

# ORNL CAIS Inspection Program

October 22, 2024

Sandra J.H. Moats Oak Ridge National Laboratory

ORNL is managed by UT-Battelle LLC for the US Department of Energy



# Oak Ridge National Laboratory

- •4,421 acres
- 400+ real property assets
- •7,100 employees
- \$2.78B FY23 Funding

# ORNL has a long history

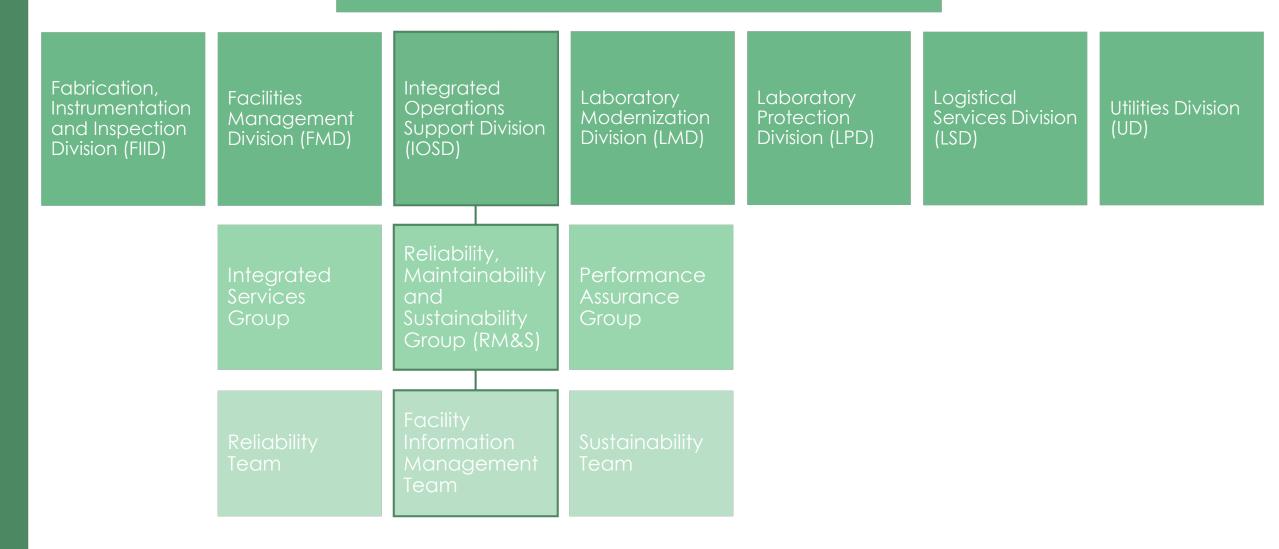




### Oak Ridge National Laboratory

Biological and Environmental Systems Sciences	Computing and Computati Sciences		Energy Science Techno	logy	Fissic and	on and on Energy Science	Exascale Computing Project		
Directorate		Directorate		Directorate		Directorate		leutron	
lsotope	National		Neutror		Phys	ical		pgrades roject Office	
Science and Engineering Directorate	Security Sciences Directorate	· · · · · · · · · · · · · · · · · · ·		Sciences Directorate		Physical Sciences Directorate		US ITER Project	
Business Services Directorate	Environment, Safety, Health, and Quality Directorate	and Co	iunications ommunity ement orate	Facilities a Operation Directorate	S	Human Resources Directorate		Information Technology Services Directorate	

### Facilities and Operations Directorate





## FIM Team Personnel



Sandra Moats Facility Information Management Team Lead



Stacy Hubbard IOSD System Administrator

CAK RIDGE



Tim Cofer Condition Assessment Engineer

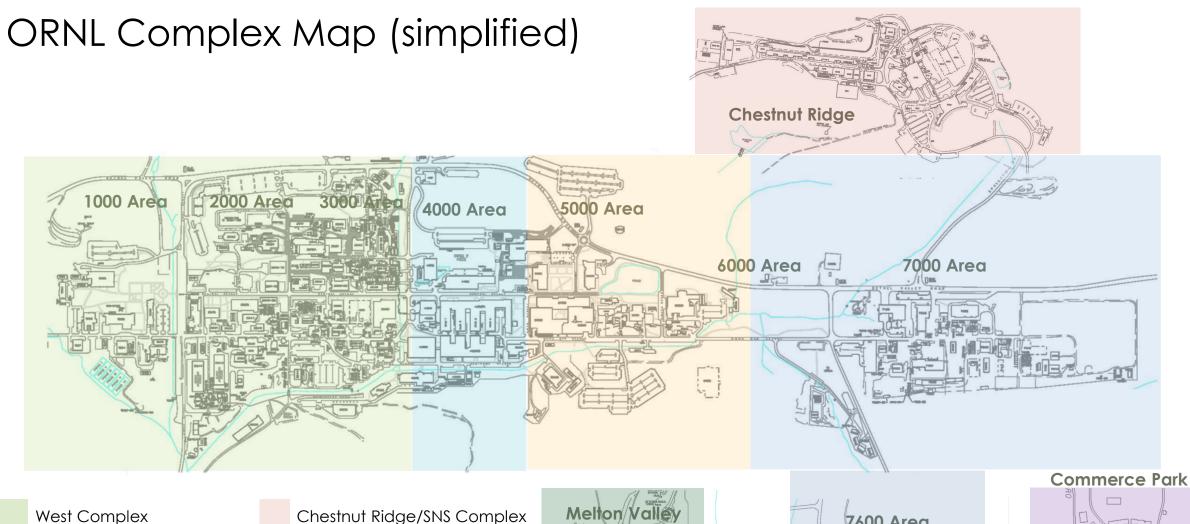


Aaron Weaver ISED Integrated Operations and Infrastructure

# FIM Team Responsibilities, Annual Timeline

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FIMS, other facilities systems	FIMS, FIC,	SAP faciliti	es systems	data mai	ntenance	, AFDCS (A	al Lab Plan Active Faci and User G	ities Data	Collectior		ot reportin OE) data	
CAIS, eCAS	Update C	AIS/FIMS c	lata eleme	ents: Repa	ir Needs, E	Deferred M	et every 3 laintenanc raining and	e, Facility	Condition	, etc. CAIS		
FUAs	Update/r	naintain/c	reate new	Facility Us	e Agreem	ents as ne	eded.					
Bridge Program	Integratio	on with ORI	NL Bridge F	Program. B	ridge asse	essments ev	very 2 yeaı	rs. Data m	aintenanc	e, answer	ing data c	alls





Central Complex

Computational Complex

Chestnut Ridge/SNS Complex

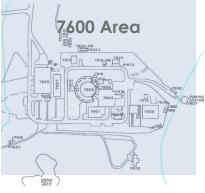
Melton Valley/HFIR Complex

Offsite Complex

East Complex

CAK RIDGE

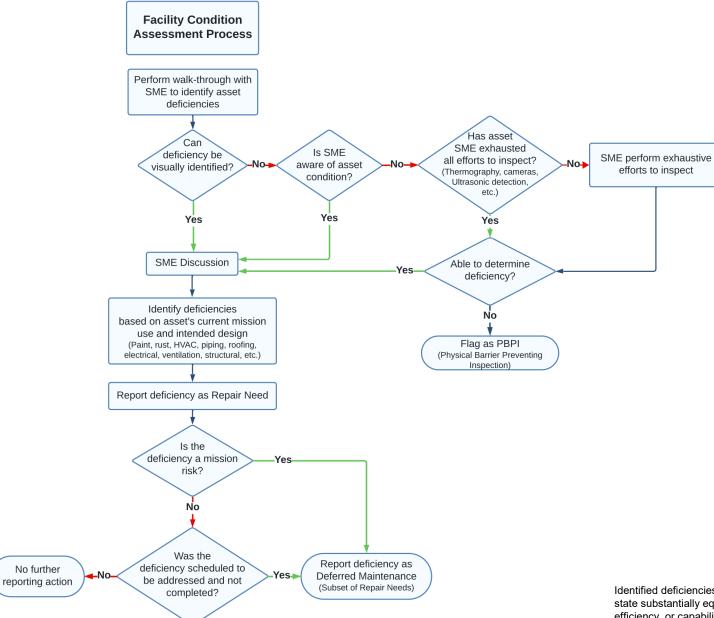
8





### Hardin Valley

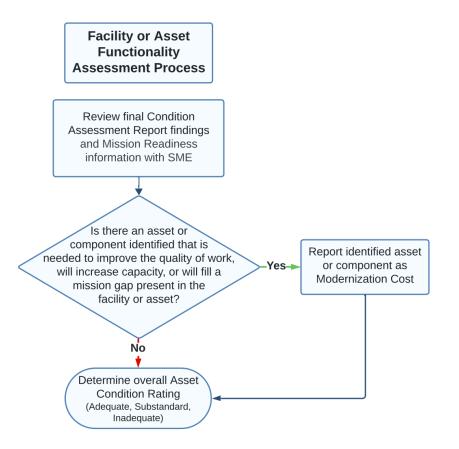
# Facility Condition Assessment Process





Identified deficiencies should be what's needed to restore the asset to a state substantially equivalent to the most recently configured capacity, efficiency, or capability as required by the mission.

# Functionality Assessment Process



**CAK RIDGE** National Laboratory

## Previous Condition Assessment Reports

Property Number: 2500 Property Name: Health Services Support Facility Assessment Date: 7/29/2020

Role	Name	Signature
Complex Manager	Scott Brackett	
Assessor #1:	Chad Miles	
Assessor #2:		
FCA Team Representative	Tim Cofer	

#### Facility Description & Use

Building 2500 is currently utilized as a Covid 19 testing facility by Health Services. It is also used as a vaccine distribution center and as a collection point for anti-body sampling related to Covid 19 and general administrative work functions related to the testing and sampling. Exterior and interior walls are concrete block with brick veneer on the northeast corner. The building is "U" shaped with truck bays in the middle where samples are collected. The flat roof is constructed of precast concrete slabs with asphalt/rock covering. The roof over the truck bay is exposed steel bar joist with metal panels. Floors are concrete with tile covering in the office areas.

#### **Facility Information Management Data**

Data Element	Value	Data Element	Value
Last Inspected Date	6/15/2016	Utilization (%)	83
Status	Operating	Gross Area (S.F.)	10,912
Mission Dependency	Mission Dependent, Not Critical	Net Usable Area (S.F.)	N/A
Year Built	1943	Excess (Y/N)	N
Usage Code	749 Other Biomed Building	Excess Year	N/A
FIMS RPV Model	E07-Fire Station	Disposition Year	2022

#### **Facility Condition Assessment Data**

Data Element	Previous Assessment Data	Current Assessment Data
Replacement Plant Value	\$1,774,581	\$1,850,033
Repair Needs	\$775,583	\$439,001
Deferred Maintenance	\$302,158	\$425,728

#### **Functionality Assessment Data**

Data Element	Previous Assessment Data	Current Assessment Data
Condition Rating	Adequate	Adequate
Condition		
Comments		
Modernization	\$0	\$0

WBS Element	Assessment Criteria	Condition Rating	Urgency Rating	Criticality Rating	Notes
A10 Foundations	A1010 Standard Foundation	N/A	N/A	N/A	N/A
	A1020 Special Foundation	N/A	N/A	N/A	N/A
	A1030 Slab on Grade	1	1	1	No issues identified with foundations.
A20 Basement Construction	A2010 Basement Excavation	N/A	N/A	N/A	N/A
	A2020 Basement Walls	N/A	N/A	N/A	N/A
B10 Superstructure	B1010 Floor Construction (Floor Slabs, Balconies Exterior Stairs)	1	1	1	No issues identified with slab.
	B1020 Roof Construction (Decking, Slabs, Sheathing Canopies)	1	1	1	No issues identified with roof structure.
B20 Exterior Enclosure	B2010 Exterior Walls	2	2	1	Prep and paint CMU decorative block on Southwest end of building covering heat pump. ~500 S.F.
	B2020 Exterior Windows (Curtain walls, Lintels, Sills, Flashing)	1	1	1	No issues identified with exterior elements.
	B2030 Exterior Doors (Personnel, Rollup, Overhead, Gates)	2	2	1	Prep and paint 8 exterior single steel 3x7 doors and 1 double door.
B30 Roofing	B3010 Roof Covering Systems (Type, Insulation, Gutters, Downspouts)2				This roof is comprised of built-up membrane that covers 11,744 total S.F. During the Bluefin roof assessment, the following issues were noted:
		2	2	2	Its installation is poor quality It is detroinance excessively There is excessive patching There is excessive shrinkage, bridging, Johner is excessive shrinkage, bridging, blisters, ridging, open laps or splits. Flashing was degraded. – Flashing repairs incorporated in restoration costs. There is indication of standing water
					The roof was rated as unsatisfactory condition. The estimated remaining service life (ERSL) of this roof is 1 yr. per RAMP FY-19. The repair needs cost includes the cost of restoration in 2020.
	B3020 Roof Openings (Hatches, Skylights, Penetrations)	N/A	N/A	N/A	N/A
C10 Interior Construction	C1010 Partitions (Interior Walls and Windows)	1	1	1	No issues identified with interiors partitions.
	C1020 Interior Doors	1	1	1	No issues identified.
	C1030 Fittings (Cubicles, Water Closets, Lockers, Counters, Cabinets, Closets)	1	1	1	No issues identified with fittings.
C20 Stairs	C2010 Stair Construction Structural Integrity	N/A	N/A	N/A	N/A
	C2020 Stair Finishes	N/A	N/A	N/A	N/A
C30 Interior Finishes	C3010 Wall Finishes (Concrete, Wall Board, Painted)	2	2	1	Interiors wall finishes need prep and paint in rooms 106, 115, 115A, 115B, 116-118, 121-125 ~ 5,000 S.F Prep and paint 25 interior doors.
	C3020 Floor Finishes (Masonry, Tile, Vinyl, Carpet)	1	1	1	No issues identified with interiors floor finishes.
	C3030 Ceiling Finishes	1	1	1	No issues identified with ceiling finishes.
D10 Conveying	D1010 Elevators & Lifts (Passenger & Freight)	N/A	N/A	N/A	N/A
	D1090 Over Conveying Systems (Overhead Crane, Hoists, Convergence)	N/A	N/A	N/A	N/A
D20 Plumbing	Conveyors) D2010 Plumbing Fixtures	1	1	1	No issues identified.

WBS Element	Assessment Criteria	Condition Rating	Urgency Rating	Criticality Rating	Notes
	(Water Closets, Lavatories, Tubs, Showers, Fountains)				
	D2020 Domestic Water				
	Distribution (Piping, Fittings, Valves, Water Heaters, Insulation)	1	1	1	No issues identified.
	D2030 Sanitary Wastewater Collection	1	1	1	No issues identified.
	D2040 Rainwater Drainage (Piping, Fitting, Roof Drains)	2	2	1	Downspouts disconnected and roof drains need reconnecting. ~1000 L.F.
	D2090 Other Plumbing System (Process Water, Process Waste, Gas, Fountain piping)	1	1	1	No issues identified.
D30 HVAC	D3010 Energy Supply (Steam, Hot, Chilled Water, Oil, Gas, Solar, Wind, Coal)	N/A	N/A	N/A	N/A
	D3020 Heating Generation Systems (Boilers, Piping, Fittings, Pumps, Insulation)	N/A	N/A	N/A	N/A
	D3030 Cooling Generation System (Chillers, Cooling Towers, Condensers, Pumps, Insulation)	N/A	N/A	N/A	N/A
	D3040 Distribution System (CW/HW supply return, AHU & coils, VAV, Ventilation & Exhaust, Heat Exchangers, Fan Coils)	1	1	1	No issues with HVAC systems. Small exhaust fans are used throughout the facility.
	D3050 Terminal & Package Units (Heaters, Window\ Wall/Roof AC & Heat Pumps, Ductwork)	1	1	1	No issues with HVAC systems. HVAC is primarily provided by unit heaters, window/thru-the-wall units and small Condenser/AHU units.
	D3060 Controls & Instrumentation (Heating, Cooling, Monitoring, Automation)	N/A	N/A	N/A	N/A
	D3070 Systems Testing and Balancing Piping, Air Testing and Balancing	N/A	N/A	N/A	N/A
	D3090 Other HVAC System & Equipment (Special, Dust Collector, Air Curtains & Purifiers, Booth Ventilation)	N/A	N/A	N/A	N/A
D40 Fire Protection	D4010 Sprinklers (Piping, Valves, Fittings, Sprinkler Heads)	1	1	1	A 6-inch wet pipe sprinkler system protects the building. The most recent FPEA December 2014 had no findings with the facility.
	D4020 Standpipes (Piping, Valves, Fittings, Cabinets, Hoses)	1	1	1	N/A
	D4030 Fire Protection Specialties (Fire Extinguishers & Cabinets)	1	1	1	Fire extinguishers are in the IT&M program and up to date.
	D4090 Other Fire Protection Systems (Heat & Ionization Detection, Chemical, Gas, Foam, Exhaust Hood)	1	1	1	A fire alarm control system monitors smoke detector, heat detectors, and six pull stations in the building. No findings reported.
D50 Electrical	D5010 Electrical Service & Distribution (Motor Control Centers, Transformers, Switchboards, Panelboards, Circuit Breakers)	1	1	3	Served from Station 6-18. Main Distribution Panel (~1,200A) No issues identified.
	D5020 Lighting & Branch Wring Lighting Fixtures, Branch wiring, Equipment Connections, Exterior Lighting)	1	1	3	Facility contains the following major electrical components (all 120/2087) Lighting Panels (7@200A, 4@~100A) No issues identified
	D5030 Communication & Security (Fire Alarm, Phone, LAN, PA, TV, Security)	N/A	N/A	N/A	N/A The security and alarm components are not a part of this assessment.
	D5090 Other Electrical Systems (Emergency Generators, UPS, Emergency & Exit Lighting, Lightening Protection	1	1	1	Facility is provided backup power from a 50kw generator and transfer switch in building 2572 located on the northwest corner of the facility and 150KVA UPS Exit and Emergency lights are in IT&M program.
E10 Equipment	System) E1020 Institutional	N/A	N/A	N/A	N/A
	Equipment	IN/A	IN/PL	INA	NA .

# eCAS: Electronic Condition Assessment System

### Condition Assessment Inspection List Full IU List GIS Map FIC FUA RAMP ACTS FSC

•	atus: Most Recent		ding: (Select/All)			Retrieve     Expor	t to Excel	New Initial Inspection:         Building: (Select)         V         Create Inspection
Building	Inspection Actions	IU Actions	Report	Reinspections	Inspection Date	<u>Status</u>	FUA Description	
0823	Photos View	View	Inspection Report	New New (copy IUs)	10/05/2021	Approved	Six 25-m diamete	r plots were laid out in 1997, and construction of the FACE facility began thereafte{more}
0825	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	07/10/2024	Approved	0825 is a well pur	np used to provide non-potable water for research activities involving plants and t{more}
0827	Photos View	View	Inspection Report	New New (copy IUs)	07/10/2024	Approved	This green house	facility is a prototype of which 16 operational ones built in Minnesota. Vegetati{more}
0855	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	07/18/2024	Approved	0855 building is th	e Operations Building 0800 Area and is constructed of pre-engineered steel struct{more}
0855T	Photos View	View	Inspection Report	New New (copy IUs)	06/29/2021	Approved	Building 0855T is	a one-story support trailer, and is used to coordinate shipping and receiving for{more}
0901A	Photos View	View	Inspection Report	New New (copy IUs)	05/20/2021	Approved	0901A was the or	ginal switch house for ORNL. When replaced by a new switch house, 0976, it was rep{more}
0901B	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	05/20/2021	Approved	0901B Oil Pump I	nouse for 0901, formerly known as 0904 Oil Storage house, is a small concrete block b{more}
0901C	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	05/20/2021	Approved	0901C Valve hous	se, was formerly used for forest fire preparation for fires near 0901.
0902	Photos View	View	Inspection Report	New New (copy IUs)	07/09/2024	Approved	0902, is a cast-in-	place concrete rebar reinforced 3-million-gallon water reservoir for potable wate{more}
0902A	Photos Approvals	<u>View</u>	Inspection Report		09/03/2024	Inspection Complete	This is a Rubb ter	t for working on, storage and protection of equipment for the Site Wide Water Dist{more}
0902B	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	09/03/2024	Approved	This is a Rubb ter	t for working on, storage and protection of equipment for the Site Wide Water Dist{more}
0902-PAD	Photos View	View	Inspection Report	New New (copy IUs)	07/09/2024	Approved	0902-PAD is a co	ncrete pad used to store\stage utilities inventory such as equipment, piping, recycl{more}
0903	Photos View	View	Inspection Report	New New (copy IUs)	04/06/2023	Approved	New Bethel Bapti	st Church Building
0903-MT	Photos View	View	Inspection Report	New New (copy IUs)	04/06/2023	Approved	This concrete mo	nument commemorates the memory of the New Bethel Valley Church
0907	Photos Approvals	<u>View</u>	Inspection Report		09/19/2024	Inspection Complete	Building 0907 is a	one-story, noncombustible structure with a hardened underground portion construct{more}
0926A	Photos View	View	Inspection Report	New New (copy IUs)	07/09/2024	Approved	This building hous	ses the potable water level valve controller house for water reservoir 0926. The{more}
0932	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	10/27/2021	Approved	Walker Branch W	est 0932 Soil block 1 is a research "soil block" site. It consists only of a foundat{more}
0933	Photos View	View	Inspection Report	<u>New (copy IUs)</u>	10/27/2021	Approved	Walker Branch W	est 0933 Soil block 2 is a research "soil block" site. It consists only of a founda{more}
0935	Photos View	View	Inspection Report	New New (copy IUs)	10/05/2021	Approved	0935 is a prefabri	cated fiberglass water measurement flume\structure fed by a 6 foot deep undergroun{more}
0946	Photos Approvals	View	Inspection Report		09/19/2024	Inspection Complete	0946 is a water w	ell in a small 80 square foot concrete block well house with a removable 42 square{more}
0956	Photos View	View	Inspection Report	New New (copy IUs)	08/02/2021	Approved	Former Spring Wa	ater Pumphouse used to sample and collect spring water Notes: This facility is in S{more}
0958	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	07/01/2021	Approved	0958 is also know	n as Water well number 1. This water resource well was can provide non potable wat{more}
0960	Photos View	View	Inspection Report	New New (copy IUs)	07/26/2021	Approved	0960 is water wel	no. 2 in the West Complex, size is 85 GPM.
0966	Photos Approvals	<u>View</u>	Inspection Report		09/25/2024	Inspection Complete	This facility is the	primary security checkpoint for entry into the west end of the laboratory.
0969	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	10/05/2021	Approved	The airway beaco	n lighthouse is a metal frame structure, approximately 14 foot long by 10 foot wide{more}
0970	Photos Approvals	View	Inspection Report		09/19/2024	Inspection Complete	0970 is a former g	uard tower built to resemble a silo in 1948 with concrete block exterior and woode{more}
0973	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	11/30/2021	Approved	0973 is a solar pa	nel array that produces electrical kW power.
0975A	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	07/09/2024	Approved	This is the potable	water level valve controller house for water reservoir 0975. The valve in this{more}
1000-MT1	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	05/17/2023	Approved	This monument is	dedicated to Marilyn Lloyd and way finding sign that denotes the location of the En{more}
1004	Photos View	<u>View</u>	Inspection Report	New New (copy IUs)	07/22/2021	Approved	The UAS Netted I	Enclosure was built in 2016 and part of the West Complex. It is an outdoor large nett{more}
1013	Photos Approvals	<u>View</u>	Inspection Report		09/25/2024	Inspection Complete	This facility is a pr	e-engineered, prefabricated restroom facility with a septic tank. The entire st{more}
02GRAND	Photos View	View	Inspection Report	New New (copy IUs)	08/09/2021	Approved	This asset provide	es office space to support the Spruce Project Note: Per Ellen Reeves, ORNL Procure{more}
1055	Photos View	View	Inspection Report	New New (copy IUs)	08/26/2020	Approved	Well number nine	was a non-potable source of water in the 1000 area. It is currently shutdown, lock{more}
1055COM	Photos View	View	Inspection Report	New New (copy IUs)	08/09/2021	Approved	This is office space	e to support ITER project management. Note: Per Ellen Reeves, ORNL Procurement{more}
1059	Photos View	View	Inspection Report	New New (copy IUs)	08/09/2024	Approved	Building 1059 is a	two-story (21'8" high), noncombustible structure. The building is primarily occup{more}



# eCAS: Electronic Condition Assessment System

### Condition Assessment Inspection List Full IU List GIS Map FIC FUA RAMP ACTS FSC

Existing I	atus: (All)	Buil	ding: (Select/All)				<ul> <li>✓ Retrieve</li> </ul>	Export to Excel	New Initial Inspection:         Building: (Select)         V
<b>Building</b>	Ins <sub>I</sub> In Process	tions	Report	Reins	pections	Inspection Date	<u>Status</u>	FUA Description	<u>n</u>
0823	E Inspection Complete	w	Inspection Report	New Nev	<u>w (copy IUs</u> )	10/05/2021	Approved	Six 25-m diamete	er plots were laid out in 1997, and construction of the FACE facility began thereafte{more}
0825	E Approved	w	Inspection Report	<u>New Nev</u>	<u>w (copy IUs)</u>	07/10/2024	Approved	0825 is a well pu	mp used to provide non-potable water for research activities involving plants and t{more}
0825	E Archived	w	Inspection Report	<u>New</u> Nev	<u>w (copy IUs)</u>	11/06/2020	Approved	0825 is a well pu	mp used to provide non-potable water for research activities involving plants and t{more}
0827	E Most Recent	w	Inspection Report	New New	<u>w (copy IUs)</u>	07/10/2024	Approved	This green house	e facility is a prototype of which 16 operational ones built in Minnesota. Vegetati{more}
0855	Priolos view vie	w	Inspection Report	New New	<u>w (copy IUs)</u>	07/18/2024	Approved	0855 building is t	the Operations Building 0800 Area and is constructed of pre-engineered steel struct{more}
0855T	Photos View Vie	<u>م</u>	Inspection Report		w (conville)	06/29/2021	Annroved	Ruilding 0855T is	s a one-story support trailer and is used to coordinate shipping and receiving for Jmore)

### Condition Assessment Inspection List Full IU List GIS Map FIC FUA RAMP ACTS FSC

Existing I	Inspections Crite	eria:				New Initial Inspection:
Inspection St	atus: Most Recent	✓ Buildi	ng: (Select/All)	Retrieve	Export to Excel	Building: (Select)
			(Select/All)	·		
Building	Inspection Actions	IU Actions	0823 - Free Air CO2 Experiment Complex	<u>Status</u>	FUA Description	<u>n</u>
0823	Photos View	<u>View</u> I	192 0825 - Well, Non-Potable Water	Approved	Six 25-m diame	ter plots were laid out in 1997, and construction of the FACE facility began thereafte{more}
0825	Photos View	<u>View</u> <u>I</u>	15p 0827 - Peat Bog Soil Warming Enclosure	Approved	0825 is a well p	ump used to provide non-potable water for research activities involving plants and t{more}
0827	Photos View		0855 - Operations Building 0800 Area	Approved	This green hous	e facility is a prototype of which 16 operational ones built in Minnesota. Vegetati{more}
0855	Photos View	<u>View</u> <u>I</u>	0855T - Materials Management Support Trailer	Approved	0855 building is	the Operations Building 0800 Area and is constructed of pre-engineered steel struct{more}
0855T	Photos View	<u>View</u> I	0901A - Electrical Utilities Storage and Shop	Approved	Building 0855T	is a one-story support trailer, and is used to coordinate shipping and receiving for{more}
0901A	Photos View	<u>View</u> <u>I</u>	0901B - Oil Pump House for 0901	Approved	0901A was the	original switch house for ORNL. When replaced by a new switch house, 0976, it was rep{more}
0901B	Photos View	<u>View</u> <u>I</u>		Approved	0901B Oil Pump	house for 0901, formerly known as 0904 Oil Storage house, is a small concrete block b{more}
0901C	Photos View	<u>View</u> <u>I</u>	0901C - Valve House for 0901	Approved	0901C Valve ho	use, was formerly used for forest fire preparation for fires near 0901.
0902	Photos View	<u>View</u> I	0902 - Main Water Reservoir	Approved	0902, is a cast-i	n-place concrete rebar reinforced 3-million-gallon water reservoir for potable wate{more}
0902A	Photos Approvals		0902A - 0902 Rubb Tent	Inspection Com	plete This is a Rubb t	ent for working on, storage and protection of equipment for the Site Wide Water Dist{more}
0902B	Photos View	<u>View</u> <u>I</u>	nsp 0902B - 0902 Rubb Tent #2	Approved	This is a Rubb t	ent for working on, storage and protection of equipment for the Site Wide Water Dist{more}
0902-PAD	Photos View	<u>View</u> I	nsp 0902-PAD - Water Dist. Sys. Maint Materials Storage	Approved	0902-PAD is a c	concrete pad used to store\stage utilities inventory such as equipment, piping, recycl{more}
0903	Photos View	<u>View</u> I	nsp 0903 - New Bethel Baptist Church	Approved	New Bethel Bap	tist Church Building
0903-MT	Photos View	<u>View</u> I	1903-MT - Bethel Valley Church Monument	Approved	This concrete m	onument commemorates the memory of the New Bethel Valley Church
0907	Photos Approvals	<u>View</u> <u>I</u>	1907 - Walker Branch Watershed Lab	Inspection Com	plete Building 0907 is	a one-story, noncombustible structure with a hardened underground portion construct{more}
0926A	Photos View	<u>View</u> I	15p 0926A - 0926 Valve House	Approved	This building ho	uses the potable water level valve controller house for water reservoir 0926. The{more}
0932	Photos View		0932 - WBW Soil Block 1	Approved	Walker Branch	Nest 0932 Soil block 1 is a research "soil block" site. It consists only of a foundat{more}
0933	Photos View	<u>View</u> <u>I</u>	0933 - WBW Soil Block 2	Approved	Walker Branch	Nest 0933 Soil block 2 is a research "soil block" site. It consists only of a founda{more}
0935	Photos View	<u>View</u>	0935 - Walker Branch Watershed Subsurface Weir	Approved	0935 is a prefab	ricated fiberglass water measurement flume\structure fed by a 6 foot deep undergroun{more}
0946	Photos Approvals	<u>View</u> <u>I</u>	Ispection report	Inspection Com	plete 0946 is a water	well in a small 80 square foot concrete block well house with a removable 42 square{more}



### eCAS Report Header Page

### Condition Assessment Inspection Entry

GIS Map FIC FUA RAMP ACTS FSC

Building:	0907 - Walker Branch Watershed Lab
Inspection Date:	09/19/2024
Facility Description & Use: Import Text from FUA	Building 0907 is a one-story, noncombustible structure with a hardened underground portion constructed into the hillside behind the building. Original construction in 1948 was for high security storage of materials. Two additions have been built, resulting in demolition of most of the original aboveground structure. The latest addition is the pre-engineered structure with an unprotected steel frame supporting corrugated metal/insulation sandwich panels. The floor is a concrete slab. The pitched roof is a metal deck supported by unprotected steel joists. Another addition is a corridor located on the northeast corner of the pre-engineered
Status:	Inspection Complete ~
FCA Team Rep Badge/Name:	00028242 Cofer, Tim Reject Approval Date: 9/25/2024 12:01:03 PM
Assessor #1 Badge/Name:	00721358 Light, Michael Reject Approval Date: 9/26/2024 4:16:01 PM
Assessor #2 Badge/Name:	
Assessor #3 Badge/Name:	
Assessor #4 Badge/Name:	00939925 Stempkowski, Tony Approve Reject
Complex Manager Badge/Name:	00939925 Stempkowski, Tony
Functional Assessment Date:	09/19/2024 ( <u>More Info</u> )
Condition Rating:	(Select) v
Condition Comments:	This asset has no current or future mission and is formally excessed.
RPV on Inspection Date:	5195021
** Previous Values **	
Inspection Date:	08/26/2020
RPV:	4285472.00
Deferred Maintenance: (More Info)	61345.00
Repair Needs: <u>(More Info)</u>	141011.00
Modernization Cost:	0.00

(Select)

 $\sim$ 

This asset has no current or future mission and is formally excessed.

### 0907 - Walker Branch Watershed Lab

<ul> <li>Facility Information ——</li> </ul>	
Last Inspection Date:	08-26-2020
Status:	4 - Shutdown
Mission Dependency:	3 - Not Mission Dependent
Year Built:	1948
Usage Code:	761 Environmental Laboratory
FIMS RPV Model:	\$5,195,021.00
Complex:	Excess Facilities
Program:	SC
Туре:	В
Own / Ingrant:	O - DOE Owned
Excess:	Υ
Historical Designation:	Not Evaluated
Total Number Occupants:	0
Using Organization:	8900
Outgrant:	Ν
Owner:	UTB
Excess Year:	2014
Estimated Disposition Year:	2028

Condition Comments:

Condition Rating:



## eCAS IU Enter/edit Screen

### Add Condition Assessment IU Entry GIS MAP FIC FUA RAMP ACTS FSC

**Building:** 

Floor:

Room:

WBS Element:

WBS Breakdown:

Material/Type:

Quantity:

Unit of Measure:

Critical Component:

Urgency:

FSC ID:

Notes:

2661 - Office of Technical Training	
(N/A) ~	
(N/A) ~	
C10 - Interior Construction ~	
C1020 - Interior Doors ~	
(Select) ~	
(Select) ~	
(Select) ~	
(Select) V	

Cancel

Save



## eCAS IU List Edit Page

### Condition Assessment IU List GIS MAR FIC FUA RAMP ACTS FSC

#### Criteria:

Inspection: 2661 - Office of Technical Training (10/01/2024) - In Process Building: 2661 - Office of Technical Training V Flor: (Select/All) V Room: (Select/All) V WBS Element: (All)

Retrieve Add New Inspection Unit

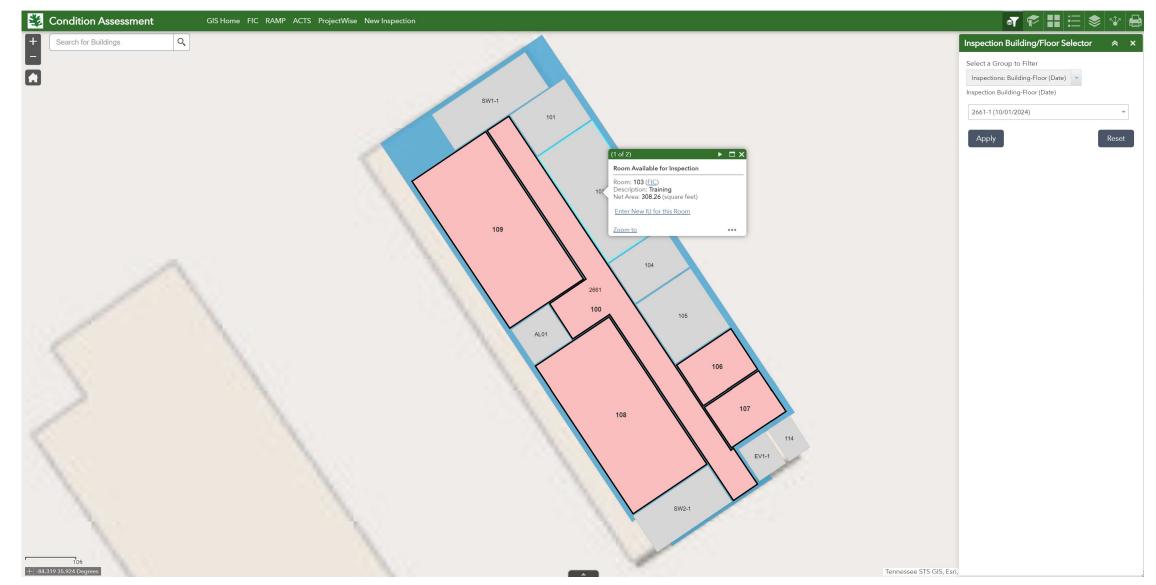
Actions	Building	g <u>Floo</u> r	Room	WBS Element	Work Breakdown	Material/Other	<u>Mat.</u> Other	<u>Qty.</u>	<u>UOM</u>	Notes	Edit	<u>Critical</u>	<u>Urgency</u>	FSC ID	<u>Repair</u> <u>Needs</u>	Def. Maint.	Mod.Cost	Delete
Edit Delete Copy Copy All	2661	1	108	A10 - Foundations	A1030 - Slab on Grade	Other	Holes	.1	Week	Replace gravel in holes near room 104 west side		No	1-2 Years		\$335.00			
	2661	N/A	N/A	B20 - Exterior Enclosure	B2010 - Exterior Walls	Masonry & brick veneer		100	L.F.	Repair brick mortar on west side outside room 103		No v	3-5 Years 🗸		819.00	0.00	0.00	
Edit Delete Copy Copy All	2661	N/A	N/A	B30 - Roofing	B3010 - Roof Coverings	Built-up Elastomeric		45.47	' Sq.	Replace built up roof cost per RAMP FY-21		Yes	1-2 Years		\$156,056.00			
Edit Delete Copy Copy All	2661	1	109	C10 - Interior Construction	C1020 - Interior Doors	Wood		1	Ea.	Replace damaged hollow core wood door room 109		No	1-2 Years		\$1,174.00			
Edit Delete Copy Copy All	2661	2	207A	C10 - Interior Construction	C1020 - Interior Doors	Wood		1	Ea.	Replace hollow core wood door, the door for the janitor supplies on second floor room, 207A, is damaged		No	1-2 Years		\$1,174.00			
Edit Delete Copy Copy All	2661	2	207	C30 - Interior Finishes	C3010 - Wall Finishes	Other	Drywall	187	S.F.	Refinish drywall in room 207		No	3-5 Years		\$268.00			
Edit Delete Copy Copy All	2661	1	108	C30 - Interior Finishes	C3020 - Floor Finishes	Carpeting		587	S.F.	Replace carpet in room 108		No	3-5 Years		\$427.00			
Edit Delete Copy Copy All	2661	1	100	C30 - Interior Finishes	C3030 - Ceiling Finishes	Acoustic ceiling tiles & panels		5.1	C.S.F.	Replace acoustical tile in first floor corridor room 100		No	3-5 Years		\$9,465.00			
Edit Delete Copy Copy All	2661	1	106	C30 - Interior Finishes	C3030 - Ceiling Finishes	Acoustic ceiling tiles & panels		1.2	C.S.F.	Replace acoustical tile in first floor corridor room 106		No	3-5 Years		\$2,227.00			
Edit Delete Copy Copy All	2661	1	107	C30 - Interior Finishes	C3030 - Ceiling Finishes	Acoustic ceiling tiles & panels		1.2	C.S.F.	Replace acoustical tile in first floor corridor room 107		No	3-5 Years		\$2,227.00			
Edit Delete Copy Copy All	2661	1	109	C30 - Interior Finishes	C3030 - Ceiling Finishes	Acoustic ceiling tiles & panels		5.86	C.S.F.	Replace acoustical tile in first floor corridor room 109		No	3-5 Years		\$10,875.00			

Return to Inspection List

Update Selected Records



## eCAS Link to GIS Map





## eCAS Report Header/approvals Page

### Condition Assessment Inspection Entry

GIS Map FIC FUA RAMP ACTS FSC

Building:	0907 - Walker Branch Watershed Lab
Inspection Date:	09/19/2024
Facility Description & Use:	Building 0907 is a one-story, noncombustible structure with a hardened underground portion constructed into the hillside behind the building. Original construction in 1948 was for high security storage of materials. Two additions have been built, resulting in demolition of most of the original aboveground structure. The latest addition is the pre-engineered structure with an unprotected steel frame supporting corrugated metal/insulation sandwich panels. The floor is a concrete slab. The pitched roof is a metal deck supported by unprotected steel joists. Another addition is a corridor located on the northeast corner of the pre-engineered
Status:	Inspection Complete ~
FCA Team Rep Badge/Name:	00028242 Cofer, Tim Reject Approval Date: 9/25/2024 12:01:03 PM
Assessor #1 Badge/Name:	00721358 Light, Michael Reject Approval Date: 9/26/2024 4:16:01 PM
Assessor #2 Badge/Name:	
Assessor #3 Badge/Name:	
Assessor #4 Badge/Name:	00939925 Stempkowski, Tony Approve Reject
Complex Manager Badge/Name:	00939925 Stempkowski, Tony
Functional Assessment Date:	09/19/2024 ( <u>More Info</u> )
Condition Rating:	(Select) v 🛈
Condition Comments:	This asset has no current or future mission and is formally excessed.
RPV on Inspection Date:	5195021
** Previous Values **	
Inspection Date:	08/26/2020
221	4285472.00
RPV:	
RPV: Deferred Maintenance: <u>(More Info</u> )	61345.00
	61345.00 141011.00
Deferred Maintenance: (More Info)	
Deferred Maintenance: <u>(More Info</u> ) Repair Needs: <u>(More Info)</u>	141011.00

#### 0907 - Walker Branch Watershed Lab

<ul> <li>Facility Information ——</li> </ul>	
Last Inspection Date:	08-26-2020
Status:	4 - Shutdown
Mission Dependency:	3 - Not Mission Dependent
Year Built:	1948
Usage Code:	761 Environmental Laboratory
FIMS RPV Model:	\$5,195,021.00
Complex:	Excess Facilities
Program:	SC
Type:	В
Own / Ingrant:	O - DOE Owned
Excess:	Y
Historical Designation:	Not Evaluated
Total Number Occupants:	0
Using Organization:	8900
Outgrant:	N
Owner:	UTB
Excess Year:	2014
Estimated Disposition Year:	2028



Page 1 of 5

### 0855 - Condition Assessment Report

10/04/2024 02:22 PM

Approved

 Building Number:
 0855

 Building Name:
 Operations Building 0800 Area

 Assessment Date:
 07/18/2024

Role	Name	Approvals
FCA Team Representative	Cofer, Tim	Approved on 07/18/2024 at 11:01 AM
Assessor #1	Fine, Greg	Approved on 08/05/2024 at 08:48 AM
Assessor #2		
Assessor #3		
Assessor #4		
Complex Manager	Brackett, Scott	Notified of Final Approval on 08/05/2024 at 08:48 AM

#### Facility Description & Use

0855 building is the Operations Building 0800 Area and is constructed of pre-engineered steel structure used for storage.

#### **Facility Information Management Data**

Data Element	Value	Data Element	Value
Last Inspection Date	07/18/2024	Utilization (%)	94
Status	Operating	Size	2,400
Mission Dependency	Mission Dependent, Not Critical	Primary Unit of Measure	SQFT
Year Built	1989	Excess (Y/N)	N
Usage Code	400 General Storage	Excess Date	N/A
RIMS RPV Model	E25-Warehouse/Storage(pre-eng	Est. Disposition Year	8888

### **Facility Information Management Data**

Data Element	Previous Assessment Data	Current Assessment Data
Replacement Plant Value	\$437,803	\$594,564
Deferred Maintenance	\$27,007	\$0
Repair Needs	\$27,662	\$10,293
Modernization Costs	\$0	\$0



Page 2 of 5

### 0855 - Condition Assessment Report

10/04/2024 02:22 PM

#### Functional Assessment Data

Data Element	Previous Assessment Data	Current Assessment Data
Conditional Rating	Adequate	Adequate
Condition Comments		

#### Details of Repair Needs & Deferred Maintenance WBS Level

WBS Element	Assemment Criteria	Fir	Room	Notes	Material	Qty.	иом	Rpr Needs	Def. Maint	Mod. Cost	Critical	Urgency	FSC ID
B20 - Exterior Enclosure	B2010 - Exterior Walls	N/A	N/A	Prep and paint exterior metal siding	Other	2940	S.F.	\$6,839	\$0	\$0	No	3-5 Years	
	B2030 - Exterior Doors	N/A	N/A	Prep and paint roll up door south side	Overhead & Rollup	1	Ea.	\$2,162	\$0	\$0	No	3-5 Years	
	B2030 - Exterior Doors	N/A	N/A	Prep and paint exterior 3 x 7 steel doors on south, north and east sides	Hollow Metal	3	Ea.	\$606	\$0	\$0	No	3-5 Years	
	B2040 - Other Exterior Enclosures	N/A	N/A	Prep and paint louvers on west side.	Other	2	Ea.	\$233	\$0	\$0	No	3-5 Years	
B30 - Roofing	B3010 - Roof Coverings	N/A	N/A	Replace downspouts on northeast and southeast corners	Gutters & Downspouts	25	V.L.F.	\$337	\$0	\$0	No	3-5 Years	
D30 - HVAC	D3040 - Distribution Systems	N/A	N/A	Prep and paint exhaust fan covers on north side.	Ventilation & exhaust systems	2	Ea.	\$116	\$0	\$0	No	3-5 Years	



Page 3 of 5

### 0855 - Condition Assessment Report

08/05/2024 08:48 AM



0855 Operations Building 0800 Area



0855 Prep & paint exterior metal siding including roll up door



0855 Prep & paint exhaust hoods west side



0855 Refinish Metal 3 x 7 doors on south, north and east sides



Page 5 of 5

#### 0855 - Condition Assessment Report

08/05/2024 08:48 AM

#### Summary of Repair Needs & Deferred Maintenance WBS Level

WBS	WBS Description	Rpr Needs	Def Maint	Mod. Costs
B20	Exterior Enclosure	\$9,840	\$0	\$0
B30	Roofing	\$337	\$0	\$0
D30	HVAC	<mark>\$</mark> 116	\$0	\$0
	Grand Total	\$10,293	\$0	\$0

Immediate Repair Needs

\*\*\* No Immediate Repair Needs Identified\*\*\*

Aging Infrastructure Needs

\*\*\* No Aging Infrastructure Needs Identified\*\*\*



### eCAS Full IU List View

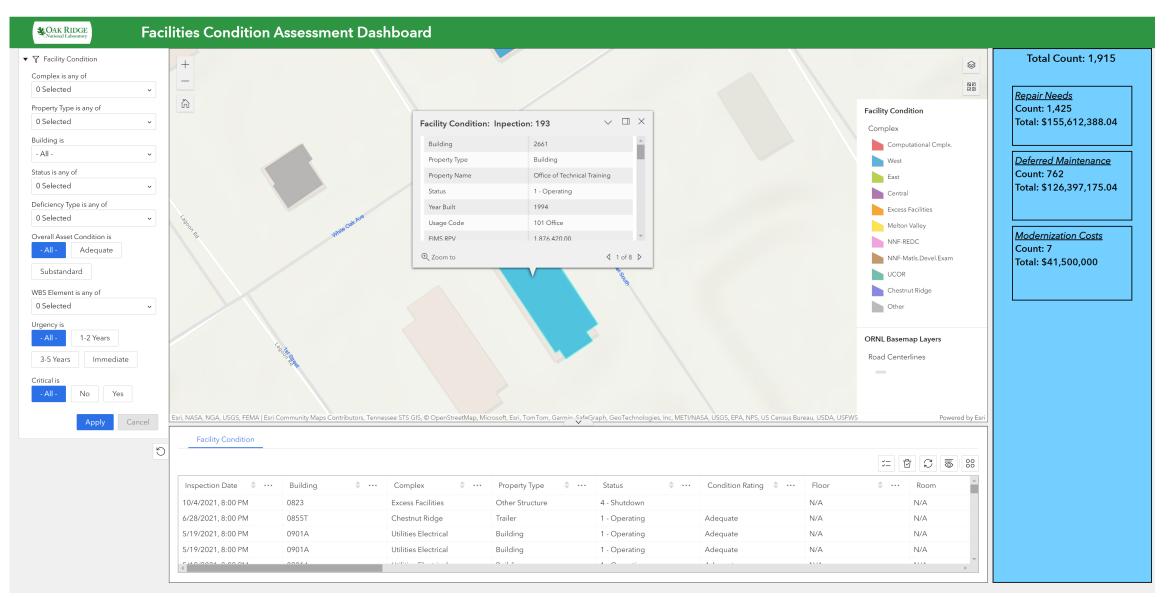
### Condition Assessment IU List

Property Filter Criteria: Export to Excel Return to Inspection List Building: Select options Complex: Select options Type: Select options Status: Select options \* -Condition: Select options ▼ Critical: Select options ▼ Urgency: Select options ▼ Deficiency: Select options WBS Element: Select options Retrieve Reset 2,505 records were found. Inspection Building Complex Prop. Work Op. Status Condition Floor Room WBS Element Material/Other Mat. Other Qty. UOM Notes Critical Urgency FSC\_ID Repair Needs Def. Maint. Mod.Cost Breakdown Туре G4030 - Site G40 - Site There are 4 sites with 11 towers each. All that remains are Other \$4,722,532,00 10/05/2021 0823 EC Shutdown N/A N/A Electrical Communications Other CO2 Towers 44 Ea. pumps, piping, steel towers and concrete bases. Selected closet Structure & Security match in CAIS. Note: Cost to repair equals RPV Utilities Glass door with Operational Adequate B20 - Exterior B2030 - Exterior Other 0827 WF N/A \$4,622.00 07/10/2024 N/A Other aluminum Repair West and East glass access doors No 1-2 Years Ea. Structure Standby Enclosure Doors frames Air handling D3040 units with coils Other Operational 07/10/2024 0827 WF Adequate N/A N/A D30 - HVAC Distribution Ea. Repair Instrumentation box North side No 1-2 Years \$5,925,00 Structure Standby (electric Systems included) Other Operational G20 - Site G2040 - Site Vegetation Remove vegetation growing outside and inside facility not WF 07/10/2024 0827 Adequate N/A N/A Other Week No 1-2 Years \$3,346.00 Structure Standby Improvements Development Control applicable to peat moss study B20 - Exterior B2010 - Exterior 0855 WF Operating N/A Other Metal 2940 S.F. Prep and paint exterior metal siding No 3-5 Years \$6,839.00 07/18/2024 Building Adequate Enclosure Walls B20 - Exterior B2030 - Exterior Prep and paint exterior 3 x 7 steel doors on south, north and N/A Ea. 07/18/2024 0855 WF Building Operating Adequate Hollow Metal No 3-5 Years \$606.00 Enclosure Doors east sides B20 - Exterior B2030 - Exterior Overhead & Building N/A 07/18/2024 0855 WF Operating Adequate Ea. Prep and paint roll up door south side No 3-5 Years \$2,162.00 Rollup Enclosure Doors B2040 - Other B20 - Exterior 07/18/2024 0855 WF Building N/A Prep and paint louvers on west side. No 3-5 Years \$233.00 Operating Adequate Exterior Other louvers Ea. Enclosure Enclosures B3010 - Roof Gutters & 07/18/2024 0855 WF Building Operating Adequate N/A B30 - Roofing 25 V.L.F. Replace downspouts on northeast and southeast corners No 3-5 Years \$337.00 Coverings Downspouts D3040 -Ventilation & 07/18/2024 0855 WF Building N/A D30 - HVAC Distribution Prep and paint exhaust fan covers on north side No 3-5 Years \$116.00 Operating Adequate exhaust Ea. Systems systems B20 - Exterior B2010 - Exterior 06/29/2021 0855T CR N/A N/A Other Vinyl Siding 25 S.F. \$103.00 Trailer Operating Adequate Enclosure Walls B20 - Exterior B2010 - Exterior Prep and paint concrete wall top portion along with repaired Masonry & brick 05/20/2021 0901A UE Building Operating Adequate N/A N/A 100 S.F. \$92.00 Enclosure Walls fascia and soffit on North addition veneer B20 - Exterior B2010 - Exterior Masonry & brick 20 05/20/2021 0901A UE Building Operating Adequate N/A N/A S.F. Prep and paint miscellaneous corroded metal on East side. \$26.00 Enclosure Walls veneer B20 - Exterior B2010 - Exterior Building N/A N/A 75 Replace North addition fascia. \$964.00 05/20/2021 0901A UE Operating Adequate Other Fascia S.F. Enclosure Walls B20 - Exterior B2010 - Exterior 05/20/2021 0901A UE Building N/A N/A Soffits (Exterior) .2 S.F. Replace North Addition Soffit \$3.00 Operating Adequate Enclosure Walls B3010 - Roof B30 - Roofing 05/20/2021 0901A UE Building Operating Adequate N/A N/A Shingle Sq. Replace North addition roof shingles \$1,329.00 \$1,329.00 Coverings B3010 - Roof Thermoplastic 05/20/2021 0901A UE N/A N/A B30 - Roofing 7.62 Sq. Replace Thermoplastic roof \$22,236.00 \$22,236.00 Building Operating Adequate Coverings single ply B20 - Exterior B2010 - Exterior Masonry & brick Operational 05/20/2021 0901B UE Building Adequate N/A N/A 365 S.F. Prep and paint exterior concrete masonry blocks \$335.00 Standby Enclosure Walls veneer

GIS Map FIC FUA RAMP ACTS FSC



### Facilities Condition Assessment Dashboard



CAK RIDGE

### What's next







eCAS improvements

FCA dashboard enhancements

Asset management







# Supporting information

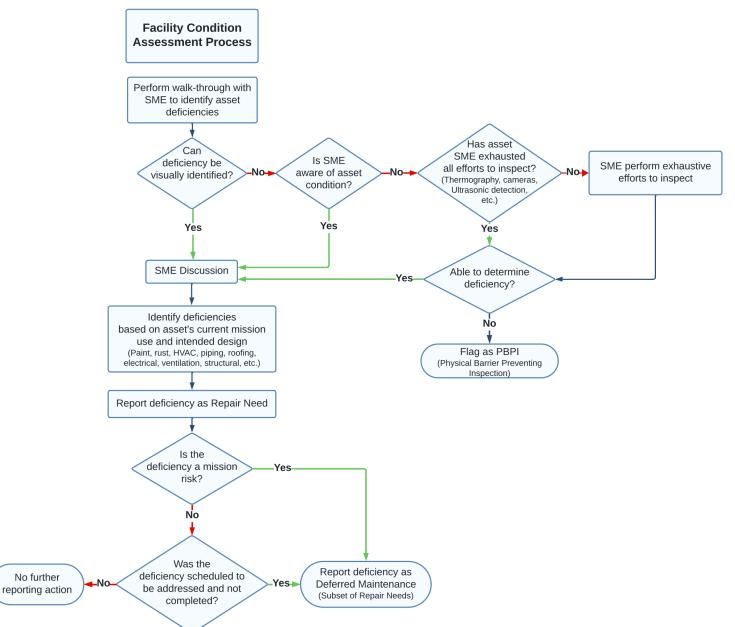


# Facility Condition Assessment Process

Identified deficiencies should be what's needed to restore the asset to a state substantially equivalent to the most recently configured capacity, efficiency, or capability as required by the mission.

If a deficiency is identified and the planned solution is needed to improve the quality of work, will increase capacity, or will fill a mission gap present in the facility or asset AND is planned to be funded in the next five years then it should be reported as a Repair Need AND a Modernization Cost. (Example: Non-functioning power should be reported as a Repair Need. If the facility plans to increase electrical capacity for the facility next FY to address this deficiency, that should also be reported as a Modernization Cost.

If an asset needs something that will improve the quality of work, will increase capacity, or will fill a mission gap present in the facility or asset AND is planned to be funded in the next five years then it should be reported as a Modernization Cost. See also Functionality Assessment Process. (Example: Existing power and cooling is functioning, but plans are in place to add additional power and cooling capacity to support new lab equipment for a new mission need and it's funded for next FY.)



**CAK RIDGE** National Laboratory