APPENDIX G
RECOMMENDATION COST SUMMARY TABLES

Area 1A
Detailed Subsurface Removal Cost Estimate[1]

Site	Recommended Cleanup Action	Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[2]	Existing Brush Density	Brush Removal Cost/Acre[3]	Ordnance Removal Cost/Acre[2]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[4]	Net Cost
Area 1A	Subsurface Clearance	1	20	Moderate/Level	1.20	Moderate	$3,000.00	$11,500.00	$276,000.00	$60,000.00	$0.00	$336,000.00
											A-E Field Oversight[5]	$33,120.00
											A-E Project Management[6]	$22,080.00
											Land Survey Costs[7]	$10,000.00
											Subtotal	$341,200.00
											Costs Contracting & Oversight[8]	$51,180.00
											Evacuation Compensation[9]	$17,000.00
											10% Contingency	$39,238.00
											Total Cost Estimate	**$448,618.00**
											Approximate Cost per acre	**$22,430.90**

Notes:

[1] The costing is based on the assumption that the subsurface clearance will be implemented independently at the site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on using "Mag and Flag" technique similar to applied during Lakeview Time Critical Removal
The number of anomalies requiring investigation is estimated to be between 100 – 300 per acre based on the EE/CA data.
A multiplier of 1.2 was used to account for site specific vegetation and terrain conditions.

[3] Brush cutting costs based on the moderate vegetation density and is obtained from the Cost Estimating Guide

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and include marking site boundaries and establishing a contiguous 100' by 100' grid network throughout the 20 acre site.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area1A - Estimated 10 residential dwellings for 5 four-day weeks = 20 days. ($55 x 20 x 10) + (10 x 2 x 20 x $15) = $17,000.

Site	Recommended Cleanup Action	Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[12]	Existing Brush Density	Brush Removal Cost/Acre[13]	Ordnance Removal Cost/Acre[12]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[14]	Net Cost
Area 4A	Surface Clearance	NA	34	Moderate/Level	1.20	Medium Density	$1,700.00	$2,200.00	$89,760.00	$57,800.00	$0.00	$147,560.00
											A-E Field Oversight[15]	$10,771.20
											A-E Project Management[16]	$7,180.80
											Land Survey Costs[17]	$17,000.00
											Subtotal	$182,512.00
											Costs Contracting & Oversight[18]	$27,376.80
											Evacuation Compensation[19]	$3,060.00
											10% Contingency	$20,988.88
											Total Cost Estimate	**$233,937.68**
											Approximate Cost per acre	**$6,880.52**

Notes:

[11] The costing is based on the assumption that the surface clearance will be implemented independently at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[12] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted surface clearance only.
The number of surface anomalies requiring investigation is estimated to be 50+ per acre based on the EE/CA data.
A multiplier of 1.2 was used to account for moderate vegetation and relatively flat terrain.

[13] Brush cutting costs based on the moderate vegetation density and is obtained from the Cost Estimating Guide

[14] Site Specific Institutional Controls measures are not planned for this site.

[15] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[16] A-E Project Management estimated at 8% of ordnance removal costs.

[17] Land survey costs are lump sum and it will include marking site boundaries and establishing a contiguous 500' by 500' grid network throughout the 34 acre site.

[18] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[19] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area 4A - Estimated 3 residential dwellings for 3 four-day weeks = 12 days. ($55 x 12 x 3) + (12 x 2 x 3 x $15) = $3,060.

Area 4A
Detailed Subsurface Cost Estimate[1]

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[2]	Existing Brush Density	Brush Removal Cost/Acre[3]	Ordnance Removal Cost/Acre[2]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[4]	Net Cost
Area 4A	Subsurface Clearance	1-2	34	Moderate/Level	1.20	Medium Density	$2,100.00	$8,600.00	$350,880.00	$71,400.00	$0.00	$422,280.00
											A-E Field Oversight[5]	$42,105.60
											A-E Project Management[6]	$28,070.40
											Land Survey Costs[7]	$21,000.00
											Subtotal	$513,456.00
											Costs Contracting & Oversight[8]	$77,018.40
											Evacuation Compensation[9]	$5,100.00
											10% Contingency	$59,047.44
											Total Cost Estimate	**$654,621.84**
											Approximate Cost per acre	**$19,253.58**

Notes:

[1] The costing is based on the assumption that the subsurface clearance will be implemented independently at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on manual digital geophysical mapping (DGM).
The number of anomalies requiring investigation after DGM is estimated to be 25-75 per acre based on the EE/CA data.
A multiplier of 1.2 was used to account for vegetation and terrain.

[3] Brush cutting costs based on the moderate vegetation density and is obtained from the Cost Estimating Guide

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and it will include marking site boundaries and establishing a contiguous 100' by 100' grid network throughout the 34 acre site.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area 4A - Estimated 3 residential dwellings for 5 four-day weeks = 20 days. ($55 x 20 x 3) + (20 x 2 x 3 x $15) = $5,100.

Area 4B
Detailed Subsurface Cost Estimate[1]

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[2]	Existing Brush Density	Brush Removal Cost/Acre[3]	Ordnance Removal Cost/Acre[2]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[4]	Net Cost
Area 4B	Subsurface Clearance	1-2	10	Open/Level	1.00	Light Density	$250.00	$12,200.00	$122,000.00	$2,500.00	$0.00	$124,500.00
											A-E Field Oversight [5]	$14,640.00
											A-E Project Management [6]	$9,760.00
											Land Survey Costs [7]	$8,000.00
											Subtotal	$156,900.00
											Costs Contracting & Oversight [8]	$23,535.00
											Evacuation Compensation [9]	$680.00
											10% Contingency	$18,043.50
											Total Cost Estimate	**$199,158.50**
											Approximate Cost per acre	**$19,915.85**

Notes:

[1] The costing is based on the assumption that the subsurface clearance will be implemented individually at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on manual digital geophysical mapping (DGM).
The number of anomalies requiring investigation after DGM is estimated to be 25-75 per acre based on the EE/CA data and land use (plow parts and other farm equipment).
A multiplier of 1.0 was used to account for vegetation and terrain.

[3] Brush cutting costs based on the vegetation density and is obtained from the Cost Estimating Guide

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and it will include marking site boundaries and establishing a 100' by 100' grid system within the site for clearance.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area 4B - Estimated 1 residential dwelling for 2 four-day weeks = 8 days. ($55 x 8 x 1) + (8 x 2 x 1 x $15) = $680.

Area 4C
Detailed Subsurface Cost Estimate[1]

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[2]	Existing Brush Density	Brush Removal Cost/Acre[3]	Ordnance Removal Cost/Acre[2]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[4]	Net Cost
Area 4C	Subsurface Clearance	2+	16	Open/Level	1.00	Light Density	$500.00	$13,000.00	$208,000.00	$8,000.00	$0.00	$216,000.00
											A-E Field Oversight [5]	$24,960.00
											A-E Project Management [6]	$16,640.00
											Land Survey Costs [7]	$15,000.00
											Subtotal	$272,600.00
											Costs Contracting & Oversight [8]	$40,890.00
											Evacuation Compensation [9]	$8,160.00
											10% Contingency	$31,349.00
											Total Cost Estimate	**$352,999.00**
											Approximate Cost per acre	**$22,062.44**

Notes:

[1] The costing is based on the assumption that the clearance will be implemented individually at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on manual digital geophysical mapping (DGM). The number of anomalies requiring investigation after DGM is estimated to be >75 per acre based on the EE/CA data, proximity to former target, and cultural residential debris. A multiplier of 1.0 was used to account for vegetation and terrain.

[3] Brush cutting costs based on the vegetation density at each site and they are obtained from USAESC-Huntsville Cost Estimating Guide

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and it will include marking residential site boundaries and establishing a 100' by 100' grid system within the residential subsites for clearance.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated. Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day. For Area 4C - Estimated 8 residential dwellings for 3 four-day weeks = 12 days. ($55 x 12 x 8) + (12 x 2 x 8 x $15) = $8,160.

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[12]	Existing Brush Density	Brush Removal Cost/Acre[13]	Ordnance Removal Cost/Acre[12]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[14]	Net Cost
Area 4D	Subsurface Clearance	2 Feet	317	Light/Moderate	1.20	Light Density	$250.00	$12,500.00	$4,755,000.00	$79,250.00	$0.00	$4,834,250.00
											A-E Field Oversight[15]	$570,600.00
											A-E Project Management[16]	$380,400.00
											Land Survey Costs[17]	$180,000.00
											Subtotal	$5,965,250.00
											Costs Contracting & Oversight[18]	$894,787.50
											Evacuation Compensation[19]	$16,320.00
											10% Contingency	$686,003.75
											Total Cost Estimate	**$7,562,361.25**
											Approximate Cost per acre	**$23,856.03**

Notes:

[11] The costing is based on the assumption that the subsurface clearance will be implemented independently at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[12] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted subsurface clearance - Mag and Dig. The number of anomalies requiring investigation is estimated to be 100-300 per acre based on the EE/CA data. A multiplier of 1.2 was used to account for light vegetation and rough terrain. Only agriculturally-used portion of site (estimated at 317 acres) would be cleared.

[13] Brush cutting costs based on the light vegetation density (agricultural use fields) and is obtained from the Cost Estimating Guide.

[14] Site Specific Institutional Controls measures are not planned for this site.

[15] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[16] A-E Project Management estimated at 8% of ordnance removal costs.

[17] Land survey costs are lump sum and it will include marking site boundaries and establishing a contiguous 100' by 100' grid network throughout the 1837 acre site.

[18] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[19] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated. Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day. For Area 4D - Estimated 8 residential dwellings for 6 four-day weeks = 24 days. ($55 x 24 x 8) + (24 x 2 x 8 x $15) = $16,320.

Area 4
Detailed Surface Cost Estimate

Site	Recommended Cleanup Action	Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[12]	Existing Brush Density	Brush Removal Cost/Acre[13]	Ordnance Removal Cost/Acre[12]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[14]	Net Cost
Area 4	Surface Clearance	NA	21139	Moderate/Moderate	1.25	Medium Density	$750.00	$2,200.00	$58,132,250.00	$15,854,250.00	$0.00	$73,986,500.00
											A-E Field Oversight[15]	$6,975,870.00
											A-E Project Management[16]	$4,650,580.00
											Land Survey Costs[17]	$3,000,000.00
											Subtotal	$88,612,950.00
											Costs Contracting & Oversight[18]	$13,291,942.50
											Evacuation Compensation[19]	$1,377,000.00
											10% Contingency	$10,190,489.25
											Total Cost Estimate	**$113,472,381.75**
											Approximate Cost per acre	**$5,367.92**

Notes:

[1] The costing is based on the assumption that the surface clearance will be implemented independently at this site.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted surface clearance only.
The number of surface anomalies requiring investigation is estimated to be 50+ per acre based on the EE/CA data.
A multiplier of 1.25 was used to account for moderate vegetation and terrain.

[3] Brush cutting costs based on the moderate vegetation density and is obtained from the Cost Estimating Guide. Mechanized equipment would be utilized to reduce per acre cost. Portion of site is agricultural use and/or logged.
Surface clearance would not require clearance level as would be needed for subsurface clearance.

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and it will include marking site boundaries and establishing a contiguous 500' by 500' grid network throughout the 21,000 acre site.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area 4 - Estimated 225 residential dwellings (on average and not same throughout) for 12 four-day weeks = 2700 days. ($55 x 2700 x 6) + (2700 x 2 x 6 x $15) = **$1,377,000.**

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[12]	Existing Brush Density	Brush Removal Cost/Acre[13]	Ordnance Removal Cost/Acre[12]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[14]	Net Cost
Area 4	Subsurface Clearance	2 Feet	21139	Moderate/Moderate	1.50	Medium Density	$1,500.00	$9,800.00	$310,743,300.00	$31,708,500.00	$0.00	$342,451,800.00
											A-E Field Oversight[15]	$37,289,196.00
											A-E Project Management[16]	$24,859,464.00
											Land Survey Costs[17]	$3,000,000.00
											Subtotal	$407,600,460.00
											Costs Contracting & Oversight[18]	$61,140,069.00
											Evacuation Compensation[19]	$3,000,000.00
											10% Contingency	$46,874,052.90
											Total Cost Estimate	**$518,614,581.90**
											Approximate Cost per acre	**$24,533.54**

Notes:

[11] The costing is based on the assumption that the subsurface clearance will be implemented independently at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[12] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted subsurface - Mag and Dig. clearance only.
The number of anomalies requiring investigation is estimated to be > 300 per acre based on the EE/CA data.
A multiplier of 1.5 was used to account for moderate vegetation and rough terrain.

[13] Brush cutting costs based on the moderate vegetation density and is obtained from the Cost Estimating Guide. Mechanized equipment would be utilized to reduce per acre cost. Portion of site is agricultural use and/or logged.
Subsurface clearance would require clearance level over and above that needed for surface clearance only.

[14] Site Specific Institutional Controls measures are not planned for this site.

[15] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[16] A-E Project Management estimated at 8% of ordnance removal costs.

[17] Land survey costs are lump sum and it will include marking site boundaries and establishing a contiguous 100' by 100' grid network throughout the 1837 acre site.

[18] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[19] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Area 4 - Estimated 225 residential dwellings (on average and not same throughout) for 12 four-day weeks = 2700 days. ($55 x 2700 x 6) + (2700 x 2 x 6 x $15) = $1,377,000.

Lakeview Subdivision
Detailed Subsurface Cost Estimate[1]

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[2]	Existing Brush Density	Brush Removal Cost/Acre[3]	Ordnance Removal Cost/Acre[2]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[4]	Net Cost
Lakeview Subdivision	Subsurface Clearance	2	26	Moderate/Level	1.20	Light	$400.00	$7,185.00	$224,172.00	$10,400.00	$0.00	$234,572.00
											A-E Field Oversight[5]	$26,900.64
											A-E Project Management[6]	$17,933.76
											Land Survey Costs[7]	$5,000.00
											Subtotal	$284,406.40
											Costs Contracting & Oversight[8]	$42,660.96
											Evacuation Compensation[9]	$13,600.00
											10% Contingency	$32,706.74
											Total Cost Estimate	**$373,374.10**
											Approximate Cost per acre	**$14,360.54**

Notes:

[1] The costing is based on the assumption that the subsurface clearance will be implemented individually at this site. The costs may be less if the clearance is contracted and implemented concurrently with other sites.

[2] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted subsurface clearance - Mag and Dig.
The number of anomalies requiring investigation is estimated to be 25-75 per acre based on the EE/CA data and the USAESCH TCRA DGM interpretation.
A multiplier of 1.2 was used to account for moderate vegetation and rough terrain.
Assumes worst-case that all 26 acres require subsurface investigation. Application of iterative approach as specified in Appendix B is planned.
Based on review of DGM survey map: Estimated 1500 total anomalies for reacquisition and further subsurface investigation.
Since the residential dwellings are in proximity to an active public road (Roberts Chapel), costs associated with local police guarding of MSD included here. Assume 12 days x 2 guards x 10 hours/day x $20/hour = $4800.

[3] Brush cutting costs are minimal for the Lakeview Subdivision as most of the necessary vegetation removal was completed during the TCRA.

[4] Site Specific Institutional Controls measures are not planned for this site.

[5] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[6] A-E Project Management estimated at 8% of ordnance removal costs.

[7] Land survey costs are lump sum and would be limited only to re-establishing grids previously set during the TCRA.

[8] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[9] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
For Lakeview - Estimated 10 residential dwellings for 4 four-day weeks = 16 days. ($55 x 16 x 10) + (10 x 2 x 16 x $15) = $13,600.

Site	Recommended Cleanup Action	Estimated Depth of Clearance (ft)	Area of Clearance (Acres)	Existing Vegetation (V) / Terrain (T)	V/T Modifier[12]	Existing Brush Density	Brush Removal Cost/Acre[13]	Ordnance Removal Cost/Acre[12]	Total Ordnance Removal Cost	Total Brush Removal Cost	Institutional Control Costs[14]	Net Cost
Residential Footprint	Subsurface Clearance	Up to 4	2	Moderate/Level	1.00	Light	$400.00	$9,600.00	$19,200.00	$800.00	$0.00	$20,000.00
											A-E Field Oversight[15]	$2,304.00
											A-E Project Management[16]	$1,536.00
											Land Survey Costs[17]	$1,200.00
											Subtotal	$25,040.00
											Costs Contracting & Oversight[18]	$3,756.00
											Evacuation Compensation[19]	$690.00
											10% Contingency	$2,879.60
											Total Cost Estimate	**$32,365.60**
											Approximate Cost per acre	**$16,182.80**

Notes:

[11] The costing is based on the assumption that the 2-acre subsurface clearance will be implemented at each residence within the subsector concurrently.

[12] Cost for OE Removal is based on the USAESCH Cost Estimating Guide, professional judgment, and actual costs from other similar sites. Cost is based on magnetometer-assisted subsurface clearance - Mag and Dig.
The number of anomalies requiring investigation is estimated to be 400 per acre based on the EE/CA data, the USAESCH TCRA DGM interpretation, and likely cultural building debris contamination.
A multiplier of 1.0 was used to account for anticipated low vegetation removal and level residential terrain.
Since most residential dwellings will be in proximity to an active public road, costs associated with local police guarding of MSD included here. Assume 3 days x 2 guards x 10 hours/day x $20/hour = $1200.

[13] Brush cutting costs are assumed relatively low since the clearance area is the primary residential footprint.

[14] Site Specific Institutional Controls measures are not planned for the individual residential dwellings.

[15] A-E Field Oversight estimated at 12% of total ordnance removal costs. Includes documentation and reporting.

[16] A-E Project Management estimated at 8% of ordnance removal costs.

[17] Land survey costs are lump sum and would be limited only to establishing grids and boundary of residential footprint.

[18] Costs for Contracting and Oversight are estimated at 15% of the subtotal cost.

[19] Evacuation costs based on the estimated number of residential dwellings within the anticipated minimum separation distance (MSD) for the site-specific munition anticipated.
Evacuation anticipated between 7AM and 5PM. Assumes 2 residents per household average and reimbursement of $55 for lodging and $15 per person per day.
Estimated 2 residential dwellings for 3 days per action, as locations are generally isolated. ($55 x 2 x 3) + (2 x 4 x 3 x $15) = $690.