CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE 33 THURSDAY 13th APRIL 1995 AT 10.00 HOURS

Present: Mr Bob Watts :W.S.A. Copies: Mr.A.Moores :M.O.D/DLA

Mr Graham Vincent :R.O. Mr.D.Coyle :M.O.D.P.E.

Mr Peter Mayell :R.O. Mr.S.Chaddock :ARCH. Mr.D.Bone :CIVIX

Mr.P.Greggain :M.O.D/DLA

Mr.S.Fox :M.O.D/DLA

MATTERS ARISING - FROM MEETING OF 9th MARCH 1995 1. ACTION 1.1 (1.1)**Explosives Testing** A programme of sampling mounds for explosives and nonexplosives contamination supplementary to ESG 17/92 is required. WSA to prepare - SMC received. Strimming and raking of mounds proceeding. Blue Asbestos discovered in E2 mound has W.S.A. been removed by excavation. Confirmatory sampling required. R.O. (1.2)Photographic record 1.2 This activity to proceed with admin assistant and possibly student labour during vacations. R.O. 1.3 P Area - outstanding items are: replace sandstone capping to (1.3)Bridge 1 abutments. Treatment to residual material in Bridge 1 abutment to await services excavation and bank treatment W.S.A. undertaken by Wimpey. R.O. 1.4 (1.4)Water wheel and Press House areas. Confirmatory investigation results to hand. Coring to banks and metal-detector sweep required. B.S. Bob Stebbings is tendering scheme for rehabilitation and planting. R.O. SMC awaited. Target date for completion of remediation is ARCH. 1st May 1995. W.S.A.

1.5 (1.5) Incorporating Mills.

Work in these buildings stopped. Clearance of undercrofts and final clean awaiting resources. L157 is completed and will be sampled. RO to prepare a swab sampling procedure. Remaining deep drains will be rodded clean and grouted. Outstanding drain grouting to be tendered.

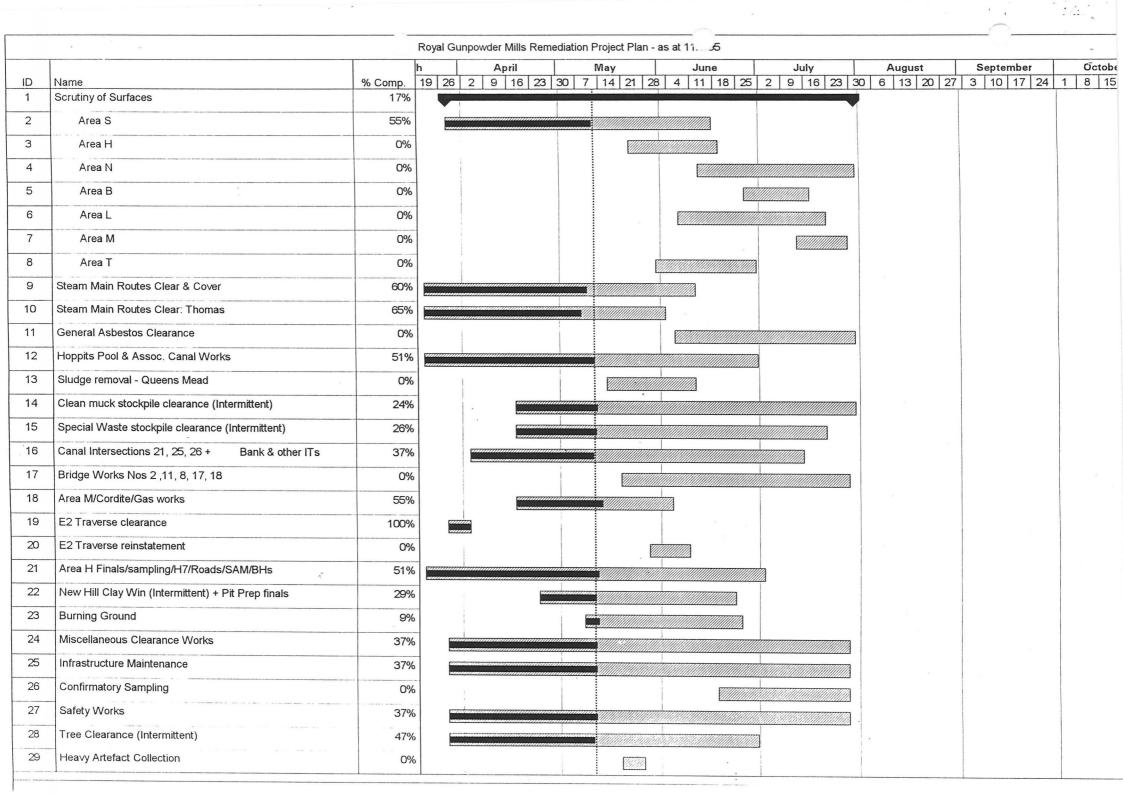
- W.S.A. R.O.

1.6	(1.6)	<u>Tetryl Area.</u> Confirmatory sampling of factory area will await removal of canal intersections and bank treatment. Due to commence 24th April 1995.	W.S.A. R.O.
1.7	(1.7)	<u>Asbestos clad steam main routes</u> work proceeding. Remainder of routes to be confirmed. Information to be collated on CAD drawings. Proceeding.	W.S.A. R.O.
1.8	(1.8)	Preparation of artifact inventory. Work stopped on this activity. Artifacts at Powfoot belonging to RO to be transported to South site at cost of RO and EFDC in liaison with Trust Steering Committee and resident archaeologist.	ARCH. R.O.
1.9	(1.9)	Asphalt melting plant. This activity held. As buildings are cleaned an assessment will be made as to whether asphalt floors should be removed at that stage. SMC received. Accumulate asphalt till warmer weather. This process could be carried out at New Hill. RO to review existing stock pile volumes.	R.O. W.S.A.
1.10	(1.10)	CAD plot of services survey to hand. Final check required.	R.O. W.S.A.
1.11	(1.11)	Safety Audit. Monthly visits proceeding.	R.O.
1.12	(1.13)	Explosives License Application received by R.O. back from HSE. Next stage is to advertise and seek public comment. In hand but a resolution not expected until after the June meeting of Essex County Council.	R.O.
1.13	(1.14)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A.
1.14	(1.15)	<u>Trenching to Northern Canals</u> - some investigation by excavation of buried stoves and canal adjacent 22a required. Further tree clearance required. Awaiting resources.	R.O. W.S.A.
1.15	(1.16)	Queens Mead almost totally covered with sludge which will be excavated in May 1995 after dewatering. General strip of areas affected by grit blasting and search for canal also required.	W.S.A.
1.16	(1.17)	<u>Water mains</u> - Some brickwork repairs to valve and hydrant pits required. Costs to VO77. On completion of works with a requirement for mains water, the system will be isolated.	R.O. W.S.A.
1.17	(1.18)	Bridge works. Tenders returned. Reduced programme to go ahead in respect of bridges 2, 8, 11, 17 and 18. Start date not yet confirmed.	W.S.A.

1.18	(1.19)	R.O. investigation into the <u>stability of N.G. in timber.</u> Draft report 2095/95 passed to WSA.	W.S.A. R.O.
1.19	(1.20)	<u>Piling to canal/river intersections</u> to remove residual contaminated material. Reduced programme to proceed. Commencing week beginning 24th April 1995.	W.S.A.
1.20	(1.21)	Excavation of river beds adjacent and integral with bridges 6 and 8 in refurbishment/replacement works. This is best carried out using Portadam technique. If bridge works approved may be possible to liaise with contractor to use his dam installation to clear before bridge works are undertaken. NRA to deal with fish. Work approved.	W.S.A.
1.21	(1.22)	R.O. <u>draft inventory</u> of client owned items received. Will be updated.	. R.O.
1.22	(1.23)	Portable explosives analyser R.O. trial complete, not yet written up. Copy to WSA. May have a use in buildings. Unit can be hired.	R.O.
1.23	(1.24)	R.O. produced a draft certificate dealing with <u>explosives risks in</u> <u>remediated buildings.</u> When accompanied by a report which addresse the toxicity aspects, this approach would seem to be satisfactory and enable building re-use. A qualified certificate for buildings not totally remediated will be provided.	es R.O.
1.24	(1.25)	Excavation of Millhead Stream and parallel drain, await resources.	R.O.
1.25	(1.27)	TNT contaminated drain at E2 excavated, confirmatory sampling undertaken further remediation required. SMC awaited.	ARCH. R.O. W.S.A.
1.26	(1.28)	Clearance of tip 74a complete. Soil samples required.	R.O. W.S.A.
1.27	(1.29)	Building L108 and shores to canal brickwork. Hold.	•
1.28	(1.30)	<u>Drum dredged from Middle Stream</u> (held in H7)will be remotely pre-drilled and sawn as cylinders. To be carried out before excavation of the Burning Ground.	R.O.
1.29	(1.31)	English Heritage approval to <u>metal detection on Burning Ground</u> , Press House area, Newtons Pool, New Hill bomb craters and other identified areas received, <u>subject to Archaeologists oversight</u> . R.O. have suitable equipment and will propose a hire charge. Now urgent.	R.O.

1.30	(1.32)	Fencing building drops. Work approved. SMC received, work partially complete. Snagging items outstanding.	R.O. W.S.A.
1.31	(3.1)	Disposal of special waste stockpile approved by WSA.	R.O.
1.32	(3.2)	<u>Limited increase in labour and plant</u> approved, 1 Kubota excavator and 6 labourers.	R.O.
1.33	(3.3)	Pump down and excavation of <u>Hoppit Pool</u> nearing completion.	R.O.
<u>2.</u>	PROGE	RESS AND PROGRAMME	
2.1		Revised programme appears at Appendix 1. 77% progress to date programme to complete 31st July 1995.	on prese
<u>3.</u>	ANY O	THER BUSINESS	
3.1		Handover documentation tasks for the decontamination works will be divided as follows:- a) Buildings - RO b) Ground - WSA Finalisation of the documentation will require a small number of staff to complete the work after 31st July 1995.	R.O. W.S.A.
3.2		Micron have been replaced by Adams Environmental for Asbestos in Air Monitoring.	
3.3		In scrutiny areas 750mm long pegs with yellow head to be used to locate obstructions. Building doors are to be blocked open as works proceed.	R.O.
3.4		Asbestos clearance to Mrs.Bellamy's (A221) approved.	
3.5		Explosives sampling of T Area canal/intersection 25 at 1 per 2m³ approved.	R.O.
<u>4.</u>	DATE (OF NEXT MEETING	
4.1		14.00 Hours on Thursday 11th May 1995.	

<u>R.E.WATTS.</u> 19th April 1995.



												_													-			
			Royal (Gunpo	wder N	ills Ren	nediatio	on Proje	ect Pla	an - as	s at 1	ن. 1	వ															~
			h		Apr	il		May	У	T		Jun	е			Ju	ıly			A	ugust			Sep	tembe	r		Octob
ID	Name	% Comp.	19 26	6 2	9	16 23	30	7 14	1 21	28	4	11	18	25	2	9	16	23	30	6	13 2	20 2	7 3	3 1	0 17	24	1	8 15
30	Site Welfare	37%	100																									
31	Area P North Finals	32%																										
32	Dredging	0%																										
33	Management	37%	2																									
34	Final Documentation	0%																										
			1																									

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 9th MARCH 1995 AT 10.00 HOURS

Pres	sent:	Mr Bob Watts Mr Graham Vincent Mr Peter Mayell	:W.S.A. :R.O. :R.O.	Copies:	Mr.D.Stanners Mr.D.Coyle Mr.S.Chaddock Mr.D.Bone Mr.P.Greggain Mr.S.Fox Mr.A.Moores	:M.O.D/DLS :M.O.D.P.E. :ARCH :CIVIX :M.O.D/DLA :M.O.D/DLA :M.O.D/DLA
<u>1.</u>	MA	TTERS ARISING - FRO	M MEETING	G OF 9th	FEBRUARY 1995	ACTION
1.1	(1.1)	Explosives Testing A programme of samp is required. All samp W.S.A to prepare - Sl of mounds proceeding SMC for removal reco	les will be scr MC received. g. Blue Asbes	eened for Strimmin	explosives. g and raking	W.S.A. R.O.
1.2	(1.2)	Photographic record This activity to proceed labour during vacation		assistant a	and possibly student	R.O.
1.3	(1.3)	P Area - outstanding : Bridge 1 abutments as abutment (to await ser undertaken by Wimpe	nd treatment to	residual	material in Bridge 1	- W.S.A. R.O.
1.4	(1.4)	Water wheel and Presin hand, some resamp Bob Stebbings is tend SMC awaited. Target March 1995.	ling undertake ering scheme	n results of	of analysis awaited. litation and planting.	B.S. R.O. ARCH. W.S.A.
1.5	(1.5)	Incorporating Mills. Work in these building final clean awaiting resampled. Remaining Outstanding drain groups.	esources. L15 deep drains w	7 is compliant of the first of	leted and will be	d. W.S.A. R.O.

1.6	(1.6)	<u>Tetryl Area.</u> Confirmatory sampling of factory area will await removal of canal intersections and bank treatment.	W.S.A. R.O.
1.7	(1.7)	Asbestos clad steam main routes work proceeding. Remainder of routes to be confirmed. Information to be collated on CAD drawings.	W.S.A. R.O.
1.8	(1.8)	Preparation of artifact inventory. Work stopped on this activity. R.O. gave notice of disposal of artifacts in 2 weeks. Archaeologist to liaise with Trust Steering Committee.	ARCH. R.O.
1.9	(1.9)	Asphalt melting plant. This activity held. As buildings are cleaned an assessment will be made as to whether asphalt floors should be removed at that stage. SMC received. Accumulate asphalt till warmer weather. This process could be carried out at New Hill.	W.S.A. R.O.
1.10	(1.10)	<u>CAD plot of services survey</u> to hand. Final check required.	R.O. W.S.A.
1.11	(1.11)	Safety Audit. Monthly visits proceeding.	R.O.
1.12	(1.12)	Edmonsey Sluice. Near completion, road to be capped with Type 1, ditch to be scraped.	R.O.
1.13	(1.13)	<u>Explosives License Application</u> received by R.O. back from HSE. Next stage is to advertise and seek public comment. In hand but a resolution not expected until after the June meeting of Essex County Council.	R.O.
1.14	(1.15)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A.
1.15	(1.16)	<u>Trenching to Northern Canals</u> - some investigation by excavation of buried stoves and canal adjacent 22a required. Awaiting resources.	W.S.A. R.O.
1.16	(1.18)	Queens Mead almost totally covered with sludge which will be excavated in May 1995 after dewatering. General strip of areas affected by grit blasting and search for canal also required.	W.S.A.
1.17	(1.19)	<u>Water mains</u> - Some brickwork repairs to valve and hydrant pits required. Costs to VO77.	R.O. W.S.A.
1.18	(1.20)	Bridge works. Tenders returned. Reduced programme to go ahead in respect of bridges 2, 8, 11, 17 and 18.	W.S.A.
1.19	(1.23)	R.O. investigation into the <u>stability of N.G. in timber</u> . Draft report issued.	R.O.

1.20	(1.24)	<u>Piling to canal/river intersections</u> to remove residual contaminated material. Reduced programme to proceed.	. W.S.A.
1.21	(1.25)	Excavation of river beds adjacent and integral with bridges 6 and 8 in refurbishment/replacement works. This is best carried out using Portadam technique. If bridge works approved may be possible to liaise with contractor to use his dam installation to clear before	
		bridge works are undertaken. NRA to deal with fish. Work approved. Similar work to Hoppit Pool proceeding.	W.S.A.
1.22	(1.26)	R.O. <u>draft inventory</u> of client owned items received. Will be updated.	R.O.
1.23	(1.27)	Portable explosives analyser R.O. trial complete, not yet written up. Copy to WSA. May have a use in buildings. Unit can be hired.	R.O.
1.24	(1.28)	R.O. produced a draft certificate dealing with <u>explosives risks in</u> <u>remediated buildings.</u> With a report which addresses the toxicity aspects, this approach would seem to be satisfactory and enable building re-use. EHO will have to be involved.	R.O.
1.25	(1.29)	Excavation of Millhead Stream and parallel drain, await resources.	R.O.
1.26	(1.30)	Table of results of <u>explosives analysis on artifacts</u> received. Any future analyses to cross reference the artifact number.	R.O.
1.27	(1.31)	TNT contaminated drain at E2 excavated, confirmatory sampling undertaken further remediation required. SMC application in hand.	ARCH. R.O.
1.28	(1.32)	Clearance of tip 74a complete. Soil samples required.	R.O.
1.29	(1.33)	Building L108 and shores to canal brickwork. Hold.	
1.30	(1.35)	<u>Drum dredged from Middle Stream</u> will be remotely pre-drilled and sawn as cylinders. To be carried out before excavation of the Burning Ground.	R.O.
1.31	(1.36)	English Heritage approval to metal detection on Burning Ground, Press House area, Newtons Pool, New Hill bomb craters and other identified areas received, subject to Archaeologists oversight. R.O. have suitable equipment and will propose a hire charge.	ARCH .
1.32	(1.37)	SMC application submitted for <u>fencing building drops.</u> Work approved.	R.O. ARCH.
1.33	(1.38)	<u>Liability issue</u> in respect of hired plant resolved.	

2. PROGRESS AND PROGRAMME

Revised programme appears at Appendix 1. 71% progress to date on present programme. Main programme extended to 31st July 1995 due to exceptional inclement weather and additional discovered contamination in the areas being remediated to residential standards.

3. ANY OTHER BUSINESS

3.1 <u>Disposal of special waste</u> stockpile approved by WSA. R.O.

3.2 WSA informed R.O. that a <u>limited increase in labour and plant</u> may be approved for identified specific tasks to enable critical programme activities to be progressed. R.O.

3.3 Pump down and excavation of <u>Hoppit Pool</u> is in hand. R.O.

4. DATE OF NEXT MEETING

4.1 14.00 Hours on Thursday 13th April 1995.

R.E.WATTS. 10th March 1995.

APPENDIX 1

PROJECT PLAN - ISSUE 8A MARCH 1995

Updated to reschedule slipped tasks at 9/3/95

ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP

<u> </u>	Name Remediation of H Area	Duration 66 6w	% Comp. 52%
2	Remediate & Tidy ancient monument	5w	10%
- 3	Construct Road, Install Wheel Wash	6w	
	1 5040 14		
4	Waste Removal Phase 2	14w	
5	EFDC Consultation for Demolition	5w	100%
6	Mobilise for Demolition of H10, H71 & H8	5w	100%
7	Demolition of H10, H71 & H8	4w	100%
8	H8 Mound to T Area	2w	100%
9	Removal of Redundant Services, bldg bases etc	14w	98%
10	Ditching to Millhead Stream inc NRA Approval	6w	68%
11	Clearance of canals north from Hoppits Pool - Phase 1	5w	100%
12	Clearance of canals north from Hoppits Pool - Phase 2	5w	100%
13	Clearance of canals north from Hoppits Pool - Phase 3	4w	18%
14	Soil Strip, Area H	14w	92%
15	Re-establisin Hoppic Road	7w	
16	Cut back water main to North of H8 or leave exposed	3w	
	AND A TOTAL PART OF THE PROPERTY OF THE PART OF THE PA		100%
17	Remove H16 Slab	4w	
18	Interim Analysis	5w	
19	Confirmatory Analysis	13w	5%
20	Report	4w	0%
21	Erect temporary fences and gate	26w	0%
22	Establish Boreholes	26w	0%
23	Organic trace	9w	0%
24	Design	5w	0%
25	Install	5w	0%
26	Monitor	16w	0%

C. C. Street, Trans.			******	TT		June			July	,		Au	gust		Septem	ber	T	Octo	ber	T	Nove	mber	T	
ID	Name	Duration	% Comp.	29	5	12	19 26	3	10 1	17 24	31	-	14 21	28		18 25	5 2	9	16 23	30	6 1	3 20	27	4
27	Remediation of North P area	62.6w	65%		ent drike and	10 KI - \$45 A	et with the control	minutes in the	HE HE	\$ 1.7 + 1g 14	College or		on of the female	• See Sugar	any talky september 1997 population	er term protest	of the terminal to	e Parite		September 1	· Vitalia	561 C 18 6 1	W to lead	N. S. C.
28	Maintenance of Bailey Bridge & footway	9w	8%					1			2												Milisiy)	
29	Maintenance/replacement of footbridge	9w	8%									GHANZANIKO:	NAME OF THE OWNER, OWNE	1 880 k	· · · · · · · · · · · · · · · · · · ·	2011-7		i isab	1900	- 4-:	44 75 6	·		
30	Removal of redundant services	14w	100%		o de la composición dela composición de la composición dela composición de la compos		N-NS Col					THE PARTY OF	Herita Han	Makes and the										
31	Vacation of A221	Od	0%																					
32	Exterior renovation to A210/A214	4w	85%		***********							TARAKARIKAN RESERVERBERAN					alle No. C. C.	TO ME VOLUMENTS	No. of the last	P POSSESSION AND A STATE OF	deserving :			Perro
33	Excavate remaining canals	9w	100%	1	mmmm		***********						reenteenteen	, , , , , , , , , , , , , , , , , , ,	orosonum meneri		120 C				Market St.		NEVE CHILD	143.76
34	Sample north bank of canal (north)	2w	100%	222																				
35	Infill canal	6w	100%											İ						į				
36	Sheet pile Millhead/canal junction	2w	100%	1000																i			1	
37	Excavate	2w	100%				111111 111111																	
38	Backfill	2w	100%				***													1				
39	Obtain NRA approval for dredging	2w	100%		ARIANTAN URANGANA																			
40	Dredge	7w	86%					SOLENIA V							en og som bler i de			ilizenilar eta e	n e seleja a da 4 inga e		NACHOR SPIN		niers volusies	
41	Tree Removal	4w	100%	977										ĺ						ĺ				
42	Surface Strip	14w	100%				anianteria.																	aan
43	Confirmatory Sample & Analysis	10w	60%	1																			i	
44	Report	4w	0%											i										
45	Installation of Boreholes	22w	0%																					
46	Design	. 4w	0%																					
47	Construct	4w	0%			*																		
48	Monitor	10w	0%																				1	
49	Confirmatory Sampling (under fuel tanks)	4w	100%	200																				
50	Store recovered materials in A210	9w	100%								224						1							
51	Store recovered Barge	4w	0%																					
52	Traffic Access/services	5w	100%	2722				720 774																
53	Reinstate carpark	4w	100%					4000			120						ì			i				

					J	une			July			Au	igust		S	eptember		Oct	ober		Nove	ember		
ID	Name	Duration	% Comp.	29	5	12 19	9 26	3	10 1	7 24	31	7	14 2	1 28	3 4	11 18 2	5 2	9	16 2	3 30	6	13 20	27	1 4
54	Remediation of T area (inc. lagoons & ponds)	48.88w	69%		arinbarin produ	er (September 1981)	er on artistic	Marie Ca		ini. jena	100 - 100 m	nt received the	a definition from	an spanished	Dis propositions a	The state of the s	Market Committee	and the state of	e conservation described	Section 4	Parks To	PHORESON SPENS	HOLENSKY.	Hamilton .
55	Surface excavations/classify arisings	4w	90%	10000 10000																				1000000 P
56	Classify washpond arisings	4w	100%	222			686 686																	
57	Decontaminate pipework	4w	99%			**********												The state of the s			KIDA WA	verzonia.		
58	Gunpowder stove clearance	4w	100%									MANA				k elek temp (a 70%								
59	Confirmatory testing	2w	77%								THE RESE							New Direct				Contraction of the	795720	
60	Terram sheeting & H8 mtl placement	Зw	97%						*******					,,,,,,,,,,	50000000							Sept March		F#20355
61	Excavation of filled canals	5w	100%	1000																				
62	Confirmatory sampling & analysis	4w	18%					WIN.															7///	29.0
63	Report	4w	0%																					
64	Refill with H8 mound from stockpile	2w	0%																					
65	Top Soil, re-seed/re-plant to EN instructions	Зw	0%								1.													
66	Road reinstatement	4w	100%	200	************		110.																	
67	Acid Factory remediation	0.2w	0%																					

					June			July			Augu				tembe			Octob				mber		
<u>D</u> 58	Name	Duration	% Comp.		5 12	19 26	3	3 10 1	7 24	31	7 14	21	28	4 1	1 18	25	2	9 1	6 23	30	6	13 20	27	1
	Remediation of M Area	64.2w	36%	The second	de Mila de Carlos Indiana	THE PARTY OF	10-3	ni selika	bi in action	ACHEROLIS	estraphic phi	U-15 - 25 17 - 14 - 15 16	- Andrews	and the second	NE WEST	O HARRY	the sale of	V1092	Mary of Plants		aviene en en	en supoka	e er er-do-lag	e la company
59	Removal of cordite/asbestos arisings	5w	100%	The second second	es de en	g consequences of		9		ì														
70	Tender	1w	100%	107777 177800																1				
71	Removal	4w	100%		**************************************	AND NOTES																		
72	Excavation of canals/reinstatement of road	4w	10%																					
73	Gasworks Remediation	12w	0%																					
74	Excavation	4w	0%																					
75	Sampling & analysis	4w	0%																					
76	Remediation	4w	0%							ľ			,											
77	Surface confirmatory sampling & analysis	4w	0%	i			1										i.							
78	Report	4w	0%							f														
79	Remediation of incorporator railways	13w	0%							i ·.														
30	Remediation	4w	0%																					
31	Sampling & analysis	4w	0%				i																	
32	Report	5w	0%	N.						1														
33	Removal of redundant services	18w	79%								anniae Anasan Anniae Anasan	ananakana Maranakana			**********	********								
34	Decontamination of drains	46.64w	71%	Ç.			W.	ursigation to protect and a con-	e se presión	and the same	· complete the	CHARLES T	e vilago	ing perjudical	anthys co	634E 646	and the latest	N. 45 P. 108	MMI	en and a	A selfaga	N. H. M. P. A.	STORES THE	Marie
35	L157	1w	100%	160,000 177250						į														
36	L153	4w	95%																					-
37	L148	4w	94%																				**********	200
38	L145	4w	90%							WARREN !														2000
39	L149	4w	0%														İ			ĺ			1	
90	Associated buildings	4w	70%										*********											esser esses
91	Removal of external slabs	14w	0%	1																É				
92	Demolition of buildings	17w	0%														í							
93	Ditching of waterways	9w	90%							*********		Unicerconni neuroinean		r = (d -)		·/···								
94	Gritblasting/ painting of steelwork	49.14w	34%		300 - N		-	Total Theres		New York		F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1700 001240	A 200	e majalinta		d Distribution	en de richt	a tur frager	epitodo (-100		macky/m	reservations	424
 95	L157	1w	100%	*****						i			į				-			1				
96	L153	6w	64%		MIARRILITIIN MINDIIIIIANN																angarawa undurinan			-
97) 148	6/1	27%				1										į							

					June			uly		August		September		October		Vovem		
ID	Name	Duration	% Comp.	29	5 12	19 26	3 10	17 24	31	7 14 21 2	28 4	11 18 25	2	9 16 23	30	6 13	20	2
98	L149	6w	0%															
99	Wall and Floor removal/paint stripping	49.33w	52%	-	OF THE STREET			\$ 1800 P. C.			SHE IN		No.	The same of the same of	opini is		10.117.128.	5160
100	L153	5w	74%													p, a design to the		2010
101	L148	4w	65%	1							MEMBERS.	Markonania	Constitut		MESTACTIC	00000000000	POTENTA.	2079
102	L145	5w	37%	1											MATTASAN			
103	L149	4w	28%										unicomo)					
104	Roofing	14w	0%												1			
105	L145	14w	0%															
106	L157	14w	0%															
107	L145 (bays)	14w	0%															
108	Boreholes	17w	0%															
109	Design	4w	0%															
110	Construct	4w	0%				1											
111	Monitor	9w	0%															
112	Confirmatory analysis in buildings	13w	0%															
113	Sampling & Analysis	9w	0%															
114	Report	4w	0%															
115	Clean out of non-scheduled, non-listed buildings	0.2w	0%															
116	Clean out of listed buildings	0.2w	0%															

	*				Jui	ne		Ju	ly	T	-	Augus	st		Septembe	r	(Octobe	r		Nove	nber	T	D
ID	Name	Duration	% Comp.	29	5 12	2 19	26	3 10	17 24	31	1 7	14	21	28	4 11 18	25	2	9 16	23	30	6 1	3 20	27	4
117	Remediation of L Area	48.6w	9%											9	No.	a production	We wish while	a war war dag	et a production of	Det .	with a resident of	n en de	de es Secul	to Mile The
118	Excavation & backfill of canals	4w	0%				i													1				
119	Confirmatory Sampling & Analysis	9w	0%																				1	
120	Report	4w	0%																					
121	Grassland Management	4w	100%												Transcript Property	IF STAN								
122	Demolition of buildings	16w	0%	1																				
123	Boreholes	16w	0%							I				1										
124	Design	4w	0%				1																	
125	Construct	4w	0%																					
126	Monitor	8w	0%							1														
127	Work to selected buildings	1d	0%											Ì										
128	Rationalise Services	1d	0%																					
129	Remove Redundant Services	4w	28%	-										Ý					TAX CONSTRUCTOR	SACRES SERVICES	Are talk (cline)	не степеци	e finkanining	

	*					ine	1	July			Aug	ust		Sep	temb	er		Oct				lover	nber		
30	Name	Duration	% Comp.		5 1	2 19 26	3	10 17	24	31	7 1	4 21	28	4 1	11 1	8 25	2	9	16	23			3 20	27	T
30	Remediation of S Area	59.92w	55%	I was	(SERVICE)	CARL LEGISLAND COMP	O HELE	E Mode	Salah Arabi da	SENSON SENSON	Septembersel	Thursday,	- Home	ang man pagan	Herman Control	15	Contraction in the last	4 8 M Gala	Market St.	and the second		(Malini film	Mignistration (1) m(C) 4	M
31	Excavate Newtons Pool Canals	3w	100%		***************************************	ana ann							Í				ĺ				i i				
32	Exploratory excavation trenches	1w	100%		0000																			1	,
33	EN Approval	3w	100%				200						1												
34	Barge removal	4w	36%				1						1				1		2000					10152000	
35	Excavation of Canals- North of M area	6w	100%	1			-				distance of the last										S ASIS MANAGES				-
36	Tree Clearance	2w	100%				22222		***********		**********	BOARES RESIDEN		******		WILLIAM OF A	************								
37	Excavation of Canals- North of T area	6w	100%				venne				E 2									223					Á
38	Tree Clearance	2w	100%								2	**********								esa.					
39	Sampling & Analysis	8w	40%								2	***************************************		**********	**********	********	************		0.00.000 100.000		2000000	77272			-
140	Report	4w	0%																*IRRI				unsumm		1
41	Removal of Residual Tips	25.8w	100%						medical post	messasta er c	i tillig kvitkill			the United Section	emotor-Very	albeit demons	Department of the	est V to	of the last	Social con-	MAJO STANDO	Se Vertices	New Bulletin	SOR FOR SE	ø
42	Edmondsey Sluice	4w	100%					************	ANTONANO																
43	Cattlegate bridge	5w	100%				vinni		ann ann										W. W.						-
44	Establish monitoring boreholes	25w	53%																ronn	umann		********	en en en en en en en en en en en en en e		1
45	Design	6w	100%																						
46	Construct	6w	100%																						
147	Monitor	13w	10%																						ĺ
148	Rehabilitation of Areas to EN & EH approval	50.82w	50%	ENFARME I	1975 A. O.	e same to the first of	Control of	en en la la la la	10 (CHS - 3)	on telepoora in	t ministra	details one	te da residade o		a de la constitución de la const	etario i segui	HARM ACCOUNT	and the	HESTA (1891)	- FF1(7, 7)	Address Service	The State of		ale the	Ä
149	Newtons Pool	5w	45%	7711					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,		mmm				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	mm							7
150	Press House	5w	95%	unnin																					â
151	Barrel Graveyard	5w	30%																						1
152	Nitration Lagoons	5w	92%			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,,,,,,,							,,,,,,,,,		,,,,,,,,,,,,				,,,,,,,	ã
153	General	14w	27%	viiiiiii																					
54	Confirmatory Sampling, analysis & reporting	49.6w	40%							arano esa	arright parts	n Poethy Hills	4-92-00-97				To the second	Sacrety.	o Zinini par	-0199h		nthin sin kina	in entitle been	TE CONSIST	A
55	Newtons Pool	14w	0%				•																	-	
56	Press House	14w	49%																						ĺ
57	Edmondsey Sluice	14w	91%																	anagain.					á
58	Barrel Graveyard	14w	80%				ennin														inner				j
59	Nitration Lagoons	14w	0%				V////			1		un in		under sied zieh dah	- certifields	are dille									

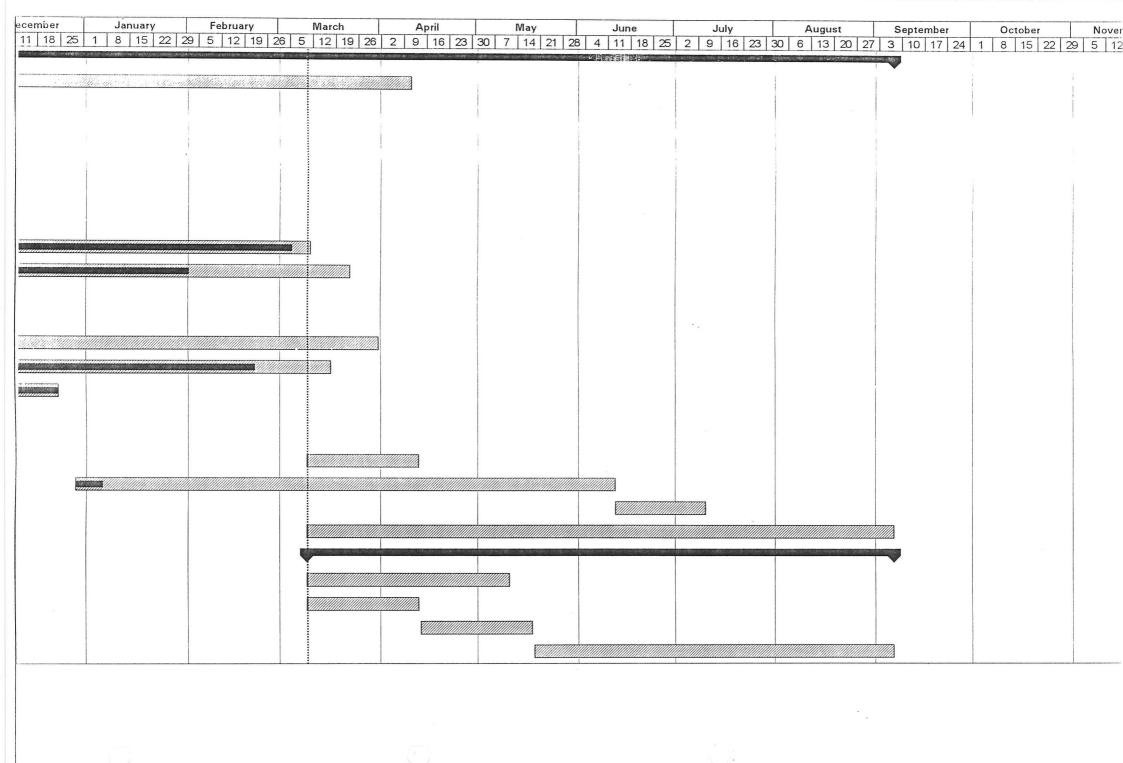
	•					June			July			August		Septer	mber		Octo	ober		î	Novem	ber	
ID	Name	Duration	% Comp.	29	5	12	19 20	3	10 17	24	31	7 14 21 2	8 4	11	18 25	2	9	16	23 30	0	6 13	20	27
160	General	14w	21%	1									1							one (da)	erinterioris		100000000
161	Removal of Redundant Services	0.2w	0%								i		1			ı							ŀ
162	Scrutiny of surfaces - Heronry	15.4w	95%													İ		W/W					
163	Scutiny of surfaces - Remainder	12.6w	5%					j			İ												
164	Clean out Scheduled Monument buildings	27.6w	30%								ì							1100	Stone Wyskele	V-2547	ale and the same		

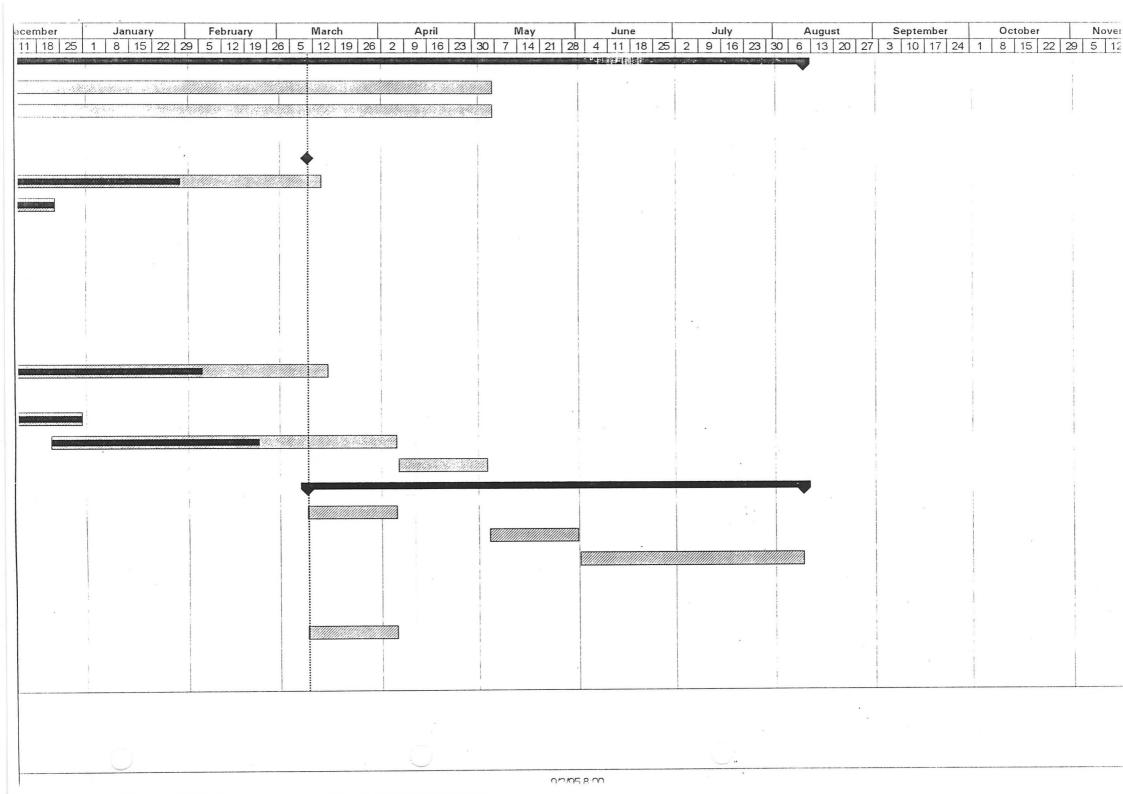
						June			Jul	ly			Aug	just		5	Septemb	er		Octol	oer		Nov	ember		D
ID	Name	Duration	% Comp.	29	5	12	19 26	3	10	17	24	31	7	14 21	28	4	11 18	3 25	2	9	6 23	30	6	13 2	0 27	4
165	Remediation of N Area	66.6w	13%	and the Land	est former	er projection	William Cont			en punett	reting trees	A ppropriate sec	to a someth	et/ sejac	N. All	make etic	Contract of the Contract of th	Section 1997	nografija kiloku je svi	1 Min 10 10	NAME OF STREET		William Co.	(ata) in the	by a leman	第4四次公司 集中
166	Site Strip	4w	14%						,			******								Willin	intiin.	11/4 11	30 90	in., 190	·	
167	Establish Waste Handling	22w	44%					1																		
168	Temporary Road	4w	0%																							
169	Fill in Pits	4w	100%				name uzaana																			
170	Maintenance to Cattlegate bridge	9w	14%													181	0283333			10.00						
171	Improve Entrance from crooked mile	4w	0%	i				1																		
172	Demolish unwanted buildings	13w	0%																1							
173	Rationalise Services	4w	55%								!															
174	Clean up after Waste Operations	14w	0%																							
175	Establish monitoring boreholes	14w	0%																							
176	Winning of clay for general site works	54.6w	18%	No.			pater measing	te Astron	HERVE TAKES	(f) N5-75-804	or de la sense	etris birti	(* 1-0 m)	grang ordered at		i Street a tr	dala emperativa	计专业编辑	to Paper to His	object Shirting at	ales ti est est gilges	elle Chimpi	planing and	ind dental	er receiptains the	a on the state
177	H Area	5w	100%	warm.				**																		
178	Lining Canals	14w	0%					ĺ																		
179	Burning Ground	9w	0%																							
180	Confirmatory sampling, analysis & reporting	17w	0%					1																		
181	Fencing	5w	0%																							
182	Removal of Cattlegate Bridge	4w	0%																							
183	Installation of foot bridge	4w	0%																							
184	Rehabilitation	26w	0%																							
185	Handover to LVRPA	Od	0%																							
186	Scrutiny of surfaces	4w	0%																							

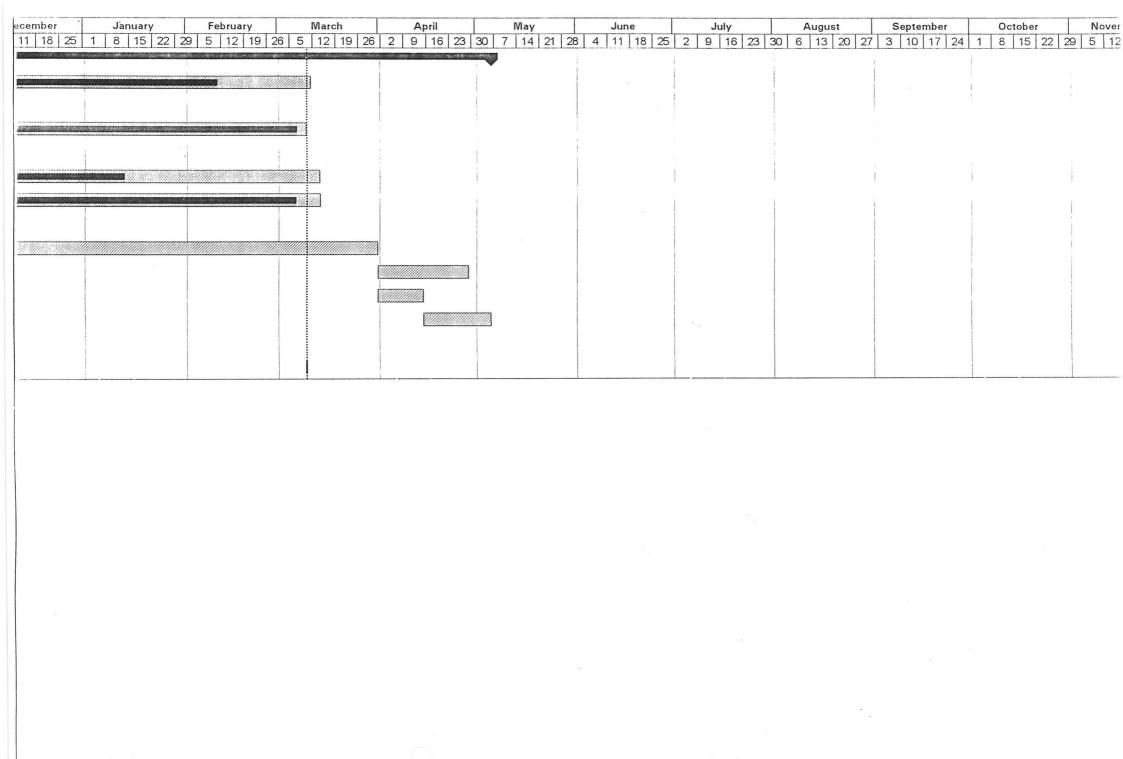
	, ,			June	July	August	September	October	November
ID	Name	Duration	% Comp.	29 5 12 19 26	3 10 17 24	31 7 14 21 28	3 4 11 18 25	2 9 16 23	30 6 13 20 27
187	Remediation of Burning Ground	57 6w	9%		CHEST STREET	older, or the construction of the second	the same of the second section is	्रेक्ट अस्ति । एक अस्ति का लाह गर्छ ।	
188	Remove Entrance Road	4w	100%		THE COLUMN THE PROPERTY OF THE				
189	Services rationalisation	9w	51%						· · · · · · · · · · · · · · · · · · ·
190	Site Strip to Gravel/Undisturbed Strata	14w	0%						
191	Transport Arisings to N Area	14w	0%						
192	Sweep Area with Metal Detector	9w	0%						
193	Re-establish clay membrane & top soil	9w	0%						
194	Carry out EH/EN remediation proposals	9w	0%						
195	Confirmatory analysis of soil samples	12w	0%						
196	Asphalt treatment	14w	0%						

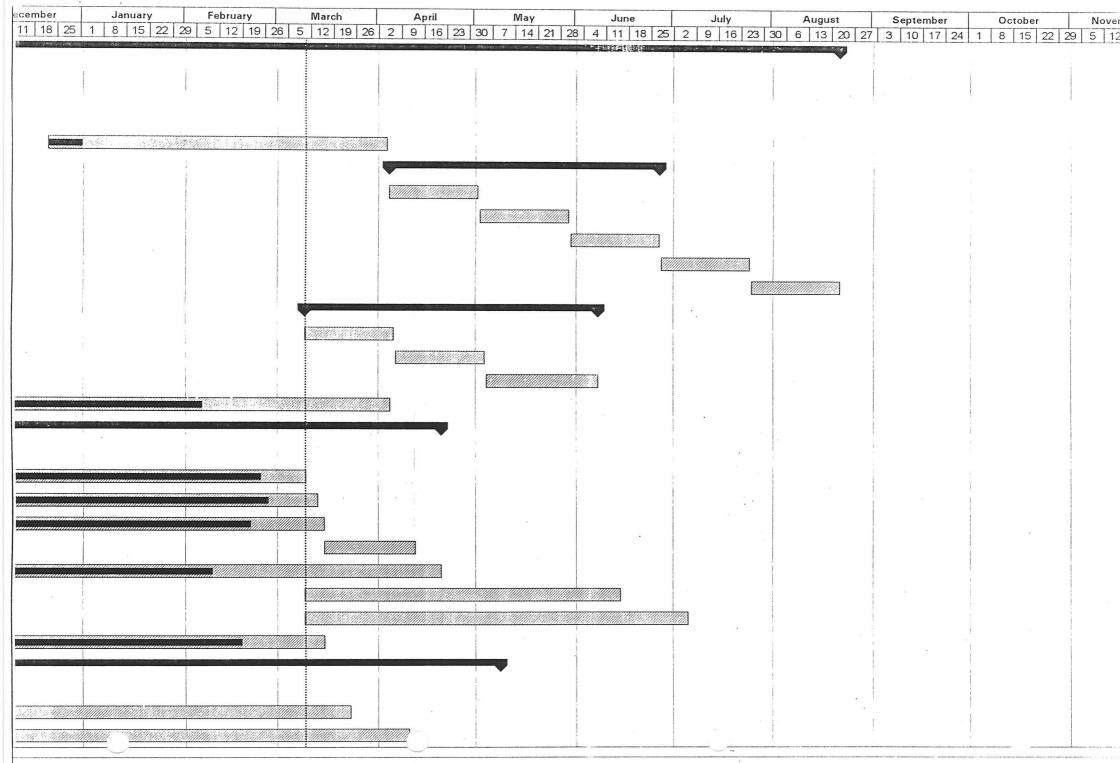
						ine	Ţ		ıly			gust		Septemb			Octo			Nover			D
ID 197	Name Maintenance of Bridges	Duration 62.6w	% Comp.		9 5 1	2 19	26	3 10	17 24	1 31	7	14 21	28	4 11 1	8 25	2	9	16 23	3 30	6 13	3 20	27	4
					to september 100									and the same and the same and	N. STORY SHOWING		the sales of the sales						
198	SMC/Trust Approval	4w	100%	9777			i															1	
199	Design/Tender	9w	100%	222						22									1			1	
200	Construction	22w	0%													1							
201	Remediation of River Banks	57w	8%	i			į			İ		erio de ostor					7.15						XID.
202	Sheet Piling & Excavations East Bank of Horsemill Strea	5w	0%										i									ı	
203	Operations West Bank Horsemill Stream	5w	0%							ì			i			i			i				
204	Ditching of On-Site Rivers & Canals	5w	70%								*******						A MARIE IN IA			er sala salas e	256.8519		
205	Removal of Canal Material at Intersection of Waterways	21.4w	0%																				
206	NRA/EN Proposals to Raise Site Water Levels	5w	0%																				
207	Reinstatement of Banks	39.2w	42%															CONTRACTOR OF THE PARTY OF THE	PL SHEETING	uradina de 1827a	Laconstan	or and self-ris	11300
208	Excavate canal batters	8w	95%	Ì							,							*********			//////////////////////////////////////		
209	Excavate pond batters	4w	100%															·					
210	Sample	4w	60%																				
211	Apply Terram and backfill	8w	0%																				
212	Report	4w	0%																				
213	Completion of T Area Works	5w	0%																				
214	Remediation under Steam Pipes	57.3w	47%		THE MALE SHALL	6.455/skid#95		New York (2004)		and the second	THE PERSON NAMED IN		F44-192.(h)		es es en es	objective and	f polytical polytical	ge out to appropri	e de la constanta	14.0	. October Medical		
215	Survey & Peg-Out Routes	1w	100%		nn.																		
216	Site Strip/disposal outside Heronry	13w	35%																				
217	Site Strip/disposal inside Heronry	9w	95%																				
218	Sample Analysis	4w	0%																				
219	Surface Treatment inside Heronry	5w	95%	11																			
220	Surface Treatment outside Heronry	9w	5%	11																			

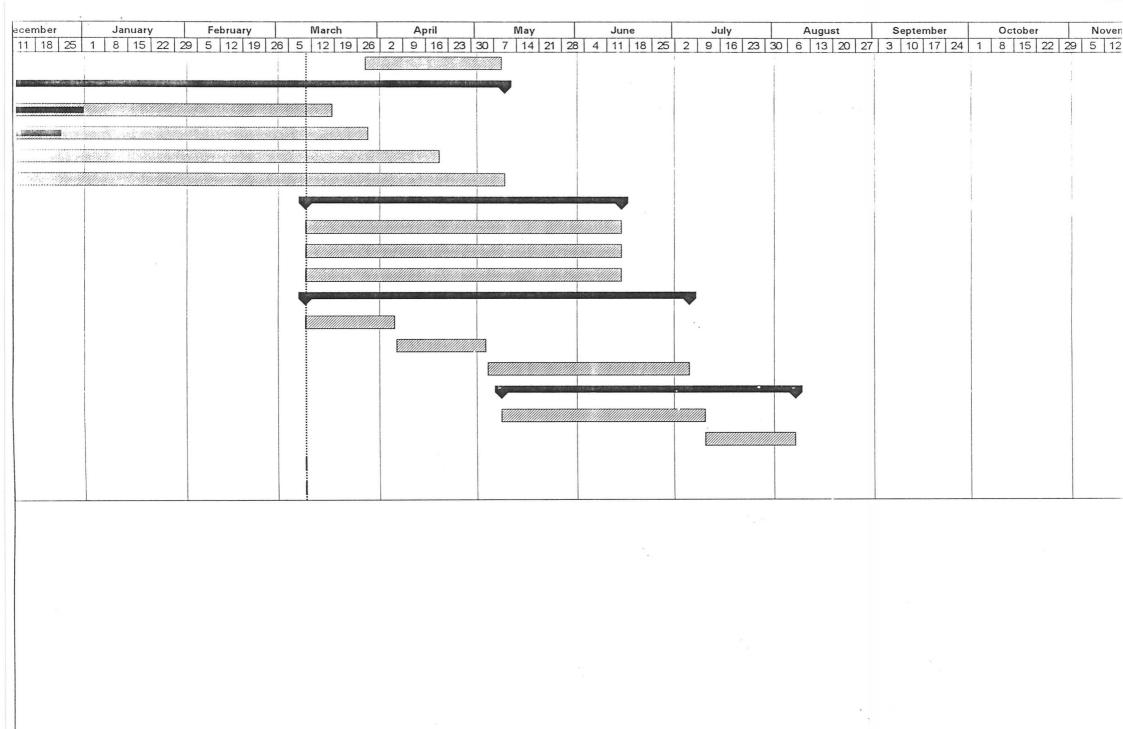
	,			June	July	August	September	October	November D
ID	Name	Duration	% Comp.	29 5 12 19 26	3 10 17 24	31 7 14 21 28	4 11 18 25	2 9 16 23	30 6 13 20 27 4
221	Buildings & Mounds	50.82w	78%	after a constant to the second second second second	Mark Programme of the second o		No. 14 mb Co. of the Co. of the Co. Hardwell		Obligations for any company of the second of
222	Mounds - Sample & Analyse	1d	0%						
223	Scheduled Area Buildings	1d	0%					I	
224	Other Buildings	1d	0%						
225	Tree Clearance from Mounds & Buildings	40w	95%	***************************************					
226	Building Information Packs	14w	27%					Jamps Horry House	् चित्रकालकारमध्येले जन्म
227	Services Survey	5w	100%						

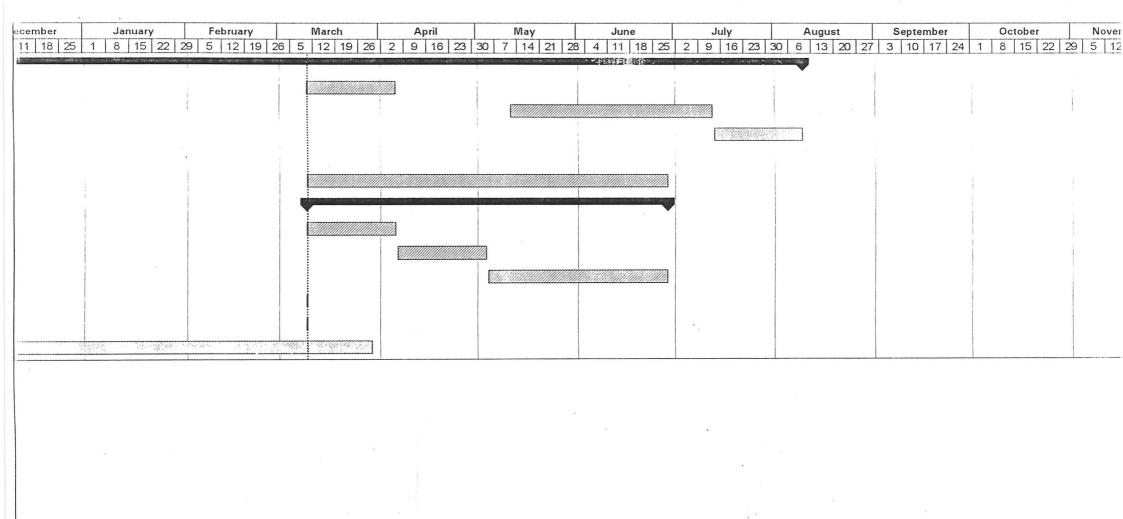


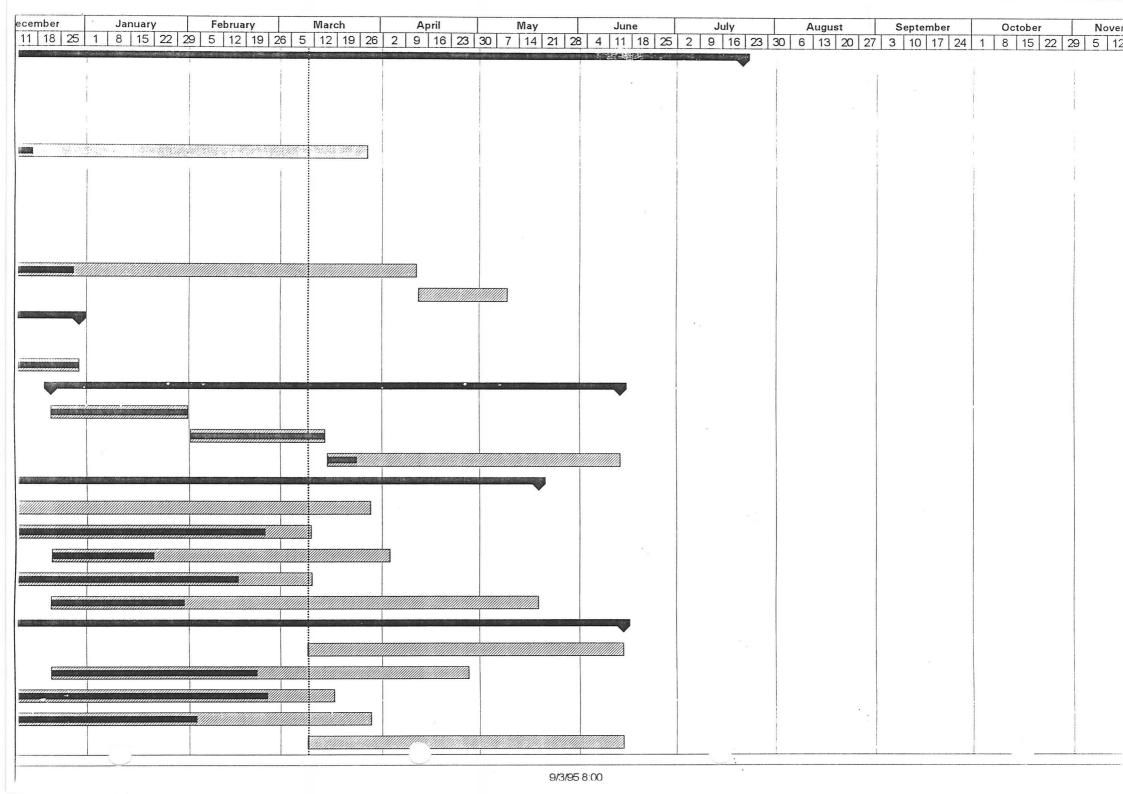




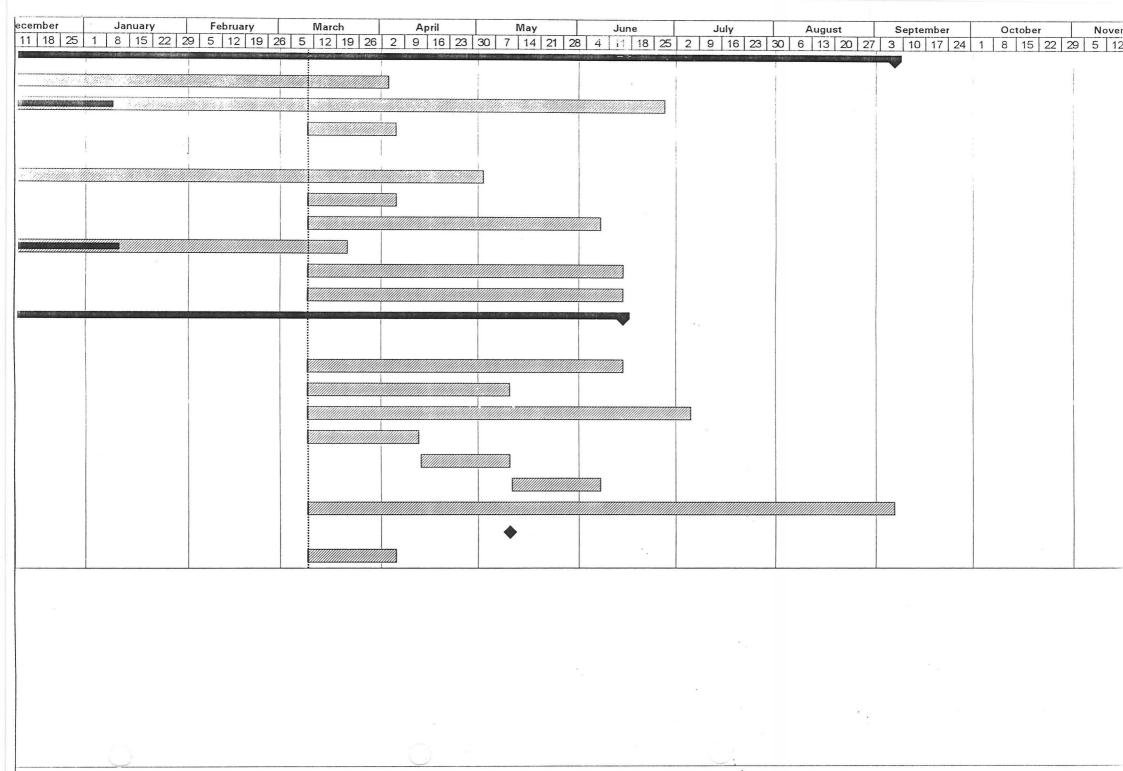






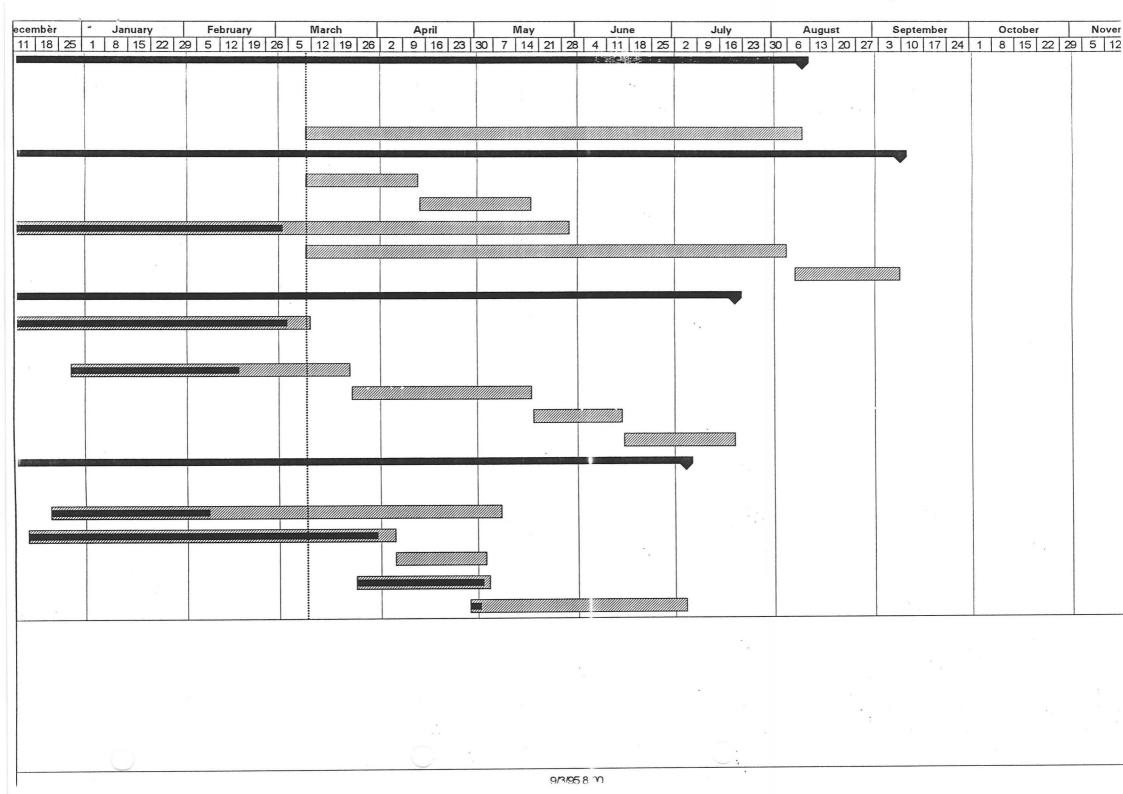


ber	J	anuary	Fe	bruary	V	March	T	Apri	il	T	May			June		July		Aug	ust		September		Octo	ber		N
18 25	1 8	15 22 29	5	12 19 26	5	12 19 26	3	2 9 1	16 23	30	7 14 2	1 28	3	4 11 18 25	2		30	6 13	3 20 2	7 3	3 10 17 24	1	8	15 22	29	5
1 2/2 1/2		A Shift Hall Control			%								;									1				
					İ																					
			annana.								*						i									
	2111111212									31										1					,	
		L-		- 1 4 1990 (1) J. (1)						31 																
			111/2/		Will Co												1									
																*										
						2																				
																			*							
						147										÷ ×					,					
																<u> 15</u>								,		
																					£.					
																					* .					
													٠													



January	February	March	April	May	June	July	August	September	October	Nove
1 8 15 22 29	9 5 12 19 26 5	5 12 19 26	2 9 16 23	30 7 14 21 3	28 4 11 18 25	1		27 3 10 17 24	1 8 15 22	29 5 1
					*		× = -		1	
					1	1				1
					<i>Xammanana</i>					
					770					
										1
			<u> </u>							
						*				
					*					
							je.			
								*		
				×					4.	
								84		

								¥		
			1.2					* .		
	1 8 15 22 29	1 8 15 22 29 5 12 19 26 5	1 8 15 22 29 5 12 19 26 5 12 19 26	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 2	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 2	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 3 10 17 24	1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 3 10 17 24 1 8 15 22



mber "		January		Feb	ruary	T		Marc	:h			Ar	oril			N	lay		Π	June)		July			Αι	ugust		S	epten	nber		00	tobe	,	
18 25	1 1	January 8 15 22	29	5	12 19	26	5 5	12	19	26	2	9	16	23	30	7 1	14	21 7 2	81	4 11	18 25	2 9	9 16	6 23	30	6	13 1	20 2	7 3	10	17 2	24 1	8	15	22	29 5
				/ 16 Tel	1.5	120		1.2	,,,,							- 1		1 -	1		.5120	- 1 -	1,0						1	1.01		<u> </u>		1		T
							1														ė.															
							i																													
							!																													
							-																													
			innun	,,,,,,,,,,,			uuuq																													
								,,,,,,,,,		,,,,,,,,,	,,,,,,,,,	,,,,,,,,	,,,,,,,,,	,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,	77772																			
																			1																	
		Ÿ																																		
																						٠.														
												*																								
																						•														
																									940											
																	•							*												
		,																																		
									,																											
												i																								
																														*						
																								٠.												
																			٠.												,					
													* *																							
												(
																								,												

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 9th FEBRUARY 1995 AT 14.00 HOURS

Pres		Mr Peter Mayell :R.O. Mr.S.Chaddock :A	.O.D.P.E. RCH. IVIX
<u>1.</u>	MAT	TERS ARISING - FROM MEETING OF 21st DECEMBER 1994	ACTION
1.1	(1.1)	Explosives Testing A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC received. ESG 4/93 strimming and raking of mounds proceeding. Blue Asbestos discovered in E2 mound, SMC for removal received.	W.S.A. R.O.
1.2	(1.2)	Photographic record This activity to proceed with student labour during vacations.	R.O.
1.3	(1.3)	<u>P Area</u> - sale complete - concrete capping to sheet piling near completion (by others). Clay berm to be tidied. Temporary road to be removed.	W.S.A. R.O.
1.4	(1.5)	Water wheel and Press House areas. Confirmatory investigation in hand, samples collected results of analysis awaited. Decontamination of Press House progressing. English Nature/Bob Stebbings considering this area for rehabilitation, planting etc., SMC awaited. Target date for completion March 1995.	B.S. ARCH. R.O. W.S.A.
1.5	(1.6)	Incorporating Mills. Work in these buildings stopped. Clearance of undercrofts and final clean awaiting resources. L157 is completed and will be sampled. Remaining deep drains will be rodded clean and grouted. Outstanding drain grouting to be tendered.	W.S.A. R.O.
1.6	(1.7)		R.O. W.S.A.

1.7	(1.8)	Asbestos clad steam main routes work proceeding. Remainder of routes to be confirmed. Information to be collated on CAD drawings.	W.S.A.
1.8	(1.9)	Preparation of artifact inventory. Work stopped on this activity. R.O. offered to give notice of any disposal.	R.O.
1.9	(1.10)	Asphalt melting plant. This activity held. As buildings are cleaned an assessment will be made as to whether asphalt floors should be removed at that stage. SMC received. Accumulate asphalt till warmer weather.	W.S.A. R.O.
1.10	(1.12)	CAD plot of services survey to hand. Final check required.	R.O. W.S.A.
1.11	(1.13)	Safety Audit. Monthly visits proceeding.	R.O.
1.12	(1.14)	Edmonsey Sluice waste. Place remaining top soil around trees and backfill with H8 material. Task to await resources.	R.O.
1.13	(1.15)	Explosives License Application received by R.O. back from HSE. Next stage is to advertise and seek public comment. In hand but a resolution not expected until after the June meeting of Essex County Council.	R.O.
1.14	(1.16)	Site vehicles. 1 Minibus R.O. 1 Old Landrover R.O. 2 Landrovers 110 R.O. No further vehicles required.	R.O.
1.15	(1.17)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A.
1.16	(1.19)	<u>Trenching to Northern Canals</u> - some investigation by excavation of buried stoves and canal adjacent 22a required. Awaiting resources.	W.S.A. R.O.
1.17	(1.20)	<u>Asbestos discovered</u> on opposite bank of Horse Mill stream. NRA dealing with this.	N.R.A.
1.18	(1.21)	Queens Mead almost totally covered with sludge which will be excavated in May 1995 after dewatering. General strip of areas affected by grit blasting and search for canal also required.	W.S.A.
1.19	(1.22)	Water mains - Maintenance of valves and hydrants carried out by Terry Stenman Some brickwork repairs to pits required. Costs to VO77.	W.S.A. R.O.

1.20 (1.23)	Bridge works. Tenders returned - held.	W.S.A.
1.21 (1.24)	Carden and Godfrey have identified <u>building anomalies</u> between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated into the site records.	ARCH. W.S.A. MKS
1.22 (1.25)	<u>Further buildings</u> to be reviewed by RW and SC for release to Morris Contracting for clean out.	ARCH. W.S.A. R.O.
1.23 (1.26)	R.O. investigation into the <u>stability of N.G. in timber</u> will be reported 23rd February 1995.	R.O.
1.24 (1.27)	Piling to canal/river intersections to remove residual contaminated material held.	W.S.A.
1.25 (1.28)	Excavation of river beds adjacent and integral with bridges 6 and 8 in refurbishment/replacement works. This is best carried out using Portadam technique. If bridge works approved may be possible to liaise with contractor to use his dam installation to clear before bridge works are undertaken. NRA to deal with fish. Work held at present. Similar work to Hoppit Pool to proceed.	W.S.A.
1.26 (1.29)	R.O. <u>draft inventory</u> of client owned items received. Will be updated.	R.O.
1.27 (1.30)	Portable explosives analyser R.O. trial complete, not yet written up. Copy to WSA. May have a use in buildings. Unit can be hired.	R.O.
1.28 (1.31)	R.O. to respond to issue of the <u>extent of the building remediation</u> and likely certification, methods and requirements.	R.O.
1.29 (1.32)	Excavation of Millhead Stream and parallel drain, removal of agreed trees proceeding.	R.O.
1.30 (1.33)	Table of results of <u>explosives analysis on artifacts</u> required.	R.O.
1.31 (1.34)	TNT contaminated drain at E2 excavated, confirmatory sampling to follow.	R.O.
1.32 (1.35)	Clearance of tip 74a complete. Samples required.	R.O.
1.33 (1.36)	Building L108 and shores to canal brickwork. Hold.	•
1.34 (1.37)	Repair of Highbridge Street traffic barrier damaged by Holts complete. No charge to MoD.	R.O.

- Drum dredged from Middle Stream will be remotely pre-drilled 1.35 (1.38) and sawn as cylinders. Awaiting resources. R.O. English Heritage approval to metal detection on Burning Ground, 1.36 (3.1) Press House area, Newtons Pool, New Hill bomb craters and other identified areas received, subject to Archaeologists oversight. R.O. have suitable equipment and will propose a hire charge. R.O. SMC application submitted for fencing building drops. Work R.O. 1.37 (3.2) ARCH. approved. Liability issue in respect of hired plant to be resolved. Meeting 1.38 (3.3)
- WSA/RO pm 15th February 1995.

2. PROGRESS AND PROGRAMME

2.1 Revised programme appears at Appendix 1. 65% progress to date on present programme. Shortened programme to complete end of February 1995. Main programme extended to 31st July 1995 due to exceptional inclement weather and additional discovered contamination in the areas being remediated to residential standards.

3. ANY OTHER BUSINESS

- 3.1 HSE officer Mr.D.G.Wilson from the Chelmsford office visited site 9th February 1995. No problems arising from the visit were notified.
- 3.2 Mr.Fox explained that a decision on the future of the site was not yet resolved. However decontamination works on the reduced programme is to proceed until further notice.
- 3.3 R.O. Valuation Nº 36 up to 28th February 1995, with sub-contactors invoices to 24th February 1995, to be handed to WSA on 7th March 1995 for clearance this financial year.

4. DATE OF NEXT MEETING

4.1 14.00 Hours on Thursday 9th March 1995.

<u>R.E.WATTS.</u> 10th February 1995.

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE WEDNESDAY 21st DECEMBER 1994 AT 14.00 HOURS

Present:	Mr	Bob Watts	:W.S.A.	Copies: Mr.D.Stanners	:M.O.D/DLS
	Mr	Graham Vincent	:R.O.	Mr.D.Coyle	:M.O.D.P.E.

Mr Peter Mayell : R.O. Mr.A.Ford : ARCH.

Mr.S.Chaddock :ARCH.
Mr.D.Bone :CIVIX
Mr.P.Greggain :M.O.D/DLA

1. MATTERS ARISING - FROM MEETING OF 17th NOVEMBER 1994 ACTION

1.1 (1.1) Explosives Testing

A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC submitted. Part 1 ESG 4/93 received from R.O. Part 2 revised by R.O to include typical sampling arrangements. Strimming of mounds proceeding. Blue Asbestos discovered in E2 mound, SMC application for removal prepared.

W.S.A. R.O.

1.2 (1.2) <u>Photographic record</u> This activity held.

- 1.3 (1.3) Remediation in P Area complete contracts exchanged. Some issues yet to be resolved. Piling along Mill Head Stream complete. Clay filling completed. Concrete capping proceeding. CIVIX
- 1.4 (1.4) A quantity of <u>cast iron drain pipes</u> removed from M Area awaiting heat treatment. R.O.
- 1.5 (1.5) Water wheel and Press House areas. Confirmatory investigation to proceed when grid established by MKS. English Nature/Bob Stebbings considering this area for rehabilitation, planting etc., SMC required. Target date for completion February 1995. W.S.A.

1.6 (1.6) Incorporating Mills.

Work in these buildings stopped. Clearance of undercrofts and final clean awaiting resources. L157 is completed and will be sampled. Remaining deep drains will be rodded clean and grouted. Outstanding drain grouting to be tendered.

R.O.

1.7	(1.7)	<u>Tetryl Area.</u> Gunpowder stove final filling complete. Pool banks sampled and results are good, L.G.C. will sample sludge from beds on 17th January 1995. Confirmatory sampling of factory area will await removal of canal intersections and bank treatment.	R.O. ARCH. W.S.A.
1.8	(1.8)	Asbestos clad steam main routes. Revised procedure within SSSI agreed with English Nature and English Heritage. Routes previously excavated will be filled, routes not yet remediated will be either hand raked or machine excavated as determined by Bob Stebbings/English Nature and backfilled without Terram. Resampling not required, work has commenced in Heronry first using MSO Thomas. Metal detection will not be undertaken.	W.S.A. B.S. ARCH. R.O.
1.9	(1.9)	Preparation of artifact inventory. Work stopped on this activity.	
1.10	(1.10)	Asphalt melting plant. This activity held. As buildings are cleaned an assessment will be made as to whether asphalt floors should be removed at that stage.	
1.11	(1.11)	Waste tip sampling for explosives analysis. Proceeding satisfactorily, volume of samples for analysis has reduced.	W.S.A. R.O.
1.12	(1.12)	<u>CAD plot of services survey</u> to hand. Final check required.	R.O. W.S.A.
1.13	(1.13)	Safety Audit. Monthly visits proceeding.	R.O.
1.14	(1.14)	Edmonsey Sluice waste excavation complete. Windbreak fencing complete. Place remaining top soil around trees and backfill with H8 material. Task to await resources.	R.O.
	(1.14)	fencing complete. Place remaining top soil around trees and	R.O.
1.15	(1.15)	fencing complete. Place remaining top soil around trees and backfill with H8 material. Task to await resources. Explosives License Application received by R.O. back from HSE.	
1.15	(1.15)	fencing complete. Place remaining top soil around trees and backfill with H8 material. Task to await resources. Explosives License Application received by R.O. back from HSE. Next stage is to advertise and seek public comment. Site vehicles. 1 Minibus R.O. 1 Maestro van R.O. (to be returned end of December). 1 Old Landrover R.O.	R.O.
1.15 1.16 1.17	(1.15)	fencing complete. Place remaining top soil around trees and backfill with H8 material. Task to await resources. Explosives License Application received by R.O. back from HSE. Next stage is to advertise and seek public comment. Site vehicles. 1 Minibus R.O. 1 Maestro van R.O. (to be returned end of December). 1 Old Landrover R.O. 2 Landrovers 110 R.O. (from 21/11/94). Disposal of transformer PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done	R.O.

1.20 (1.20)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Awaiting NRA decisions regarding bank excavation, reduction in Horse Mill Stream water level and export route for waste. Work may proceed this FY.	N.R.A. R.O. W.S.A.
1.21 (1.21)	Queens Mead almost totally covered with dewatering sludge which will be excavated next summer with a general strip of areas affected by grit blasting and search for canal.	
1.22 (1.22)	Water mains - Valves and hydrants maintained by Terry Williams. Costs to caretaking contract, VO61.	W.S.A. R.O.
1.23 (1.23)	Bridge works. Tenders returned - held.	W.S.A.
1.24 (1.24)	Carden and Godfrey have identified <u>building anomalies</u> between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated into the site records.	ARCH. W.S.A. MKS
1.25 (1.25)	Initial <u>strip out of buildings 134 to 160</u> complete. Work stopped. Further buildings to be reviewed by RW and AF for release to Morris Contracting for clean out. Particularly building 96 in the Heronry.	ARCH. W.S.A. R.O.
1.26 (1.26)	R.O. investigation into the <u>stability of N.G. in timber</u> proceeding. First stage nearing completion. Sealing methods being assessed.	R.O.
1.27 (1.27)	<u>Piling to canal/river intersections</u> to remove residual contaminated material held. Geotechnical investigation report available. Samples recovered from selected intersections.	
1.28 (1.29)	Excavation of river beds adjacent and integral with bridges in refurbishment/replacement works. This is best carried out using Portadam technique. If bridge works approved may be possible to liaise with contractor to use his dam installation to clear before bridge works are undertaken. NRA to deal with fish. Work held at present.	
1.29 (1.30)	R.O. draft inventory of client owned items received.	R.O.
1.30 (1.31)	<u>Demonstration of portable explosives analyser</u> took place on 14th September 1994. R.O. will trial this end of January 1995.	R.O.
1.31 (1.32)	R.O. to respond to issue of the <u>extent of the building remediation</u> and <u>likely certification</u> , methods and requirements.	R.O.
1.32 (1.33)	Excavation of Millhead Stream and parallel drain and removal of agreed trees held.	

1.33	(3.5)	Table of results of <u>explosives analysis on artifacts</u> required. Artifacts with UCL will be returned to site.	ARCH. R.O.
1.34	(3.6)	Procedure for TNT drain at E2 complete, issue imminent.	R.O.
1.35	(3.7)	Clearance of tip 74a almost complete.	R.O.
1.36	(3.9)	Building L108 and shores to canal brickwork. Hold.	
1.37	(3.10)	R.O. site list of expenditure items as approved to hand and being updated regularly.	R.O.
1.38	(3.11)	Repair of Highbridge Street traffic barrier damaged by Holts, arrangements proceeding.	R.O.
1.39	(3.13)	<u>Drum dredged from Middle Stream</u> will be remotely pre-drilled and sawn as cylinders.	R.O.
1.40	(3.14)	Agreed R.Bray can remove stockpiled chippings at own expense.	
<u>2.</u>	PROGE	RESS AND PROGRAMME	
2.1		Revised programme appears at Appendix 1. 60% progress to date programme. Shortened programme to complete end of January 1995.	•
<u>3.</u>	ANY O	THER BUSINESS	
3.1		English Heritage approval to metal detection on Burning Ground, Press Newtons Pool, New Hill bomb craters and other identified areas receive to Archaeologists oversight.	
3.2		SMC application will be made for fencing building drops. Deborah Pri	ddy to visit

4. DATE OF NEXT MEETING

3.3

3.4

4.1 14.00 Hours on Tuesday 7th February 1995.

site 12th January 1995 to view.

Reduction in Micron Monitoring agreed.

Liability issue in respect of hired plant to be resolved.

A HAPPY NEW YEAR TO ALL OUR READERS.

R.E.WATTS. 28th December 1994

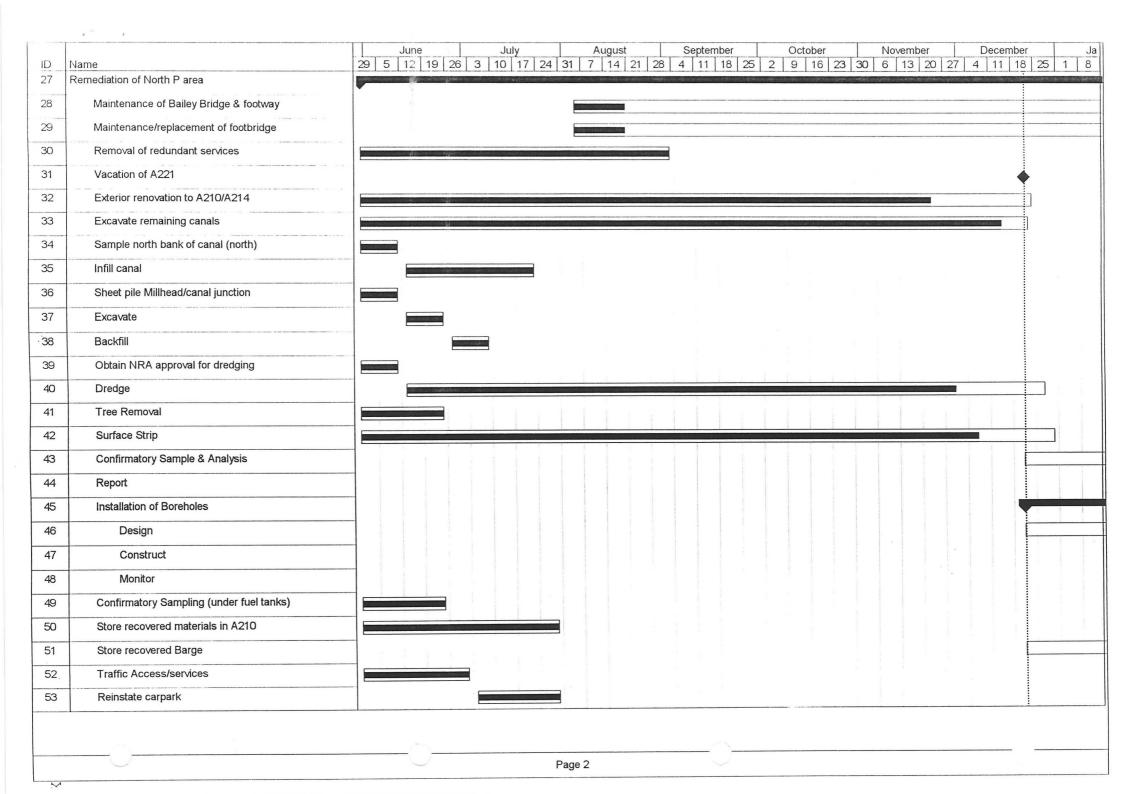
PROJECT PLAN - ISSUE 6A DECEMBER 1994

Updated to reschedule slipped tasks at 21/12/94

ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP

ID	Name
	Remediation of H Area
	Remediate & Tidy ancient monument
3	Construct Road, Install Wheel Wash
4	Waste Removal Phase 2
5	EFDC Consultation for Demolition
6	Mobilise for Demolition of H10, H71 & H8
7	Demolition of H10, H71 & H8
8	H8 Mound to T Area
9	Removal of Redundant Services, bldg bases etc
10	Ditching to Millhead Stream inc NRA Approval
11	Clearance of canals north from Hoppits Pool - Phase
12	Clearance of canals north from Hoppits Pool - Phase
13	Clearance of canals north from Hoppits Pool - Phase
14	Soil Strip, Area H
15	Re-establish Hoppit Road
16	Cut back water main to North of H8 or leave exposed
17	Remove H16 Slab
18	Interim Analysis
19	Confirmatory Analysis
20	
21	Erect temporary fences and gate
22	
23	THE RESERVE OF THE PROPERTY OF
24	
25	
26	and the same of the contract of the same o
20	IVIOI IICOI

Page 1

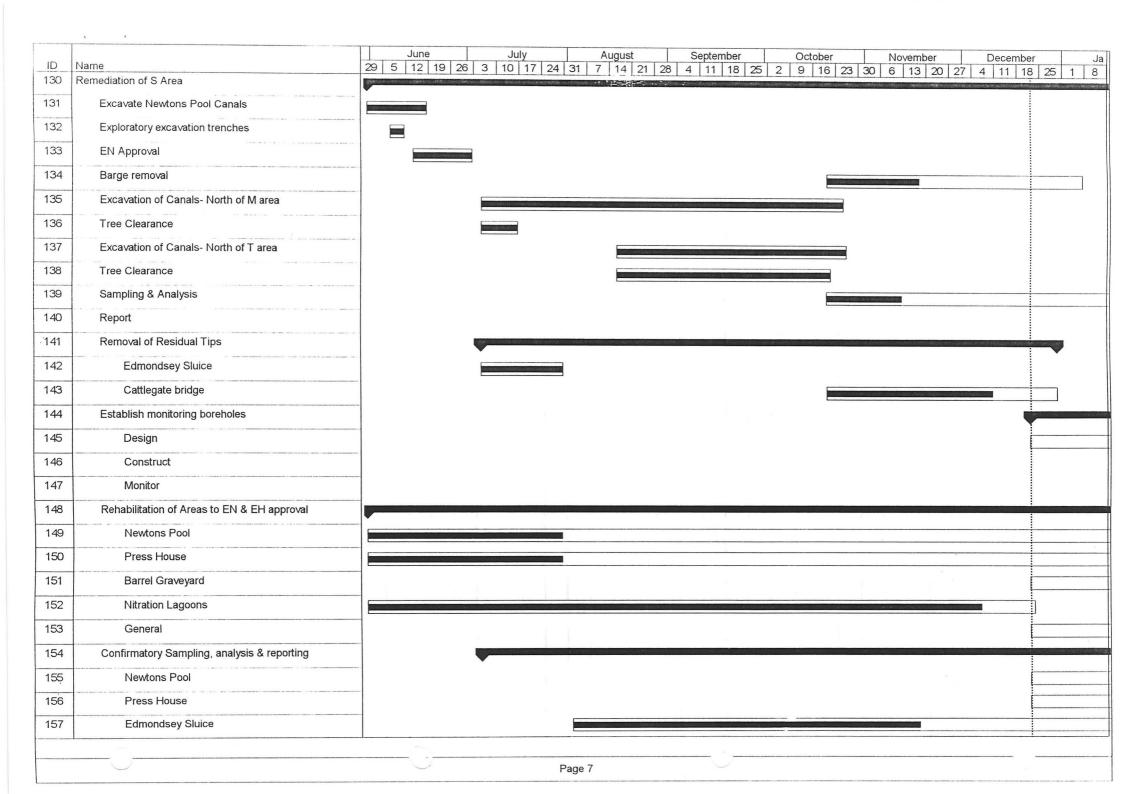


		June	July	August	September	October	November	December	_
ID 54	Name Remediation of T area (inc. lagoons & ponds)	29 5 12 19	26 3 10 17 24 3	1 7 14 21 28	4 11 18 25	2 9 16 23	30 6 13 20 27	7 4 11 18 :	4
55	Surface excavations/classify arisings							1	
56	Classify washpond arisings								
57	Decontaminate pipework				handelijk in de rederling of de grand	and a substitute of the substi	or significance in the state of		
58	Gunpowder stove clearance				one seem to be dressed in the property of the				
59	Confirmatory testing	1477.1		man (S. C. C. German) in April 1981 State of the de-		The State of the L	Principal Charles		
60	Terram sheeting & H8 mtl placement	owner (res		s San a come de come de come de come		Property and second	to extrapa a attended to the	Property of the Take	
61	Excavation of filled canals								
62	Confirmatory sampling & analysis								_
63	Report								
64	Refill with H8 mound from stockpile								
65	Top Soil, re-seed/re-plant to EN instructions								
66	Road reinstatement								
67	Acid Factory remediation							i	

<u>D</u> 38	Name	29 5 12 19 2	26 3 10 17	August 24 31 7 14 2	Septem 1 28 4 11	18 25 2 9	October	November 80 6 13 2	Dec 0 27 4 1	1 1
38	Remediation of M Area	port in the contract of		SAGE OF WITHOUT WAY IN THE SAME PLANT	tion accompanies of the second state of	In the second control of the		est la production de la constante de la consta	De als Hilliams . He cannot	Selfent
69	Removal of cordite/asbestos arisings									
70	Tender									
71	Removal									
72	Excavation of canals/reinstatement of road									
73	Gasworks Remediation									
74	Excavation									
75	Sampling & analysis									
76	Remediation									
77	Surface confirmatory sampling & analysis									
78	Report									
79	Remediation of incorporator railways									
80	Remediation									
81	Sampling & analysis									
82	Report									
83	Removal of redundant services									_
84	Decontamination of drains									
85	L157									
86	L153									
87	L148									
88	L145	1								
89	L149									
90	Associated buildings								5/5/9/1/25/5/1/20/1	
91	Removal of external slabs									
92	Demolition of buildings									
93	Ditching of waterways									
94	Gritblasting/ painting of steelwork		A SPECIAL PROPERTY AND A SECOND			V Child Swiedership.	X Y 76 //S JOH			117-2
95	L157									

ID	Name	29 5 12	10 26	July 3 10 17	24 31	August 7 14 21	Septem	18 25	Octo	16 23	30 6	ovember	27 27	Decer	18 25	5 1	1
6	L153	29 3 12	19 20	3 10 17	24 51	7 (4 21	20 4 11	10 23	2 9	10 25	30 0	113 20	5 21	4 111	110 20		1
7	L148																-
8	L149											,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
9	Wall and Floor removal/paint stripping	AND THE PARTY OF THE PARTY.	and the second		Market State	E year of the second	the second section of the second	errenia altre	A SEASON STATE	SATISMENT NAME.	. Section of	All Participation (Con-	orkernie Feb	Section School Se	Maria de Maria de Maria		20
00	L153		- Note and South Section	De Resource Belling to					la region service	e positivine out-	is made]	
01	L148			Programme Special Section			was deposit of	en ja teur sade									_
02	L145						santa a santa d		* 95.5								_
103	L149	Salari Carani						4.75		Section 1							_
104	Roofing															Security	
105	L145																_
106	L157	****															_
107	L145 (bays)	1000															
108	Boreholes														18 manual	A STATE OF THE PARTY OF	
109	Design																-
110	Construct																
111	Monitor																
112	Confirmatory analysis in buildings																
113	Sampling & Analysis																
114	Report																
115	Clean out of non-scheduled, non-listed buildings														İ		
116	Clean out of listed buildings	and 1 and 1													İ		

				June				July		1	Au	gust		Se	ptembe	r		Octob	er		Nov	ember		De	ecemb	er		
<u>ID</u>	Name	29	5	12	19 2	6 3	3 1	0 17	7 24	31	7	14 2	21 28	4	11 18	3 25	2	9 1	6 23	30	6	13 20	27	4	11 1	18 2	5 1	
17	Remediation of L Area														10 1000	and participation in	e ja priede		WALL AND ADDRESS.	73 187441184	i (SK) (M)	Cambala alla	e-impo	Santa ye	100-1200	order seeder	NSPARION.	1000
18	Excavation & backfill of canals																											
19	Confirmatory Sampling & Analysis																											
20	Report	The state of the s																										
21	Grassland Management													2100	dent access													
22	Demolition of buildings																											
23	Boreholes																								1		sissio per	(C)
24	Design																											
25	Construct																						,					
26	Monitor																											
27	Work to selected buildings																									İ		
28	Rationalise Services																									İ		
29	Remove Redundant Services																									-		_



				lune			July		August		September		0	ctob	er			Nove	emb	er		De	cem	oer		J
ID	Name	29	5	12 1	9 26	3	10 17 24	31	7 14 21 28	4	11 18 25	2	9) 1	6 2	3 30	0	6	13	20	27	4	11	18 2	25	1 8
158	Barrel Graveyard						Signal diverse property (
159	Nitration Lagoons																									
160	General														States	1000										
161	Removal of Redundant Services																							İ		
162	Scrutiny of surfaces - Heronry														Control	hitesus sa	ropidzion	e proper	1 History							
163	Scutiny of surfaces - Remainder																									
164	Clean out Scheduled Monument buildings															Sin banes	OA YOU UN	10 July 1								

ID	Name	June July 29 5 12 19 26 3 10 17 24 3	August 31 7 14 21 28 4	September Oct 1 11 18 25 2 9	16 23 30 6 13	3 20 27 4	4 11 18	25 1	1
65	Remediation of N Area		na varant a 🕒 Tropagas begins b			and the same of the same of		en jours en a	***1-4
166	Site Strip								
167	Establish Waste Handling			The second secon					
168	Temporary Road								
169	Fill in Pits								
170	Maintenance to Cattlegate bridge								
171	Improve Entrance from crooked mile								
172	Demolish unwanted buildings								
173	Rationalise Services								
174	Clean up after Waste Operations								
175	Establish monitoring boreholes								_
176	Winning of clay for general site works							MENT SERVICE	() bi
177	H Area								
178	Lining Canals								_
179	Burning Ground								
180	Confirmatory sampling, analysis & reporting								
181	Fencing								
182	Removal of Cattlegate Bridge								
183	Installation of foot bridge								
184	Rehabilitation								_
185	Handover to LVRPA								
186	Scrutiny of surfaces								

				June			July		Augus	it	Septe	mber		Octo	per		Nove	mber		Dec	embei			Ja
ID	Name	29	5	12 1	19 26	3	10 17	24 31	7 14	21 28	4 11	18 25	2	9	16 23	30	6 1	3 20	27	4 1	1 18	25	1	8
187	Remediation of Burning Ground						Lik John Links				20.50-03-0	3 rest #4860	I HAD		et et le le le le le le le le le le le le le	(dake)	grander in	or district		i de la como		a Carette	an negative	9124
188	Remove Entrance Road	*******																						
189	Services rationalisation								and San Property	i Ag an ining Silving in	Carrier Comme	ini ya Toka da k	(\$10 M(H)/H)	et el Antica	M. S. Carlo									
190	Site Strip to Gravel/Undisturbed Strata																				[
191	Transport Arisings to N Area																				į			
192	Sweep Area with Metal Detector																							
193	Re-establish clay membrane & top soil																							
194	Carry out EH/EN remediation proposals																							
195	Confirmatory analysis of soil samples																							
196	Asphalt treatment																				Ė		-	

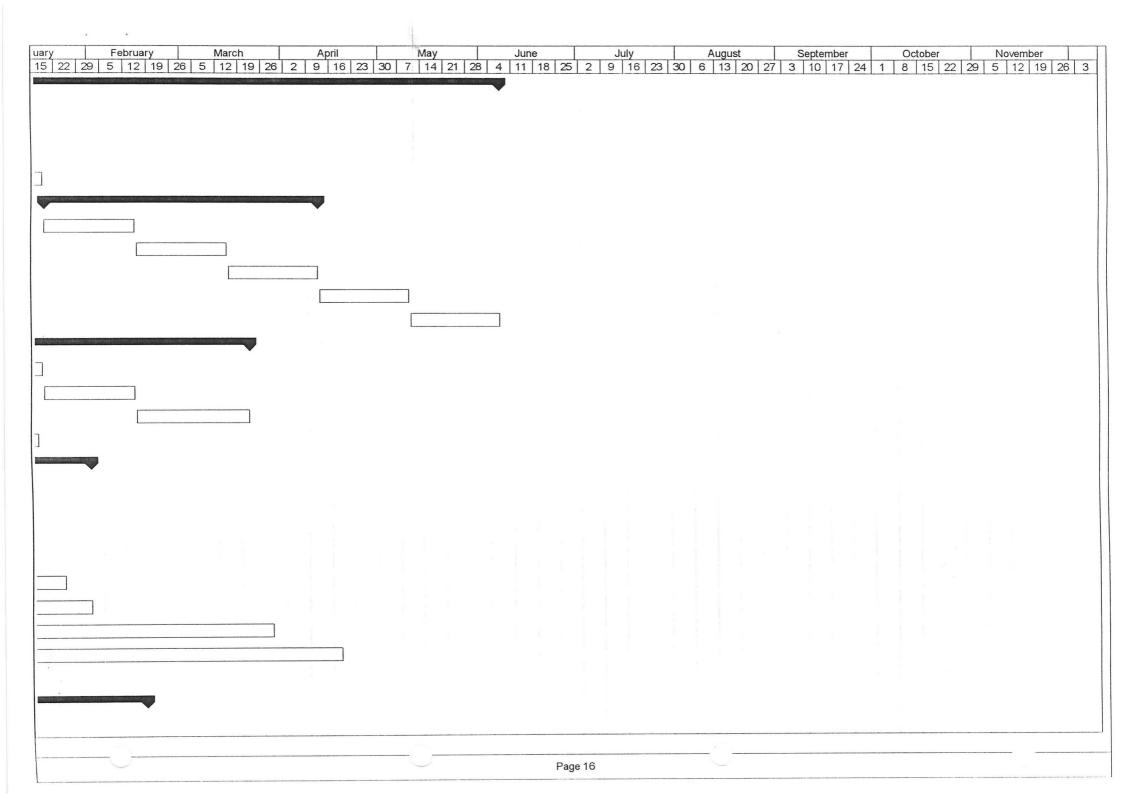
ID	Name	29 5 12	19 26 3 10	uly 17 24 31	August	Septem	ber Oct 18 25 2 9	ober Noven 16 23 30 6 13	nber Dec 3 20 27 4 1	ember 1 18 25
197	Maintenance of Bridges	29 3 12	19 20 3 10	17 24 31	1 14 21	20 4 11	10 23 2 9	10 25 30 0 10	5 20 21 4 1	1 10 25
198	SMC/Trust Approval									
199	Design/Tender			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
200	Construction									
201	Remediation of River Banks				Wife St. Co. of St. St.				->=# 34 - 1 (C)	CONTRACTOR OF THE PARTY OF THE
202	Sheet Piling & Excavations East Bank of Horsemill Str									
203	Operations West Bank Horsemill Stream									
204	Ditching of On-Site Rivers & Canals									
205	Removal of Canal Material at Intersection of Waterway									
206	NRA/EN Proposals to Raise Site Water Levels									
207	Reinstatement of Banks								produced by a part that	
208	Excavate canal batters									•
209	Excavate pond batters									
210	Sample									
211	Apply Terram and backfill									
212	Report									
213	Completion of T Area Works									
214	Remediation under Steam Pipes				3-1					
215	Survey & Peg-Out Routes									
216	Site Strip/disposal outside Heronry									
217	Site Strip/disposal inside Heronry	1								
218	Sample Analysis	1								
219	Surface Treatment inside Heronry									
220	Surface Treatment outside Heronry									

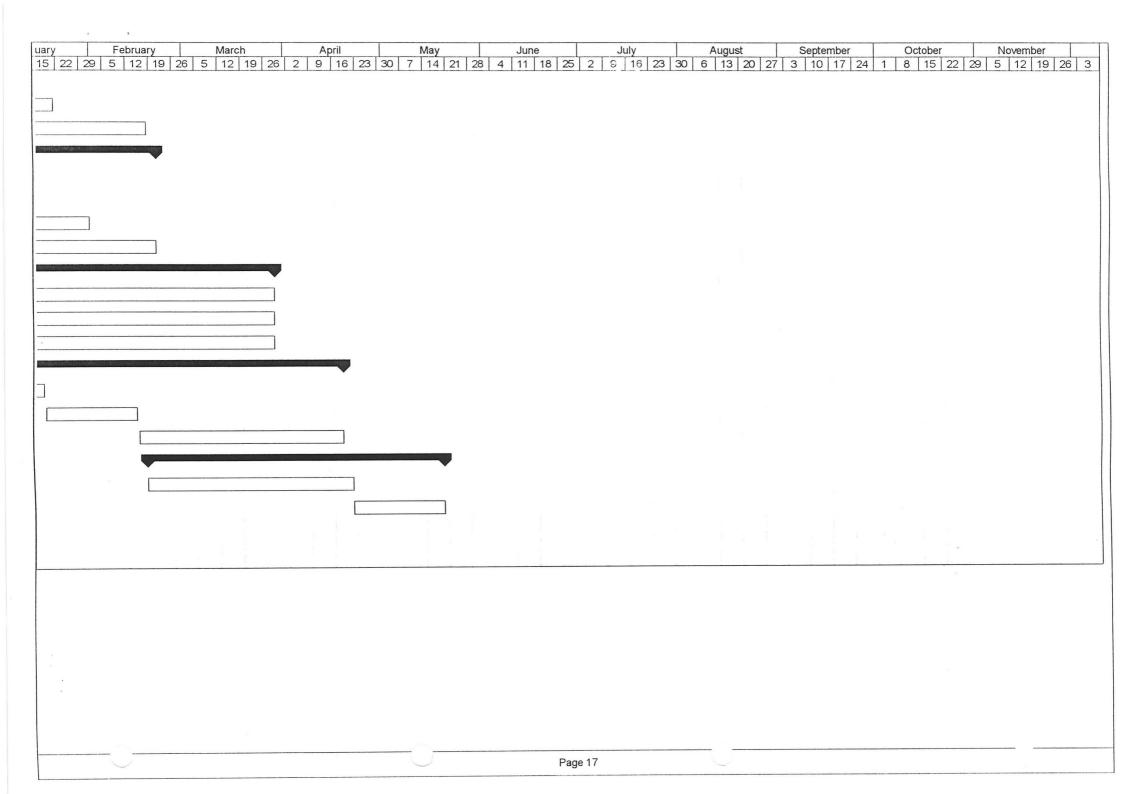
				Jur	ne				July				Augus				Septe						tobe				vem			De	ceml	per		
ID	Name	29	5	12	2 19	26	3	10	17	24	31	7	14	21	28	4	11	1 1	8	25	2	9	16	23	30	6	13	20	27	4	11	18 2	5	1
221	Buildings & Mounds		11/4-	PHON	ne reference de la la	dign Sign	পুলা ্য ক্টাৰ	Sports	41	12 7/25		tess/fil		and page	HI PARK	· / · /		C A T	enin	Mile .	(ceeph)	(far)(90)	12474	nin ann	199	ANT DIX 1	GUIGHEN	100 mg	s indin	Sin Hill STEELS	per riya	mention relation	aritiret ei	MAIN OF SE
222	Mounds - Sample & Analyse																															İ		
223	Scheduled Area Buildings																															İ		
224	Other Buildings																															İ		
225	Tree Clearance from Mounds & Buildings		A9. 15	26. C29.4	ir Shirty	de la company	ke e Mai	26 932	Ulrace to		de la secolata	drais-	non-sense		istories.	A to a to	lueki	No. of the A	(idea)	2444	het Ho		1,195	i por perio										
226	Building Information Packs		We will	n nesankn		s dinion from	(av Ermin)		Salar Caldy	turbicum k	in remain	1 1 10 Y	IF.																					
227	Services Survey						=																											

uary February March April May June	July August September	October November
uary February March April May June 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 2	25 2 9 16 23 30 6 13 20 27 3 10 17 24 1	October November 8 15 22 29 5 12 19 26 3
		* .
		ji
·		
F	Page 13	

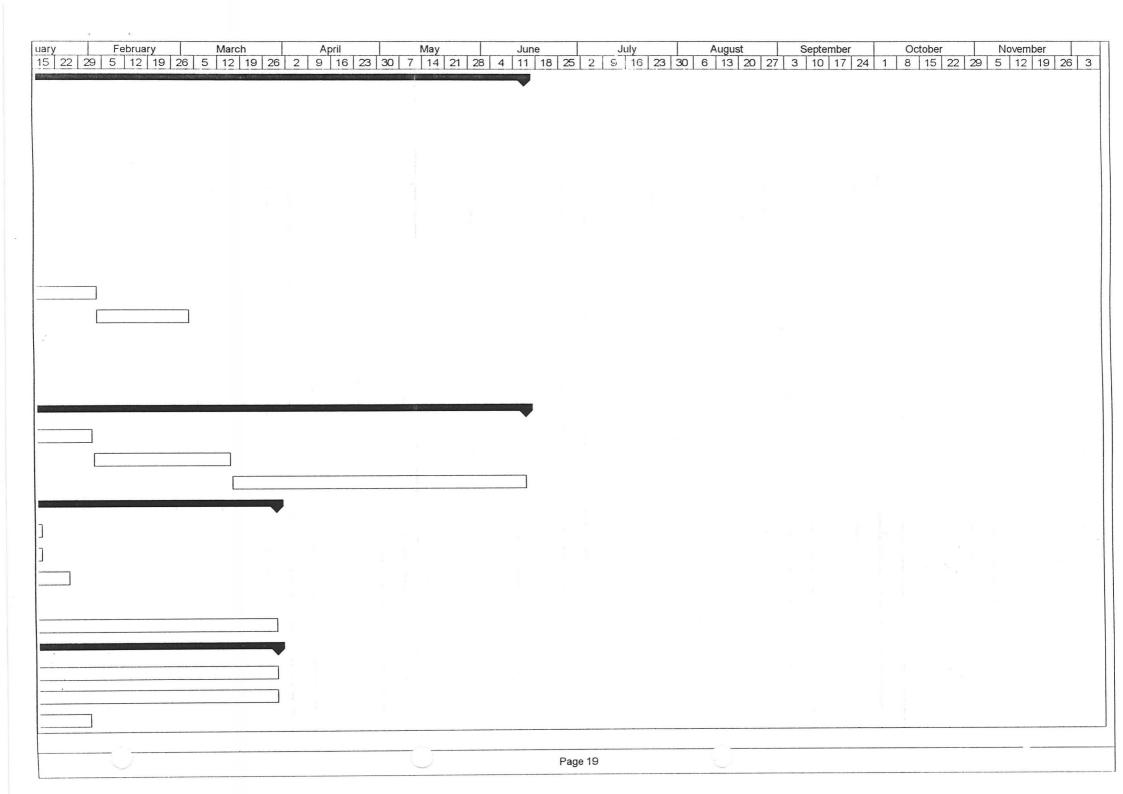
	February	l N	March	April		May		June	Τ.	July	<i>P</i>	August		September		October		November	
22 29	5 12 19	26 5	March 12 19 26	2 9 16	23 30 7	14 21 2	8 4	11 18 2	25 2 9	16 23	30 6	13 20	27 3	September 10 17 2	4 1	8 15 2	2 29 5	November 12 19	26
tiskopog manav		ekinirent iro erebreiki			CONTRACTOR OF STREET														
September 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of 18 of	ellionate on the state of the			aging the Mary on the state	THE PERSON NAMED IN	THE PARTY OF THE PARTY.													
w X									Carrier Control of the Control of th										
ar X																			

T	February		March	T		April	T	May	y	T	June			July		Αι	igust		Septem	ber		Octobe	r		Novemb	er	T
22 29	February 5 12 1	9 26 1	5 12 19	26	2 9	16	23 30	7 12	4 21	28 4	11 1	8 25	2 9	16	23 30	6	13 20	27 :	3 10	17 24	1	B 15	22	29 5	12	19 2	6
	15 Sec. 18, 28 (28)																										
-																											
	y-		A					Na																			





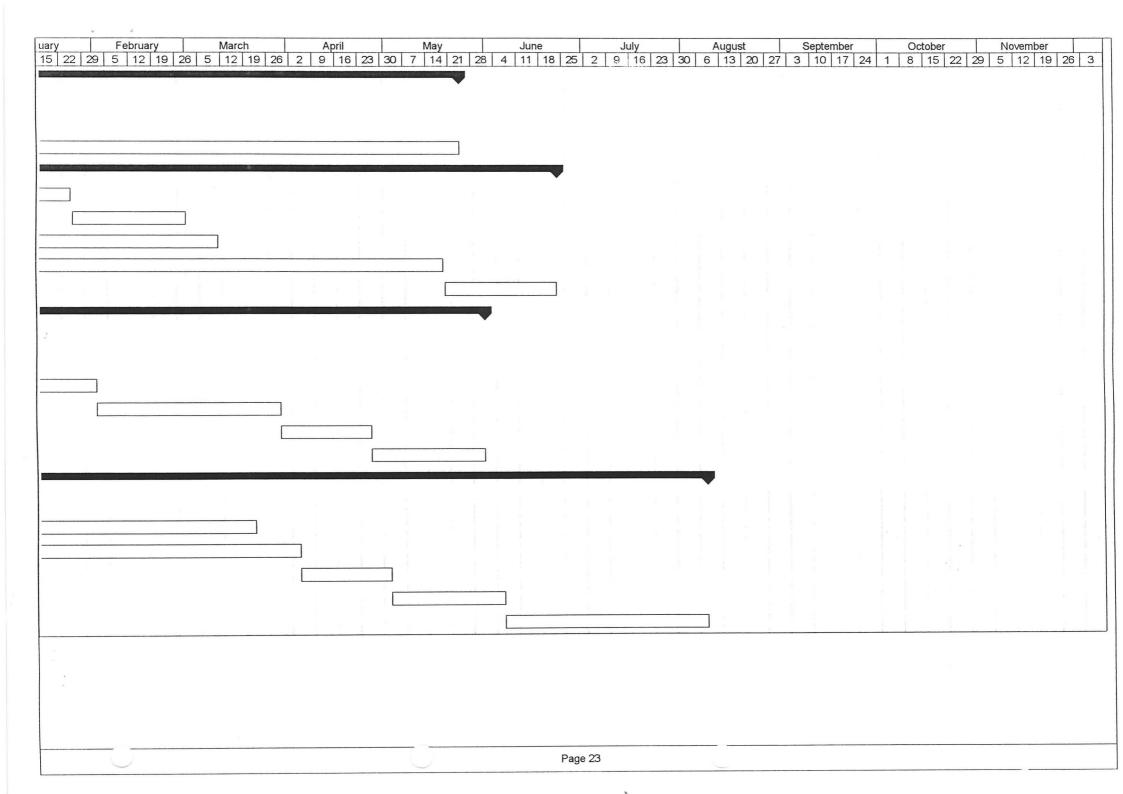
May June 7 14 21 28 4 11 1	July F 3 25 2 9 16 23 30 6	August September 13 20 27 3 10 17	October November 24 1 8 15 22 29 5 12 19 26
7	May June 7 14 21 28 4 11 18	May June July 7 14 21 28 4 11 18 25 2 9 16 23 30 6	May June July August September 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 3 10 17 2



February March	April May 2 9 16 23 30 7 14 21 28	June July 4 11 18 25 2 9 16	August Septemb 23 30 6 13 20 27 3 10 1	Der October Now 7 24 1 8 15 22 29 5 1	ember 2 19 26

February March April May	June Jul 4 11 18 25 2 9	y August 16 23 30 6 13 20 27 3	September October 10 17 24 1 8 15 22 28	November
•				
	Page 21			

	Fobruary Mar	rch April	May	ine luly	August Senten	oher October Nover	nher
15 22 29	5 12 19 26 5 12	2 19 26 2 9 16 23	30 7 14 21 28 4 11	18 25 2 9 16 2	August Septen 3 30 6 13 20 27 3 10	nber October Nover 17 24 1 8 15 22 29 5 12	19 26 3
				Page 22			



22 29 5	February 5 12 19	26	5 12	ch 19	26	2 9	April 16	23	30	7 1	4 21	28	4	June 11	18	25 2	2 9	July 16	23	30	Aug 6 1	gust 3 20	27	S 3	eptem 10	17 2	24 1	3	Octobe 3 15	r 22	29	Nover 5 12	mber 2 19	26
		Na I		A ANS	NAME		e in a																				1							
																														(*)				
	-															Page 2																	7	

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 17th NOVEMBER 1994 AT 14.00 HOURS

Present: Mr Bob Watts :W.S.A. Copies: Mr.D.Stanners :M.O.D/DLS Mr.D.Covle Mr Graham Vincent : R.O. :M.O.D.P.E. Mr Peter Mayell :R.O. Mr.A.Ford :ARCH. Mr.D.Bone :CIVIX Mr.P.Greggain :M.O.D/DLA MATTERS ARISING - FROM MEETING OF 19th OCTOBER 1994 **ACTION** 1. 1.1 (1.1)**Explosives Testing** A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC submitted. Part 1 ESG 4/93 received from R.O. Part 2 to be revised by R.O to include typical W.S.A. sampling arrangements. Strimming of mound proceeding. R.O. Photographic record 1.2 (1.2)

This activity held.

the miles

- Remediation in P Area complete contracts exchanged. 1.3 (1.3)Issues yet to be resolved. Piling along Mill Head Stream complete. W.S.A. Clay filling completed. Concrete work to commence Monday CIVIX 21st November 1994. R.O.
- Collection of Tetryl Area pipes from T Area progressing. (1.4)1.4 Existing water mains need not be cut into short sections before heat treatment. When collection complete decontamination to proceed with Morris Contractors.

R.O.

- Water wheel and Press House areas. Confirmatory investigation B.S. 1.5 (1.5)to await outstanding items and scrutiny. English Nature/Bob ARCH. Stebbings considering this area for rehabilitation, planting etc., R.O. SMC required. Target date for completion January 1995. W.S.A.
- (1.6)Incorporating Mills. 1.6 Work in these buildings being systematically reduced to cease beginning January 1995. Outstanding drain grouting to be tendered.

R.O.

1.7 (1.8)	Tetryl Area. Gunpowder stove final filling complete. Pool banks to be sampled, L.G.C. will sample sludge from beds. Confirmatory sampling of factory area will await removal of canal intersections and bank treatment.	R.O. ARCH. W.S.A.
1.8 (1.9)	Asbestos clad steam main routes. Revised procedure within SSSI agreed with English Nature and English Heritage. Routes previously excavated will be filled, routes not yet remediated will be either hand raked or machine excavated as determined by Bob Stebbings/English Nature and backfilled. Resampling not required, work has commenced in Heronry first using MSO Thomas.	B.S. W.S.A. ARCH. R.O.
1.9 (1.10)	Preparation of artifact inventory. Work stopped on this activity.	
1.10 (1.11)	Asphalt melting plant. This activity held. As buildings are cleaned an assessment will be made as to whether asphalt floors should be removed at that stage.	R.O. W.S.A.
1.11 (1.12)	Waste tip sampling for explosives analysis. Proceeding satisfactorily, volume of samples for analysis has reduced.	W.S.A. R.O.
1.12 (1.13)	R.O <u>engineer carrying out services survey</u> and checking CAD plot. Work complete.	
1.13 (1.14)	Safety Audit. Monthly visits proceeding.	R.O.
1.14 (1.15)	Edmonsey Sluice waste excavation complete. Windbreak fencing in hand, SMC submitted. Place remaining top soil around trees.	R.O.
1.15 (1.16)	Copy of Explosives License Application received from R.O. Delayed at request of H.S.E Explosives Inspectorate - no progress.	R.O.
1.16 (1.17)	Site vehicles. 1 Minibus R.O. 1 Minibus hired (return 18/11/94) 1 Astra van hired (return 18/11/94) 1 Maestro van R.O. (return on receipt of 2nd replacement 110 Landrover). 1 Old Landrover R.O. 1 Landrover 110 R.O. (from 21/11/94). Awaiting 2nd replacement Landrover R.O.	R.O.
1.17 (1.18)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A. R.O.

1.18 (1.19)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract.	R.O.
1.19 (1.20)	Trenching to Northern Canals - complete. Trench logs outstanding. Results of analysis indicate fill quality is acceptable and also over lain by river gravels. No further excavation required. Some investigation by excavation of buried stoves required.	W.S.A. R.O.
1.20 (1.21)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Awaiting NRA decisions regarding bank excavation, reduction in Horse Mill Stream water level and export route for waste. Work may proceed this FY.	N.R.A. R.O. W.S.A.
1,21 (1.22)	Queens Mead almost totally covered with dewatering sludge which will be excavated next summer with a general strip of areas affected by grit blasting and search for canal.	R.O.
1.22 (1.23)	Water main and Sewage Pumping main H Area - stripped out from H Area. Pumping main not to be replaced at this time. Continue emptying pump sump by tanker. Valves and hydrants being maintained by Terry Williams. Costs to caretaking contract, VO61.	W.S.A. R.O.
1.23 (1.24)	Bridge works. Tenders returned - held.	W.S.A.
1.24 (1.25)	Carden and Godfrey have identified <u>building anomalies</u> between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated into the site records.	ARCH. W.S.A. MKS
1.25 (1.26)	Initial <u>strip out of buildings 134 to 160</u> partially complete. Work stopped. Further buildings to be reviewed by RW and AF for release to Morris Contracting for clean out.	W.S.A. ARCH. R.O.
1.26 (1.27)	R.O investigation into the <u>stability of N.G. in timber</u> on a shared cost basis delayed. R.O. to advise completion date.	R.O.
1.27 (1.28)	<u>Piling to canal/river intersections</u> to remove residual contaminated material held. Geotechnical investigation complete. Samples required from selected intersections.	W.S.A. R.O.
1.28 (1.29)	Kocurek amphibious excavator off hire 18/11/94. Remaining Millhead Stream to be dredged from bank side.	R.O.
1.29 (1.31)	Excavation of river beds adjacent and integral with bridges in refurbishment/replacement works. This is best carried out using Portadam technique. If bridge works approved may be possible to liaise with contractor to use his dam installation to clear before bridge works are undertaken. NRA to deal with fish. Work held at present.	W.S.A. B.S. R.O. NRA.

1.30	(1.32)	R.O. to produce <u>draft inventory</u> of client owned items.	R.O.
1.31	(1.34)	<u>Demonstration of portable explosives analyser</u> took place on 14th September 1994. R.O. will trial this on 2 week free loan from manufacturer in November 1994. No progress.	R.O.
1.32	(1.35)	R.O. to respond to issue of the <u>extent of the building remediation</u> and likely certification, methods and requirements.	R.O.
1.33	(3.1)	Excavation of Millhead Stream held, parallel drain progressing, remove agreed trees.	R.O.
<u>2.</u>	PROGI	RESS AND PROGRAMME	
2.1		Revised programme will be issued when client aspects resolved. 55% date on present programme.	progress to
<u>3.</u>	ANY O	THER BUSINESS	
3.1		Gas works investigation held but will be designed by WSA.	W.S.A.
3.2		Site hours reduced to 0730 - 1600 from 21st November 1994.	
3.3		Standard hours 5 day working by all contractors and staff unless previously agreed.	R.O. W.S.A. ARCH.
3.4		Reprogramming of activities in hand, staff and labour reductions actioned. Commensurate reductions in road sweeping and Polyloo provision in hand.	R.O.
3.5		Table of results of explosives analysis on artifacts required.	R.O.
3.6		Procedure for TNT drain at E2 in hand.	R.O.
3.7		Tip 74a to be cleared.	R.O.
3.8		Bridge 59. Form clay berm to culvert bed.	R.O.
3.9		Building L108 and shores to canal brickwork. Hold.	
3.10		R.O. to produce site list of expenditure items as approved.	R.O.
3.11		Blick quote received for repair of Highbridge Street traffic barrier damaged by Holts.	
3.12		Suspect material excavated from around A210 is paint. No contamination implications. Disposal with special waste.	R.O.

. v 1

3.13 Drum dredged from Middle Stream will be remotely pre-drilled and sawn as cylinders. R.O.

3.14 Agreed R.Bray can remove stockpiled chippings at own expense.

4. DATE OF NEXT MEETING

4.1 14.00 Hours on Wednesday 21st December 1994.

R.E.WATTS. 21st November 1994

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE WEDNESDAY 19th OCTOBER 1994 AT 14.00 HOURS

Present: Mr Bob Watts Copies: Mr.D.Stanners :M.O.D/DLS :W.S.A. Mr.D.Coyle Mr Graham Vincent : R.O. :M.O.D.P.E. Mr.A.Ford Mr Peter Mayell :R.O. :ARCH. Mr.D.Bone :CIVIX Mr.P.Greggain :M.O.D/DLA

N

<u>1.</u>	MATTI	ERS ARISING - FROM MEETING OF 15th SEPTEMBER 1994	ACTION
1.1	(1.2)	Explosives Testing A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC submitted. Part 1 ESG 4/93 received from R.O. Part 2 to be revised by R.O to include typical sampling arrangements. Strimming of mound proceeding.	W.S.A. R.O.
1.2	(1.3)	Photographic record Negatives indexed, photos to be indexed by vacation student. Video tape with "date on" to be edited.	R.O.
1.3	(1.4)	Remediation in P Area complete - contracts exchanged. Issues yet to be resolved. Piling along Mill Head Stream complete. Clay filling completed. Concrete work to be tendered.	CIVIX W.S.A. R.O.
1.4	(1.5)	Collection of <u>Tetryl Area</u> pipes from T Area progressing. Existing water mains need not be cut into short sections before heat treatment. When collection complete decontamination to proceed with Morris Contractors.	R.O.
1.5	(1.6)	Water wheel and Press House areas. Confirmatory investigation to await completion of road construction and outstanding items. English Nature/Bob Stebbings considering this area for rehabilitation,	
1.6	(1.7)	planting etc., SMC required. L157 2nd stage strip out nearing completion. Work carried out in L157 extended to L145, L148, L149 and L153. Floor removal to be assessed using 3 tonne remote controlled chisel, which is on	R.O.

1.7	(1.8)	Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify. Non urgent.	R.O.
1.8	(1.9)	Tetryl Area. Procedure for pools adjacent to E2 agreed with Bob Stebbings and nearing completion. Gunpowder stove initial filling complete, external excavation in hand to prepare for final filling. Pools to be sampled, L.G.C. will sample sludge from beds.	R.O. ARCH. W.S.A.
1.9	(1.10)	Asbestos clad steam main routes. Revised procedure within SSSI agreed with English Nature and English Heritage. Routes previously excavated will be filled, routes not yet remediated will be either hand raked or machine excavated as determined by Bob Stebbings/English Nature and backfilled. Resampling not required, work to commence in Heronry first using MSO Thomas.	B.S. W.S.A. ARCH. R.O.
1.10	(1.12)	Preparation of artifact inventory. R.O draft report being continuously updated. R.O. to organise transport of artifacts. Barge to be transported to site, organised by archaeologist, but dependent on formation of the Trust.	R.O.
1.11	(1.13)	Asphalt melting plant work complete to date. R.O have prepared a list of remaining buildings with asphalt floors. WSA authorised removal work to proceed. R.O to inspect asphalt floors in buildings undergoing strip out. R.O are investigating commercial outlet for asphalt. Additional buildings identified from C & G report. SMC submitted.	W.S.A. R.O.
1.12	(1.14)	Waste tip sampling for explosives analysis. Proceeding satisfactorily, volume of samples for analysis has reduced.	W.S.A. R.O.
1.13	(1.15)	R.O <u>engineer carrying out services survey</u> and checking CAD plot.	R.O.
1.14	(1.17)	Safety Audit. Monthly visits proceeding.	R.O.
1.15	(1.19)	Initial <u>Edmonsey Sluice waste</u> excavation and filling complete. Further limited excavation required and sampling. Windbreak fencing to follow, SMC submitted. Grit blasting to NRA sluice has resulted in wind blown arisings being blown onto site.	R.O.
1.16	(1.20)	Copy of Explosives License Application received from R.O. Delayed at request of H.S.E Explosives Inspectorate - no progress.	R.O.
1.17	(1.21)	Site vehicles 1 No. flat bed and minibus available October.	R.O.

1.18	(1.23)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A. R.O.
1.19	(1.24)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract.	R.O.
1.20	(1.25)	<u>Trenching to Northern Canals</u> - complete. Samples taken. Logs in hand, results of analysis received.	W.S.A. R.O.
1.21	(1.26)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Awaiting NRA decisions regarding bank excavation, reduction in Horse Mill Stream water level and export route for waste. Work may proceed this FY.	N.R.A. R.O. W.S.A.
1.22	(1.27)	Queens Mead Canals partially located and excavated, work suspended. River sludge being placed. Areas affected by gritblasting exhaust (lead content) to be stripped on completion of task.	R.O.
1.23	(1.28)	Water main and Sewage Pumping main to be rerouted and/or cut back and replaced with new polymer tube where exposed. H Area water main cut off, sewage pumping main to be reinstated. Pump sump emptied by tanker. Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract, VO61.	W.S.A. R.O.
1.24	(1.29)	Bridge works to be organised by WSA. Decontamination programme implications. Tenders returned.	W.S.A.
1.25	(1.30)	Carden and Godfrey have identified <u>building anomalies</u> between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated into the site records.	ARCH. W.S.A. MKS
1.26	(1.31)	Initial <u>strip out of buildings 134 to 160</u> proceeding to programme. Further buildings to be reviewed by RW and AF for release to Morris Contracting.	ARCH R.O.
1.27	(1.32)	R.O proposal for further investigation into the stability of N.G. in timber on a shared cost basis approved. Will commence end of October.	R.O.
1.28	(1.33)	WSA outlined the requirements for <u>piling canal/river intersections</u> to remove residual contaminated material. Approval to proceed with design received. Trial pits/probes at intersections carried out by R.O. Geotechnical investigation commences 20th October 1994.	W.S.A. R.O.
1.29	(1.35)	Kocurek amphibious excavator on site to dredge Millhead Stream.	R.O.
1.30	(1.36)	Grass cutting to Queens Mead and N Area complete.	R.O.

1.31	(1.37)	WSA instructed R.O. to excavate river beds adjacent and integral with bridges in Bridge Refurbishment/Replacement works. Amphibious excavator too large to carry out work. RSC to consider implications of damming part of Middle Stream and	B.S.
		Hoppit Pool.	R.O.
1.32	(1.38)	R.O. to produce <u>draft inventory</u> of client owned items.	R.O.
1.33	(1.39)	R.O. have ordered <u>air filtration plant</u> relating to gritblasting air discharge. Delivery week commencing 24th October 1994, McGoff & Vickers to cable in.	W.S.A. R.O.
1.34	(1.40)	<u>Demonstration of portable explosives analyser</u> took place on 14th September 1994. R.O. will trial this on 2 week free loan from manufacturer in November 1994.	R.O.
1.35	(1.41)	R.O. to respond to issue of the <u>extent of the building remediation</u> and likely certification, methods and requirements.	R.O.
1.36	(3.1)	Agreed the resourcing of further R.O. site supervisor Bob Edwards.	
<u>2.</u>	PROGI	RESS AND PROGRAMME	
2.1		Revised October programme attached at Appendix 1. Next revision progress meeting. Existing 6 weeks delay held. Practical completion of 1994. 52% completion to end of October.	_
<u>3.</u>	ANY O	THER BUSINESS	
3.1		Excavation of Millhead Stream and parallel drain. Tree clearance agr	reed.
3.2 at		Sean Roberts, student, will be on site to gain experience. Could carr a charge of £7 per hour for R.O. and W.S.A.	y out tasks
aı			
4.	DATE	OF NEXT MEETING	

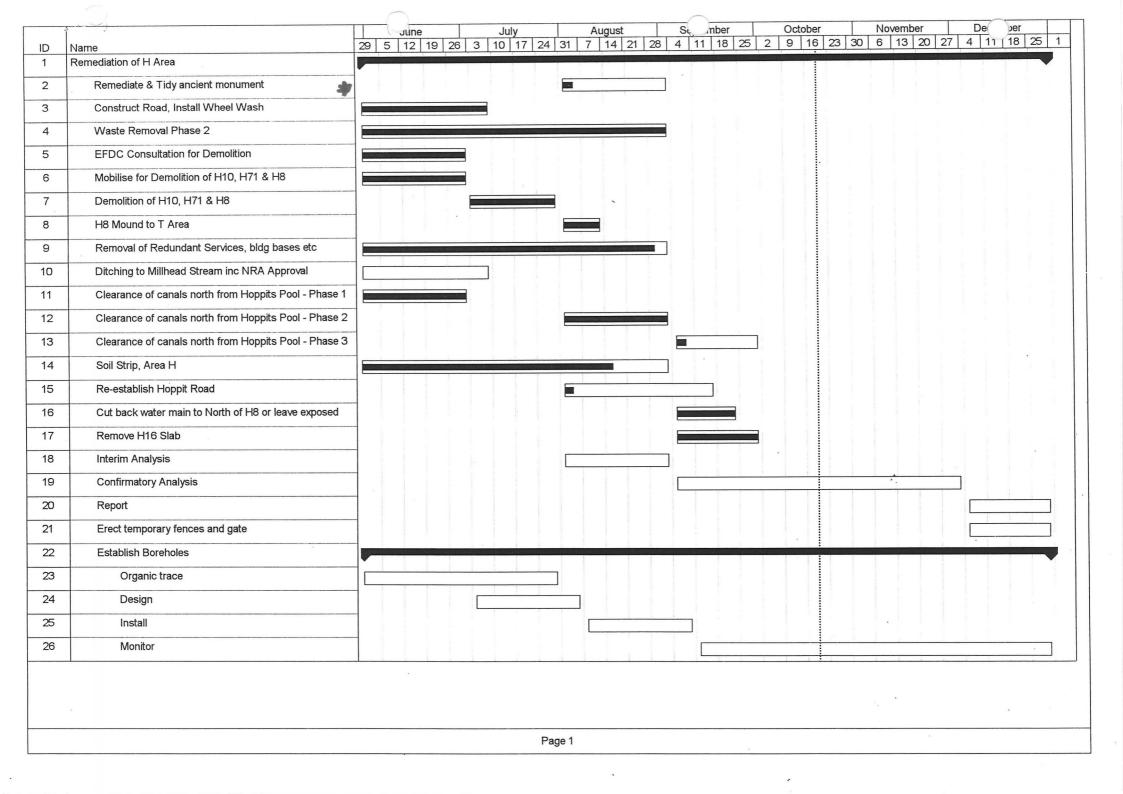
R.E.WATTS. 16th November 1994

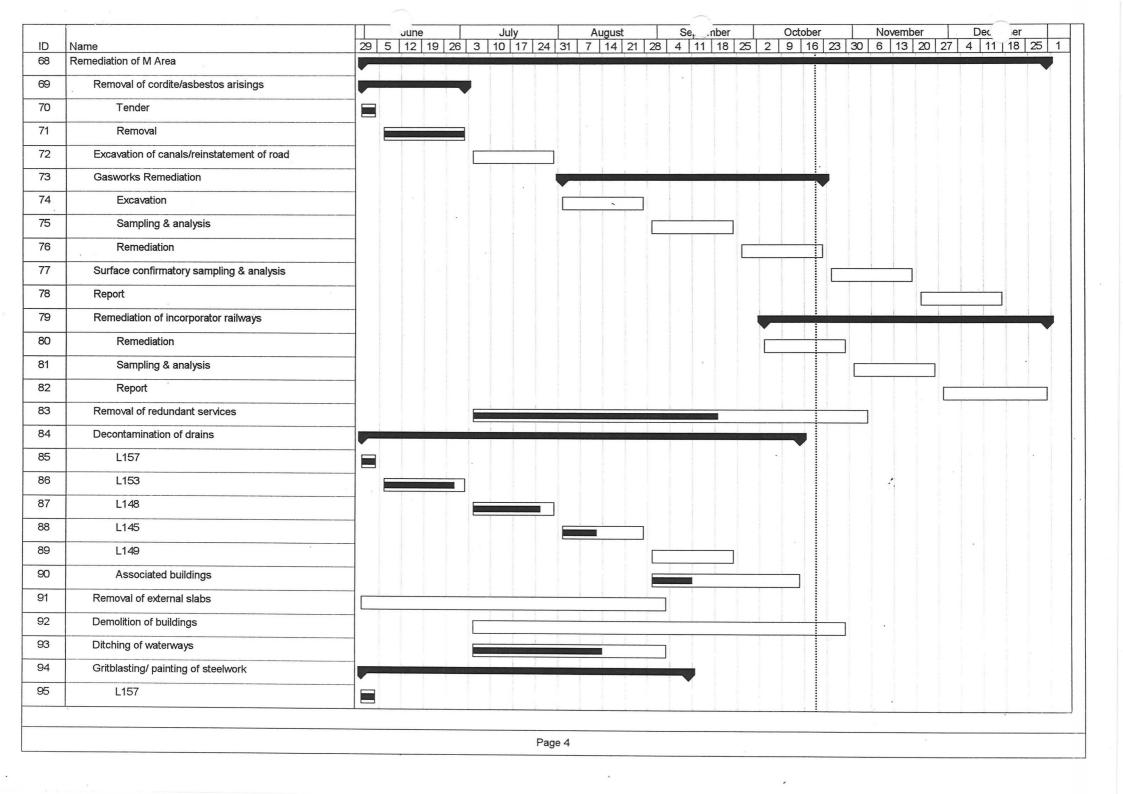
10.00 Hours on Thursday 17th November 1994.

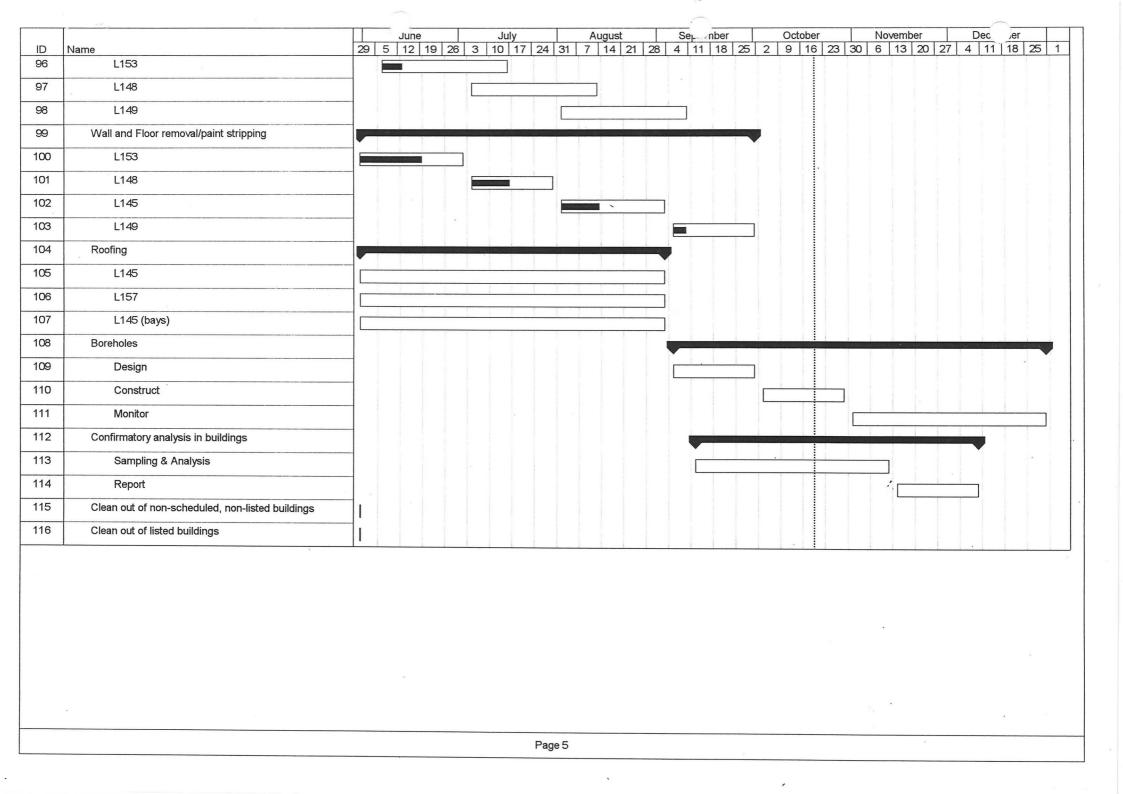
4.1

PROJECT PLAN - ISSUE 5 OCTOBER 1994

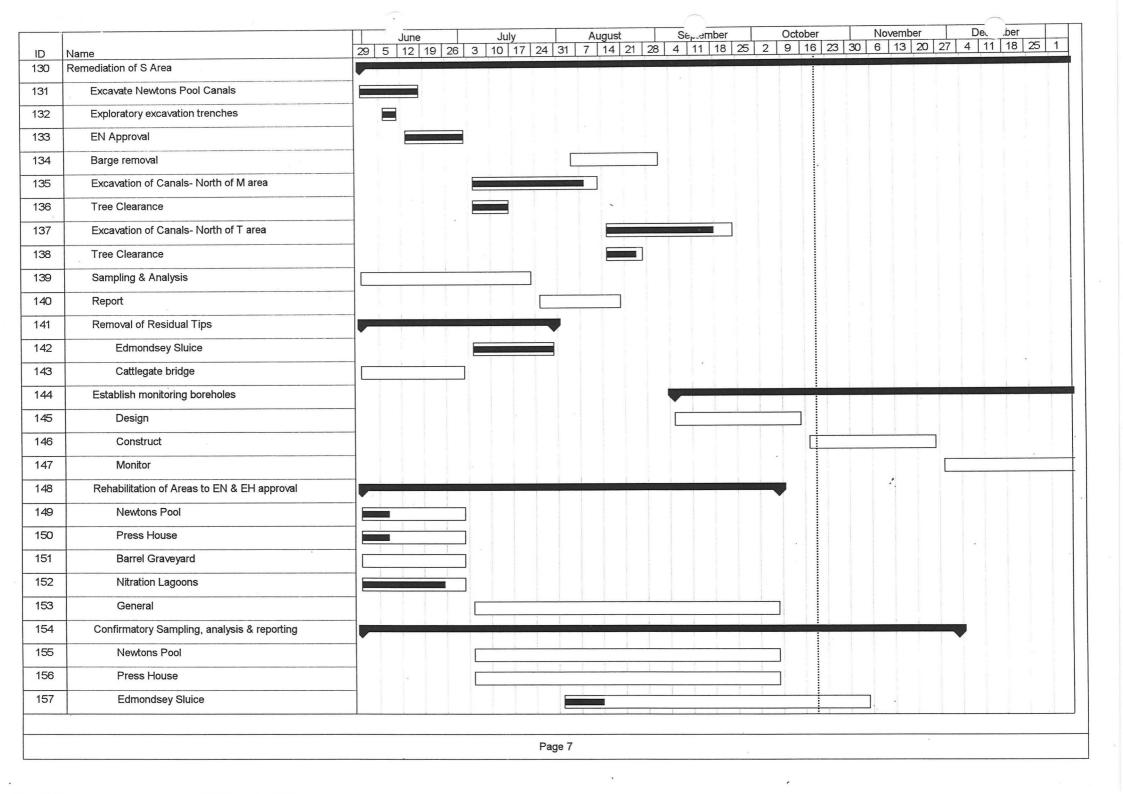
ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP





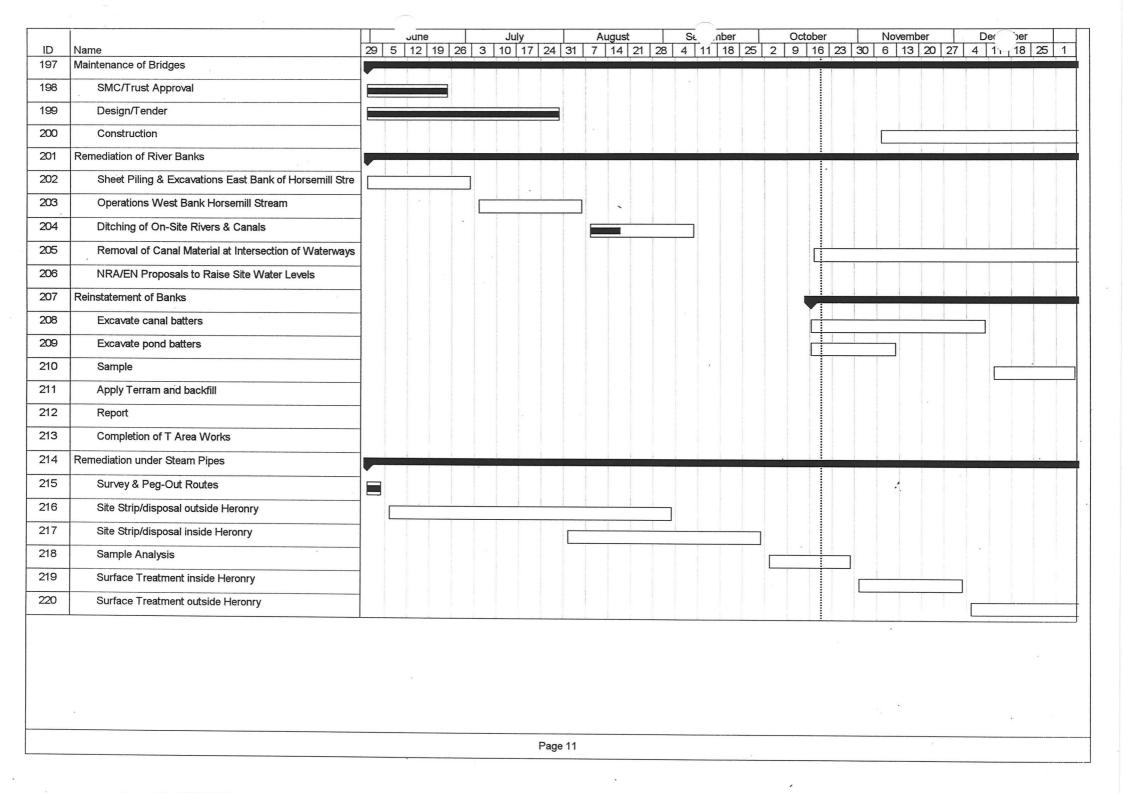


		1.1		June	9		Jul	ly		Αι	ugust		Se		ber		Oc	tober		Nove	ember		D	ec	er	
ID	Name	2	9 5			26 3	10	17 2	4 31	7	14 2	1 28	4	11	18 2	5 2		16	23		13 20	27	4	ec 11	18 2	×
117	Remediation of L Area		ii .																				4			
118	Excavation & backfill of canals																									
119	Confirmatory Sampling & Analysis															Е]			
120	Report																									_
121	Grassland Management															3										
122	Demolition of buildings										<u> </u>															
123	Boreholes										`					+		÷								
124	Design																									
125	Construct																	1								
126	Monitor																									
127	Work to selected buildings	1																								
128	Rationalise Services	1																								
129	Remove Redundant Services																									



				June			J	uly		-	August		Se	-inl	oer		Octo	ber		Nove	mber	9	Dec	ber		
D	Name	29	5	12	19 2	26	3 10	17	24	31 7	August 14 2	21 28	4	11	18 25	5 2	9	16 23	3 30	6 1	3 20	27	Dec 4 11	118	25	1
58	Barrel Graveyard					[
59	Nitration Lagoons					1																				
60	General																									
61	Removal of Redundant Services	1																								
62	Scrutiny of surfaces - Heronry																									_
63	Scutiny of surfaces - Remainder																	ľ								
64	Clean out Scheduled Monument buildings										,															-
					ii				-11-			-		<u> </u>				•					<u> </u>		l	
														,												
																9									·	
																				•						

				June	9			Jul	y			Αı	ugust			Se	r	ber			Oct	ober			No	vemb	er		D	ec	er	
ID	Name	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25
187	Remediation of Burning Ground					ı																										
188	Remove Entrance Road															•																
189	Services rationalisation																															
190	Site Strip to Gravel/Undisturbed Strata																															
191	Transport Arisings to N Area																															
192	Sweep Area with Metal Detector																															[
193	Re-establish clay membrane & top soil												`																			
194	Carry out EH/EN remediation proposals																															
195	Confirmatory analysis of soil samples																															
196	Asphalt treatment												-									L			1							



				Jun	е			Jı	ıly				Aug	ust		1	S	ı۲	ber			Oc	ctob	er			Nov	emb/	er)e	ber		
ID	Name	29	5	12	19	26	3	10	17	24	31	7	1	4 2	1 2	8	4	11	18	25	2	9	1	3 2	3 3	30	6	13	20	27	4	1.	18	25	1
221	Buildings & Mounds									سب																			- Constitution	(Cally)				i de la	
222	Mounds - Sample & Analyse	1																																	
223	Scheduled Area Buildings	1																																	
224	Other Buildings	1																																	
225	Tree Clearance from Mounds & Buildings				n i Ga		30-18		zpicem.												1_								-			7/	_		
226	Building Information Packs																																		
227	Services Survey				e kan		}							,																					

			Jane	lary			Fe	ebru	uary		Ш,		Mar	ch_		Ļ		1r	4	_		Ma	, -				June	40 1	~	<u> </u>	_	Jul
ID	Name	1	8 ′	15	22	29	5	12	2 1	9	26	5	12	19	26	2	9	1	6 23	3 30	D 7	1 1	4 2	1 2	8	4	11	18 3	25	2	9	4
1	Remediation of H Area	I																														
2	Remediate & Tidy ancient monument																															
3	Construct Road, Install Wheel Wash																															
4	Waste Removal Phase 2																															
5	EFDC Consultation for Demolition																															
6	Mobilise for Demolition of H10, H71 & H8																															
7	Demolition of H10, H71 & H8													`																		
8	H8 Mound to T Area																															
9	Removal of Redundant Services, bldg bases etc																															
10	Ditching to Millhead Stream inc NRA Approval																															
11	Clearance of canals north from Hoppits Pool - Phase 1																															
12	Clearance of canals north from Hoppits Pool - Phase 2																															
13	Clearance of canals north from Hoppits Pool - Phase 3																															
14	Soil Strip, Area H																		, 1													
15	Re-establish Hoppit Road																															
16	Cut back water main to North of H8 or leave exposed																															
17	Remove H16 Slab																															
18	Interim Analysis																															
19	Confirmatory Analysis																															
20	Report																															
21	Erect temporary fences and gate																															
22	Establish Boreholes	ı																														
23	Organic trace																															
24	Design																															
25	Install																															
26	Monitor	1																														

			Ja	aııuar	γ		F	ebr	uary			ſ	Marc	h			Α	p.	/	\prod	N	May	May	May	May	May Jun	May June	May June	May June	May June	May June Ju	May June July	May June July	May June July
)	Name	1	8	15	22	2 29	5	1	2 1	9 2	26	5	12	19	26	2	9	16	23	30	7	7 14	7 14 21	7 14 21 28	7 14 21 28 4	7 14 21 28 4 11	7 14 21 28 4 11 18	7 14 21 28 4 11 18 25	7 14 21 28 4 11 18 25 2	7 14 21 28 4 11 18 25 2	7 14 21 28 4 11 18 25 2 9	7 14 21 28 4 11 18 25 2 9 16	7 14 21 28 4 11 18 25 2 9 16 23	7 14 21 28 4 11 18 25 2 9 16 23 30
	Remediation of North P area																																	
28	Maintenance of Bailey Bridge & footway	-																																
29	Maintenance/replacement of footbridge																																	
30	Removal of redundant services																																	
31	Vacation of A221																																	
32	Exterior renovation to A210/A214																																	
33	Excavate remaining canals													`																				
34	Sample north bank of canal (north)																																	
35	Infill canal																																	
36	Sheet pile Millhead/canal junction																																	
37	Excavate																																	
38	Backfill																																	
39	Obtain NRA approval for dredging																																	
40	Dredge																																	
41	Tree Removal																																	
42	Surface Strip																																	
43	Confirmatory Sample & Analysis																																	
44	Report																																	
45	Installation of Boreholes	-																											***		1	1		
46	Design																																	
47	Construct																																	
48	Monitor																																	
49	Confirmatory Sampling (under fuel tanks)																																	
50	Store recovered materials in A210																																	
51	Store recovered Barge																																	
52	Traffic Access/services																																	
53	Reinstate carpark																																	

			Ja	uar	v		Fe	ebrua	arv		 Marc	h			Ap	2			Vlay				Jun	е			Ju	1	ılv
ID	Name	1				29			19	26			26	2			23	30		21	28	4			25	2	9	1	61
54	Remediation of T area (inc. lagoons & ponds)																												
55	Surface excavations/classify arisings														,														
56	Classify washpond arisings																												
57	Decontaminate pipework																												
58	Gunpowder stove clearance																												
59	Confirmatory testing																												
60	Terram sheeting & H8 mtl placement											,																	
61	Excavation of filled canals																												
62	Confirmatory sampling & analysis																												
63	Report																												
64	Refill with H8 mound from stockpile																												
65	Top Soil, re-seed/re-plant to EN instructions																												
66	Road reinstatement																												
67	Acid Factory remediation	1																											

D	Name
	Remediation of M Area
69	Removal of cordite/asbestos arisings
70	Tender
71	Removal
72	Excavation of canals/reinstatement of road
73	Gasworks Remediation
74	Excavation
75	Sampling & analysis
76	Remediation
77	Surface confirmatory sampling & analysis
78	Report
79	Remediation of incorporator railways
80	Remediation
81	Sampling & analysis
82	Report
83	Removal of redundant services
84	Decontamination of drains
85	L157
86	L153
87	L148
88	L145
89	L149
90	Associated buildings
91	Removal of external slabs
92	Demolition of buildings
93	Ditching of waterways
94	Gritblasting/ painting of steelwork
95	L157
	1

			ال	ary	/		Fe	ebrua	ary			Marc	ch			A۴	. 1				May				Jun	ne		<u></u>		July
ID	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	3 25	2	9	9 1
96	L153																													
7	. L148															,														
98	L149																													
99	Wall and Floor removal/paint stripping																													
00	L153																													
)1	L148																													
2	L145																													
B	L149																													
)4	Roofing																													
5	L145																													
06	L157									1																				
07	L145 (bays)																													
08	Boreholes	ı																												
09	Design																													
10	Construct																													
11	Monitor																													
12	Confirmatory analysis in buildings																													
13	Sampling & Analysis						1																							
4	Report																													
5	Clean out of non-scheduled, non-listed buildings																													
3	Clean out of listed buildings														1															

			JL	⊿ary	/		F	ebru	uary				Mar	ch				Ar					May				J	June					luly		
ID	Name	1	8	15	22	29	5	1:	2 1	9	26	5	12	19	26	2	9	9	16	23	30	7	14	21	28	3 4	4 1	11	18	25	2	9	1	, Z	3
117	Remediation of L Area	I																																	
118	Excavation & backfill of canals																																		
119	Confirmatory Sampling & Analysis																																		
120	Report																																		
121	Grassland Management																																		
122	Demolition of buildings																																		
123	Boreholes																																		
124	Design																																		
125	Construct																																		
126	Monitor																																		
127	Work to selected buildings																																		
128	Rationalise Services																																		
129	Remove Redundant Services																																		

			—	anual	ry		Fe	bruary	,		Ma	rch			F	(\cdot)			M	ay			June		Ţ	,	Jul		
ID	Name	1	8	3 15	22	29	5	12	19 2	6 5	5 12	2 1	9 26	2	9	16	23	30	7 1	4 2	1 28	4	11	18 2	5 2	9	101	23 3	30 6
130	Remediation of S Area											Т																	
131	Excavate Newtons Pool Canals																												
132	Exploratory excavation trenches																												
133	EN Approval																												
134	Barge removal																												
135	Excavation of Canals- North of M area																												
136	Tree Clearance			*									`																
137	Excavation of Canals- North of T area					•																							
138	Tree Clearance																												
139	Sampling & Analysis																												
140	Report																												
141	Removal of Residual Tips																												
142	Edmondsey Sluice																												
143	Cattlegate bridge															,													
144	Establish monitoring boreholes																												
145	Design										*																		
146	Construct																												
147	Monitor																												•
148	Rehabilitation of Areas to EN & EH approval																												
149	Newtons Pool																												
150	Press House																												
151	Barrel Graveyard																												
152	Nitration Lagoons																												
153	General																												
154	Confirmatory Sampling, analysis & reporting																												
155	Newtons Pool																												
156	Press House																												
157	Edmondsey Sluice																												
																												•	-

				Jary	/	T	Fe	brua	ry			Mar	ch			A				I	Vlay				Jun				July				
ID	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	10	23	30	7	14	21	28	4	11	18	25	2	9 1	2	23 3	30	6
158	Barrel Graveyard																																
159	Nitration Lagoons																																
160	General																																
161	Removal of Redundant Services																																
162	Scrutiny of surfaces - Heronry																																
163	Scutiny of surfaces - Remainder																	_															
164	Clean out Scheduled Monument buildings	_		_			_	-		1							-	1]							1							

T	<u> </u>		_ 	uary		T	Fe	ebruar	у		Ma	arch		T		Ā				May				June				Jul	1		
	Name	1	8	15	22	29	5	12	19	26	5 1	2 19	9 26	2	9	10	6 23	3 30	7	14	21	28	4	11 1	8 2	5 2	9	10	23	30	6
165	Remediation of N Area																														
166	Site Strip																														
167	Establish Waste Handling																														
168	Temporary Road																														
169	Fill in Pits															0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															
170	Maintenance to Cattlegate bridge																														
171	Improve Entrance from crooked mile											,																			
172	Demolish unwanted buildings																														
173	Rationalise Services																														
174	Clean up after Waste Operations]																
175	Establish monitoring boreholes			!																											
176	Winning of clay for general site works																														
177	H Area																														1
178	Lining Canals																														
179	Burning Ground												_																		
180	Confirmatory sampling, analysis & reporting																														
181	Fencing]																	
182	Removal of Cattlegate Bridge																														
183	Installation of foot bridge																														
184	Rehabilitation																														-
185	Handover to LVRPA																	\													
186	Scrutiny of surfaces					Г				ן כ																					
																								r							
										Page	9															ù.					

,

88 R 89 S 90 S	e ediation of Burning Ground Remove Entrance Road Services rationalisation Site Strip to Gravel/Undisturbed Strata	Sanuar 8 15	22 2	9 5	bruary 12 19	26	Marc 5 12	6 2	9	16 23	30	7 1	4 21	28	ine 1 18	25	2	Jul 9 1	, 23	30
87 Remed 88 R 89 S 90 S	ediation of Burning Ground Remove Entrance Road Services rationalisation									7										
89 S	Services rationalisation																			
90 S																				
	Site Strip to Gravel/Undisturbed Strata																			
91 T		 																		
- 1	Transport Arisings to N Area																			
92 S	Sweep Area with Metal Detector																			
93 R	Re-establish clay membrane & top soil																			
94 C	Carry out EH/EN remediation proposals		Г					7												
95 C	Confirmatory analysis of soil samples		Г							\neg										
96 A	Asphalt treatment																			

			Jail	uary		Fel	bruary		Ma	arch		A,			Ma	y		June			Ju'		
	Name	1	8	15 2	2 29	5	12 19	26	5 1:	2 19	26 2	9	16 2	3 30	7 14	1 21	28 4	11 1	8 25	2	9 1-	23	30 6
197	Maintenance of Bridges				T.																		
198	SMC/Trust Approval																						
199	Design/Tender																						
200	Construction]_]											
201	Remediation of River Banks					+																	
202	Sheet Piling & Excavations East Bank of Horsemill Stre																						
203	Operations West Bank Horsemill Stream	1					1																
204	Ditching of On-Site Rivers & Canals																						
205	Removal of Canal Material at Intersection of Waterways	1-					l l																
206	NRA/EN Proposals to Raise Site Water Levels												7										
207	Reinstatement of Banks													4									
208	Excavate canal batters																						
209	Excavate pond batters																						
210	Sample																						
211	Apply Terram and backfill																						
212	Report																						
213	Completion of T Area Works																						
214	Remediation under Steam Pipes				\Rightarrow																		
215	Survey & Peg-Out Routes																			1			
216	Site Strip/disposal outside Heronry																						
217	Site Strip/disposal inside Heronry																						
	Sample Analysis	1																					
218	Oditiple Allalysis																						
218 219	Surface Treatment inside Heronry																						

-

			Ju	uary	у		F	ebrua	iry			Mar					A,					May				Jun					lul		
ID	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	2 9	9	16	23	30	7	14	21	28	4	11	18	25	2	9	T ₁ _	23	30
221	Buildings & Mounds										7																						
222	Mounds - Sample & Analyse																																
223	Scheduled Area Buildings																																
224	Other Buildings																																
225	Tree Clearance from Mounds & Buildings		1	_	1	<u> </u>			1]																						
226	Building Information Packs																																
227	Services Survey												,																				

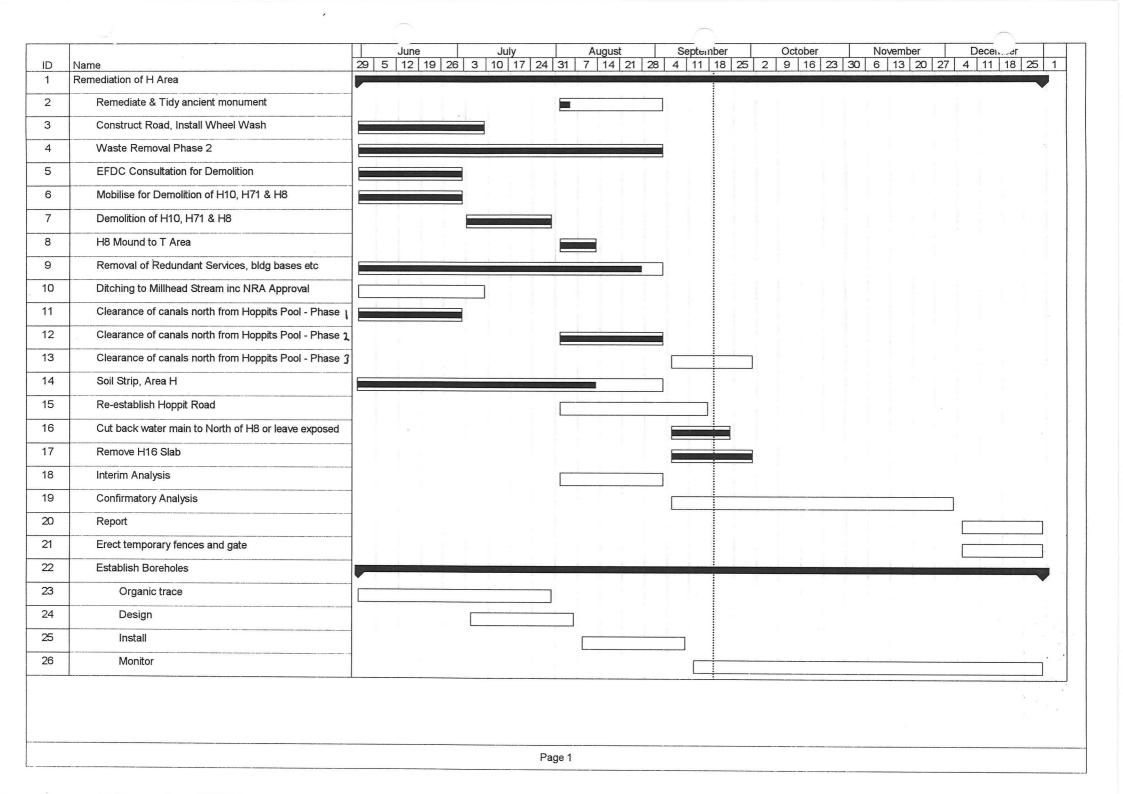
			19	994											995					- 11		9	
ID	Name	May	Jun	Jul	Aug S	Sep	Oct Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	M
1	Remediation of H Area	1																					
27	Remediation of North P area									-													
54	Remediation of T area (inc. lagoons & ponds)	,																					
68	Remediation of M Area	١ ا						-															
117	Remediation of L Area				•																		
130	Remediation of S Area	- 1																					
165	Remediation of N Area																	*					
187	Remediation of Burning Ground								4.7.31				J										
197	Maintenance of Bridges	- ,																					
201	Remediation of River Banks								N. Company				I										
207	Reinstatement of Banks																						
214	Remediation under Steam Pipes													-	J								
221	Buildings & Mounds		<u></u>				_																

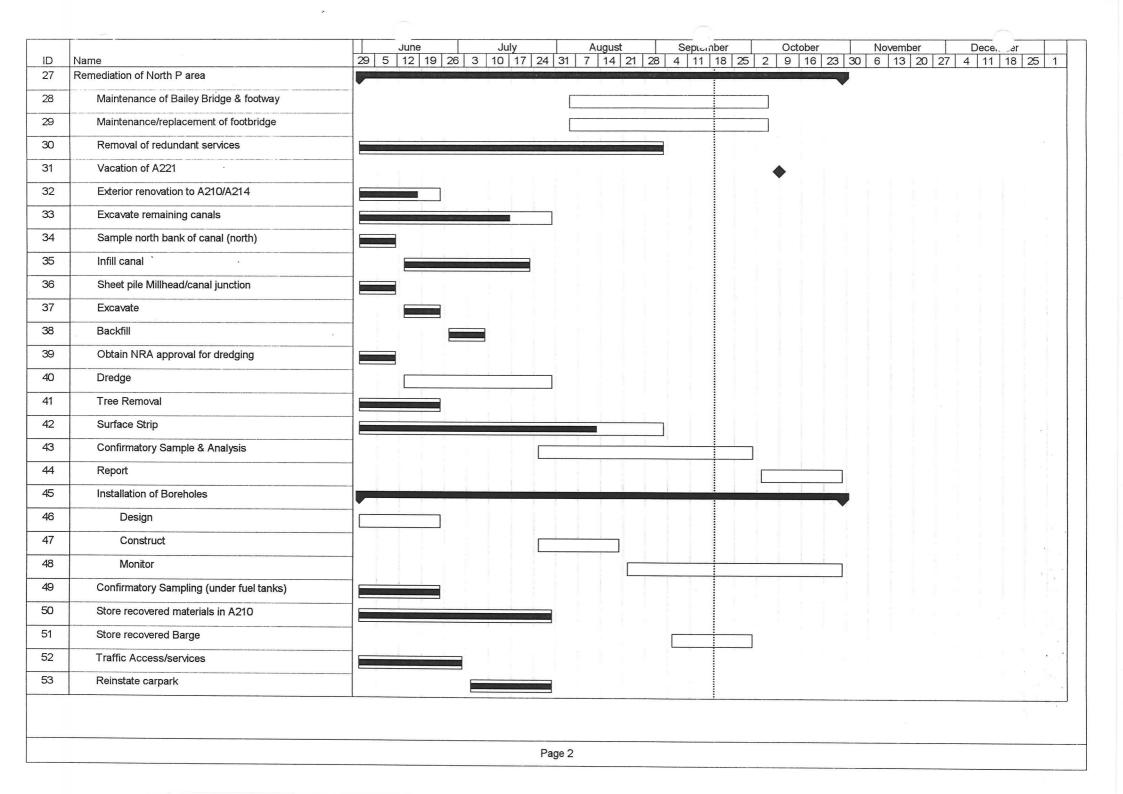
FORMER RARDE SITE WALTHAM ABBEY NORTH REMEDIATION PROJECT

APPENDIX 1

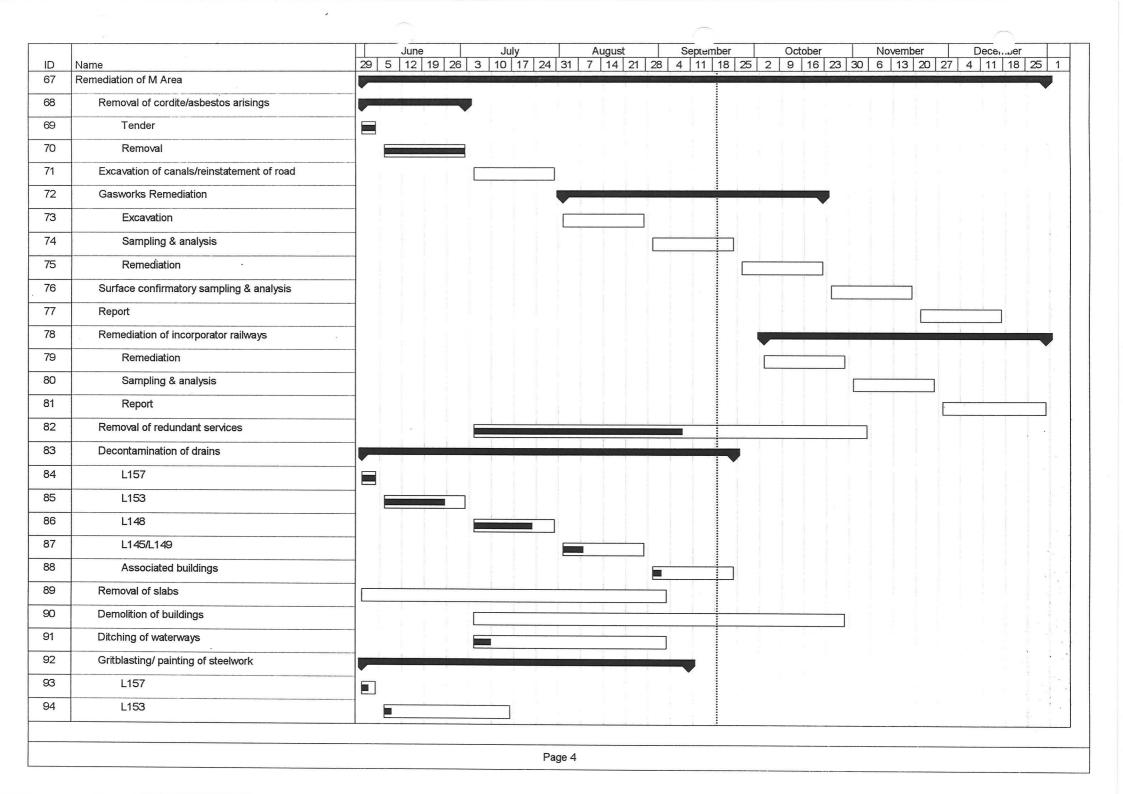
PROJECT PLAN - ISSUE 4 SEPTEMBER 1994

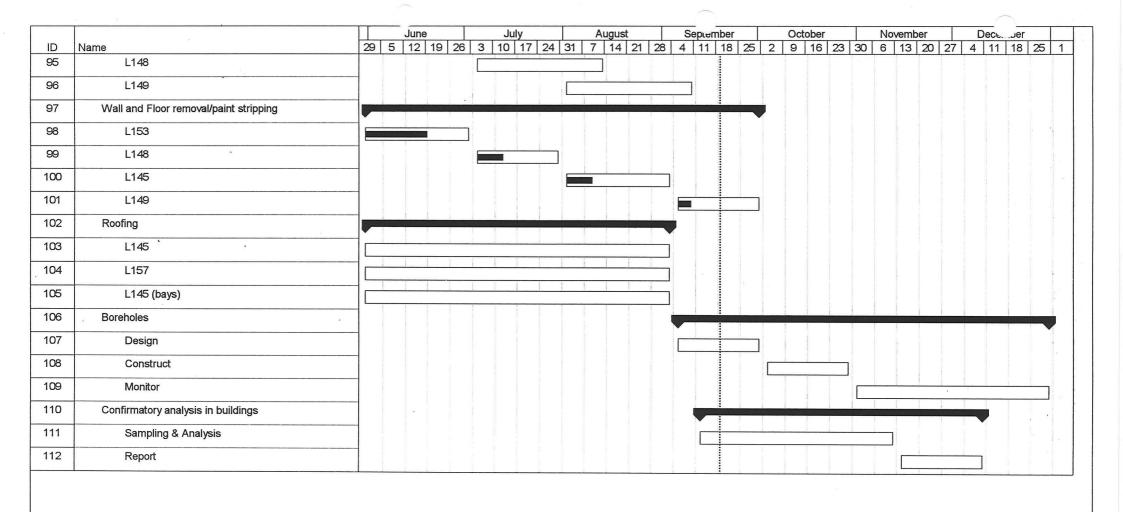
ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP



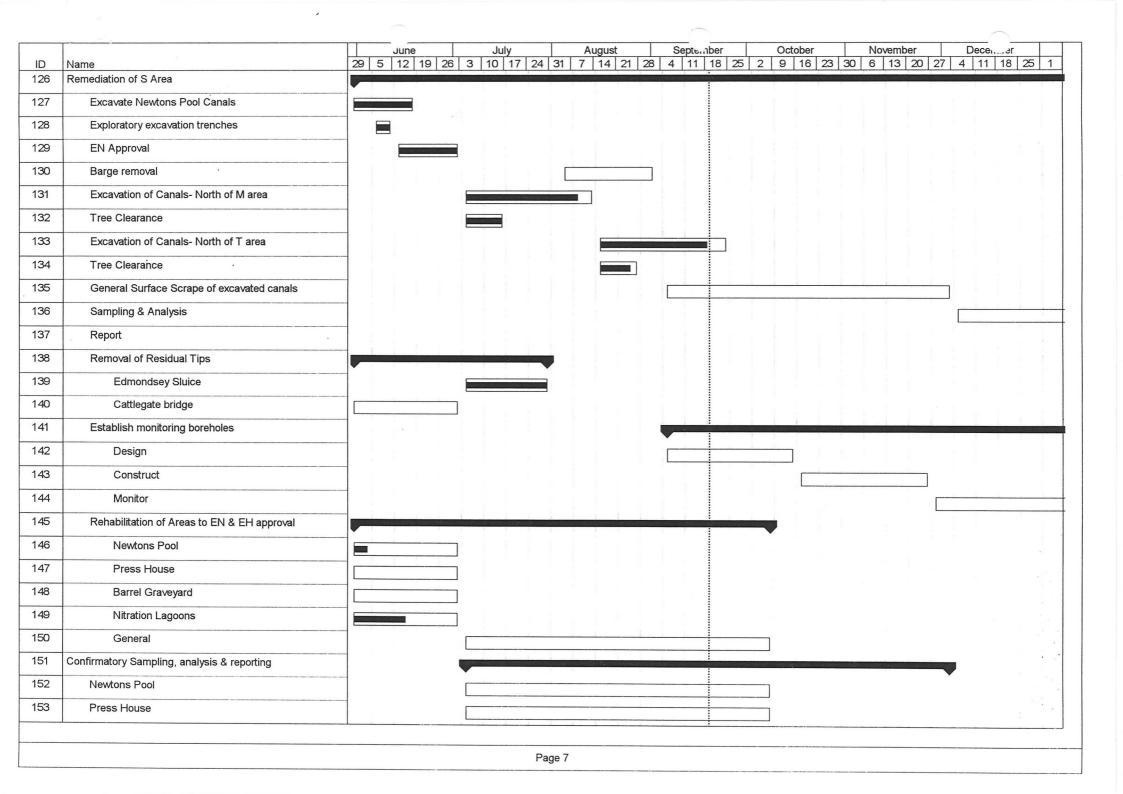


	v			June				July			Α	ugust			Sep	temb			Oct	ober			Nov	vembe	er		Dec	embe	r	
ID	Name	29	5	12	19	26	3	10 1	7 24	4 31	7	14	21 2	28			25	2	9	16	23	30	6	13	20	27	4 1	1 18	2	
54	Remediation of T area (inc. lagoons & ponds)		, leik, .		Gell II		i yms eu	A Francisco		O Dist	U _{7-E} its	C M MOG		7																-
55	Surface excavations/classify arisings			10 5 0																										
56	Classify washpond arisings		e green	V(- 1/2-																										
57	Decontaminate pipework		777																											
58	Gunpowder stove clearance		y Lee																											
59	Confirmatory testing																													
60	Terram sheeting & H8 mtl placement							JEVI D																						
61	Excavation of filled canals		e de la companya del companya de la companya del companya de la co																											
62	Confirmatory sampling & analysis																													
63	Report									С																				
64	Refill with H8 mound from stockpile																													
65	Top Soil, re-seed/re-plant to EN instructions																													
66	Road reinstatement			1																										





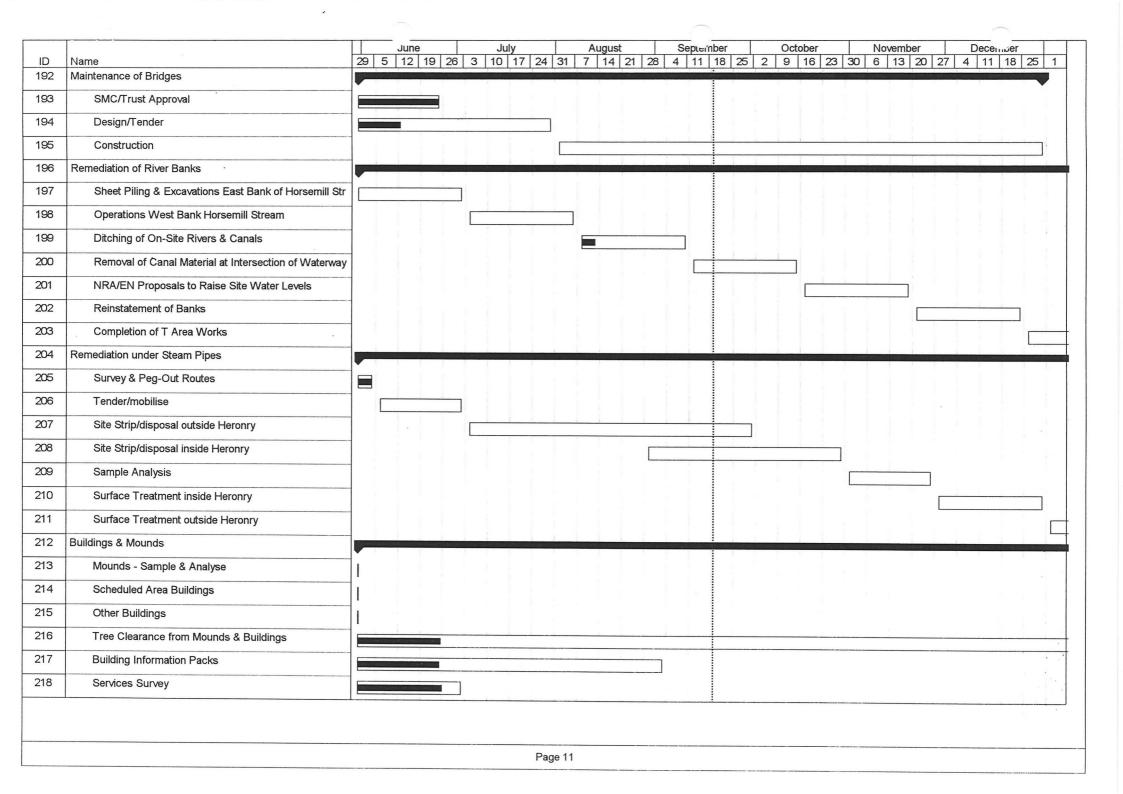
			June	Э		July		Augus	t	Septe	:ber		October		Novemb	per	Dece	٩.
ID	Name	29	5 12	19 20	3 1	0 17 2	24 31	7 14	21 28	4 11	1 18 25	2	9 16	23 30	6 13	20 27	4 11	
113	Remediation of L Area		Service of the		A 50 W 198 S			(F) ET SAN STOP				-0.59	19 19 M.	\$75590 YOU	5) es -2/es.	CONTRACTOR OF THE PARTY OF THE		M
14	Excavation & backfill of canals																	
15	Confirmatory Sampling & Analysis																	
116	Report																× [
117	Grassland Management									150.50								
18	Demolition of buildings	and a second supplier of decision in the second supplier																
19	Boreholes															inge ja v		
20	Design																	
21	Construct																	
122	Monitor																	
123	Work to selected buildings																	
24	Rationalise Services																	
125	Remove Redundant Services																	



				June				Ju	lly			Α	ugust			Se	pterr	ıber			Oct	ober			No	vemb	per		Dec	ember		
ID	Name	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20 2	27 4	4 1	1 18	25	1
154	Edmondsey Sluice																															
155	Barrel Graveyard																				l.											
156	Nitration Lagoons																															
157	General																															
158	Removal of Redundant Services	1																														

915			June		July		August 7 14 21	Septer	nber	Oct	ober	Nov	ember		Decemb		1
ID 59	Name Remediation of N Area	29 5	12 19	9 26	3 10 17	24 31	7 14 21	28 4 11	18 25	2 9	16 23 3	30 6	13 20	27 4	11 1	8 25	1
60	Site Strip					=											
61	Establish Waste Handling															-	
162	Temporary Road															ì	
163	Fill in Pits			3													
164	Maintenance to Cattlegate bridge																
165	Improve Entrance from crooked mile]													
166	Demolish unwanted buildings																
167	Rationalise Services]													
168	Clean up after Waste Operations																Г
169	Establish monitoring boreholes																
170	Winning of clay for general site works							4.0			0-00000000		and who place to the	DUM TON		101101116	10-11
171	H Area																
172	Lining Canals											\neg					
173	Burning Ground													×			
174	Confirmatory sampling, analysis & reporting																. г
175	Fencing																
176	Removal of Cattlegate Bridge																
177	Installation of foot bridge																
178	Rehabilitation												L				
179																	7

				Jur				July			Au	gust			epter			0	ctober	r		Nove	ember			Decen	nuer
ID	Name	29	5	12	19	26	3	10 1	7 24	31	7	14 2	1 28	4	11	18	25 2	2 9	16	23	30	6	13 2	0 27	7 4	11	18
180	Remediation of Burning Ground		S A HE		1974		19,019	, o pome u					SELECT OF STREET				This Y	415.00.00	17-9-0	100	0 100	200 (2)		5097 VE. 30	e de la composition della composition della comp	Spiceria	n 1958/5
181	Canals - surface scrape & batter sides																										
182	Establish temporary road - not Reqd																										
183	Remove Entrance Road								-																		
184	Services rationalisation																										
185	Site Strip to Gravel/Undisturbed Strata																										
186	Transport Arisings to N Area																							1			
187	Sweep Area with Metal Detector																							X			
188	Re-establish clay membrane & top soil																										
189	Carry out EH/EN remediation proposals																										
190	Confirmatory analysis of soil samples																										
191	Asphalt treatment															\bot	į				1						



			Jar	nuary			Feb	ruary			M	arch		_	A	pril			_	Ma	May	May	May		May June	
D_	Name	1	8	15 2	22 2	29	5	12 1	9 2	26 5	5 1	12 1	9 26	2	9	16	23	30	7	1.	14 21	14 21 28	14 21 28 4	14 21 28 4 11	14 21 28 4 11 18	14 21 28 4 11 18 25
1	Remediation of H Area	ı																								
2	Remediate & Tidy ancient monument																									
3	Construct Road, Install Wheel Wash																									
4	Waste Removal Phase 2																									
5	EFDC Consultation for Demolition																									
6	Mobilise for Demolition of H10, H71 & H8																									
7	Demolition of H10, H71 & H8																									
8	H8 Mound to T Area																									
9	Removal of Redundant Services, bldg bases etc																									
10	Ditching to Millhead Stream inc NRA Approval	1																								
11	Clearance of canals north from Hoppits Pool - Phase																									
12	. Clearance of canals north from Hoppits Pool - Phase																									
13	Clearance of canals north from Hoppits Pool - Phase																									
14	Soil Strip, Area H																									
15	Re-establish Hoppit Road																									
16	Cut back water main to North of H8 or leave exposed																									
17	Remove H16 Slab																									
18	Interim Analysis																									
19	Confirmatory Analysis																									
20	Report																									
21	Erect temporary fences and gate																									
22	Establish Boreholes	ı																								
23	Organic trace																									
24	Design																									
25	Install	1																								
26	Monitor	1																								

	· ·		Janu	ary			Feb	ruary			Marci	h	4	AI	pril			_	ivia	May	iviay	May	May Jun	May June	May June
7	Name Remediation of North P area	1	8 1	15	22	29 5	5 1	12 19	9 26	5 5	12	19 2	6 2	9	16	23 3	30		7 14	7 14 21	7 14 21 28	May	7 14 21 28 4 11	7 14 21 28 4 11 18	7 14 21 28 4 11 18 25
7																									
28	Maintenance of Bailey Bridge & footway																								
29	Maintenance/replacement of footbridge					ed .																			
30	Removal of redundant services																								
31	Vacation of A221																								
32	Exterior renovation to A210/A214																								
33	Excavate remaining canals																								
34	Sample north bank of canal (north)																								
35	Infill canal `																								
36	Sheet pile Millhead/canal junction																								
37	Excavate																								
38	Backfill																								
39	Obtain NRA approval for dredging																								
40	Dredge																								
41	Tree Removal																								
42	Surface Strip																								
43	Confirmatory Sample & Analysis																								
44	Report																								
45	Installation of Boreholes																								
46	Design																								
47	Construct	And Article and Australia																							
48	Monitor																								
49	Confirmatory Sampling (under fuel tanks)																								
50	Store recovered materials in A210																								
51	Store recovered Barge																								
52	Traffic Access/services																								
53	Reinstate carpark																								

			Ja	anuar	у		Fe	ebrua	ary			Mar	ch			Ap					May				Jun	ie				J	July	
ID	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	3	25	25 2	25 2 9	25 2 9 16	25 2 9 16 23
54	Remediation of T area (inc. lagoons & ponds)																															
55	Surface excavations/classify arisings																															
56	Classify washpond arisings																															
57	Decontaminate pipework																															
58	Gunpowder stove clearance																															
59	Confirmatory testing																															
60	Terram sheeting & H8 mtl placement																															
61	Excavation of filled canals																															
62	Confirmatory sampling & analysis																															
63	Report																															
64	Refill with H8 mound from stockpile																															
65	Top Soil, re-seed/re-plant to EN instructions																															
66	Road reinstatement																															

			Jan	uary		١.,	Fel	brua	ry			Marc	n ,	بلب	-	Ap	111		L		May			1	Jun	T	7				July
ID	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18		25	25 2	25 2 9	25 2 9 16 2
67	Remediation of M Area	1																													
38	Removal of cordite/asbestos arisings																														
39	Tender																														
70	Removal																														
71	Excavation of canals/reinstatement of road																														
72	Gasworks Remediation																														
73	Excavation																														
74	Sampling & analysis																														
75	Remediation																														
76	Surface confirmatory sampling & analysis																														
77	Report																														
78	Remediation of incorporator railways	.]																													
79	Remediation																														
30	Sampling & analysis																														
31	Report																														
32	Removal of redundant services			*																											
33	Decontamination of drains																														
34	L157																														
35	L153																														
36	L148																														
37	L145/L149																														
38	Associated buildings																														
39	Removal of slabs																														
90	Demolition of buildings																														
91	Ditching of waterways																														
92	Gritblasting/ painting of steelwork																														
93	L157																														
94	L153																														

			Jar	uary	/		F	ebi	ruary	/			Ma	rch	9 2			Ap	rii	23	I		Ma	ay				June	3	25		,	July	-			
ID	Name	1	Jar 8	15	22	29	5	1	12	19	26	5	12	2 1	9 2	6 2	2	9	16	23	30	7	1	4 2	21 :	28	4	11	18	25	2	9	16	23	30) 6	
95	L148																																				
96	L149																																				
97	Wall and Floor removal/paint stripping																																				
98	L153																																				
99	L148																																				
100	L145																																				
101	L149																																				
102	Roofing																																			1	
103	L145 `																																				
104	L157																																			•	
105	L145 (bays)																																				
106	Boreholes	I																																			
107	Design																																				
108	Construct																																				
109	Monitor																																				
110	Confirmatory analysis in buildings			e.																																	
111	Sampling & Analysis																																				
112	Report																																				

			Jai	nuary	,		Fe	brua	ary			Ma	rch			Α	prıı				Î	Иау	Vlay	May	Vlay	Vlay	May Jun	May June	May June	May June	May June Ju	May June July	May June July
ID	Name	1	8	15	22	29	5	12	19	26	5	12	2 19	26	2	9	16	23	30	7	14		21	21 28	21 28 4	21 28 4	21 28 4 11	21 28 4 11 18	21 28 4 11 18 25	21 28 4 11 18 25 2	21 28 4 11 18 25 2 9	21 28 4 11 18 25 2 9 16	21 28 4 11 18 25 2 9 16 23
113	Remediation of L Area	J																															
114	Excavation & backfill of canals																																
115	Confirmatory Sampling & Analysis																																
116	Report																																
117	Grassland Management																																
118	Demolition of buildings																																
119	Boreholes																																
120	Design																																
121	Construct ·																																
122	Monitor																																
123	Work to selected buildings																																
124	Rationalise Services																																
125	Remove Redundant Services																																

			Janua	ry		Febr	ruary			March	1		/	April				1 1	Iviay	Iviay	I IVIAY						May June July
	Name	1	8 15	22	29	5 1	12 19	26	5	12	19 2	6 2	2 9	16	23	3	0	0 7	0 7 14 2	0 7 14 21 28	0 7 14 21 28 4	0 7 14 21 28 4 11	0 7 14 21 28 4 11 18	0 7 14 21 28 4 11 18 25	0 7 14 21 28 4 11 18 25 2	0 7 14 21 28 4 11 18 25 2 9	0 7 14 21 28 4 11 18 25 2 9 16
6	Remediation of S Area		Series Co.		s red blanc	nuer 3		V																			
27	Excavate Newtons Pool Canals																										
128	Exploratory excavation trenches																										
129	EN Approval																										
130	Barge removal																										
131	Excavation of Canals- North of M area																										
132	Tree Clearance																										
133	Excavation of Canals- North of T area																										
134	Tree Clearance																										
135	General Surface Scrape of excavated canals																										
136	Sampling & Analysis]																						
137	Report																										
138	Removal of Residual Tips																										
139	Edmondsey Sluice																										
140	Cattlegate bridge																										
141	Establish monitoring boreholes					West		•																			
142	Design																										
143	Construct																										
144	Monitor		_																								
145	Rehabilitation of Areas to EN & EH approval																										
146	Newtons Pool	1																									
147	Press House																										
148	Barrel Graveyard																										
149	Nitration Lagoons																										
150	General																										
151	Confirmatory Sampling, analysis & reporting																										
152	Newtons Pool																										
153	Press House																										

Page 7

			Ja	ınuar	у		F	ebrua	ary			Marc	h			Ap	١			N	Лау				June	9			Ju	ly			
ID	Name	1-	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30 6	;
154	Edmondsey Sluice												ALL STATES																				
155	Barrel Graveyard																																
156	Nitration Lagoons																																
157	General																																
158	Removal of Redundant Services																																

			Januar	ry		Febr	uary		N	/larch			Ар	tu			May	y			June			Jı	uly	
ID	Name	1	8 15	22	29	5 1	2 19	26	5	12 1	9 26	3 2	9	16	23 3	30 7	7 14	1 21	28	4	11 1	18 25	2	9	16	
159	Remediation of N Area		W .			37.54		100			-			45.5	-	-200										
160	Site Strip																									
161	Establish Waste Handling																									
162	Temporary Road																									
163	Fill in Pits																									
164	Maintenance to Cattlegate bridge																									
165	Improve Entrance from crooked mile																									
166	Demolish unwanted buildings																									
167	Rationalise Services																									
168	Clean up after Waste Operations]													
169	Establish monitoring boreholes		i_																							
170	. Winning of clay for general site works		50 8 00																							
171	H Area																									
172	Lining Canals																									
173	Burning Ground]														
174	Confirmatory sampling, analysis & reporting																									
175	Fencing																									
176	Removal of Cattlegate Bridge											Е														
177	Installation of foot bridge														[
178	Rehabilitation]										1								
179	Handover to LVRPA														٠											

			Janu	anuary			Febr	uary			Marc	h			Apr	TI I			N	/lay				Jur	ne			J	uly		
ID	Name	1	8 1	5 2	22 2	29 5	5 1:	2 19	26	5 5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30
180	Remediation of Burning Ground														(8/2)																
181	Canals - surface scrape & batter sides																														
182	Establish temporary road - not Reqd																														
183	Remove Entrance Road																														
184	Services rationalisation																														
185	Site Strip to Gravel/Undisturbed Strata																														
186	Transport Arisings to N Area																														
187	Sweep Area with Metal Detector																														
188	Re-establish clay membrane & top soil				[
189	Carry out EH/EN remediation proposals				[1																			
190	Confirmatory analysis of soil samples				[
191	Asphalt treatment																														

Manne	Name				Jani	uary			10	bruar	,	- 1	101	arch				Apri	•												uly		
Maintenance of Bridges Maintenance of Bridges Maintenance of Bridges Maintenance of Bridges Maintenance of Bridges Maintenance of Bridges Design/Tender Design/Tender Sheet Piling & Excavations East Bank of Horsemill Str Operations West Bank Horsemill Stream Ditching of On-Site Rivers & Canals Maintenance of Bridges Maintenance o	Markenance of Bridges	ID	Name	1	8	15	22	29	5	12	19	26	5 1	12	19 2	6	2	9 1	16 2	23 3	30	7 1	14 2	1 28	8 4	11	18	25	2			23	•
194 Design/Tender 195 Construction 196 Remediation of River Banks 197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Ste Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRACEN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal Inside Heronry 208 Site Strip/disposal Inside Heronry 209 Sample Analysis 210 Surface Treatment outside Heronry 211 Surface Treatment outside Heronry 212 Buildings Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	Design/Tender Construction Remediation of River Banks Parediation of River Banks Parediation of River Bank Horsemill Str Sheet Piling & Excavations East Bank of Horsemill Str Operations West Bank Horsemill Stream Piling Disching of On-Ste Rivers & Canalis Piling On-Ste Rivers & Canalis Removal of Canal Material at Intersection of Waterway NRACEN Proposals to Raise Ste Water Levels Reinstatement of Banks Completion of T Area Works Completion of T Area Works Survey & Peg-Out Routes Survey & Peg-Out Routes Survey & Peg-Out Routes Ste Strip/disposal inside Heronry Ste Strip/disposal inside Heronry Ste Strip/disposal inside Heronry Ste Strip/disposal inside Heronry Stample Analysis Mounds - Sample Analysis Mounds - Sample & Analyse Mounds - Sample & Analyse Tree Clearance from Mounds & Buildings Tree Clearance from Mounds & Buildings Tree Clearance from Mounds & Buildings Tree Clearance from Mounds & Buildings			ı																										-			
196 Construction 196 Remediation of River Banks 197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Stripfdisposal outside Heronry 208 Sate Stripfdisposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	196 Construction 196 Remediation of River Banks 197 Sheet Piling & Exexautions East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal outside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment unside Heronry 212 Buildings & Mounds 213 Other Buildings 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	193	SMC/Trust Approval																														
196 Remediation of River Banks 197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Ste Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds - Sample & Analyse 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	196 Remediation of River Banks 197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Ste Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment uside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	194	Design/Tender																														
197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRAVEN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Cut Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	197 Sheet Piling & Excavations East Bank of Horsemill Str 198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Ares Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment outside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds - Sample & Analyse 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	195	Construction																														
198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	198 Operations West Bank Horsemill Stream 199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Sample Analysis 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment inside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	196	Remediation of River Banks					J																									
199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Sample Analysis 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	199 Ditching of On-Site Rivers & Canals 200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment inside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	197	Sheet Piling & Excavations East Bank of Horsemill Str																														
200 Removal of Čanal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment outside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	200 Removal of Canal Material at Intersection of Waterway 201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	198	Operations West Bank Horsemill Stream																														
201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	201 NRA/EN Proposals to Raise Site Water Levels 202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	199	Ditching of On-Site Rivers & Canals																														
202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Satple Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	202 Reinstatement of Banks 203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	200	Removal of Canal Material at Intersection of Waterway																														
203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	203 Completion of T Area Works 204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	201	NRA/EN Proposals to Raise Site Water Levels																														
204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	204 Remediation under Steam Pipes 205 Survey & Peg-Out Routes 206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	202	Reinstatement of Banks																														
206 Survey & Peg-Out Routes 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	206 Survey & Peg-Out Routes 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	203	Completion of T Area Works			_																											
206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	206 Tender/mobilise 207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	204	Remediation under Steam Pipes							/hans			ı																				
207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	207 Site Strip/disposal outside Heronry 208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	205	Survey & Peg-Out Routes																														
Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	208 Site Strip/disposal inside Heronry 209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	206	Tender/mobilise																														
209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	209 Sample Analysis 210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	207	Site Strip/disposal outside Heronry																														
210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	210 Surface Treatment inside Heronry 211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	208	Site Strip/disposal inside Heronry																														
211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	211 Surface Treatment outside Heronry 212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	209	Sample Analysis																														
212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	212 Buildings & Mounds 213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	210	·																														
213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	213 Mounds - Sample & Analyse 214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs					_																											
214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	214 Scheduled Area Buildings 215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs													-	+																		
215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	215 Other Buildings 216 Tree Clearance from Mounds & Buildings 217 Building Information Packs																																
216 Tree Clearance from Mounds & Buildings 217 Building Information Packs	216 Tree Clearance from Mounds & Buildings 217 Building Information Packs			1																													
217 Building Information Packs	217 Building Information Packs																																
							1											_															
218 Services Survey	218 Services Survey			1																													
		218	Services Survey																														

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 15th SEPTEMBER 1994 AT 14.00 HOURS

Present: Mr Bob Watts :W.S.A. Copies: Mr.D.Stanners :M.O.D/DLS
Mr Graham Vincent :R.O. Mr.D.Coyle :M.O.D.P.E.
Mr Peter Mayell :R.O. Mr.A.Ford :ARCH.
Mr Peter Greggain :M.O.D./DLA Mr.D.Bone :CIVIX

<u>1.</u>	MATT	ERS ARISING - FROM MEETING OF 18th AUGUST 1994	ACTION
1.1	(1.1)	<u>Drain Sampling</u> Review draft 37/93.	W.S.A.
1.2	(1.2)	Explosives Testing A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC required. Part 1 ESG 4/93 received from R.O. Part 2 to be revised by R.O to include typical sampling arrangements and sampling positions as indicated by settlement of trenches.	R.O. W.S.A.
1.3	(1.4)	Photographic record Negatives indexed, photos being indexed by vacation student. Video tape with "date on" to be edited.	R.O.
1.4	(1.5)	Remediation in P Area complete - contracts exchanged. Issues yet to be resolved. Piling along Mill Head Stream bank started on programme.	CIVIX W.S.A. R.O.
1.5	(1.7)	Collection of <u>Tetryl Area</u> pipes from T Area progressing. Existing water mains need not be cut into short sections before heat treatment. When collection complete decontamination to proceed with Morris Contractors.	R.O.
1.6	(1.8)	Water wheel and Press House areas. Confirmatory investigation to await completion of road removal and associated works. Liaison committee is considering this area, including the Barrel Graveyard, for rehabilitation, planting etc., SMC required.	ARCH R.O. W.S.A.

1.7	(1.9)	L157 2nd stage strip out in progress. Work carried out in L157 extended to L145, L148, L149 and L153. Floor removal to be assessed using 3 tonne remote controlled chisel.	R.O. W.S.A
1.8	(1.11)	Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify. Non urgent.	R.O.
1.9	(1.12)	Tetryl Area. Procedure for pools adjacent to E2 agreed with Bob Stebbings and nearing completion. Gunpowder stove filling complete, external excavation in hand.	ARCH R.O. W.S.A
1.10	(1.13)	Partial preparation of <u>accurate drawings and pegging out of</u> <u>Asbestos clad steam main routes</u> based on existing drawings, on-si observations, R.C.H.M.E survey drawing and <u>Archaeologist input</u> undertaken by MKS. Drawings to be marked up with assumed routes, to be proved on site. WSA to collate results, instigate remediation and negotiate acceptable levels with EHO. Recent disturbance along a steam route revealed significant quantities of visible asbestos in the ground. Now urgent to achieve access during Heronry open period.	W.S.A MKS. ARCH R.O.
1.11	(1.14)	Comments received from <u>Fire Prevention Officer</u> . W.S.A to comment. Problem with door swings. Prices being sought for a replacement fire alarm system.	W.S.A
1.12	(1.15)	Preparation of artefact inventory. R.O draft report being continuously updated. R.O. to organise transport of artifacts. Barge to be transported to site, organised by archaeologist, but dependent on formation of the Trust.	R.O. ARCH
1.13	(1.16)	Asphalt melting plant work complete to date. R.O have prepared a list of remaining buildings with asphalt floors. WSA authorised removal work to proceed. R.O to inspect asphalt floors in building undergoing strip out. R.O are investigating commercial outlet for asphalt. Additional buildings to be identified from C & G report. SMC required.	gs W.S.A R.O.
1.14	(1.17)	Waste tip sampling for explosives analysis. Review again 29th September 1994. Proceeding satisfactorily, volume of samples for analysis has reduced.	R.O. W.S.A
1.15	(1.18)	R.O <u>engineer carrying out services survey</u> and checking CAD plot.	R.O.
1.16	(1.19)	Stockpiled waste material Waste classification complete. Contract for special waste disposal complete. Call off contract in place.	R.O.

			A
1.17	(1.20)	Safety Audit. Report received.	R.O.
1.18	(1.21)	Newtons Pool Preliminary canal clean out complete. Analysis of arisings does not reveal any contamination. Dispose of as uncontaminated material Clearance work to be incorporated into a larger area for clearance by end of October for hand over to RSC.	W.S.A. R.O.
1.19	(1.22)	Initial <u>Edmonsey Sluice waste</u> excavation complete. Further limited excavation required, sampling and backfilling. Windbreak fencing to follow.	R.O.
1.20	(1.24)	Copy <u>of Explosives License Application</u> received from R.O. Delayed at request of H.S.E Explosives Inspectorate - no progress.	R.O.
1.21	(1.25)	<u>Site vehicles</u> 1 No. flat bed available October. Requirement for transport now. Additional 110 Landrover required, R.O. to resource. R.O. will if possible change Landrovers 2 x 110 at existing rates.	R.O.
1.22	(1.26)	Explosives analysis data capture. Report by R.O with WSA for comment.	R.O.
1.23	(1.27)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A. R.O.
1.24	(1.28)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract.	R.O.
1.25	(1.29)	<u>Trenching to Northern Canals</u> - complete. Samples taken. Logs in hand, results of analysis awaited.	W.S.A. R.O.
1.26	(1.30)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Awaiting NRA decisions regarding bank excavation, reduction in Horse Mill Stream water level and export route for waste. Work may proceed this FY.	N.R.A. R.O. W.S.A.
1.27	(1.31)	Queens Mead Canals partially located and excavated, work suspended. River sludge being placed. Areas affected by gritblasting exhaust (lead content) to be stripped on completion of task.	R.O.
1.28	(1.32)	Water main and Sewage Pumping main to be rerouted and/or cut back and replaced with new polymer tube where exposed if damage by plant is a problem. H Area water main to be cut off,	

			. 8
		sewage pumping main to be reinstated. Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract. VO61.	R.O. W.S.A.
1.29 (1.	.33)	Bridge works to be organised by WSA. Decontamination programme implications. Tender return 22nd September 1994.	W.S.A.
1.30 (1	.34)	Carden and Godfrey have identified <u>building anomalies</u> between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated into the site records.	ARCH. W.S.A. MKS
1.31 (1	.35)	Initial <u>strip out of buildings 134 to 160</u> proceeding to programme. Further buildings to be reviewed by RW and AF for release to Morris Contracting.	R.O.
1.32 (1	(.36)	R.O proposal for further investigation into the stability of N.G. in timber on a shared cost basis approved. Will commence end of September. Analytical results for L149 timber samples outstanding.	R.O.
1.33 (1	.37)	WSA outlined the requirements for <u>piling canal/river intersections</u> to remove residual contaminated material. Approval to proceed with design received. Trial pits/probes required at intersections to be carried out by R.O.	W.S.A. R.O.
1.34 (1	.38)	Report by R.O listing buildings cleared of asbestos is in hand.	R.O.
1.35 (1	7.39)	R.O. reported angled excavator and long reach excavator hired to dredge Mill Head Stream and batter canals. Kokurek amphibious excavator being resourced. Tree clearance required to Middle Stream.	R.O.
1.36 (1	(.40)	Grass cutting to Queens Mead and N Area complete, except for area South of bomb craters and S16.	R.O.
1.37 (3	3.1)	WSA instructed R.O. to excavate river banks adjacent and integral with bridges in Bridge Refurbishment/Replacement works. Await arrival of amphibious excavator.	R.O.
1.38 (3	3.2)	R.O. to produce <u>draft inventory</u> of client owned items.	R.O.
1.39 (3	3.3)	R.O. are researching <u>air filtration plant</u> relating to gritblasting air discharge.	R.O.
1.40 (3	3.4)	<u>Demonstration of portable explosives analyser</u> took place on 14th September 1994. R.O. will trial this on 2 week free loan from manufacturer.	W.S.A.

1.41 (3.5) R.O. to respond to issue of the <u>extent of the building remediation</u> w.S.A and likely certification, methods and requirements. R.O.

2. PROGRESS AND PROGRAMME

2.1 Revised September programme attached at Appendix 1. Next revision at coming progress meeting. Existing 6 weeks delay held. Practical completion end of June 1994.

3. ANY OTHER BUSINESS

3.1 Agreed the resourcing of further R.O. site supervision.

4. DATE OF NEXT MEETING

4.1 14.00 Hours on Wednesday 19th October 1994.

R.E.WATTS. 5th October 1994

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE WEDNESDAY 18th AUGUST 1994 AT 14.00 HOURS

Present:	Mr Bob Watts	:W.S.A.	Copies:	Mr.D.Stanners	:M.O.D/DLS
	Mr Graham Vincent	:R.O.		Mr.D.Coyle	:M.O.D.P.E.
	Mr Peter Mayell	:R.O.		Mr.A.Ford	:ARCH.
	Mr Peter Greggain	:M.O.D./DL	A	Mr.D.Bone	:CIVIX

-			
<u>1.</u>	MATT	ERS ARISING - FROM MEETING OF 20th JULY 1994	ACTION
1.1	(1.1)	<u>Drain Sampling</u> Review draft 37/93.	W.S.A.
1.2	(1.2)	Explosives Testing A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC required. Part 1 ESG 4/93 received from R.O. Part 2 to be revised by R.O before issue.	R.O. W.S.A.
1.3	(1.3)	Building Index Condition Survey now available. Use for R.O. index limited to datapacks.	R.O.
1.4	(1.4)	Photographic record Negatives indexed, photos being indexed by vacation student. Index to CLI required. Video tape to be edited.	R.O.
1.5	(1.5)	Remediation in P Area complete - contracts exchanged. Issues yet to be resolved. Piling along Mill Head Stream bank to commence 12th September 1994.	CIVIX W.S.A. R.O.
1.6	(1.6)	Barrel Graveyard will be incorporated into Presshouse and steam mains remediation.	W.S.A.
1.7	(1.7)	Collection of <u>Tetryl Area</u> pipes from T Area progressing. Existing water mains need not be cut into short sections before heat treatment. When collection complete decontamination to proceed on basis of lump sum contract.	R.O.

1.8	(1.8)	Water wheel and Press House areas. Confirmatory investigation to await completion of road removal and associated works. Liaison committee is considering this area for rehabilitation, planting etc., SMC required.	ARCH R.O. W.S.A.
1.9	(1.9)	<u>L157 2nd stage strip out</u> in progress. Work carried out in L157 extended to L145, L148, L149 and L153. Floor removal to proceed on basis of established method, but assessment of alternative heavy duty hydraulic remote slab cracking equipment to be carried out by R.O.	W.S.A. R.O.
1.10	(1.10)	<u>"Asbestos in Buildings"</u> Review of procedures by W.S.A carried out 28th March 1994. Personnel air monitoring exercise complete. Draft WSA report received. Report issue imminent.	W.S.A.
1.11	(1.12)	Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify. Non urgent.	R.O.
1.12	(1.13)	<u>Tetryl Area.</u> Procedure for pools adjacent to E2 agreed with Bob Stebbings and nearing completion. Results of analysis of samples from the Gunpowder Store indicate the need for further excavation with Archaeologists overview, sampling and backfill.	ARCH. R.O. W.S.A.
1.13	(1.14)	Partial preparation of <u>accurate drawings and pegging out of</u> <u>Asbestos clad steam main routes</u> based on existing drawings, on-si observations, R.C.H.M.E survey drawing and Archaeologist input undertaken by MKS. Drawings to be marked up with assumed routes, to be proved on site. WSA to collate results, instigate remediation and negotiate acceptable levels with EHO. Recent disturbance along a steam route revealed significant quantities of visible asbestos in the ground.	ARCH. W.S.A. MKS. R.O.
1.14	(1.15)	Comments received from <u>Fire Prevention Officer.</u> W.S.A to comment. Problem with door swings. Prices being sought for a replacement fire alarm system.	W.S.A.
1.15	(1.16)	Preparation of artefact inventory. R.O draft report being continuously updated. R.O. to organise transport of artifacts. Barge to be transported to site, organised by archaeologist, but dependent on formation of the Trust.	R.O. ARCH.
1.16	(1.17)	Asphalt melting plant work complete to date. R.O have prepared a list of remaining buildings with asphalt floors. WSA authorised removal work to proceed. R.O to inspect asphalt floors in building undergoing strip out. R.O to investigate commercial outlet for asphalt.	gs R.O.
		-	

1.17 (1.18)	Waste tip sampling for explosives analysis. Present system reviewed Thursday 30th June 1994. Simplified arrangements promulgated. Review again 29th September 1994. Proceeding satisfactorily, volume of samples for analysis has reduced.	R.O. W.S.A.
1.18 (1.19)	R.O <u>engineer carrying out services survey</u> and checking CAD plot. Archaeologist has arranged copying of material in the PRO.	ARCH. R.O.
1.19 (1.20)	<u>Stockpiled waste material</u> Waste classification complete. Contract for special waste practically complete. Call off contract in place.	
1.20 (1.21)	Safety Audit. Report received, current report outstanding.	R.O.
1.21 (1.22)	Newtons Pool Preliminary canal clean out complete. Analysis of arisings does not reveal any contamination. Dispose of as uncontaminated material Clearance work to be incorporated into a larger area for clearance by end of October for hand over to RSC.	W.S.A. R.O.
1.22 (1.23)	Edmonsey Sluice waste excavation complete further topsoil for trees delivered. Bag up discrete, localised asbestos. Competitive prices required for additional windbreak fencing.	R.O.
1.23 (1.25)	<u>Clean/Dirty site arrangements.</u> Wheel wash off hire. Block laying complete. Level check to follow.	R.O.
1.24 (1.26)	Copy of Explosives License Application received from R.O. Delayed at request of H.S.E Explosives Inspectorate. H10, H8 and H71 demolition proceeding.	R.O.
1.25 (1.27)	<u>Site vehicles</u> 1 No. flat bed available October. Requirement for transport now. R.O. will change Landrovers 2x110 at existing rates.	R.O.
1.26 (1.28)	Explosives analysis data capture. Output complete, report by R.O in hand.	R.O.
1.27 (1.29)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary, which will be done with remediation of L146.	W.S.A. R.O.
1.28 (1.31)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract.	R.O.
1.29 (1.32)	Trenching to Northern Canals - complete. Samples to be taken.	W.S.A. R.O.

1.30	(1.33)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Awaiting NRA decisions regarding bank excavation, reduction in Horse Mill Stream water level and export route for waste. Work may proceed this FY.	N.R.A. R.O. W.S.A.
1.31	(1.34)	Queens Mead Canals partially located and excavated, work suspended. Grass cut in hand, area can accommodate river sludge.	R.O.
1.32	(1.35)	Water main and Sewage Pumping main to be rerouted and/or cut back and replaced with new polymer tube where exposed if damage by plant is a problem. Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract. VO61.	R.O. W.S.A.
1.33	(1.36)	Bridge works to be organised by WSA. Decontamination programme implications. Tender return 22nd September 1994.	W.S.A.
1.34	(1.37)	Carden and Godfrey have identified anomalies between RCHME survey, MKS survey drawings and situation on the ground. These to be incorporated in the site records.	W.S.A. MKS
1.35	(3.1)	Initial strip out of buildings 134 to 160 proceeding to programme.	R.O.
1.36	(3.2)	R.O undertook to investigate the costs and submit a proposal for further investigation into the stability of N.G. in timber on a shared cost basis as R.O have an interest.	R.O.
1.37	(3.3)	WSA outlined the requirements for piling canal/river intersections to remove residual contaminated material. There would be a considerable input from R.O. The piling would be undertaken by Woods Warren. Revised estimates are in hand.	W.S.A. R.O.
1.38	(3.4)	Report by R.O listing buildings cleared of asbestos is in hand.	R.O.
1.39	(3.5)	R.O. reported investigations were in hand to resource plant to dredge Mill Head Stream and batter canals.	R.O.
1.40	(3.8)	Quotations for grass cutting to Queens Mead and N Area approved. Work proceeding.	R.O.

2. PROGRESS AND PROGRAMME

Revised August programme attached at Appendix 1. Next revision at coming progress meeting. Approximately 6 weeks delay. Practical completion end of June 1994.

3. ANY OTHER BUSINESS

3.1	WSA instructed R.O. to excavate river banks adjacent and integral with bridges in Bridge Refurbishment/Replacement	
	works.	R.O.
3.2	R.O. to produce draft inventory.	R.O.
3.3	R.O. are researching air filtration plant relating to gritblasting air discharge.	R.O.
3.4	WSA informed R.O. of portable explosives analyser commercially available. WSA to arrange a demonstration.	W.S.A
3.5	Discussion took place on the extent of the building remediation and likely certification, methods and requirements.	W.S.A R.O.
	TO A DESIGNATION OF THE PROPERTY OF THE PROPER	

4. DATE OF NEXT MEETING

4.1 14.00 Hours on Thursday 15th September 1994.

R.E.WATTS. 8th September 1994 FORMER RARDE SITE WALTHAM ABBEY NORTH REMEDIATION PROJECT

APPENDIX 1

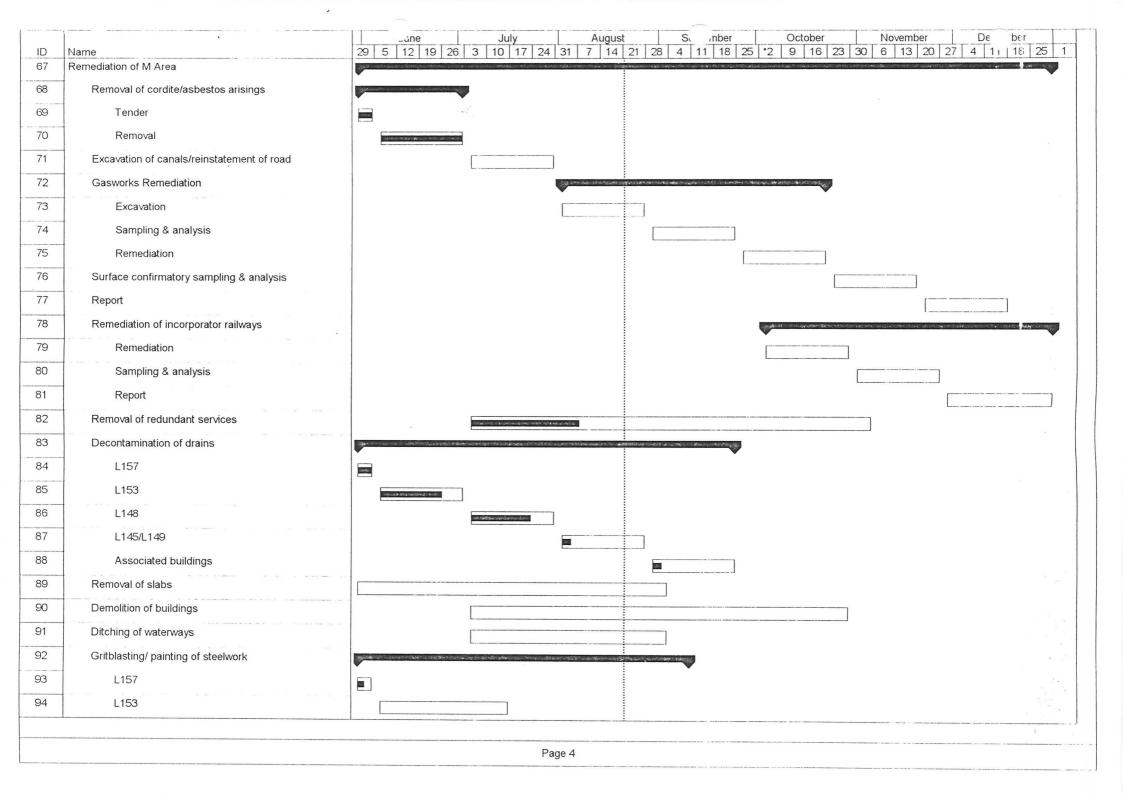
PROJECT PLAN - ISSUE 3 AUGUST 1994

ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP

)	Name	June July August St mber October November Dt lbt.
1	Remediation of H Area	The state of the s
2	Remediate & Tidy ancient monument	
	Construct Road, Install Wheel Wash	
	Waste Removal Phase 2	Shall the proceedings of the Section
	EFDC Consultation for Demolition	assumptioned intercepts in the production of the intercept of the contract of
i i	Mobilise for Demolition of H10, H71 & H8	contract the contract of the c
-	Demolition of H10, H71 & H8	THE PROPERTY.
	H8 Mound to T Area	
	Removal of Redundant Services, bldg bases etc	
)	Ditching to Millhead Stream inc NRA Approval	
	Clearance of canals north from Hoppits Pool - Phase	
)	Clearance of canals north from Hoppits Pool - Phase.	
3	Clearance of canals north from Hoppits Pool - Phase	
1	Soil Strip, Area H	
5	Re-establish Hoppit Road	
5	Cut back water main to North of H8 or leave exposed	
7	Remove H16 Slab	
3	Interim Analysis	
 9	Confirmatory Analysis	
)	Report	
1	Erect temporary fences and gate	
2	Establish Boreholes	TO THE STORY OF TH
3	Organic trace	
1	Design	
5	Install	
6	Monitor	

	Name	29	5 12	19 2	26 3	10 17	24 3	1 7 1	1 21 28	3 4	11 1	8 25	2 9	16	23 30	6	3 20	27 4	111	be: 18 25
7	Remediation of North P area	de la constante de la constant	and transfer i	COMPANY OF	A AV DAY - APER	annes reporte poste to	in hijide jetelê	TO LONG OF THE PARTY AND	propadkilis (40 m/40)	in the same of the	epin despite tipes	optimilitation in translati	eddishter altri	ntriangle	and the same					
	Maintenance of Bailey Bridge & footway																			
	Maintenance/replacement of footbridge																			
	Removal of redundant services	11494114000	or market throughton	Discascia nacioni ferio	tion along time	part of the state	and with the recover	over in participation												4
	Vacation of A221				•															
	Exterior renovation to A210/A214	APPEN S																		
	Excavate remaining canals	other and	e equit the cost	Lynning a season	i de et de de de estado de la	in Chicago														
	Sample north bank of canal (north)		Y44.81																	
	Infill canal		Stations.	ر د د د د د د د د د د د د د د د د د د د		de la completa														
	Sheet pile Millhead/canal junction	340p-3740p1	K,498-11																	
	Excavate		Make it is	er water to																
	Backfill				Marine and															
	Obtain NRA approval for dredging	n/suspending	last territ																	
-	Dredge					3														
	Tree Removal	(#)(1/eur)	AND WARRIES AND THE SERVICE	MAZA yyanis																
	Surface Strip	of sec.	NA ANGERS I CAN ASSA	and a state with	rate de la Michaela	Mar sun to so him way	rs firm w	ant-		7										
	Confirmatory Sample & Analysis					The Secretary of the Control of the	[
	Report	201													\neg					
	Installation of Boreholes		harter of the sa	State of the state	THE PERSON	and the second second	constant con a	etalist paratel yezhou.	(1) gapta (Alanker over	of a serie	ere ribitation	that contains with oil	14. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	with the block	100					
	Design														•					
	Construct								7											
	Monitor	*** X													_					
	Confirmatory Sampling (under fuel tanks)	TO SERVE A	marketic colorests ago	in the second market					L			-		-						
-	Store recovered materials in A210	- Miles - Marie	acontrol y to the second	office property	in the relative	والمراض والمعاود والمراض	C. P. Britania													
	Store recovered Barge									Γ										
	Traffic Access/services	III M TO MAKE	CONTRACTOR AND SOURCE	ON BUT THE PLANE TAKE	elton-							J								
	Reinstate carpark			-		er e e														

ID	Name	June July August S 3mber October November D 3ber 29 5 12 19 26 3 10 17 24 31 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 4 11 18 25 25 2 30 30 30 30 30 30 30
54	Remediation of T area (inc. lagoons & ponds)	The first of a close of a first and the action of the control of t
55	Surface excavations/classify arisings	Michael Control of the Control of th
56	Classify washpond arisings	
57	Decontaminate pipework	Mode Address and the Control of the
58	Gunpowder stove clearance	To all approximately contribute to the second
59	Confirmatory testing	
60	Poly sheeting & hoggin placement	
31	Excavation of filled canals	Associated the theretake verify continued
62	Confirmatory sampling & analysis	
63	Report	
64	Refill with H8 mound from stockpile	
65	Top Soil, re-seed/re-plant to EN instructions	
66	Road reinstatement	



ID	Name	June July August Sep. Jmber October November Dec. Der 29 5 12 19 26 3 10 17 24 31 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 4 11 18 25 1
95	L148	23 3 12 13 20 3 10 17 24 31 7 14 21 20 4 11 10 20 2 3 10 20 30 0 13 20 27 4 11 10 20 1
96	L149	
97	Wall and Floor removal/paint stripping	
98	L153	
99	L148 .	
100	L145	
101	L149	
102	Roofing	
103	L145 ·	
104	L157	
105	L145 (bays)	
106	Boreholes	
107	Design	
108	Construct	
109	Monitor	
110	Confirmatory analysis in buildings	The control of the co
111	Sampling & Analysis	
112	Report	

	2			Jun	е			Ju	ıly			Α	ugus	st		S	ڭ .	embe	r		0	ctobe	r		No	ovem	ber		[) t	nber	
ID	Name	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25
13	Remediation of L Area	-	dos delicios	han in to the	martine referen	site in the Pop	ri diserbe d	and the latest of the	about great a	one attended	distribution	Kerene Vije	et con to	teached a	In Mark to go	Unio participar	* X Y	spie prodict	Made orless	gal-voor-b	taki isting	Note to the	Service Service	otroje Bilian	125- prie lesi s	consiste to be	AN 4 WAY	to the second	ian mil	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	reduced Lines	S. W.
14	Excavation & backfill of canals										[
15	Confirmatory Sampling & Analysis						•]			
16	Report]
17	Grassland Management .]												
18	Demolition of buildings																															
19	Boreholes															-	10 V 27 K	HILL THINKS	San production	NEW YORK	replication in	O Neva	de la selec	7. n/hari jarā	s was not a	STR PAR	The Maria	99 AND		40 M (500)	1076	,
20	Design]												
21	Construct]								
22	Monitor																															
23	Work to selected buildings	1																														
24	Rationalise Services	1																														
 25	Remove Redundant Services										[-																		

ID	Name	29 5	5 12 19	9 26	3 10 17	24 31 7	14 21	28 4	11 18 25	5 2 9	16 23	30 6 13 20 27	7 4 11	18 25
126	Remediation of S Area	** Charleson	Conservation (September 1)	Wanter Professor &	Plat ACLIANTIAN PROFESION	erige with rest vice execution rises	N. Sin waterest den	terració in a sicial	entraga in a Consequence (Mariagricia) in	water to market out the	ya yazık erilikti eli tülkeyini.	Mile of Color and State of the Color of the	en ellen littadisettionis	
127	Excavate Newtons Pool Canals	MATERIAL ST	1005000000											
128	Exploratory excavation trenches		THE											
129	EN Approval		the designation	ar pulsarille										Υ,
130	Barge removal													
131	Excavation of Canals- North of M area				takan 1996 yang elangsi milang 19. elebera	edependa de co]							
32	Tree Clearance				PROBACTION IS									
133	Excavation of Canals- North of T area						TO STATE DESCRIPTION	Marin Control						
134	Tree Clearance													
135	General Surface Scrape of excavated canals	-												
136	Sampling & Analysis	-						-				The second secon		
137	Report												Lancas and a second sec	
38	Removal of Residual Tips	Section 1	COMMON MARKET COM	Michigan St. Vicence	ner grade et al laire de la red e	Contract of								
39	Edmondsey Sluice	0			Manda (See Section See									
40	Cattlegate bridge													
41	Establish monitoring boreholes		127					Kiles	deficie laste income complete de la complete	entra in electric esqu	e booket webselver	engelige die was de dieger is gewenn dies is wordte. Despirit wie despirit	adiat was one and other and	m Market Const
42	Design	= =						Г						
43	Construct	- 1							THE RESIDENCE OF THE PARTY OF T		[
44	Monitor										<u> </u>			
145	Rehabilitation of Areas to EN & EH approval	2 Million of the	an operand where	halder or other or	e en en en en en en en en en en en en en	outside that there which	scenis constanting	same representation	menage, or to an algae (channe)	CONTRACTOR TOLER				AND THE STORY SECURISION OF ADMINISTRATION
146	Newtons Pool													
147	Press House													
148	Barrel Graveyard													, a
149	Nitration Lagoons	wayer she	in solding wife \$											
150	General													
51	Confirmatory Sampling, analysis & reporting				Land the contractor, where they det	ntiferiorism properties for the wilder	大大 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg 1000 mg	on a fill aligner	in July Appendiction	with the William bearing	i de kasalang kan sangan	the man to more such as a superior wife out the factors as superior way		* * * * * * * * * * * * * * * * * * *
52	Newtons Pool							-					•	
153	Press House													
	1						<u>-</u>				-			- 5-0

	AND THE PROPERTY OF THE PROPER		,	June				J	uly				ugu				5		em	ber				_	tob	er			No	oven	nber			Dt	dr			
ID	Name	29	5		19	26	3	10	1		31	7	14	2	1	28	4	1	1	18	25	5	2	9	1	6 2	23	30	6	13	3 20	27	7 4	1	1 1	8	25	1
154	Edmondsey Sluice																																					
155	Barrel Graveyard																																					
156	Nitration Lagoons						8																															
157	General																																					
158	Removal of Redundant Services	1																																				

ID	Name	Sune July August Standard October November Dtandard
59	Remediation of N Area	where the contract of the cont
160	Site Strip	
161	Establish Waste Handling	
162	Temporary Road	
163	Fill in Pits	
164	Maintenance to Cattlegate bridge	
165	Improve Entrance from crooked mile	
166	Demolish unwanted buildings	
167	Rationalise Services	
168	Clean up after Waste Operations	
169	Establish monitoring boreholes	
170	Winning of clay for general site works	
171	H Area	
172	Lining Canals	
173	Burning Ground	
174	Confirmatory sampling, analysis & reporting	
175	Fencing	
176	Removal of Cattlegate Bridge	
177	Installation of foot bridge	
178	Rehabilitation	
179	Handover to LVRPA	

		une July August Ember October November D nber
ID	Name	29 5 12 19 26 3 10 17 24 31 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 4 11 18
180	Remediation of Burning Ground	1919
181	Canals - surface scrape & batter sides	
182	Establish temporary road - not Reqd	
83	Remove Entrance Road	The state of the control of the cont
184	Services rationalisation	Testing trains
185	Site Strip to Gravel/Undisturbed Strata	
186	Transport Arisings to N Area	
187	Sweep Area with Metal Detector	
188	Re-establish clay membrane & top soil	
189	Carry out EH/EN remediation proposals	
190	Confirmatory analysis of soil samples	
191	Asphalt treatment	

ID	Name	29	5 12 1	9 26	July 3 10	17 24	31 7	14 2	1 28	S 1	18 25	2	9	16 23	30 6	13 2	20 27	D(1 18	25 1
192	Maintenance of Bridges	No. of Concession, Name of Street, or other Persons, Name of Street, or ot	90 K H 10 20 K 10 K	A CONTRACTOR		e september 40	SESSENCE AND ACTION	A DESIGNATION OF THE PERSON OF	ela e les manies les	A) 10% (B) (B) (B) (B)	Party Labor	507 5 0F244	Tooled by a	Opening of the Late	PERSONAL PROPERTY.	author Michael	nier + www. Class		i i	
93	SMC/Trust Approval		SERVICE TO A SERVICE																	
194	Design/Tender						1													
195	Construction						,													
96	Remediation of River Banks	100	Der State of August 15	Section 1	the off a property and all all a	6-42 20 W W W	is the grown production	(kir) dad (c	e talog ex asisten	o frest e Rose a Miller	esta el como octobe	garle in interes	987485a	et leik helt av stat he	O WOT BY		Con Section			Address Address
97	Sheet Piling & Excavations East Bank of Horsemill Str				1															
98	Operations West Bank Horsemill Stream		-		,															
99	Ditching of On-Site Rivers & Canals																			
200	Removal of Canal Material at Intersection of Waterway																			
201	NRA/EN Proposals to Raise Site Water Levels										90 Marie de la 1800 Marie de 1									
202	Reinstatement of Banks													Contraction and a second						1
203	Completion of T Area Works															,				
204	Remediation under Steam Pipes		J	Line of	* to (44) (4) (4)		9 (8 9a) - Ac.,					(1 40K) (1 13)	weeky le	e to distinct the second	all place	1	41-7-12-6		je	d 1439
205	Survey & Peg-Out Routes																			
206	Tender/mobilise]															
207	Site Strip/disposal outside Heronry																			
208	Site Strip/disposal inside Heronry																			
209	Sample Analysis																			
210	Surface Treatment inside Heronry																			
211	Surface Treatment outside Heronry																			
212	Buildings & Mounds	No. of Concession,	Cart San Page 1	10 m 100 m	e i grado e i ca	April 18	Large Allers	o stea	all see	lingson, 1817, an	deljestes "St	N. Marine	Colonia -	Superior Livery - In	A., 59(195)) is library	Television VIII	,, -0	37 - VA	
213	Mounds - Sample & Analyse	1																		
214	Scheduled Area Buildings	1																		- 8
215	Other Buildings	1																		
216	Tree Clearance from Mounds & Buildings																			
217	Building Information Packs																			
218	Services Survey	Sec. 19.1	of the contractions																	
		1		OTT STREET, STREET,										NO. OF PERSONAL PROPERTY.						
																				1

			Janua	ary		- F	ebrua	ary		Ma	arch			April		1	IVI	ay 14 21		т. т	June		J	T = T	-T-	1	Т-
ID 1	Name Remediation of H Area	1.1	8 1	5 22	2 29	5	12	19	26	5 1	2 19	26	2	9 1	6 23	30	7	14 21	1 28	4	11	18 25	2	9	16 23	3 30	16
		,																									
2	Remediate & Tidy ancient monument																										
3	Construct Road, Install Wheel Wash																										
4	Waste Removal Phase 2																									λ_{i}	
5	EFDC Consultation for Demolition		¥																								
6	Mobilise for Demolition of H10, H71 & H8																										
7	Demolition of H10, H71 & H8																										
8	H8 Mound to T Area																										
9	Removal of Redundant Services, bldg bases etc																										
10	Ditching to Millhead Stream inc NRA Approval																										
11	Clearance of canals north from Hoppits Pool - Phase																										
12	Clearance of canals north from Hoppits Pool - Phase																										
13	Clearance of canals north from Hoppits Pool - Phase																										
14	Soil Strip, Area H																										
15	Re-establish Hoppit Road																										
16	Cut back water main to North of H8 or leave exposed			(8)																							
17	Remove H16 Slab																										
18	Interim Analysis																										
19	Confirmatory Analysis																										
20	Report																										
21	Erect temporary fences and gate																										
22	Establish Boreholes	ı																									
23	Organic trace																										
24	Design																										
25	Install																										,
26	Monitor																										ď

ID.	Name	1 8	January	/	F	ebruary	0 26	Mar	h	ГэТс	, ,	2 201	May	21 20	J. T. 4. T. 4.	ine 1 18 2	5 2 1	0 1 16	121	30
ID 27	Remediation of North P area	_! _1_	0 113	1 22 1 2	9 3	1211	9 [20]	3 [12	19 20	1_2_1_5	10 2	23 30	. /] 14	21 20	141	1 10 2	3 2	9 1 10		20
28	Maintenance of Bailey Bridge & footway																			
29	Maintenance/replacement of footbridge	ı																		
30	Removal of redundant services																			
1	Vacation of A221																			
2	Exterior renovation to A210/A214																			
3	Excavate remaining canals																			
4	Sample north bank of canal (north)																			
5	Infill canal																			
3	Sheet pile Millhead/canal junction																			
7	Excavate																			
3	Backfill																			
)	Obtain NRA approval for dredging																			
)	Dredge																			
1	Tree Removal																			
2	Surface Strip																			,
3	Confirmatory Sample & Analysis																			
4	Report																			
5	Installation of Boreholes	1																		
3	Design																			
7	Construct																			i.e.
3	Monitor																			
	Confirmatory Sampling (under fuel tanks)																			
)	Store recovered materials in A210																			
	Store recovered Barge																			
2	Traffic Access/services																			r, s , r
3	Reinstate carpark																			

· ·	,	January	February	Marc	ch	r. d	May		June			
İD	Name	1 8 15 22	29 5 12	19 26 5 12	ch 19 26 2	9 16 23	30 7 14 2	21 28	4 11 18 25	2 9 1	6 3 3	0 6
54	Remediation of T area (inc. lagoons & ponds)											
55	Surface excavations/classify arisings											
56	Classify washpond arisings		- 12									
57	Decontaminate pipework											÷,
58	Gunpowder stove clearance .											
59	Confirmatory testing											
60	Poly sheeting & hoggin placement											
61	Excavation of filled canals							*				
62	Confirmatory sampling & analysis											
63	Report											
64	Refill with H8 mound from stockpile											
65	Top Soil, re-seed/re-plant to EN instructions											
66	Road reinstatement											

151			Janua	- 1	T-00-T	Febr	0 140	Local	-	larch	1 00 1	0	Ar		1 00 1	May	1 04	~ T	4	T	144 46	T44 T40 T00	June
ID 67	Name Remediation of M Area	1	8 1	5 22	29	5 1	2 19	26	5 1	12 19	26	2	9 1	6 23	30	7 14	1 21	28	4	L	11 18	11 18 2	11 18 25 2
68	Removal of cordite/asbestos arisings																						
69	Tender																						
70	Removal																						
71	Excavation of canals/reinstatement of road																						
72	Gasworks Remediation	- 10																					
73	Excavation	(4)																					
74	Sampling & analysis																						
75	Remediation																						
76	Surface confirmatory sampling & analysis																						
77	Report																						
78	Remediation of incorporator railways	. 1																					
79	Remediation																						
80	Sampling & analysis																						
81	Report																						
82	Removal of redundant services			*																			
83	Decontamination of drains																						
84	L157																						
85	L153																						
86	L148																						
87	L145/L149																						
88	Associated buildings	6																					
89	Removal of slabs																						
90	Demolition of buildings																						
91	Ditching of waterways																						
92	Gritblasting/ painting of steelwork																						
93	L157																						
94	L153																						

IE.	Name	January February March , May June 	23 30 6
ID 95	L148	1 0 10 22 120 0 12 10 120 10 120 10 120 10 120 12	
96	L149		
97	Wall and Floor removal/paint stripping		~
98	L153		a 5
99	L148		
100	L145		
101	L149		
102	Roofing		
103	L145 `		
104	L157		
105	L145 (bays)		3
106	Boreholes		N H
107	Design		
108	Construct		
109	Monitor		
110	Confirmatory analysis in buildings	*	
111	Sampling & Analysis		
112	Report		*

	,					_																	T					T				r		-			7
				Janua	ary			F	ebr	uary	/			Ma	rch				P	٩			<u> </u>		May					June					_		_
ID_	Name	1	8	Janua 3 1	5 2	22	29	5	1	2	19	26	5	12	2 1	9	26	2	9	-	16 2	23	30	7	14	21	2	8 4	4	11	18	25	2	9	16	23	1
113	Remediation of L Area	I																	-																		
114	Excavation & backfill of canals																																				
115	Confirmatory Sampling & Analysis																																				
116	Report																																				
117	Grassland Management																																				
118	Demolition of buildings																																				
119	Boreholes																																				
120	Design																										٠										
121	Construct																																				
122	Monitor	4																																			
123	Work to selected buildings																																				
124	Rationalise Services																																				
125	Remove Redundant Services																																				

ID	Name	January February March Ap May June J.
126	Remediation of S Area	Address of the second control of the second
127	Excavate Newtons Pool Canals	
128	Exploratory excavation trenches	
129	EN Approval	
130	Barge removal	
131	Excavation of Canals- North of M area	
132	Tree Clearance	
133	Excavation of Canals- North of T area	* *
134	Tree Clearance	
135	General Surface Scrape of excavated canals	
136	Sampling & Analysis	
137	Report	
138	Removal of Residual Tips	
139	Edmondsey Sluice	
140	Cattlegate bridge	
141	Establish monitoring boreholes	SE AMBRICO MARIO DE PRESENTA DE LA CONTRACTOR DE LA CONTR
142	Design	
143	Construct	
144	Monitor	
145	Rehabilitation of Areas to EN & EH approval	
146	Newtons Pool	
147	Press House	
148	Barrel Graveyard	
149	Nitration Lagoons	
150	General	
151	Confirmatory Sampling, analysis & reporting	
152	Newtons Pool	
153	Press House	

	,	 Janua		bruary			March			Ap			Ma			une			J.		
ID	Name	8 15			9 26	6 5		9 26	2	9	6 23	30	7 14	1 21	4 1	1 18	25	2		23	30 6
154	Edmondsey Sluice																				
155	Barrel Graveyard																				
156	Nitration Lagoons																				
157	General																				
158	Removal of Redundant Services																				

			Janua	ry		Fe	bruary			Mai	ch			A ₁ .			May			
ر 9	Name	1	8 15	5 22	29	5	12 1	19 2	26 5	5 12	19	26	2 9	9 10	6 23	30	7 14			21 28
	Remediation of N Area	Mark 1	William Profile	ediet certiere	See Mile Serve	OU PHONE	e v decided peld	ack realization	tale entire	ASMATE CORS	the season of the	KARENDELLA	estable of each	on workersage	e Garage	The state of the state of	esmess cottles	4 112	September 1	ALC: N
03	Site Strip																			
61	Establish Waste Handling] .	, h														
162	Temporary Road																			
163	Fill in Pits																			
64	Maintenance to Cattlegate bridge																			
165	Improve Entrance from crooked mile																			
166	Demolish unwanted buildings																	,		
167	Rationalise Services																			
168	Clean up after Waste Operations																			
169	Establish monitoring boreholes																			
70	Winning of clay for general site works	74004975	18. (C. C.)	server webs	States in a seco	60,600	ole a set of make	sia (Sanci)	of the Lorents	File Service of	and the last	and the same of th								
71	H Area																			
72	Lining Canals																			
73	Burning Ground																			
74	Confirmatory sampling, analysis & reporting			,																
175	Fencing																			
176	Removal of Cattlegate Bridge																			
177	Installation of foot bridge																			
178	Rehabilitation																			
179	Handover to LVRPA																			

		Janu	uary		February	/	Mar	ch	Ap	11			Л ау			June			J.			
IÙ	Name	1 8	15 22	29	5 12	19 26	5 12	19 26	2 9	16 23	30	7	14 21	28	4	11 18	25	2	9	16 23	30	5
180	Remediation of Burning Ground	List of Report Leavening Constitution	CONTRACTOR SPECIES	a chicken	and the transition of	to the season of	SPECT AND MINGS STREET	apriliance of the state of the	ng matalog, ngong Kinasay ngo	and the												
181	Canals - surface scrape & batter sides																					
182	Establish temporary road - not Reqd																					
183	Remove Entrance Road																					
184	Services rationalisation																					
185	Site Strip to Gravel/Undisturbed Strata																					
186	Transport Arisings to N Area																					
187	Sweep Area with Metal Detector																					
188	Re-establish clay membrane & top soil																					
1.89	Carry out EH/EN remediation proposals	N-8-1000 A																				
190	Confirmatory analysis of soil samples																					
191	Asphalt treatment																					

	,	January	F	ebruary	Mar	ch	Ар. 2 9		May	28 4	June		I. 16
ID	Name	1 8 15 2	2 29 5	12 19	26 5 12	19 26	2 9	16 23 30	7 14 21	28 4	11 18 2	5 2 9	110
92	Maintenance of Bridges	1											
93	SMC/Trust Approval												
94	Design/Tender		**										
195	Construction												
196	Remediation of River Banks	constitution, is a surjective	100										
97	Sheet Piling & Excavations East Bank of Horsemill Str												
198	Operations West Bank Horsemill Stream												
99	Ditching of On-Site Rivers & Canals									•			
200	Removal of Canal Material at Intersection of Waterway												
201	NRA/EN Proposals to Raise Site Water Levels												
202	Reinstatement of Banks												
203	Completion of T Area Works												
204	Remediation under Steam Pipes	The section of the se		or so we wanted	185								
205	Survey & Peg-Out Routes												
206	Tender/mobilise												
207	Site Strip/disposal outside Heronry												
208	Site Strip/disposal inside Heronry												
209	Sample Analysis												
210	Surface Treatment inside Heronry												
211	Surface Treatment outside Heronry												
212	Buildings & Mounds	Tree to be a library appoint.	New ACCOUNTS AND THE	es and the ores	of the same of the second	a de la companya de l	or a Harrison of						
213	Mounds - Sample & Analyse												
214	Scheduled Area Buildings												
215	Other Buildings												
216	Tree Clearance from Mounds & Buildings												
217	Building Information Packs												
218	Services Survey												

·			
*			
×			
•			
,			
	*		
	*		
			× = ×
Project: WAN Critical Programmer Programmer Project: WAN Noncritical Miles	ress Summary	2	
Date: 18/8/94 Noncritical Miles	stone • Rolled Up		
		Page 12	

-

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE WEDNESDAY 20TH JULY 1994 AT 09.00 HOURS

Present: Mr Bob Watts :W.S.A. Copies: Mr.D.Stanners :M.O.D/DLS Mr Graham Vincent :R.O. Mr.D.Coyle :M.O.D.P.E. Mr.A.Ford Mr Peter Mayell :R.O. :ARCH. Mr.D.Bone :CIVIX Mr.R.Pallett :D.W.S. Mr.P.Greggain :M.O.D/DLA

1. MATTERS ARISING - FROM MEETING OF 10TH JUNE 1994 **ACTION** 1.1 (1.1)**Drain Sampling** Draft ESG 37/93 - (will include details of work to L157), and draft 41/93 - will be issued soon. L153 drain removal progressing. Material above drain sample 1 per 50m³, material below drain sample 1 per 12m³ and 1 per drain branch. R.O.

1.2 (1.2)

Explosives Testing A programme of sampling mounds for chemical contamination is required. All samples will be screened for explosives. W.S.A to prepare - SMC required. Part 1 ESG 4/93 received from R.O. Part 2 to be revised by R.O before issue.

R.O. W.S.A.

Building Index 1.3 (1.3) Revised versions to be issued as changes are made. Condition Survey of Buildings issue imminent. R.O.

1.4 (1.5)Photographic record Vacation student used at £5 per hour will return summer to complete. Negatives indexed, not photos yet indexed but system in place. Index to CLI required. Video tape to be edited.

R.O.

Remediation in P Area - practical completion - (17th Jan 1994) 1.5 (1.6) Archaeological evaluation complete. Report received from E.C.C. All residual work complete. Disposal proceeding. W.S.A.

1.6 (1.7) Barrel Graveyard investigated. Strata of ground proved. Sampling undertaken by L.G.C. Results received from R.O. and L.G.C. W.S.A to issue short report. Steam main routes to be resolved.

W.S.A.

1.7	(1.8)	Collection of <u>Tetyrl Area</u> pipes from T Area progressing. Existing water mains need not be cut into short sections before heat treatment. When collection complete decontamination to proceed on basis of lump sum contract.	R.O.
1.8 hoison	(1.9) Some wrong	Water wheel and Press House areas. Confirmatory investigation to await removal of road located on fill which is progressing. Condition survey of buildings 103 and 104 will dictate approach to clearance. Liaison committee is considering this area for further work, planting etc SMC required.	R.O. W.S.A.
1.9	(1.10) inproversity	L157 2nd stage strip out in progress. Work carried out in L157 extended to L145, L148, L149 and L153. Floor removal to proceed on basis of established method, but assessment of alternative heavy duty hydraulic remote slab cracking equipment to be carried out by R.O.	E.H. W.S.A. R.O.
1.10	(1.11)	<u>"Asbestos in Buildings"</u> Review of procedures by W.S.A carried out 28th March 1994. Personnel air monitoring exercise complete. Draft WSA report received.	W.S.A.
1.11	(1.12)	<u>Damage to fence in Grand Magazine</u> Work proceeding.	R.O.
1.12	(1.13)	Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify.	R.O.
1.13	(1.14)	Tetryl Area. Procedure for pools adjacent to E2 agreed with Bob Stebbings and nearing completion. Results of analysis of samples from the Gunpowder Stare indicate the need for further excavation with Archaeologists overview.	ARCH. R.O. W.S.A.
1.14	(1.15)	Partial preparation of <u>accurate drawings and pegging out of</u> <u>Asbestos clad steam main routes</u> based on existing drawings, on-sir observations, R.C.H.M.E survey drawing and Archaeologist input undertaken by MKS. Drawings to be marked up with assumed routes, to be proved on site. WSA to collate results, instigate remediation and negotiate acceptable levels with EHO.	te ARCH. W.S.A. MKS. R.O.
1.15	(1.16)	Comments received from <u>Fire Prevention Officer.</u> W.S.A to comment. Problem with door swings.	W.S.A.
1.16	(1.17)	<u>Preparation of artefact inventory.</u> R.O draft report publication imminent R.O. to organise transport of artifacts. Barge to be transported to site, organised by archaeologist.	R.O. ARCH.

1.17	(1.18)	Asphalt melting plant work complete to date. R.O have prepared a list of buildings with asphalt floors. WSA to consider this work in relation to proposed interpretation. R.O to inspect asphalt floors in buildings undergoing strip out. R.O to investigate commercial	
		outlet for asphalt	R.O.
1.18	(1.19)	Waste tip sampling for explosives analysis. Present system reviewed Thursday 30th June 1994. Simplified arrangements promulgated. Review again 29th September 1994.	R.O. W.S.A.
1.19	(1.20)	R.O <u>engineer carrying out services survey</u> and checking CAD plot. Archaeologist is arranging copying of material in the PRO and researching drawing preservation methods and costs. All of them to expensive.	ARCH.
1.20	(1.21)	Stockpiled waste material Waste classification complete. Contract for special waste removal let.	W.S.A.
1.21	(1.22)	Safety Audit. Report received, another visit due.	R.O.
1.22	(1.23)	Newtons Pool Canal clean out complete. Disposal of waste to be arranged by WSA. Clearance work to be incorporated into a larger area for clearance by end of October for hand over to RSC.	W.S.A. R.O.
1.23	(1.24)	Edmonsey Sluice waste excavation proceeding further topsoil for trees ordered. Bag up to discrete, localised asbestos. Prices required for additional fencing.	R.O.
1.24	(1.25)	<u>Drainage to Island car park.</u> Pointing to brickwork at drain outfall to canal and Bridge Nº 1 abutment complete.	R.O.
1.25	(1.26)	<u>Clean/Dirty site arrangements.</u> Wheel wash off hire. Block laying proceeding.	R.O.
1.26	(1.27)	Copy of Explosives License Application received from R.O. Delayed at request of H.S.E Explosives Inspectorate. H10, H8 and H71 strip out and demolition proceeding.	R.O.
1.27	(1.28)	Site vehicles 1 No. flat bed available October.	R.O.
1.28	(1.30)	Explosives analysis data capture. Output complete, report by R.O to be prepared.	R.O.
1.29	(1.31)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary.	W.S.A. R.O.

	1.30	(1.34)	<u>Fuel tank</u> excavation in North P Area to be sealed with clay and backfilled. Results of sampling acceptable.	W.S.A. R.O.
	1.31	(1.35)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract. Response from Thames Water in respect of proposed vehicle wash not received. R.O to proceed.	R.O.
A	1.32	(1.36)	Trenching to Northern Canals - replace materials as excavated so any suspect material is capped with gravel. Beware buried barge. Original investigation trenches pegged out. WSA to inspect with R.O.	W.S.A. R.O.
1/1	1.33	(1.38)	,	N.R.A. R.O. W.S.A.
	1.34	(1.39)	<u>Queens Mead Canals</u> partially located and excavated, work suspended. After grass cut excavation can accomodate river sludge.	R.O.
	1.35	(1.41)	Water main and Sewage Pumping main to be replaced with new polymer tube where exposed if damage by plant is a problem. Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract. VO61	R.O. W.S.A.
	1.36	(3.5)	Bridge works to be organised by WSA. Decontamination programme implications. Roughtons outline programme received.	W.S.A.
	1.37	(1.43)	Carden and Godfrey are identifying anomalies between RCHME survey, MKS survey drawings and situation on the ground. These can then be incorporated in the site records.	
	<u>2.</u>	PROG	RESS AND PROGRAMME	
	2.1		Revised July programme attached at Appendix 1 Next revision	at coming

2.1 Revised July programme attached at Appendix 1. Next revision at coming progress meeting.

3. ANY OTHER BUSINESS

3.1 R.O outlined the proposed programme and resources required to carry out an initial strip of buildings 134 to 160 and the implications for welfare facilities.

R.O.

3.2	R.O undertook to investigate the costs and submit a proposal for further investigation into the stability of N.G. in timber on a shared cost basis as R.O have an interest.	R.O.
3.3	WSA outlined the requirements for piling canal/river intersections to remove residual contaminated material. There would be a considerable input from R.O. The piling would be undertaken by Woods Warren.	W.S.A R.O.
3.4	WSA described the requirements for a report by R.O listing buildings cleared of asbestos.	R.O.
3.5	R.O. reported investigations were in hand to resource plant and dredge Mill Head Stream and batter canals.	R.O.
3.6	R.O. reported arrangements were in hand to accommodate the English Heritage seminar on 6th August 1994.	R.O.
3.7	WSA instructed R.O to resource additional ablution facilities.	R.O.
3.8	R.O. reported that quotations for grass cutting to Queens Mead and H Area are being sought.	R.O.
3.9	Mr.Peter Greggain from Defence Land Agent Cambridge will attend the next progress meeting.	
3.10	The Ministers visit on 7th July 1994 went well and messages of thanks and appreciation have been received from Steven Norris MWATC, etc.	Ρ,

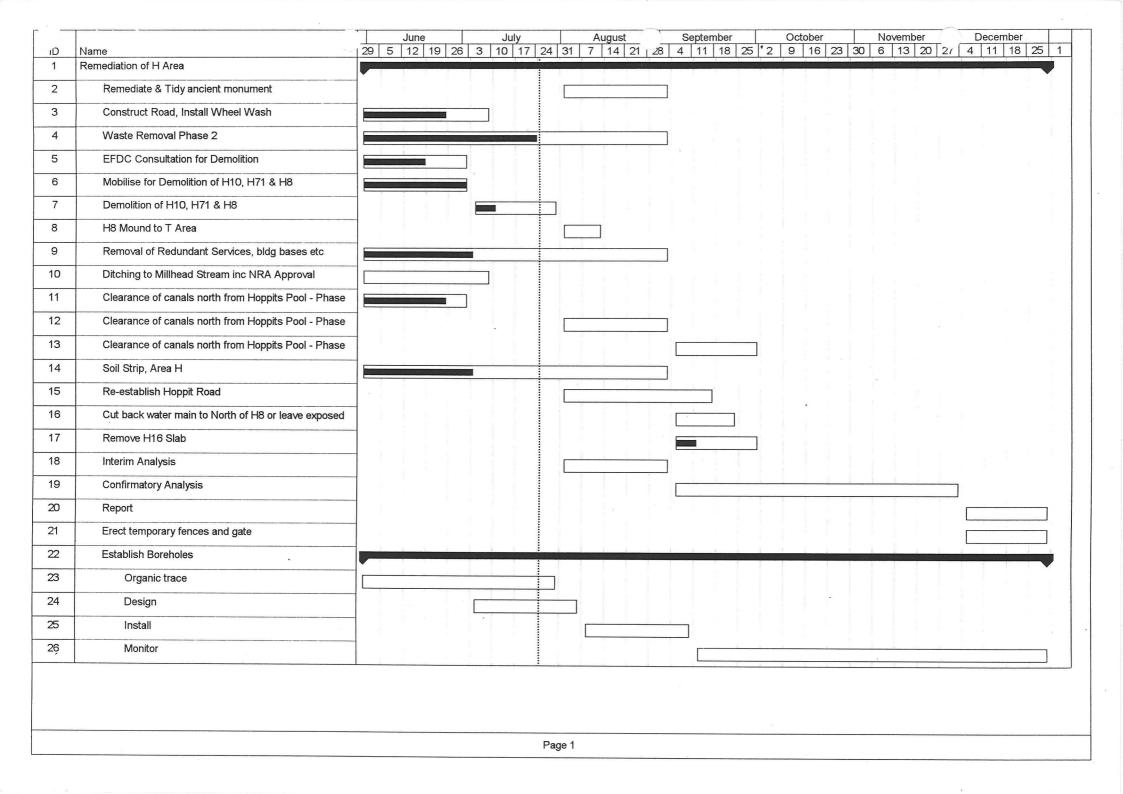
4. DATE OF NEXT MEETING

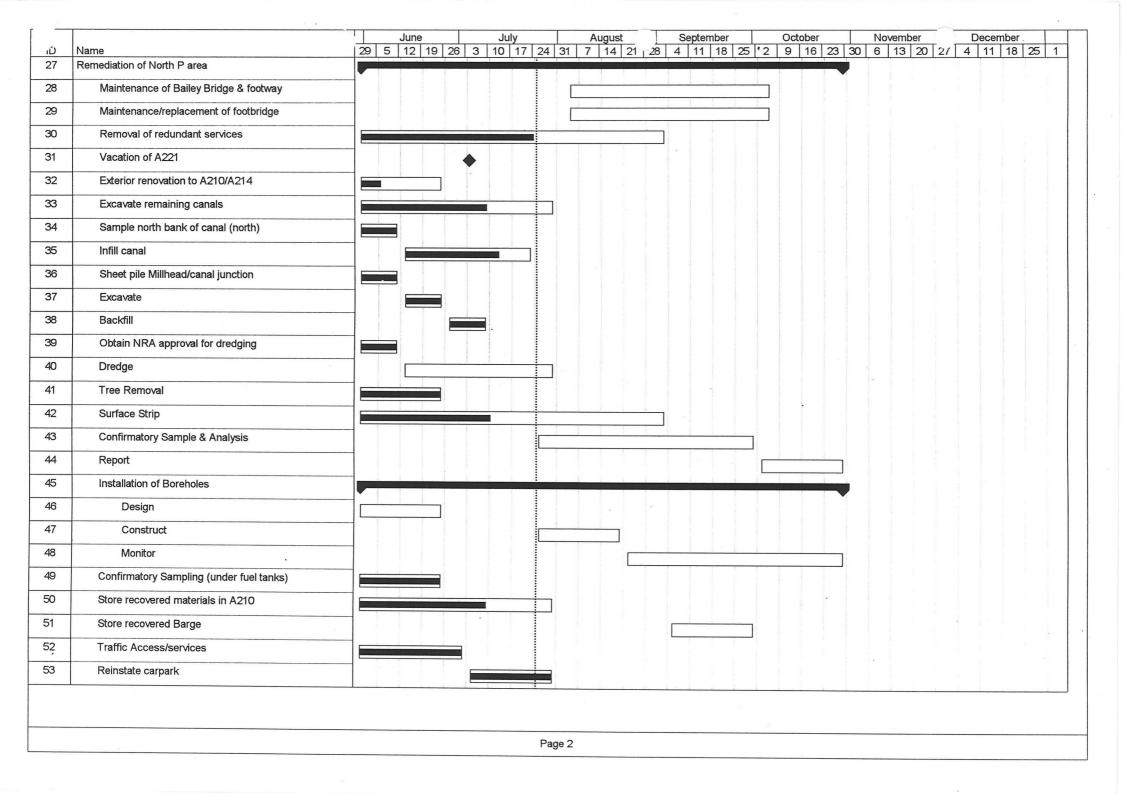
4.1 09.00 Hours on Thursday 18th August 1994.

R.E.WATTS. 21st July 1994

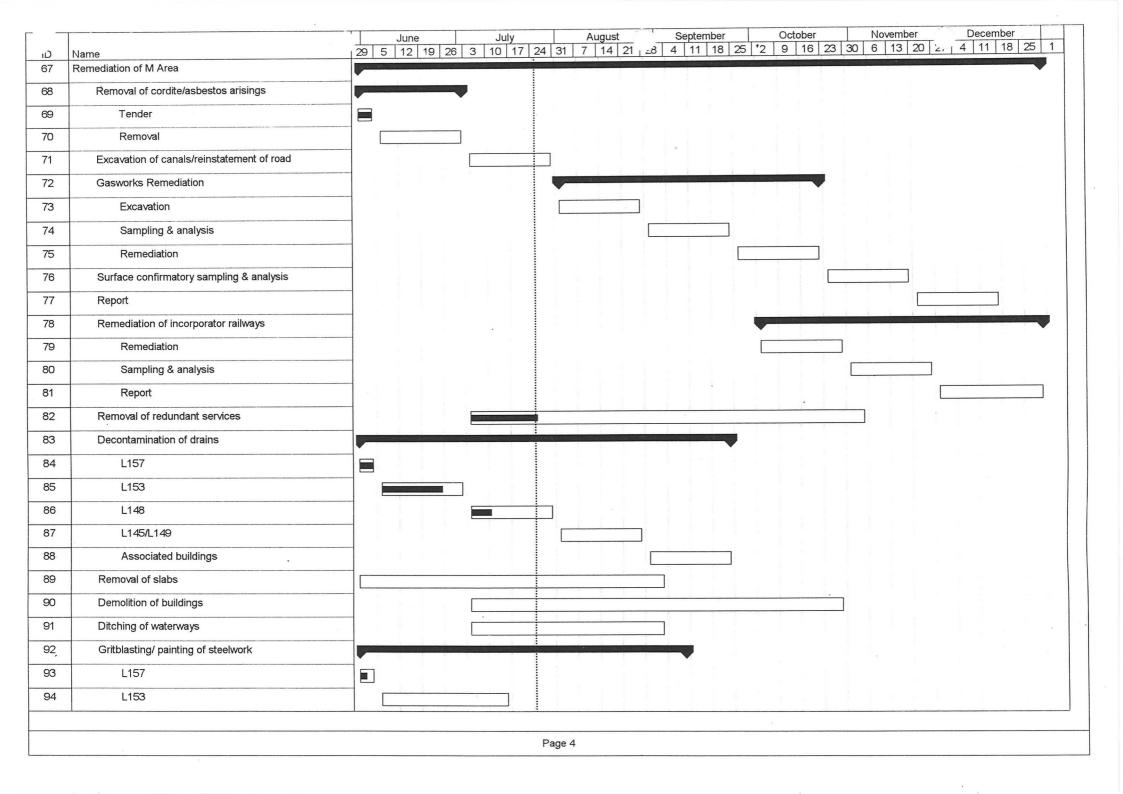
PROJECT PLAN - ISSUE 2 JULY 1994

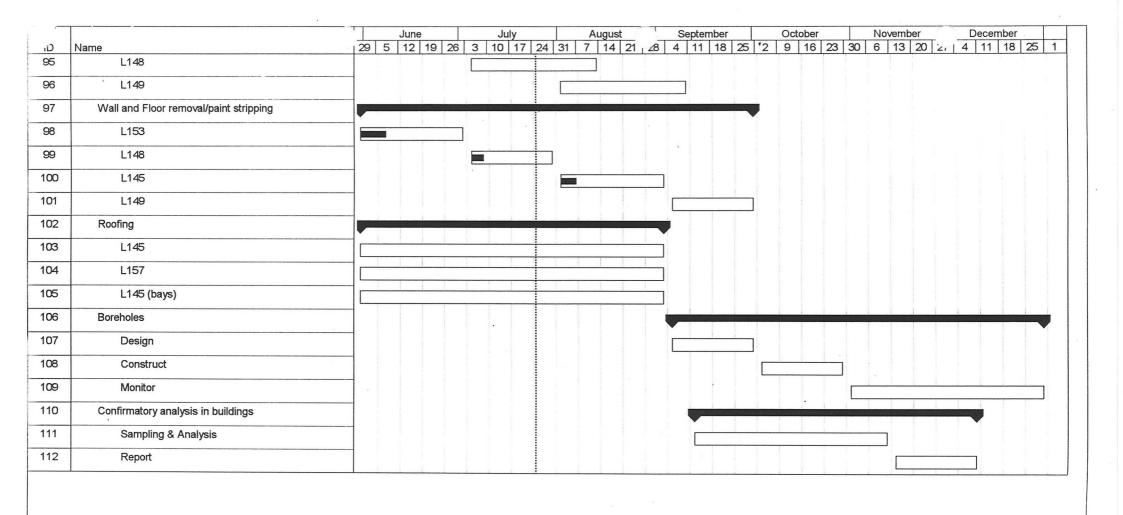
ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP



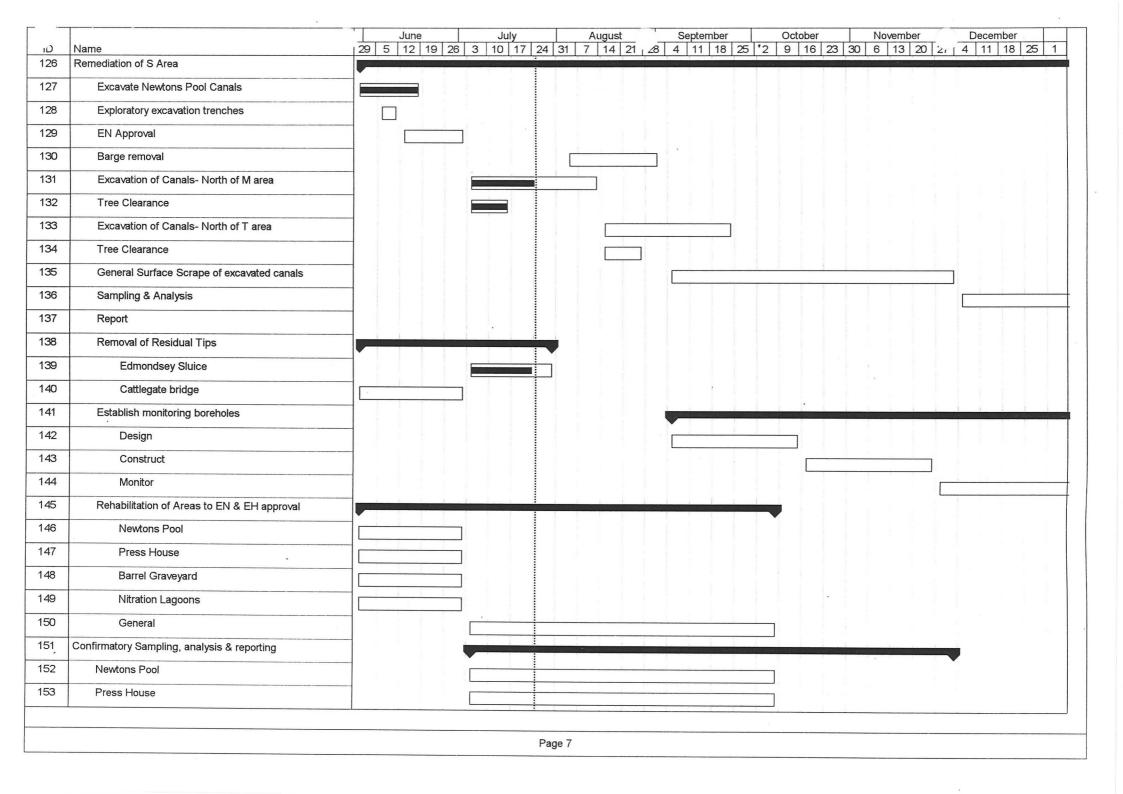


		,	Jun	ie		July		August		Septe	ember		October		November		cember .
íD	Name	29	5 12		26 3		31	7 14 21	128	4 11		25 7 2	9 16	23 30	6 13 20	21 4 1	1 18 2
54	Remediation of T area (inc. lagoons & ponds)								$\overline{}$	1							
55	Surface excavations/classify arisings																
56	Classify washpond arisings																
57	Decontaminate pipework																
58	Gunpowder stove clearance																
59	Confirmatory testing]											
60	Poly sheeting & hoggin placement																
61	Excavation of filled canals																
62	Confirmatory sampling & analysis																
63	Report]								
64	Refill with H8 mound from stockpile																
65	Top Soil, re-seed/re-plant to EN instructions																
66	Road reinstatement								8								





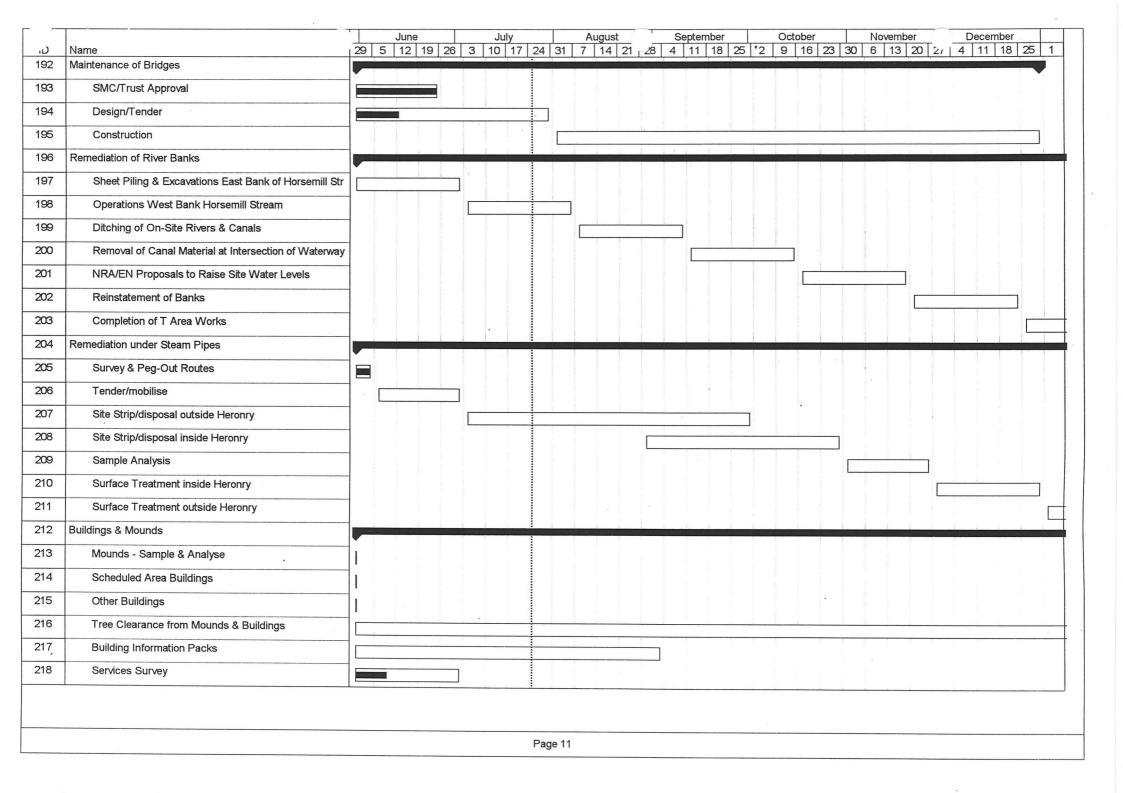
				Jur	ne			Jul	ly			Aug	ust		Se	ptemi	oer			Octo	ber			Nove	mber		[Decer	nber	
1D	Name	25	9 5	12	2 19	26	3	10	17	24	31	7 1	4 21	1 28	4	11		25 1	2	9	16 2	23	30	6	3 20	21	4	11	18	25
113	Remediation of L Area		a.Jbys	ll de la		10	E (0.0)	Told in	(1,16,18)			L) Long		200,000	34 IL 6		119	7-1911	HIST E	-90000	Mark D		di Kalin	UN Y	1		. E. (14)	, J. J.	105	7
114	Excavation & backfill of canals]																
115	Confirmatory Sampling & Analysis																													
116	Report								=																					
117	Grassland Management																													
118	Demolition of buildings							F						-																
119	Boreholes															4.7				7/4	e pi		F		-5 - 7 Miles			P		3
120	Design																													
121	Construct																		_											
122	Monitor																									-				
123	Work to selected buildings	1																												
124	Rationalise Services	1																												
125	Remove Redundant Services													1																



				June				July				Αι	ıgust		4	Se	ptemb				Octo					embe			Dec	cembe	er	
(D	Name	29	5	12	19	26	3 1	10 1	7	24	31	7	14	21 ₁	28	4	11 1	8 2	25 '	2	9	16 2	23 (30	6	13	20	21	4 1	11 18	3 25	5 '
154	Edmondsey Sluice																															
155	Barrel Graveyard					[
156	Nitration Lagoons					[
157	General																															
158	Removal of Redundant Services																															

ر.	Name	June July August September October November December 29 5 12 19 26 3 10 17 24 31 7 14 21 28 4 11 18 25 7 9 16 23 30 6 13 20 2. 4 11 18 25
159	Remediation of N Area	
160	Site Strip	
161	Establish Waste Handling	
162	Temporary Road	
163	Fill in Pits	
164	Maintenance to Cattlegate bridge	
165	Improve Entrance from crooked mile	
166	Demolish unwanted buildings	
167	Rationalise Services	
168	Clean up after Waste Operations	
169	Establish monitoring boreholes	
170	Winning of clay for general site works	
171	H Area	
172	Lining Canals	
173	Burning Ground	
174	Confirmatory sampling, analysis & reporting	
175	Fencing	
176	Removal of Cattlegate Bridge	
177	Installation of foot bridge	
178	Rehabilitation	
179	Handover to LVRPA	

				June			July		Au	gust	1	September		October		November	De	ecember	
iD.	Name	129	5			6 3		7 24 3	1 7	14 21	28	4 11 18	25 '2	9 16	23 30	6 13 20	21 4	11 18	25
180	Remediation of Burning Ground				Vestining.		g Ale			Ball Ta	West In		- San Sore						4 4
181	Canals - surface scrape & batter sides																		
182	Establish temporary road - not Reqd																		
183	Remove Entrance Road																		
184	Services rationalisation											N.							
185	Site Strip to Gravel/Undisturbed Strata																		
186	Transport Arisings to N Area																		
187	Sweep Area with Metal Detector																		
188	Re-establish clay membrane & top soil																		
189	Carry out EH/EN remediation proposals																		
190	Confirmatory analysis of soil samples																		
191	Asphalt treatment							Г			<u> </u>								



Critical Progress Summary Project: WAN Date: 29/7/94 Rolled Up 🔷 Noncritical Milestone • Page 12

			Jai	nuar	4		_			uar			Ь,	1		Ma			T =	-		_	Ap	111		-	-		T	10-	Te- 14	10-141	10- 14104	10- 14- 04- 14	107 144 04 00	107 14 104 100 14	107 141 04 100 141	107 14 104 100 14 144	117 44 04 00 4 44 4	117 14 04 00 4 44 40	147 144 04 00 4 44 40 0	147 144 04 00 4 44 40 05	107 14 04 00 4 44 40 05	117 141 04 00 14 14 140 00 1	117 44 04 00 4 44 40 05	1:2 44 24 40 25 4	147 44 94 99 4 44 49 95 4	117 141 04 00 14 14 10 05 1	107 14 04 00 4 14 140 05 1 0 146	lital at local at late local at late local	Ividy outle outly	Ividy outle outly	147 141 04 00 14 14 140 05 1 0 146 23 26	14 14 14 14 14 14 14 14 14 14 14 14 14 1	May June July	Way 50116 5017 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17 14 21 28 4 11 18 25 2 9 16 23 30 6
)	Name	1	8	15	22	: 2	<u>.9</u>	5	1	2	19	12	26	5	5	12	2	19	12	<u>1</u> 6	2		9	16	3 2	23	30)	Ľ	1,1	' / 1	' / 14	14 21	14 21 2	14 21 28	14 21 28 4	14 21 28 4	'7 14 21 28 4 11	14 21 28 4 11 1	14 21 28 4 11 18	7 14 21 28 4 11 18 2	7 14 21 28 4 11 18 25	7 14 21 28 4 11 18 25 2	'7 14 21 28 4 11 18 25 2	'7 14 21 28 4 11 18 25 ₂	14 21 28 4 11 18 25 2 9	14 21 28 4 11 18 25 2 9	14 21 28 4 11 18 25 2 9 10	14 21 28 4 11 18 25 2 9 16	14 21 28 4 11 18 25 2 9 16 2	7 14 21 28 4 11 18 25 2 9 16 25	7 14 21 28 4 11 18 25 2 9 16 23 3	7 14 21 28 4 11 18 25 2 9 16 25 30	14 21 28 4 11 18 25 2 9 16 23 30	7 14 21 28 4 11 18 25 2 9 16 23 30	14 21 28 4 11 18 25 2 9 16 25 30 6	14 21 28 4 11 18 25 2 9 16 23 30 6
1	Remediation of H Area	,																																																							
2	Remediate & Tidy ancient monument																																																								
3	Construct Road, Install Wheel Wash											×	8																																												
4	Waste Removal Phase 2						1																																																		
5	EFDC Consultation for Demolition																																																								
6	Mobilise for Demolition of H10, H71 & H8																																																								
7	Demolition of H10, H71 & H8																																																								
8	H8 Mound to T Area																																																								
9	Removal of Redundant Services, bldg bases etc																																																								
10	Ditching to Millhead Stream inc NRA Approval																																																								
11	Clearance of canals north from Hoppits Pool - Phase																																																								
12	Clearance of canals north from Hoppits Pool - Phase																																																								
13	Clearance of canals north from Hoppits Pool - Phase																																																								
14	Soil Strip, Area H																																																								
15	Re-establish Hoppit Road	1																							٠																																
16	Cut back water main to North of H8 or leave exposed	1																																																							
17	Remove H16 Slab																																																								
18	Interim Analysis																																																								
19	Confirmatory Analysis							Steam Control																																																	
20	Report																																																								
21	Erect temporary fences and gate							TO THE REAL PROPERTY.																																																	
22	Establish Boreholes .	ı																																																							
23	Organic trace	1						Access to the second																																																	
24	Design							Total Control																											•7																		-	-	-		
25	Install							The second secon	•																																																
26,	Monitor	1																																																							

			Janu	uary			Febru	lary	150	M	larch	0 00		Ap	16		~ 3	23 30 17	20 17 14	20 17 14 21	23 30 7 14 21 28	May 23 30 17 14 21 28 4 1
_	Name	1	8	15 2	2 29	9 5	12	2 19	26	5	12 1	9 26	1 2	9	16	_	3 3	3 30 17	3 30 7 14	3 30 7 14 21 1	3 30 7 14 21 20 .	3 30 7 14 21 20 4
	Remediation of North P area																					
8	Maintenance of Bailey Bridge & footway																					
9	Maintenance/replacement of footbridge								1.													
30	Removal of redundant services																					
31	Vacation of A221																					
32	Exterior renovation to A210/A214																					
33	Excavate remaining canals																					
34	Sample north bank of canal (north)																					
35	Infill canal																					
36	Sheet pile Millhead/canal junction					ŀ																
37	Excavate																					
38	Backfill																					
39	Obtain NRA approval for dredging																					
40	Dredge																					
41	Tree Removal																					
42	Surface Strip																					
43	Confirmatory Sample & Analysis																					
44	Report																					
45	Installation of Boreholes																					
46	Design																					
47	Construct																					
48	Monitor .																					
49	Confirmatory Sampling (under fuel tanks)																					
50	Store recovered materials in A210																					
51	Store recovered Barge		,																			
52,	Traffic Access/services																					
53	Reinstate carpark																					

			Ja	anuar	Y		Fe	ebrua	ry			Marc	h			Ap	ril			M	lay				June						July
'n	Name	1		15		29				26	5			26	2	9	16	23	30 1	7	14	21 :	28	4 1	11 1	18 2	5	2	(9 1	16 2
54	Remediation of T area (inc. lagoons & ponds)						I																								
55	Surface excavations/classify arisings																														
56	Classify washpond arisings																														
57	Decontaminate pipework																														
58	Gunpowder stove clearance															· ·															
59	Confirmatory testing																														
60	Poly sheeting & hoggin placement																														
61	Excavation of filled canals																														
62	Confirmatory sampling & analysis																														
63	Report																														
64	Refill with H8 mound from stockpile																														
65	Top Soil, re-seed/re-plant to EN instructions																														
66	Road reinstatement																														

-	
	Name .
	Remediation of M Area
68	Removal of cordite/asbestos arisings
69	Tender
70	Removal
71	Excavation of canals/reinstatement of road
72	Gasworks Remediation
73	Excavation
74	Sampling & analysis
75	Remediation
76	Surface confirmatory sampling & analysis
77	Report
78	Remediation of incorporator railways
79	Remediation
80	Sampling & analysis
81	Report
82	Removal of redundant services
83	Decontamination of drains
84	L157
85	L153
86	L148
87	L145/L149
88	Associated buildings .
89	Removal of slabs
90	Demolition of buildings
91	Ditching of waterways
92 ,	Gritblasting/ painting of steelwork
93	L157
94	L153

_			Ja	nuar	У			Feb	orua	ry			Ν	/larc	h				Apı	ril				N	lay					Jun	е	_				Ju	July	July	July
ID	Name	1	8	15	22	2 2	9	5	12	19	26	3 !	5	12	19	26	1 4	<u>'</u>	9	16	23	30	77	7	14	21	28	3	4	11	1	8	8 25	8 25 2	8 25 ∠ 1	8 25 2 9	8 25 2 9 16	8 25 2 9 16 23	8 25 🗸 9 16 23 30
95	L148																																						
96	L149	1																																					
97	Wall and Floor removal/paint stripping																																						
98	L153																																						
99	L148																																						
100	L145																																						
101	L149																																						
102	Roofing																																						
103	L145						Mary Commercial																																
104	L157						(account)																																
105	L145 (bays)						and the same of																																
106	Boreholes	ı																																					
107	Design						1																																
108	Construct																																						
109	Monitor																																						
110	Confirmatory analysis in buildings																																						
111	Sampling & Analysis																																						
112	Report	1																																					

				Ja	nuar	y			Fe	brua	iry	- 1		Ma	arch				Α	pril				M	ay				Jun	e				Jul	У		
iD	Name		1	8	15	2	2 2	29	5	12	19	26	3 5	1	2	19	26 ₁	2	9	16	23	30) 17	7 1	14	21	28	4	11	18	3 25	5 2	4	9	16	23	30
113	Remediation of L Area	J																			i																
114	Excavation & backfill of canals																																				
115	Confirmatory Sampling & Analysis																																				
116	Report																																				
117	Grassland Management																		•																		
118	Demolition of buildings							1																													
119	Boreholes																																				
120	Design																																				
121	Construct																																				
122	Monitor																																				
123	Work to selected buildings																																				
124	Rationalise Services																																				
125	Remove Redundant Services							l																													

-		January		Februa	rv	March		April		May		June		July		
וט	Name	1 8 15	22 29	5 12	19 26	5 12 19	26 2	9 16 2	3 30 7	14 21	28 4	11 18	3 25 2	9 16	3 23 3	:
126	Remediation of S Area	DT .	0.00		7											
127	Excavate Newtons Pool Canals	~~	oupe		T											
128	Exploratory excavation trenches															
129	EN Approval															
130	Barge removal															
131	Excavation of Canals- North of M area															
132	Tree Clearance															
133	Excavation of Canals- North of T area															
134	Tree Clearance				1											
135	General Surface Scrape of excavated canals															
136	Sampling & Analysis				inst											
137	Report		1.00	La Trace	notre											
138	Removal of Residual Tips															
139	Edmondsey Sluice			,												
140	Cattlegate bridge	~	st me	-												
141	Establish monitoring boreholes															
142	Design															
143	Construct															
144	Monitor		Zinger w. Z	THE REAL PROPERTY.	W. E21.1.1											
145	Rehabilitation of Areas to EN & EH approval															
146	Newtons Pool															
147	Press House .															
148	Barrel Graveyard			Colorado Colorado Colorado Colorado Colorado Colorado Colorado Colorado Colorado Colorado Colorado Colorado Co												
149	Nitration Lagoons															
150	General															
151,	Confirmatory Sampling, analysis & reporting															
152	Newtons Pool															
153	Press House															

		-		anuar				ebrua				Marc				Ap					May					ine			-	July			
ľ	Name	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	17	14	21	28	3 4	11	18	3 25	5 2	1 9	1	6 23	3 3	0 6
154	Edmondsey Sluice		Ì				1																			İ							
155	Barrel Graveyard																																
156	Nitration Lagoons	1																															
157	General																																
158	Removal of Redundant Services															3																	

ıD	Name	January February March April May June July 1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 3
159	Remediation of N Area	
160	Site Strip	not recessingly me.
161	Establish Waste Handling	
162	Temporary Road	
163	Fill in Pits	
164	Maintenance to Cattlegate bridge	
165	Improve Entrance from crooked mile	
166	Demolish unwanted buildings	
167	Rationalise Services	not me
168	Clean up after Waste Operations	manner
169	Establish monitoring boreholes	net we.
170	Winning of clay for general site works	The state of the s
171	H Area	
172	Lining Canals	
173	Burning Ground	mmmm
174	Confirmatory sampling, analysis & reporting	y my many
175	Fencing	many not me
176	Removal of Cattlegate Bridge	man not me not me
177	Installation of foot bridge	AAA
178	Rehabilitation	The same
179	Handover to LVRPA	

			Janua	ry		Febru	lary	,	1	March			Ap					lay				June		2"		July			
)	Name	1	8 15	22	29	5 12	19	26	5	12 1	9 2	6,2	9	16 2	3 3	30 7	7	14	21	28	4	11	18	25	_	9 1	6 23	30	1
30	Remediation of Burning Ground										oe d	da	-11																
31	Canals - surface scrape & batter sides	- 100 miles	المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع المراقع			7				100	1226	ok p	MARIN	en.															
32	Establish temporary road - not Reqd							1.																					
3	Remove Entrance Road																												
4	Services rationalisation					7																							
5	Site Strip to Gravel/Undisturbed Strata				3 823	2																							
6	Transport Arisings to N Area			126	2250					0																			
7	Sweep Area with Metal Detector			5220	AND MADE	ji Žipte ir		eres		`(. ,		7																
8	Re-establish clay membrane & top soil					Here de			12.5	Elization Control	1	1	7																
9	Carry out EH/EN remediation proposals				1		W	wa	W.Sh	MA	w	ee.																	
0	Confirmatory analysis of soil samples						Migration in the sales	J. Gar		STEEL STATE	1																		
91	Asphalt treatment						Nines					MOT	m	e															

_	
D 92	Name Maintenance of Bridges
3	SMC/Trust Approval
194	Design/Tender
195	Construction
196	Remediation of River Banks
197	Sheet Piling & Excavations East Bank of Horsemill Str
198	Operations West Bank Horsemill Stream
199	Ditching of On-Site Rivers & Canals
200	Removal of Canal Material at Intersection of Waterway
201	NRA/EN Proposals to Raise Site Water Levels
202	Reinstatement of Banks
203	Completion of T Area Works
204	Remediation under Steam Pipes
205	Survey & Peg-Out Routes
206	Tender/mobilise
207	Site Strip/disposal outside Heronry
208	Site Strip/disposal inside Heronry
209	Sample Analysis
210	Surface Treatment inside Heronry
211	Surface Treatment outside Heronry
212	Buildings & Mounds
213	Mounds - Sample & Analyse
214	Scheduled Area Buildings
215	Other Buildings
216	Tree Clearance from Mounds & Buildings
217,	Building Information Packs
218	Services Survey

,			
•			
			Page 12
		\Diamond	Pag
		Summary Rolled Up	
		Summary Rolled Up	
		•	
		Progress Milestone	
	٥	Z Z	
*		tical	
		Critical Noncritical	
		Project: WAN Date: 29/7/94	
		Project Date: 2	

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE FRIDAY 10TH JUNE 1994 AT 09.00 HOURS

Pres		Mr Bob Watts Mr Graham Vincent Mr Peter Mayell	:W.S.A. :R.O. :R.O.	Copies:	Mr.D.Stanners Mr.D.Coyle Mr.A.Ford Mr.D.Bone Mr.R.Pallett	:M.O.D :M.O.D.P.E. :ARCH, :CIVIX :D.W.S.
<u>1.</u>	MAT	TERS ARISING - FROM	I MEETING	OF 5TH M	AY 1994	ACTION
1.1	(1.1)	Drain Sampling Draft ESG 37/93 - (wand draft 41/93 - will progressing sample and	be issued s	oon. L153	drain removal	R.O.
1.2	(1.2)	Explosives Testing A programme of sam is required. All samp W.S.A to prepare - S from R.O.	oles will be	screened for	explosives.	W.S.A.
1.3	(1.3)	Building Index Revised versions to b	e issued as	changes are	made.	R.O.
1.4	(1.4)	R.O. to issue ESG 17	1/92 amendn	nent.		R.O.
1.5	(1.5)	Photographic record Vacation student used complete. Negatives Index to CLI required	indexed, no	t photos yet	but system in place.	R.O.
1.6	(1.6)	Remediation in P Are Archaeological evaluates.C.C. All residual v	ation comple	ete. Report	received from	W.S.A.
1.7	(1.7)	Barrel Graveyard invo Sampling undertaken and L.G.C. W.S.A to	by L.G.C.	Results rece	_	W.S.A.

1.8	(1.8)	Gas Bottles uncovered in Tips disposal complete. Method statement 78/93 for Tetryl pipe issued. Collection of pipes from T Area progressing. Existing water mains need not be cut into sections before heat treatment. Work ongoing. R.O to clarify quantities decontaminated to date.	R.O.
1.9	(1.9)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance Liaison committee is considering this area for further work, planting etc SMC required.	R.O. W.S.A.
1.10	(1.10)	<u>L157 2nd stage strip out</u> in progress. Work carried out in L157 extended to L145, L148 and L153. Floor removal to proceed on basis of established method, monitor and assess progress.	E.H. W.S.A. R.O.
1.11	(1.11)	<u>"Asbestos in Buildings"</u> Review of procedures by W.S.A carried out 28th March 1994. Personnel air monitoring exercise complete. WSA report imminent.	W.S.A.
1.12	(1.12)	<u>Damage to fence in Grand Magazine</u> SMC application received. Provision for placement of otter pipes to be made. R.O to proceed.	R.O.
1.13	(1.13)	Roof works to A203. Defects on lead work to be rectified. Pondition library roof, R.O to present priced proposals to rectify. Jobbing firm to repair Mrs.Bellamys roof. Slates on A201/A202 to be refixed.	ng R.O.
1.14	(1.14)	Tetryl Area. Procedure for pools adjacent to E2 agreed with Bob Stebbings. Awaiting results of analysis of samples from Gunpowder Store. Final clearance, removal and replacement of road and confirmatory sampling imminent.	ARCH R.O. W.S.A.
1.15	(1.15)	Partial preparation of <u>accurate drawings and pegging out of</u> <u>Asbestos clad steam main routes</u> based on existing drawings, on-sit observations, R.C.H.M.E survey drawing and Archaeologist input undertaken by MKS. Drawings to be marked up with assumed routes, to be proved on site. WSA to collate results, instigate remediation and negotiate acceptable levels with EHO.	te ARCH W.S.A. MKS. R.O.
1.16	(1.16)	Comments received from <u>Fire Prevention Officer.</u> W.S.A to comment. Problem with door swings. Electrical installation, handover scheduled 10th June 1994.	W.S.A.

1.17	(1.17)	<u>Preparation of artefact inventory.</u> R.O draft report received. R.O. revised offer for this work approved. First items stored at South Site 29th April 1994. Barge to be transported to site, organised by archaeologist.	R.O. ARCH
1.18	(1.19)	Asphalt melting plant work complete to date. R.O have prepared a list of buildings with asphalt floors. WSA to consider this work in relation to proposed interpretation.	R.O.
1.19	(1.22)	Waste tip sampling for explosives analysis. Present system to be reviewed Thursday 30th June 1994.	R.O. W.S.A
1.20	(1.23)	R.O to engage engineer short term to complete existing services plotting. Checking by R.O then later C.A.D incorporation by MKS. Task continuing. N Area water mains and services trace in hand. Chessington drawings now on site. Archaeologist is arranging copying of material in the PRO and researching drawing preservation methods and costs.	ARCH R.O.
1.21	(1.25)	Stockpiled waste material Waste classification being carried out by W.S.A.	W.S.A.
1.22	(1.26)	Safety Audit. Report received, another visit due.	R.O.
1.23	(1.27)	Newtons Pool Canal clean out in hand. Disposal of waste to be arranged by WSA. R.O to strim weed growth to permit inspection.	R.O.
1.24	(1.28)	R.O to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u> . R.O reported initial undergrowth clearance in hand.	R.O.
1.25	(1.29)	Boot wash and drainage to Island car park. Pointing required to brickwork at drain outfall to canal. R.O to erect a sign.	R.O.
1.26	(1.30)	<u>Clean/Dirty site arrangements.</u> Implementation of proposals in han Wheel wash off hire. Preparatory work proceeding. Placement of clay almost complete.	
1.27	(1.31)	Copy of Explosives License Application received from R.O. This item long overdue. R.O to progress. H.S.E explosives inspectorate have promised to deal. H8, H10 & H7 not used. Agreed to keep intact for the moment, pending EFDC approval to demolition. R.C reported H.S.E agree to change H8 magazine in application to H7. agreed delay of 2 - 3 weeks to enable application to go forward with South Site application on shared costs basis. Proceeding	H10)

1.28	(1.32)	Site vehicles 1 No. flat bed to be obtained.	R.O.
1.29	(1.33)	R.O offered <u>mound material from South Site for filling in T Area.</u> W.S.A inspection revealed dubious material. W.S.A to re-inspect.	
1.30	(1.34)	Explosives analysis data capture. Output complete, report by R.O to be prepared. (Related to review see item 1.19)	R.O.
1.31	(1.35)	<u>Disposal of transformer</u> PCB clearance certificate received. PCB levels indicate investigation necessary.	R.O.
1.32	(1.36)	Revised programme issued. Will be updated next month.	
1.33	(1.37)	New Hill Pits 5 No. now exposed and fenced. Awaiting results of analysis of samples.	R.O.
1.34	(1.38)	<u>Fuel tanks</u> in North P Area located, exposed and removed. Awaiting results of sampling undertaken after clean up.	W.S.A. R.O.
1.35	(1.40)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract. WSA awaiting response from Thames Water in respect of proposed vehicle wash.	R.O.
1.36	(1.41)	<u>Trenching to Northern Canals</u> - replace materials as excavated so any suspect material is capped with gravel. Beware buried barge.	R.O.
1.37	(1.42)	R.O to provide 2 No. portable offices on rental, call off when required. For use in N Area, adjacent A200 or Powdermill lane. Delivery 16th June 1994. Use local crane, can also lift pipe bridges to North of A210.	R.O.
1.38	(1.43)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Samples processed by R.O and LGC.	N.R.A. R.O. W.S.A.
1.39	(1.44)	Queens Mead Canals partially located and excavated, work suspended.	R.O.
1.40	(1.45)	Repairs to H Area Road and others continuing on Saturdays. SMC received for repairs in the Scheduled Monument.	R.O.
1.41	(1.47)	Urgent repair to <u>Pumping main</u> carried out. Pumping test by Rogers Engineers required. R.O to move pump equipment to H7. Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract. VO61	R.O. W.S.A.

- 1.42 (3.5) Bridge works to be organised by WSA. Programme implications. W.S.A. Awaiting Roughtons draft programme.
- 1.43 (3.6) Carden and Godfrey are identifying anomalies between RCHME survey, MKS survey drawings and situation on the ground. These can then be incorporated in the site records.
- 1.44 (3.9) Mrs.Bellamys dampness to be investigated and remedied. R.O to advise. R.O.
- 1.45 (3.10) New storage heaters installed by McGoff and Vickers.
- 1.46 (3.11) Replacement of plastic fencing in unsafe locations by scaffolding purchased from Bray (to be painted) approved. Also certain bridges as advised.

 R.O.

2. PROGRESS AND PROGRAMME

2.1 Revised programme attached at Appendix 1. Next revision at coming progress meeting.

3. ANY OTHER BUSINESS

3.1 WSA to advise re-scaffolding to S90 and 26. R.O to obtain costing details for purchase of raking shores and bridge to S90.

R.O.

4. DATE OF NEXT MEETING

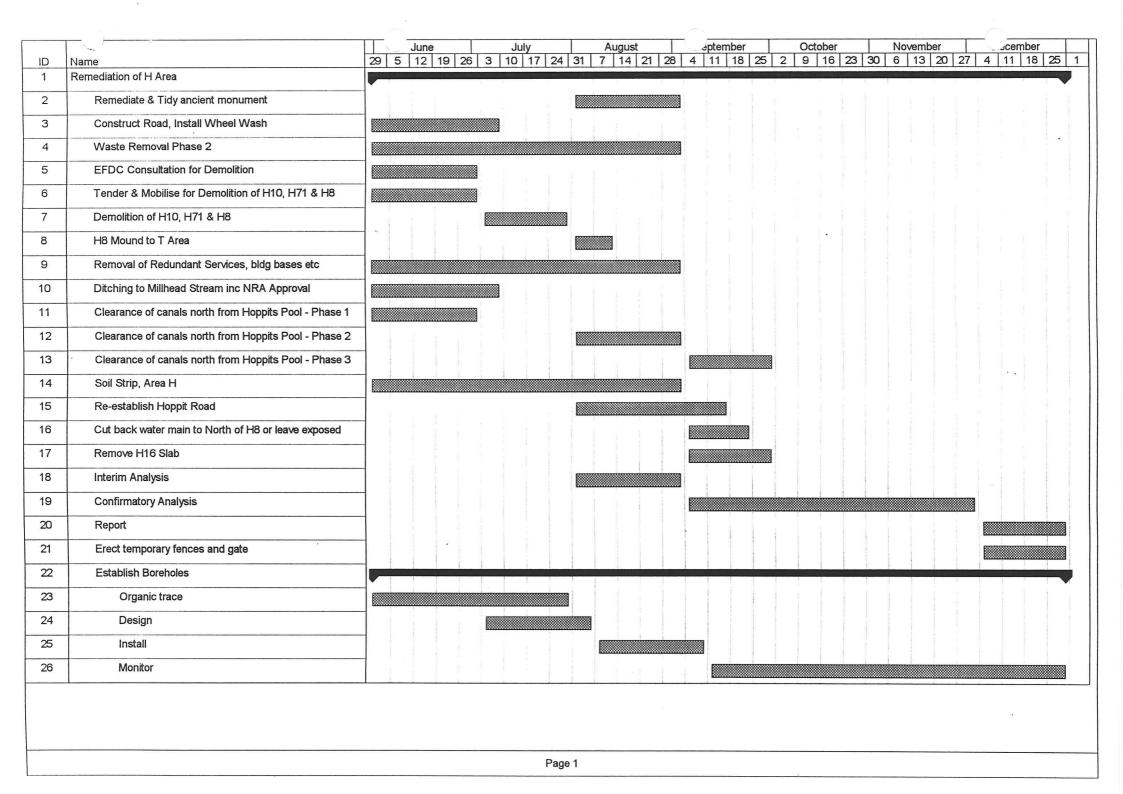
4.1 09.00 Hours on Wednesday 20th July 1994.

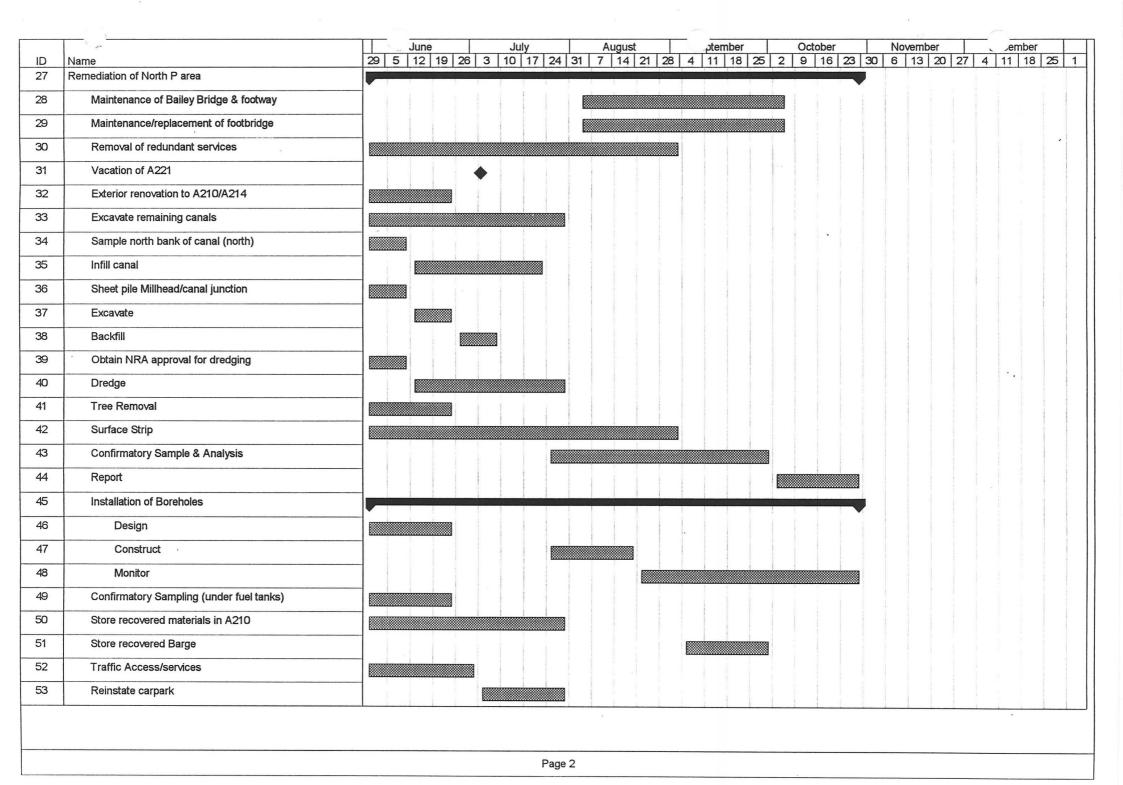
R.E.WATTS. 13th June 1994

APPENDIX

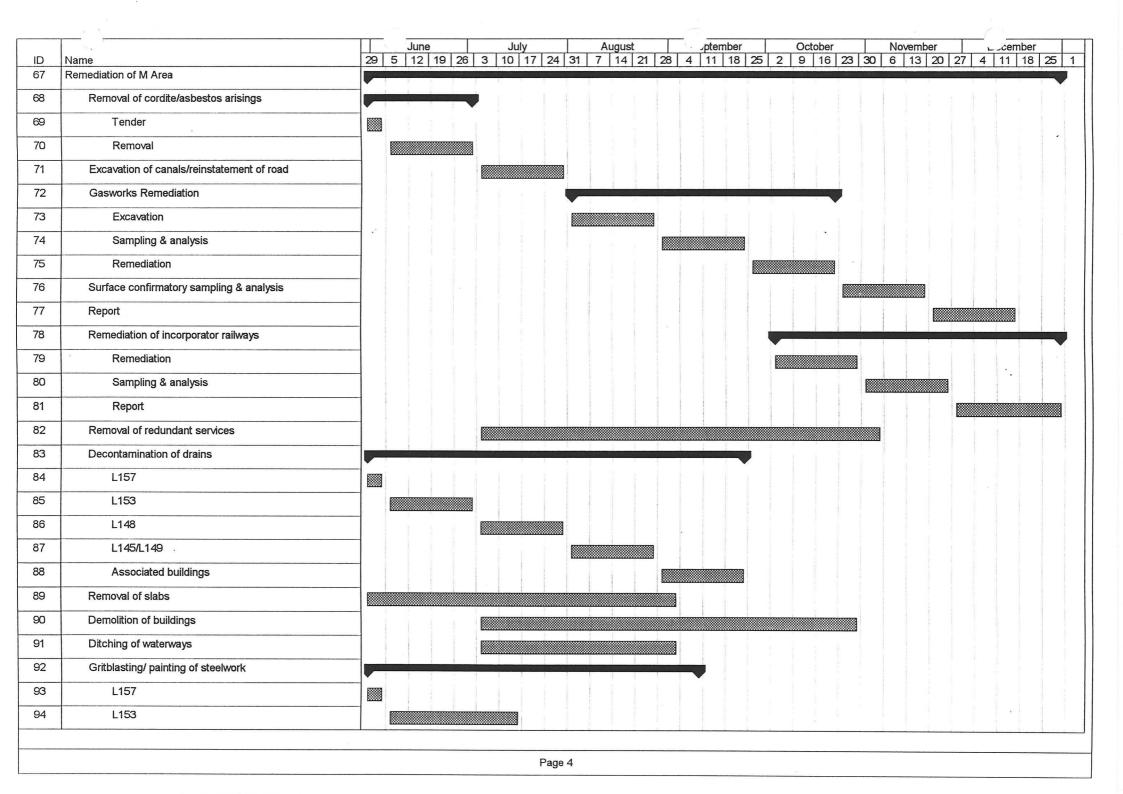
PROJECT PLAN - ISSUE 1 JUNE 1994

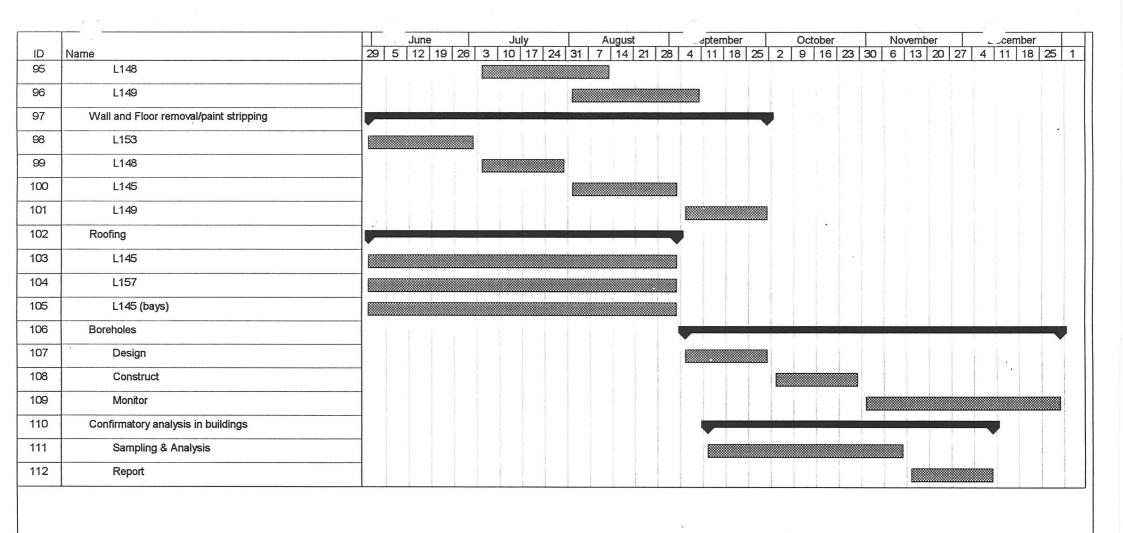
ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP



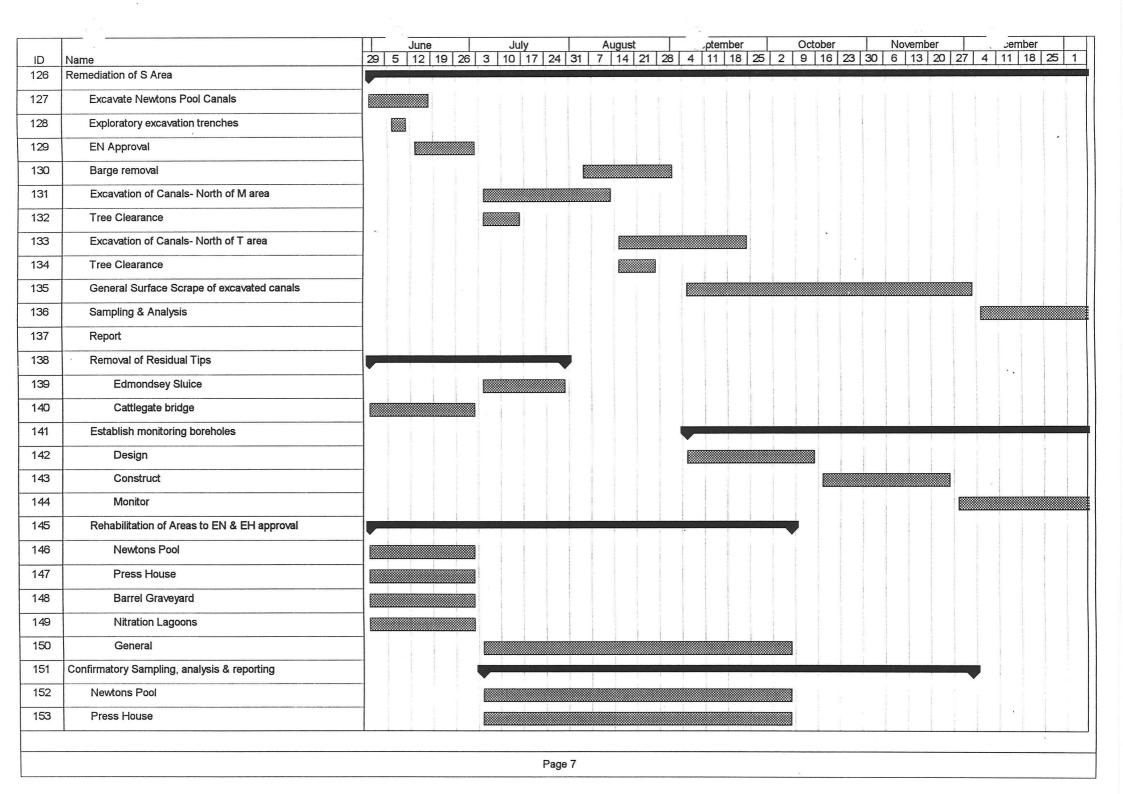


	N. C.		June			July		1	Aug				tem	ber			Octol	per			Nov	embe	r		L	₃mb		
D	Name	29	5 12	19 26	3	10 1	7 24	31		4 21	28	4	11	18	25	2	9	16 2	23 :	30	6	13	20	27	4 1	1 1	8 2	5
54	Remediation of T area (inc. lagoons & ponds)									ACC EN		,																
5	Surface excavations/classify arisings																											
6	Classify washpond arisings																											
7	Decontaminate pipework																											
8	Gunpowder stove clearance																											
9	Confirmatory testing																											
0	Poly sheeting & hoggin placement	1																										
1	Excavation of filled canals																	•										
2	Confirmatory sampling & analysis																											
3	Report																											
4	Refill with H8 mound from stockpile																											
5	Top Soil, re-seed/re-plant to EN instructions								8																			
3	Road reinstatement																											





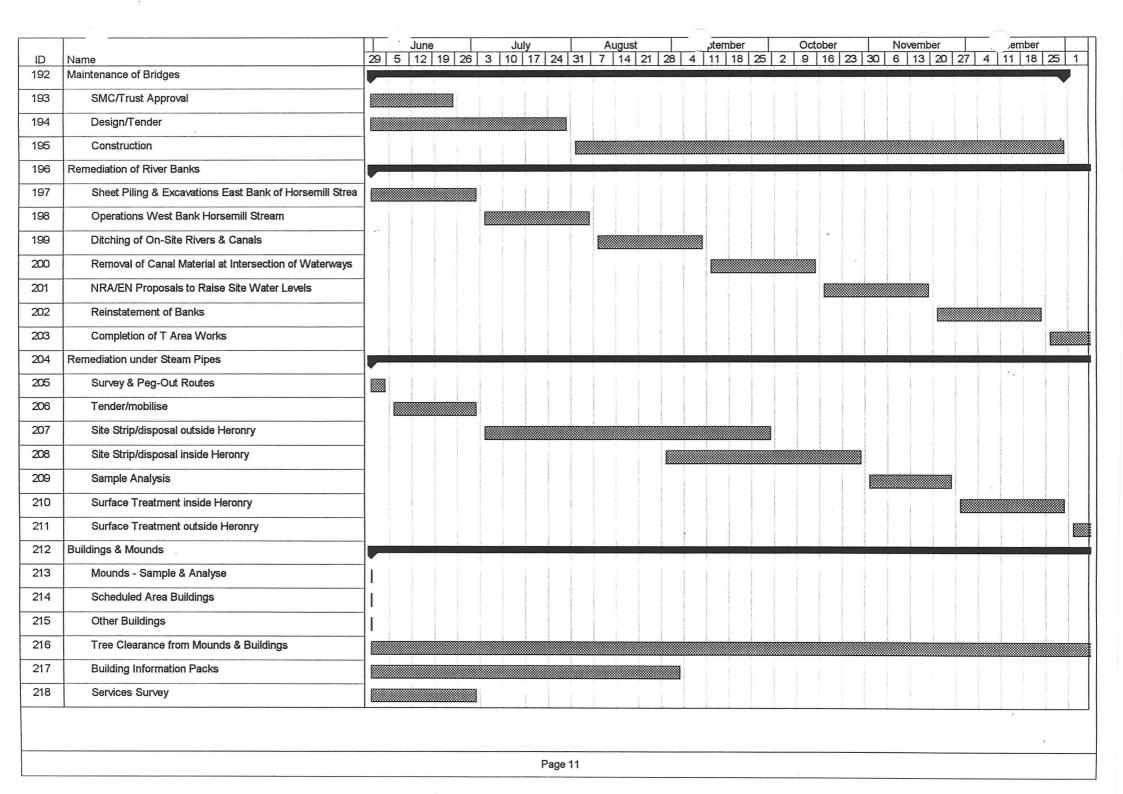
	6	11	. J	lune		J	luly		Αι	gust			, teml	oer		(Octob	er		No	vemb	er		L	∌mb	er	
ID	Name	29	5	12 19	26	3 10	17	24 31	7	14 21	28	4	11	18 2	25 2	2	9 1	6 2	3 30	6	13	20	27	4	11 1	B 25	5
113	Remediation of L Area								el us												3 161		15.741				-
114	Excavation & backfill of canals										1					1											
115	Confirmatory Sampling & Analysis																										
116	Report																										Á
117	Grassland Management																										
118	Demolition of buildings																										
119	Boreholes											-		-													
120	Design																	•									
121	Construct														8												
122	Monitor																										
123	Work to selected buildings	I																									
24	Rationalise Services	1																									
25	Remove Redundant Services										3																



	~			June				Jul	У			Aug	just		_	مر _	tem	ber			0	ctobe	er		N	over	nber			Jen	ber		
ID	Name	29	5	12	19	26	3	10	17	24	31	7	14 2	21 28	4	1	11	18	25	2	9	16	3 2	3 30	6	13	3 20	27	4	11	18	25	1
154	Edmondsey Sluice																																
155	Barrel Graveyard																																
156	Nitration Lagoons																				1												
157	General																												l				
158	Removal of Redundant Services	1																														*	

ID	Name
) 59	Name Remediation of N Area
160	Site Strip
161	Establish Waste Handling
162	Temporary Road
163	Fill in Pits
164	Maintenance to Cattlegate bridge
165	Improve Entrance from crooked mile
166	Demolish unwanted buildings
167	Rationalise Services
168	Clean up after Waste Operations
169	Establish monitoring boreholes
170	Winning of clay for general site works
171	H Area
172	Lining Canals
173	Burning Ground
174	Confirmatory sampling, analysis & reporting
175	Fencing
176	Removal of Cattlegate Bridge
177	Installation of foot bridge
178	Rehabilitation
179	Handover to LVRPA

	3,	June July August optember October November	cember
)	Name		11 18 25
30	Remediation of Burning Ground		
31	Canals - surface scrape & batter sides		
2	Establish temporary road		
3	Remove Entrance Road		
4	Services rationalisation		
5	Site Strip to Gravel/Undisturbed Strata		
6	Transport Arisings to N Area		
7	Sweep Area with Metal Detector		
8	Re-establish clay membrane & top soil		
9	Carry out EH/EN remediation proposals		
0	Confirmatory analysis of soil samples		
)1	Asphalt treatment		



D			_	uar	у	\perp		Feb	ruary	'	Ц,		Mar	rch		ᅪ		_	- 1	_	_				Ivia	Iviay	Iviay	Iviay	Iviay	May Ju	May June	May June	May June	May June	May June	May June	May June	May June 1
	Name	1	0	15	22	29	9 5	5	12	19	26	5	12	2 1	9 2	26	2	9	116	5 2	3	:	30	30 7	30 7 14	30 7 14 2	30 7 14 21	30 7 14 21 28	30 7 14 21 28 4	30 7 14 21 28 4 11	30 7 14 21 28 4 11 1	30 7 14 21 28 4 11 18 2	30 7 14 21 28 4 11 18 25	30 7 14 21 28 4 11 18 25 2	30 7 14 21 28 4 11 18 25 2 9	30 7 14 21 28 4 11 18 25 2 9 , 6	30 7 14 21 28 4 11 18 25 2 9 6 23	30 7 14 21 28 4 11 18 25 2 9 , 6 23 3
	Remediation of H Area	,																																				
2	Remediate & Tidy ancient monument																																					
3	Construct Road, Install Wheel Wash	1																																				
4	Waste Removal Phase 2																																					
5	EFDC Consultation for Demolition																																					
6	Tender & Mobilise for Demolition of H10, H71 & H8																																					
7	Demolition of H10, H71 & H8																																					
8	H8 Mound to T Area																		The state of the s																			
9	Removal of Redundant Services, bldg bases etc																																					
10	Ditching to Millhead Stream inc NRA Approval																																					
11	Clearance of canals north from Hoppits Pool - Phase 1	1																																				
12	Clearance of canals north from Hoppits Pool - Phase 2																																					
13	Clearance of canals north from Hoppits Pool - Phase 3																																					
14	Soil Strip, Area H																																					
15	Re-establish Hoppit Road																																					
16	Cut back water main to North of H8 or leave exposed																																					
17	Remove H16 Slab																																					
18	Interim Analysis																																					
19	Confirmatory Analysis																																					
20	Report																																					
21	Erect temporary fences and gate																																					
22	Establish Boreholes	ı																																				
23	Organic trace																																					
24	Design																																					
25	Install																																					
26	Monitor																																					

			nuary		F	ebruary		Marc	h		^ril				Ma	May	May	May	May June
0	Name	1	15	22 2	9 5	12 1	26	5 12	19 26	2	, 16	6 23	30	I	7 1	7 14 21	7 14 21 28	7 14 21 28 4	
7	Remediation of North P area						1												
28	Maintenance of Bailey Bridge & footway																		
29	Maintenance/replacement of footbridge																		
30	Removal of redundant services																		
31	Vacation of A221																		
32	Exterior renovation to A210/A214																		
33	Excavate remaining canals																		
34	Sample north bank of canal (north)																		
35	Infill canal																		
36	Sheet pile Millhead/canal junction																		
37	Excavate																		
88	Backfill																		
39	Obtain NRA approval for dredging		Ī																
40	Dredge																		
41	Tree Removal																		
42	Surface Strip																		
43	Confirmatory Sample & Analysis																		
44	Report																		
45	Installation of Boreholes																		
46	Design																		
47	Construct																		
48	Monitor																		
49	Confirmatory Sampling (under fuel tanks)																		
50	Store recovered materials in A210																		
51	Store recovered Barge																		
52	Traffic Access/services																		
53	Reinstate carpark																		

				nuar	y		F	ebru	ary			Ma	ırch				1	1				May				Ju								
ID	Name	1	J	15	22	29	5	12	19	2	6 5	12	2 1	9 2	6 2	2	5-1	6	23	30	7	14	21	28	4	11	18	3 25	2	9	, 16	3 2	3 30)
54	Remediation of T area (inc. lagoons & ponds)							1									The second second												in the second			1		
55	Surface excavations/classify arisings																																	
56	Classify washpond arisings																																	
57	Decontaminate pipework																	***																
58	Gunpowder stove clearance											100000000000000000000000000000000000000										H.												
59	Confirmatory testing																																	
60	Poly sheeting & hoggin placement																																	
61	Excavation of filled canals	,																						į										
62	Confirmatory sampling & analysis											***************************************																						
63	Report																													1				
64	Refill with H8 mound from stockpile																										-							
65	Top Soil, re-seed/re-plant to EN instructions																																	
66	Road reinstatement																					1												

			_	nuary			F	Feb	ruar	ry	_			Ma	rch			-	_	1	il		1			May	T = :	Τ-	_	_	_	144	14 4	14 40	14 40 05	14 40 05 0	14 40 05 0	14 40 05 0	Julie 2 0 16	Julie 2 0 16 2	June 10 10 10 10 10 10 10 10 10 10 10 10 10	14 40 05 0 16 33 30
ID 07	Name	1	ŏ	15	22	29	5	1	12	19	2	26	5	12	2 ′	19	26	2	1 8	9	16	23	30)	7	14	21	1 2	28	4		111	11 1	11 18	11 18 🙇	11 18 20 2	11 18 25 2 3	11 18 25 2 9	11 18 25 2 9 10	11 18 25 2 9 10 2	11 18 25 2 9 10 25	11 18 25 2 9 16 23 30
67	Remediation of M Area	'																																								
68	Removal of cordite/asbestos arisings																																									
69	Tender																																									
70	Removal																																									
71	Excavation of canals/reinstatement of road																																									
72	Gasworks Remediation																																									
73	Excavation																																									
74	Sampling & analysis	,																																								
75	Remediation																																									
76	Surface confirmatory sampling & analysis																																									
77	Report																																									
78	Remediation of incorporator railways	ı																																								
79	Remediation																																									
80	Sampling & analysis																																									
81	Report																		- Since																							
82	Removal of redundant services																											Sanahio all Island														
83	Decontamination of drains																																-									
84	L157																																									
85	L153						110																																			
86	L148																						Marin Company																			
87	L145/L149												With the contract of																													
88	Associated buildings			-																		,																				
89	Removal of slabs							***************************************																																		
90	Demolition of buildings																																									
91	Ditching of waterways																																									
92	Gritblasting/ painting of steelwork																																									
93	L157																					***																				
94	L153																																									

			1	uary		F	ebrua	ary		1	Marc	h							May				Jun	June	June	June		June	
ID	Name	1	[-1	15 2	2 29	5	12	19	26	5	12	19	26	2 5	5 , 1	6 23	30	7	14	21	28	28 4	28 4 11	28 4 11 18	28 4 11 18 25	28 4 11 18 25 2	28 4 11 18 25 2 9	28 4 11 18 25 2 9	28 4 11 18 25 2 9 3 23
95	L148																												
96	L149																												
97	Wall and Floor removal/paint stripping																												
98	L153																												
99	L148																												
100	L145																												
101	L149																	-											
102	Roofing																												
103	L145																												
104	L157																												
105	L145 (bays)																												
106	Boreholes	ı																											
107	Design																												
108	Construct																												
109	Monitor																												
110	Confirmatory analysis in buildings																												
111	Sampling & Analysis															¥													
112	Report																												

				nı	uary			Febr	ruary			٨	/larch				il				May				Jun	е				`			
ID	Name		1	0	15 2	2 2	9 5	5 1	12 1	19 2	26	5	12 19	9 26	2	Ts	116	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	
13	Remediation of L Area	ı		1																								1					
14	Excavation & backfill of canals										-																						
15	Confirmatory Sampling & Analysis									-																							
16	Report																																
17	Grassland Management		-																						-								
18	Demolition of buildings																																
19	Boreholes																																
20	Design																	110															
21	Construct																																
22	Monitor																																
23	Work to selected buildings																																
24	Rationalise Services																																
25	Remove Redundant Services																																

		nuary February March ii May June	9 , 16 2
6	Name Remediation of S Area	1 5 15 22 29 5 12 19 26 5 12 19 26 2 5 16 23 30 7 14 21 28 4 11 18 25 2	
27	Excavate Newtons Pool Canals		
 28	Exploratory excavation trenches		
20 29	EN Approval		
	Barge removal		
130			
131	Excavation of Canals- North of M area		
132	Tree Clearance		
133	Excavation of Canals- North of T area		
134	Tree Clearance		
135	General Surface Scrape of excavated canals		
136	Sampling & Analysis		
137	Report		
138	Removal of Residual Tips		
139	Edmondsey Sluice		
140	Cattlegate bridge		
141	Establish monitoring boreholes		
142	Design		
143	Construct		
144	Monitor		
145	Rehabilitation of Areas to EN & EH approval		
146	Newtons Pool		
147	Press House		
148	Barrel Graveyard		
149	Nitration Lagoons		
150	General		
151 ′	Confirmatory Sampling, analysis & reporting		
152	Newtons Pool		
153	Press House		

				nuar				ebru				Marc				7	il				Лау				Jun				7	•		
ID	Name	1	ื่ช	15	22	29	5	12	19	26	5	12	19 2	26 2	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9 1	16 2	23	30 6
154	Edmondsey Sluice										Ì					į								1:								
155	Barrel Graveyard																															
156	Nitration Lagoons																															
157	General																															
158	Removal of Redundant Services				1												1															

				nuary			Feb	oruary	1		Mar	rch				1			May				June				_	_	τ,
ID	Name	1	Ţ	15	22	29	5	12	19 2	6 5	12	19	26	2	51	16 2	3 3	0 7	14	21	28	4	11	18	25	2	9,	.6	2
159	Remediation of N Area										1					-													
160	Site Strip																												
161	Establish Waste Handling	■																					1						
162	Temporary Road																												
163	Fill in Pits																												
164	Maintenance to Cattlegate bridge																												
165	Improve Entrance from crooked mile		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															# # # # # # # # # # # # # # # # # # #											
166	Demolish unwanted buildings																	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2											
167	Rationalise Services																				,								
168	Clean up after Waste Operations																												
169	Establish monitoring boreholes	₩																											
170	Winning of clay for general site works																												
171	H Area																												
172	Lining Canals																												
173	Burning Ground																												
174	Confirmatory sampling, analysis & reporting																												
175	Fencing									THE																			
176	Removal of Cattlegate Bridge															Ak/A													
177	Installation of foot bridge																			隐觀	I								
178	Rehabilitation													1															
179	Handover to LVRPA																												

			7	uary	1.		Feb	ruary			Ma	arch				il				N	Лау				Jur	ne							
ID	Name	1] - İ	15	22 2	29	5	12 1	9 2	26 5	5 1	2 1	9 2	6 2	TE	. 1	6 2	3 3	30	7	14	21	28	4	11	18	25	2	9	, ,6	23	30	1
180	Remediation of Burning Ground																																
181	Canals - surface scrape & batter sides																																
182	Establish temporary road																																
183	Remove Entrance Road																																
184	Services rationalisation																																
185	Site Strip to Gravel/Undisturbed Strata																																
186	Transport Arisings to N Area																																
187	Sweep Area with Metal Detector										-																						
188	Re-establish clay membrane & top soil																																
189	Carry out EH/EN remediation proposals																																
190	Confirmatory analysis of soil samples																																
191	Asphalt treatment								į		*																						

			т	านอ	al y		-	_		er	oru	ai y	_	\vdash	Ц,			Ma	101	_	_		_		-		-					_	Ma	41	-		-T	_	1	ine	40		-1	_	T	5	. 7	5.	~	T	-	7
ID	Name	1	ب ا	1:	5	22	2	9	5	1	12	11	19	2	26	5	5	1:	2	19	12	26	2	1	5	11	16	23	3	30	1	7	1.	4	21	20	3	4	11	Щ	18	2		2	1 5	اراد	10	21	2:	1		3
192	Maintenance of Bridges	J																																																		
193	SMC/Trust Approval		To an annual con-									Section 1														***																										
194	Design/Tender																									-																										
195	Construction																																																			
196	Remediation of River Banks					_																																														
197	Sheet Piling & Excavations East Bank of Horsemill Strea																																																	OR SHIP OF STREET		
198	Operations West Bank Horsemill Stream																																																			
199	Ditching of On-Site Rivers & Canals																																				as found mount															
200	Removal of Canal Material at Intersection of Waterways																																				*															
201	NRA/EN Proposals to Raise Site Water Levels																																																			
202	Reinstatement of Banks																																																			
203	Completion of T Area Works																																																			
204	Remediation under Steam Pipes		÷									+																																								
205	Survey & Peg-Out Routes																																																			
206	Tender/mobilise																																																			
207	Site Strip/disposal outside Heronry																																																			
208	Site Strip/disposal inside Heronry																																																			
209	Sample Analysis																																																			
210	Surface Treatment inside Heronry																																																			
211	Surface Treatment outside Heronry																																																			
212	Buildings & Mounds						-							+		-		Ť				3 /																														
213	Mounds - Sample & Analyse																																																			
214	Scheduled Area Buildings																																																			
215	Other Buildings			8 9 9 9 9 9 9 9												-																																				
216	Tree Clearance from Mounds & Buildings																																																			
217 -	Building Information Packs																																																		-	
218	Services Survey						***************************************																																													

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 5TH MAY 1994 AT 09.00 HOURS

Pres]	Mr Bob Watts :W.S. Mr Graham Vincent :R.O. Mr Peter Mayell :R.O.	A. Copies:	Mr.D.Stanners Mr.D.Coyle Mr.A.Ford Mr.D.Bone Mr.R.Pallett	:M.O.D. :M.O.D.P.E. :ARCH. :CIVIX :D.W.S.
<u>1.</u>	MAT	ΓERS ARISING - FROM MEET	ring of 15th n	//ARCH 1994	ACTION
1.1	(1.1)	Drain Sampling Draft ESG 37/93 - replaced around incorporating Mills p shores necessary. Sampling material one per 12m³ for expensive process.	oroceeding. Sheet of drains one per	ting and hydraulic run, surrounding	R.O.
1.2	(1.2)	Explosives Testing A programme of sampling mais required. All samples will W.S.A to prepare - SMC received from R.O.	l be screened for	explosives.	W.S.A.
1.3	(1.3)	Building Index Revised versions to be issue	d as changes are	made.	R.O.
1.4	(1.4)	R.O. to prepare ESG 17/92 a Issues as identified by W.S.A			R.O.
1.5	(1.5)	Photographic record Vacation student used at £5 complete. Negatives indexed Index to CLI required. Vide	d, not photos yet	but system in place	R.O.
1.6	(1.6)	Remediation in P Area - pra Archaeological evaluation co E.C.C. All residual work co	omplete. Report	received from	W.S.A.
1.7	(1.7)	Barrel Graveyard investigate Sampling undertaken by L.G. and L.G.C. W.S.A to issue	G.C. Results rece	-	W.S.A.

- 1.8 (1.8) Gas Bottles uncovered in Tips disposal complete. Method statement 78/93 for Tetryl pipe issued. Collection of pipes from T Area progressing. Existing water mains need not be cut into sections before heat treatment. Part of lump sum work. R.O.
- 1.9 (1.9) Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance.

 Liaison committee is considering this area for further work, planting etc... SMC required.

 W.S.A.
- 1.10 (1.10) L157 2nd stage strip out in progress. Listed building consents required for work other than maintenance, replacement like with like or safety aspects. R.O document for E.H. listing explosives contamination matters issued. Scaffold erection, grit blasting and painting approved. Visit by Paul Edwards 3rd May 1994 E.H. extension of work carried out in L157 extended to L145, L148 W.S.A. and L153. Floor removal method to be assessed. R.O.
- 1.11 (1.11) "Asbestos in Buildings" Review of procedures by W.S.A carried out 28th March 1994. Ditto Air Monitoring report expected.. Personnel air monitoring regime in place. W.S.A.
- 1.12 (1.12) <u>Damage to fence in Grand Magazine</u> area will require replacement with buried chain link. Competitive quote approved SMC application submitted, work to commence when SMC received. Provision for placement of otter pipes to be made. R.O.
- 1.13 (1.13) Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify.

 R.O to contact local roofing / jobbing firms for prices to repair Mrs.Bellamys roof. Slates on A201/A202 to be refixed.

 R.O.
- 1.14 (1.14) Tetryl Area. Analysis of samples from Horsemill Stream bank indicated explosives within open space levels. Asbestos now is prime concern. Proceed with exposing gunpowder stove remains. Which will then be sheeted and covered with hoggin if confirmatory sampling and analysis is satisfactory. Proceed with clearance and excavation generally. Canal clearance to have Archaeological supervision. Necessity to sheet pile bank for excavation to be resolved. Lagoon cleaned out awaiting pump down to inspect. R.O to excavate trench to determine extent of borrow pit fill and threat to pollarded willows and adjacent buildings. Further asbestos removal and scraping required.

 R.O.

 W.S.A.

1.15	(1.16)	Preparation of <u>accurate drawings and pegging out of Asbestos</u> <u>clad steam main routes</u> based on existing drawings, on-site observations, R.C.H.M.E survey drawing and Archaeologist input undertaken by MKS from 28th March 1994. R.O. backup required regarding site information etc. R.C.H.M.E survey disk received. Approaching completion on site. Drawings to be	ARCH.
		marked up with assumed routes to be proved on site. WSA to collate results, instigate remediation and negotiate acceptable levels with EHO.	W.S.A. MKS. R.O.
1.16	(1.18)	Comments received from <u>Fire Prevention Officer.</u> W.S.A to comment. Problem with door swings. Modifications to Electrical installation, commenced 18th April 1994.	W.S.A.
1.17	(1.19)	<u>Preparation of artefact inventory.</u> R.O draft report received. R.O. revised offer for this work approved. First items stored at South Site 29th April 1994. Barge to be transported to site, organised by archaeologist.	R.O. ARCH.
1.18	(1.20)	Adam Ford Site Archaeologist has prepared and issued the bridge report and canal/river intersections report.	ARCH.
1.19	(1.21)	Asphalt melting plant production continuing. R.O report 07.00 hor early start had improved efficiency. R.O to prepare a list of buildings with asphalt floors. R.O to dispose of arisings at no cost. MOD pay transport costs to South Site.	R.O.
1.20	(1.22)	Security High Bridge Street entrance. Barrier installed.	R.O.
1.21	(1.23)	Reports. W.S.A has informed R.O which copy reports are required WSA to check outstanding items.	d. W.S.A.
1.22	(1.24)	Waste tip sampling for explosives analysis. Present system to be reviewed Thursday 30th June 1994.	
1.23	(1.26)	R.O to engage engineer short term to complete existing services plotting. Checking by R.O then later C.A.D incorporation by MKS. Task continuing. N Area water mains required. Chessingted drawings now on site. Archaeologist is arranging copying of material in the PRO and researching drawing preservation	on
3		methods and costs.	R.O.
1.24	(1.27)	Replacement of gutter to A201/A202 with cast iron. E.H approved Work complete.	l. R.O.

- Stockpiled waste material adjacent to A210 awaiting disposal. 1.25 (1.28) Analysis revealed consistent asbestos (Crocidolite) levels. Boiler house cleaned out. Material can be used as a dilutant to explosively contaminated material > 1% if necessary. Waste classification being carried out by W.S.A. W.S.A. Safety Audit. Report received, another visit due. R.O. 1.26 (1.29) W.S.A. Newtons Pool now complete. R.O report of total works issued. 1.27 (1.29) Wagtail nest preventing further work. Canals to be cleaned out. W.S.A. Disposal to be arranged by WSA. R.O. 1.28 (1.31) R.O to carry out preliminary removal of demolition arisings and hand pick of waste/asbestos in wooded area adjacent to track south of Edmonsey Sluice. R.O reported no progress, awaiting machine availability and labour resources. R.O to investigate alternative methods and machine source. R.O. Boot wash and drainage to Island car park W.S.A have commented 1.29 (1.32) on R.O draft proposals. Works approved, but awaiting SMC. Pointing required to brickwork at drain outfall to canal. PMH R.O. SMC issued by DNH but not received. R.O to proceed. W.S.A. 1.30 (1.33) Clean/Dirty site arrangements. Implementation of proposals in hand. 6 months minimum hire on wheel wash agreed. Preparatory work proceeding. WSA instructed placement of N Area clay. Detail R.O. required. W.S.A. Copy of Explosives License Application received from R.O. This 1.31 (1.34) item long overdue. R.O to progress. H.S.E explosives inspectorate have promised to deal. H8, H10 & H7 not required. Agreed to keep H10 intact for the moment, pending EFDC approval to demolition. R.O reported H.S.E agree to change H8 magazine in application to H7. WSA agreed delay of 2 - 3 weeks to enable application to go forward with South Site application on shared costs basis. R.O. Site vehicles provision agreed. 2 new landrovers, 1 new 1.32 (1.37)
- 1.33 (1.38) R.O offered mound material from South Site for filling in T Area. W.S.A inspection revealed dubious material. W.S.A to re-inspect.

to be placed on Maestro insurance.

Maestro and used landrover delivered. 1 No. flat bed to be obtained. Transit to be returned to South Site. AF and RW

R.O.

1.34 (1.40)	Explosives analysis data capture. Output complete, further data to be added, report by R.O to be prepared.	R.O.
1.35 (1.41)	<u>Disposal of transformer</u> PCB clearance certificate required.	R.O.
1.36 (1.43)	The need to revise the present programme to take account of clean/dirty site operations, requirements of planning application and development, expenditure, use of Crooked Mile Site access and infrastructure, was discussed. W.S.A draft programme put onto software by R.O for agreement and amendment. Additional muck shifting and other plant requirements to be identified by R.O in resources plot.	R.O. W.S.A.
1.37 (1.44)	New Hill Pits 5 No. now exposed and fenced. R.O to organise sample collection for chemical analysis.	R.O.
1.38 (1.45)	<u>Fuel tanks</u> in North P Area located, exposed and removed. Sampling required after canal location and clean up.	W.S.A. R.O.
1.39 (1.46)	<u>Drying Room</u> B & CE complete. Await electrics.	W.S.A.
1.40 (1.47)	R.O to investigate <u>sewerage charges</u> under auspices of the management contract.	R.O.
1.41 (1.48)	<u>Trenching to Northern Canals</u> - replace materials as excavated so any suspect material is capped with gravel. Beware buried barge.	R.O.
1.42 (1.50)	R.O to provide 2 No. portable offices on rental, call off when required. For use in N Area, adjacent A200 or Powdermill lane. Craneage requirements to be coordinated with Wheelwash delivery.	R.O.
1.43 (1.53)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. Samples processed by R.O and LGC.	N.R.A. R.O. W.S.A.
1.44 (1.54)	Queens Mead Canals partially located and excavated, work suspended.	R.O.
1.45 (1.55)	Repairs to H Area Road and others continuing on Saturdays. SMC received for repairs in the Scheduled Monument.	
1.46 (1.56)	P.M.N. Additional W.S Atkins training visit to site arranged for 12th May 1994.	W.S.A.

- 1.47 (3.1) Urgent repair to Pumping main and water main.
 - i) Repairs to pumping main to allow pumping test by Rogers Engineers. Move pump equipment to H7.
 - ii) Repairs to water main urgent to permit dust control by sprinklers. Check out mains connection to Watermans Cottage.
 - iii) Valves and hydrants to be maintained by Terry Williams. Costs to caretaking contract.
- 1.48 (3.2) Restructuring of site labour and staff undertaken. Approval given for replacement agency foreman to overlap Friday 6th May 1994.

2. PROGRESS AND PROGRAMME

2.1 R.O have produced a monthly progress report and recast programme based on a W.S.A draft which is attached at Appendix 1 to these minutes.

3. ANY OTHER BUSINESS

3.1	Approval given to grouting contract for deep buried drains.	
	R.O to proceed.	R.O.
3.2	Works required to Watermans Cottage.	R.O.
3.3	WSA had expressed interest in RO/ESG demonstration of explosives.	R.O.
3.4	Engineering bricks, copings etc. to be collected into 168. Not to be collected from collapsed buildings and structures unless instructed.	R.O.
3.5	Bridge works to be organised by WSA. Programme implications.	W.S.A.
3.6	Carden and Godfrey are identifying anomalies between RCHME survey, MKS survey drawings and situation on the ground These can then be incorporated in the site records.	
3.7	Waste charges to be clarified by R.O.	R.O.
3.8	Purchase of 3 No. weather proofing sheets for L157 by Morris Contractors approved.	R.O.
3.9	Mrs.Bellamys dampness to be further investigated and remedied.	R.O.
3.10	R.O to obtain used replacement storage heaters for installation by McGoff & Vickers.	R.O.

3.11	Replacement of plastic fencing in unsafe locations by scaffolding purchased from Bray (to be painted) approved.	R.O.
3.12	Employment of South Site Lab Technician for cleaning duties 3 days per week (not Friday) during site hours on a trial basis at Morris Labour rate approved.	R.O.
3.13	Hydrocarbon contaminated material from Wheelwash road excavat to be transported to Chorley for trial in R.O soil remediation unit. Costs for disposal (Hazardous non special) to be rebated to R.O.	ion R.O. W.S.A.

4. DATE OF NEXT MEETING

4.1 09.00 Hours on Thursday 9th June 1994.

R.E.WATTS. 9th May 1994

MINUTES OF MEETING HELD ON SITE TUESDAY 15TH MARCH 1994 AT 09.00 HOURS

Present: Mr Bob Watts :W.S.A.

Copies: Mr.D.Stanners :M.O.D

		Ir Graham Vincent :R.O. Ir Peter Mayell :R.O.	Mr.D.Coyle Mr.A.Ford Mr.D.Bone Mr.R.Pallett	:MO.D.P.E. :ARCH. :CIVIX :D.W.S.
<u>1.</u>	MATT	ERS ARISING - FROM MEETING OF 10TH	FEBRUARY 1994	ACTION
1.1	(1.1)	Drain Sampling Draft ESG 37/93 - replaced by draft 41/93 around incorporating Mills to proceed. Shee shores required.		R.O.
1.2	(1.2)	Explosives Testing A programme of sampling mounds for chem is required. All samples will be screened fo W.S.A to prepare - awaiting issue of ESG 4, R.O. Part 2 received. SMC required.	r explosives.	R.O. W.S.A.
1.3	(1.3)	Building Index Revised versions to be issued as changes are	made.	R.O.
1.4	(1.4)	R.O. to prepare ESG 17/92 amendment for i	ssue at R.O. cost.	R.O.
1.5	(1.5)	Photographic record of C.L.I now available. photographs to be indexed and stored in Alb Video film will be edited. Index to C.L.I re approved temporary labour for indexing post R.O to confirm rate. Future photographs to taken. Adopt Adam Fords system.	oums for inspection. quired. W.S.A c.C.L.I photographs	R.O.
1.6	(1.7)	Remediation in P Area - practical completion Archaeological evaluation complete. Report E.C.C. All residual work complete. Dispos	awaited from	W.S.A.
1.7	(1.8)	Barrel Graveyard investigated. Strata of gro Sampling undertaken by L.G.C. Results recand L.G.C. W.S.A to issue report.	-	W.S.A.

(1.9)Gas Bottles uncovered in Tips disposal complete. Method 1.8 statement 78/93 for Tetryl pipe issued. Collection progressing. R.O. (1.10)Water wheel and Press House areas. Confirmatory investigation 1.9 to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. Liaison committee is considering this area for further work, R.O. W.S.A. planting etc... SMC required. L157 2nd stage strip out in progress. Listed building consents 1.10 (1.11) required for work other than maintenance, replacement like with like or safety aspects. R.O document for E.H. listing explosives E.H. contamination issues imminent. Scaffold erection, grit blasting W.S.A. and painting approved. R.O. "Asbestos in Buildings" Review of procedures by W.S.A to be 1.11 (1.12) carried out 28th March 1994. W.S.A. Damage to fence in Grand Magazine area will require replacement 1.12 (1.13) W.S.A. have raised general V.O. for work which will appear in valuation but charged to caretaking and maintenance contract. Competitive quote approved SMC application submitted, work to commence when SMC received. R.O. 1.13 (1.14) Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present priced proposals to rectify. Letchworth day work rates received for work on Mrs Bellamy's roof are high. R.O to contact local roofing / jobbing firms for prices. R.O. Tetryl Area. Analysis of samples from bank indicated explosives 1.14 (1.15) within open space levels. Asbestos now is prime concern. Proceed with exposing gunpowder stove remains. Which will then be sheeted and covered with hoggin if confirmatory sampling and analysis is satisfactory. Proceed with clearance and excavation generally. ARCH. Canal clearance to have Archaeological supervision. Necessity R.O. to sheet pile bank for excavation to be resolved. W.S.A. Air monitoring to continue until further notice. W.S.A to 1.15 (1.16) investigate third party checking. Review to be carried out R.O. 28th March 1994. W.S.A.

1.16 (1.17)	Preparation of <u>accurate drawings and pegging out of Asbestos</u> <u>clad steam main routes</u> based on existing drawings, on-site observations, R.C.H.M.E survey drawing and Archaeologist input to be undertaken by MKS from 28th March 1994. R.O. backup required regarding site information etc. R.C.H.M.E survey disk received.	ARCH W.S.A. MKS R.O.
1.17 (1.18)	<u>Disposal of bagged asbestos.</u> New arrangements proposed by W.S.A agreed. Remaining bags to be disposed of with skip loaded asbestos contaminated soil.	R.O.
1.18 (1.19)	Lecture theatre power and lights now functional. Comments received from Fire Prevention Officer. W.S.A to comment Problem with door swings. Modifications to Electrical installation tenders due 18th March 1994.	W.S.A.
1.19 (1.20)	Approval up to £2,000 received for preparation of <u>artefact inventor</u> Roger Neal will accompany Adam Ford to R.O sites to review iter which may be available. R.O to progress, report required. R.O. revised offer for this work submitted to client for approval. Barge to be transported to site, organised by archaeologist.	
1.20 (1.21)	Adam Ford Site Archaeologist has prepared and issued the <u>bridge report</u> . He is also preparing a report on canal/river intersections.	ARCH
1.21 (1.22)	Asphalt melting plant to process material possibly containing explosives. Production continuing. Bitumen addition successful in improving flow characteristics. R.O report 07.00 hours early stand improved efficiency. R.O to prepare a list of buildings with asphalt floors.	art R.O.
1.22 (1.23)	<u>Security</u> High Bridge Street entrance. Layout related to clean/dirty site proposals. TW mains connection application cancelled. SMC received for installation of barrier. Barrier held in stock pending deliveries.	
1.23 (1.24)	Reports. W.S.A informed R.O which <u>copy reports</u> are required. R.O to action remaining items and prepare an updated and edited publications list.	R.O.
1.24 (1.25)	R.O have copied <u>past waste tip method coloured results sheets</u> to W.S.A. R.O reminded to pass explosives analytical results to W.S.A as they become available. Review of method complete. Procedure 76/93 now printed with revised information on "Wet Method" and applicable factors.	R.O. W.S.A

- 1.25 (1.26) Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains and taking account of E.H. E.N and R.S.C views. The EHO has now issued guidelines on acceptable levels of Asbestos in soil. However experience has shown these levels will be difficult to achieve and each area will require individual assessment.

 W.S.A.
- 1.26 (1.27) R.O to engage engineer short term to complete existing services plotting. Checking by R.O then later C.A.D incorporation by external source. Task continuing. Chessington drawings now on site. Archaeologist is arranging copying of material in the PRO. **R.O**.
- 1.27 (1.28) Replacement of gutter to A201/A202 with cast iron. E.H approved. Work proceeding. R.O.
- 1.28 (1.30) Stockpiled waste material adjacent to A210 awaiting disposal.

 Analysis revealed consistent asbestos (Crocidolite) levels. Boiler house cleaned out. Material can be used as a dilutant to explosively contaminated material > 1% if necessary. Waste classification being carried out by W.S.A. R.O to carry out land fill search. R.O waste Disposal Audit Report to be issued to W.S.A. W.S.A.
- 1.29 (1.31) Safety Audit comments received by R.O copied to W.S.A proposals for monthly Audit Visits at £200 per visit approved. Reports to be copied to W.S.A. Visit carried out, awaiting report. W.S.A.
- 1.30 (1.32) Newtons Pool now complete. Results of explosives analysis to arisings received. Stockpiled material to be disposed of. Sluice practically complete. Canal clean out agreed. Results of confirmatory testing received. R.O draft report of total works in hand.

 W.S.A. R.O.
- 1.31 (1.33) R.O to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u>. R.O reported no progress, awaiting machine availability and labour resources. R.O to investigate alternative machine source.
- 1.32 (1.34) Boot wash and drainage to Island car park W.S.A have commented on R.O draft proposals. Works approved, but awaiting SMC.
 Pointing required to brickwork at drain outfall to canal. W.S.A.
- 1.33 (1.35) Clean/Dirty site arrangements. Implementation of proposals in hand.
 6 months minimum hire on wheel wash agreed. Preparatory work proceeding.

 W.S.A.

1.34	(1.30)	item long overdue. R.O to progress. H.S.E explosives inspectorat have promised to deal. H8, H10 & H7 not used. Agreed to keep H10 intact R.O reported H.S.E agree to change H8 magazine in application to H7.	e R.O.
1.35	(1.37)	<u>Lagoon</u> pump out in T Area and scrape complete. Sludge held in borrow pit for de-watering. Material being transported to slabs and sampled for explosives prior to disposal.	R.O.
1.36	(1.38)	Rawlings Associates have assessed <u>structural stability</u> of walls (2 No.) at Newtons Pool and inspected R.O occupied buildings and unstable structures. Reports issued. Information received on paint specification and stability of undercroft in L148.	
1.37	(1.39)	Site vehicles provision agreed. 2 landrover vehicles delivered, hire vehicle returned. R.O to replace existing 2 vans with 1 new Maestro (outstanding) and landrover (delivered). 6 months minimum hire on landrovers agreed.	R.O.
1.38	(1.40)	R.O offered mound material from South Site for filling in T Area. W.S.A inspection revealed dubious material. W.S.A will inspect further if mound exposed by R.O. At present the material would not seem worth further consideration.	
1.39	(1.41)	Instructions issued by W.S.A Re: <u>prevention of pollution by oil.</u> R.O reported absorbent material obtained to deal with spillage. R.O and W.S.A to remind <u>all</u> contractors of need to contain fuel and oil stocks. R.O to provide steel fuel trays for use by contractors	
		R.O provided costing of £55 per tray, 1200 x 1200 x 125mm. R.O have ordered. Delivery imminent.	R.O.
1.40	(1.42)	Explosives analysis data capture. Waste tip results complete, Asbestos bags to follow, then open space and residential results. Database to be interrogated.	R.O.
1.41	(1.43)	<u>Disposal of transformer</u> PCB clearance certificate required.	R.O.
1.42	(1.44)	Tennis Club Hut Work is completed. R.O to dispose of residual items if not collected this summer.	R.O.
1.43	(1.46)	The need to <u>revise the present programme</u> to take account of clean/dirty site operations, requirements of planning application and development, expenditure, use of Crooked Mile Site access and infrastructure, was discussed. W.S.A draft programme prepare R.O to put onto software for agreement and amendment. Pertmaster manuals loaned to R.O.	d. R.O. W.S.A

1.44	(1.47)	New Hill Pits, now exposed and fenced, sampling by R.O required for explosives to open space levels. Archaeologist cannot identify previous use. R.O to organise sample collection foe explosive and chemical analysis.	R.O. ARCH.
1.45	(1.48)	<u>Fuel tanks</u> in North P Area located and exposed. Specialist contract for removal required. R.O to organise.	R.O.
1.46	(1.50)	<u>Drying Room</u> B & CE complete. Await electrics.	W.S.A.
1.47	(1.51)	R.O to investigate <u>water consumption/sewerage charges and</u> <u>electric tariff</u> under auspices of the management contract.	R.O. W.S.A.
1.48	(1.52)	<u>Trenching to Northern Canals</u> - replace materials as excavated so any suspect material is capped with gravel. Beware buried barge.	R.O.
1.49	(1.54)	Services to Mrs.Bellamy to be maintained.	R.O.
1.50	(1.58)	R.O undertook to investigate port-a-cabin rental prices and purchase options. For use in N Area, adjacent A200 or Powdermill lane. Craneage requirements to be coordinated.	R.O.
1.51	(3.1)	W.S.A have ascertained situation regarding <u>Planning Permission</u> and H Area. Remediation to residential standards is required.	W.S.A.
1.52	(3.4)	<u>Demolition Contract</u> - Button have repaired damaged roof trusses. Arched timber door frames repairs outstanding.	R.O.
1.53	(3.5)	Asbestos discovered on opposite bank of Horse Mill stream. NRA dealing with this. R.O input possible on explosives aspects. Awaiting NRA.	W.S.A. N.R.A.
1.54	(3.6)	Queens Mead Canals partially located and excavated, work suspended.	R.O.
1.55	(3.7)	Repairs to H Area Road and others outstanding.	
1.56	(3.10)	W.S Atkins training visit to site rearranged for 27th April 1994.	W.S.A.
<u>2.</u> .	PROG!	RESS AND PROGRAMME	
2.1		R.O have produced a monthly progress report and recast programm based on a W.S.A draft for comment which is attached at Appendi	

1 to these minutes.

3. ANY OTHER BUSINESS

- 3.1 <u>Valves and Hydrants</u> to be maintained by Terry Williams. Costs to caretaking contract.
- 3.2 Restructuring of site labour and staff to be undertaken. Approval given to employment of agency foreman to organise and motivate dayworks labour.

4. DATE OF NEXT MEETING

4.1 09.00 Hours on Tuesday 3rd May 1994.

<u>R.E.WATTS.</u> 21st April 1994

MINUTES OF MEETING HELD ON SITE TUESDAY 10TH FEBRUARY 1994 AT 09.00 HOURS

: W.S.A.

Mr Bob Watts

Mr Graham Vincent : R.O.

Present:

Copies: Mr D. Stanners

Mr D. Coyle

: M.O.D.

CIVIX

: M.O.D. P.E.

		Mr Peter Mayell	: R.O.	Mr A. Ford Mr D. Bone Mr R. Pallett	: ARCH. : CIVIX : D.W.S.
<u>1.</u>	MAT	TERS ARISING - FROM	M MEETING OF	11TH JANUARY 1994	ACTION
1.1	(1.1)	Drain Sampling			
		Draft ESG 37/93 - repl Drain removal around	-	93 - W.S.A. to comment. s to proceed.	R.O. W.S.A.
1.2	(1.2)	Explosives Testing			
		required. All samples	will be screened for sue of ESG 4/93 I	nemical contamination is or explosives. W.S.A. Part 1 from R.O. Part 2	R.O. W.S.A.
1.3	(1.3)	Building Index			
		Revised versions to be	issued as changes	are made.	R.O.
1.4	(1.4)	R.O. to prepare ESG 1	7/92 amendment f	or issue at R.O. cost.	R.O.
1.5	(1.5)	to be indexed and store will be edited. Index to consider temporary lab	d in Albums for in o C.L.I. required our requirements f	able. Post C.L.I. photograph aspection. Video film - non urgent. W.S.A. to for indexing post C.L.I. andexed when taken. Adopt	hs R.O.
1.6	(1.6)	Dossiers of buildings id	entified for retenti	on draft document	

published. PMN finalised document published.

3			
1.7	(1.7)	Remediation in P Area - practical completion - (17th Jan 1994)	R.O. W.S.A.
1.8	(1.8)	Barrel Graveyard investigated. Strata of ground proved. Sampling undertaken by L.G.C. Results received from R.O. and L.G.C. W.S.A. to issue report.	W.S.A.
1.9	(1.9) <u>(</u>	Gas Bottles uncovered in Tips Fixed price for this work received from R.O. and approved. Draft method statement for Tetryl pipe not complete.	R.O.
1.10	(1.10)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. Liaison committee is considering this area for further work, planting etc SMC required.	R.O. W.S.A.
1.11	(1.11)	L157 2nd stage strip out in progress. Await E.H. comments on exposure of boiler house and method of paint stripping. Listed building consents required for work other than maintenance, replacement like with like or safety aspects.	E.H. W.S.A. R.O.
1.12	(1.12)	"Asbestos in Buildings" Review of procedures in hand by W.S.A.	W.S.A.
1.13	(1.13)	Damage to fence in Grand Magazine area will require replacement. R.O. to undertake under maintenance contract. W.S.A. have raised V.O. which will appear in valuation but charged to caretaking and maintenance contract. R.O. to approach Carey's new fencing contractor when on site. PMN competitive quotes being obtained.	R.O.
1.14	(1.14)	Roof works to A203. Defects on lead work to be rectified. Ponding on library roof, R.O to present proposals to rectify. Letchworth day work rates received for work on Mrs Bellamy's roof.	R.O.
1.15	(1.15)	Tetryl Area. Analysis of samples from bank indicated explosives within open space levels. Asbestos now is prime concern. Proceed with exposing gunpowder stove remains. Which will then be sheeted and covered with hoggin if confirmatory sampling and analysis is satisfactory. Proceed with clearance and excavation generally. Necessity to sheet pile bank for excavation to be resolved.	ARCH. R.O. W.S.A.
1.16	(1.16)	Air monitoring to continue until further notice. W.S.A. to investigate third party checking.	R.O. W.S.A.
1.17	(1.17)	Preparation of <u>accurate drawings of Asbestos clad steam main routes</u> based on existing drawings, on-site observations, R.C.H.M.E. survey and Archaeologist input to be undertaken by MKS. W.S.A. to arrange R.O. backup required regarding site information etc	W.S.A.

1.18	(1.18)	and results of explosive sampling. New arrangements proposed by W.S.A. agreed.	R.O.
1.19	(1.19)	Lecture theatre power and lights now functional. Comments received from Fire Prevention Officer. W.S.A. to comment. Electrics survey in hand and preparation of contract documents. Problem with door swings.	W.S.A.
1.20	(1.20)	Approval up to £2000 received for preparation of <u>artefact inventory</u> . Roger Neal will accompany Adam Ford to R.O. sites to review items which may be available. R.O. to progress, report required. Barge to be transported to site, organised by archaeologist. R.O. to submit revised offer for this work.	R.O. ARCH.
1.21	(1.21)	Adam Ford Site Archaeologist is preparing a <u>bridge report</u> . Which is in print. He is also preparing a report on canal/river intersections.	ARCH.
1.22	(1.22)	R.O. have purchased <u>asphalt melting plant</u> to process material possibly containing explosives, for hire to client. Production in hand. Bitumen addition successful in improving flow charateristics. R.O. to investigate early start late finish for this task.	R.O.
1.23	(1.23)	Security High Bridge Street entrance. Layout related to clean/dirty site proposals. TW mains connection application in hand. R.O. checked possibility of mail deliveries to Highbridge Street. Possible but leave till permanent presence at High Bridge Street. PMN SMC received.	R.O. W.S.A.
1.24	(1.24)	Reports. W.S.A. informed R.O. which <u>copy reports</u> are required. R.O. to action. First instalment received.	R.O.
1.25	(1.25)	R.O. have copied <u>past waste tip method coloured results sheets</u> to W.S.A. R.O. reminded to pass explosives analytical results to W.S.A. as they become available. Review of method complete. Procedure now being printed with revised information on "Wet Method" and applicable factors.	R.O. W.S.A.
1.26	(1.26)	Desir of call assigning to appear containing asherter contaminated	
1.26	(1.20)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains and taking account of E.H. E.N. and R.S.C. views. The EHO has now issued guidelines on acceptable levels of Asbestos in soil.	W.S.A.
1.27	(1.27)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later C.A.D. incorporation by external source. Task continuing. Chessington drawings now on site. Archaeologist is arranging copying of material in the PRO.	R.O.

1.28	(1.28)	Replacement of gutter to A201/A202 with cast iron. Order now placed with Bray. Awaiting E.H. approval. PMN approval received from E.H.	R.O.
1.29	(1.29)	Shaft by Water Mill cleaned out. R.O. reported no explosives. R.O. to fill with shingle.	R.O. ARCH.
1.30	(1.30)	Stockpiled waste material to be disposed of. Analysis revealed consistent Asbestos (Crocidolite) levels. Boiler house being cleaned out. Material can be used as a dilutant to explosively contaminated material > 1% if necessary. In dispute with S & M Re: volume calculations.	W.S.A.
1.31	(1.31)	Safety Audit comments received by R.O. copied to W.S.A. proposals for monthly Audit Visits at £200 per visit approved. Reports to be copied to W.S.A. Visit arranged.	R.O. W.S.A.
1.32	(1.32)	Newtons Pool now complete. Results of explosives analysis to arisings received. Stockpiled material to be disposed of. Sluice practically complete. Canal clean out agreed. Results of confirmatory testing received. R.O. draft report of total works in hand.	W.S.A. R.O.
1.33	(1.33)	R.O. to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u> . R.O. reported no progress, awaiting machine availability and labour resources.	R.O.
1.34	(1.34)	Boot wash and drainage to Island car park W.S.A. have commented on R.O. draft proposals. Works approved, but awaiting SMC. Pointing required to brickwork at drain outfall to canal.	w.s.a
1.35	(1.35)	<u>Clean/Dirty site arrangements</u> . Implementation of proposals in hand. PMN 6 months minimum hire on wheel wash agreed.	W.S.A.
1.36	(1.36)	Copy of Explosives License Application received from R.O. This item long overdue. R.O. to progress. H.S.E. explosives inspectorate have promised to deal. H8, H10 & H71 not used. Agreed to keep H10 intact R.O. reported HSE agree to change H8 magazine in application to H7.	R.O.
1.37	(1.37)	<u>Lagoon</u> pump out in T Area and scrape complete. Sludge held in borrow pit for de-watering. Material will be sampled. awaiting resources.	R.O.
1.38	(1.38)	Rawlings Associates have assessed <u>structural stability</u> of walls (2 No.) at Newtons Pool and inspection of R.O. occupied buildings. Report issued. Unstable structures investigated, report in hand. Information received on paint specification and stability of undercroft in L148.	W.S.A.

1.39	(1.39)	<u>Site vehicles</u> provision agreed. 2 vehicles delivered, hire vehicle returned. R.O. to replace existing 2 vans with 1 new Maestro and Bedford Flat bed. R.O. to action before next meeting. PMN 6 months minimum hire on landrovers agreed.	R.O.
1.40	(1.40)	R.O. offered mound material from South Site for filling in T Area. W.S.A. inspection revealed dubious material. W.S.A. will inspect further if mound exposed by R.O. At present the material would not seem worth further consideration.	
1.41	(1.41)	Instructions issued by W.S.A. Re: prevention of pollution by oil. R.O. reported absorbent material obtained to deal with spillage. R.O. and W.S.A. to remind all contractors of need to contain fuel and oil stocks. R.O. to provide steel fuel trays for use by contractors. R.O. provided costing of £55 per tray, 1200 x 1200 x 125mm R.O. to order 4.	R.O.
1.42	(1.42)	R.O. costs for <u>explosives analysis data capture</u> received. R.O. to proceed with hire of temp and provide proposals for acceptance.	R.O.
1.43	(1.43)	<u>Disposal of Transformer</u> PCB clearance certificate required.	R.O.
1.44	(1.44)	Tennis Club Hut Work in completed. R.O. to dispose of residual items.	R.O.
1.45	(1.45)	Erection of security lights at Highbridge Street and A203 and other electrical requirements. Contract preparation in hand by Terry Pack.	W.S.A.
1.46	(1.46)	The need to revise the present programme to take account of clean/dirty site operations, requirements of planning application and development, expenditure, use of Crooked Mile Site access and infrastructure, was discussed. This to be undertaken before next progress meeting.	R.O. W.S.A.
1.47	(1.47)	New Hill pits, now exposed and fenced, sampling by R.O. required for explosives to open space levels. Archaeologist cannot identify previous use. R.O. to organise sample collection for explosive and chemical analysis.	R.O. ARCH
1.48	(1.48)	R.O. to locate fuel tanks in North P Area. In hand.	R.O.
1.49	(1.49)	R.O. to provide <u>itemised B.T. bills</u> for 651611, 700296 and 713962. R.O. reported in hand. PMN received.	R.O.
1.50	(1.50)	Drying Room B & CE complete. Await electrics.	W.S.A.
1.51	(1.52)	R.O. to investigate <u>water consumption/charges and electric tariff</u> under auspices of the management contract. Terry Pack reviewing power consumption also. Copy of R.O. report to Mr D Stanners handed over.	R.O. W.S.A.
1.52	(1.53)	Trenching to Northern Canals - replace materials as excavated so any suspect material is capped with gravel. Beware buried barge.	R.O.

1.53	(1.34)	season.	R.O.
1.54	(1.55)	Services to Mrs Bellamy to be maintained.	R.O.
1.55	(1.56)	R.O. undertook to <u>review hire rates</u> of their equipment. R.O. to add insurance rate to specific hire items (excluding vehicles). R.O. reported in hand. PMN received.	
1.56	(3.1)	R.O. to produce February Valuation in early March to ensure payment this Financial Year.	R.O.
1.57	(3.2)	W.S.A. informed that an advisor to the emerging Trust was to be appointed and would require accommodation in A203 adjacent to present W.S.A./Archaeologists accommodation.	
1.58	(3.3)	R.O. undertook to investigate port-a-cabin rental prices and options. For use in N Area.	R.O.
<u>2.</u>	PROC	GRESS AND PROGRAMME	
2.1		R.O. have produced a monthly progress report and re-cast programme for comment which is attached at Appendix 1 to these minutes.	
<u>3.</u>	ANY	OTHER BUSINESS	
3.1		W.S.A. to ascertain situation regarding <u>Planning Permission and H Area.</u> Degree of remediation is dependent on end use.	W.S.A.
3.2		R.O. to be invited to comment on <u>Specifications/Proposals prepared by others.</u>	w.s.A.
3.3		R.O. reiterated the requirement for a <u>Drying Room</u> during the wet weather.	W.S.A. R.O.
3.4		<u>Demolition Contract</u> - Button to be instructed to repair damaged roof trusses.	R.O.
3.5		Asbestos discovered on opposite bank of Horse Mill Stream. NRA dealing with this. R.O. input possible on explosives aspects.	W.S.A. N.R.A.
3.6		Queens Mead Canals being located and excavated.	R.O.
3.7		Repairs to H Area Road in hand.	
3.8		R.M.A. undertaking L145 and L157 roof repairs.	W.S.A.
3.9		Tony Bell has visited site to inspect the Herons. He will be carrying out monthly inspections. Working arrangements as last year.	R.O.

3.10

4.1 09.00 Hours on 15th March 1994.

R. E. Watts 1st March 1994

MINUTES OF MEETING HELD ON SITE TUESDAY 11TH JANUARY 1994 AT 09.00 HOURS

: R.O.

Present:

Mr Gordon Bulloch

Copies: Mr D. Stanners : M.O.D. D.L.S.

Tiese		Mr Graham Vincent Mr Peter Mayell Mr Bob Watts	: R.O. : R.O. : W.S.A.	Mr D. Coyle Mr A. Ford Mr D. Bone Mr R. Pallett	: M.O.D. P.E. : ARCH. : CIVIX : D.W.S.
<u>1.</u>	MAT	TERS ARISING - FROM	MEETING OI	F 4TH NOVEMBER 1993	ACTION
1.1	(1.1)	Drain Sampling			
		Draft ESG 37/93 - W.S. from R.O.	A. to comment.	(PMN) awaiting copy	R.O. W.S.A.
1.2	(1.2)	Explosives Testing			
		A programme of samplin required. All samples w to prepare - awaiting issu	ill be screened	for explosives. W.S.A.	R.O. W.S.A.
1.3	(1.3)	Building Index			
		Revised versions to be is	sued as changes	are made.	R.O.
1.4	(1.4)	R.O. to prepare ESG 17	/92 amendment	for issue at R.O. cost.	R.O.
1.5	(1.6)	to be indexed and stored	in Albums for C.L.I. required ents for indexir	- non urgent. W.S.A. will	R.O.
1.6	(1.7)	Dossiers of buildings identification CIVIX. Walton House put This task now extended to E.H. requirements for a continuous	roposals have be cover all build	een circulated by R.M.A. lings and remains to meet	CIVIX

1.7	(1.8)	Remediation in P Area - approaching completion - (17th Jan 1994)	R.O. W.S.A.
1.8	(1.9)	Barrel Graveyard investigated. Strata of ground proved. Sampling undertaken by L.G.C. Results received from R.O. and L.G.C. Issue report when Asbestos in soil issue resolved.	W.S.A.
1.9	(1.10)	Gas Bottles uncovered in Tips Fixed price for this work received from R.O. and approved. Draft method statement for Tetryl pipe received and commented on.	R.O.
1.10	(1.11)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. Liaison committee is considering this area for further work, planting etc	R.O. W.S.A.
1.11	(1.12)	L157 2nd stage strip out in progress. Sampling approved by W.S.A. Fill / undisturbed horizon around undercroft to be determined and sampled. L157 undercroft cleared. Draft incident report: ESG 77/93 received and commented on. Await E.H. comments on exposure of boiler house and method of paint stripping. Paul Morris to prepare costs and schedule of rates for remaining Incorporating Mills.	E.H. W.S.A. R.O.
1.12	(1.13)	"Asbestos in Buildings" Review of procedures in hand by W.S.A. No further clearance tests. List of buildings not yet cleared by R.O. in hand.	W.S.A. R.O.
1.13	(1.14)	Damage to fence in Grand Magazine area will require replacement. R.O. to undertake under maintenance contract. W.S.A. have raised V.O. which will appear in valuation but charged to caretaking and maintenance contract. R.O. to approach Carey's fencing contractor when on site.	R.O.
1.14	(1.15)	Roof works to A203. Defects on lead work rectified, slate fixing on A201, A202 and A200 complete. Ponding on library roof, R.O. to present proposals to rectify.	R.O.
1.15	(1.16)	<u>Tetryl Area</u> - some analysis results available. Approval to further sampling for explosives analysis to open space levels approved, results awaited. Construction of bank to Horse Mill Stream to be ascertained by R.O. NRA to be consulted when further information is to hand. Di Mathias marked up drawing identified 4 pipes to be investigated. Waste is being processed. Excavation around archaeological remains proceeding.	ARCH. R.O.
1.16	(1.17)	Air monitoring to continue until further notice. Results summary received and distributed to E.H.O. W.S.A. to investigate third party checking.	W.S.A. R.O.

1.17	7 (1.18)	Preparation of <u>accurate drawings of Asbestos clad steam main routes</u> based on existing drawings, on-site observations, R.C.H.M.E. survey and Archaeologist input to be undertaken by MKS, subject to cost. W.S.A. to arrange. R.O. backup required regarding site information etc	W.S.A.
1.18	3 (1.19)	R.O. reported on progress relating to <u>disposal of bagged asbestos</u> and results of explosive sampling. New arrangements proposed by W.S.A. R.O. to investigate implementation.	R.O.
1.19	9 (1.20)	Lecture theatre power and lights now functional. Comments received from Fire Prevention Officer. W.S.A. to comment, presentation by R.C.H.M.E. on 21st January 1993. Electrics survey in hand and preparation of contract documents. Problem with door swings.	W.S.A.
1.20	(1.21)	Approval up to £2000 received for preparation of <u>artefact inventory</u> . Roger Neal will accompany Adam Ford to R.O. sites to review items which may be available. R.O. to progress, report required. Barge to be transported to site.	R.O. ARCH.
1.2	1 (1.22)	Adam Ford Site Archaeologist will now carry out the task of preparing bridge report. Progressing.	ARCH.
1.22	2 (1.23)	R.O. have purchased <u>asphalt melting plant</u> to process material possibly containing explosives, for hire to client. Production in hand.	R.O.
1.23	3 (1.24)	Security module in place at High Bridge Street entrance. W.S.A. to obtain quotes for security barrier. Portable toilet in place. Layout related to clean/dirty site proposals. TW mains connection application in hand. R.O. to check possibility of mail deliveries to Highbridge Street.	R.O. W.S.A.
1.2	4 (1.25)	Reports. W.S.A. informed R.O. which <u>copy reports</u> are required. R.O. to action.	R.O.
1.2	5 (1.26)	R.O. have copied <u>past waste tip method coloured results sheets</u> to W.S.A. R.O. reminded to pass explosives analytical results to W.S.A. as they become available. Review of method complete. R.O. to resolve "wet factor" with David Malcolm.	W.S.A. R.O.
1.2	6 (1.27)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains. This work to be held pending consultations with E.H.O., R.S.C. and W.S.A. L.G.C. sampling in N Area complete, results indicate persistent Asbestos levels. W.S.A. to discuss with E.H.O. acceptable levels of Asbestos in soil.	W.S.A.
1.2	7 (1.28)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later C.A.D. incorporation by external source. R.O. reported P Area complete. Task continuing.	g. R.O.

1.28	(1.29)	Replacement of gutter to A201/A202 with cast iron. Order now placed with Bray.	R.O.
1.29	(1.30)	Shaft by Water Mill cleaned out. R.O. reported rubble removed. R.O. to sample soil for open space analysis.	R.O. ARCH.
1.30	(1.31)	Stockpiled waste material to be disposed of. Analysis revealed consistent Asbestos (Crocidolite) levels. Boiler house to be cleaned out. Material can be used as a dilutant to explosively contaminated material > 1%.	W.S.A.
1.31	(1.32)	Safety Audit comments received by R.O. copied to W.S.A. proposals for monthly Audit Visits at £200 per visit approved. Reports to be copied to W.S.A.	R.O. W.S.A.
1.32	(1.33)	Newtons Pool now complete. Results of explosives analysis to arisings received. Stockpiled material to be disposed of. Sluice practically complete. R.O. clean up in hand. Canal clean out and confirmatory testing agreed. Eventually report of total works required.	R.O.
1.33	(1.34)	R.O. to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u> . R.O. reported no progress, awaiting machine availability and labour resources.	R.O.
1.34	(1.35)	Boot wash and drainage to Island car park W.S.A. have commented on R.O. draft proposals. Works approved.	W.S.A
1.35	(1.36)	<u>Clean/Dirty site arrangements</u> . W.S.A. to comment on R.O. draft proposals.	W.S.A.
1.36	(1.37)	Copy of Explosives License Application received from R.O. This item long overdue. R.O. to progress. H.S.E. explosives inspectorate have promised to deal. H8, H10 & H71 not used. Agreed to keep H10 intact R.O. to change H8 magazine in application to H7 if possible.	R.O.
1.37	(1.38)	Lagoon pump out in T Area and scrape in progress. Sludge held in borrow pit for de-watering. Material will be sampled, awaiting resources.	R.O.
1.38 .	(1.39)	Conisbee have assessed <u>structural stability</u> of walls (2 No.) at Newtons Pool and inspection of R.O. occupied buildings. Information has been circulated. Report issued. Unstable structures to be investigated.	W.S.A.
1.39	(1.40)	Site vehicles provision agreed. 2 vehicles delivered, hire vehicle returned. R.O. to replace existing 2 vans from R.O. stock of more recent vintage at same cost. R.O. to action before	

R.O.

next meeting.

(1.41) R.O. offered mound material from South Site for filling in T Area. 1.40 W.S.A. inspection revealed dubious material. W.S.A. will inspect further if mound exposed by R.O. At present the material would not seem worth further consideration. (1.42) Instructions issued by W.S.A. Re: prevention of pollution by oil. 1.41 R.O. reported absorbent material obtained to deal with spillage. R.O. and W.S.A. to remind all contractors of need to contain fuel and oil stocks. R.O. to provide steel fuel trays for use by contractors. R.O. to provide costing. R.O. 1.42 (1.43) R.O. costs for explosives analysis data capture received. R.O. to proceed with hire of temp and provide proposals for acceptance. R.O. 1.43 (1.44) Disposal of Transformer PCB clearance certificate required. R.O. (1.45) Tennis Club Hut Work in progress. 1.44 R.O. 1.45 (1.46) Erection of security lights at Highbridge Street and A203 and other electrical requirements. Contract preparation in hand by Terry Pack. W.S.A. 1.46 (1.48) The need to revise the present programme to take account of clean/dirty site operations, requirements of planning application and development. expenditure, use of Crooked Mile Site access and infrastructure, was R.O. discussed. This to be undertaken before next progress meeting. W.S.A. 1.47 (1.50) New Hill pits, now exposed and fenced, sampling by R.O. required for R.O. explosives to open space levels. Archaeologist to identify if possible. ARCH. (1.51) R.O. to locate fuel tanks in North P Area. Use metal detectors if 1.48 necessary. Await relocation of waste operations. R.O. (1.53) R.O. to provide itemised B.T. bills for 651611, 700296 and 713962. 1.49 R.O. reported in hand. R.O. 1.50 (1.54) P.M.N. <u>Drying Room</u> B & CE complete. Await electrics. W.S.A. (1.55) P.M.N. R.O.list of unstable buildings and structures received. 1.51 W.S.A. to respond. W.S.A. (1.56) R.O. to investigate water consumption/charges and electric tariff under auspices of the management contract. Terry Pack reviewing R.O. power consumption also. W.S.A. Trenching to Northern Canals - replace materials as excavated so 1.53 (3.1)any suspect material is capped with gravel. R.O. 1.54 (3.2)Complete canal clearance in the Herony protection zone before 16th January 1994 if possible. R.O.

1.55	(3.3)	Services to wirs benamy to be maintained.	K.O
1.56	(3.4)	R.O. undertook to <u>review hire rates</u> of their equipment. R.O. to add insurance rate to specific hire items (excluding vehicles).	
<u>2.</u>	PROC	GRESS AND PROGRAMME	
2.1		R.O. have produced a monthly progress report and re-cast programme for comment which is attached at Appendix 1 to these minutes.	
<u>3.</u>	ANY	OTHER BUSINESS	
3.1		R.O. to produce February Valuation in early March to ensure payment this Financial Year.	R.O.
3.2		W.S.A. informed that an advisor to the emerging Trust was to be appointed and would require accommodation in A203 adjacent to present W.S.A./Archaeologists accommodation.	
3.3		R.O. undertook to investigate port-a-cabin rental prices. For use in N Area.	
<u>4.</u>	DAT	E OF NEXT MEETING	
4.1		09.00 Hours on 10th February 1994.	

R. E. Watts 2nd February 1994

Adam Ford.

: M.O.D. D.L.S.

: M.O.D. P.E.

R.O.

Our Ref: E5275

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 7TH DECEMBER 1993 AT 09.00 HOURS

: R.O.

: R.O.

Mr Graham Vincent

Mr Peter Mayell

Present:

Copies: Mr D. Stanners

Mr D. Coyle

		Mr Bob Watts	: W.S.A.	Mr A. Ford Mr D. Bone	: ARCH. : CIVIX
<u>1.</u>	MAT	TERS ARISING - FRO	OM MEETING OF 47	ΓΗ NOVEMBER 1993	ACTION
1.1	(1.1)	Drain Sampling			
		Draft ESG 37/93 - W from R.O.	.S.A. to comment. (F	PMN) awaiting copy	R.O. W.S.A.
1.2	(1.2)	Explosives Testing			
		A programme of samples to prepare - (PMN) as	s will be screened for	explosives. W.S.A.	R.O. W.S.A.
1.3	(1.3)	Building Index			
		Revised versions to be	e issued as changes are	e made.	R.O.
1.4	(1.4)		. reported P Area upd	W.S.A. response to ate completed. (PMN) ment for issue at R.O.	R.O.
1.5	(1.5)	Original sample points when C.A.D. input reestablished, standard	esolved. Area P comp	MKS survey drawings plete, drawing register	R.O.
1.6	(1.6)	to be indexed and stor	red in Albums for insp to C.L.I. required - n	on urgent. W.S.A. will	hs

photographs to be indexed when taken.

1.7	(1.7)	Dossiers of buildings identified for retention not yet received from CIVIX. Walton House proposals have been circulated by R.M.A. This task now extended to cover all buildings and remains to meet E.H. requirements for a condition survey.	CIVIX
1.8	(1.8)	Further investigation required in Southern P Area to W.S.A. plan. Extent will depend on discussions with developers/purchasers and degree of remediation required - in hand.	M.K.S. L.G.C. R.O. W.S.A.
1.9	(1.9)	Barrel Graveyard to be investigated. Strata of ground proved. Sampling undertaken by L.G.C. Results awaited from R.O. and L.G.C. (PMN) Results to hand.	W.S.A.
1.10	(1.10)	Gas Bottles uncovered in Tips Fixed price for this work received from R.O. and approved. Draft method statement for Tetryl pipe received.	R.O. W.S.A.
1.11	(1.11)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. Liaison committee is considering this area for further work, planting etc	R.O. W.S.A.
1.12	(1.12)	L157 2nd stage strip out in progress. Sampling approved by W.S.A. Fill / undisturbed horizon around undercroft to be determined and sampled. L157 undercroft to be cleared. Draft incident report ESG 77/93 received. Await E.H. comments on exposure of boiler house and method of paint stripping. Paul Morris to prepare costs and schedule of rates for remaining Incorporating Mills.	E.H. W.S.A. R.O.
1.13	(1.13)	"Asbestos in Buildings" Review of procedures in hand by W.S.A. No further clearance tests. List of buildings not yet cleared required.	R.O.
1.14	(1.15)	Damage to fence in Grand Magazine area will require replacement. R.O. to undertake under maintenance contract. W.S.A. have raised V.O. will appear in valuation but charged to caretaking and maintenance contract.	R.O.
1.15	(1.17)	Roof works to A203. Defects on lead work rectified, slate fixing on A201, A202 and A200 complete, R.O. to inspect. Ponding on library roof R.O. to present proposals to rectify.	R.O.

1.16	(1.18)	<u>Tetryl Area</u> - analysis results available. Approval to further sampling for explosives analysis to open space levels approved. Construction of bank to Horse Mill Stream to be ascertained by R.O. NRA to be consulted when further information is to hand. Di Mathias marked up drawing identified 4 pipes to be investigated. Waste is being processed. Excavation around archaeological remains proceeding.	R.O.
		proceeding.	K.U.
1.17	(1.19)	<u>Air monitoring</u> to continue until further notice. Results summary received and distributed to E.H.O. W.S.A. to investigate third party checking.	R.O.
1.18	(1.20)	Preparation of <u>accurate drawings of Asbestos clad steam main routes</u> based on existing drawings, on-site observations, R.C.H.M.E. survey and Archaeologist input to be undertaken by MKS, subject to cost. W.S.A. to arrange. R.O. backup required regarding site information etc	W.S.A.
1.19	(1.22)	R.O. reported on progress relating to <u>disposal of bagged asbestos</u> and results of explosive sampling. Revised procedure ESG 1008/93 draft for comment from R.O. (PMN) New arrangements proposed by W.S.A.	R.O. W.S.A.
1.20	(1.23)	Lecture theatre power and lights now functional. Comments received from Fire Prevention Officer. W.S.A. to comment, presentation by R.C.H.M.E. on 21st January 1993. (PMN) Electrics survey in hand and preparation of contract documents. Problem with door swings.	W.S.A.
1.21	(1.24)	Approval up to £2000 received for preparation of <u>artefact inventory</u> . Roger Neal will accompany Adam Ford to R.O. sites to review items which may be available. R.O. to progress, report required. (PMN) Barge to be transported to site.	R.O. ARCH.
1.22	(1.25)	Adam Ford Site Archaeologist will now carry out the task of preparing bridge report. Progressing.	ARCH.
1.23	(1.26)	R.O. have purchased <u>asphalt melting plant</u> to process material possibly containing explosives, for hire to client. Production in hand R.O. issued draft report ESG 65/93 for comment.	R.O. W.S.A.
1.24	(1.27)	Security module in place at High Bridge Street entrance. W.S.A. to obtain quotes for security barrier, R.O. to install stand pipe. Portable toilet in place. Layout related to clean/dirty site proposals. TW mains connection application in hand. R.O. to check possibility of mail deliveries to Highbridge Street.	R.O. W.S.A.
1.25	(1.28)	Reports. W.S.A. informed R.O. which <u>copy reports</u> are required. R.O. to action.	R.O.

1.26	(1.29)	R.O. have copied <u>past waste tip method coloured results sheets</u> to W.S.A. R.O. reminded to pass explosives analytical results to W.S.A. as they become available. Review of method in hand. R.O. to resolve "wet factor" with David Malcolm. Draft instruction ESG 76/93 passed for comment.	W.S.A R.O.
1.27	(1.31)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains positions set out in P.S.A. letter to R.O. of the 11th June 1993. This work to be held pending consultations with E.H.O., R.S.C. and W.S.A. L.G.C. sampling in N Area complete, results indicate persistent Asbestos levels. W.S.A. to discuss with E.H.O. acceptable levels of asbestos in soil.	W.S.A.
1.28	(1.32)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later C.A.D. incorporation by external source. R.O. reported P Area complete. R.O. to produce completed services drawing for P Area. Task continuing.	R.O.
1.29	(1.33)	Replacement of gutter to A201/A202 with cast iron, quotations required. Variations in offers resolved. Order now placed with Bray.	R.O.
1.30	(1.34)	Shaft by Water Mill cleaned out. R.O. reported rubble removed. R.O. to sample soil for open space analysis.	R.O. ARCH.
1.31	(1.35)	Stockpiled waste material to be disposed of. Analysis revealed consistent Asbestos (Crocidolite) levels. Boiler house to be cleaned out. Material can be used as a dilutant to explosively contaminated material > 1%.	W.S.A.
1.32	(1.37)	Safety Audit comments received by R.O. copied to W.S.A. proposals	W.S.A.
1.32	(1.57)	for monthly Audit Visits at £200 per visit approved. Reports to be copied to W.S.A.	R.O. W.S.A.
1.33	(1.54)	Newtons Pool now complete. Results of explosives analysis to arisings received. Stockpiled material to be disposed of. Sluice practically complete. R.O. clean up in hand. Canal clean out and confirmatory testing outstanding. PMN incident report required and eventually report of total works.	R.O.
1.34	(1.56)	R.O. to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u> . R.O. reported no progress, awaiting machine availability.	R.O.
1.35	(1.57)	Boot wash and drainage to Island car park W.S.A. have commented on R.O. draft proposals. Works approved.	W.S.A
. 1.36	(1.58)	<u>Clean/Dirty site arrangements</u> . W.S.A. to comment on R.O. draft proposals.	W.S.A.

(1.59) Copy of Explosives License Application received from R.O. This item 1.37 long overdue. R.O. to progress. H.S.E. explosives inspectorate have promised to deal H8, H10 & H71 not used. R.O. 1.38 (1.60) Lagoon pump out in T Area and scrape in progress. Sludge held in borrow pit for de-watering. Material will be sampled, awaiting resources. R.O. 1.39 (1.61) Conisbee have assessed structural stability of walls (2 No.) at Newtons Pool and inspection of R.O. occupied buildings. Information has been circulated. Draft report imminent. Unstable structures to be investigated. W.S.A. (1.62) Site vehicles provision agreed. 2 vehicles delivered, hire 1.40 vehicle returned. R.O. to replace existing 2 vans from R.O. stock of more recent vintage at same cost. R.O. to action. R.O. (1.64) R.O. offered mound material from South Site for filling in T Area. 1.41 W.S.A. inspection revealed dubious material. W.S.A. will inspect further if mound exposed by R.O. At present the material would not seem worth further consideration. 1.42 (1.67) Instructions issued by W.S.A. Re: prevention of pollution by oil. R.O. reported absorbent material obtained to deal with spillage. R.O. and W.S.A. to remind all contractors of need to contain fuel and oil stocks. R.O. to provide steel fuel trays for use by contractors. R.O. to provide costing. R.O. (1.68) R.O. costs for explosives analysis data capture received. R.O. to 1.43 provide proposals for acceptance. R.O. 1.44 (1.69) Instructions for disposal of transformer issued. Others on site to be identified. Costs from specialist company received. R.O. reported removal imminent. R.O. 1.45 (1.70) VO. issued for Tennis Club Hut erection. Weather delay, dimension problem, hut delivered but not erected. R.O. 1.46 Erection of security lights at Highbridge Street and A203 and other electrical requirements to be considered. (PMN) Contract preparation in hand by Terry Pack. W.S.A. 1.48 (3.2)The need to revise the present programme to take account of clean/dirty site operations, requirements of planning application and development, expenditure, use of Crooked Mile Site access and infrastructure, was R.O. discussed. This to be undertaken before next progress meeting. W.S.A.

Hire of security guard for Highbridge Street gate requested by W.S.A.

No cost advantage using Reliance Security in place of Bray.

1.49

(3.3)

1.50	(3.4)	New Hill pits, now exposed and fenced, sampling by R.O. required for explosives to open space levels. Archaeologist to identify if possible. Pending R.O. to report.
1.51	(3.6)	R.O. to <u>locate fuel tanks</u> in North P Area. Use metal detectors if necessary. Await relocation of waste operations.
1.52	(3.8)	R.O. reported sign production and fixing is complete.
1.53	(3.9)	R.O. to provide <u>itemised B.T. bills</u> for 651611, 700296 and 713962. R.O. reported in hand.
1.54	(3.12)	P.M.N. <u>Drying Room</u> B & CE complete. Await electrics.
1.55	(3.13)	P.M.N. R.O.list of <u>unstable buildings and structures</u> received. W.S.A. to respond.
1.56	(3.15)	R.O. to investigate <u>water consumption/charges and electric tariff</u> under auspices of the management contract. (PMN) Terry Pack reviewing power consumption also.
		TOTAL AND DOCUMENT OF THE STATE
<u>2.</u>	<u>PROG</u>	GRESS AND PROGRAMME
2.1	PROG	Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment, Trust.
		Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and
2.1		Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment Trust.
2.1 3.		Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment trust. OTHER BUSINESS Trenching to Northern Canals - replace materials as excavated so
2.13.3.1		Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment trust. OTHER BUSINESS Trenching to Northern Canals - replace materials as excavated so any suspect material is capped with gravel. Complete canal clearance in the Herony protection zone before
2.13.3.13.2		Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment Trust. OTHER BUSINESS Trenching to Northern Canals - replace materials as excavated so any suspect material is capped with gravel. Complete canal clearance in the Herony protection zone before 16th January 1994 if possible.
2.13.3.13.23.3	ANY	Programme against which progress is being measured is to be recast to take account of land disposals, developers requirements and establishment trust. OTHER BUSINESS Trenching to Northern Canals - replace materials as excavated so any suspect material is capped with gravel. Complete canal clearance in the Herony protection zone before 16th January 1994 if possible. W.S.A. will write to M.O.D. to clarify services to Mrs Bellamy. R.O. undertook to review hire rates of their equipment. R.O. to

R.O. ARCH.

R.O.

R.O.

R.O.

W.S.A.

W.S.A.

W.S.A.

R. E. Watts 6th January 1994

09.00 Hours on 11th January 1994.

4.1

MINUTES OF MEETING HELD ON SITE TUESDAY 4TH NOVEMBER 1993 AT 09.00 HOURS

Present:		Mr Graham Vincent Dr Gordon Bulloch Mr Peter Mayell Mr Bob Watts : R.O. : R.O. : R.O. : R.O. Mr D. Coyle Mr D. Bone Mr D. Bone Mr A. Ford		: M.O.D. D.L.S. : M.O.D. P.E. : CIVIX : ARCH.	
<u>1.</u>	MAT	TERS ARISING - FROM M	EETING OF	F 2ND SEPTEMBER 1993	ACTION
1.1	(1.1)	Drain Sampling			
		Report ESG28/93 issued. D W.S.A to comment - outsta		3 and ESG41/93 issued.	W.S.A.
1.2	(1.2)	Explosives Testing			
		A programme of sampling required. All samples will to prepare - outstanding. (S	be screened f	for explosives. W.S.A.	W.S.A.
1.3	(1.4)	Building Index		e way	
		Revised versions to be issue	d as changes	are made.	R.O.
1.4	(1.5)	Updating of original C.L.I. Clayton Report. R.O. report			W.S.A.
1.5	(1.6)	Original sample points are twhen C.A.D. input resolved established, standard title bl	l. Area P co	mplete, drawing register	R.O.
1.6	(1.7)	Potographic record of C.L.I to be indexed and stored in will be edited. Index to C.I consider labour requirement photographs to be indexed with the control of the control	Albums for i L.I. required s for indexing	- non urgent. W.S.A. will	R.O.
1.7	(1.8)	Dossiers of buildings identification CIVIX. Walton House properties task now extended to calc. H. requirements for a confidence of the confidence of the confidence of the calculation of the confidence of the calculation of	oosals have booser all build	een circulated by R.M.A. lings and remains to meet	CIVIX

1.8	(1.9)	Further investigation required in Southern P Area to W.S.A. plan. Extent will depend on discussions with developers/purchasers and degree of remediation required - in hand.	W.S.A
1.9	(1.10)	<u>Barrel Graveyard</u> to be investigated. Strata of ground proved. Sampling undertaken by L.G.C. Results awaited from R.O. and L.G.C.	L.G.C R.O. W.S.A.
1.10	(1.11)	R.O. to investigate the hire and use of remotely controlled electric saw to <u>cut gas bottles uncovered in tip</u> . R.O. stated intention to pilot drill first then saw. Procurement of saw in hand. Suitable arrangements will be made by R.O. to take account of any chlorine release. Water sprays, breathing apparatus etc procedure ESG48/93 issued. Fixed price for this work received from R.O W.S.A to respond.	W.S.A.
1.11	(1.12)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. PJ costs relating to stabilising spray received. Two further competitive costs required. Liaison committee is considering this area for further work, planting etc	R.O. W.S.A.
1.12	(1.13)	L157 2nd stage strip out in progress. alternative method of working under consideration. Sampling approved by WSA. Fill / undisturbed horizon around undercroft to be determined and sampled. L157 undercroft to be cleared. Strutting of undercroft approved.	R.O.
1.13	(1.14)	"Asbestos in Buildings" Report to be photocopied to WSA with list of completed buildings with a view to tender action for remainder	R.O.
1.14	(1.15)	Phase IV demolition contract defects and deficiencies complete. WSA to issue WSA VO to cover outstanding account and subsequent demolition.	W.S.A.
1.15	(1.16)	<u>Damage to fence in Grand Magazine</u> area will require replacement. R.O. to undertake under maintenance contract. W.S.A. to raise V.O. will appear in valuation but charged to caretaking and maintenance contract.	W.S.A. R.O.
1.16	(1.17)	R.S.C. has recommended September <u>cut rake and light rolling</u> <u>to Queens Mead</u> . Fitzjohn proceeding on competitive quotation.	R.O.
1.17	(1.18)	Approval to variation on roof works arising from poor quality roof screed on Area C. Defects on lead work to be rectified, slate fixing on A201, A202 and A200 to proceed, date required. Ponding on library roof R.O. to present proposals to rectify.	R.O.

1.18	(1.19)	<u>Tetryl Area</u> - analysis results available. Approval to further sampling for explosives analysis to open space levels approved. Construction of bank to Horse Mill Stream to be ascertained by R.O. NRA to be consulted when further information is to hand. Di Mathias marked up drawing identified 4 pipes to be investigated.	R.O.
1.19	(1.20)	Air monitoring to continue until further notice. Results summary received and distributed to E.H.O. Drawing required showing locations of "fixed" monitoring locations. P.M.N. 3 copies of monitoring results and clearance certificates now required for E.H.O. and consultant.	R.O.
1.20	(1.21)	Preparation of <u>accurate drawings of Asbestos clad steam main routes</u> based on existing drawings, on-site observations, RCHME survey and Archaeologist input to be undertaken by MKS, subject to cost. WSA to arrange. R.O. backup required regarding site information etc	W.S.A.
1.21	(1.22)	MKS or similar to undertake <u>future griding and survey work on site</u> and production of CAD survey sheets.	W.S.A.
1.22	(1.23)	R.O. reported on progress relating to <u>disposal of bagged asbestos</u> and results of explosive sampling, comments received from E.H.O. Ref: ESG/1008/93 procedure. Some positives < 1000 ppm. Further discussions required W.S.A. to respond to E.H.O. R.O. to write to Shanks & McEwan with volumes and types of solvent for disposal as special waste and tip license limitations.	R.O. W.S.A.
1.23	(1.24)	<u>Lecture theatre power and lights</u> now functional. Successful presentation 22nd October to ex RARDE employees. Comments received from Fire Prevention Officer. WSA to comment.	W.S.A.
1.24	(1.25)		R.O. ARCH.
1.25	(1.26)	Adam Ford Site Archaeologist will now carry out the task of preparing bridge report.	ARCH.
1.26	(1.29)	R.O. have purchased <u>asphalt melting plant</u> to process material possibly containing explosives, for hire to client. R.O. to advise hire rate and work procedure. Demonstration by manufacturer to R.O. successf R.O. reported delivery to W/A North Site. Commissioning at R.O. co (Excluding labour costs). 5/11/93.	

0	1.27	(1.30)	Security module in place at High Bridge Street entrance. W.S.A. to obtain quotes for security barrier, R.O. to install stand pipe. Portable toilet in place. Layout related to clean/dirty site proposals.	R.O. W.S.A.
	1.28	(1.32)	Reports. W.S.A. to inform R.O. which <u>copy reports</u> are required. Outstanding W.S.A. to action.	W.S.A.
	1.29	(1.33)	R.O. to <u>copy past waste tip method coloured results sheets</u> to W.S.A. at approximately £0.80p sheet. R.O. reminded to pass explosives analytical results to W.S.A. as they become available.	R.O.
	1.30	(1.34)	<u>Distribution list for all R.O. proposals</u> to be as P.S.A. fax to Roger Neal of 4th June 1993. W.S.A. will distribute to E.F.D.C.	
0			Environmental Officer, and his consultant, Clayton Environmental. Please note cost information to David Stanners M.O.D. and W.S.A only. W.S.A. will distribute to S.S.O. M.O.D. P.E. Tender documents not to be distributed unless instructed by W.S.A.	R.O.
	1.31	(1.35)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains positions set out in P.S.A. letter to R.O. of the 11th June 1993. This work to be held pending consultations with E.H.O., R.S.C. and W.S.A. L.G.C. sampling in N Area complete, results awaited. W.S.A. to discuss with E.H.O. acceptable levels of asbestos.	W.S.A.
	1.32	(1.36)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later C.A.D. incorporation by external source. R.O. reported P Area complete. R.O. to produce completed services drawing for P Area. Task continuing.	R.O.
	1.33	(1.38)	Replacement of gutter to A201/A202 with cast iron, quotations required. Variations in offers resolved. Order now placed with Bray.	R.O.
	1.34	(1.40)	Shaft by Water Mill cleaned out. R.O. to make safe. R.O. to use hand grab to lower level of internal rubble. In hand.	R.O. ARCH.
	1.35	(1.41)	Stockpiled waste material to be disposed of. Analysis to proceed to classify present and future waste. Alternative sites to be researched.	W.S.A.
	1.36	(1.42)	P.M.N. S.S.O. requested documents supplied by R.O. and collected - comments awaited.	
	1.37	(1.44)	Safety Audit comments received by R.O. To be copied to W.S.A. with proposals for frequency of Audit Visits which are to be considered.	R.O. W.S.A.
	1.38	(1.47)	All R.O. sample analysis to be identified by number in valuations.	R.O.

0	1.39	(1.48)	Excavate Northern P Area canal over road, temporary road installed to allow excavation of remainder of canal. Confirmatory sampling as part of Powdermill Lane Housing Site investigation.	R.O.
	1.40	(1.49)	<u>P10 Area</u> - Latest sample analysis results indicate presence of NG in excavated faces. Re-excavation required in co-ordination with Powdermill Lane Housing Site.	R.O.
	1.41	(1.50)	Powdermill Lane Housing. Future fill stripping and demolition of A230, 1, 2 & 4 buildings to be resolved with developers and client. P.M.N. consultation procedure in hand, date required for completion. Tender procedure for demolition to be progressed by R.O.	R.O. W.S.A.
0	1.42	(1.52)	Accumulated material from cordite area which contains minimal shards of cordite sampled for asbestos content to determine disposal route. Area formed in truncated cone shape. Spray paint used to mark grids L.G.C. sampling complete. Results awaited.	R.O. W.S.A.
	1.54	(1.54)	Newtons Pool now complete. Remaining clay and silt to be sorted. Football found, report awaited and results of analysis. Carey started 18th October 1993. R.O. set up syphon between Cornmill Stream and Old River Lea. W.S.A. to consider chemical sampling of silt and gave approval to limited explosives sampling by R.O.	R.O.
	1.55	(1.56)	R.O. to obtain costings for procurement of a <u>rotary suction floor cleaner</u> . R.O. reported on order correct machine awaited.	R.O.
	1.56	(1.57)	R.O. to carry out <u>preliminary removal of demolition arisings</u> and hand pick of waste/asbestos in wooded area adjacent to track south of <u>Edmonsey Sluice</u> . R.O. reported no progress.	R.O.
0	1.57	(3.1)	Boot wash and drainage to Island car park W.S.A. to comment on R.O. draft proposals.	W.S.A
	1.58	(3.2)	<u>Clean/Dirty site arrangements</u> . W.S.A. to comment of R.O. draft proposals.	W.S.A.
	1.59	(3.3)	Copy of Explosives License Application received from R.O. This item long overdue. R.O. to progress.	R.O.
	1.60	(3.4)	<u>Lagoon</u> pump out in T Area and scrape in progress. Sludge held in borrow pit for de-watering	R.O.
	1.61	(3.6)	Conisby have assessed <u>structural stability</u> of walls (2 No.) at Newtons Pool and inspection of R.O. occupied buildings. Some information received W.S.A. to circulate.	W.S.A.

1.62	(3.7)	<u>Site vehicles</u> provision agreed. 2 vehicles delivered, hire vehicle returned. R.O. to replace existing 2 vans from R.O. stock of more recent vintage at same cost.	R.O.
1.63	(3.8)	Comments on ESG 5/93 part 1 made by W.S.A. do not necessitate re-issue. 3 sets of Part 2, as amended, requested for W.S.A. & E.H.O.	n o
1.64	(3.9)	R.O. offered mound material from South Site for filling in T Area. W.S.A. inspection revealed dubious material. W.S.A. will inspect further if mound exposed by R.O. At present the material would not seem worth further consideration.	R.O.
1.65	(3.10)	<u>Copier</u> delivered and installed. Rental will appear in valuations. Charge of 0.9p per copy will be applied.	
1.66	(3.11)	Camera equipment supplied. Rental charge to be proposed by R.O.	R.O.
1.67	(3.13)	Instructions issued by W.S.A. Re: <u>prevention of pollution by oil</u> . R.O. reported absorbent material obtained to deal with spillage. R.O. and W.S.A. to remind <u>all</u> contractors of need to contain fuel and oil stocks.	R.O.
1.68	(3.14)	R.O. proposals and costs for <u>explosives analysis data capture</u> in hand.	R.O.
1.69	(3.17)	Instructions for <u>disposal of transformer</u> issued. Others on site to be identified. Awaiting costs from specialist company.	R.O.
1.70	(3.18)	VO. issued for Tennis Club Hut erection. No request by R.M.A. yet.	R.O.
	(3.19)	Instruction for <u>removal of security lights and associated cable</u> and fittings issued. Erection of security lights at Highbridge Street and A203 and other electrical requirements to be considered.	W.S.A. R.O.
	(3.20)	Instructions to remove and treat <u>ivy and stumps from building 103</u> issued. Arrangements in hand.	R.O.
1.71	(3.22)	W.S.A to draft visitors procedure. In hand.	W.S.A.

2. PROGRESS AND PROGRAMME

2.1 R.O. produced a monthly progress report and programme for comment which is attached at Appendix 1 to these minutes.

3. ANY OTHER BUSINESS

3.1	A detailed discussion took place regarding waste sampling and analysis. W.S.A. are concerned to undertake only that analysis absolutely necessary. The large body of evidence available should now be considered and a revision to procedure enacted if appropriate. This approach is to be applied to the procedures of classification of waste following analysis. The present arrangements, given the experiences of the last 10 months, would seem to be too onerous. R.O. to discuss aspects with their safety officer, W.S.A. to write to H.S.E.	R.O. W.S.A
3.2	The need to revise the present programme to take account of clean/dirty site operations, requirements of planning application and development, expenditure, use of Crooked Mile Site access and infrastructure, was discussed. This to be undertaken before next progress meeting.	R.O. W.S.A.
3.3	Hire of <u>security guard for Highbridge Street gate</u> requested by W.S.A. This person to be capable of booking in and out vehicles, ascertaining if vehicles are fully loaded with waste on exit and control of general traffic/personnel through the gate. This will release Bray employees from unskilled work.	R.O.
3.4	New Hill pits, now exposed and fenced, sampling by R.O. required for explosives to open space levels. Archaeologist to identify if possible.	R.O. ARCH.
3.5	Administrative Support R.O. requested admin support be reassessed due to additional load from site presence of Archaeologist and W.S.A. W.S.A. responded any increase in resources must be funded by R.O.	R.O.
3.6	R.O. to <u>locate fuel tanks</u> in North P Area. Use metal detectors if necessary.	R.O.
3.7	R.O. reported previous use of <u>Ammonium Nitrate</u> on site was minimal with the exception of T Area where Ammonia was used in the production of Nitric Acid.	
3.8	R.O. to provide progress report on sign production and fixing.	R.O.
3.9	R.O. to provide itemised B.T. bills for 651611, 700296 and 713962.	R.O.
3.10	W.S.A. agreed R.O. proposals for <u>propping arrangements to undercroft</u> in L157.	R.O.
3.11	R.O. to investigate production of <u>waste tickets</u> to minimise repetitive and time consuming form filling.	R.O.
3.12	P.M.N. <u>Drying Room</u> quotations received. W.S.A. to respond.	W.S.A.

3.13	P.M.N. R.O.list of <u>unstable buildings and structures</u> received. W.S.A. to respond.	W.S.A.
3.14	P.M.N. information on computer rental received. W.S.A. to respond.	W.S.A.
3.15	R.O. to investigate water consumption/charges and electric tariff under auspices of the management contract.	

4. DATE OF NEXT MEETING

4.1 09.00 Hours on 7th December 1993.

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE TUESDAY 5TH OCTOBER 1993 AT 08.00 HOURS

Present:		Dr Gordon Bulloch : R Mr Peter Mayell : R	.O. Coj .O. .O. V.S.A.	pies: Mr D. Stanners Mr D. Coyle Mr D. Bone Mr A. Ford	: M.O.D. D.L.S. : M.O.D. P.E. : CIVIX : ARCH.
<u>1.</u>	MAT	TERS ARISING - FROM MEE	TING OF 2NI	O SEPTEMBER 1993	ACTION
1.1	(1.1)	- Drain Sampling			
		Report ESG28/93 issued. Draft W.S.A to comment.	ESG37/93 and	I ESG41/93 issued.	W.S.A.
1.2	(1.2)	- Explosives Testing			
		A programme of sampling mourequired. All samples will be sto prepare - outstanding.			W.S.A.
1.3	(1.3)	R.O. to provide details of past R.O. reported in hand. P.M.N.			
1.4	(1.4)	- Building Index			
		Revised version issued.			R.O.
1.5	(1.5)	Updating of original C.L.I. rep Clayton Report. R.O. reported			W.S.A.
1.6	(1.6)	Original sample points are to be when C.A.D. input resolved. drawing register is required and drawing register established.	Area P comple	te W.S.A. stated a	R.O.
1.7	(1.7)	Photographic record of C.L.I. to be indexed and stored in Albuill be edited. P.M.N. index will consider labour requirement	oums for inspecto C.L.I. requi	ction. Video film red - non urgent W.S.A.	

R.O.

photographs to be indexed when taken.

0	1.8	(1.8)	Dossiers of buildings identified for retention not yet received from CIVIX. Walton House proposals have been circulated by R.M.A. This task now extended to cover all buildings and remains to meet E.H. requirements for a condition survey.	CIVIX
	1.9	(1.9)	Further investigation required in Southern P Area to W.S.A. plan. Extent will depend on discussions with developers/purchasers and degree of remediation required.	W.S.A
	1.10	(1.10)	Barrel Graveyard to be investigated. Strata of ground to be proved by 1 No. excavator trial pit then area to be gridded for sampling. R.O. reported griding nearly complete.	R.O. W.S.A.
	1.11	(1.11)	R.O. to investigate the hire and use of remotely controlled electric saw to cut gas bottles uncovered in tip. R.O. stated intention to pilot drill first then saw. Procurement of saw in hand. Suitable arrangements will be made by R.O. to take account of any chlorine release. Water sprays, breathing apparatus etc procedure ESG48/93 issued. W.S.A. requested fixed price for this work.	R.O.
	1.12	(1.12)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance. R.O. to inform what estimated costs by PJ relating to stabilising spray.	R.O. W.S.A.
	1.13	(1.13)	Incorporating Mills strip out nearing completion. Some work in L157 and L149 outstanding 2nd stage strip out agreed with English Heritage. L149 to be completed first (Paul Morris + 3 and Bray labourers) then proceed with 2nd stage in L157 and coring to ascertain construction and contamination.	R.O.
(,	1.14	(1.14)	Update on redrafting of "Asbestos in Buildings" report required. Not received - R.O. to chase, now urgent. Redrafted report handed to W.S.A.	R.O.
	1.15	(1.15)	Phase IV demolition complete contractor to be brought back to rectify defects and deficiencies. Outstanding, Particularly bolting down of sump plates.	
	1.16	(1.16)	Damage to fence in Grand Magazine area will require replacement. R.O. to undertake under maintenance contract. W.S.A. to raise V.O. will appear in valuation but charged to caretaking and maintenance contract	R.O.
7.77	1.17	(1.17)	R.S.C. has recommended September cut, rake and light rolling. R.S.C. letter of 14 July circulated. R.O. to obtain competitive quotations from Bray and Fitzjohn. P.M.N. quotes received, instructions to proceed issued.	R.S.C. R.O.

1.18	(1.18)	Approval to variation on roof works arising from poor quality roof screed on Area C. R.O. to provide details of guarantee and retention. Defects on lead work to be rectified, slate fixing on A201, A202 and A200 to proceed, date required. P.M.N. ponding on library roof R.O. to present proposals to rectify.	R.O.
1.19	(1.19)	R.O. proposal ESG24/93 approved by W.S.A. License received from N.R.A. to excavate > 300 mm. Work proceeding screen off hire excavation to proceed to 900 mm depth. Quality of lagoon water sampled prior to approval by N.R.A. to disposal.	R.O.
1.20	(1.20)	Air monitoring to continue until further notice. Results summary received and distributed to E.H.O. P.M.N. drawing required showing locations of "fixed" monitoring locations.	R.O.
1.21	(1.22)	R.O. to produce drawings (which can be incorporated onto C.A.D. survey sheets) of all sampling and soil removal relating to the asbestos contaminated ground below asbestos insulated steam pipe lines including initial work. It may be layers of drawings showing sampling and excavation works will be necessary. W.S.A. reported some steam line location information outstanding on areas in SSSI. Where asbestos visible strip soil to W.S.A. outline method statement before sampling. Destination of stripped soil to be investigated. Use of R.O. South Site staff discussed. P.M.N. W.S.A. to make arrangements for these drawings.	R.O. W.S.A
1.22	(1.22)	R.O. to produce drawings (which can be incorporated onto C.A.D. survey sheets) of all tip areas discovered, extent of removal and sequence of future operations. This work to be included in the site works programme. Site survey 1:2500 plans to be marked up by A.F. This information to form the basis of S.M.C. applications. P.M.N. W.S.A. to make arrangements for these drawings.	R.O. W.S.A ARCH
1.23	(1.23)	R.O. reported on progress relating to disposal of bagged asbestos and results of explosive sampling. P.M.N. comments received from E.H.O. Ref: ESG/1008/93 procedure. Some positives < 1000 ppm. Further discussions required W.S.A. to respond to E.H.O.	W.S.A.
1.24	(1.25)	R.O. to proceed with activating A203 lights and alarm system. Inspection by Fire Prevention Officer to be arranged. Lecture theatre lights and limited power to be costed. Drawings and application to F.P.O. submitted. Lecture Theatre facilities required for 22nd October 1993 P.M.N approval to proceed with	n.c
		Coteford given.	R.O.

 \bigcirc

0	1.25	(1.26)	Approval up to £2000 received for preparation of artefact inventory. P.S.A. letter of 26th May 1993 refers. R.O. to action. Visits to be made with A.F. commencing with South Site. Archaeologist has invited National Maritime Museum to inspect barges on site and at Fort Halstead. Preliminary barge report received. Roger Neal will accompany Adam Ford to other R.O. sites to review items which may be available.	R.O. ARCH.
	1.26	(1.27)	R.O. to complete short identification report on bridges including services bridges and disused pedestrian bridges. P.M.N. Adam Ford Site Archaeologist will now carry out this task.	ARCH.
	1.27	(1.28)	R.O. reported sample preparation in H10 laboratory has commenced. Power provided to kitchen/rest room.	R.O.
0	1.28	(1.29)	Removal of timber strutting to canals to enable clearance of contamination from canal banks is to await E.H. decisions. Archaeologist to prepare submission for scheduled monument consent dealing with canals. R.O. report on canals outstanding. P.M.N. R.O. report received, distributed and part of S.M.C. now submitted.	E.H. R.O. ARCH.
	1.29	(1.30)	R.O. to purchase asphalt melting plant to process material possibly containing explosives, and hire to client. R.O. to advise hire rate and work procedure. Demonstration by manufacturer to R.O. successful. R.O. reported delivery to W/A North Site imminent for commissioning at R.O. cost.	R.O.
	1.30	(1.31)	Security module in place at High Bridge Street entrance. W.S.A. to obtain quotes for security barrier, R.O. to install stand pipe. Portable toilet in place.	R.O. W.S.A.
	1.31	(1.32)	Sola Electrics to clip power cable to bridge at rear of A201. P.M.N. complete.	R.O.
	1.32	(1.33)	Reports. W.S.A. to inform R.O. which copy reports are required. Outstanding W.S.A. to action.	W.S.A.
	1.33	(1.34)	Results of explosives analysis to soil samples taken from P Area North of A234 issued. R.O. to copy all results relating to analysis for explosives to W.S.A. simultaneously with their internal distribution. To include selection of waste sample results. Also copies of despatch note to laboratory, including dates, sample numbers, locations etc required. New reporting procedure proposed by R.O. accepted by R.W. P.M.N. explosives analysis relating to T Area not received by W.S.A.	R.O

0	1.34	(1.35)	Distribution list for all R.O. proposals to be as P.S.A. fax to Roger Neal of 4th June 1993. W.S.A. will distribute to E.F.D.C. Environmental Officer, and his consultant, Clayton Environmental. Please note cost information to David Stanners M.O.D. and W.S.A only. W.S.A. will distribute to S.S.O. M.O.D. P.E.	R.O.
	1.35	(1.36)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains positions set out in P.S.A. letter to R.O. of the 11th June 1993. R.O. progress in N Area. P.M.N. This work to be held pending consultations with E.H., R.S.C. and W.S.A.	W.S.A
	1.36	(1.37)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later C.A.D. incorporation by external source. R.O. reported P Area complete. R.O. to produce completed drawing for P Area. Task continuing.	R.O.
	1.37	(1.38)	R.O. reply of 10th August 1993 to P.S.A. letter of the 17th June regarding performance of South Site Laboratory and binding turn around times for the various explosives analysis requires clarification. This now resolved. Recording form agreed.	R.O.
	1.38	(1.41)	Replacement of gutter to A201/A202 with cast iron, quotations required. Variations in offers to be resolved.	R.O.
	1.39	(1.43)	Chipped timber off site, logs to be stockpiled. R.O. reported in hand. Storage near E10. P Area trees to be cut long.	R.O.
	1.40	(1.44)	Shaft by Water Mill cleaned out. R.O. to make safe. R.O. to use hand grab to lower level of internal rubble.	R.O. ARCH
	1.41	(1.45)	Stockpiled waste material to be disposed off. Analysis to proceed to classify present and future waste. Alternative sites to be researched.	W.S.A
	1.42	(1.46)	Visit by S.S.O. M.O.D. P.E. rearranged 16th September 1993 due to operational requirement. R.O. to make arrangements to weigh, photograph and record cordite and burn on burning ground. R.O. reported Cordite burnt. P.M.N. S.S.O. requested documents supplied by R.O. and collected - comments awaited.	R.O.
	1.43	(3.1)	R.O. to provide sketch of sample positions and depths in H12 and H8 and H7 mounds. P.M.N. provided.	R.O.
	1.44	(3.2)	R.W. agreed to R.O. obtaining a costing for a Safety Audit by an independent accredited organisation. Following visit by M.O.D. P.E. such safety audits maybe carried out in house by M.O.D. Following visit to site by Safety Audit Organisation a questionnaire is being completed by R.O.	R.0.

1.45	(3.3)	R.W. reminded R.O. that copies of all time sheets (R.O. and contractors), invoices, plant sheets and muckaway tickets are to be provided. variation orders will be renumbered and revised charging arrangements operative from 6th September 1993.	R.O.
1.46	(3.4)	Asbestos strip out of buildings (not externals) to proceed.	R.O.
1.47	(3.5)	All R.O. sample analysis to be identified by number in valuations.	R.O.
1.48	(3.6)	Excavate Northern P Area canal over road, sample and backfill. P.M.N. N.R.A. approval to pump out received, canal pumped out and scraped, temporary road installed to allow excavation of remainder of canal.	R.O.
1.49	(3.7)	P10 Area - Latest sample analysis results indicate presence of NG in excavated faces. Re-excavation required in co-ordination with Powdermill Lane Housing Site.	R.O.
1.50	(3.8)	Future fill stripping and demolition of A230,1,2 & 4 buildings to be resolved with developers and client. P.M.N consultation procedure in hand. Tender preparation by R.O.	W.S.A.
1.51	(3.9)	R.O. to organise overtime working on screening operations if weather satisfactory. No overtime necessary due to wet weather P.M.N. screen now off site.	R.O.
1.52	(3.10)	Accumulated material from cordite area which contains minimal shards of cordite to be tested for asbestos content to determine disposal route. Area to be formed in truncated cone shape. Spray paint used to mark grids L.G.C. to sample. P.M.N. L.G.C. sampling complete. Results awaited.	R.O. L.G.C. W.S.A.
1.53	(3.11)	Scaffolding required to carry out strip out and clean to L149 R.O. to obtain quotes. Quote approved. P.M.N. cleaning complete in Tower.	R.O.
1.54	(3.12)	Newtons Pool preparations in hand. Work at Pool now complete. Remaining clay and silt to be sorted. Football found. P.M.N. report awaited and results of analysis. Carey to start on 18th October 1993. R.O. to set up a syphon between Cornmill Stream and Old River Lea.	R.O.
1.55	(3.13)	R.O. to provide a copy of Brays order to screen material for R.O. use. Received.	R.O.
1.56	(3.14)	R.O. to obtain costings for procurement of a rotary suction floor cleaner. R.O. reported on order P.M.N. correct machine awaited.	

1.57 (3.15) R.O. to carry out preliminary removal of demolition arisings and hand pick of waste/asbestos in wooded area adjacent to track south of Edmonsey Sluice. R.O. reported no progress.

2. PROGRESS AND PROGRAMME

2.1 R.O. produced a monthly progress report and programme for comment which is attached at Appendix 1 to these minutes.

3. ANY OTHER BUSINESS

3.1	Boot wash and drainage to Island car park W.S.A. to comment on R.O. draft proposals.	W.S.A
3.2	Clean/Dirty site arrangements. W.S.A. and R.O. to discuss proposals.	R.O. W.S.A.
3.3	Copy of Explosives License Application received from R.O. This item long overdue. R.O. to progress.	R.O.
3.4	R.O. progress Lagoon pump out in T Area and scrape.	R.O.
3.5	Future staffing of project to end of October discussed and agreed.	
3.6	Conisby instructed to assess structural stability of walls (2 No.) at Newtons Pool and inspection of R.O. occupied buildings. Results awaited.	W.S.A.
3.7	Site vehicles provision agreed. P.M.N. 2 No. vehicles delivered, hire vehicle returned. R.O. to summarise arrangements in a memo. P.M.N. received.	R.O.
3.8	P.M.N. comments on ESG 5/93 part 1 made by W.S.A. 3 No. R.O. sets of Part 2, as amended, requested for W.S.A. & E.H.O.	R.O.
3.9	R.O. offered mound material from South Site for filling in T Area. W.S.A. to arrange a visit with Ed Andrews and sampling by L.G.C.	
3.10	Copier delivered and installed. Rental will appear in valuations.	
3.11	P.M.N. camera equipment supplied.	
3.12	P.M.N. W.S.A. comments made on the following:	R.O.

3.12	ESG 57/93 - Roof Repairs to L157. ESG 1014/93 - Strip out to L157 ESG 38/93 - Asbestos Removal P Area. ESG 54/93 - Coring Building A230 - A234. ESG 5/93 - Buildings Part 1 ESG 61/93 - Sampling Results P10. ESG 49/93 - NG Finds Trial Trenches North P Area. ESG 59/93 - Demolition of Buildings A230 - A234.	R.O.
3.13	Instructions issued by W.S.A. Re: prevention of pollution by oil. Absorbent material to be obtained by R.O. to deal with any incident.	
3.14	P.M.N. R.O. to present proposals and costs for explosives analysis data capture.	
3.15	Works to No.5 Walton Gardens and grass cutting requested.	R.O.
3.16	P.M.N. note on volility of NG received from R.O.	
3.17	Instructions for disposal of transformer issued. Others on site to be identified.	R.O.
3.18	VO. issued for Tennis Club Hut erection.	R.O.
3.19	Instruction for removal of security lights and associated cable and fittings issued.	R.O.
3.20	Instructions to remove ivy and stumps from building 102 issued.	R.O.
3.21	Information regarding visit by RARDE employees 22nd October 1993 and escorting requirements issued to R.O.	R.O.
3.22	W.S.A to draft visitors procedure.	
<u>4.</u>	DATE OF NEXT MEETING	
4.1	09.00 Hours on 4th November 1993.	

R. E. Watts 2nd November 1993

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE THURSDAY 2ND SEPTEMBER 1993 AT 08.00 HOURS

Copies: Mr D. Stanners

Mr D. Coyle

Mr D. Bone : CIVIX

: M.O.D. D.L.S.

: M.O.D. P.E.

R.O.

: R.O.

: R.O.

: R.O.

Mr Graham Vincent

Mr Roger Neal

will be edited.

Mr Peter Mayell

Present:

1.7

		Mr Bob Watts	: W.S.A.	Mr A. Ford	: ARCH.
1.	MAT	ΓERS ARISING - FRO	OM MEETING OF 20	TH JULY 1993	ACTION
1.1	(1.1)	- Drain Sampling			
		Report ESG28/93 issue W.S.A to comment.	ed. Draft ESG37/93 ar	nd ESG41/93 issued.	W.S.A.
1.2	(1.4)	- Explosives Testing			
			pling mounds for chems will be screened for early.		W.S.A.
1.3	(1.5)	R.O. to provide detail R.O. reported in hand	s of past Tetryl finds a	around L134.	R.O.
1.4	(1.6)	- Building Index			
		Revised version issued	i.		R.O.
1.5	(1.7)		CLI report to await W. reported P Area upda	_	W.S.A.
1.6	(1.8)	when CAD input resol	s are to be plotted on Notice of Notice and Standard title	e P.S.A. stated a	R.O. W.S.A.

(1.10) Photographic record of CLI now available. Post CLI photographs

to be indexed and stored in Albums for inspection. Video film

0	1.8	(1.11)	Dossiers of buildings identified for retention not yet received from CIVIX. Walton House proposals have been circulated by R.M.A. This task now extended to cover all buildings and remains to meet E.H. requirements for a condition survey.	CIVIX
	1.9	(1.12)	Further investigation required in Southern P Area to W.S.A. plan. Extent will depend on discussions with developers/purchasers and degree of remediation required.	W.S.A
	1.10	(1.13)	Barrel Graveyard to be investigated. Strata of ground to be proved by 1 No. excavator trial pit then area to be gridded for sampling.	R.O. W.S.A.
	1.11	(1.14)	R.O. to investigate the hire and use of remotely controlled electric saw to cut gas bottles uncovered in tip. R.O. stated intention to pilot drill first then saw. Procurement of saw in hand. Suitable arrangements will be made by R.O. to take account of any chlorine release. Water sprays, breathing apparatus etc Post meeting note procedure ESG48/93 issued for comment.	R.O.
	1.12	(1.15)	Water wheel and Press House areas. Confirmatory investigation to await removal of road which is located on fill. Road removal will proceed on completion of Newtons Pool Sluice. Condition survey of buildings 103 and 104 will dictate approach to clearance.	R.O. W.S.A.
	1.13	(1.16)	Incorporating Mills strip out nearing completion. Some work in L157 and L149 outstanding 2nd stage strip out to be agreed with English Heritage.	R.O.
	1.14	(1.17)	Update on redrafting of "Asbestos in Buildings" report required. Not received - R.O. to chase, now urgent.	R.O.
	1.15	(1.18)	Phase IV demolition complete contractor to be brought back to rectify defects and defficiencies.	
	1.16	(1.20)	Damage to fence in Grand Magazine area will require replacement. R.O. to undertake.	R.O.
	1.17	(1.21)	RSC has recommended September cut, rake and light rolling. RSC letter of 14 July circulated. P.M.N. R.O. to obtain compeditive quotations from Bray and Fitzjohn.	R.S.C. R.O.
	1.18	(1.22)	Approval to variation on roofworks arising from poor quality roof screed on Area C. R.O. to provide details of guarantee and retention. Defects on lead work to be rectified P.M.N. slate fixing on A201, A202 and A200 to proceed.	R.O.

.

1.19	(1.24)	R.O. proposal ESG24/93 approved by W.S.A. License received from N.R.A. to excavate > 300 mm. Work proceeding. When cordite area complete, screen can be moved to T area. Quality of lagoon water sampled prior to approval by N.R.A. to disposal.	R.O.
1.20	(1.25)	Air monitoring to continue until further notice. Results summary received and distributed to E.H.O.	R.O.
1.21	(1.26)	R.W. and G.V. to visit Chessington to view drawings. P.M.N. Archaeologist Adam Ford to be invited to attend. Arranged for 29th September 1993.	W.S.A. R.O. ARCH.
1.22	(1.27)	R.O. to produce drawings (which can be incorporated onto CAD survey sheets) of all sampling and soil removal relating to the asbestos contaminated ground below asbestos insulated steam pipe lines including initial work. It may be layers of drawings showing sampling and excavation works will be necessary. W.S.A. reported some steam line location information outstanding on areas in SSSI. Where asbestos visible strip soil to W.S.A. outline method statement before sampling. Destination of stripped soil to be investigated.	R.O. W.S.A
1.23	(1.28)	R.O. to produce drawings (which can be incorporated onto CAD survey sheets) of all tip areas discovered, extent of removal and sequence of future operations. This work to be included in the site works programme. Site survey 1:2500 plans to be marked up by A.F. This information to form the basis of S.M.C. applications.	R.O. W.S.A. ARCH.
1.24	(1.29)	R.O. reported on progress relating to disposal of bagged asbestos and results of explosive sampling. P.M.N. comments received from E.H.O. Ref: ESG/1008/93 procedure. Some positives < 1000 ppm.	R.O.
1.25	(1.30)	R.O. to proceed with activating A203 lights and alarm system. Inspection by Fire Prevention Officer to be arranged. Lecture theatre lights and limited power to be costed.	R.O.
1.26	(1.31)	inventory. P.S.A. letter of 26th May 1993 refers. R.O. to action. Visits to be made with A.F. commencing with South Site.	R.O. ARCH.
1.27	(1.34)	R.O. to complete short identification report on bridges including services bridges and disused pedestrian bridges.	R.O.
1.28	(1.35)	R.O. reported sample preparation in H10 laboratory has commenced. Power provided to kitchen/rest room.	R.O.
		•	

1.

	1.29	(1.40)	Removal of timber strutting to canals to enable clearance of contamination from canal banks is to await E.H. decisions. Archaeologist to prepare submission for scheduled monument consent dealing with canals.	E.H. ARCH.
	1.30	(1.41)	R.O. to purchase asphalt melting plant to process material possibly containing explosives, and hire to client. R.O. to advise hire rate and work procedure. Demonstration by manufacturer to R.O. successful. R.O. reported on order.	R.O.
	1.31	(1.42)	Security module in place at High Bridge Street entrance. W.S.A. to obtain quotes for security barrier stand pipe required. Portable toilet in place.	W.S.A. R.O.
	1.32	(1.43)	Sola Electrics to clip power cable to bridge at rear of A201.	R.O.
(1)	1.33 W.S.		Reports. R.W. to inform R.O. which copy reports are required.	
>	1.34	(1.45)	Results awaited of analysis to soil samples taken from P Area North of A234. R.O. to copy all results relating to analysis for explosives to W.S.A. simultaneously with their internal distribution. P.M.N. To include selection of waste sample results. Also copies of despatch note to laboratory, including dates, sample numbers, locations etc required. New reporting procedure proposed by R.O. accepted by R.W.	R.O
	1.35	(1.46)	Distribution list for all R.O. proposals to be as P.S.A. fax to Roger Neal of 4th June 1993. W.S.A. will distribute to E.F.D.C. Environmental Officer, and his consultant, Clayton Environmental. Please note cost information to David Stanners M.O.D. and W.S.A only.	R.O.
(1.36	(1.47)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains positions set out in P.S.A. letter to R.O. of the 11th June 1993. R.O. to proceed. Item 1.22 also refers.	R.O.
	1.37	(1.48)	R.O. to engage engineer short term to complete existing services plotting. Checking by R.O. then later CAD incorporation by external source. R.O. reported P Area complete.	R.O.
	1.38	(1.50)	R.O. reply of 10th August 1993 to P.S.A. letter of the 17th June regarding performance of South Site Laboratory and binding turn around times for the various explosives analysis requires clarification.	R.O.
	1.39	(3.1)	Coring through Incorporating Mills slabs in hand. P.M.N. complete. 2nd stage strip in L157 commenced.	R.O.

.

. . .

1.40	(3.2)	Coring former R.O. offices. Results complete. R.W. to into incorporate report.	R.O.
1.41	(3.3)	Replacement of gutter to A201/A202 with cast iron, quotations required.	R.O.
1.42	(3.4)	Repairs to slates A201, A202 and A200. R.O. to proceed. 1.18 refers.	W.S.A.
1.43	(3.5)	Chipped timber off site, logs to be stockpiled. R.O. reported in hand.	R.O.
1.44	(3.6)	Shaft by Water Mill cleaned out. R.O. to make safe.	R.O. ARCH.
1.45	(3.7)	Stockpiled waste material to be disposed off. Analysis to proceed to classify present and future waste. Alternative sites to be researched.	W.S.A.
1.46	(3.8)	Tony Bell visited site Re: Herons 1st September 1993. One nest still occupied. All clear to work normally.	R.O.
1.47	(3.10)	Visit by M.O.D. P.E. rearranged 16th September 1993 due to operational requirement. R.O. to make arrangements to weigh, photograph and record cordite and burn on burning ground.	R.O.
<u>2.</u>	PROG	RESS AND PROGRAMME	
2.1		R.O. produced a monthly progress report and programme for comment which is attached at Appendix 1 to these minutes.	
<u>3.</u>	ANY (OTHER BUSINESS	
3.1		R.O. to provide sketch of sample positions and depths in H12 and H8 mounds.	R.O.
3.2		R.W. agreed to R.O. obtaining a costing for a Safety Audit by an independent accredited organisation. P.M.N. following visit by M.O.D. P.E. such safety audits maybe carried out in house by M.O.D.	
3.3		R.W. reminded R.O. that copies of all time sheets (R.O. and contractors), invoices, plant sheets and muckaway tickets are to be provided. variation orders will be renumbered and revised charging arrangements operative from 6th September 1993.	R.O.
3.4		Asbestos strip out of buildings (not externals) to proceed.	R.O.
		C C	

•

3.5	All R.O. sample analysis to be identified by number in valuations.	R.O.
3.6	Excavate Northern P Area canal over road, sample and backfill.	R.O.
3.7	P10 Area - excavate to clean face when archaeology is recorded, sample and when satisfactory results obtained backfill with uncontaminated material.	R.O.
3.8	Future fill stripping and demolition of A230,1,2 & 4 buildings to be resolved with developers and client.	W.S.A
3.9	R.O. to organise overtime working on screening operations if weather satisfactory.	R.O.
3.10	Accumulated material from cordite area which contains minimal shards of cordite to be tested for asbestos content to determine disposal route. Area to be formed in truncated cone shape. Spray paint used to mark grids L.G.C. to sample.	R.O. L.G.C W.S.A
3.11	Scaffolding required to carry out strip out and clean to L149 R.O. to obtain quotes.	R.O.
3.12	Newtons Pool preparations in hand.	R.O.
3.13	R.O. to provide a copy of Brays order to screen material for R.O. use.	R.O.
3.14	P.M.N. R.O. to obtain costings for procurement of a rotary suction floor cleaner.	
3.15	P.M.N. R.O. to carry out preliminary removal of demolition arisings and hand pick of waste/asbestos in wooded area adjacent to track south of Edmonsey Sluice.	

4. DATE OF NEXT MEETING

4.1 08.00 Hours on 5th October 1993.

Trans 21/9/93.

Our Ref: UB84/72

/.....

CONTAMINATED LAND INVESTIGATION AND REMEDIATION WALTHAM ABBEY RARDE NORTH SITE

MINUTES OF MEETING HELD ON SITE TUESDAY 20 JULY 1993 AT 0800 HOURS

Present:

Mr Graham Vincent - RO

Copies:

Mr D. Stanners -MOD

Mr Gordon Bulloch - RO

Mr D. Bone - MOD
Mr A. Ford - Arch.

Mr Peter Mayell - RO Mr Bob Watts - PSA Mr David Macklin - PSA

MATTERS ARISING (From Meeting of 12 May 1993) **ACTION** 1. 1.1 (1.1) - Drain Sampling Report ESG28/93 complete and will be issued. New "procedure" RO ESG41/93 in preparation. 1.2 (1.2)- Explosives Testing New comprehensive procedure ESG39/93 (which replaces RO ESG23/93) issued in draft for comment. **PSA** 1.3 (1.3) Data packs for P Area buildings in area for sale required. Three copies initially, then 10 copies for potential purchasers. Complete 10 copies on site for collection by CIVIX 4.8.93. A programme of sampling mounds for chemical contamination is 1.4 (1.4)**PSA** required. All samples will be screened for explosives. PSA to prepare when EH requirements are received - outstanding. 1.5 (1.5) RO to provide details of NC and Tetryl finds around Incorporating RO Mills and L134. RO reported in hand. Information will be issued in 2 parts (separate areas). 1.6 (1.6) - Building Index Revised version issued, however still needs further changes and RO additions. RO reported this was a continuous procedure to reflect site changes. Dates of next revised issue 4.8.93 and 24.8.93. 1.7 (1.8) Updating of original CLI report to await PSA response to Clayton **PSA** Report.

1.8 (1.9)		RO PSA
	i) Areas P. H. L. M and T by measurement, either from site grid using co-ordinates or by dimensions from existing buildings.	
	ii) Remaining areas by inspection.	
	When information available PSA will CAD plot on MKS Survey Drawings. RO reported P Area complete and will be issued - ongoing task.	RO
1.9 (1.11)	Reference document in CLI report still not available to purchase. RO reported problems in availability. PSA stressed some importance attached to this item.	RO
1.10 (1.12)	Photographic record of CLI still not available. RO to provide. Post CLI photographs to be indexed and stored in Albums for inspection. RO reported CLI record complete. PSA to inspect when delivered to North Site.	RO
1.11 (1.14)		RMA CIVIX
1.12 (1.16)	Further trial pits required in Southern P Area to PSA plan. Extent will depend on discussions with developers/purchasers and degree of remediation required.	PSA
1.13 (1.17)	Trial pit required by hand, in drum tip in S Area, to ascertain if tip or undisturbed ground. RO to remove steel barrels. RO reported steel barrels removed. Strata of ground to be proved by 1 no. excavator trial pit then area to be gridded for sampling.	RO
1.14 (1.18)	RO to investigate the hire and use of remotely controlled electric saw to cut gas bottles uncovered in tip. RO stated intention to pilot drill first then saw. Procurement of saw in hand. Suitable arrangements will be made by RO to take account of any chlorine release. Water sprays, breathing apparatus etc. Post meeting note - Draft procedure ESG48/93 issued for comment.	RO

/.....

1.15 (1.19)	RO to mark up plan indicating extent of clearance and work still to be done in areas west of and including the road around the water wheel and press. Tree stumps to be removed. PSA to design a grid for confirmatory sampling. EH report will be of interest in respect of the canal configuration. Previous investigation did not reveal explosives contamination. Tree stumps & ivy will be treated with "Roundup" not removed. Fill under road and access requirements to be resolved. Results of condition survey of buildings important. Area pegged out.	RO PSA
1.16 (1.20)	Additional team of 3 labourers employed to carry out unskilled element and clean up of Incorporating Mills strip out. Forward programme required for all buildings for retention outstanding. PMN. RO involvement in buildings now dependent on condition surveys by others. Outstanding actions relate to internal asbestos stripouts and 2nd stage strip for incorporating mills. This work to be programmed and circulated for EH agreement.	RO
1.17 (1.21)	Update on redrafting of "Asbestos in Buildings" report required. Not received - RO to chase, now urgent.	RO
1.18 (1.22)	Phase IV demolition proceeding	
1.19 (1.23)	Update on Thames Water Connection and Chlorination of new water main required, also result of TWA bye-laws compliance inspection. Certificates for chlorination and testing required, PSA to arrange water sample for analysis on completion. Satisfactory water analysis results from LGC. RO certification outstanding (in PSA format).	RO
1.20 (1.24)	2 no. repairs to fence in New Hill done. Damage to fence in Grand Magazine area will require replacement. RO to confirm completion.	RO
1.21 (1.25)	Grass cutting in Queens Mead complete. RSC has recommended September cut, rake and light rolling. RSC letter of 14 July circulated. PMN, RO to obtain competitive quotations from Bray and Fitzjohn.	RSC RO
1.22 (1.26)	Approval to variation on roofworks arising from poor quality roof screed on Area *C'. RO to provide details of guarantee and retention.	RO
1.23 (1.27)	Excavation profiles required for services trenches in 'H' Area. Received, sample positions required.	RO
1.24 (1.28)	RO proposal ESG24/93 approved by PSA. License awaited from NRA to excavate > 300mm. Work to proceed. When cordite area complete, screen can be moved to T area.	
		/

1.25 (1.30)	Air monitoring to continue to 6 September 1993 when it will be reviewed. Results Summary received.	RO
1.26 (1.33)	RW and GV to arrange a visit to Chessington to view drawings. PMN. Archaeologist Adam Ford to be invited to attend.	PSA RO/Ar.
1.27 (1.35)	RO to produce drawings (which can be incorporated onto CAD survey sheets) of all sampling and soil removal relating to the Asbestos contaminated ground below asbestos insulated steam pipe lines including initial work. It may be layers of drawings showing sampling and excavation works will be necessary. Removal of asbestos contaminated soil to proceed in Southern P Area. This work included in the site works programme. PSA reported some information outstanding on areas in SSS1. Where asbestos visible strip soil to PSA outline method statement before sampling.	RO
1.28 (1.36)	RO to produce drawings (which can be incorporated onto CAD survey sheets) of all tip areas discovered, extent of removal and sequence of future operations. This work to be included in the site works programme. In hand.	RO
1.29 (1.37)	RO reported on progress relating to disposal of bagged asbestos and results of explosive sampling. Storage and sampling slabs cleared once and now refilled. RO to provide a summary of analytical results and quantities removed. PMN received.	RO
1.30 (1.38)	RO to ensure accommodation in A203, A201 and A202 has functioning fire escapes, notices and appliances (fire extinguishers). Ground floor windows should be capable of opening. Windows complete, escape path to rear complete, fire appliances will be transferred from existing RO accommodation. Prices to be invited from Coteford and Sola for activating the Fire alarm System and connecting A203 lights in library. Signs outstanding. RO reported complete. PSA to comment on costs for Fire Alarm System activation. PMN. RO to obtain competitive quotes for activating the lecture theatre lights and power and remainder of A203.	RO
1.31 (1.39)	Removal of two demolished building slabs on island site complete. Ancient structure revealed beneath. EH to comment. Access road (temporary) constructed. RO to remove solvent pit.	EH RO
1.32 (1.40)	Approval up to £2000 received for preparation of artefact inventory. PSA letter of 26 May 1993 refers. RO to action. RO to update 31 August. Also to inspect Powder Barge at Fort Halstead. Archaeologist has invited National Maritime Museum to inspect barges on site.	RO Ar.
		1

1.33 (1.41)	LGC engaged as explosives third party confirmatory analyst. Results awaited on first batch. LGC results to hand RO results awaited. RO report received.	
1.34 (1.42)	RO to complete short identification report on bridges including services bridges and disused pedestrian bridges.	RO
1.35 (1.43)	RO agreed to start sample preparation only in HIO laboratory. This will assist south site laboratory. RO reported HIO used from 27.7.	RO
1.36 (1.44)	Mr D Mathias has indicated three areas of possible contamination:	
	i) S16 mound (asbestos) PMN. None found after extensive excavation.	
	ii) Burning Ground by L175 (asbestos) investigated, bags of asbestos found.	RO
	iii) Pipes into river from T Area. Will be investigated in T Area remediation.	
1.37 (1.47)	PSA emphasised the need to maintain services to A221 (Directors House). RO reported on site problems relating to water and gas supplies resolved.	RO
1.38 (1.48)	Awaiting response from NRA to data base of borehole water results forwarded 27 April 1993. PMN. Response received. PSA to resolve.	PSA
1.39 (1.51)	Results of explosives analysis to initial H area service trenches required plus other discrete sampling. Incorporating Mills undercrofts for example, RO will summarise. Reported in hand.	RO
1.40 (1.52)	Removal of timber strutting to canals to enable clearance of contamination from canal banks is to await EH decisions. Archaeologist to prepare submission for consent dealing with canals	EH Ar.
1.41 (1.53)	RO to purchase asphalt melting plant to process material possibly containing explosives, and hire to client. RO to advise hire rate and work procedure. Demonstration by manufacturer to RO successful. RO reported tender procedure for procurement in hand.	RO
		/

- 1.42 (1.55) Terry Pack informs that a power supply is available from the distribution box at Highbridge Street to connect a relocated security post. A decision will be required whether to relocate the existing security kiosk (and possibly barrier) or to relocate H32 (portable office). RO to obtain costs from Sola and Coteford to connect kiosk and repair to barrier motor. Standpipe from new water main also required for drinking water. RO reported work in hand. PSA to obtain quotes for safety barrier.
- 1.43 (1.56) Redundant services to be removed from bridge 17 to rear of A203. Gas pipe removed, Sola to clip cables to bridge, live water main needed therefore to remain.
- 1.44 (1.57) Reports (my fax of 4 June 1993 refers)

Supply for record purposes one copy of:-

- ESG 1/92 Datasheet updated to eliminate manuscript table
- ESG 18A/92 Issued
- ESG 26/92 Issued
- ESG 27/92 Issued
- ESG 36/92 Issued
- ESG 3/93 Issued
- ESG 8/93 Superseded by 21/93

The following draft documents require consideration of my comments where given and issue

ESG 1/93 "instructions for Decontamination/Stripping out of L148" RO informed superseded by 1004/93. Copy to PSA.

ESG 4/93 "Presence of explosives contamination - Mounds" Parts 1 and 2. RO informed in hand.

ESG 5/93 "Presence of explosive contamination - Buildings" Parts 1 and 2. Draft Part 1 issued, part 2 in hand.

ESG 13/93 "Trial pit investigation of former Gas works area". Issued PSA to respond to EHO comments.

ESG 14/93 "Discovery of munitions on site" - issued.

ESG 15/93 "Investigation of Newton Pool". PSA to respond with RSC to EHO comments. Further procedures to follow.

ESG 19/93 "Procedure for the Disposal of Asbestos contaminated by Explosives". RO reported under revision.

ESG 21/93 "Rehabilitation of Buildings contaminated with Explosives". PSA to comment on latest draft.

ESG 23/93 "Laboratory Determination of Explosives - Residential Threshold Trigger Levels". Superseded by draft ESG 39/93 with PSA for comment.

ESG 24/93 "Procedure for the Rehabilitation of the Tetryl Area. RO reported in hand, redrafting required to include NRA requirements.

ESG 30/93 "Phase IV Demolition. Issued

ESG 28/93 "Trial Decontamination Procedures for Drains". Issued.

1.45 (3.4)	Results awaited of analysis to soil samples taken from P Area North of A234. RO to copy all results relating to analysis for explosives to PSA simultaneously with their internal distribution. PMN. To include waste sample results. Also copies of despatch notes to laboratory, including dates, sample numbers, locations etc. required.	RO
1.46 (3.6)	Distribution list for all RO proposals to be as PSA fax to Roger Neal of 4 June 1993. PSA will distribute to EFDC Environmental Officer, and his consultant, Clayton Environmental. Please note cost information to David Stanners MOD and PSA only.	RO
1.47 (3.7)	Basis of soil stripping to areas containing asbestos contaminated soil below former insulated steam mains positions set out in PSA letter to RO of 11 June 1993. RO to proceed.	RO
1.48 (3.8)	RO to engage engineer short term to complete existing services plotting. Checking by RO then CAD incorporation by PSA.	RO.
1.49 (3.12)	Further (Stage 2) stripout of Incorporating Mills awaits PSA letter to EH and EH response from Paul Edwards. PSA/RO to prepare programme of work,	RO PSA EH
1.50 (3.15)	Reply to PSA letter of 17 June regarding performance of RO South Site Laboratory and binding turn around times for the various explosives analysis awaited.	
ă	PROCEETING AND PROCEETING	

2. PROGRESS AND PROGRAMME

2.1 RO produced a monthly progress report and programme for comment which is attached at Appendix 1 to these minutes.

3. ANY OTHER BUSINESS

3.1 Coring through Incorporating Mills slabs - Machine under repair. RO RO to prepare procedure note.