PLANNED & EMERGENCY OUTAGES STANDARD OPERATING PROCEDURES

TINKER AIR FORCE BASE

72 ABW / Base Civil Engineering
Planned and Emergency Outages
Standard Operating Procedures

EFFECTIVE DATE: 03 January 2022

APPLICABILITY:

These Standard Operating Procedures (SOP) apply to any entity that needs or wishes to request any type of outage/closure on Tinker Air Force Base (TAFB), including but not limited to: Gates, Roads, Parking (lots or spaces), Sidewalks, Fire Alarms, Fire Suppression Systems, HVAC, Compressed Air, and all Utilities (gas, electric, water, steam, etc).

PURPOSE:

The purpose of this SOP is to define the roles, responsibilities, and processes in requesting, coordinating, scheduling, and executing outages as well as the restoration procedures for outages related to emergencies, daily operations, and construction projects.

STRATEGIC VISION:

Safeguard resources by proactively managing all outages and closures to minimize operational impacts.

ATTACHMENTS:

1. Attachment 1 shows the process that all outage and closure requests will follow.
2. Attachment 2 is the form that shall be used when requesting an outage on TAFB.
3. Attachment 3 is the list of Points of Contact for the TAFB 72 ABW CE Utilities Shops.

DEFINITIONS:

1. **REQUESTOR:** The person who initiates the outage request and is responsible for overall stewardship and accountability for an Outage or closure.

2. **TAFB CONTRACT POINT OF CONTACT (PRIMARY CONTACT):** The person who is responsible for oversight of the Outage or Closure and is the REQUESTOR'S primary point of contact within Base Civil Engineering (BCE) on TAFB. This could be someone from the US Army Corps of Engineers or the Contractor or Government individual tasked with liaison duties for the BCE.

3. **STAKEHOLDER:** Individuals and/or groups who are involved in and/or impacted by an Outage and whose concurrence is required to perform the Outage. Examples include, <u>but are not limited to</u>: building occupants, Facility Managers, Fire Marshal (AHJ), 72 ABW CE Shops, TAFB IT/Communications, USAF Security Forces, Workers Union, etc.

4. **UTILITY:** Any service provided by an outside source, or manufactured in house (including but not limited to: propane or natural gas, water, electricity, fire suppression (water or foam), chilled water, steam, vacuum, compressed air, etc.), which facilitates building operations.

5. **OUTAGE WORK REQUEST FORM** (ATTACHMENT 2): A document that provides full details of a Planned, Urgent, or Emergency Outage – timing, building/areas impacted, work to be performed, dates/times of outage start/finish, point of contact information, etc. This form is initiated and filled out by the REQUESTOR and is staffed for approval by either the REQUESTOR or their TAFB PRIMARY CONTACT. The form that shall be used for all Outage Work Requests on TAFB is the attached "TAFB Outage Request Form" unless/until superseded. There is a fillable pdf of this form embedded in the electronic version of this SOP on Attachment 2 or REQUESTOR can contact their PRIMARY POINT OF CONTACT or the OUTAGE COORDINATION TEAM for a copy of this form if needed.

   - **NOTE:** Outage request forms shall be submitted in electronic format to the 72 ABW Outage Coordination Team so staffing and signatures can be obtained through electronic means (email). Send to: 72ABW.CEEO.UtilityOutageWork@us.af.mil

6. **LOCAL OUTAGE:** For work to be performed on isolation valves, switches, or other such devices that isolate a point of service device that shall result in only the loss of service of the specific piece of equipment, fixture or other device, or to a single area affecting only a single tenant. For these outages only, the OUTAGE COORDINATION TEAM shall staff the Outage Request Form only to the 72 ABW CE SHOPS and upon receiving written concurrence will provide the REQUESTOR with a copy of the approved request and the REQUESTOR must notify the affected tenant of the impact and duration of the outage.

72 ABW / Base Civil Engineering
Planned and Emergency Outages
Standard Operating Procedures

I. SCOPE

This SOP covers the requirements when outages/interruptions are required to the normal operation of all buildings and transportation systems located on TAFB that are operated and/or maintained by the 72nd Air Base Wing Base Civil Engineer (either directly or by contract). This SOP shall be provided to all contractors/entities that perform work on TAFB building and transportation systems. Closures/outage of these systems are typically required for the purposes of construction, renovation, isolation, maintenance, replacement, or repairs to existing systems, subsystems or component parts thereof.

Systems included in this SOP include, but are not limited to:

- Entrance/Exit Gates
- Roads/Parking (lots and spaces)/Sidewalks
- Restrooms
- Doors or other means of ingress/egress
- Steam and condensate supply and return
- Domestic Hot and/or Cold Water supply and return
- Chilled Water supply and return
- Compressed air produced centrally or locally
- Electrical High Voltage (12.470 kV)
- Electrical Low Voltage (480/277/240/208/120V)
- Natural or Propane Gas
- Vacuum systems
- Elevator systems
- Fire Alarms and Mass Notification Systems
- HVAC components and systems
- CO2 Systems
- Fire Suppression (pump, sprinkler, standpipe, foam)
- Flow Tests/Hydrant Tests
    - **NOTE:** Requests for flow tests and hydrant tests that are located on the Fire Loop WILL NOT BE APPROVED under this SOP. The REQUESTOR of those tests shall be provided a copy of the latest flow test report of this system for their use (official flow tests are performed every 5 years).

Examples of such situations would include but not be limited to:

a. Plumbing fixtures (sinks, toilets, showers, drinking fountains, etc.)
b. Redundant devices such as pumps, fans or other equipment that are being appropriately backed- up by operational duplicate devices.
c. Individual VAV boxes, air terminals, reheat valves, coils, radiators, fan coils, unit heaters or other HVAC devices controlling a single space.
d. Lighting and power circuits serving a single space or device including discrete electrical

devices such as occupancy sensors, light fixtures, light switches and receptacles.

II. CATEGORIES & TIMELINES

All outages and closures will be classified in one of the following three categories:

a. **Planned (Routine)** – An interruption to any building or transportation system which can be foreseen or is on an approved schedule. Planned outages include all repair projects, with enough lead-time to allow them to be accomplished on a non-emergency basis and all capital improvement and renovation projects, which require outages during construction. Planned outage requests should be submitted to the Outage Coordination Team prior to the requested outage using the following timelines to allow for proper coordination:

- **Roads/Parking Lots/Sidewalks –** 45 calendar days
- **Utilities (all) –** 21 calendar days
- **Flow Test/Hydrant Test –** 14 calendar days
  - **NOTE:** Only for those devices NOT on the Fire Loop
- **Fire Alarms –** 14 calendar days
  - **NOTE:** these tests are only performed on Wed/Thu/Fri

b. **Limited Notice (Urgent)** – An interruption to any building or transportation system that cannot be foreseen or which does not allow for extensive pre-planning or coordination prior to the interruption. A Limited Notice Outage may be required when repairs must be accomplished within a short time-frame (which may not allow time for BCE to notify or meet with all stakeholders) to safeguard property and/or occupant health. Limited Notice outages should be submitted to the Outage Coordination Team prior to the requested outage using the following timelines (or as soon as possible/known):

- **Roads/Parking Lots/Sidewalks –** 21 calendar days
- **Utilities (all) –** 10 calendar days
- **Flow Test/Hydrant Test –** 7 calendar days
  - **NOTE:** Only for those devices NOT on the Fire Loop
- **Fire Alarms –** 7 calendar days
  - **NOTE:** these tests are only performed on Wed/Thu/Fri

c. **Emergency** – An interruption to any building or transportation system that must be accomplished immediately to safeguard property or occupant health. This may occur as the result of a natural or human-caused hazard. Examples of emergency outages include but are not limited to: mechanical failure, flooding within buildings, water line breaks, electrical outages or “power blips”, or hazardous materials incidents. Outage requests are considered an Emergency Request if they are submitted to the Outage Coordination Team in a period that is less than the Urgent timelines noted above and that meet the definition stated above. Emergency requests must still be supported with an outage request form (as soon as possible) explaining the situation and reason that the outage cannot be accomplished as a Routine or Urgent Outage. Emergency Requests outside of normal working hours (0700-1600 M-F) should call the 72 ABW BCE Customer Service Unit (CSU) at commercial 405-734-3117 for immediate assistance.

III. PROCESS: *Refer to ATTACHMENT 1 for flowchart summaries of the outage request process*

PLANNED OUTAGE

1.0 Evaluate the Outage

1.1 The REQUESTOR shall evaluate the potential outage to determine if it would more appropriately be a Limited Notice (Urgent) or Emergency Outage.

2.0 Plan the Outage

2.1 The REQUESTOR or PRIMARY CONTACT shall plan sufficiently to meet and coordinate with all appropriate STAKEHOLDERS in advance of the outage and to fill out and submit the WORK REQUEST FORM to adhere to the timelines noted in Section II. The earlier the 72 ABW CE Shops can provide feedback regarding the potential impacts of the request to the REQUESTOR the better. The discussion should include the following topics (at a minimum) in order to properly define the scope of the outage:

A. Impacts (multiple buildings/areas/tenants)
B. Preferred and Alternate Scheduling
C. Outage Duration
D. Contingency plans to minimize disruption and protect the building systems and program operations (such as signage plans, traffic flow plans, etc.)
E. Special logistics such as room access, etc.
F. Contact information for the designated person and their availability during outage.

2.2 STAKEHOLDERS shall develop AF Form 4437 Risk Management Plan and submit to 72 ABW FES for review/approval for any outage that affects Fire Protection or Fire Alarm Systems and that may last for more than 72 hours in an occupied facility.

3.0 Communicate the Outage

3.1 The REQUESTOR or PRIMARY CONTACT shall submit the completed WORK REQUEST FORM to the TAFB BCE OUTAGE COORDINATION TEAM to be staffed for approval and publication. See ATTACHMENTS 1 and 2.

3.2 Upon receipt, the OUTAGE COORDINATION TEAM shall forward the request to the appropriate STAKEHOLDERS for review and comment. If questions arise from the STAKEHOLDERS, the OUTAGE COORDINATION TEAM shall contact the REQUESTOR or the PRIMARY CONTACT for answers and provide those answers to the STAKEHOLDERS. If all STAKEHOLDERS have not provided a response concurring or non-concurring within three (3) working days the OUTAGE COORDINATION TEAM will contact those individuals who have not responded to prevent delay of the request.

3.3 When all STAKEHOLDERS have provided concurrence in writing on the WORK REQUEST FORM, the OUTAGE COORDINATION TEAM sends the request to the 72 ABW BCE for final approval. Once BCE approval has been received, the OUTAGE COORDINATION TEAM shall post the approved outage notification to the BCE Share Point Portal, notify TAFB Public Affairs (if required), notify the REQUESTOR, and each Friday send out the new list of approved outages on the Outage Distribution List and post the list to the CE Share Point site.

3.4 Notices to STAKEHOLDERS of approved outages shall be issued no less than seven (7) calendar days prior to the scheduled outage (with the exception of Urgent Fire Alarm/Flow Test/Hydrant tests and Emergency Outages).

4.0 Execute the Outage

4.1 The REQUESTOR and PRIMARY CONTACT shall coordinate all aspects of the outage. The PRIMARY CONTACT shall contact the appropriate 72 ABW CE Supporting Shop 24 hours prior to the outage to confirm support is being tracked on their calendar (see Attachment 3). Depending on the extent and complexity of the outage, this may include a constant or a periodic presence on site, and/or coordinating and providing regular updates to key STAKEHOLDERS as appropriate.

4.2 During the outage and if applicable, the REQUESTOR is responsible for ensuring that all equipment lock-out/tag-out is performed by the entity performing the outage and that all locks/tags are removed upon completion. The 72 ABW CE Supporting Shops will not perform these actions.

4.3 If the outage is unsuccessful, (i.e. the intended scope of work could not be accomplished) the PRIMARY CONTACT and the REQUESTOR shall notify and/or meet with the appropriate STAKEHOLDERS to correct problems and propose a rescheduled date.

4.4 If the outage will extend beyond the approved completion date or time, the REQUESTOR and/or the PRIMARY CONTACT shall notify the STAKEHOLDERS so they will be aware of the situation and notify the OUTAGE COORDINATION TEAM so the outage report can be updated as required. If the outage will extend more than 72 hours beyond the approved completion date/time the REQUESTOR shall submit a new outage request form with the new planned completion date and time to the OUTAGE COORDINATION TEAM for staffing.

EMERGENCY OUTAGE

Emergency outages are required for repairs that must occur immediately to safeguard property and/or health. The 72 ABW/CE CSU has a record of key departmental personnel, Facilities Management personnel, Facilities Planning & Construction personnel, and security personnel telephone numbers and names, who they contact as standard procedure.

The REQUESTOR handling an emergency outage shall call the CSU immediately at 405-734-3117 if an outage occurs (or needs to occur) during normal or non-working hours. The REQUESTOR shall relay as much information as is possible at that time and fill out and submit the TAFB Outage Request Form as soon as possible. The CSU shall contact the key personnel at that time and use the Outage Request Form if circumstances permit.

RESTORATION OF SERVICE:

Every attempt shall be made to restore services as fast as possible. Services shall be restored in the general priority below:

1. Safety of Personnel
2. Building Life Safety
3. Utility Life Safety
4. Laboratory and Research Buildings
5. Residential and Dormitory Buildings
6. Auxiliary Areas
7. Classrooms and Offices

After restoration of services, technicians representing each technical area of 72 ABW CE Shops shall survey the affected buildings/areas and ensure that systems in their respective areas are operational and that equipment is set in its normal operating position. <u>If the outage occurs after normal operating hours (0700-1600) the REQUESTOR and PRIMARY POINT OF CONTACT must coordinate with the Facility Manager and ensure that building access is maintained until all services are restored.</u> This includes, but is not limited to: building HVAC and controls, elevators, fire alarm, building electric and emergency power systems, building plumbing systems, etc. The Facility Manager for the area or building where the outage occurred must look through their area of responsibility to ensure everything is functional and call the 72 ABW CSU if items of concern are determined to exist.

The following is a brief outline of the post-event checks that shall be performed:

- ☐ **Fire Alarm:** All fire alarm panels are on battery backup. If the power outage is less than 24

hours and there are no fire alarm events, all the systems shall continue to stay online. In the extended outage scenario, fire alarm batteries shall start recharging after power is restored.

After the outage event, 72 ABW CE Fire Alarm Technicians shall log on to their workstation and verify that the fire alarm system is fully operational. Buildings with a failed fire alarm system will show up as a break in network. These areas shall be targeted and addressed accordingly by the fire alarm technicians.

- ☐ **HVAC and Controls:** After restoration of services, the technician that locked down and tagged out the equipment shall confirm that all equipment and systems (chillers, boilers, air-handlers, pumps, exhaust fans, fume hoods, and domestic water system, etc.) are ready for startup. Upon confirmation, these systems shall be brought on-line and the services in the building restored to the pre-event operating conditions.

  Simultaneously, the HVAC technician shall start the equipment and perform checkups via controls workstation interface (onsite or remotely). If equipment cannot be started remotely the HVAC Technician shall respond and perform start up on site. For buildings without direct digital control (DDC) systems, the HVAC technician shall physically visit each area of the building and confirm the operations of heating, ventilation and cooling systems. Controls Technicians will assist as needed.

- ☐ **Elevators:** For all planned elevator outages and planned power outages that remove the elevator(s) from service, prior to the outage the FACILITY MANAGER or REQUESTOR shall post signage indicating the dates/times that the elevators are out of service and the PRIMARY CONTACT shall verify signage is posted appropriately. After restoration of services, all elevators should automatically go back in their normal service mode and the FACILITY MANAGER shall confirm normal operations of affected elevators. If elevators do not function properly after reset the FACILITY MANAGER should call the CSU.

- ☐ **Electrical:** For outages involving building voltage systems, the building main switch shall be de-energized, locked out, and tagged out by the servicing electricians prior to any work or repairs. After the outage event, the electricians shall confirm that electrical systems are ready to be put back in service. After confirmation, the electricians shall remove the locks and tags and re-energize the system. Critical building systems shall be physically checked by the electricians in the affected buildings.

  For high voltage system outages, OG&E will verify boundaries, de-energize, test dead, ground, and lock out/tag out all necessary electrical equipment as requested or needed to safeguard personnel and equipment. All substation, transmission, and distribution electrical work practices will be completed in accordance with all of OG&E's Standard Safety Operating Procedures (SSOPs) and Standard Operating Procedures (SOPs). For further clarification or documentation, contact OG&E's TAFB Operations Team in Building 15. Critical systems shall be physically checked by the electricians in affected buildings.

- ☐ **Plumbing:** After services are restored, the REQUESTOR and FACILITY MANAGER(S) shall walk the affected buildings to confirm all the fixtures and systems are operational and set back to the normal operating conditions.

After all responsible personnel have completed their post-event checkout as described above, the PRIMARY CONTACT shall notify the Building Facility Manager(s) and confirm that there are no outstanding issues with any of the building occupants and advise their PRIMARY CONTACT that no issues exist and the outage is complete.

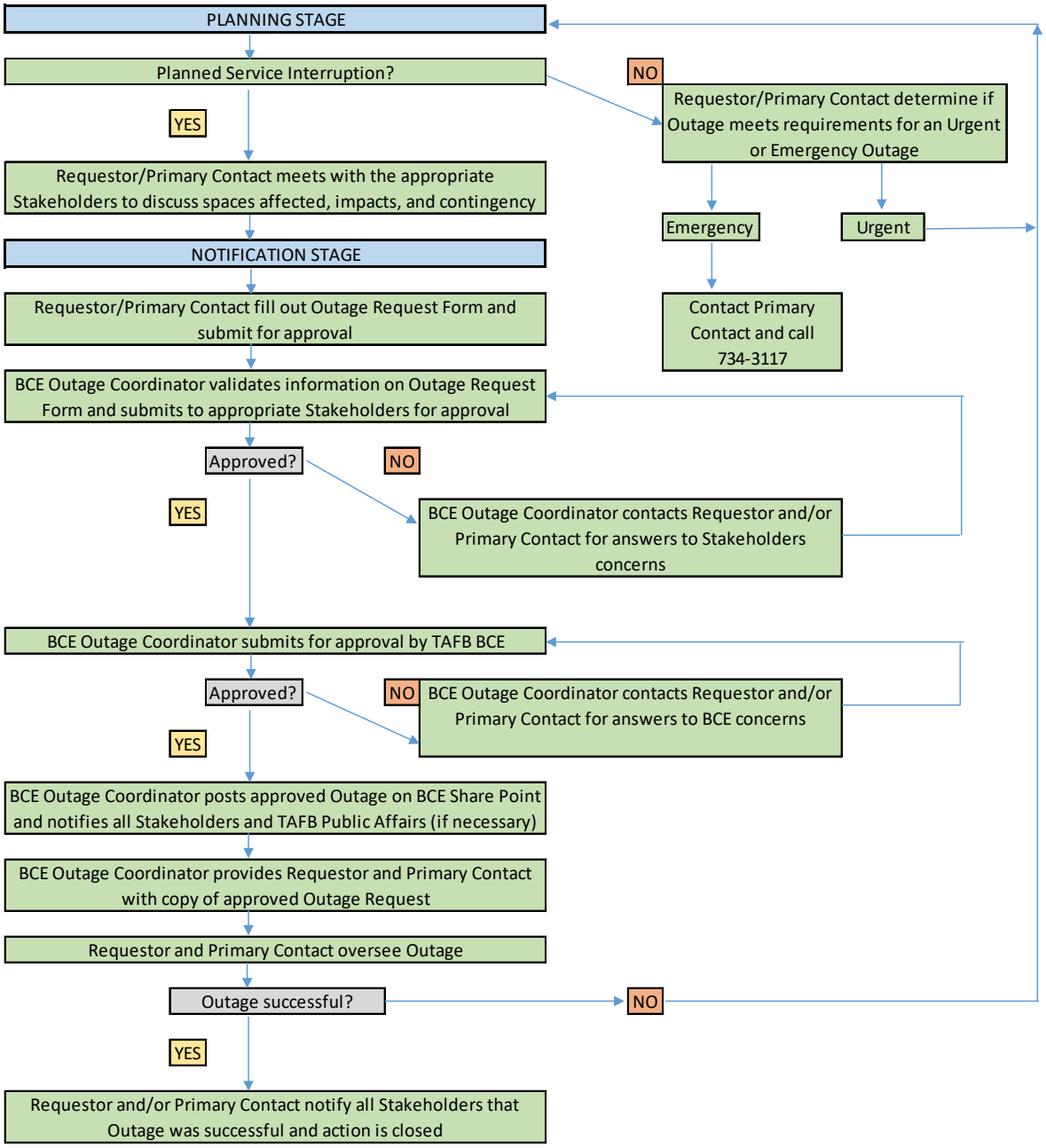
This SOP is effective immediately upon approval and signature of the approving authority below and shall remain in force until further notice or superseding policy is issued by the undersigned or higher authority. All Contractors or entities that perform work on facilities or utilities or other services that facilitate building operations shall be provided a copy of this SOP.

WILSON.STEPHANIE.PETERENIA.1063234377

Digitally signed by WILSON.STEPHANIE.PETERENIA.1063234377
Date: 2022.01.03 13:50:24 -06'00'

STEPHANIE P. WILSON, NH-IV
Director, 72 ABW CE

ATTACHMENT 1: OUTAGE PROCESS FLOWCHART



THIS PROCESS CHART DOES NOT COVER ALL STEPS REQUIRED IN THE OUTAGE REQUEST PROCESS.

ATTACHMENT 2: OUTAGE REQUEST FORM
Form shall be sent to the Outage Coordination Team at
72ABW.CEEO.UtilityOutageWork@us.af.mil

TINKER AIR FORCE BASE OUTAGE REQUEST FORM					
Routine or Urgent requests received after 1 pm will be processed the next business day					
Type of notification:		Routine		Urgent	Emergency
If Urgent or Emergency state reason why outage cannot be Routine:					
Type of Outage or Closure					
	Fire Suppression		Fire Alarm Outage		Electric
	Gas		Fire Alarm Testing		HVAC
	Steam		Domestic Water		Compressed Air
	Breathing Air		Chilled Water		Parking Lot
	Sidewalk		Road		Gate(s) (specify which)
Other or Remarks:					
Project Information					
Project #:				Work Order #:	
Project Name:					
Exact Location (Bldg #, Post #, intersection, etc.)					
Outage Start Date:			Outage End Date:		
Outage Start Time:			Outage End Time:		
If outage is phased, fill out a separate form for each phase					
Description of Work to be Performed (more detail is better):					
Operational Support Required					
	Plumbing Shop		Alarms/Sprinkler Shop		Plant Maintenance
	Electrical Shop		OG&E		Honeywell
	HVAC		Fire Department		Other (state needs below)
Impact of outage (to occupants, surrounding bldgs/areas, etc.)					
Requestor Point of Contact					
Primary:			Position:		
Phone:			Email:		
Alternate:			Position:		
Phone:			Email:		
TAFB Contract Point of Contact (Inspector/PM/COR)					
Primary:			Position:		
Phone:			Email:		
Alternate:			Position:		
Phone:			Email:		
Utility Outage Coordination Team, TAFB Civil Engineering, Building 414 72ABW.CEEO.UtilityOutageWork@us.af.mil					

Outage Request Form Apr 2020.pdf

ATTACHMENT 3: OUTAGE CONTACT NUMBERS

1. **72 ABW CE Chief of Operations:** 405-734-3057, alt: 405-582-1228
2. **Industrial Waste Treatment Plant Supervisor:** 405-734-3114
3. **Fire Alarms/Fire Suppressions Systems:** 405-734-1264, alt: 405-734-4202
4. **Power Production:** 405-734-1264, alt: 405-734-5058
5. **Exterior Electrical:** 405-734-1264 or 734-3142 (OG&E – 405-553-4120)
6. **Interior Electrical:** 405-734-3142, alt: 405-734-3142 or 734-2885
7. **External Plumbing:** 405-734-3328, alt: 734-5370
8. **Interior Plumbing:** 405-734-3328, alt: 405-734-2753
9. **HVAC (Zone A):** 405-734-3328, alt: 405-734-5815
10. **HVAC (Zone C):** 405-734-3328, alt: 405-734-5856
11. **Central Plant Operations** (chilled water, steam, and utility infrastructure): 405-734-9377
12. **Elevators:** 405-734-3142
13. **Customer Service Unit:** 405-734-7113
14. **Outage Coordination Team:** 405-734-2236