



Ref: CUS/tie/letter/SH/Projects/1635

30th October 2008

Mr. Graeme Barclay
tie MUDFA Utilities Construction Director
tie Limited.
Citypoint,
1st Floor,
65 Haymarket Terrace,
Edinburgh.
EH12 5HD

Dear Graeme,

Subject: MUDFA Carillion Utility Services (CUS) – Contract A150
Change Reference 154.37: Work Order 1D WSI 001/001 (Shandwick Place to Haymarket); Delay, Disruption and Dislocation to Worksite.

Further to letter Ref; CUS/tie/letter/TL/Projects/1385 dated 25th August 2008 and letter Ref; CUS/tie/letter/TL/Projects/1566 dated 14th October 2008; we wish to record the following additional items affecting CUS MUDFA's value recovery against the Schedule Four Rates and Prices for the MUDFA works: -

1. Inefficient Resources and Double Handling of materials due to Traffic Management Design Issues.
2. Remobilisation of resources due to scheduled diversions for original Haymarket Traffic Management falling out with the revised Traffic Management.
3. Double Handling materials to BT manhole – 1D/BT/D/54 due to concerns over structural safety of the adjacent retaining wall and the subsequently reduced working area.

1. Inefficient Resources and Double handling of materials due to Traffic Management Design Issues.

As a direct result of the alterations to Phase 1 Traffic Management, the working area at Haymarket has been considerably reduced. Haymarket is now divided into three separate working areas, as opposed to the originally planned two. Of these three working areas, 'Worksite 2' (please refer to attached drawing), is unpractical due to its inadequate size.

The Traffic Management plan for Phase 1 of Haymarket was put in place for the start date Monday 18th August 2008. While CUS MUDFA were implementing the approved Traffic Management plan, it was realised by tie Limited that the approved Traffic Management plan was not be feasible. The initial approved Traffic Management design had overlooked the ingress and egress of vehicles to the Taxi Rank outside Haymarket Train Station and the adjacent Bus Stop. As a result of this, tie Limited instructed that the Traffic Management be de-scoped, a consequence of which is a significantly reduced worksite for CUS MUDFA to carry out diversionary works.

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Furthermore Traffic Management had overlooked the necessity for a pedestrian walkway west of the Taxi Rank, this walkway is essential to keep pedestrians safe due to the absence of any safety fencing at the retaining wall at the site of the now demolished Caledonian Ale House (please refer to TQ 836). The consequence of these changes is that the width of 'Worksite 3' (please refer to attached drawing) has been significantly reduced.

In addition all required worksite vehicles including; Grab Wagons, Tippers, and the 7.5t Runner, can only obtain safe access to 'Worksite 1'. As a consequence all Materials must be delivered and removed from 'Worksite 1' resulting in double-handling. All spoil from 'Worksite 3' must be transferred to 'Worksite 1' for collection, resulting in additional Labour and Plant (i.e. Dumpers).

Another contributing factor is, the original requirement for Heras Fencing between the two planned working areas has had to be altered to Mass Barriers. This was required due to the ingress and egress of vehicles from the taxi rank. As a consequence access to 'Worksite 2' and 'Worksite 3' is restricted. The result of this change is that Plant cannot be transferred between the three sub worksites and as a consequence sharing of plant is inhibited.

2. Remobilisation of resources due to scheduled diversions for original Haymarket Traffic Management falling out with the revised Traffic Management.

As a consequence of the restrictions mentioned above it will not be possible to commence the following diversions on the planned start dates:-

Diversion	Programmed (Phase 1) Start Date	Programmed (Phase 1) Finish Date	Actual / Proposed Start Date	Estimated Delay to Programme (calendar days)
1D/SP/D/22	02/09/2008	23/09/2008	09/10/2008	44 days
1D/SP/D/24	16/09/2008	23/09/2008	02/10/2008	23 days
1D/SW/D/24	09/09/2008	22/09/2008	14/10/2008	42 days
1D/BT/D/53	26/08/2008	01/09/2008	Unknown	63 days to date
1D/VM/D/33	25/09/2008	23/10/2008	Unknown	40 days to date
1D/VM/D/34	06/10/2008	17/10/2008	15/10/2008	9 days
1D/CW/D/14	23/09/2008	07/10/2008	09/10/2008	23 days

The limited amount of diversionary work available has resulted in CUS MUDFA re-locating **3 teams** from 1D-01-01 to other worksites where it is estimated that **2 teams** were working at 50% efficiency.

Although CUS MUDFA has now begun works on three of the above seven mentioned diversions (1D/SP/D/22; 1D/SP/D/24; 1D/CW/D/14) these will be subject to further delay, disruption and dislocation. This is due to the requirement to maintain ingress and egress to the Taxi Rank adjacent to Haymarket Train Station at all times. As a consequence CUS MUDFA will have to complete said

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diversions in small sections as opposed to one large section as originally anticipated. CUS MUDFA will provide full substantiation of this further delay in future correspondence.

The delay, disruption & dislocation incurred by the above mentioned descoping of Phase 1 Haymarket Traffic Management is estimated to continue until implementation of the Phase 3 Haymarket Traffic Management Plan. As per Construction programme Revision 7.9 Phase 3 is estimated to be implemented on 31st October 2008.

3. Double Handling Steel to BT Manhole – 1D/BT/D/54 due to minimum load bearing capacity of adjacent retaining wall

Upon installation of Haymarket Traffic Management Phase 1 on 16th August 2008, it was noted that the Traffic Management required for demolition of the Caledonian Ale House was still in place. This was despite assurances from **tie** (Ltd) that no **Infracore** Traffic Management would be in place during the MUDFA works. On the morning of 18th August 2008, **Infracore** relocated their site fence onto the rear of the footpath thus no longer inhibiting installation of Haymarket Traffic Management Phase 1.

CUS raised concerns through TQ 836 dated 20th August 2008 over the support to the raised bank and the possibility of undermining, as a consequence to the non-response of TQ 836, CUS deemed that a 3 metre exclusion zone from the Retaining Wall was necessary as no assurance of structural safety from **tie** (Ltd) was given. A 3 metre exclusion zone has been marked out by installation of additional mass barriers, furthermore as mentioned above, the area of 'Worksite 3' was reduced due to the requirement to filter pedestrians around the North of 'Worksite 3', i.e. a safe distance from the Retaining Wall. As a result of this reduction to the North of 'Worksite 3', coupled with the 3 metre exclusion zone infringing on the South of 'Worksite 3' CUS have had to store all steel required to construct 1D/BT/D/54 (MRX 410A) some distance away in 'Worksite 2'. The required steel therefore had to be manually transferred between the two worksites, thus creating reduced productivity in the installation of 1D/BT/D/54. In addition due to the reduced working area at 'Worksite 3' and the inability for a Grab Wagon to directly remove spoil, all spoil was transferred from 'Worksite 3' to 'Worksite 1' for collection.

The consequence of these events equates to a delay, disruption and dislocation the equivalent of an additional **244 calendar days** to date, which will have a direct and consequential impact on the planned completion date.

The above detailed Delay, Disruption & Dislocation incurred by CUS MUDFA will increase the Estimate for 1D WSI 001/001 by **£66,978.01**. The breakdown for this is detailed in the following attachments;

- CC 154.37.1a. Inefficient Resources due to Traffic Management Design Issues: £25,260.11.
- CC 154.37.1b. Double Handling materials due to Traffic Management Design Issues: £13,617.50.

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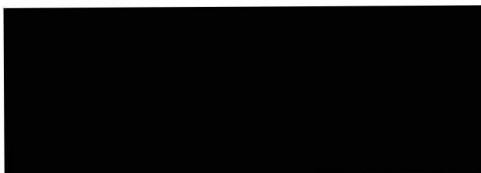
- CC 154.37.2. Remobilised Resources due to diversions falling out with the revised Traffic Management (i.e. demobilise/re-mobilise resources sent off site and some utilised unproductively elsewhere; evaluated @ 50% efficient): £16,211.20
- Double Handling materials to BT manhole – 1D/BT/D/54 due to concerns over structural safety of the adjacent retaining wall and the subsequently reduced working area: £11,889.20.

The attached estimates exclude the following:-

- An assessment of the impact on Work Sector and Contract Preliminaries
- An assessment of the impact on the overall Contract Programme and associated Extension of Time entitlement under Clause 38 (Long Stop Date).
- A re-assessment of the Schedule 4 rates and prices due to the limited availability of Work Sites and those issues discussed in detail under letter Ref, CUS/tie/letter/KAG/Projects/833 dated 11th March 2008.
- Other Change Control items for this Work Site issued under separate cover.

Should you wish to discuss or review any of the above please do not hesitate to contact me, or Mr. Taryne Lowe.

Yours sincerely,
For and on behalf of **Carillion Utility Services**



Steve Beattie
MUDFA Carillion Project Director

Copies:-
tie Project Team
John Casserly

MUDFA Project Team
Keith Gourlay
Taryne Lowe
Roddy Aves
Stephen Miller

Attached/... **Drawings (1 page)**
Change Reference Build-up (4 pages)
Copy of Technical Queries (1 page)
Breakdown of Resources claimed (1 page)
Photographs (9 pages)



Change Reference: 154.37.1a

Diversion Numbers:

Date of Works
 From: 18/08/2008
 To: 17/10/2008

Contract Number: A150
 Contract Name: MUDFA - Edinburgh Trams

Description of Works: Inefficient Resources due to Traffic Management Design Issues.
 (excluding manhole team claimed in 154.37.3)

TQ Number(s):
 TQ Date:

CVI Breakdown Summary

CVI No.	Description	Date	Unchartered Services	Artificial Obstruction	Additional Works	Trial Holes	Other	TOTAL
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
Team Hours			0.0	0.0	0.0	0.0	0.0	0.0

Extra Over Items (Exception Items)

Labour Uplift Until 12/10/2007 (100% for 1A-03-01; 50% for other Work Sites) included for valuation under CR 00.0 (Measured on resource allocation sheets)

Cost Quantity	Cost Unit	Cost Rate	Cost Amount	CARP/CUS Uplift %	CARP/CUS Uplift Value	TOTAL
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CARP Rates

Actual recorded on CVI: CARP Day works

Labour	Quantity	Unit	Rate	Amount	CARP/CUS Uplift %	Uplift Value	Total	Actual Cost
Utility Civil Labourer - Welch Civils (Inefficient working due to reduced work area - taken at 25% of total hours)	21.75	hr	20.00	435.00	8.80%	38.28	473.28	Actual Cost
Utility Machine Labourer - EJB Civil Engineering (Inefficient working due to reduced work area - taken at 25% of total hours)	21.38	hr	23.25	496.97	8.80%	43.73	540.70	Actual Cost
Utility Civil Labourer - L.U.N (Inefficient working due to reduced work area - taken at 25% of total hours)	393.75	hr	20.00	7,875.00	8.80%	693.00	8,568.00	Actual Cost
Utility Civil Labourer - CBZ Utilities (Inefficient working due to reduced work area - taken at 25% of total hours)	221.38	hr	20.00	4,427.50	8.80%	389.62	4,817.12	Actual Cost
Utility Civil Labourer - Dickson Utilities (Inefficient working due to reduced work area - taken at 25% of total hours)	96.00	hr	3.00	288.00	8.80%	25.34	313.34	Actual Cost
Utility Civil Foreman - CUS (Inefficient working due to reduced work area - taken at 25% of total hours)	11.88	hr	13.37	158.77	8.80%	13.97	172.74	Actual Cost
Utility Civil Labourer - CUS (Inefficient working due to reduced work area - taken at 25% of total hours)	23.75	hr	10.69	253.89	8.80%	22.34	276.23	Actual Cost
Sub-Total				13,935.13		1,226.29	15,161.42	

Disrupted (Unproductive Schedule 4 resources)

Other	Quantity	Unit	Rate	Amount	CARP/CUS Uplift %	Uplift Value	Total	Actual Cost
Tipper truck: 32t GVW grab wagon (taken at 33% of team hours, then 25% inefficient)	83.45	hr	48.27	4,028.36	8.80%	354.50	4,382.85	Plus 8.6% CARP uplift
7.5t Wagon & Driver (taken at 20% of team hours, then 25% inefficient)	50.58	hr	46.68	2,360.65	8.80%	207.74	2,568.39	C.A.R.P Plus 8.6% CARP uplift
Inefficiency in Plant (taken at 25% of total Plant Costs up to 17/10/2008 (£26,351) minus plant claimed in CC154.37.1b (£9,184.90) minus plant claimed in CC154.37.1a (£4,717))	1.00	Sum	2,892.88	2,892.88	8.80%	254.57	3,147.46	Actual Cost
Sub-Total				9,281.89		816.81	10,098.70	

Summary

Schedule 4	Totals	
Artificial Obstructions	0.00	
Trial Holes	0.00	
Traffic Management	0.00	
Subcontractors	0.00	
Materials	0.00	
Other	0.00	
CARP	Totals	
Labour	15,161.42	
Plant- Water	0.00	
Plant- Power	0.00	
Plant- Gas	0.00	
Plant- Telecoms	0.00	
Plant- Other	0.00	
Subcontractors	0.00	
Materials	0.00	
Total		15,161.42
Unproductive Plant - CARP	Totals	
Plant- Water	0.00	
Plant- Power	0.00	
Plant- Gas	0.00	
Plant- Telecoms	0.00	
Plant- Other	10,098.70	
Total		10,098.70
Total		25,260.11

Cost Amount	CARP/CUS Uplift Value	TOTAL
23,217.02	2,043.10	25,260.11

Notes

- 1) Excludes assessment of impact on Work Sector Preliminaries & Contract Preliminaries
- 2) Excludes assessment of impact on programme and subsequent EOT
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)
- 11)
- 12)
- 13)
- 14)

Plant	10,098.70	Prepared by	
Labour	15,161.42		
Materials	0.00		
S/C	0.00		
Other	0.00		

Checked by



Change Reference: 154.37.1b

Division Numbers	

Date of Works
From: 18/08/2008
To: 17/10/2008

Contract Number: A150
Contract Name: MUDFA- Edinburgh Trams
TQ Number(s):
TQ Date:

Description of Works: Double Handling materials due to Traffic Management Design Issues. (excluding manhole team claimed in 154.37.3)

CVI Breakdown Summary

CVI No.	Description	Date	Unchartered Services	Artificial Obstruction	Additional Works	Trial Holes	Other	TOTAL
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
Team Hours			0.0	0.0	0.0	0.0	0.0	0.0

Extra Over Items (Exception Items)

Labour Uplift Until 12/10/2007 (100% for 1A-03-01; 50% for other Work Sites) Included for valuation under CR 00.0 (Measured on resource allocation sheets)

Cost Quantit	Cost Unit	Cost Rate	Cost Amount	CARP/CUS Uplift %	CARP/CUS Uplift Value	TOTAL
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CARP Rates

Actual recorded on CVI - CARP Dayworks

Labour	Quantity	Unit	Rate	Amount	Uplift %	Uplift Value	Total	Actual Cost
Utility Civil Labourer - Weich Civils (taken at 50% of the Grab Wagons total hours)	5.03	hr	22.00	110.72	8.80%	9.74	120.46	Actual Cost
Utility Machine Labourer - EJB Civil Engineering (taken at 50% of the Grab Wagons total hours)	4.70	hr	20.00	94.05	8.80%	8.28	102.33	Actual Cost
Utility Civil Labourer - L.U.N (taken at 50% of the Grab Wagons total hours)	88.03	hr	20.00	1,760.55	8.80%	154.93	1,915.48	Actual Cost
Utility Civil Labourer - CBZ Utilities (taken at 50% of the Grab Wagons total hours)	40.18	hr	20.00	803.55	8.80%	70.71	874.26	Actual Cost
Utility Civil Labourer - Dickson Utilities (taken at 50% of the Grab Wagons total hours)	21.12	hr	20.00	422.40	8.80%	37.17	459.57	Actual Cost
Utility Civil Labourer - CUS (taken at 50% of the Grab Wagons total hours)	7.84	hr	13.37	104.79	8.80%	9.22	114.01	Actual Cost
Sub-Total				3,296.05		290.05	3,586.10	
Plant - Other								
8t Excavator required at Worksite 3 to load dumper	63.00	day	106.00	6,678.00	8.80%	587.66	7,265.66	Actual Cost
6t Dumper	63.00	day	28.00	1,764.00	8.80%	155.23	1,919.23	Actual Cost
Additional White Diesel (taken @ 0.078% Claimed Plant cost as per Build Ups to Schedule 4 Rates and Prices)	1.00	Sum	778.03	778.03	8.80%	68.47	846.50	C.A.R.P Plus 8.6% CARP uplift
Sub-Total				9,220.03		811.36	10,031.40	

Summary	
Schedule 4	
Artificial Obstructions	0.00
Trial Holes	0.00
Traffic Management	0.00
Subcontractors	0.00
Materials	0.00
Other	0.00
CARP	
Labour	3,586.10
Plant - Water	0.00
Plant - Power	0.00
Plant - Gas	0.00
Plant - Telecoms	0.00
Plant - Other	10,031.40
Subcontractors	0.00
Materials	0.00
Total	13,617.50
Unproductive Plant - CARP	
Plant - Water	0.00
Plant - Power	0.00
Plant - Gas	0.00
Plant - Telecoms	0.00
Plant - Other	0.00
Total	0.00
Total	13,617.50

Cost Amount	CARP/CUS Uplift Value	TOTAL
12,516.09	1,101.42	13,617.50

- Notes
- 1) Excludes assessment of impact on Work Sector Preliminaries & Contract Preliminaries
 - 2) Excludes assessment of impact on programme and subsequent EDT
 - 3)
 - 4)
 - 5)
 - 6)
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 - 8)
 - 9)
 - 10)
 - 11)
 - 12)
 - 13)
 - 14)

Plant	10,031.40	Prepared by:	
Labour	3,586.10		
Materials	0.00		
S/C	0.00		
Other	0.00		
		Checked by:	



Cost Build-up for Additional Works

Change Reference: 154.37.2
 Contract Number: A150
 Contract Name: MUDFA- Edinburgh Trams
 TQ Number(s):
 TQ Date:

Diversion Numbers:
 Date of Works
 From: 22/08/2008
 To: 17/10/2008

Description of Works: Remobilised Resources due to seven diversions scheduled for original Haymarket Traffic Management falling out with de-scoped Traffic Management. (i.e. demobilise/re-mobilise resources sent off site and some utilised unproductively elsewhere; evaluated @ 50% efficient)

CVI Breakdown Summary

CVI No.	Description	Date	Unchartered Services	Artificial Obstruction	Additional Works	Trial Holes	Other	TOTAL
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
Team Hours			0.0	0.0	0.0	0.0	0.0	0.0

Extra Over Items (Exception Items)

Labour Uplift Until 12/10/2007 (100% for 1A-03-01; 50% for other Work Sites) Included for valuation under CR 00.0 (Measured on resource allocation sheets)

Cost Quantity	Cost Unit	Cost Rate	Cost Amount	CARP/CUS Uplift %	CARP/CUS Uplift Value	TOTAL
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CARP Rates

Actual recorded on CVI: CARP Dayworks

Labour	Cost	Unit	Rate	Amount	CARP/CUS Uplift %	Uplift Value	TOTAL	Actual Cost
Utility Civil Foreman - Welch Civils (evaluated to be working @ 50% efficiency)	150.00	hr	22.00	3,300.00	8.80%	290.40	3,590.40	Actual Cost
Utility Civil Labourer - Welch Civils (evaluated to be working @ 50% efficiency)	205.00	hr	20.00	4,100.00	8.80%	360.80	4,460.80	Actual Cost
Utility Civil Foreman - L.U.N (evaluated to be working @ 50% efficiency)	225.00	hr	20.00	4,500.00	8.80%	396.00	4,896.00	Actual Cost
Utility Civil Labourer - L.U.N (evaluated to be working @ 50% efficiency)	150.00	hr	20.00	3,000.00	8.80%	264.00	3,264.00	Actual Cost
Sub-Total				14,900.00		1,311.20	16,211.20	

Summary	
Schedule 4	Totals
Artificial Obstructions	0.00
Trial Holes	0.00
Traffic Management	0.00
Subcontractors	0.00
Materials	0.00
Other	0.00
CARP	Totals
Labour	16,211.20
Plant- Water	0.00
Plant- Power	0.00
Plant- Gas	0.00
Plant- Telecoms	0.00
Plant- Other	0.00
Subcontractors	0.00
Materials	0.00
Total	16,211.20
Unproductive Plant - CARP	Totals
Plant- Water	0.00
Plant- Power	0.00
Plant- Gas	0.00
Plant- Telecoms	0.00
Plant- Other	0.00
Total	0.00
Total	16,211.20

Cost Amount	CARP/CUS Uplift Value	TOTAL
14,900.00	1,311.20	16,211.20

Notes

- Excludes assessment of impact on Work Sector Preliminaries & Contract Preliminaries
- Excludes assessment of impact on programme and subsequent EOT
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Plant	0.00	Prepared by:
Labour	16,211.20	
Materials	0.00	
S/C	0.00	
Other	0.00	

Checked by:



Change Reference: **154.37.3**

Contract Number: **A150**

Contract Name: **MUDFA - Edinburgh Trams**

TQ Number(s):

TQ Date:

Olversion Numbers: **10/BT/D/54**

Date of Works
From: **18/08/2008**
To: **10/10/2008**

Description of Works: **Double Handling materials to BT manhole - 10/BT/D/54 due to minimum load bearing capacity of adjacent retaining wall and reduced 'Worksite 3'. Minus 42 team hours spent demolishing existing manhole - CVI 00455**

CVI Breakdown Summary

CVI No.	Description	Date	Unchartered Services	Artificial Obstruction	Additional Works	Trial Holes	Other	TOTAL
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
								0.0
Team Hours			0.0	0.0	0.0	0.0	0.0	0.0

Extra Over Items (Exception Items)

Labour Uplift Until 12/10/2007 (100% for 1A-03-01; 50% for other Work Sites) included for valuation under CR 00 0 (Measured on resource allocation sheets)

Cost Quantity	Cost Unit	Cost Rate	Cost Amount	CARP/CUS Uplift %	CARP/CUS Uplift Value	TOTAL
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CARP Rates

Actual recorded on CVI - CARP Dayworks

Labour	Quantity	Unit	Rate	Amount	Uplift %	Uplift Value	TOTAL	Actual Cost
Utility Civil Labourer - Welch Civils (taken at 30% inefficient)	101.40	hr	22.00	2,230.80	8.80%	196.31	2,427.11	Actual Cost
Utility Civil Labourer - Welch Civils (taken at 30% inefficient)	212.25	hr	20.00	4,245.00	8.80%	373.56	4,618.56	Actual Cost
Sub-Total				6,475.80		569.87	7,045.67	

Disrupted (Unproductive Schedule 4 resources)

Plant - Water	Quantity	Unit	Rate	Amount	Uplift %	Uplift Value	TOTAL	Actual Cost
Transit Van (taken at 30% inefficient)	101.40	hr	2.88	292.37	8.80%	25.73	318.10	Actual Cost
Road Saw self propelled (taken at 30% inefficient)	101.40	hr	0.63	63.38	8.80%	5.58	68.95	Actual Cost
Sub-Total				433.93		38.19	472.12	
Plant - Power	Quantity	Unit	Rate	Amount	Uplift %	Uplift Value	TOTAL	Actual Cost
Cat and Genny (taken at 30% inefficient)	101.40	hr	0.25	25.35	8.80%	2.23	27.58	Actual Cost
Sub-Total				25.35		2.23	27.58	
Other	Quantity	Unit	Rate	Amount	Uplift %	Uplift Value	TOTAL	Actual Cost
7.5t Excavator (taken at 30% inefficient)	101.40	hr	8.25	836.55	8.80%	73.62	910.17	Actual Cost
Breaker for 7.5t Excavator (taken at 30% inefficient)	101.40	hr	5.00	507.00	8.80%	44.62	551.62	Actual Cost
Stihl Saw (taken at 30% inefficient)	101.40	hr	0.33	32.96	8.80%	2.90	35.86	Actual Cost
1.5t Excavator (taken at 30% inefficient)	101.40	hr	2.88	291.53	8.80%	25.65	317.18	Actual Cost
Breaker for 1.5t Excavator (taken at 30% inefficient)	101.40	hr	2.25	228.15	8.80%	20.08	248.23	Actual Cost
Trailer for 1.5t Excavator (taken at 30% inefficient)	101.40	hr	0.33	32.96	8.80%	2.90	35.86	Actual Cost
Gas Detector (taken at 30% inefficient)	101.40	hr	0.83	84.16	8.80%	7.41	91.57	Actual Cost
Angle Grinder (taken at 30% inefficient)	101.40	hr	2.58	261.61	8.80%	23.02	284.63	Actual Cost
Ladders (taken at 30% inefficient)	101.40	hr	0.20	20.28	8.80%	1.78	22.06	Actual Cost
Vibrating Poker + Gen + Pump (taken at 30% inefficient)	101.40	hr	8.22	833.89	8.80%	73.38	907.27	Actual Cost
Escape Set (taken at 30% inefficient)	101.40	hr	-1.28	-433.99	8.80%	38.19	472.18	Actual Cost
Additional Gas Oil (taken @ 0.024% of Disrupted Plant cost as per Build Ups to Schedule 4 Rates and Prices)	1.00	Sum	101.04	101.04	8.80%	8.89	109.93	C.A.R.P Plus 8.6% CARP uplift
Additional White Diesel (taken @ 0.076% of Disrupted Plant cost as per Build Ups to Schedule 4 Rates and Prices)	1.00	Sum	328.38	328.38	8.80%	28.90	357.28	C.A.R.P Plus 8.6% CARP uplift
Sub-Total				3,992.49		351.34	4,343.83	

Summary

Schedule 4	Totals
Artificial Obstructions	0.00
Trial Holes	0.00
Traffic Management	0.00
Subcontractors	0.00
Materials	0.00
Other	0.00
CARP	Totals
Labour	7,045.67
Plant - Water	0.00
Plant - Power	0.00
Plant - Gas	0.00
Plant - Telecoms	0.00
Plant - Other	0.00
Subcontractors	0.00
Materials	0.00
Total	7,045.67
Unproductive Plant - CARP	Totals
Plant - Water	472.12
Plant - Power	27.58
Plant - Gas	0.00
Plant - Telecoms	0.00
Plant - Other	4,343.83
Total	4,843.53
Total	11,889.20

Cost Amount	CARP/CUS Uplift Value	TOTAL
10,927.57	961.63	11,889.20

Notes

- 1) Excludes assessment of impact on Work Sector Preliminaries & Contract Preliminaries
- 2) Excludes assessment of impact on programme and subsequent EOT
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)
- 11)
- 12)
- 13)
- 14)

Plant	4,807.68	Prepared by	
Labour	7,045.67		
Materials	0.00		
S/C	0.00		
Other	0.00		

Checked by

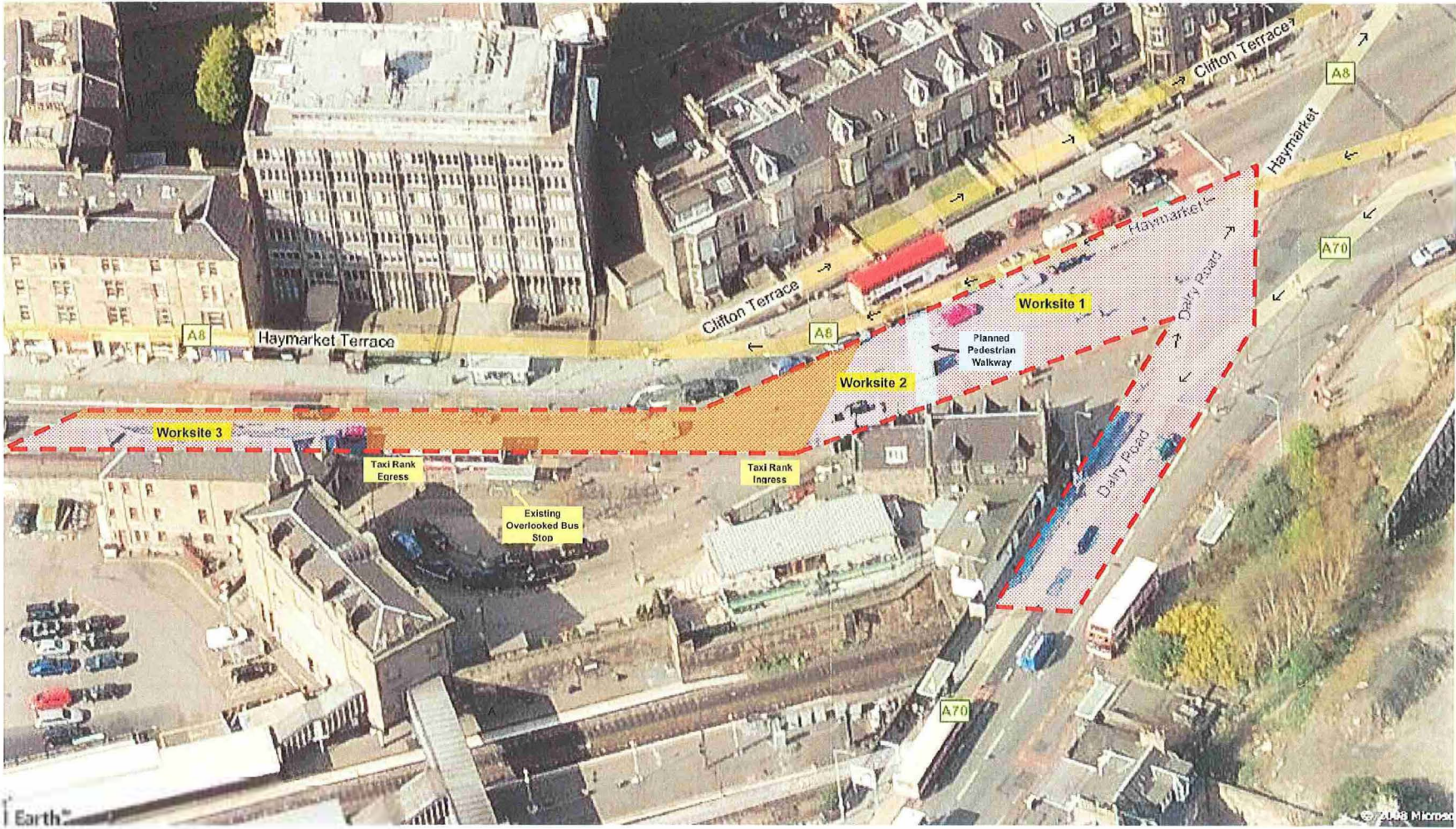


Technical Query Sheet

Section/Work Order 1D - Manor Place to Haymarket		
AMIS Technical Query No: TQ/UTL/836	Date Raised: 20/08/2008	
Raised By: Rod Aves	Position: Design & Planning Manager	
General Description of Query		
<p>On Saturday morning the traffic management in haymarket was installed, it was noted / recorded that the traffic management for the Ale house demolition was still in place even following confirmation from tie limited that no INFRACO TM would be in place during the MUDFA works in haymarket.</p> <p>On Monday morning INFRACO proceeded to relocate their site fence onto the rear of the footpath thus removing the TM. Currently there is no support to the bank by means of specific retaining wall, designed structure or temporary works installation and only a heras type fence to stop pedestrians falling over the edge. There is approx 1m of the bank immediately below the footpath that has no support what so ever and part of the ale house foundations remain holding the rest of the embankment.</p> <p>Can tie Limited please confirm that a suitable professional assessment has been undertaken to substantiate that the road passing the Ale house location can operate in its previously designed condition and that the removal of the ale house has not undermined the structural integrity of the road in any way.</p> <p>Carillion must record that we will not proceed with excavation below the 1m depth until we are satisfied that the road surface has not been compromised.</p> <p>Please note any delays associated with confirming the above mentioned points may impact on the current construction programme.</p>		
Issued to: G Barclay Organisation: tie Ltd	Target Date for Response: 26/08/2008	
Query Answer:		
Approved by:	Organisation:	
Signed:	Date:	
Closed By:	Signed:	Date:



AREA NOT WITHIN TM SETUP 18/08/2008



Key

-  Phase 1 Traffic Management Area
-  Areas of Phase 1 Traffic Management Remove

	1	2	3	4	5	6	7	8	9	Total
	2	2		1	1	2	0	1	1	
	2	9		2	9	6	3	0	7	
A	A	0	S	S	S	S	O	O	O	
u	u	5	e	e	e	e	c	c	c	
g	g	+	p	p	p	p	t	t	t	
SECTION 1 - LABOUR										
CBZ										
a Johnstone					9.5					9.5
B. Irvine		47.5	38.0	28.5						114.0
c Kingland	Foreman				19.0					19.0
C. Flynn		47.5	38.0							85.5
c mcgovern					9.5					9.5
D Steith				47.5						47.5
J Hatch	Foreman		38.0	39.0	43.0	2.0				122.0
k Hatch						2.0				2.0
J. Allan	Foreman	17.0								17.0
J. Keir		47.5	38.0	48.5	33.0	2.0				169.0
k hatch					48.0					48.0
L. Flalman	Foreman	47.5	38.0							85.5
R. Dully		28.5	38.0	47.5	43.0					157.0
										0.0
Welch Civils										
C. Morley	Manhole Foreman	42.0	31.5	52.5	38.0	39.0	61.0	51.5	64.5	380.0
D. Monahan	Foreman			4.5	26.0					30.5
D. Everett		31.5	31.5	52.5	38.0			51.5	64.5	269.5
miko				26.0						26.0
n evans					39.0	61.0				100.0
r oldham				4.5	26.0					30.6
P. Pearson		42.0	31.5	52.5	38.0	39.0	61.0	51.5	64.5	380.0
										0.0
Dickson Utilites										
D. Lawton						4.5	47.5	28.5	47.5	128.0
M. Deaville	Foreman					4.5	47.5	28.5	47.5	128.0
P. Obyrne						4.5	47.5	28.5	47.5	128.0
										0.0
CUS										
A. Dalton	Foreman			47.5						47.5
G. Bartlett				47.5						47.5
J. Maiks				47.5						47.5
										0.0
L.U.N										
b pierek	Foreman			20.5	61.0	24.0				105.5
D. Irvine						50.0	50.0	62.0	50.0	212.0
D. Bartram	Foreman					40.0	58.0	62.0	50.0	210.0
J. Gallagher						40.0	58.0	62.0	50.0	210.0
J. Leo					37.0	24.0				61.0
m. comiskey						50.0	56.0	42.0	50.0	198.0
m. renwick				20.5	54.0	24.0				98.5
S. Jamieson	Foreman					50.0	56.0	62.0	50.0	218.0
W. Jamieson									50.0	50.0
w. mclean						50.0	50.0	62.0	50.0	212.0
										0.0
EJB Engineering										
s. forsyth	Foreman							9.5	19.0	28.5
r. forsyth								9.5	19.0	28.5
a. riddock								9.5	19.0	28.5

Manhole Team estimated in CC 154.37.3

Grab Wagon Hours (@ 33% of team hours)	333.8
7.5t Wagon driver (taken @ 20% of team hours)	202.3

3 teams Remobilised (estimated to be working at 50% efficiency)

	1	2	3	4	5	6	7	8	9	Total								
	2	2	0	1	1	2	0	1	1									
	2	9	5	2	9	6	3	0	7									
A	A	S	S	S	S	S	O	O	O									
u	u	e	e	e	e	e	c	c	c									
g	g	p	p	p	p	p	t	t	t									
Total																		
C. McGinty	Welch	50	50	50	10	40	50	50		300								
A. Guilfoyle	Welch	50	50	50	10	40	40	50		290								
P. McGinty	Welch		30	10	40	40				120								
D. Bartram	LUN	56		84	50	78				efficient remobilised labour								
J. Gallagher	LUN	56		84	50	78				efficient remobilised labour								
S. Nelson (gas)	LUN	50	50	50	50	50	50	50	50	450								
A. Norris (gas)	LUN	50	50	50	50	50	50			300								
<table border="1"> <tr><td>REM 1</td></tr> <tr><td>1B-02-01</td></tr> <tr><td>1B-01-01</td></tr> <tr><td>2A-01-01</td></tr> <tr><td>1D-04-01</td></tr> <tr><td>absent</td></tr> <tr><td>CC 184</td></tr> <tr><td>1A-01-01</td></tr> <tr><td>1D-01-01</td></tr> </table>										REM 1	1B-02-01	1B-01-01	2A-01-01	1D-04-01	absent	CC 184	1A-01-01	1D-01-01
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29/01/2008



29/01/2008



26/02/2008



26/02/2008



26/02/2008

LA STAZIONE
ITALIAN RESTAURANT
ENTRANCE 600 STRAIGHT UPSTAIRS

Crillion



CAR0000311_0017





26/02/2008



26/02/2008