

A3

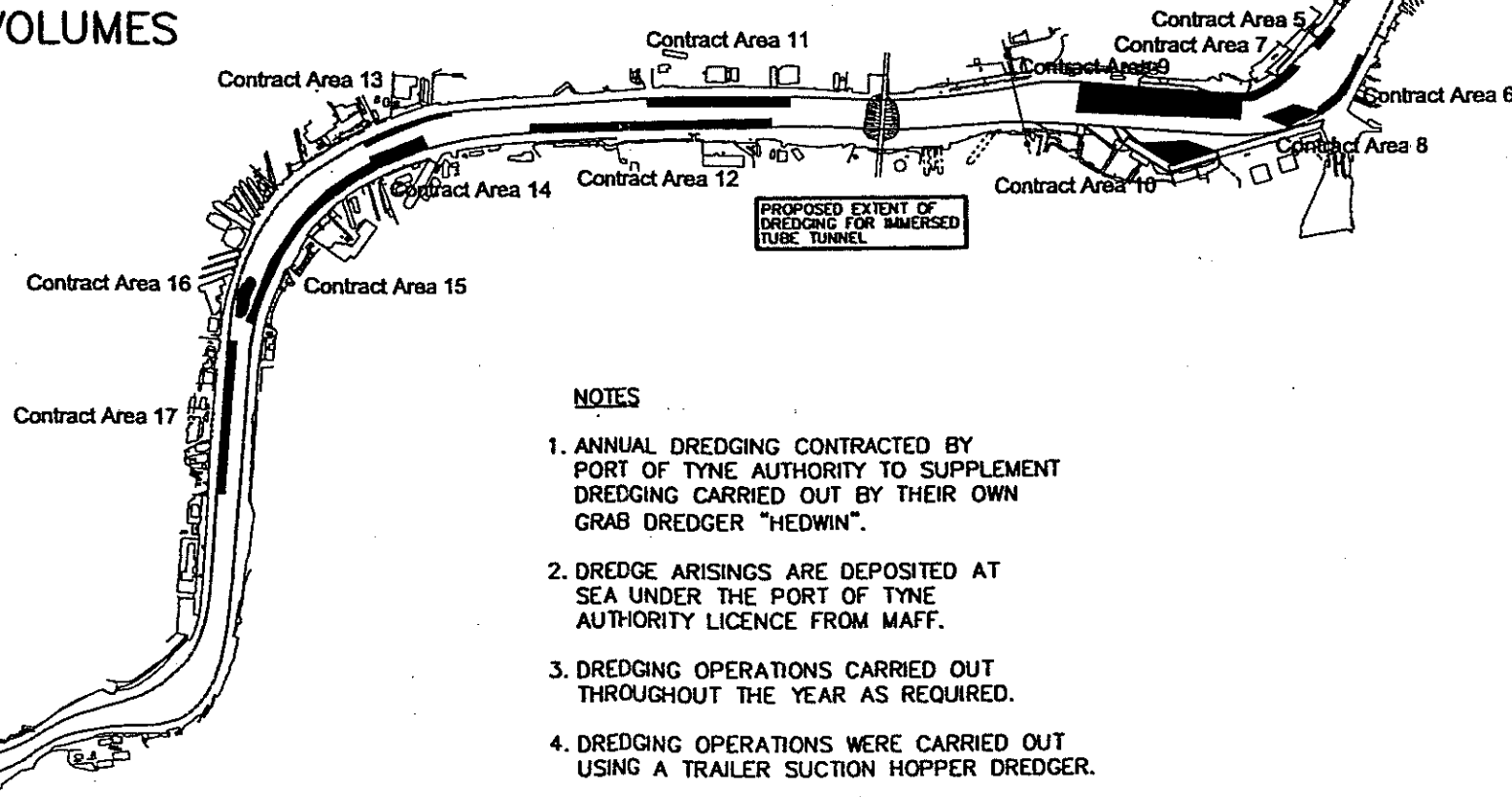
100mm - SCALE WITH CAUTION AS DISTORTION CAN OCCUR

CONTRACT AREA	YEAR												
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
1	24877	67898	NO CONTRACT DREDGING CARRIED OUT THIS YEAR	55168	NO CONTRACT DREDGING CARRIED OUT THIS YEAR	72938	19673	?	26699	41717	1512	48555	
2	-	17103		-		-	-	-	?	-	-	-	-
3	-	-		6958		-	45301	?	2750	2083	-	39570	
4	-	-		6478		-	-	?	-	764	-	-	
5	-	-		-		-	-	?	-	-	-	-	
6	-	-		-		-	-	?	-	-	-	7918	
7	-	-		-		-	-	?	-	-	-	38022	
8	-	-		-		-	-	?	-	-	-	651	
9	47774	46697		20633		78496	34488	?	-	4167	-	53652	
10	-	-		-		-	-	?	-	-	-	2950	
11	-	-		-		-	-	?	-	-	-	13638	
12	-	-		-		-	-	?	-	-	-	19291	
13	-	-		-		-	-	?	-	-	-	6249	
14	-	29472		-		-	-	?	-	-	-	-	
15	23603	-		-		-	17499	?	-	-	-	45030	
16	21216	-		-		-	-	?	-	-	-	-	
17	-	-		-		-	-	?	-	-	-	-	
TOTAL	117470	161170	0	96864*	0	151434	116961	53494	29449	48731	71023**	237504	

TABLE OF ANNUAL DREDGE VOLUMES

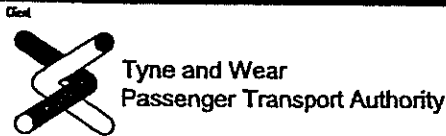
* TOTAL ANNUAL DREDGE AREA INCLUDES 2 EXTRA VOLUMES OF 7147 AND 480m³ OF WHICH THE DREDGE LOCATIONS ARE UNKNOWN.

** TOTAL ANNUAL DREDGE AREA INCLUDES 3 EXTRA VOLUMES OF 9351, 13513 AND 8625m³ OF WHICH THE DREDGE LOCATIONS ARE UNKNOWN.



NOTES

1. ANNUAL DREDGING CONTRACTED BY PORT OF TYNE AUTHORITY TO SUPPLEMENT DREDGING CARRIED OUT BY THEIR OWN GRAB DREDGER "HEDWIN".
2. DREDGE ARISING ARE DEPOSITED AT SEA UNDER THE PORT OF TYNE AUTHORITY LICENCE FROM MAFF.
3. DREDGING OPERATIONS CARRIED OUT THROUGHOUT THE YEAR AS REQUIRED.
4. DREDGING OPERATIONS WERE CARRIED OUT USING A TRAILER SUCTION HOPPER DREDGER.



NEW TYNE CROSSING

0	FEB '01	DB	ORIGINAL
Rev.	Date	By	Description

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ARUP HERBERT SMITH

KPMG Lamb & Edge

CONTRACT DREDGING ON RIVER TYNE 1989-2000

Drawing Status	ORIGINAL	Rev.	0
Scale	# A3 NTS	Originator	DB
Checked	TNR	Approved	TJF
Date	FEB '01		
Job No.	F4546	Drawing No.	FIGURE B1

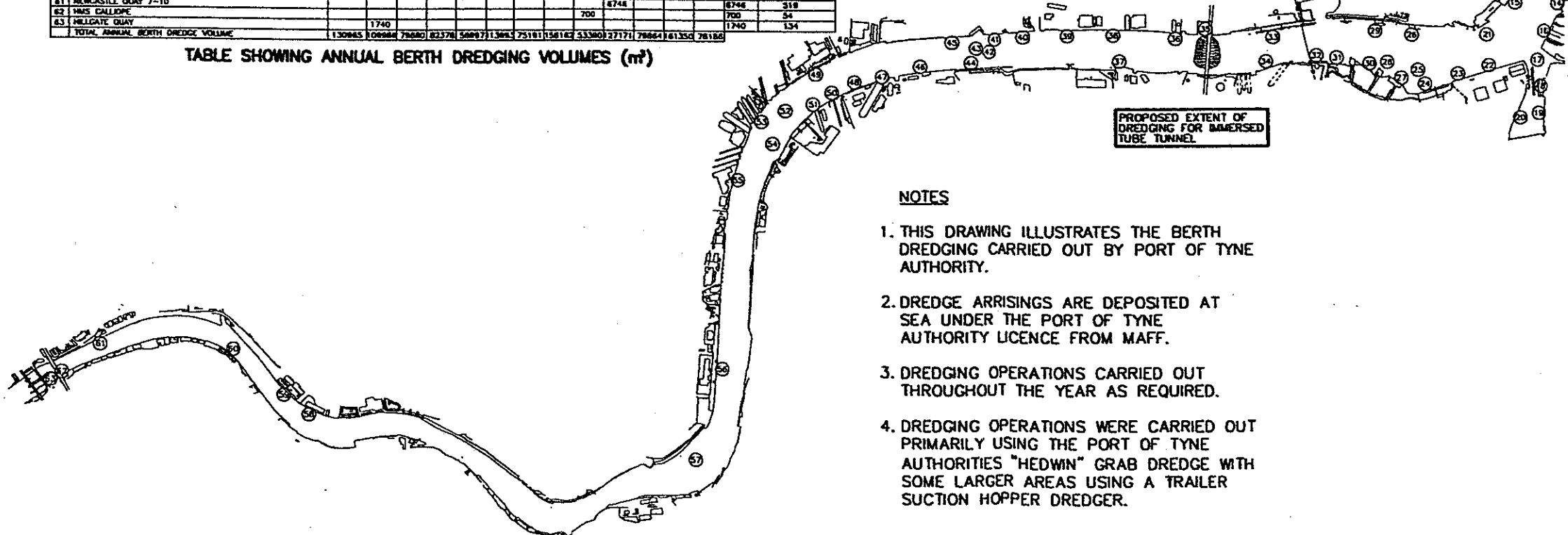
100mm - SCALE WITH CAUTION AS DISTORTION CAN OCCUR

A3

No.	LOCATION	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTAL	YEARLY AVERAGE	
1	LIFE BOAT STATION - FISH QUAY									350					350	27	
2	CHANNEL - SHIELDS HARBOUR REACH	15281			3315			9100	7401						30087	2313	
3	CHANNEL - NARROWS	1840													1840	142	
4	FISH QUAY	1840		2223					2983				350		7404	570	
5	AAP - NORTH SHIELDS							10032							10032	772	
6	TYNE DOCK ENGINEERING - MARKET DOCK	9221													9221	709	
7	HARTON STRAITS		831		1128										2057	158	
8	AED ENTRANCE - OSLO QUAY	4041													4041	311	
9	AED LOCK ENTRANCE									1351					1351	104	
10	TYNE COMMISSION QUAY		230	3351		1819	3713	3801	1400	3733	8585		1712	30484	2343		
11	TYNE DOCK ENGINEERING - EAST DOCK						4844								4844	373	
12	TYNE DOCK ENGINEERING D.D.E.'s														1400	108	
13	RORO 3		3057		830	2026		350	1050						13747	1058	
14	TYNE DOCK ENGINEERING - WEST DOCK							2032	1050	2014	1586	1050			4234	326	
15	RORO 4		6825	3720	258	5463	350	1788	700	3428	2051	3833	1344		24133	1828	
16	McMILLY MARLE				465										465	36	
17	TYNE DOCK ENTRANCE		2774		465	794	903	8714	1804				4103		22857	1743	
18	TYNE DOCK ENTRANCE - 60'		4120												4120	32	
19	FACTORY QUAY, TYNE DOCK									700			700		1400	108	
20	NORTH WEST QUAY, TYNE DOCK													300	300	27	
21	WHITFIELD POINT JETTY	3375		3720		3274			5250	3283	700	2800	3500	2372	28254	2173	
22	REVERSIDE QUAY	2445	5256	4700	4636	8618	5525	2450	350	2387	8450	6005	4874	5021	58710	4583	
23	ISO GRAB BERTH		185												185	15	
24	TYNE COAL TERMINAL	1840	8688	4185	1860	5811		7832	2100			10643	4818	914	48372	3713	
25	TYNE COAL TERMINAL APPROACHES				4830										4830	378	
26	TYNE TANKER BERTH																
27	TYNE CAR TERMINAL - No.1	5745	6278	10415	2323	99	5804	3500	2993	2051	7000	8963	2800	2818	58880	4530	
28	TYNE CAR TERMINAL CAPITAL DREDGE						87705							1400	88105	6854	
29	VELVA OCEAN BERTH							14810	6945	20139					41284	3174	
30	TYNE CAR TERMINAL - No.2							185		700					885	68	
31	TYNE CAR TERMINAL - No.3							2812	5834	2800				350	1106	12805	985
32	JARROW CR BERTH	920													920	71	
33	HOWDON JETTY	3820													3820	297	
34	JMC, JARROW		1860	480	350	926	173			2006			1050		10505	808	
35	HOWDON YARD			4000	1930		1400	4900							45930	3538	
36	HOWDON EAST YARD													651	2585	15468	1180
37	HOWDON WEST YARD				7815										7815	608	
38	ROBIN & HAAS	8899	4413		9772			4880							28074	2008	
39	HOWDON CENTRAL YARD	5175			3038		1197								8411	724	
40	HOWDON WEST 'A' YARD				265	1992				1897	3150				7180	562	
41	HOWDON WEST 'B' YARD				12480		883	2100	8850	12258	3147			3056	40854	3127	
42	CHANNEL - OPP. HOWDON YARD WEST					3150									3150	242	
43	CHANNEL - JARROW QUAY - WALLSEND		3409	17133											22543	1754	
44	JARROW STRAITS	1380	4306	831											6617	509	
45	HOWDON WEST 'C' YARD					330									330	25	
46	BRIDE QUAY							57582				6364			6364	4820	
47	SWAN HUNTERS CANNELL LARD - HEBURN		8850		3150	2100							1400	4831	25202	1838	
48	WEST QUAY									350	563				913	72	
49	SWAN HUNTERS - EAST FITTING OUT QUAY	60455	4720		-2549	-500									62128	4779	
50	AMARC - HEBURN	3148													3148	242	
51	HAWTHORN LESLIE O.D.E.											2806	4501		7307	562	
52	CHANNEL - OPP. SWAN HUNTER WALLSEND				8355										8355	643	
53	WALLSEND DRY DOCK ENTRANCES						1854								1854	127	
54	CHANNEL HIGH WALKER REACH		3485	18060	23205			11357	5089	6836	6451				78773	5808	
55	MEPTURE FITTING OUT QUAY		930												930	72	
56	WALKER TECHNOLOGY PARK		24681					24423		71735		121833			242872	18867	
57	CHANNEL - BELL POINT		1841			10506									12347	850	
58	T.A.V.R. NEWCASTLE							350	525						875	67	
59	NEWCASTLE QUAY 27-28	3600	3040	4648	3254	3754	4831	8400	7744	2620					44004	3385	
60	REDLANDS AGGREGATES							2980							2980	228	
61	NEWCASTLE QUAY 7-10									8748					8748	674	
62	MRS GALLIPE														700	54	
63	MILLGATE QUAY		1740												1740	134	
64	TOTAL ANNUAL BERTH DREDGE VOLUME	130845	108888	78680	82378	588731	38615	75181	156182	533803	27171	78864	81355	78180			

TABLE SHOWING ANNUAL BERTH DREDGING VOLUMES (m³)

YEAR	TOTAL ANNUAL DREDGING		TOTAL ANNUAL DREDGE VOL (m³)
	CONTRACT DREDGE VOL (m³)	BERTH DREDGE VOL (m³)	
1988	-	130965	130965
1989	117470	109986	227456
1990	161170	79880	241050
1991	0	82378	82378
1992	96864	58997	155861
1993	0	113993	113993
1994	151434	75191	226625
1995	116961	156162	273123
1996	53494	53390	106884
1997	29449	127171	156620
1998	48731	79864	128595
1999	71023	161350	232373
2000	237504	78186	315690
TOTAL VOLUME	1084100	1229327	2391613
ANNUAL AVERAGE	80342	94564	183970



NOTES

1. THIS DRAWING ILLUSTRATES THE BERTH DREDGING CARRIED OUT BY PORT OF TYNE AUTHORITY.
2. DREDGE ARRISINGS ARE DEPOSITED AT SEA UNDER THE PORT OF TYNE AUTHORITY LICENCE FROM MAFF.
3. DREDGING OPERATIONS CARRIED OUT THROUGHOUT THE YEAR AS REQUIRED.
4. DREDGING OPERATIONS WERE CARRIED OUT PRIMARILY USING THE PORT OF TYNE AUTHORITIES "HEDWIN" GRAB DREDGE WITH SOME LARGER AREAS USING A TRAILER SUCTION HOPPER DREDGER.

NEW TYNE CROSSING

0	FEB '01	DB	ORIGINAL
Rev.	Date	By	Description

HERBERT SMITH

Drawing Title: **RIVER TYNE BERTH DREDGING**

Drawing Status:	ORIGINAL	Rev.:	0
Scale:	A3	NTS	Originator: DB
Checked:	TNR	Approved:	JNR
Job No.:	F4546	Date:	FEB '01
Drawing No.:	FIGURE B.2		