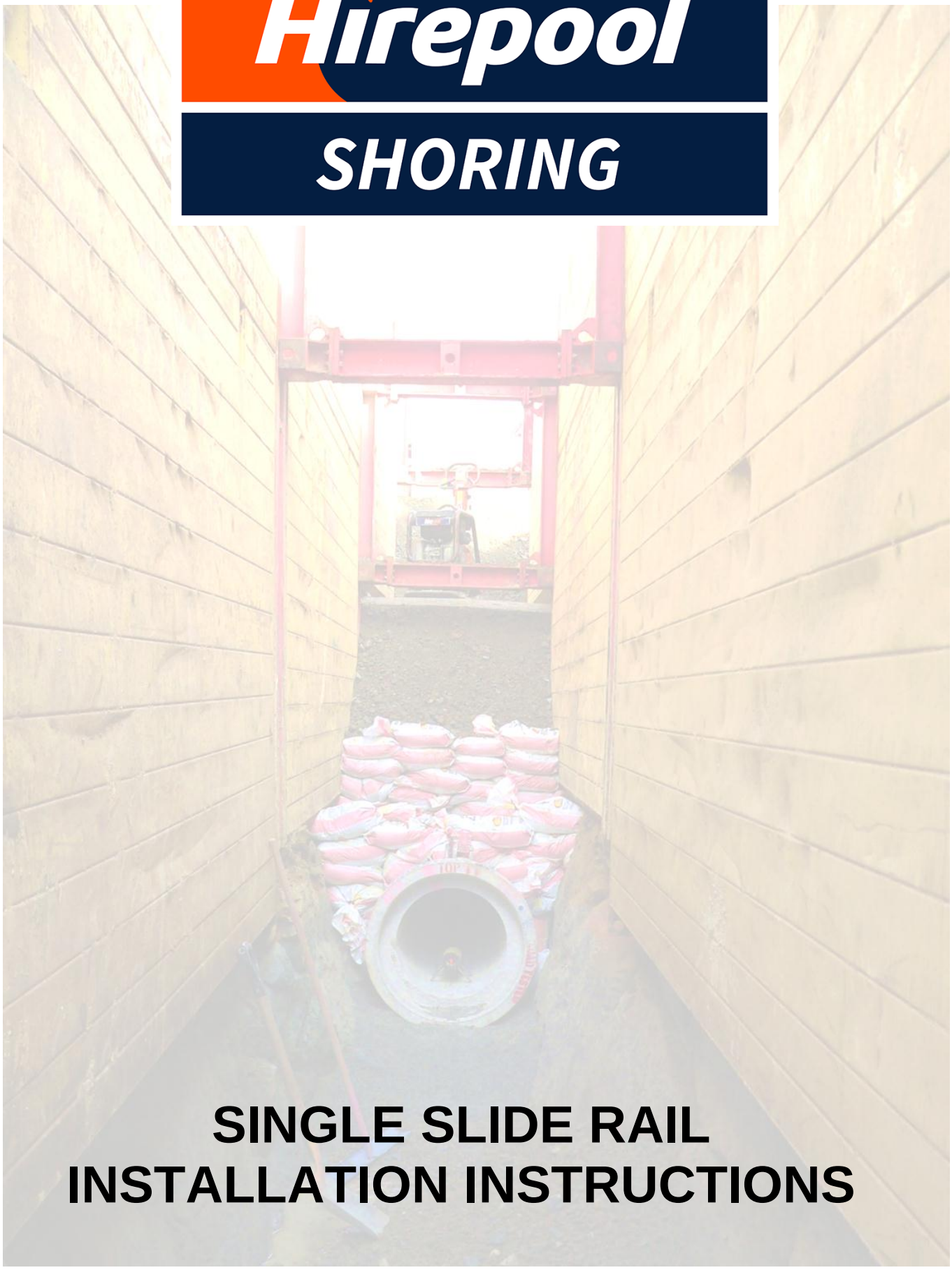
Hirepool

SHORING



SINGLE SLIDE RAIL INSTALLATION INSTRUCTIONS

Introduction
The Single Slide Rail can be used up to a depth of 4m and a maximum width 5.8m wide. It is best suited for laying longer lengths of pipe and larger diameter pipe than trench boxes due to its cross bracing being completely adjustable for clearance. Panels are available in 4, 3 and 2m lengths. This is installed using the dig and push method which gives positive pressure ideal for roadways and next to buildings as well as saving on cut to waste etc

SAFETY
Lifting, handling, pulling, dragging
Handling should be carried out as close to the ground as possible.

Lifting chains must be chosen to suit the weight being handled and must be certified.

To prevent the accidental detachment of the load use only load hooks with safety catches.

The load must be slung in such a way that the shoring is kept in a horizontal position and swinging is kept to a minimum. Use a tag line to control the movement of gear.

Do not stand within the pivoting range of the excavator or crane or beneath suspended loads.

A load operator must stand to the front of the excavator and be in eye contact with the machine operator.
Checklist:

- Am I trained for the task?
- Am I wearing the correct PPE (Personal Protective Equipment) for this task?
- Do I require assistance from a licensed machinery operator- eg cranes?
- Do I have the correct tools for the task?
- What are the safety devices being used on site – eg chains etc?
- Is the work area cleared of debris, tools etc?

Measures to reduce hazards
The safety of persons on site is paramount and should be enhanced with the aid of appropriate signs, cones, warning tapes and safety staff trained and deployed for the purpose of preventing accidents.

The risk of instability as a consequence of wind loads when setting up or using shoring must be considered.

Shoring must be secured against accidental impacts and set up in an area of sufficient size and on firm ground.

Care must be taken to look out for and avoid contact with overhead cables when handling, installing and removing shoring.

Where the ground is sloping or uneven, the shoring should be set up, if possible, at right angles to the slope.

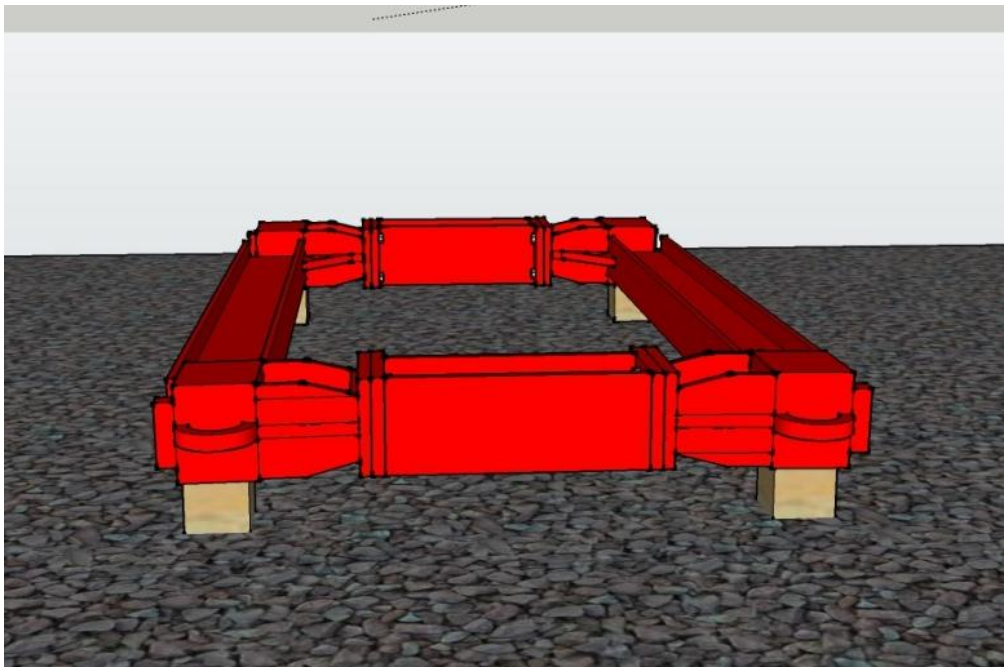
Damages on site
The contractor must notify TSNZ of any damage ASAP; TSNZ will assess the damage and advise whether it is safe to continue using the item. Repairs must be carried out by TSNZ or carried out by another party only when in authorised in writing by TSNZ.

Loadings

Ensure that the loadings don't exceed the maximum SWL for the system. The SWL for the single corner slide rail is 47.2 kNm² using 4m panels

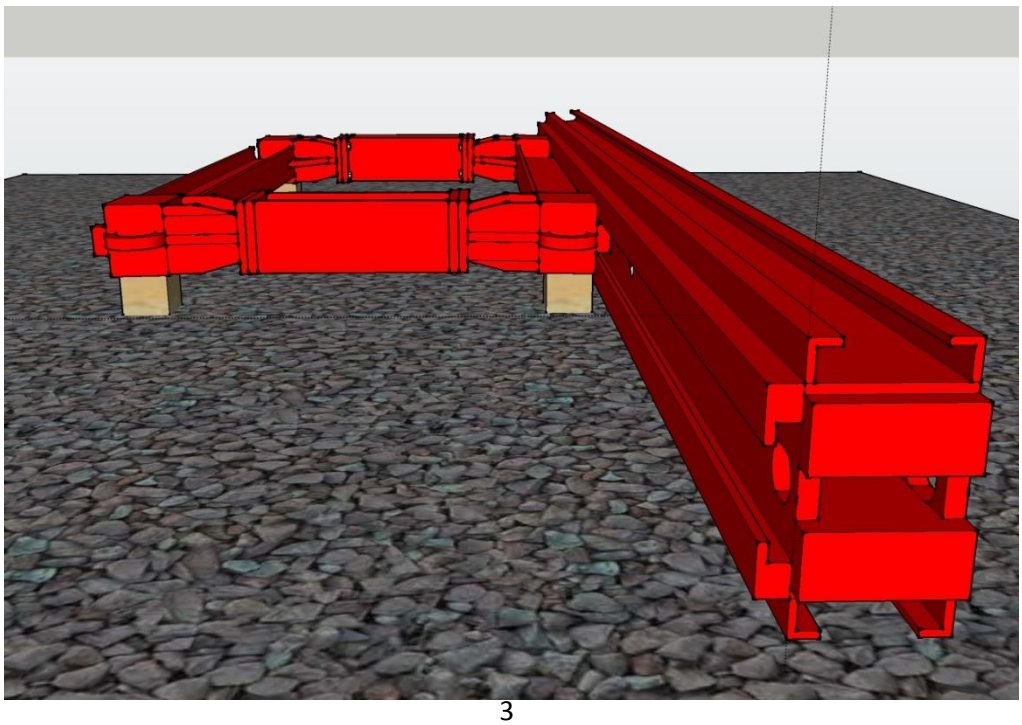
Step 1,

Place the frame assembly on wood blocks ensuring that the blocks don't stick out past where the posts slide on (T section on Frames) Check all bolts are tight, these are tightened in our yard however can vibrate loose during transport.



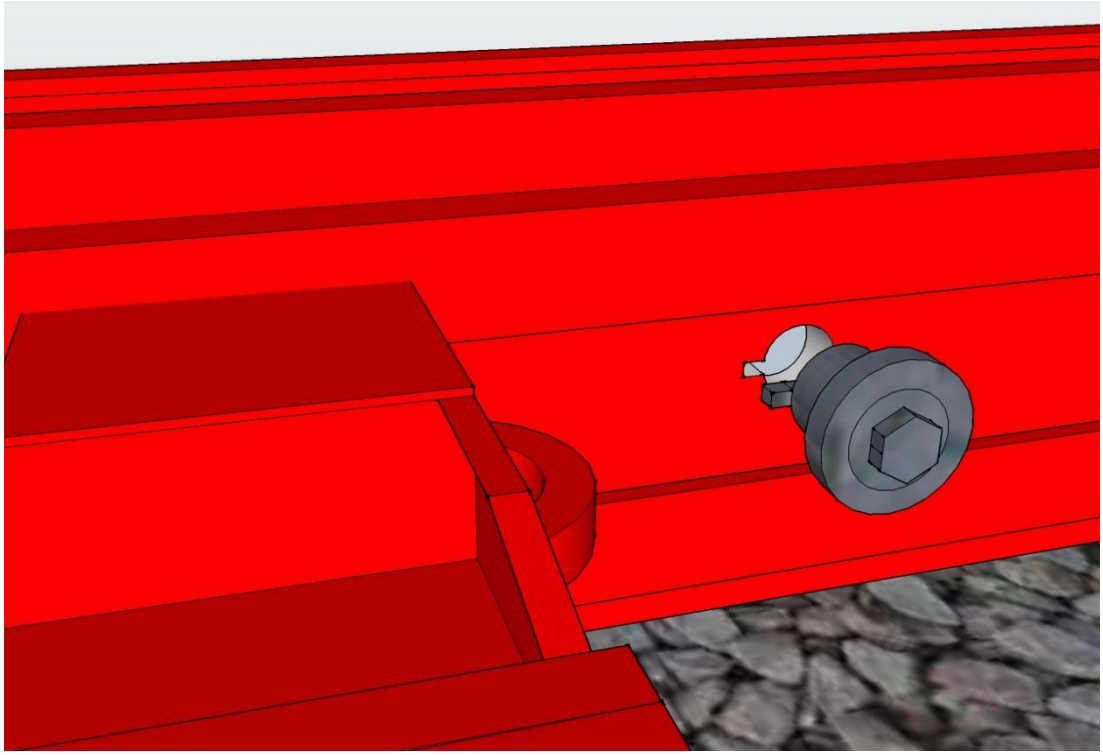
Step 2,

Slide a post onto the frame ensuring the lifting eyes at the top of post are facing the same way as the lifting lug on the frames. Choking the post in the centre is the easiest way to lift the posts for this task.



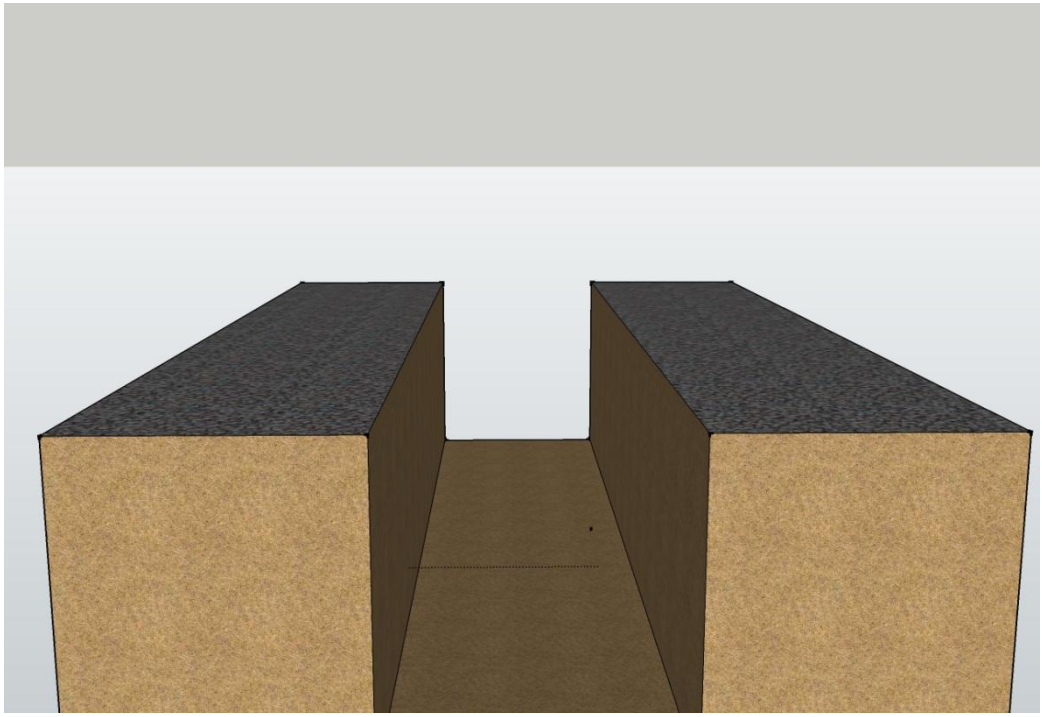
Step 3,

Slide both the posts down so the frame is in the centre or towards the bottom of the posts, insert the locking pins top and bottom of frames in the posts. Insert the pins in then turn so key is not aligned with hole.



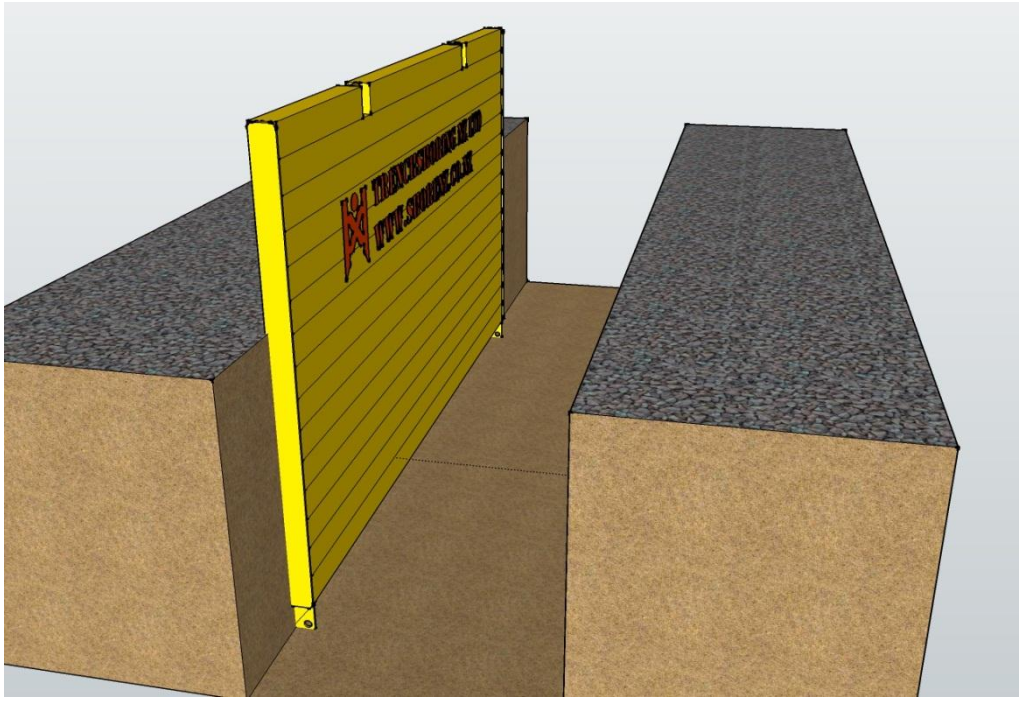
Step 4,

Excavate down to 1.5m, 4.5m long and the width required. As an example a 1m inside width will require an outside width of 1400mm.



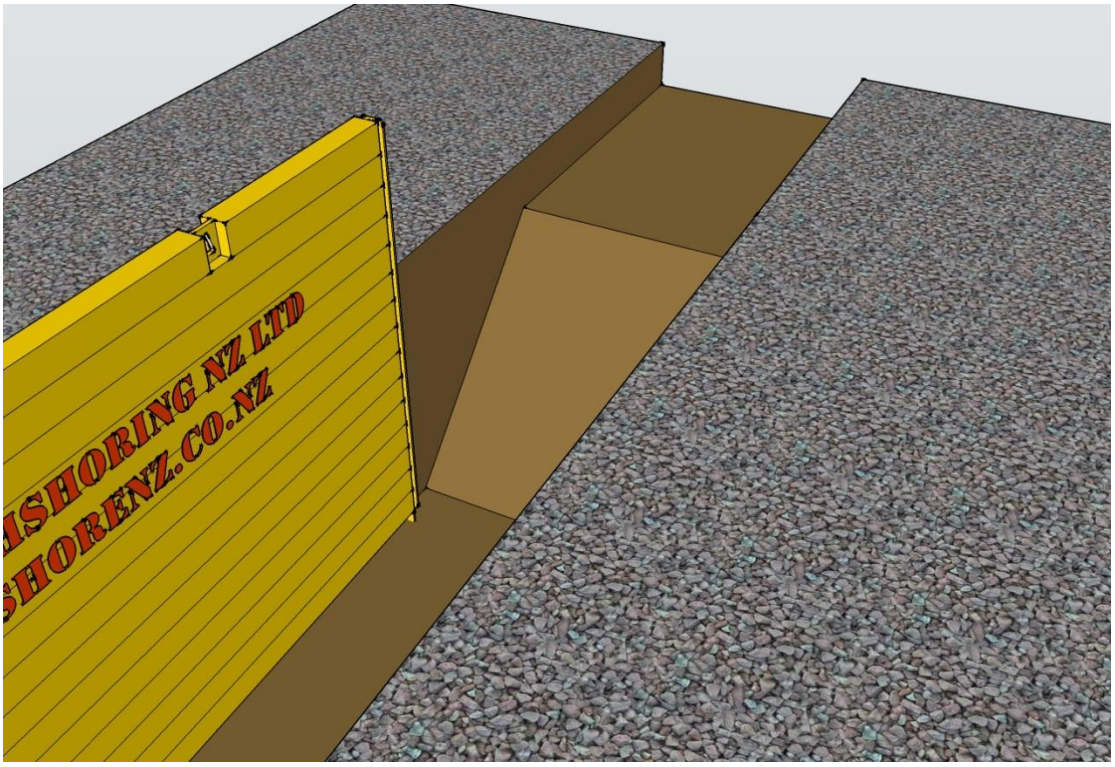
Step 5,

Place a base panel in the trench lean on a slight angle to prevent it from falling over. The slope of the cutting edge always faces in. You may push on the panel slightly to embed the bottom to prevent it slipping.



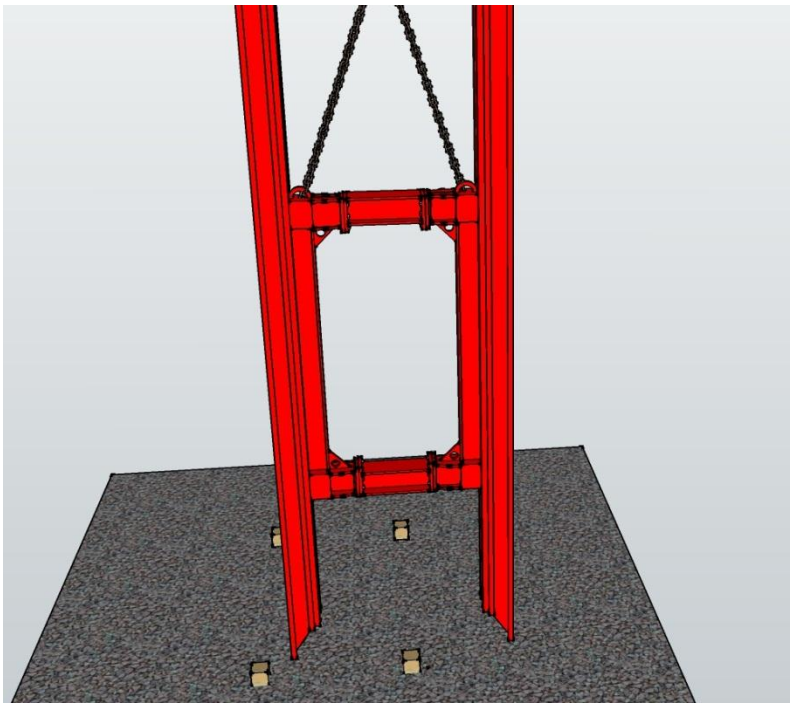
Step 6,

The ends of the trench should be safely battered back to prevent cave ins, even when the shoring is fully installed it should be bettered back 1:1 or have a road plate or similar down the end.



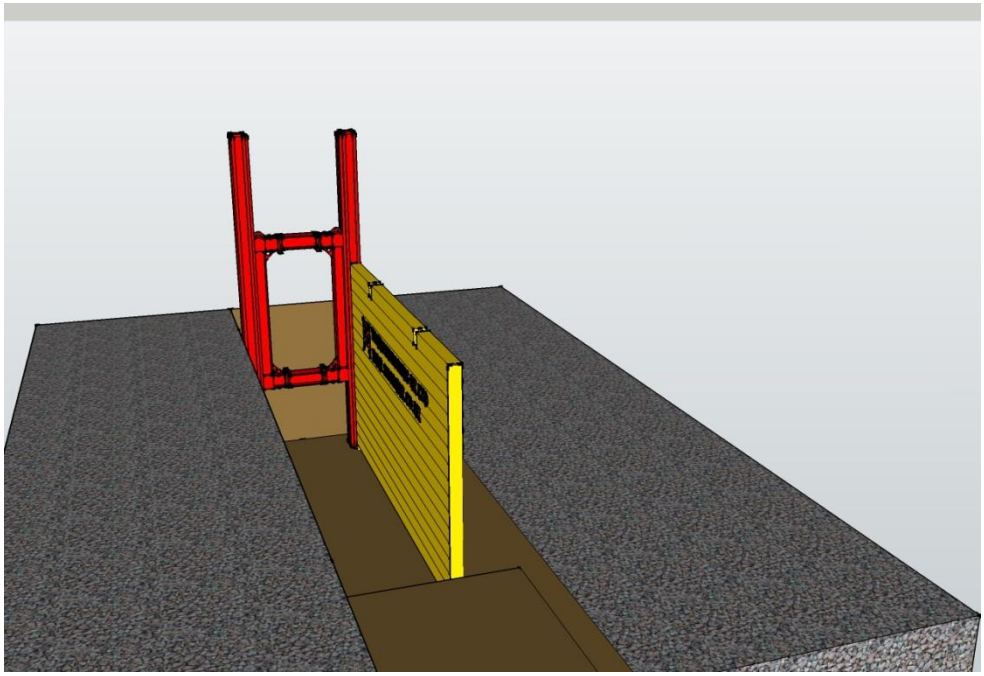
Step 7,

Lift up the fully assembled “H Frame” (posts and frame assembly) It is a good idea to lift from the frame rather than the posts as it reduces the reach required to lift. The locking pins will prevent the posts or frame coming apart when lifting



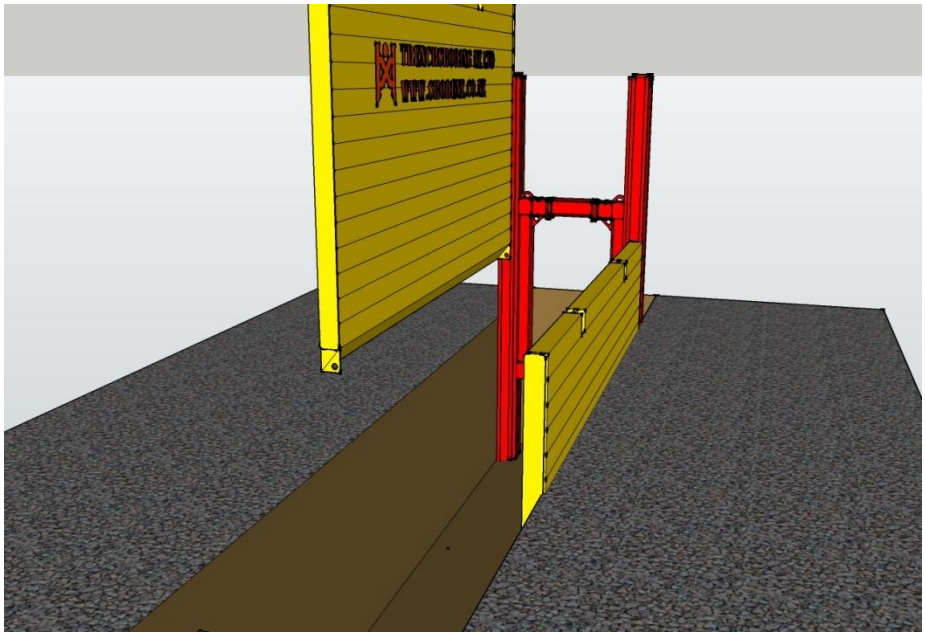
Step 8.

Slide the H frame onto panel. Once the frame is on the panel this will stop the frame going anywhere. Do not push the posts into the ground.



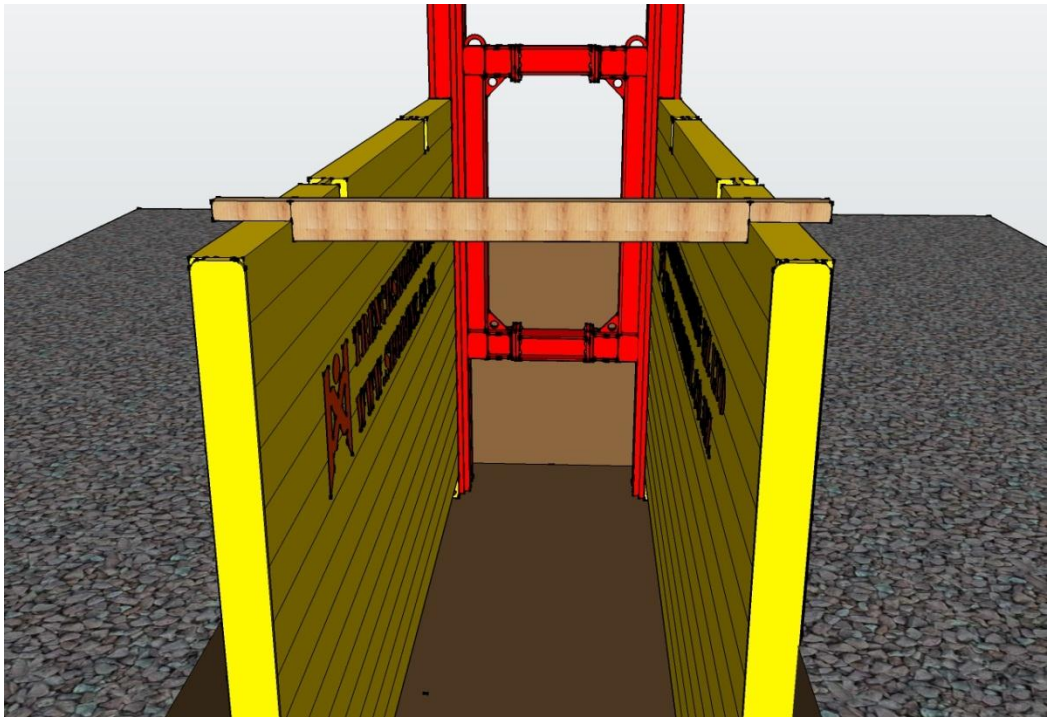
Step 9,

Slide a 2nd base panel into the top of the other post.



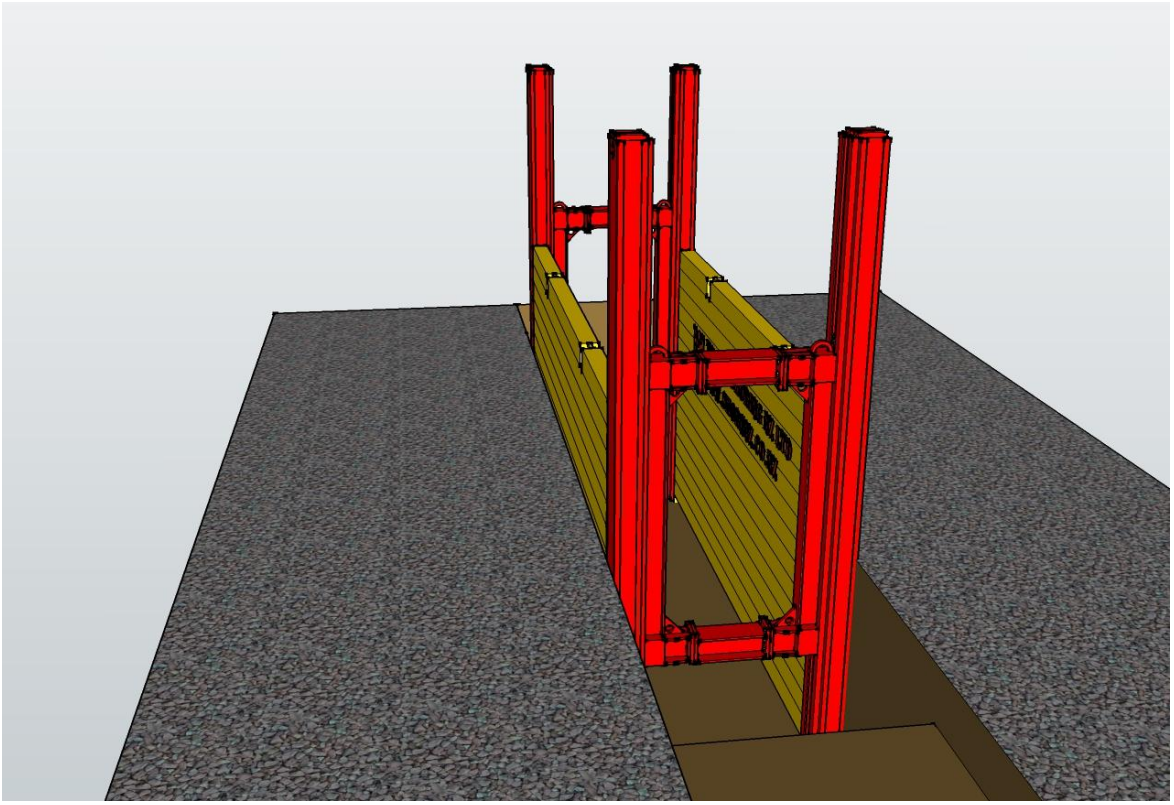
Step 10,

To line the panels up it is a good idea to get a length of timber and cut to the size of the inside of the panels, this saves time measuring the gap every time. To get this measure the distance between the two panels at the H frame.



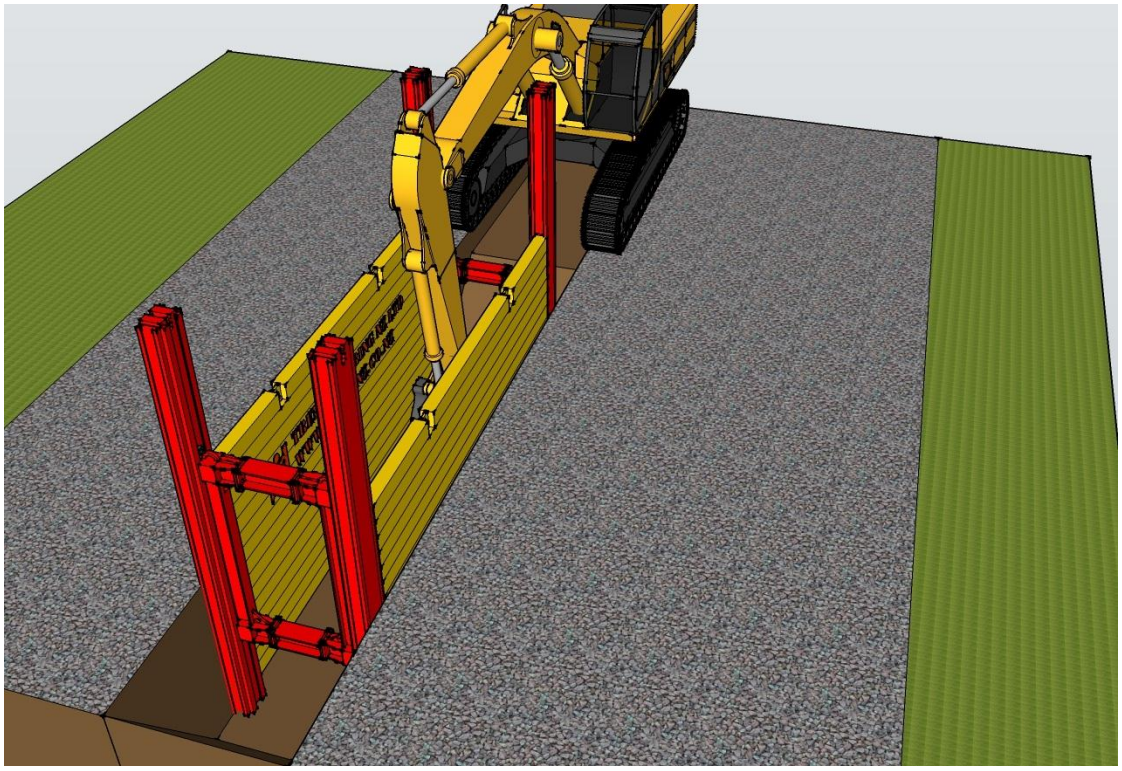
Step 11,

Having lined up the panels, now place the second H frame on to the panels. Once again do not push the posts down.



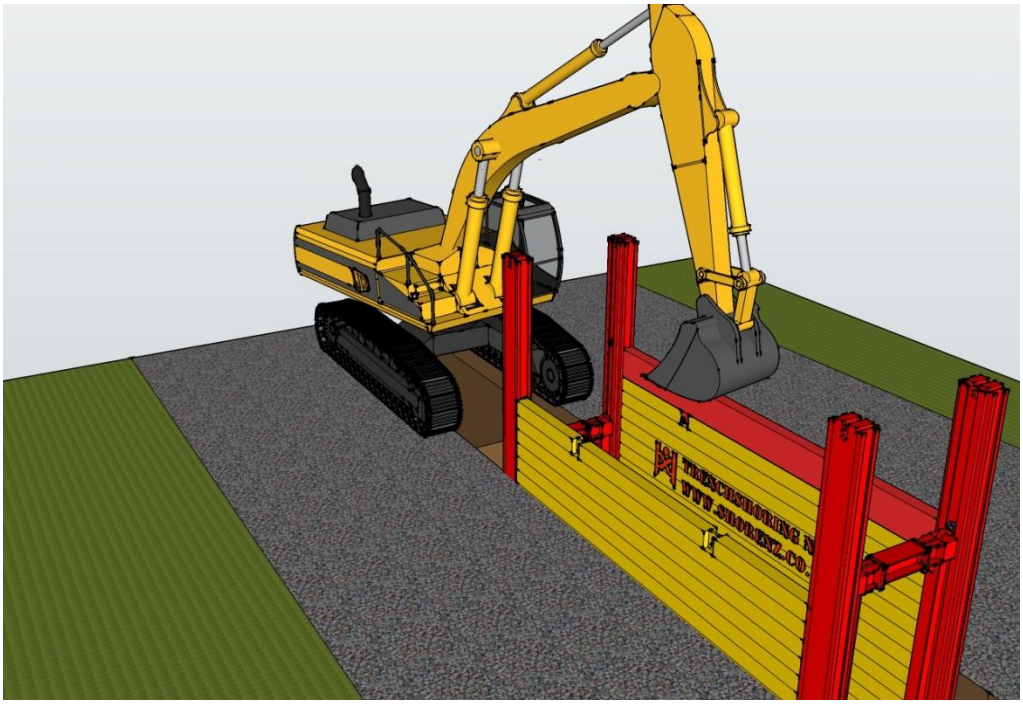
Step 12,

Continue to dig between the panels using the dig and push method. Dig approx. 500mm push down each component



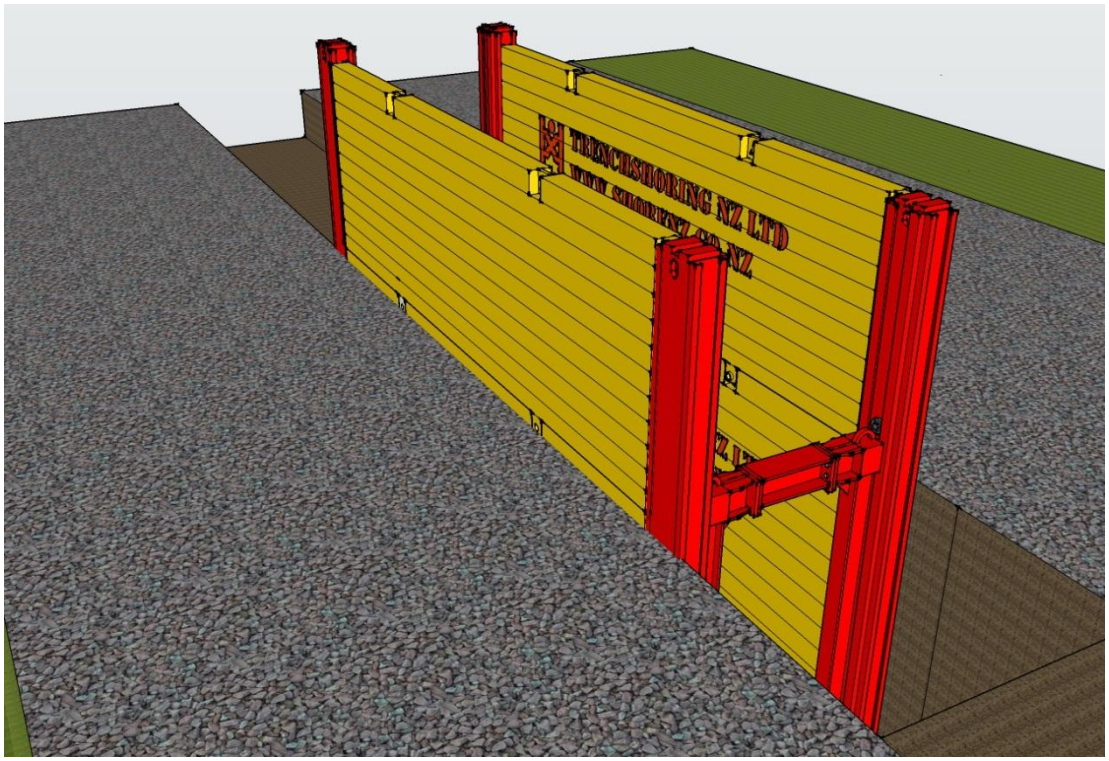
Step 13,

If the panels require some gentle persuasion at any time please use the Plate protector provided as shown



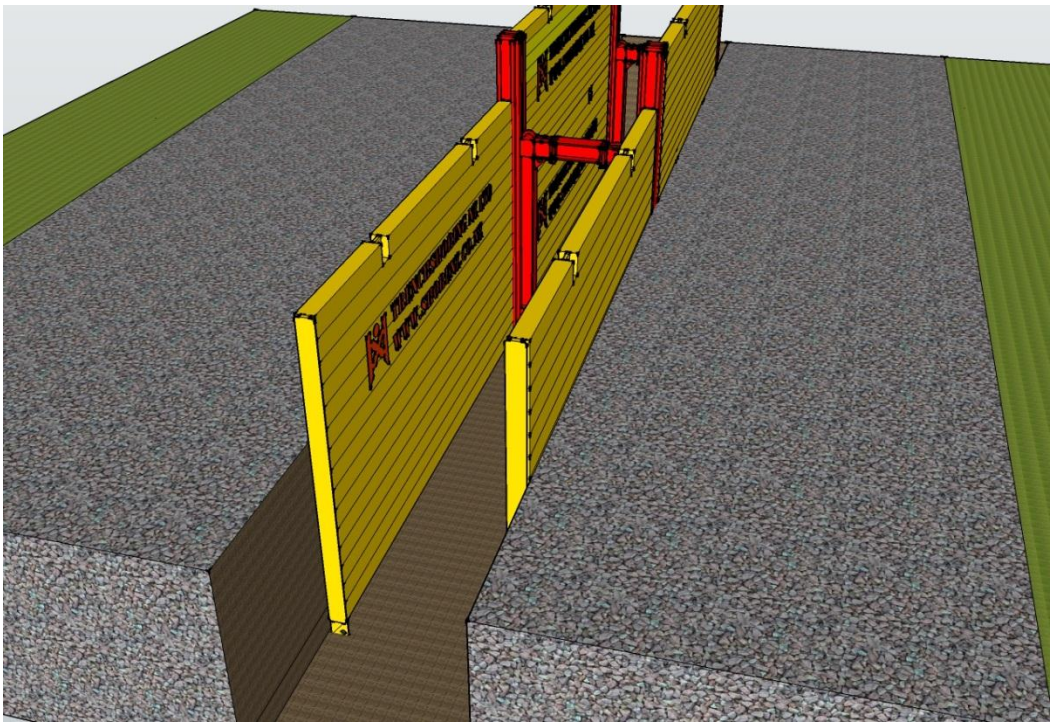
Step 14

Once the top of the base panels are close to ground level, it is time to add the top panels



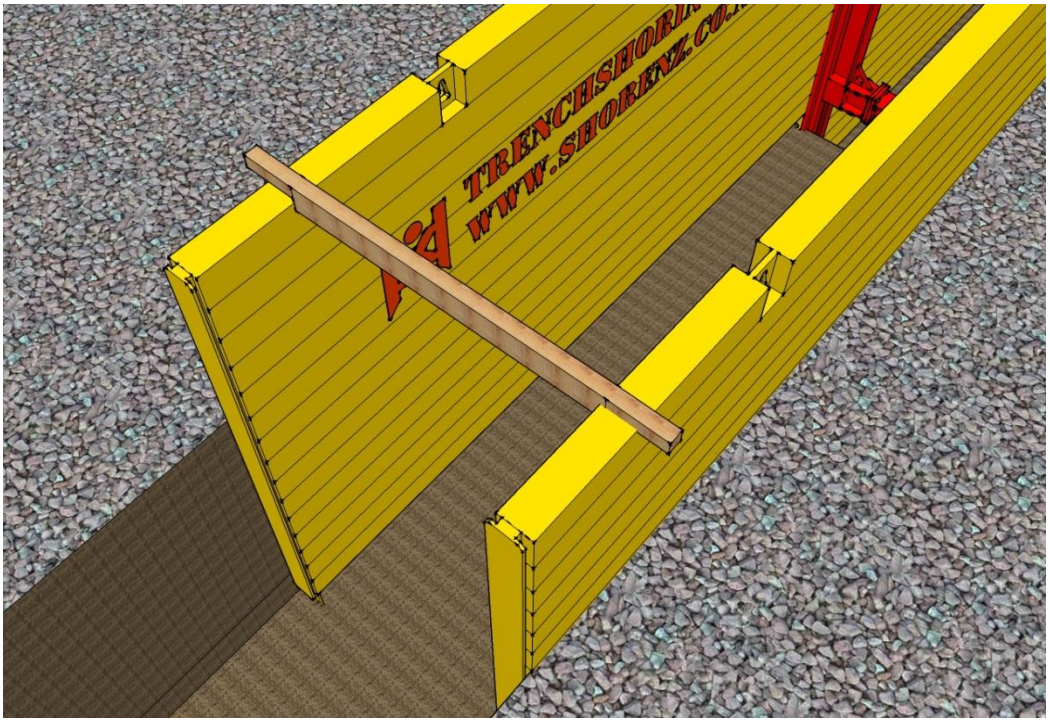
Step 15,

To extend the shoring place base panels onto the slides of the first module



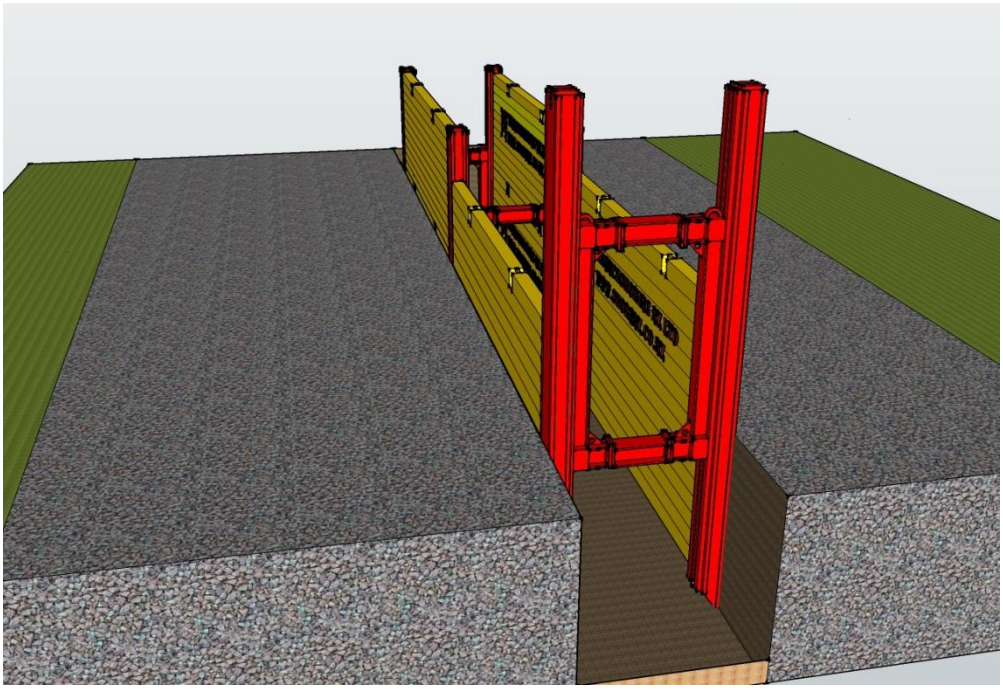
Step 16,

Measure with the timber



Step 17,

Add the H frame, and continue the dig and push method.



Continue to add modules as required to full length and depth required

