City of Edinburgh and Western East Lothian Configuration

Option 104 - Close Marionville 1 Pump WT (RAAC) station.

&

Increase Newcraighall 1 Pump WT station to a 2 Pump WT station.

AND

Option 110 - Closure of Musselburgh Station and Tranent station and relocation of pumps and crew to a new 2 pump WT/OC station.

1. Configuration Decision Tree

Marionville, Newcraighall, Musselburgh and Tranent

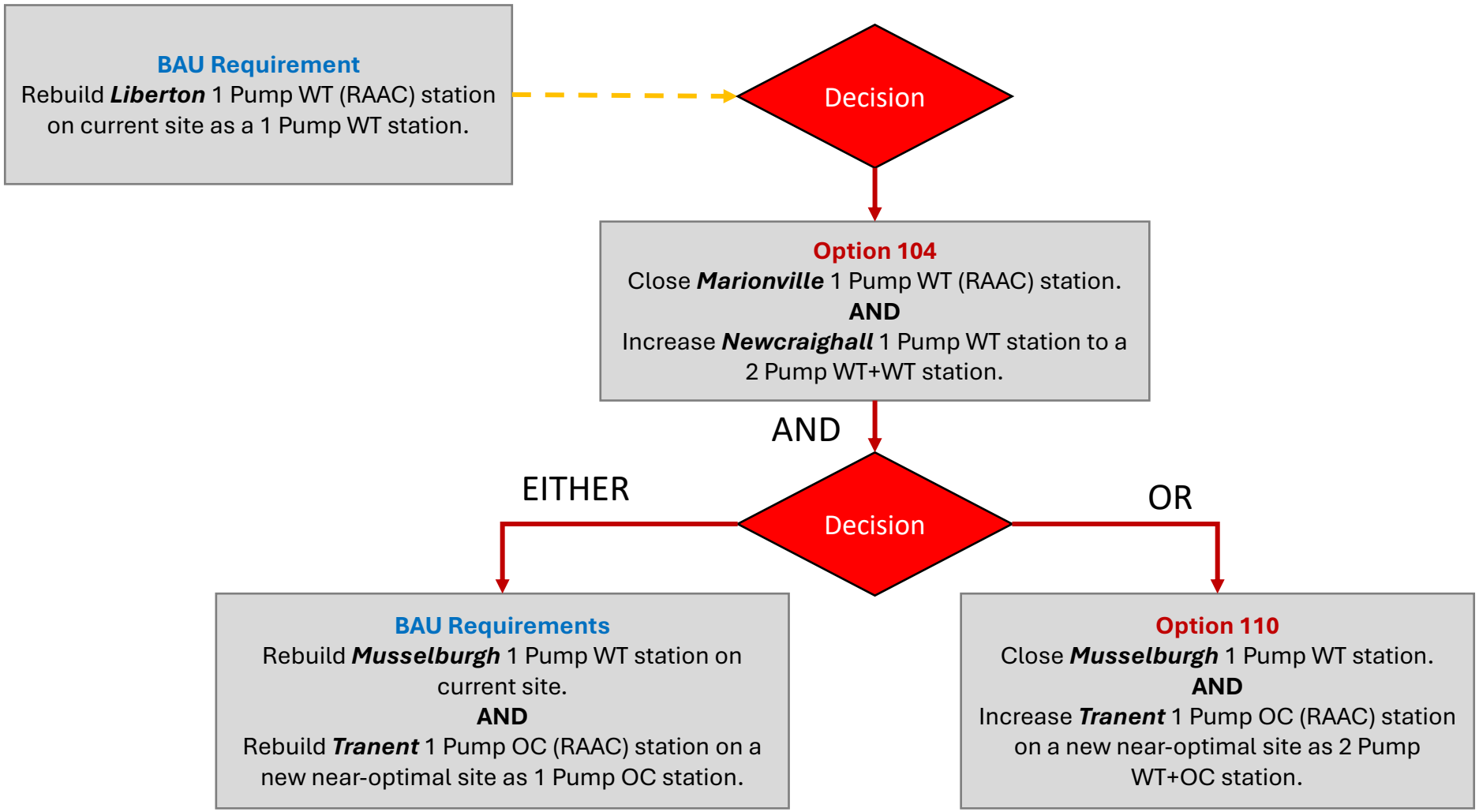


Figure 1

2.1 Station Overview - Marionville

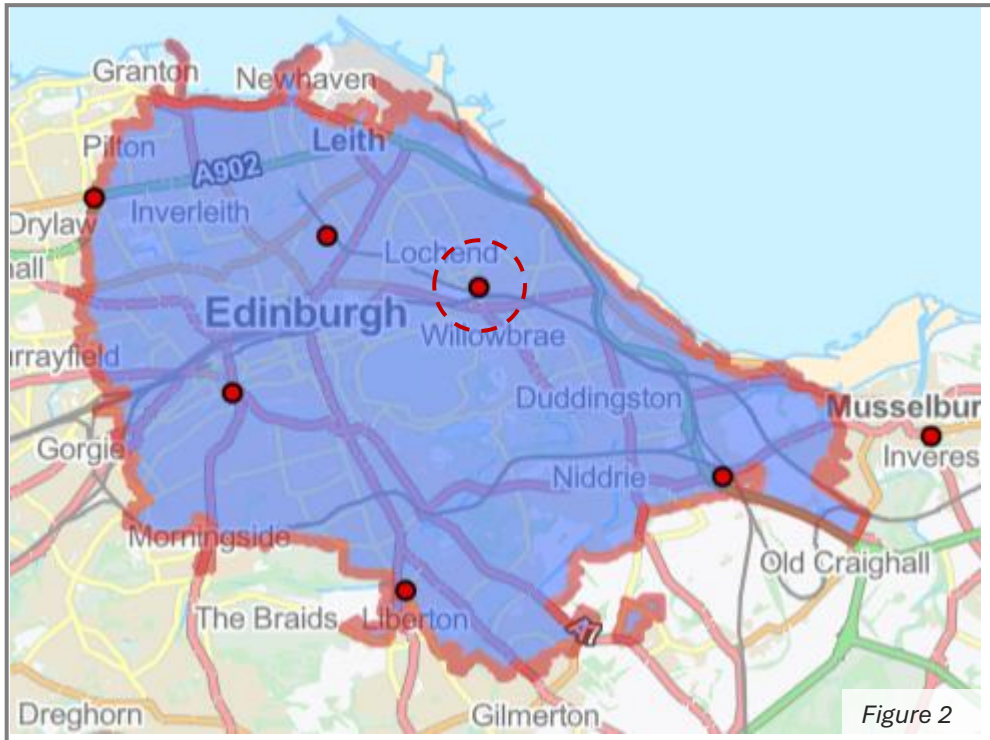


Figure 2

Figure 2 above shows the historical coverage of Marionville's pump as 1st or 2nd pump in attendance to 95% of historical attendances.

Station Resources

K03 P1	Rescue Pump
K03 S1	Operational Support Vehicle
K03 B1	SRT Boat

MORRD Assessment

Risk and response time optimisation modelling has identified the optimal Marionville Station replacement as being a 1 Pump Wholetime station midway between McDonald Road Fire Station and Newcraighall Fire Station, in the Duddingston area.

Property Assessment

- Condition = "bad" due to its RAAC roof and Suitability = "satisfactory".
- Recommendation = "replacement".
- Relocation to a near-optimal site is not considered physically feasible or financially viable due to existing property developments and high land values.

Station Occupancy

The station is crewed as Wholetime 5 Watch Duty System with a TOM watch strength of 6 (4FF, 1CC, 1WC) and overall station TOM of 30 (20FF, 5CC, 5WC)

In addition to the operational staff, the station is currently used by the FBU as a regional office location. They currently have a formal tenancy agreement to occupy 1 of 3 terraced houses on the station complex. 1 of the other 2 houses is privately owned and occupied by a retired Service employee.

Training Demand(minimum annual requirement)

- 100% water rescue personnel trained to maintain minimum of crew of 5
- 30hrs SRT training per year
- 35hrs SFRBO training per year
- Instructor (x2) led training event twice per year (20hrs)

PP&P Demand

The station has a periodic inspection programme consisting of:

- 38 Operational Intelligence Inspection/Audits
- 14 Care Home Operational Assurance Visitations
- 15 Multi-storey Flat Inspection/Audits
- Approximately 900 – 1000 Hydrants
- 227 HFSVs conducted 1st April '23 – 31st March '24 (65 High Risk)
- 26 "Other" CFS events 1st April '23 – 31st March '24

2.2 Station Overview - Newcraighall

Figure 3 above shows the historical coverage of Newcraighall's pump as 1st or 2nd pump in attendance to 95% of historical attendances.

Station Resources

K04 P1	Rescue Pump
K04 S1	Operational Support Vehicle (USAR)

MORRD Assessment

Risk and response time optimisation modelling has identified that the Newcraighall Station is in a prime location on the road network and provides excellent response time coverage across southeastern Edinburgh, eastern East Lothian and northeastern Midlothian.

Property Assessment

•Condition = "satisfactory" and Suitability = "satisfactory"
•Property currently being reconfigured as a 2 Pump WT station to enable temporary decanting of 1 WT Pump from a local RAAC station and address RAAC stations within the Capital Programme.
•Property is currently subject to focussed project to reconfigure for dignified facilities and contaminant control but refurbishment of remaining accommodation and infrastructure outstanding for future phasing
•The expected timescale for completion for phase 1 is Dec 2024 – future phase would take c12months

Station Occupancy

The station is crewed as Wholetime 5 Watch Duty System with a TOM watch strength of 6 (4FF, 1CC, 1WC) and overall station TOM of 30 (20FF, 5CC, 5WC)

Training Demand(minimum annual requirement)

- 100% watch personnel USAR trained
- 66hrs per 3 years (22hrs/annum)
- Full day training takes place every Thursday for on-duty watch

PP&P Demand

The station has a periodic inspection programme consisting of:

- 40 Operational Intelligence Inspection/Audits
- 10 Care Home Operational Assurance Visitations
- 6 Multi-storey Flat Inspection/Audits
- Unknown number of Hydrants
- 155 HFSVs conducted 1st April '23 – 31st March '24 (28 High Risk)
- 135 "Other" CFS events 1st April '23 – 31st March '24

2.3 Station Overview - Musselburgh

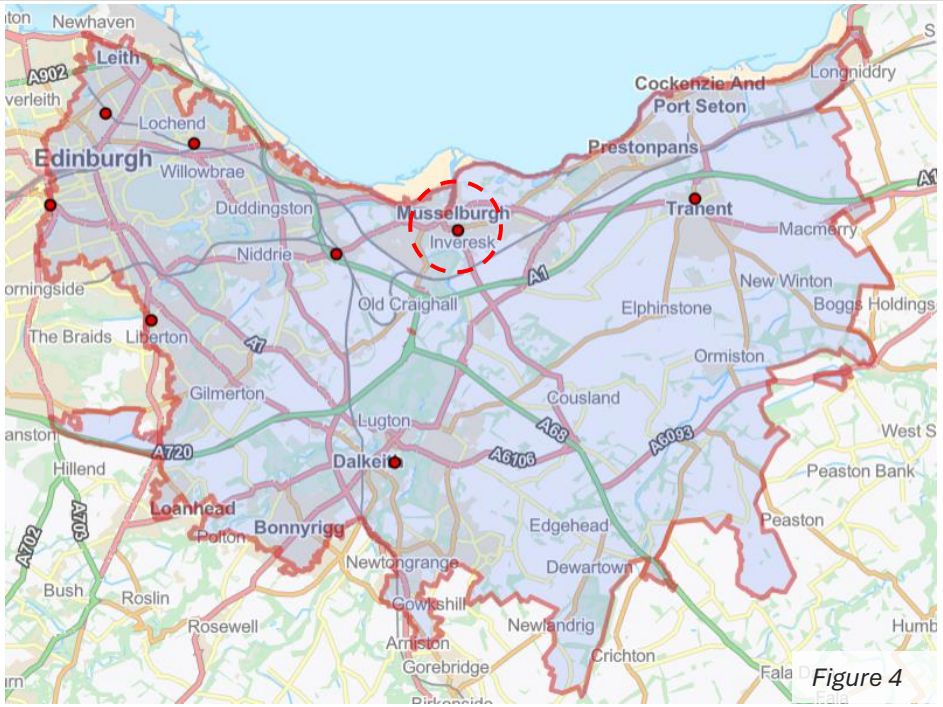


Figure 4

Figure 4 above shows the historical coverage of Musselburgh's pump as 1st or 2nd pump in attendance to 95% of historical attendances.

Station Resources

K03 P1	Rescue Pump
K03 S1	Operational Support Vehicle
K03 B1	Flood Response
	Wildfire Response

MORRD Assessment

•Risk and response time modelling analysis has identified an alternative station, pump and duty system configuration which could provide a more effective resource configuration for responding to the pattern of risk and demand observed in western East Lothian.
•Introduction of a 2nd WT Pump at ***Newcraighall Station***.
•Closure of ***Musselburgh Station***.
•Relocation of the ***Musselburgh*** WT Pump to a new near-optimally located 2 pump WT+OC Fire Station near ***Tranent***.

Property Assessment

•Condition = "satisfactory" and Suitability = "poor".
•Recommendation = "replacement".
•Timescale for implementation c2 Years

Station Occupancy

The station is crewed as Wholetime 5 Watch Duty System with a TOM watch strength of 6 (4FF, 1CC, 1WC) and overall station TOM of 25 (15FF, 5CC, 5WC)

In addition to the operational staff, the station is currently used by 1 P,P&P function staff member who occupies 1 of 2 workstations in the Station Commanders office.

Training Demand

- 100% watch personnel Flood Response trained
- 18 hours per watch annually.
- No training standard for Wildfire currently in place.

PP&P Demand

The station has a periodic inspection programme consisting of:

- 19 Operational Intelligence Inspection/Audits
- 8 Care Home Operational Assurance Visitations
- 0 Multi-storey Flat Inspection/Audits
- 789 Hydrants
- 192 HFSVs conducted 1st April '23 – 31st March '24 (65 High Risk)
- 145 "Other" CFS events 1st April '23 – 31st March '24

2.4 Station Overview - Tranent

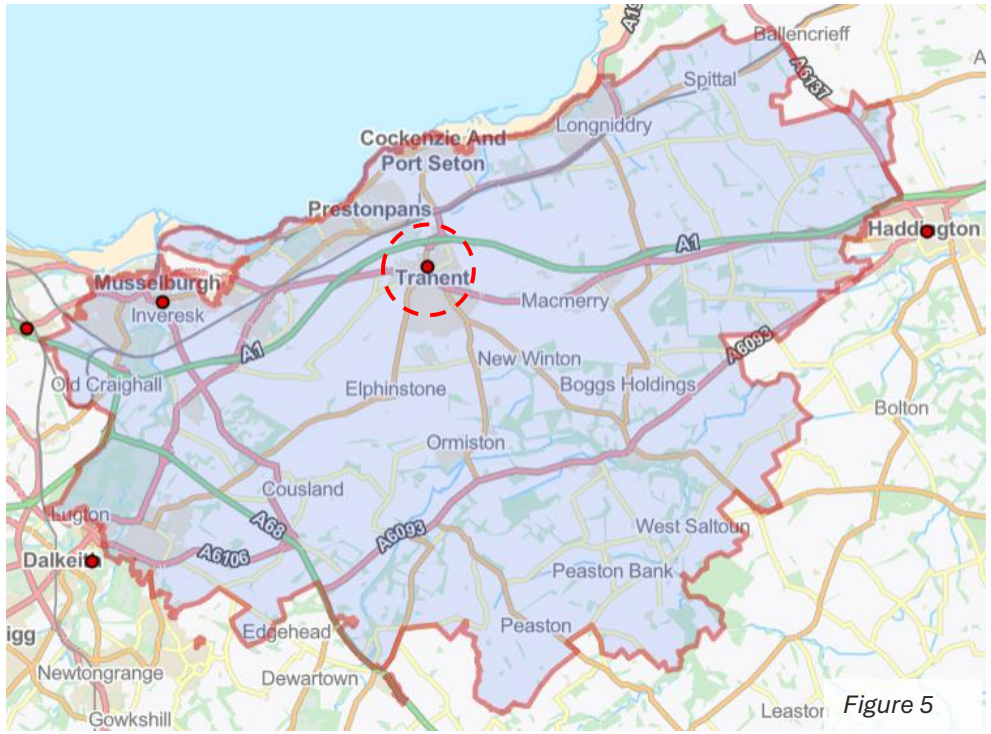


Figure 5

Figure 5 above shows the historical coverage of Tranent's pump as 1st or 2nd pump in attendance to 95% of historical attendances.

Station Resources

J20 P6 Rescue Pump (RDS OC)

MORRD Assessment

•Risk and response time modelling analysis has identified an alternative station, pump and duty system configuration which could provide a more effective resource configuration for responding to the pattern of risk and demand observed in western East Lothian.
•Introduction of a 2nd WT Pump at ***Newcraighall Station***.
•Closure of ***Musselburgh Station***.
•Relocation of the ***Musselburgh*** WT Pump to a new near-optimally located 2 pump WT+OC Fire Station near ***Tranent***

Property Assessment

•Condition = "bad" due to its RAAC roof and Suitability = "poor"
•Recommendation = replace station on a new site, providing modern dignified facilities and contaminant control.
•Rebuilding on a new site is often more efficient, cost effective and avoids disruption to continuing operational activities.

Station Occupancy

The station is crewed as RDS On-Call Duty System with a TOM station strength of 10 (7FF, 2CC, 1WC)

PP&P Demand

The station has a periodic inspection programme consisting of:

- 10 Operational Intelligence Inspection/Audits
- 3 Care Home Operational Assurance Visitations
- 0 Multi-storey Flat Inspection/Audits
- 837 Hydrants
- 163 HFSVs conducted 1st April '23 – 31st March '24 (43 High Risk)
- 36 "Other" CFS events 1st April '23 – 31st March '24

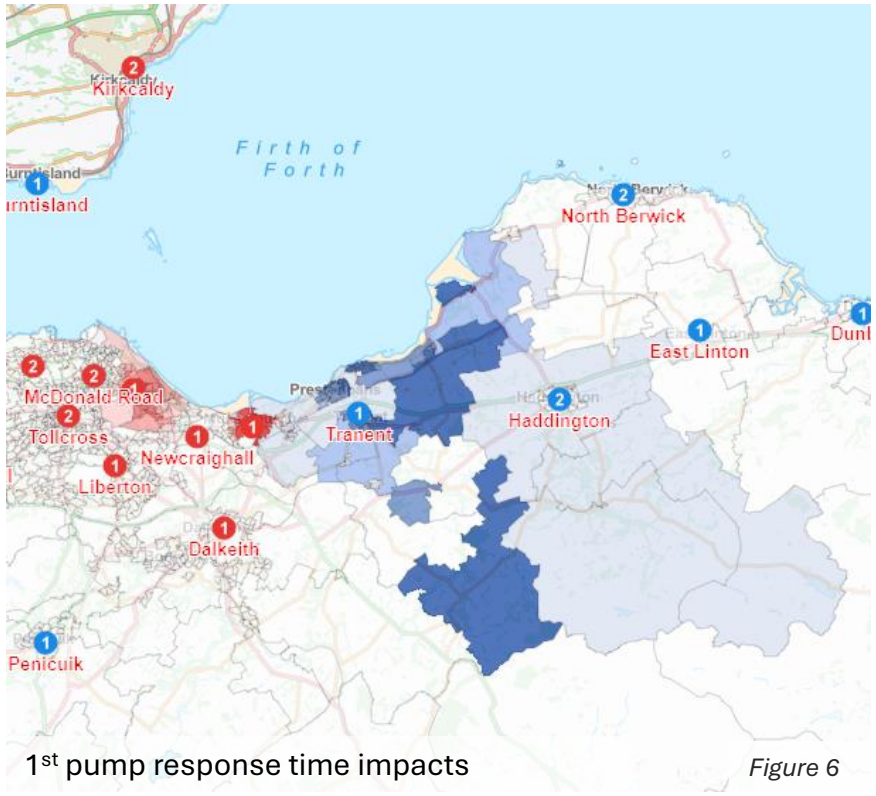
3. Potential Impacts

Hurdle Criteria No. 1 Desirability

Does the option contribute to improved outcomes for communities as outlined in the Programme vision i.e. does it achieve at least one of the following?:

- **Enhances community safety (through PP&P)**
- **Supports partnership working**
- **Equalities**

Area of Impact	Specific Impacts
Service Delivery	



1st pump response time impacts *Figure 6*

Figures 6 above and 7 on the right show the impact the changes will have on mean 1st Pump response times across the affected area.

Median First 1st Pump Response Time Change	CRIM Level: Very High	High	Medium	Low	Very Low	*Figure 7* Total
>= 4 Minutes	2	4	5	3	2	16
3 to 4	1	4	4	5	7	21
2 to 3	0	5	5	7	0	17
0 to 2	3	1	6	9	1	20
Increase Datazones	6	14	20	24	10	74
No Change	91	135	210	232	188	856
-2 to 0	3	0	6	4	2	15
-3 to -2	0	1	2	0	1	4
-4 to -3	1	2	2	7	6	18
< -4 Minutes	0	2	4	8	6	20
Decrease Datazones	4	5	14	19	15	57
Net Change	2	9	6	5	-5	17

The SFRS **CRIM** (Community Risk Index Model) predicts the risk of incidents and casualties occurring. It utilises **datazone** areas which have 500-1,000 residents, align with local authority areas, respect physical boundaries and represent communities with similar socio-economics. **Operational modelling** has identified the datazones likely to be impacted and quantifies the extent of the response time changes.

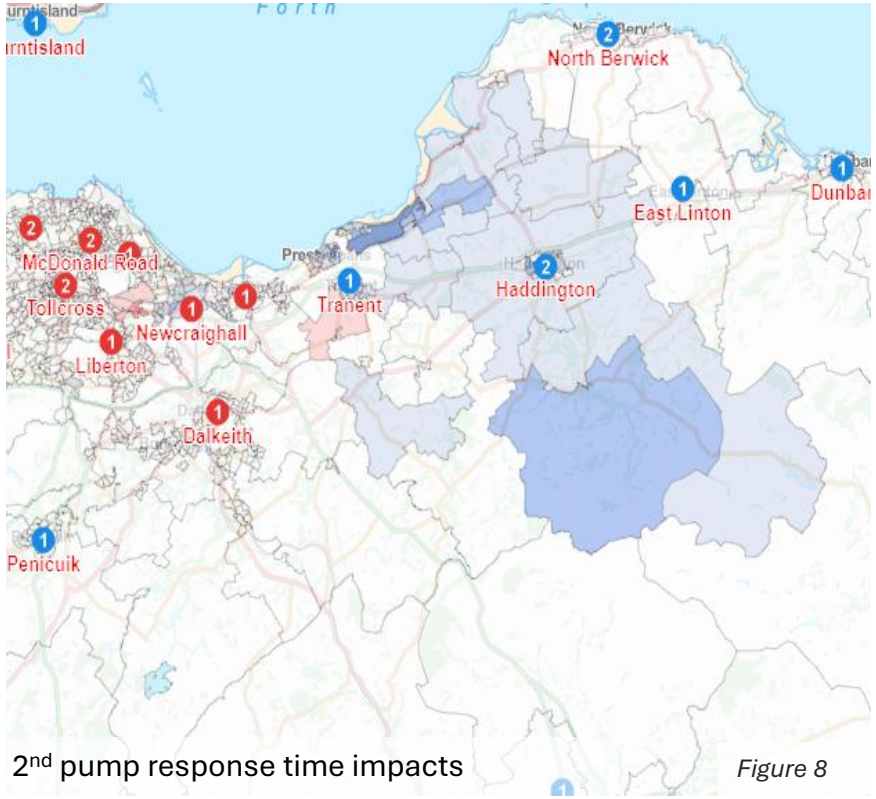
3. Potential Impacts

Hurdle Criteria No. 1 Desirability

Does the option contribute to improved outcomes for communities as outlined in the Programme vision i.e. does it achieve at least one of the following?:

- **Enhances community safety (through PP&P)**
- **Supports partnership working**
- **Equalities**

Area of Impact	Specific Impacts
Service Delivery	



2nd pump response time impacts *Figure 8*

Figures 8 above and 9 on the right show the impact the changes will have on mean 2nd Pump response times across the affected area.

Median Second 1st Pump Response Time Change	CRIM Level: Very High	High	Medium	Low	Very Low	*Figure 9* Total
>= 4 Minutes	0	0	0	0	0	0
3 to 4	0	0	0	0	0	0
2 to 3	1	1	1	0	0	3
0 to 2	1	1	3	3	3	11
Increase Datazones	2	2	4	3	3	14
No Change	91	145	225	255	192	908
-2 to 0	8	6	12	16	14	56
-3 to -2	0	0	3	0	4	7
-4 to -3	0	1	0	1	0	2
< -4 Minutes	0	0	0	0	0	0
Decrease Datazones	8	7	15	17	18	65
Net Change	-6	-5	-11	-14	-15	-51

The SFRS **CRIM** (Community Risk Index Model) predicts the risk of incidents and casualties occurring. It utilises **datazone** areas which have 500-1,000 residents, align with local authority areas, respect physical boundaries and represent communities with similar socio-economics. **Operational modelling** has identified the datazones likely to be impacted and quantifies the extent of the response time changes.

3. Potential Impacts

Hurdle Criteria No. 1 Desirability
Does the option contribute to **improved outcomes for communities** as outlined in the Programme vision i.e. does it achieve at least one of the following?:
1. Enhances community safety (through PP&P)
2. Supports partnership working
3. Equalities

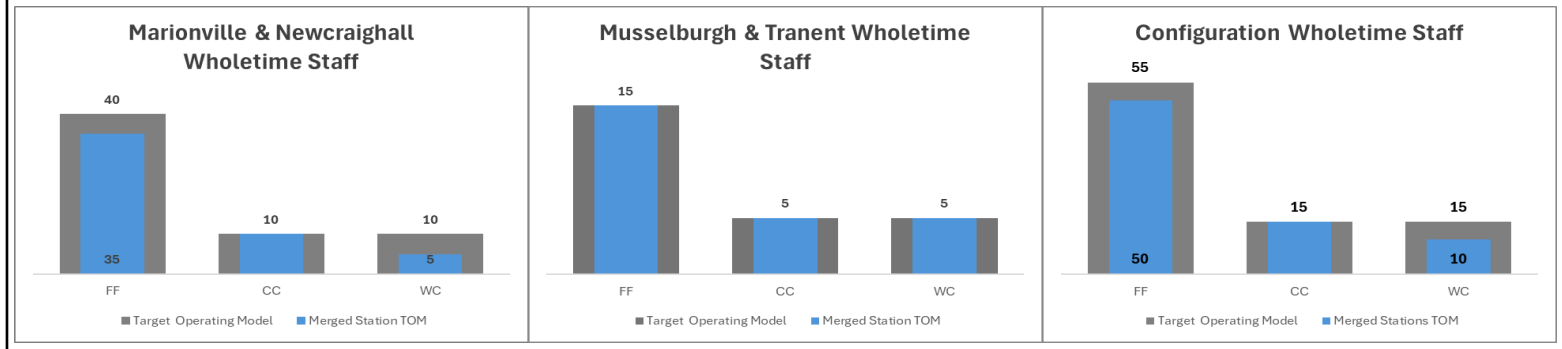
Area of Impact	Specific Impacts	
Community Safety **PPP & LSO**	The specifics of who will deliver activities and how, are yet to be determined and will vary based on each option. i.e., surrounding stations may increase Community Safety Activities or capacity released may allow for further dedicated staff. Revising station boundaries will help redistribute the workload.	
	1. Enhances **community safety** (through PP&P).	The PPP Directorate is currently progressing a new Vision and Strategy that will set the future direction for Prevention, Protection and Preparedness. This will include our new recently launched approach to HFSVs which will focus our visits to those who are deemed as high risk and most vulnerable from fire. We also aim increase our reach to those who do not fall into the high-risk category through the provision of our online self-service tool and fire safety advice literature. This new approach and targeted data led PPP activities which address localised risk will continue to be explored as the Service Delivery Review process progresses and a clearer picture emerges around the resources which will be available to support our approach to Prevention. By working closely with LSO Areas, we will aim to ensure that communities across Scotland are safe and resilient and have equitable access to our PPP activities.
	2. Supports **partnership working**.	To improve partnership working, we will develop a comprehensive plan for Community Safety (CS) initiatives, Operational Intelligence (OI), Operational Assurance Visits (OAVs), and Operational Risk Visits (ORVs). This plan will involve the SDR PPP lead, LSO management teams, Single Point of Contact (SPOC), and the Directorate team to ensure effective delivery of Prevention, Protection, and Preparedness (PPP) activities.
	3. Equalities	Please refer to the relevant Equalities and Human Rights Impact Assessments for: • Marionville • Newcraighall • Musselburgh • Tranent • Please refer to Eastern City of Edinburgh and East Lothian Configuration – Early Equality Considerations

3. Potential Impacts

No. 2 Desirability

Does the option contribute to **improved outcomes for the Service and its staff** as outlined in the Programme vision i.e. does it achieve at least one of the following?:

1. enhance firefighter safety
2. better use of resources and facilities
3. improves staff attraction and retention
4. increases organisational capacity.

Area of Impact	Specific Impacts
Employees	 *These bar graphs depict the Target Operating Model (TOM) staff numbers for the 4 stations that within the option configuration measured against what the TOM would be following the change.*
1. Enhance **Firefighter safety**	This is a key element and is being considered in greater detail where any concerns will be highlighted. Marionville and Tranent are both RAAC stations and Musselburgh is in poor condition. Completion of these options will improve the working environment and safety of staff.
2. Better use of **resources and facilities**	Newcraighall has already undergone reconfiguration to accommodate a 2nd pump and crew. Capital backlog will be reduced. New stations will comply with modern requirements and reduce the organisations RAAC concerns. The reallocation of staff positions will involve transferring some employees to different roles or departments within the Service. This could include: PPP : Some staff may be moved into PPP roles within LSO areas or in the Directorate . Operational Roles: Employees may be reassigned to operational positions. Special Projects: Staff could be allocated to special projects or initiatives aimed at improving service delivery or implementing new programs. Training and Development: Some positions may focus on training and development. These reallocations will optimise the use of existing personnel while addressing the evolving needs of the Service.
3. Improves staff **attraction and retention.**	This configuration moves employees from three older stations which do not meet the current SFRS standards for dignified facilities with the workplace to two newly refurbished or newly constructed buildings which address these deficiencies. This may improve attraction and retention – particularly in the case of attracting on-call employees at Tranent station.
4. Increases **organisational capacity**	This configuration would see an overall potential reduction in 10 WT personnel (5 x FF & 5 x WC) at stations with the potential to redeploy some staff into other roles e.g P,P&P and Training. Capacity will be gained but It is not within scope to determine its utilisation.

3. Potential Impacts

No. 3

Financial Viability Does the option provide **long-term financial sustainability** – e.g., reduces capital investment backlog and/or operating costs?

Area of Impact	Specific Impacts

Finance (Budgetary Capacity & Best Value) **Capital**

Figure 11 Marionville / Newcraighall Merge

	Capital (Investment) or Income
Reconfiguration works	Nil
Site de-risk	TBC
Capital receipt	£280,000
Property Capital Avoided	£8,500,000
Total	£280,000
Time to complete	3 Months
Earliest potential start date	Mar-27

Figure 12 Musselburgh / Tranent Merger New build

	Capital (Investment) or Income
Land procurement	-£1,400,000
Station planning & build	-£8,500,000
Site(s) de-risk	TBC
Capital receipts	£120,000
Property Capital Avoided	£14,250,000
Total	-£9,780,000
Time to complete	40 Months
Earliest potential start date	Apr-27

Configuration Total Investment	Configuration Total Capital avoided
-£9,500,000	£22,750,000

N.B This configuration will require capital investment circa £9.5m, however this will negate £22.75m projected investment required with no change.

Finance (Budgetary Capacity & Best Value) **Resource**

Figure 13 Marionville / Newcraighall Merge

	Resource Saving
Number of Post released	10 (5xFF, 5xWC)
Annual cost of released posts	£488,000
Change in annual property costs	£116,067
Change in annual fleet costs	Nil
Total Saving	£604,067

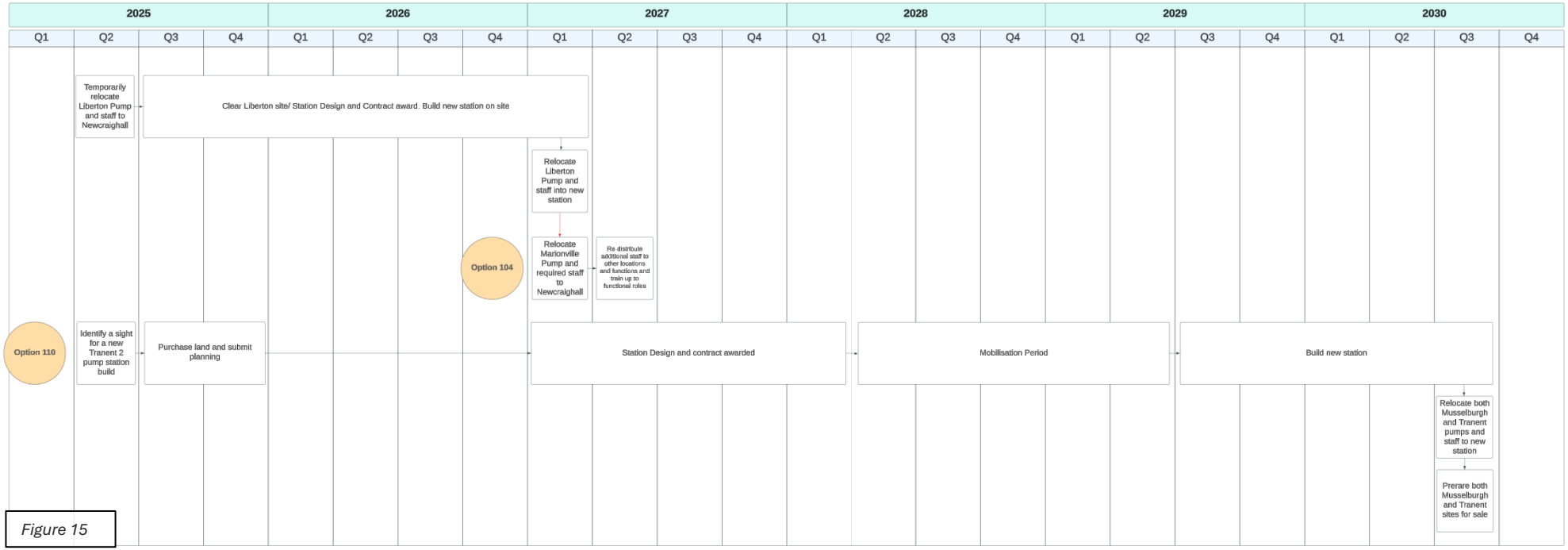
Figure 14 Musselburgh / Tranent Merger New build

	Resource Saving
Number of Post released	Nil
Annual cost of released posts	Nil
Change in annual property costs	-£50,000
Change in annual fleet costs	Nil
Total Saving	-£50,000

Configuration Total Saving
£554,067

N.B Any projected staff savings may not be fully realised by SFRS, as positions are likely to be reassigned to other functions within the Service. Additionally, property running costs will increase for the merged stations.

3. Potential Impacts

No. 4 Feasibility Is the Option a strategic priority that can be delivered within the next 5 years?	
Area of Impact	**Specific Impacts**
Timeline **Sequencing & Interdependencies**	 *Figure 15*
Interdependencies What unlocks this option? Does it unlock others?	This configuration of options relies on the completion of several other scheduled SFRS property projects: Newcraighall renovation and reconfiguration, demolition and rebuild of Liberton on current site and build of Dalkeith on a new site. This configuration would require the purchase of **1** new site and building of a new station near Tranent and the closure and release of **3** stations sites, each with a potential capital receipt. There is no reduction in fleet or equipment as a result of this option but there will be significant impact on the SFRS capital backlog. The redeployment of released uniform employees provides an opportunity to bolster pump availability and increase P,P&P and Training capacity. **A decision on re-locating of the Marionville water rescue asset will be required to progress this configuration.** The impact on training capacity is dependent on the chosen re-location for the resource verses the re-location of the station employees with water rescue competency.