

Facilities CMMS Asset Management Process

Document Change Control – Below details a history of the revisions made to this document:

Revision Number	Date of Issue	Author(s)	Brief Description of Change
1.0	3/8/2023	Linda Sippel	Initial Draft

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CMMS Asset Management Process – Below details the process for JLab facilities asset management in the CMMS:

- The JLab Facilities Computerized Maintenance Management System (CMMS) is **IBM Maximo**, an enterprise asset management software program designed for asset management life cycle and workflow process management.
- There are 7 integrated modules in the CMMS discussed below being used for asset and workflow management: **Asset**, **Preventive Maintenance (PM)**, **Route**, **Job Plan**, **Service Request**, **Work Order** and **Start Center** (see **Appendix A**).
- Except in the <u>Start Center</u>, the following drop down menus are available in each module:
 - Actions to be performed on records are done using the "Select Action" drop down menu in the gray section at near the top of the page.
 - Searching for specific records is done by typing search criteria in the field blocks displayed in the module, inputting search criteria using the "Advanced Search" & "More Search Fields" drop down menu, or by query selection using the "Query" drop down menu in the gray section.
- Assets are managed in the CMMS through the following notification methods to the CMMS Administrator:
 - Email a request to add/remove/update asset(s) from a facilities work group manager or coordinator
 - Email a list of assets found/not found by the facilities engineer from a condition assessment survey
 - o Submit a service request noting the asset name and status requiring maintenance or installation
 - Note asset name and status in the Operations & Management (O&M) Weekly Status Report from the FMO manager
- The CMMS Administrator identifies a new asset to be entered into the CMMS using an asset type acronym (see Appendix B) with the naming convention: location-asset type-sequence #, where location is a JLab site location (see Appendix C) and sequence # is numbered sequentially starting at 1 for each asset type.
- In the CMMS <u>Asset module</u>, the CMMS Administrator creates an asset with an **OPERATING** status and provides as much detailed information about the asset as available to include: location, install date, manufacturer, serial #, asset classification (see **Appendix D**), and the system for which it is primarily used in (see **Appendix E**).
- Two statuses are used for CMMS assets: **OPERATING** = operational and **DECOMMISSIONED** = removed from operation.
- The CMMS Administrator then establishes a Preventive Maintenance (PM) schedule of planned maintenance work for an asset or assets at a particular location, assigning a work group, work type (see **Appendix F**), work owner, and job plan for the asset(s).
- In the CMMS <u>PM module</u>, PMs are grouped by location with the naming convention: *location-asset type-frequency*, where the PM frequency of work order generation is denoted by the following letter/number/combination: **A**=annually, **SA**=semi-annually, **Q**=quarterly, **B**=bi-monthly, **M**=monthly, and **W**=weekly. There are also multiple year frequencies such as: **3Y**=every 3 years and **5Y**=every 5 years.
- Two statuses are used for CMMS PMs: **ACTIVE** = scheduled to generate a PM work order and **INACTIVE** = not currently scheduled to generate a PM work order. When you create a PM it automatically gets saved in **DRAFT** status, which must then be changed to be **ACTIVE**.
- A PM work order is automatically created by the CMMS program on the scheduled release date (Due Date Lead Time) in the <u>Work Order module</u> (no service request is generated). The work order owner reviews the scheduled work and assigns a work lead. The CMMS Administrator may also generate a PM as needed by selecting Generate Work Orders from the "Select Action" menu and unchecking the Use Frequency Criteria box and clicking on OK.
- In a PM, a single asset may be referenced, or for multiple assets, a route is created and referenced in the PM. For multiple assets to be grouped similarly at a location, they are listed in a route in the CMMS <u>Route module</u> using a similar naming convention to the PM name. Routes have no status, but do provide 3 choices to select for generating PM work orders:
 - Child Work Orders = new work orders associated with the PM work order in a parent-child relationship are created
 for each asset listed in the route and are listed in the PM work order's <u>Plans</u> tab in the "Children of Work Order ..."
 section.
 - Entries in the Work Order's Multi Asset, Location and CI Table = assets in the route are listed in the PM work order's "Multiple Assets, Locations and Cis" section on the <u>Work Order</u> tab.
 - Work Order Tasks = assets in the route are listed as a sequence of tasks in the PM work order's "Tasks for Work
 Order ..." section on the <u>Plans</u> and <u>Actuals</u> tabs.

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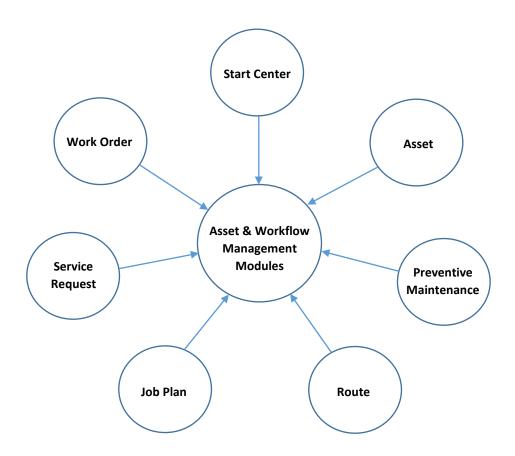
- Job plans for tasks to be performed during a particular PM are created in the <u>Job Plan module</u> with a name representing the asset, frequency, and/or activity (such as inspection or calibration). Four statuses are used for CMMS Job Plans:
 ACTIVE = an active version of the job plan available for selection in a PM, INACTIVE = a non-active job plan, PNDREV = a pending revision status between REVISED and ACTIVE where changes can be made until the status is changed to ACTIVE, and REVISED = a version-controlled job plan copy containing changes made previously to the ACTIVE job plan.
- Removing an asset involves deleting it from a route if there are multiple assets or deleting it from a PM if there is just a single asset and then changing the asset status from **OPERATING** to **DECOMMISSIONED**.
- Corrective Maintenance (CM) and Service Work (SW) issues discovered as well as Material Acquisition (MATL), Modernization (MOD) and Capital Project (CP) efforts require a user to submit a service request. A work request front end application outside of Maximo in **ServiceNow** is used to input a service request into the CMMS.
- Only Facilities personnel are able to select a work group when submitting a service request. All other service requests show up in the Maximo **StartCenter** module with a work group of "OTHER".
- Service request priorities are selected as follows: 1 (Low-28 days to complete), 3 (Medium-14 days to complete), and 5 (High-7 days to complete), which is used to determine the target finish date when a work order is created.
- The CMMS Administrator reviews the incoming list of **PENDING** service requests in the <u>Start Center module</u> for <u>all</u> work groups to determine the affected work group (see **Appendix F**) and assign the appropriate job type (see **Appendix G**). This allows each facilities work group to see only the service requests that they need to accept to be worked on. Those with an unclear work group, job type or encompassing complex issues are assigned to the **FM** group to be reviewed.
- Acceptance of the PENDING (initial status) service request in the CMMS <u>Start Center module</u> by the managing work group initiates the creation of a work order in the <u>Work Order module</u>. The work location(s) is/are required. Where possible, the affected asset(s) should be added.
- Based on the work to be performed and the repair/replacement cost(s), the CMMS Administrator assigns the appropriate work type (see **Appendixes F** and **G**) and the work order owner assigns a work lead. All work orders created from a service request are automatically assigned a "CM" work type by the CMMS system, which is then reviewed and updated as needed. The CMMS Administrator frequently queries the work orders to ensure they are categorized correctly for metrics reporting. Work orders encompassing multiple locations are able to store each location near the bottom of the main work order page, which the CMMS Administrator frequently checks for as well.
- Once accepted, the <u>service request</u> status becomes **WORKING** and the <u>work order</u> status becomes **APPR** (initial status), except where a waiting status (**WAPPR**, **WMATL**, **WPCOND**, or **WSCH**) may be required for performing initial ePAS (Electronic Permit Administration) job hazard assessment and mitigation preparation tasks.
- See Appendix H for the available service request and work order statuses. Service requests of any status may be viewed
 in the <u>Service Request module</u> and the work order owner, lead or work group manager/coordinator changes the status
 to <u>CLOSED</u> after all associated work orders are completed (<u>COMP</u>), closed (<u>CLOSE</u>), or canceled (<u>CAN</u>, <u>CANCEL-NOACCESS</u>, or <u>CANCEL-NR</u>).

• See below Appendices for further details.

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Appendix A – Below details a list of the **CMMS modules** referenced in this document:

CMMS Module	Description	
Asset	Facility and site equipment managed in the CMMS database	
Preventive Maintenance	Planned work scheduled at regular intervals to maintain assets	
Route	Grouping of multiple assets for a building/location	
Job Plan	List of work group tasks to be performed on an asset during routine preventive maintenance	
Service Request A formal request for maintenance work to be performe		
Work Order	Information about maintenance work to be performed, where it is located, who it is assigned to, associated costs for labor and materials, work status, and when it is targeted for completion	
Start Center	Default entrance into Maximo providing a view screen to monitor a work group's incoming (pending) service requests and open work orders (APPR, WAPPR, WSCH, WMATL, WPCOND statuses)	



Appendix B - Use the following example list to determine the **asset type** to be used when naming an asset in the CMMS:

Asset Type	Description	Managing Work Group
AAD	Audible Alarm Device	Fire Protection
		Fire Protection
AC	Air Compressor Fan Coil	Mechanical
ACC	Air Cooled Condenser (Refrigerant Coil)	Mechanical
ACU	Air Conditioning Unit	Mechanical
ACWP	Acid Chilled Water Pump	Mechanical
AHU	Air Handling Unit	Mechanical
ASCP	Air Sampling Control Panel	Fire Protection
ASSD	Air Sampling System Detector (VESDA)	Fire Protection
ATS	Automatic Transfer Switch	Electrical
AV	Alarm Valve	Fire Protection
AV/CH	Alarm Valves / Check Valves on Riser	Fire Protection
В	Boiler	Mechanical
BFP	Backflow Preventer	Mechanical
BS	Branch Selector	Mechanical
CAM	Security Camera	Electrical
CATF	Clean Agent/Total Flooding System	Fire Protection
CH	Chiller	Mechanical
СНН	ARC Chiller	Mechanical
CHMF	Chemical Feeder	Mechanical
CMS	Panelboard	Electrical
СР	Panelboard	Electrical
CRAC	Computer Room Air Conditioning Unit (Direct Expansion)	Mechanical
CRAH	Computer Room Air Handling Unit (Chilled Water Air Handling Unit)	Mechanical
CRN	Crane	Structural
CRU	Computer Room Unit	Mechanical
CRYO	Panelboard	Electrical
СТ	Cooling Tower Cell	Mechanical
CTBS	Cooling Tower Basin Strainer	Mechanical
CTF	Cooling Tower Fan	Mechanical
СТР	Cooling Tower Pump	Mechanical
CTS	Cooling Tower Strainer	Mechanical
CV	Check Valve Control Valve	Fire Protection
CWP	Chilled Water Pump	Mechanical
DD	Desiccant Air Dryer	Mechanical
DDC	Direct Digital Control	Mechanical
DHU	Dehumidification Unit	Mechanical
DOR	Interior/Exterior Door	Structural
DS	Disconnect/Distribution Switch	Electrical
DSD	Duct Smoke Detector	Fire Protection
DWR	Dewar	Mechanical
ECB	Enclosed Circuit Breaker	Electrical
EAC	Exhaust Air Control	Mechanical
EF	Exhaust Fan	Mechanical
ELV	Elevator	Fire Protection

EMLIGHT	Emergency/Exit Light	Electrical
ERU	Energy Recovery Unit	Mechanical
ESEF	End Station Exhaust Fan	Mechanical
EUH	Electric Unit Heater	Mechanical
EV	Electric Vehicle	Vehicles
EVC	Electric Vehicle Charging Station	Electrical
EYE	Eyewash/Safety Shower	Mechanical
F	Fan	Mechanical
FACP	Fire Alarm Control Panel	Fire Protection
FC	Fire Connection	Fire Protection
FCU	Fan Coil Unit	Mechanical
FDC	Fire Department Connection	Fire Protection
FDU	Fiber Distribution Unit	Electrical
FL	Incoming Fire Line	Fire Protection
FPB	Fan Powered Box	Mechanical
GEN	Generator	Electrical
GTP	Geothermal Pump	Mechanical
GTW	Ground Test Well	Electrical
GWP	Groundwater Pump	Mechanical
HD	Heat Detector	Fire Protection
HEX	Heat Exchanger	Mechanical
HP	Heat Pump	Mechanical
HPAF	High Power Amplifier Fan	Mechanical
HPP	High Pressure Pump	Mechanical
HPU	Heat Pump Unit	Mechanical
HRP	Heat Recovery Pump	Mechanical
HRV	Heat Recovery Ventilation	Mechanical
HS	Hood System	Mechanical
HTAPE	Heat Trace Tape	Electrical
HUM	Humidifier	Mechanical
HVAC	Heating, Ventilation, and Air Conditioning Pnlbrds	Electrical
HWP	Hot Water Pump	Mechanical
HYDRANT	Fire Hydrant	Fire Protection
ICE	Ice Machine	Mechanical
IDF	Intermediate Distribution Frame	Electrical
IPC	Integrated Power Center	Electrical
IU	Independent AC Unit	Mechanical
L	Lighting Panelboard	Electrical
LAV	Lavatory (Bathroom Sink)	Structural
LCWF	Low Conductivity Water Filter	Mechanical
LCWP	Low Conductivity Water Pump	Mechanical
LDR	Ladder	Structural
LHD	Linear Heat Detector	Fire Protection
LP	Lightning Protection	Electrical
LS	Lift Station	Mechanical
M	Mechanical Panelboard	Electrical
MAU	Make-up Air Unit (Supply Air)	Mechanical
MCB	Main Circuit Breaker	Electrical
MCC	Motor Control Center	Electrical

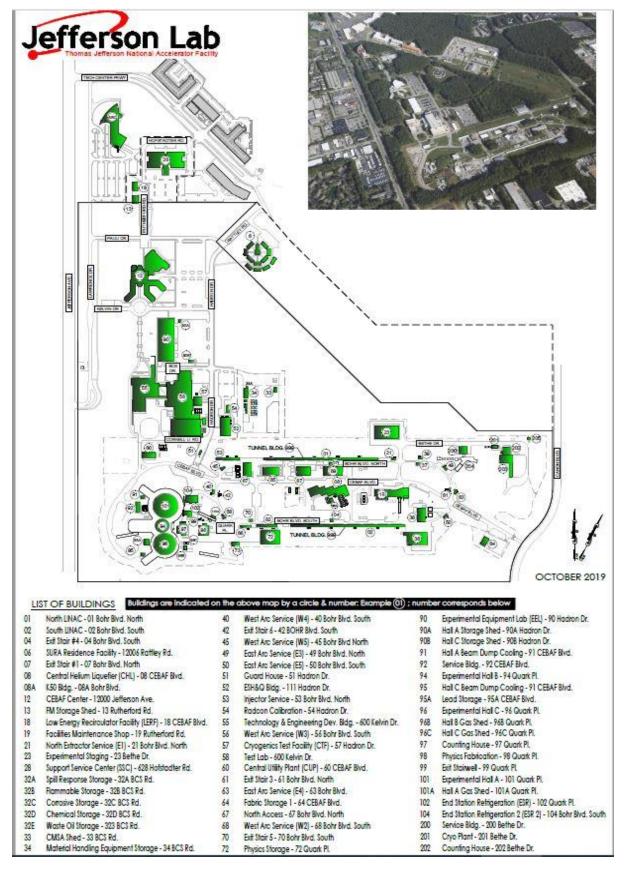
Main Distribution Frame	Electrical
	Electrical
	Fire Protection
	Electrical
	Electrical
	Electrical
	Electrical
	Mechanical
	Structural
	Mechanical
	Mechanical
	Electrical
	Fire Protection
	Mechanical
	Fire Protection
· · · · · · · · · · · · · · · · · · ·	Fire Protection
	Electrical
-	Fire Protection
	Fire Protection
	Electrical
Patch Panel	Electrical
P Chiller	Mechanical
PR Chilled Water Pump	Mechanical
Packaged Terminal Air Conditioner	Mechanical
Remote Control Center	Fire Protection
Refrigerated Dryer	Mechanical
Return Air Fan Rack Fan	Mechanical
Roof Hatch	Structural
Radiant Heater Unit	Mechanical
Refrigerant Monitor	Mechanical
Road	Structural
Roof	Structural
Roof Top Air Unit	Mechanical
Definemation Unit	
Refrigeration Unit	Mechanical
Supply Air Fan	Mechanical Mechanical
Supply Air Fan	Mechanical
Supply Air Fan Smoke Detector	Mechanical Fire Protection
Supply Air Fan Smoke Detector Scrubber Exhaust Fan	Mechanical Fire Protection Mechanical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping	Mechanical Fire Protection Mechanical Fire Protection
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard	Mechanical Fire Protection Mechanical Fire Protection Electrical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation Switch Switchboard	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical Electrical Electrical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation Switch	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical Electrical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation Switch Switchboard Switchgear	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical Electrical Electrical Electrical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation Switch Switchboard Switchgear Truck Access Exhaust Fan (Halls A, B, C)	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical Electrical Electrical Electrical Mechanical
Supply Air Fan Smoke Detector Scrubber Exhaust Fan Sprinklers & Associated Piping Systems Panelboard Substation Switch Switchboard Switchgear Truck Access Exhaust Fan (Halls A, B, C) Unit Heater	Mechanical Fire Protection Mechanical Fire Protection Electrical Electrical Electrical Electrical Electrical Mechanical Mechanical
	PR Chilled Water Pump Packaged Terminal Air Conditioner Remote Control Center Refrigerated Dryer Return Air Fan Rack Fan Roof Hatch Radiant Heater Unit Refrigerant Monitor Road Roof

VACP	Vacuum Pump	Mechanical
VAV	Variable Air Volume Box	Mechanical
VFD	Variable Frequency Drive	Mechanical
VIU	Variable Refrigerant Flow (VRF) - Indoor Unit	Mechanical
VLV	Distribution Valve	Mechanical
VOU	Variable Refrigerant Flow (VRF) - Outdoor Unit	Mechanical
VRFC	Variable Refrigerant Fan Coil	Mechanical
WATER METER	Water Meter	Engineering
WC	Water Closet (Toilet)	Structural
WFN	Water Fountain	Structural
WFS	Water Flow Switch	Mechanical
WH	Water Heater (Electric, Gas)	Mechanical
WS	Wet Standpipe	Fire Protection
WU	Window Unit	Mechanical
WWHP	Water-Water Heat Pump	Mechanical
XFMR	Transformer	Electrical

= Acronym is used for multiple asset types

Note: this list may be viewed/updated here: M:\facilities\Software\Maximo\Acronyms for Assets.

Appendix C – Use the JLab Site Plan below to determine the **location** for an **asset** in the CMMS:



Note: site plan is located at <u>m:\facilities\Master Documents\Drawings\Site Plans</u>. See next page for more locations.

The following are non-numbered locations, offsite warehouses, or non-specific site locations:

ARC = Applied Research Center

AWN = Acid Waste Neutralization

BC2 = Blue Crab Road Warehouse (offsite)

CHW = Chilled Water Distribution

CMSA = Central Materials Storage Area

COMM = Communications Distribution

CT = Cooling Towers (associated with bldgs: 08, 200, 38, 57, 58, 67, & 92)

CW = Condenser Water Distribution

DITCHES = Ditches

E = Equipment Costpoint Costs (associated with bldgs: 101, 203, 94, 96, & 999)

EMSA = East Materials Storage Area

ELEC = Electrical Distribution

EVC = Electric Vehicle Charging Stations

FENCING = Security Fencing

KIOSKS = Smoking Kiosks

LCW = Low Conductivity Water Distribution

LIGHTS = Street Lights

NGAS = Natural Gas Distribution

PARKING = Parking

POND-E = Retention Pond - East Side of JLab

POND-N = Retention Pond - North Side of JLab

RM = Boundary Radiation Monitors

ROADS = Roads

SEWER = Sanitary Sewer

SIDEWALK = Sidewalks

STRMPIPE = Stormwater Piping

TS = Thimble Shoals Warehouse

WATER = Potable Water Distribution

WB = Warwick Blvd Warehouse (offsite)

WELLS = Ground Water Monitoring Wells

WMSA = West Materials Storage Area

Appendix D - Use the following list to determine the **CMMS classification** to be assigned to an <u>asset</u> in the CMMS:

CMMS Asset Classification *	Asset Classification Description
Electrical Grounding	Electrical : Grounding
Electrical Generator	Electrical : Power Generation
Heat Trace	Electrical : Heat Distribution
Panelboards	Electrical : Power Distribution
Transformers	Electrical : Power Distribution
Conveying	Fire Protection: Elevator
Fire Detection	Fire Protection : Fire Detection
Fire Suppression	Fire Protection : Fire Suppression
N2 Generator	Fire Protection: Gas Generation
Cranes & Hoists	Material Handling Equipment
Air Compressor	Mechanical : Air Compressor
Cooling Towers	Mechanical : Cooling Tower
Mechanical	Mechanical (Generic Placeholder)
Refrigerant Monitor	Mechanical : Refrigerant Monitoring
VFD	Mechanical : Variable Frequency Drive
Valve	Mechanical : Water Distribution
Water Meter	Mechanical : Water Monitoring
Door	Structural : Door
Ladder	Structural : Ladder
Plumbing	Structural : Plumbing
Roof Hatch	Structural : Roofing
Roofing	Structural : Roofing

^{*} An asset classification is a configurable template the CMMS Administrator creates/updates and references in an asset's **Specifications** tab, providing an additional set of modifiable specification fields to populate for an asset.

Appendix E - Use the following list to determine the **system name**, representing the function for which it is mainly used (formatted in a UNIFORMAT II Level 2 Group Element classification for building specifications & related sitework – see https://fims.doe.gov/caisinfo/Documents/CAS/Uniformat_II_Level1-3.pdf), assigned to an asset type in the CMMS:

Asset Type(s) – from Appendix B *	System Name
LDR	B10 Superstructure
OHD	B20 Exterior Enclosure, Exterior Doors
RH,ROOF	B30 Roofing, Roof Coverings
CRN,ELV	D10 Conveying, Hoists & Cranes
AC,SC	D20 Plumbing, Compressed Air
LAV,UR,US,WC	D20 Plumbing, Plumbing Fixtures
N2-GEN	D20 Plumbing, Industrial Gas Distribution
EYE	D20 Plumbing, Industrial Safety Fixture
GWP	D20 Plumbing, Storm Drainage
BFP,HPP,WATER METER,WFN,WFS	D20 Plumbing, Water Distribution
WH,WWHP	D20 Plumbing, Water Heating
AC,ACC,ACU,AHU,CRAC,CRAH,CRU,ICE,IU,PACU,PTAC,RD,RTU,VIU,VOU,VRFC,WU	D30 HVAC, Air Cooling
DD,DHU,ERU,FC,FCU,FPB,GTP,HEX,HP,HPU,HRP,HUM,OAU,VAV,VFD	D30 HVAC, Air Distribution
EUH,RHU,UH	D30 HVAC, Air Heating
CH,PCH,RU	D30 HVAC, Chiller
nc .	D30 HVAC, HVAC Controls &
BS	Instrumentation
CT,CT-BS,CTF,CTP,CTS	D30 HVAC, Cooling Tower
НТАРЕ	D30 HVAC, Electrical Heating
OME,OWS	D30 HVAC, Filtration
RM	D30 HVAC, HVAC Leak Detection
LCWF,LCWP	D30 HVAC, Process Cooling
F,HPAF,HRV,RF,SF	D30 HVAC, Ventilation
EF,ESEF,HS,PB,SEF	D30 HVAC, Ventilation Exhaust
MAU,SAF	D30 HVAC, Ventilation Supply Air
ACWP,CWP,PCWP,PRCWP	D30 HVAC, Water Cooling
B,HWP	D30 HVAC, Water Heating
CHMF	D30 HVAC, Water Treatment
AV,PH	D40 Fire Protection, Communication and Alarm
DSD,FACP,HD,LHD,MS,PAD3,RCC,SD	D40 Fire Protection, Fire Detection
AV/CH,CATF,CV,FDC,FL,HYDRANT,PA,PIV,SHP,WS	D40 Fire Protection, Fire Suppression
ASCP,ASSD	D40 Fire Protection, Early Smoke Detection
ATS,DS,GEN,panelboards,switchboards,switches,XFMR	D50 Electrical, Electrical Service/Distribution
	G30 Sitework Mechanical Utilities, Process
DEWAR	Gas & Liquid Storage
	G30 Sitework Mechanical Utilities, Sanitary
LS	Sewer
GTW	G40 Sitework Electrical Utilities, Grounding Loop
unit substations	G40 Sitework Electrical Utilities, Substation
diffe Substitutions	G-0 Sitework Electrical Offices, Substation

^{*} Lower case designations represent asset types which do not conform to the standard naming convention listed in **Appendix B**.

Appendix F – Use the following lists to determine the **work group** and **work type** to be assigned to a work order in the CMMS:

Work Groups	Description	Group Default Work Order Owner	PM Coordinator(s)
FM	Facilities Management	David Fazenbaker	Tracy Draine / Linda Sippel
FME	Electrical	Todd Kujawa	Todd Kujawa / Howard Dunlap
FMENG	Engineering	Linda Sippel	Tracy Draine / Linda Sippel
FMFS	Fire Protection	Tim Minga	Lee Johnson / Robert Myles
FMM	Mechanical	Mike Sprouse	Mike Sprouse / Bobby Simone
FMO	Facilities Maint. & Ops	Wayne Williams	Wayne Williams / Al Porto
FMO-MH	Material Handling	Joe Thomas	Joe Thomas
FMO-P	Plumbing	Wayne Williams	Wayne Williams / Al Porto
FMO-S	Structural	Wayne Williams	Wayne Williams / Al Porto
FMO-VG	Vehicles	Joe Thomas	Joe Thomas
FMSS	Security & Services/ACS	Mike Lewellen	Mike Lewellen / Russell Pitts
LOCKS	Keys & Locks	Wayne Williams	Wayne Williams / Al Porto
PROP	Property	Jay Draughn	Jay Draughn / Jerry Mitchell

Work Types	Description
CM	Corrective Maintenance
CMGT	Construction Management
СР	Capital Project
CSTN	Construction
DSGN	Design
MATL	Material
MOD	Modernization
PM	Preventive Maintenance
PMF	PM Find (ie: CM)
SOW	Scope of Work
STDY	Study
SW	Service Work

Appendix G – Use the following list to determine the **work group**, **work type** and **work classification** (job type) to be assigned to the work order and the average number of days it is expected to be open with respect to the priority:

	Facilities Management 9 Legistics (FM91) Work Degreet Crown Assignments					
Facilities Management & Logistics (FM&L) Work Request Group Assignments						
Work Group	Work Request Description	# Days To Complete	Work Classification (Job Type) *	Work Type		
FMSS	Access Control : Modify/New	180	ACCESSN - Modify/New	MOD		
FMSS	Access Control : Repair/Maintenance	28	ACCESSR - Repair/Maintenance	CM		
	Appliances	28	APPLIANCES - Appliances	SW		
	Architectural : Modify/New	180	ARCHITN - Modify/New	MOD		
FMO-S	Architectural : Repair/Maintenance	28	ARCHITR - Repair/Maintenance	CM		
	Audio-Visual Equipment : Modify/New	180	AUDION - Modify/New	MOD		
FMSS	Audio-Visual Equipment : Repair/Maintenance	28	AUDIOR - Repair/Maintenance	CM		
FMO-S	Cafeteria Equipment	28	CAFETERIA - Cafeteria	SW		
	Capital Projects	1080	PLANNING - Planning	СР		
	Carpentry : Modify/New	180	CARPN - Modify/New	MOD		
FMO-S	Carpentry : Repair/Maintenance	28	CARPR - Repair/Maintenance	CM		
	Civil : Modify/New	180	CIVILN - Modify/New	MOD		
	Civil : Repair/Maintenance	28	CIVILR - Repair/Maintenance	CM		
-	Doors & Windows : Modify/New	180	DOORN - Modify/New	MOD		
	Doors & Windows : Repair/Maintenance	28	DOORR - Repair/Maintenance	CM		
	Drafting : Modify/New	180	DRAFTN - Modify/New	MOD		
	Drafting : Repair/Maintenance	28	DRAFTR - Repair/Maintenance	CM		
	Electrical : Lighting : Modify/New	180	LIGHTN - Modify/New	MOD		
	Electrical: Lighting: Repair/Maintenance	28	LIGHTR - Repair/Maintenance	CM		
	Electrical: Power: Modify/New	180	POWERN - Modify/New	MOD		
-	Electrical : Power : Repair/Maintenance	28	POWERR - Repair/Maintenance	CM		
-	Elevator : Modify/New	180	ELEVN - Modify/New	MOD		
	Elevator : Repair/Maintenance	28	ELEVR - Repair/Maintenance	CM		
	Emergency Preparedness & Response	7	EMERG - Emergency Preparedness & Response	SW		
	Environmental : Modify/New	180	ENVIRN - Modify/New	MOD		
	Environmental : Repair/Maintenance	28	ENVIRR - Repair/Maintenance	CM		
	Environmental Response/Action	28	ENVIRRES - Environmental	CM		
	Finishes : Ceiling : Modify/New	180	CEILINGN - Modify/New	MOD		
	Finishes : Ceiling : Repair/Maintenance	28	CEILINGR - Repair/Maintenance	CM		
	Finishes : Floor : Modify/New	180	FLOORN - Modify/New	MOD		
	Finishes : Floor : Repair/Maintenance	28	FLOORR - Repair/Maintenance	CM		
	Fire Protection : Modify/New	180	FIREN - Modify/New	MOD		
	Fire Protection : Repair/Maintenance	28	FIRER - Repair/Maintenance	CM		
	Fitness Equipment	28	FITNESS - Fitness Equipment	SW		
	Furniture : Modify/New	180	FURNISHN - Modify/New	MOD		
FMO-S	Furniture : Repair/Maintenance	28	FURNISH - Repair/Maintenance	SW		
	Gates & Fences : Modify/New	180	GATESN - Modify/New	MOD		
FMO	Gates & Fences : Repair/Maintenance	28	GATESR - Repair/Maintenance	CM		
FMO	Grounds/Landscaping	28	GROUNDS - Grounds	SW		
	Hang/Install signs, pictures, whiteboards,		HANG - Hang/Install signs, pictures,			
IFIV(()-\	keyboard trays, etc.	28	whiteboards, keyboard trays, etc.	SW		
	Inspections	28	INSPEC - Inspections	SW		
FMENG	Inspections	28	INSPEC - Inspections	SW		

FMSS	Janitorial service	7	JANSERV - Janitorial	SW
LOCKS	Key Request	28	KEY REQUEST - Key Request	SW
LOCKS	Locks : Modify/New	180	KEYN - Locks Modify/New	MOD
LOCKS	Locks : Repair/Maintenance	7	KEYR - Locks Repair/Maintenance	CM
FMO-MH	Material Handling Equipment : Modify/New	180	MATHANDN - Modify/New	MOD
FMO-MH	Material Handling Equipment : Repair/Maintenance	28	MATHANDR - Repair/Maintenance	СМ
FMM	Mechanical : HVAC : Modify/New	180	HVACN - Modify/New	MOD
FMM	Mechanical : HVAC : Repair/Maintenance	7	HVACR - Repair/Maintenance	CM
FMM	Mechanical: Process Cooling/LCW: Modify/New	180	PROCESSN - Modify/New	MOD
FMM	Mechanical: Process Cooling/LCW: Repair/Maintenance	28	PROCESSR - Repair/Maintenance	СМ
FMSS	Meetings/Special Events : Room Setup	7	ROOMSET - Meeting Room Setup	SW
FMSS	Meetings/Special Events : Special Event	7	SPEEVT - Special Event Setup	SW
PROP	Office & Staff Relocation	7	INTEROFF - Office & Staff Relocation	SW
FMENG	Other	28	OTHER - Other	SW
PROP	PROP - Property Moves	28	PROP - Property Moves	SW
FMO-S	Painting : Modify/New	180	PAINTN - Modify/New	MOD
FMO-S	Painting : Repair/Maintenance	28	PAINTR - Repair/Maintenance	CM
FMSS	Pest Control Services	28	PEST - Pest Control	SW
FMENG	Plumbing : Modify/New	180	PLUMBN - Modify/New	MOD
FMO-P	Plumbing : Repair/Maintenance	7	PLUMBR - Repair/Maintenance	CM
FMENG	Project Mgmt : Modify/New	180	PROJMGTN - Modify/New	MOD
FMENG	Project Mgmt : Repair/Maintenance	28	PROJMGTR - Repair/Maintenance	CM
FM	Project Request	180	PROJ - Project Request	СР
FMSS	Refuse & Recycling	7	REFUSE - Refuse/Recycling	SW
FMENG	Roads & Paving : Modify/New	180	ROADPAVN - Modify/New	MOD
FMO	Roads & Paving : Repair/Maintenance	28	ROADPAVR - Repair/Maintenance	CM
FMENG	Roofing : Modify/New	180	ROOFN - Modify/New	MOD
FMO-S	Roofing : Repair/Maintenance	28	ROOFR - Repair/Maintenance	SW
FMSS	Security	7	SECUR - Security	SW
FMO	Snow Removal	7	SNOW REMOVAL - Snow Removal	SW
FMENG	Space Request	180	SPACE - Space Request	СР
FMENG	Stormwater Drainage : Modify/New	180	STORMN - Modify/New	MOD
FMO	Stormwater Drainage : Repair/Maintenance	28	STORMR - Repair/Maintenance	CM
FMENG	Structural : Modify/New	180	STRUCN - Modify/New	MOD
FMO-S	Structural : Repair/Maintenance	28	STRUCR - Repair/Maintenance	CM
FMENG	Telecommunications : Modify/New	180	TELEN - Modify/New	MOD
FME	Telecommunications : Repair/Maintenance	28	TELER - Repair/Maintenance	CM
	Vehicles & Golf Carts	7	VEHICLE - Vehicles & Golf Carts	SW
FMENG	Water : Modify/New	180	WATERN - Modify/New	MOD
FMO-P	Water : Repair/Maintenance	28	WATERR - Repair/Maintenance	SW
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^{*} A work request classification is selected from a list of facilities maintenance job types in the **Submit Work Request** front end application. Users with Maximo administrative access may view/update the above items here: https://mis.jlab.org/mis/apps/facilities/changeClassGroup.cfm.

Appendix H – Use the following lists to denote the life cycle statuses for service requests and work orders in the CMMS:

Service Request Statuses	Description
PENDING	Service request is awaiting
	acceptance by managing work group
REASSIGNED	Assign service request to a new
	work group
WORKING	Service request has open
	(incomplete) work order(s)
CLOSED	Work order(s) is/are no longer open,
	service request is complete or
	canceled
DEFERRED	Service request put on backlog

Work Order Statuses	Description
APPR	Approved for work
CAN	Canceled – generic for work not done
CANCEL-NOACCESS	Canceled - no access to work site
CANCEL-NR	Canceled – no resources (facility technicians) available
CLOSE	PM due date reached, work status unknown – no labor hours recorded
СОМР	Work status complete, labor hours recorded
FLDWRKCOMP	Field work complete (for facility technicians)
WAPPR	Waiting for work approval
WMATL	Waiting for material
WPCOND	Waiting for facility/work area access (plant conditions)
WSCH	Waiting for work to be scheduled

- PENDING status changes available: REASSIGNED, WORKING, CLOSED, DEFERRED
- REASSIGNED status changes available: PENDING, WORKING, CLOSED, DEFERRED
- WORKING status changes available: CLOSED, DEFERRED
- **CLOSED** no further status changes available
- DEFERRED status changes available: WORKING, CLOSED
- APPR work approved; status changes available: CANCEL-NOACCESS, CANCEL-NR, CLOSE, COMP, FLDWRKCOMP, WAPPR, WMATL, WPCOND, and WSCH
- CAN work canceled; no further status changes available
- CANCEL-NOACCESS no site access; status changes available: CANCEL-NR, CLOSE, and COMP
- CANCEL-NR no resources available; status changes available: CANCEL-NOACCESS, CLOSE, and COMP
- CLOSE CMMS administrator closed; no further status changes available
- COMP work completed; status changes available: CANCEL-NOACCESS, CANCEL-NR, CLOSE
- FLDWRKCOMP field work completed; status changes available: CANCEL-NOACCESS, CANCEL-NR, COMP, WAPPR, and WMATL
- WAPPR awaiting approval; status changes available: APPR, CAN, CANCEL-NOACCESS, CANCEL-NR, CLOSE, COMP, FLDWRKCOMP, WMATL, WPCOND, and WSCH
- **WMATL** awaiting material; status changes available: CANCEL-NOACCESS, CANCEL-NR, CLOSE, COMP, FLDWRKCOMP, and WAPPR
- **WPCOND** awaiting plant conditions; status changes available: APPR, CANCEL-NOACCESS, CANCEL-NR, COMP, FLDWRKCOMP, WAPPR, WMATL, and WSCH
- WSCH awaiting scheduling; status changes available: APPR, CANCEL-NOACCESS, CANCEL-NR, COMP, FLDWRKCOMP, WAPPR, WMATL, and WPCOND

See the next page for a process flow for work requests.

Process Flow for Work Order (WO) Requests (update work log for any status change):

