

THE MERSEA HARBOUR PROTECTION TRUST

SAVE MERSEA HARBOUR

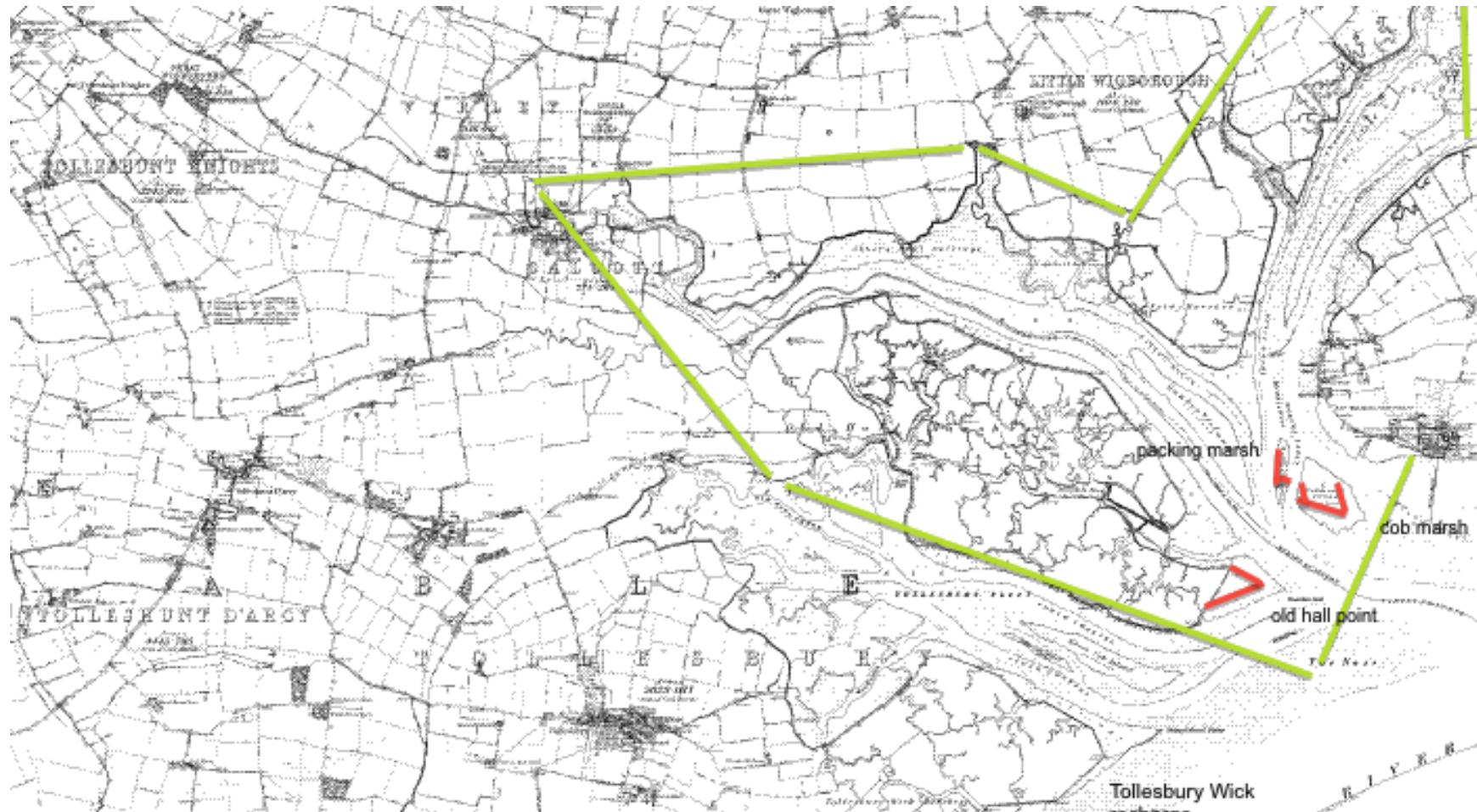
Success has many fathers.

Failure is an orphan.

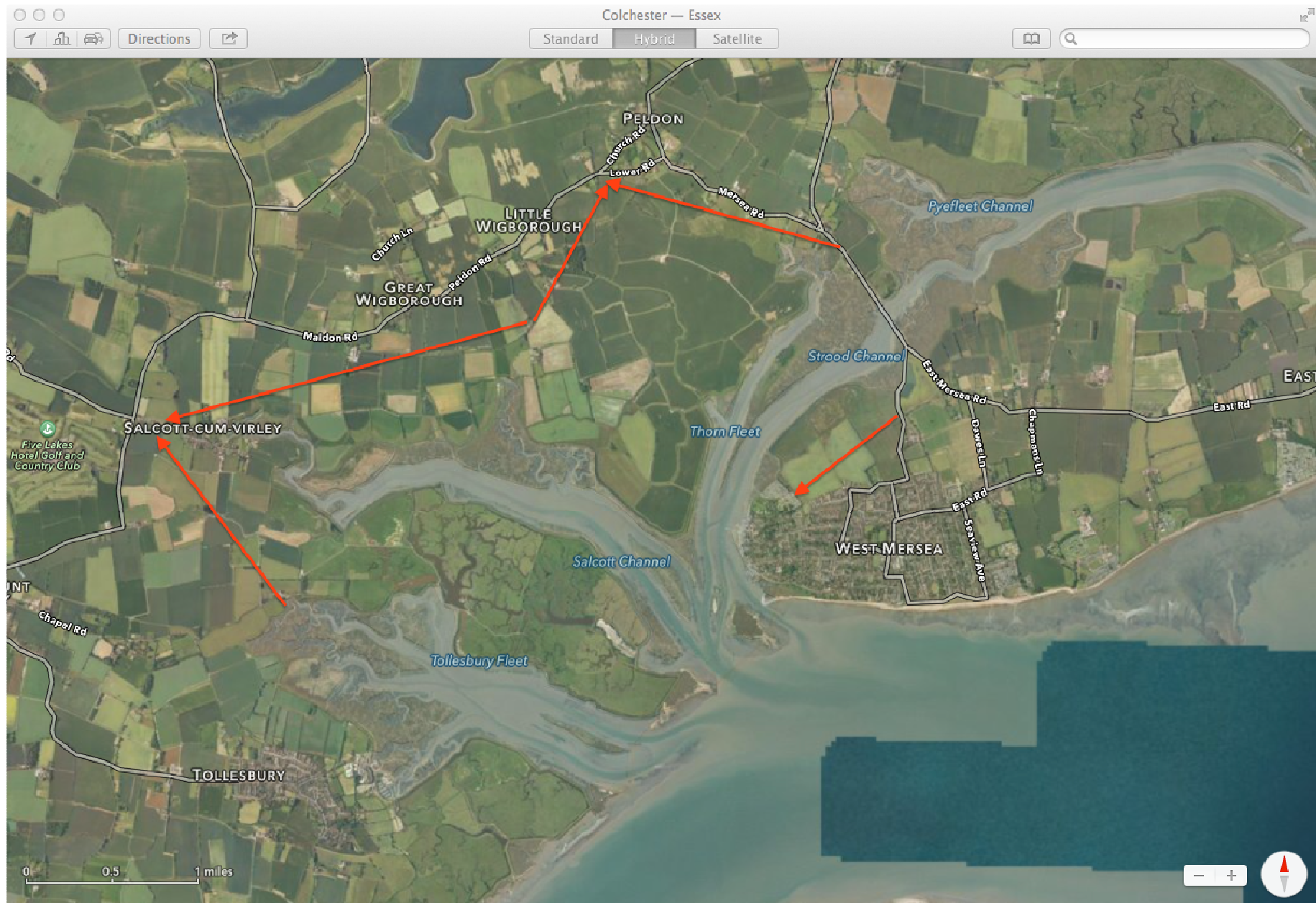
1840 OS Map

Green line – area under threat

Red line – current mean high water shore



Area Protected



Mersea Quarters 1923 to now

Note change to Cobmarsh spit at low tide



From 32 acres to 16 acres



OLD HALL POINT

1923 OS MAP COMPARED TO 2014 AIR PHOTO



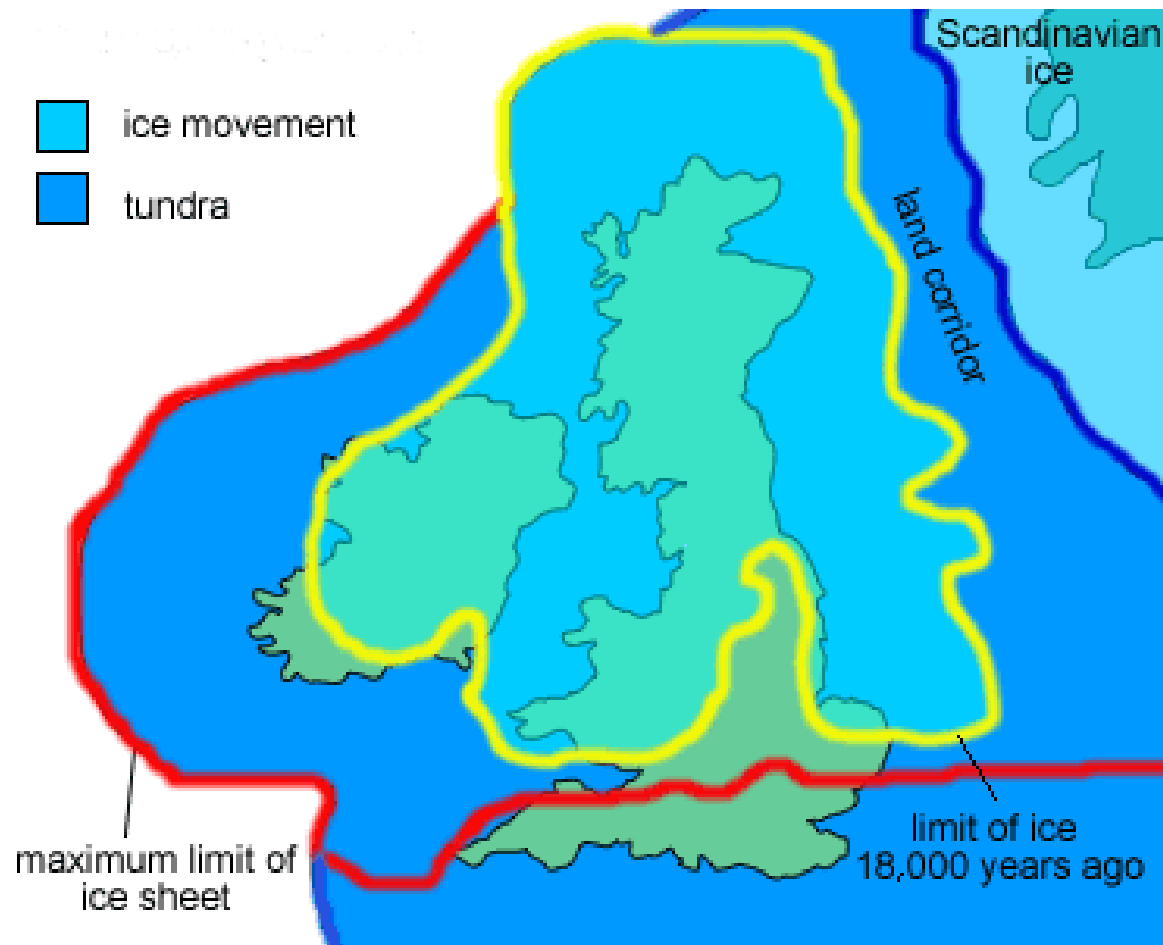
Erosion to Cobmarsh following winter storms 2013/14



WHY?

- WHAT IS THE MAIN CAUSE OF THE EROSION?
- LAND SINKING SINCE LAST ICE AGE.
- SEA LEVELS RISING SINCE LAST ICE AGE.
- DEEPER WATER ALLOWS BIGGER WAVES.
- BIGGER WAVES CAUSE MORE EROSION.
- WITH CLIMATE CHANGE SEA LEVELS MAY RISE ANOTHER 2 FEET IN NEXT 100 YEARS.

EXTENT OF ICE SHEET LAST ICE AGE ENDED 12K YEARS AGO



WEIGHT OF ICE PUSHES NORTHERN UK DOWN AND
SOUTH UP.

WHEN ICE MELTS SOUTHERN UK SINKS BACK



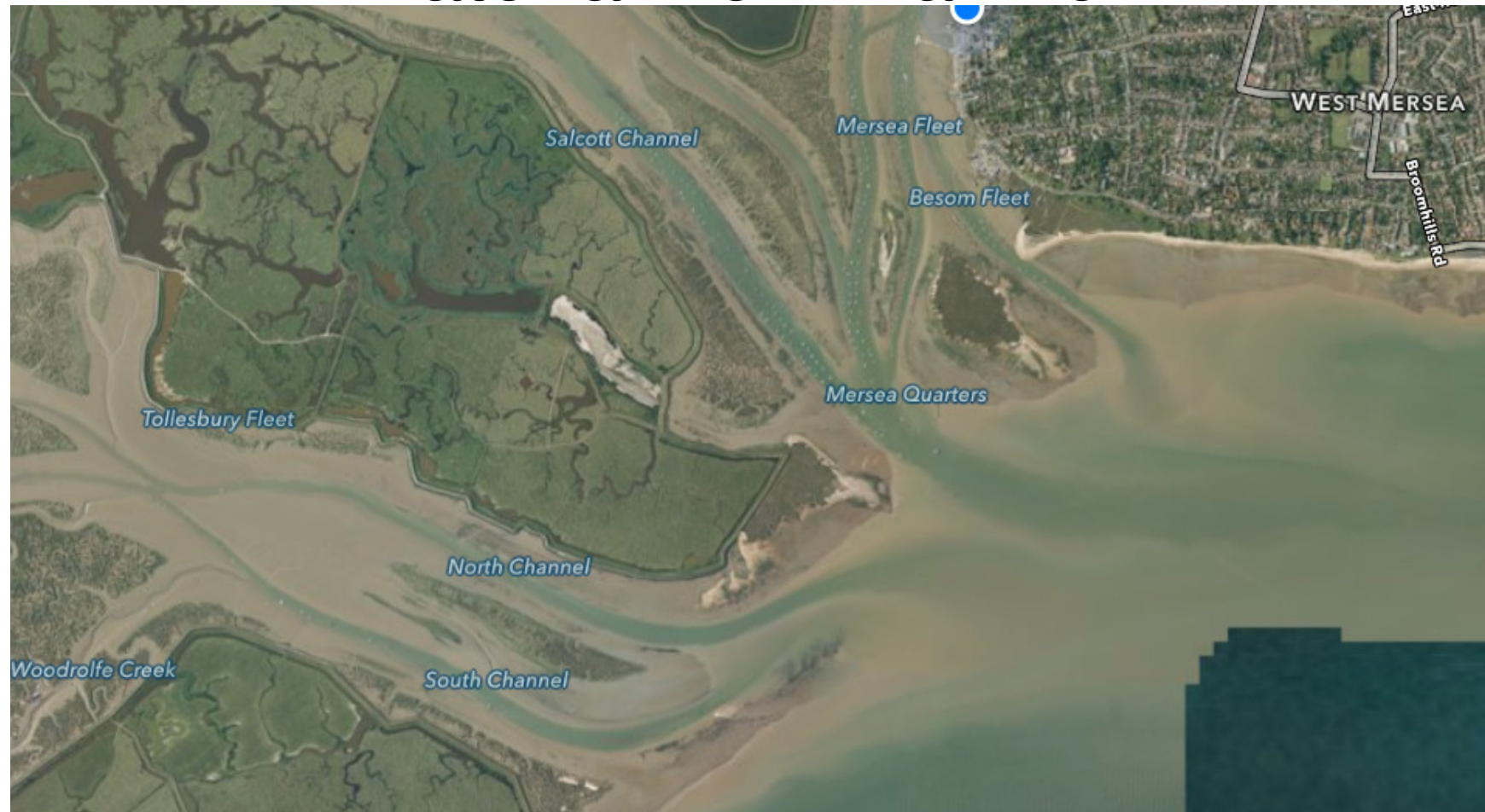
LAND MASS AT END OF ICE AGE 12K YEARS
AGO. SEA LEVEL RISING SINCE THEN.



What are the options?

- Do nothing, we lose the jetty within 10 to 20 years and the harbour within 75 years.
- Large rock armour. Cost £10+ million and design and consent nightmare.
- Small rock in gabion wire cages. Cost £3+ million. Gabions 10 year maximum lifespan.
- Foreshore recharge with gravel and sand. Cost £380k to £400k. Done before.

Previous EA recharge to Mersea Quarters Material from Harwich



Little Tern legally protected





We will not all agree



OBJECTIONS RAISED

- IT BLOCKS MY NAVIGATION RIGHT AND IS A HAZARD AND DANGER TO BOATERS.
- IT MOVES INTO NAVIGATION CHANNELS.
- IT CAUSES CREEKS TO SILT UP AND BLOCKS MY NAVIGATION.
- AS THE RECHARGE IS PLACED DISTURBED MUD SMOTHERS MY OYSTER LAYINGS.
- THE NESTING BIRDS STOP MY RIGHT TO LAND.
- THE RECHARGE BELONGS TO NO ONE AND SO NO ONE CAN TELL ME NOT TO LAND WHEN I WANT TO.
- IT KILLS ALL THE CREATURES IN THE MUD.
- IT KILLS THE VEGETATION ON THE SALTINGS.
- IT CAUSES POLLUTION.
- IT IS THE MOST DESTRUCTIVE THING SINCE HITLER.

Design Cross Section

MLWN - 1.3M ODN. MHWST +2.8M ODN. HAT +3.3M ODN.

COB MARSH LENGTH 380M + INCLUDING shore connector to west

OLD HALL LENGTH 320M

PACKING MARSH LENGTH 50M

TOLLESBURY WICK 50M TO EAST END + top up existing low spots

VOLUME PER M LENGTH FROM C/S 1 BELOW = 128M³

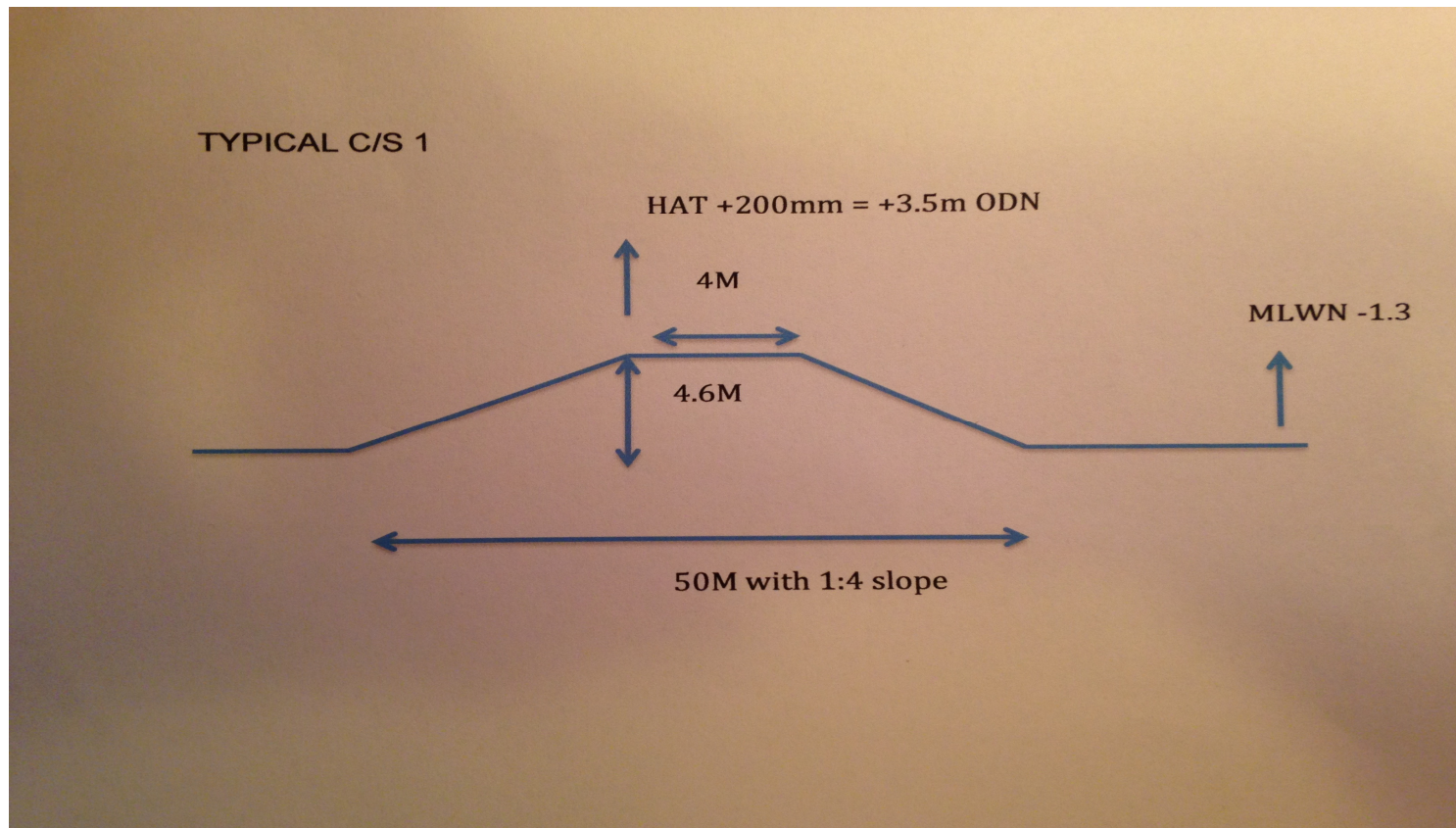
COB = 48K M³

OLD HALL = 40K M³

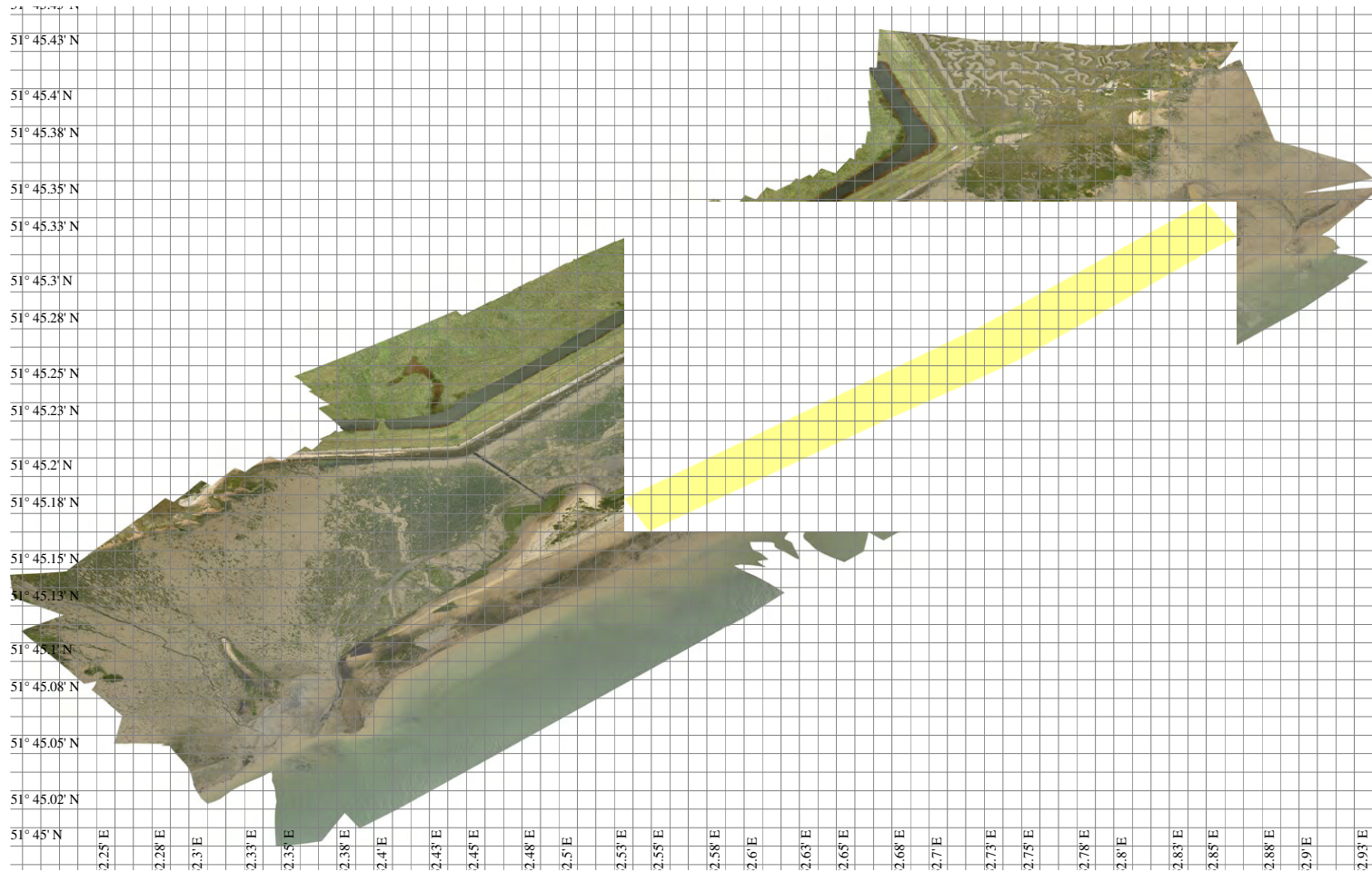
PACKING MARSH = 5K M³

TOLLESBURY WICK = 5K M³ to east end

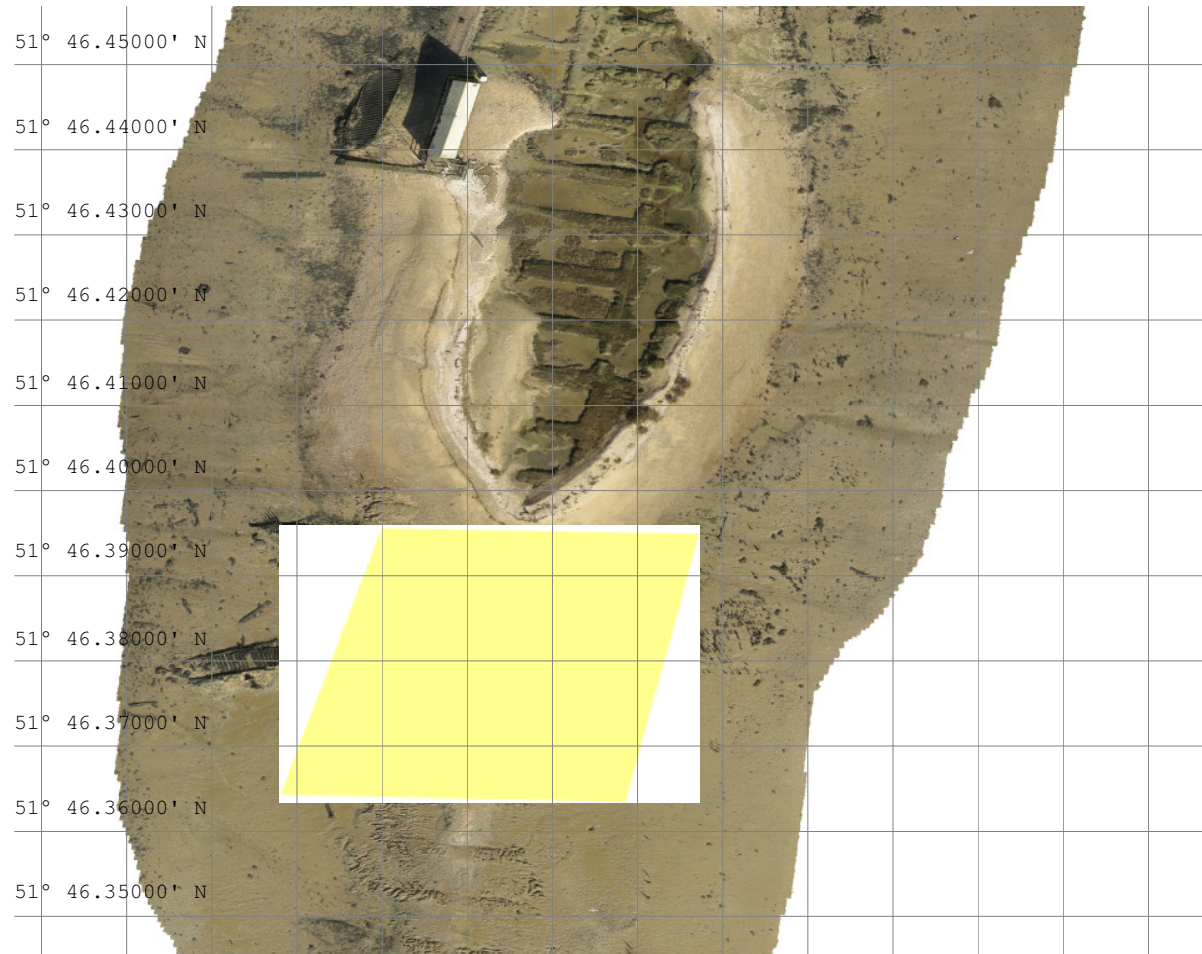
TOTAL 98K M³



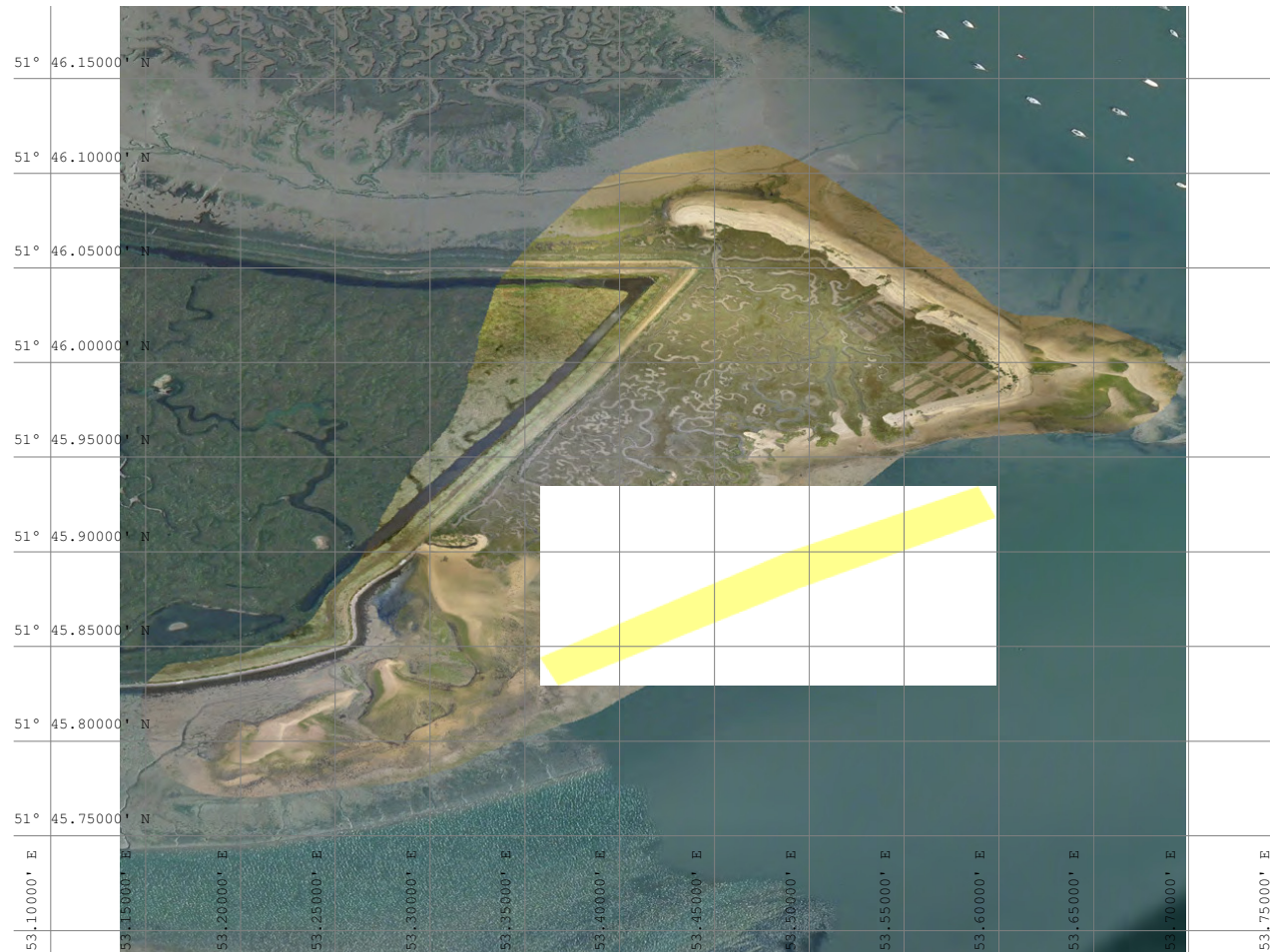
Tollesbury Wick Plan



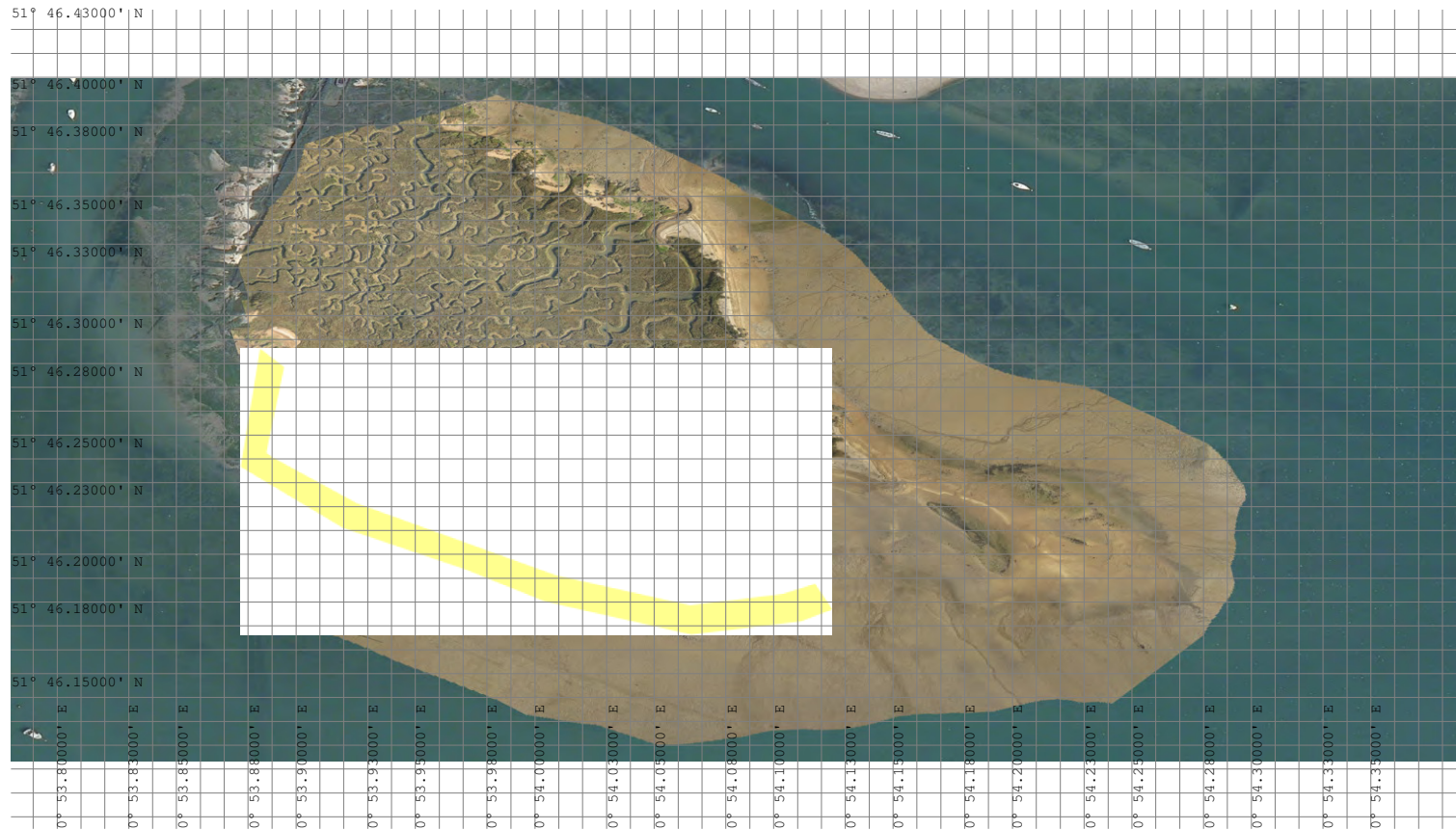
Packing Marsh Plan



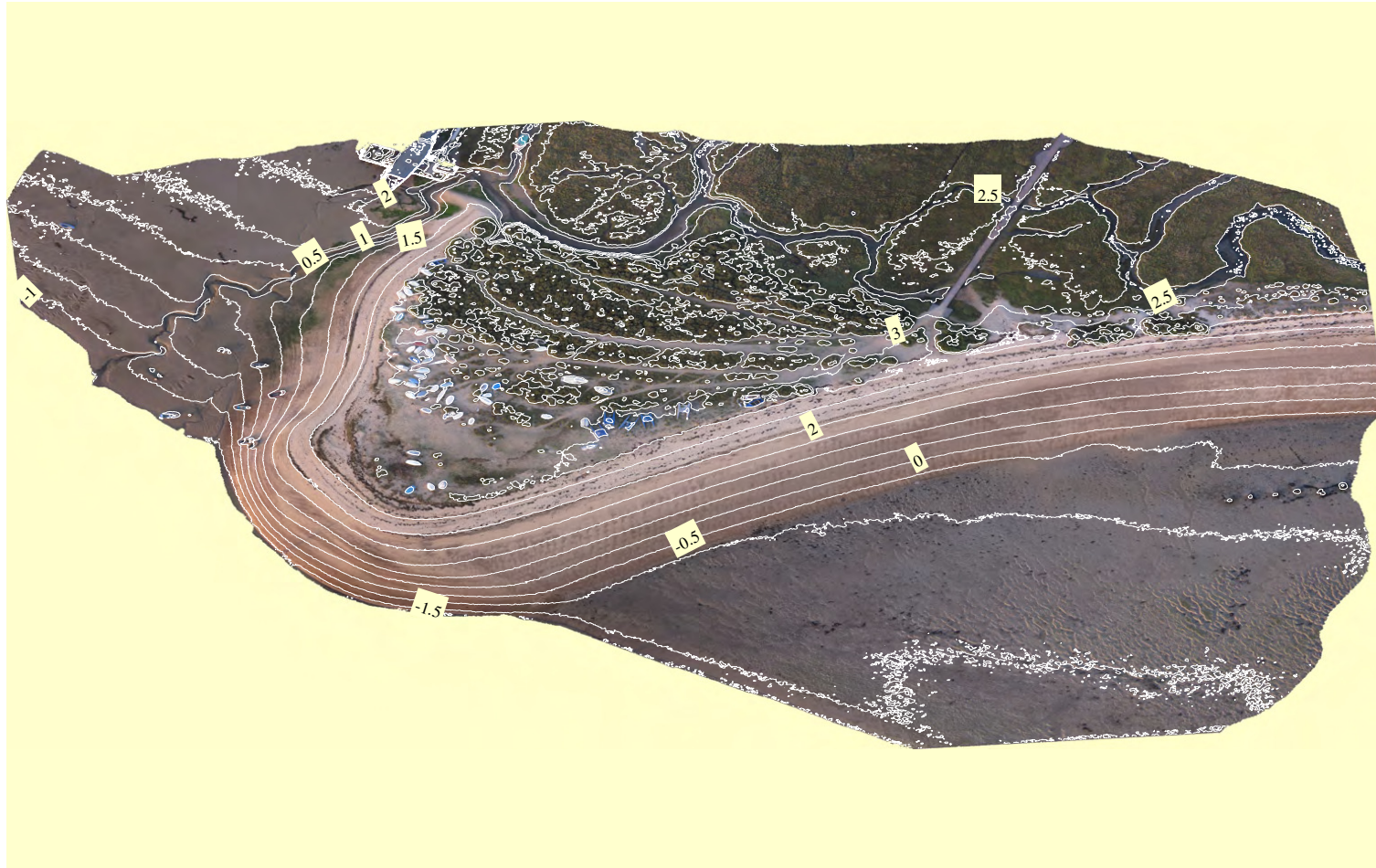
Old Hall Point Plan



Cobmarsh Plan



Monkey Beach Survey



Recharge method



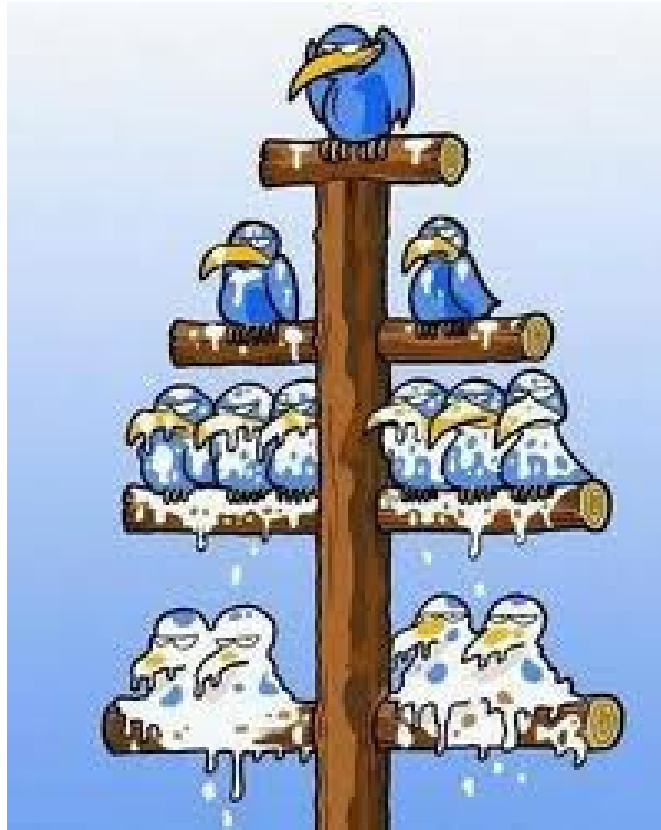
It is not cheap



What will it cost?

- **BUDGET ESTIMATES HAVE BEEN CALCULATED TO GET ALL THE SURVEYS, CONSENTS, MONITORING AND MANAGEMENT REQUIRED. THIS WILL COST BETWEEN £72K AND £100K. NO GUARANTEE OF CONSENTS.**
- **THESE FIGURES DO NOT INCLUDE CONTRIBUTIONS “IN KIND” FROM UNPAID LOCAL VOLUNTEERS, THE RSPB AND ESSEX WILDLIFE TRUST HELPING WITH ALL OF THE ABOVE. THIS HAS BEEN CALCULATED AT £114K.**
- **THE COSTINGS DO NOT INCLUDE FOR SUPPLY, TRANSPORT AND PLACING OF THE MATERIAL FROM HARWICH TO MERSEA. THE TRUST HOPES WE CAN GET THE MATERIAL FREE OF CHARGE AS IT WILL BE FOR LOCAL BENEFICIAL USE. THERE IS NO GUARANTEE OF THIS, BUT WE WILL TRY.**
- **IF WE ARE CHARGED FOR THE MATERIAL IT WILL COST ABOUT AN EXTRA £300K FOR 95K M3 OF MATERIAL AND £40K FOR MONITORING OVER 3 TO 5 YEARS. WE ARE APPLYING FOR MONEY NOW FOR THIS.**
- **THE 95K M3 IS FOR 5K TO TOLLESBURY WICK, 40K TO OLD HALL POINT, 48K TO COBMARSH AND 5K TO PACKING MARSH.**

Consent policy into practice



Income and expenses to date

		£
INCOME		
	Membership Subs	5800
	Associate Members	745
	Donations	1160
	Grants	
	Col BC	2000
	ECC CIF 13/14	15000
	ECC CIF 14/15	15000
	Environment Agency	9807
	Essex Community Foundation	5000
	Total Grants	46807
	TOTAL INCOME	54512
<u>EXPENDITURE</u>		
	Pullen - Surveys *	12246
	Reid - Consultancy	15756
	Unfold Digital -Website	2110
	Expenses	
	Survey Equipment Hire *	317
	BTO - Bird Survey *	548
	Insurance	915
	Boat Hire	105
	Hall Hire	100
	TOTAL EXPENSES	1984
	TOTAL EXPENDITURE	32096
	Balance at Bank	22416
<u>FUTURE EXPENDITURE</u>		
	Reid - Consultancy	
	Completion of ES etc	9110
	Additional Marine Survey	2435
	MMO/CEFAS	22000
	Thomson Ecology *	8130
	Pullen (Est) *	1000
	TOTAL	42675
DEFICIT		-20259

2016 Next Steps

September – December

Ongoing discussions with partners- RSPB, EA, EWT, CBC, ECC, WMTC
Secure agreements with landowners
Formal application for consents from NE, MMO, CEFAS
Public exhibitions, public talks and advertising for planning consent
Ongoing discussions with MMO/CEFAS
Fundraising

December 2016 – December 2017

Detailed discussions with HHA
Monitoring programme protocol
Detailed discussions with NE, RSPB, Oystermen, mooring owners, Yacht Clubs, Fishermen etc
Public consultation
Fundraising

December 2017 to December 2018

Final contract with HHA for material delivery and purchase
Pre monitoring for potential impacts
Pre placement brushwood fence control structures
Erect navigation markers
Manage material delivery
Instigate 3 to 5 year monitoring programme

Is it worth it?
There are no guarantees.



But in 2016



Little and Common Terns colonise Cob Marsh and Old Hall Point which is good news for the project

D r e d g e r

FUNDING AND SPENDING TO 1 DECEMBER 2015

INCOME	£	
Membership Subs	6000	
Associate Member	1145	
Donations	1560	
Colchester BC	6000	
ECC CIF 13/14 and 14/15	30000	
Environment Agency	9807	
Essex Community Foundation	5000	
ECC CIF 15/16	15000	
Colchester BC	4000	TOTAL FUNDS AVAILABLE £78512

EXPENDITURE TO DATE

Surveys (including VAT)	16374	
Specialist Consultants fees	18941	
Website	2139	
Thomson ecology invertebrate report	6326	
MMO/CEFAS	7093	
Expenses (equipment hire, BTO, insurance)	3117	TOTAL SPENT TO DATE £53990

FUTURE EXPENDITURE TO CONSENTS STAGE

Marine Surveys	2435	
Specialist Consultants	9110	
MMO/Cefas consent fees	20000	
Level surveys and grid maps	1000	TOTAL FUTURE EXPENDITURE £32545

PLEDGED FUNDS

Mersea Moorings Association £11800

BALANCE £3777