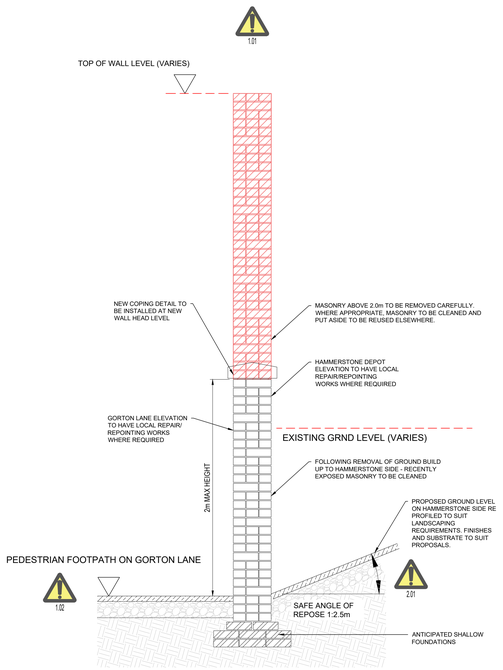
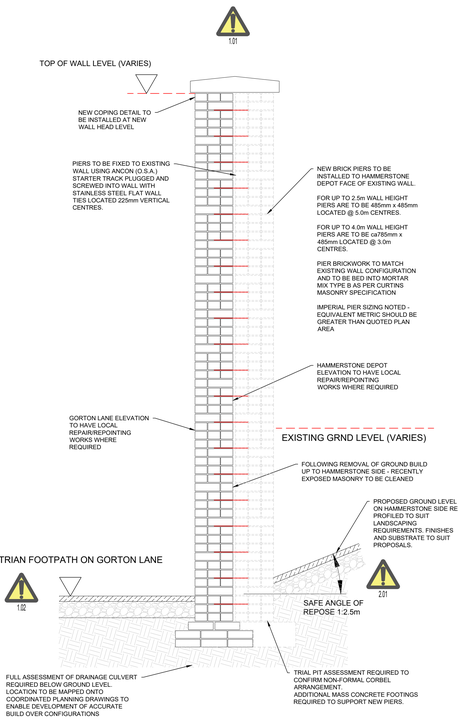


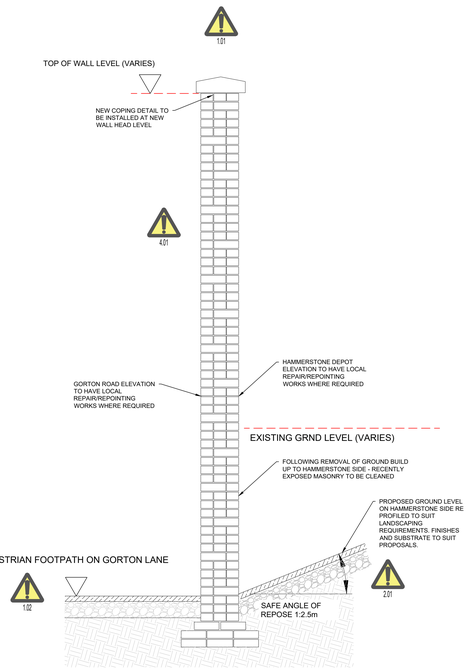
OPTION 01: REDUCED HEIGHT

SCALE 1:20



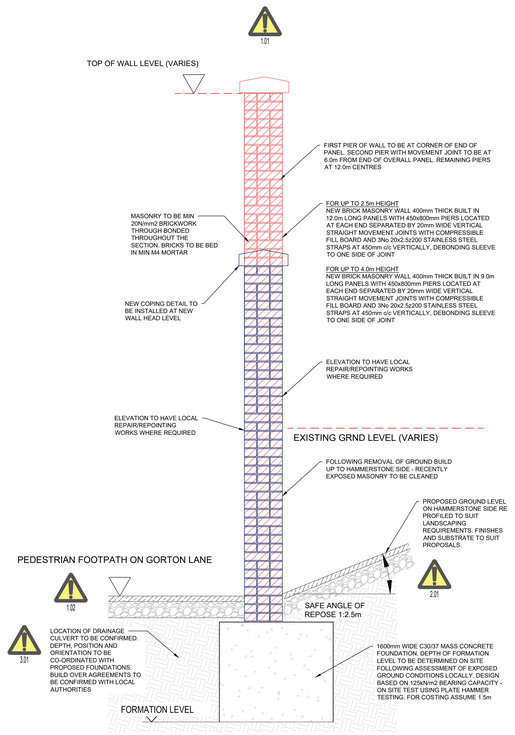
OPTION 02: INSTALLED BUTTRESSES/PIERS

SCALE 1:20



OPTION 03: NO STABILITY ENHANCEMENT

SCALE 1:20

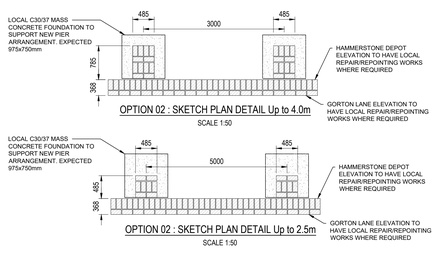


OPTION 04: DEMOLISHED AND NEW WALL

SCALE 1:20

OPTION 01 : SKETCH PLAN DETAIL

SCALE 1:20

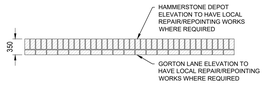


OPTION 02 : SKETCH PLAN DETAIL Up to 4.0m

SCALE 1:50

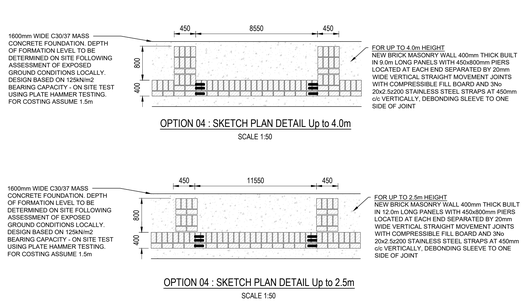
OPTION 02 : SKETCH PLAN DETAIL Up to 2.5m

SCALE 1:50



OPTION 03 : SKETCH PLAN DETAIL

SCALE 1:50



OPTION 04 : SKETCH PLAN DETAIL Up to 4.0m

SCALE 1:50

OPTION 04 : SKETCH PLAN DETAIL Up to 2.5m

SCALE 1:50

OPTION 01:

THIS OPTION REQUIRES THE CROPPING OF THE EXISTING BOUNDARY WALL TO A SPECIFIC HEIGHT. THE FREESTANDING ELEMENT WILL BE REDUCED TO 2.0m ABOVE GROUND LEVEL WITHOUT THE REQUIREMENT FOR STRENGTHENING AND MODIFICATION. INSTALLATION OF NEW COPING ARRANGEMENT REQUIRED TO

REMEDIAL WORKS TO THE BRICK FACE MUST BE UNDERTAKEN TO ADDRESS THE POOR CONDITION IN PLACES.

VEGETATION MUST ALSO BE REMOVED TO ENSURE CONDITION IS MAINTAINED.

REMOVE THE REQUIREMENT FOR A GRAVITY RETAINING WALL FOR A LENGTH OF THE WALL BY RE-PROFILING THE GROUND LEVELS BEHIND THE WALL.

PROS:

- ENHANCES STABILITY OF THE WALL.
- REDUCED EXTENT OF WORK AND REFURBISHMENT.
- REDUCES RISK TO PUBLIC SAFETY.

CONS:

- ADDITIONAL SECURITY RISKS - REQUIRES ANTI CLIMB DETERRENT TO BE INSTALLED TO HEAD OF WALL.
- DISTURBS HISTORIC FABRIC OF THE WALL.

CURTINS **DOES** RECOMMEND THIS OPTION

OPTION 02:

THIS OPTION INSTALLS ADDITIONAL BUTTRESSES BEHIND THE REAR FACE OF THE EXISTING BOUNDARY WALL, KEEPING THE EXISTING WALL HEIGHT AS EXISTING WHERE POSSIBLE.

REMEDIAL WORKS TO THE BRICK FACE MUST BE UNDERTAKEN TO ADDRESS THE POOR CONDITION IN PLACES.

VEGETATION MUST ALSO BE REMOVED TO ENSURE CONDITION IS MAINTAINED.

REMOVE THE REQUIREMENT FOR A GRAVITY RETAINING WALL FOR A LENGTH OF THE WALL BY RE-PROFILING THE GROUND LEVELS BEHIND THE WALL.

PROS:

- ENHANCES STABILITY OF THE WALL.
- REDUCES RISK TO PUBLIC SAFETY.
- RETAINS THE HISTORIC FABRIC OF THE WALL

CONS:

- INSTALLATION OF THE FOUNDATIONS MAY UNDERMINE THE WALL IN PLACES
- ADDITIONAL TEMPORARY WORKS ARE REQUIRED TO ENSURE STABILITY IS MAINTAINED.
- LOSS OF SPACE BEHIND THE WALL.

OPTION 03:

THIS OPTION DOES NOT UNDERTAKE ANY WORKS WHICH ENHANCE THE STABILITY OR REDUCE THE HEIGHT OF THE WALL, WHICH LEAVES THE EXISTING WALL IN A SIMILAR CONFIGURATION AS SURVEYED.

REMEDIAL WORKS TO THE BRICK FACE MUST BE UNDERTAKEN TO ADDRESS THE POOR CONDITION IN PLACES.

VEGETATION MUST ALSO BE REMOVED TO ENSURE CONDITION IS MAINTAINED.

REMOVE THE REQUIREMENT FOR A GRAVITY RETAINING WALL FOR A LENGTH OF THE WALL BY RE-PROFILING THE GROUND LEVELS BEHIND THE WALL.

PROS:

- RETAINS THE HISTORIC FABRIC OF THE WALL
- REDUCES PROGRAMME
- REDUCES COSTS

CONS:

- WALL STABILITY IS CRITICAL AT PRESENT
- INCREASES RISK TO PUBLIC AND HIGHWAYS ASSET TO OUTSIDE OF BOUNDARY
- POTENTIAL REFURBISHMENT WORKS REQUIRED BY CLIENT IN FUTURE TO ENSURE STABILITY IS MAINTAINED.

CURTINS **DOES NOT** RECOMMEND THIS OPTION

OPTION 04:

THIS OPTION DEMOLISHES THE EXISTING MASONRY WALL AND REPLACES WITH A NEW BRICK FREESTANDING WALL WITH JOINTS AT END OF RESTRAINED PANELS TO ENABLE MOVEMENT.

NEW WALL TO BE FOUNDED UPON MASS CONCRETE STRIP FOOTINGS WITH AN ANTICIPATED DEPTH OF 1.5m TO BE CONFIRMED ON SITE FOLLOWING INSITU SOIL TESTING.

PROS:

- ENHANCES STABILITY OF THE WALL.
- REDUCES RISK TO PUBLIC SAFETY.
- REMOVES THE UNKNOWNS
- REDUCES PROGRAMME FROM UNKNOWN EXTENT OF REPAIR WORKS

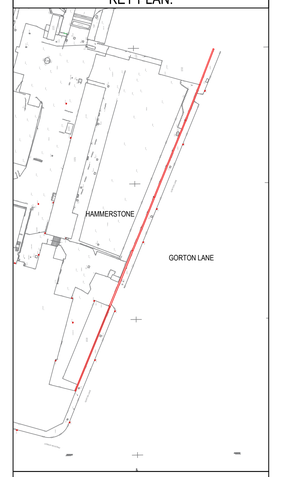
CONS:

- EXISTING CULVERT LOCATION UNKNOWN. REQUIRES SURVEY TO CONFIRM. SIGNIFICANT CO-ORDINATION WITH LOCAL AUTHORITIES AND BUILD OVER AGREEMENT TO BE IN PLACE.
- REPLACEMENT OF WALL NOT A SUSTAINABLE SOLUTION.

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

KEY PLAN:



RESIDUAL HAZARD REGISTER

(RELATES TO CIVIL/STRUCTURAL MATTERS ONLY) MUST BE READ IN CONJUNCTION WITH CURTINS RESIDUAL HAZARD REGISTER 008965-CUR-V1-XX-HA-Z-0001. HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
1.01	LOOSE MASONRY AT HIGH LEVEL	LOOSE MASONRY FALLING ON SITE PERSONNEL AND EQUIPMENT
1.02	PROXIMITY TO BUSY HIGHWAY	DANGERS ENTERING/EXITING SITE AND DANGER OF DISTURBING HIGHWAY RETENTION STRUCTURES
2.01	EMBANKMENT	DANGER OF DISTURBING FOUNDATIONS AND RETENTION STRUCTURES ALONG BUSY HIGHWAY
3.01	EXISTING LIVE SERVICES	EXISTING LIVE SERVICES UNKNOWN (DRAINAGE, ELECTRIC ETC) POTENTIAL TO BE EXPOSED & DAMAGED DURING CONSTRUCTION.
4.01	DEMOLITION / TEMPORARY WORKS	STABILITY OF EXISTING WALLS & STRUCTURE DURING THE DEMOLITION / TEMPORARY WORKS

P02	REVISED DRAWINGS NUMBER	23/11/21	SJ	SJS
P01	FOR INFORMATION AND REVIEW	27/08/21	MW	SJS
Rev:	Description:	Date:	By:	Chkd:

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Birmingham • Bristol • Cambridge • Cardiff • Croydon • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Status: SUITABLE FOR INFORMATION — S2

Project: HAMMERSTONE ROAD DEPOT

Drg Title: PERMANENT REPAIR WORKS - SOUTH BOUNDARY WALL OPTIONS APPRAISAL

Size:	Date:	Drawn By:	Designed By:	Checked By:
A0	AUG 2021	MW	MW	SS

Scale: 1:20

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
HRD	- CUR -	00 -	XX -	DR -	S -	27-0003 -	P02

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