SP-20 - AIRPORT SECURITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. The Prime Contractor is required to obtain a copy of the Security Requirements and to disseminate them to the appropriate sub-contractors.

B. At a minimum, SP-20 applies to the work being performed. Additional requirements may be incorporated due to Local, State or Federal Regulations or increased security levels at the Airport.

C. At a minimum, the following guidelines should be used and followed – TSA Airport Security design guidelines, RTCA, Inc – Standards for Airport Security Access Control Systems (RTCA-DO 230 in latest version) and any National Safe Skies Alliance, Inc. PARAS reports.

D. The Contractor shall be required to supply, place, maintain, move and store the items listed herein, as appropriate, to facilitate construction and protect air traffic. The Contractor shall maintain an adequate extra supply of these items on site.

PART 2 - EXECUTION

2.1 GENERAL REQUIREMENTS AND CONTRACTOR RULES

A. Any construction, alteration or modification that would modify the Airport's TSA-approved Airport Security Program (ASP) requires sixty (60) days' notice to Airport Security Management. Failure to comply with this requirement may delay the project. The lead time is required for the Airport to seek and receive TSA approval for the changed condition.

B. The Contractor is responsible for submitting a Site Security Plan which describes measures for the control and accountability of Airport ID badges, tools and site security.

C. Per Federal Regulation 49 CFR 1520, all construction documents shall be controlled. The documents shall either be identified as 'Security Sensitive Information' or 'For Official Use Only'. Documents that identify critical infrastructure and/or security systems shall be marked with the following statement:

'WARNING: This record contains Sensitive Security Information that is controlled in 49 CFR Part 1520. No part of this record may be disclosed to persons without a "need to know", as directed in 49 CFR part 1520, except with the written permission of the Administrator or the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For US government agencies, public disclosure is governed by 5 USC 552 and 49 CRF Part 1520.' All other documents shall be marked Official Use Only – Public availability to be determined under 5 USC 552."

1. Contact an Airport Security Manager if you require clarification on proper document.

D. All individuals working inside or traversing Security Sensitive Areas shall possess Airport Identification Badges obtained from the Airport's Credentials Office (734) 942-3606. All forms and information are available at www.metroairport.com - click the 'badging' link.

1. Unescorted access requires a DTW photo ID Badge. Contractors should contact the Airport's Credentials Office for specific Badge processing procedures or refer to the Airport's website.
2. Contractor access is restricted to the construction site only; access to any other area(s) is not permitted.
3. Access through security doors and gates can be granted by submitting a written request to an Airport Security Manager.
   i. Access requests must specify the door(s) or gate(s) where access is being requested, along with justification for need/use.
   ii. If access is required to other tenant or airline locations, written permission of the leaseholder is required.
4. Lost or Stolen ID Badges shall be immediately reported to the Airport Security Credentials Office 734-942-3606 or to the 24/7 Airport Response Center (ARC) at 734-942-5304.
5. All Airport ID Badges must be returned to the Airport upon completion of the project. The ID Badges are valid for approved construction projects only; this does not include warranty work. If warranty work is to be provided, the Contractor shall coordinate with the Credentials Office to have their paperwork and badges updated to reflect the change in status.
6. Fines may be imposed for not notifying the Airport when an individual no longer requires access at the Airport.
7. Badge deposits will be forfeited for Badges not returned within ninety (90) days of deactivation/completion of the project.

E. The Contractor shall not paint over, damage, alter or tamper with any component of the Electronic Security System (ESS), including associated signage and labels, unless authorized by a Security Manager in advance. The work is subject to inspection by Airport Security to ensure it meets our requirements. The Contractor will be required to restore any altered items to their previous or better condition than before alteration. All costs associated with the above work will be at the expense of the Contractor.

F. Shop drawings and submittals for any Security equipment must be pre-approved by a Security Manager prior to purchase and installation.

G. Any security equipment that is removed as part of this project is the property of Airport Security and shall be inventoried and returned to the Airport. The Airport, at its discretion, may decide to have the Contractor dispose of select items that are no longer needed or of value according to the Airport's current policies.

H. To prevent possible explosive or incendiary devices from being hidden in areas close to Airport facilities, equipment, aircraft, or vehicles, no containers (toolboxes, storage containers, material trailers) shall be left unsecured or unattended in any Security Sensitive Area.

I. The Contractor shall not park any vehicles, or store any construction materials, within ten (10) feet of the AOA perimeter fence. Lay down areas for materials must be pre-approved by an Airport Security Manager.

J. Due to the potential for damage and to meet security regulations, Contractors shall coordinate and receive pre-approval from an Airport Security Manager, prior to lifting any equipment, persons or material over the Airport's AOA Fence or perimeter building.

1. The Contractor may be required to have an Airport Contract Security Officer on site during this work. The Contractor shall be responsible for all costs associated with the Contract Security Officer coverage. The Contractor shall complete a Security Services Request Form to schedule these services.

K. Contractors shall not excavate under, or around, the AOA fence without prior approval from an Airport Security Manager.

1. Depending on the duration and extent of the excavation, the Contractor may be required to have an Airport Contract Security Officer at the site during this work. The Contractor shall be responsible for all costs associated with the Contract Security Officer coverage and vehicle, if required. The Contractor shall complete a Security Services Request Form to schedule those services.
2. To prevent AOA access, all excavations that traverse the AOA line shall be adequately enclosed or covered prior to the end of each workday and should never be left unattended. Prior to completion of work for the day, the Contractor shall contact Airport Security to have the site inspected and approved before the Contractor leaves the site and the Security Officer is released
3. Any damage to the AOA fence should be reported immediately.

L. All other requirements in the Airport Security Program, Security Rules for Contractors, Badging Procedures, and all local, state, and Federal laws and regulations also apply.

M. Failure to comply with the Security Rules and Procedures may result in an Administrative Penalty, work stoppage and/or removal from the site.

1. Any TSA Civil Penalty issued to the Airport because of a Contractor's security violation will be passed onto the Contractor.

2.2 PUBLIC – TERMINAL REQUIREMENTS

A. The Contractor and/or his employees shall not prop open any gates or doors that allow access to any Security Sensitive Area; this includes any temporary wall(s) separating the public from any construction area.

1. Temporary walls shall meet Security access requirements (fence standards or ESS system) to prevent access to persons or prohibited items. A Contract Security Officer(s) is required (at the cost of the Contractor) at any unsecured opening leading to a Security Sensitive Area.

2. If a temporary opening is made that would allow access into a Security Sensitive Area, the Contractor shall erect a partition to prevent access until the area is inspected by Airport Security and approved by an Airport Security Manager.
   i. The partition shall be sufficient to prevent access of persons or prohibited items. The requirements may change depending on the location of the partition.

B. The installation of an active shooter detection and notification system may be required. The system at a minimum should be integrated with the ESS.

C. The Contractor shall not install any openings/doors that would allow access to the Security Sensitive Area unless approved in advance and tested by Airport Security. The Contractor may be required to have an Airport Contract Security Officer at the site during this work.

1. All new Security doors or gates shall have the appropriate signs and be numbered using the Airport Security's numbering system. The signs shall match (look and material) of the existing security signs and shall be provided by the Contractor at their expense. Security shall approve all signs prior to production. Signs must be in place prior to door or gate activation.

D. All contractors accessing the terminal may be required to go through employee screening. Tools will be allowed on a case-by-case basis.

E. Prior to any area being opened to the public, Airport Security shall conduct a security sweep of the area. A Sweep request must be submitted to Airport Security with a minimum 48 hours in advance to schedule the sweep.

F. Bollards shall remain secured in front of the terminal buildings at established locations, always. Temporary movement of the bollards to accommodate the movement of equipment or material shall be coordinated in advance (at least 24 hours) with an Airport Security Manager. The type of bollards and spacing will be coordinated and approved by Airport Security.

G. Dumpsters are not permitted within 300' (three hundred feet) of the public areas of the terminal buildings.

2.3 STERILE AREA REQUIREMENTS

A. The Contractor and/or his employees shall not prop open any gates or doors that allow access to any Security Sensitive Area. This includes doors installed in temporary walls to keep the public from any construction area.

1. Temporary walls shall meet Security access requirements (fence standards or ESS system) to prevent persons and prohibited items from entering the Security Sensitive Areas. Contract Security Officers are required (at the cost of the Contractor) for any security sensitive access opening.

2. If a temporary opening is made that would allow access into a Security Sensitive Area, the Contractor shall erect a partition to

prevent access until the area is inspected and approved by Airport Security.

3. Any access points within the temporary walls must be secured with a combination lock with the code provided to public safety.
4. The Contractor is responsible for ensuring the construction area is either manned or secured always. Any prohibited items discovered left unattended and/or accessible to the public may result in; the removal of the prohibited items, administrative penalty, badge suspension, and/or termination.
5. If an access point is found unsecured and unattended, it should be reported immediately to the Airport Response Center (ARC) by calling the number on the back of the Airport ID Badge and staying in the area to prevent unauthorized access until Airport Police arrive to complete a detailed report of the incident.

B. The Contractor shall prevent unauthorized pedestrian or vehicular access to the Security Sensitive Areas from the construction site.

C. The Contractor shall not install any openings/doors that would allow access to the Security Sensitive Area unless approved in advance and tested by Airport Security. The Contractor may be required to have an Airport Contract Security Officer at the site during this work.

1. All new Security doors or gates shall have the appropriate signs and be numbered using Airport Security's numbering system. The signs shall match (look and material) the existing security related signs and shall be provided by the Contractor at their expense. Security shall approve all signs prior to production. Signs must be in place prior to door or gate activation.

D. Bollards shall remain secured in front of the terminal buildings at established locations, always. Temporary movement of the bollards to accommodate the movement of equipment or material shall be coordinated in advance (at least 24 hours) with an Airport Security Manager.

E. Staging of equipment, storage of materials or dumpsters are not allowed within 300' (three hundred feet) of the public areas of terminal buildings.

F. The Contractor shall coordinate equipment or personnel access through passenger screening with Airport Security in advance.

G. The Contractor is not permitted to carry any prohibited items (see TSA website www.tsa.gov for current list of prohibited items) that are not necessary for operational or medical needs. These items may be subject to inspection.

1. No prohibited items (including tools) shall be left unsecured or unattended in a Security Sensitive Area at any time.

H. Any temporary door(s) that lead to a construction area that is accessible to the traveling public shall be equipped with a coded lock or the Airport's Intellikey Lock (purchased and installed at the Contractor's expense).

1. The access number to the door shall be provided to a WCAA Security Manager and Inspectors. These areas must remain secured always.
2. Removal of any temporary structure requires a Security sweep and must be coordinated with Airport Security with 48-hour advance notice.

I. Prior to any area being opened to the public, Airport Security shall conduct a security sweep of the area. A Sweep request must be submitted to Airport Security with a minimum 48 hours in advance to schedule the sweep.

J. Prior to any area that was closed for construction being opened to the public all prohibited items that are to remain in the area must be audited by the Concession Department. Go to www.tsa.gov for a complete list of TSAs prohibited items.

2.4 AIR OPERATIONS AREA (AOA) REQUIREMENTS

A. The Contractor and/or his employees shall not prop open any gates or doors that allow access to any Security Sensitive Area. This may include temporary walls to keep the public from any construction area.

1. Temporary walls shall meet Security access requirements (fence standards or ESS system) to prevent persons and prohibited items. Contract Security Officers are required (at the cost of the Contractor) for any security sensitive access opening.

2. If a temporary opening is made that would allow access into a Security Sensitive Area, the Contractor shall erect a partition to prevent access until the area is inspected and approved by an Airport Security Manager.
   i. The partition shall be sufficient to prevent access of persons or prohibited items. The requirements may change depending on the location of the partition.

B. The Contractor shall prevent unauthorized pedestrian or vehicular access to the Security Sensitive Areas from the construction site.

C. The Contractor shall not install any openings/doors that would allow access to the Security Sensitive area unless approved and tested by Airport Security.

1. The Contractor may be required to have an Airport Contract Security Officer at the site during this work.

D. All new Security doors or gates shall have the appropriate signs and be numbered using Airport Security's numbering system.

1. The signs shall match (look and material) the existing security related signs and shall be provided by the Contractor at their expense. Security shall approve all signs prior to production. Signs must be in place prior to door or gate activation.

2. All jet way stair doors are required to have ‘restricted area’ & “sterile area subject to search, liquid gels” signs installed on the door.

3. The signs shall match (look and material) the existing security related signs and shall be provided by the Contractor at their expense.

E. At the Contractor’s expense, a double-sided cipher lock must be installed on jet way stair doors, preventing access from both the sterile area to the AOA and the AOA to the sterile area.

F. Entry and exit to job sites shall be through approved vehicle checkpoints, only.

1. If the Contractor requires access after the regularly scheduled hours at manned vehicle checkpoint locations, the Contractor shall submit a Security Officer Request form and the Contractor will be responsible for the cost of the additional hours
2. For locations that are not currently being manned, the Contractor will be required to pay for the contract security officer. In addition, a temporary booth may be required (see Temporary Booth).
3. At locations other than one of the established vehicle checkpoints, the contractor must meet all security requirements for “vehicle checkpoints”. Installation of any additional required equipment will be at the cost of the Contractor.
4. All construction/installation vehicles, while on the AOA, shall have a DTW vehicle pass displayed on the dashboard. In addition, any persons that are required to drive on the Air Operations Area (AOA) will be required to undergo ramp drivers training. DTW vehicle passes may be obtained from the Airport Credentials Office.
5. All construction/installation vehicles shall display company logo affixed to the drivers' and passengers' door.
   i. Logos shall be no less than 12" x 12" and can be magnetic, printed or pasted on, but shall be commercially made.
6. All drivers must have valid company proof of insurance maintained in their vehicles always.

2.5 SECURED AREA REQUIREMENTS

A. The Contractor and/or his employees shall not prop open any gates or doors that allow access to any Security Sensitive Area. This may include temporary walls to keep the public from any construction area.

1. Temporary walls shall meet Security access requirements (fence standards or ESS system) to prevent persons and prohibited items. Contract Security Officers are required (at the cost of the Contractor) for any security sensitive access opening.

2. If a temporary opening is made that would allow access into a Security Sensitive Area, the Contractor shall erect a partition to prevent access until the area is inspected and approved by the Airport Security.

i. The partition shall be sufficient to prevent access of persons or prohibited items. The requirements may change depending on the location of the partition.

B. The Contractor shall prevent unauthorized pedestrian or vehicular access to all the Security Sensitive Areas from the construction site.

C. Entry and exit to job sites shall be through approved vehicle checkpoints, only.

1. If the Contractor requires access after the regularly scheduled hours at manned vehicle checkpoint locations, the Contractor shall submit a Security Officer Request, at least 48 hours notification is required, and the Contractor will be responsible for the cost of the additional hours.
2. For locations that are not currently manned, the Contractor will be required to pay for the contract security officer. In addition, a temporary booth may be required (see Temporary Booth).
3. At locations other than one of the established vehicle checkpoints, the contractor must meet all security requirements for “vehicle checkpoints”. Installation of any additional requirements will be the cost of the Contractor.
4. All construction/installation vehicles, while on the AOA, shall have a DTW vehicle pass displayed on the dashboard. In addition, any persons that require driving on the Air Operations Area (AOA) will be required to undergo ramp drivers training. DTW vehicle passes may be obtained from the Airport Credentials Office.
5. All construction/installation vehicles shall display company logo affixed to the drivers' and passengers' door or side window.
   i. Logos shall be no less than 12" x 12" and can be magnetic, printed or pasted on, but shall be commercially made.
6. All drivers must have valid company proof of insurance maintained in their vehicle always.

2.6 CONTRACT SECURITY SERVICES

A. The Contractor shall utilize the Airport’s Contract Security Service for any work that affects the security of the Airport (i.e., access points, fencing, doors, gates, etc.).

1. Note: The Airport’s Contract Security Service cannot be used for escorting services.

B. The Contract Security Service shall be provided at the Contractor’s expense. The Contractor shall complete the Contract Security Service Request Authorization Form at least 48 hours prior to service being provided. Less than 48 hours advance notice will result in additional hourly charges.

C. The Request Forms should be submitted to Airport Security at security@wcaa.us at least forty-eight (48) hours in advance. A cancellation fee may apply without proper cancellation notice.

D. Depending on the location and the operational impact, the Contractor may be required to pay for an additional Contract Security Officer to perform vehicle inspections, relief duties and/or act as a physical barrier for any open perimeter access points. This may require the use of a Contract Security vehicle, which will be provided at the expense of the Contractor making the request.

E. For AOA access, the Airport has several existing vehicle checkpoint locations that contain guard booths and ESS. These locations should be utilized as the preferred access locations. If Contract Security Services are required at other perimeter locations, it must be first approved by an Airport Security Manager and the Contractor must supply a temporary booth (see Temporary Booth Requirements). The Airport may (if available, if approved by a Security Manager and with advance notice) provide the Airport's portable booth for temporary use by the Contractor. It will be the responsibility of the Contractor to provide maintenance of the checkpoint booth (interior and exterior) for the duration of the requested service. Maintenance may consist of, but not limited to; wiping down interior and exterior walls and windows, window screens, sweeping and washing the floor, and cleaning or changing the HVAC filters as needed. The contractor will be responsible for ensuring the checkpoint traffic lanes are kept clear of snow, ice and mud.

F. Rates and requirements are subject to change. The Contractor should always utilize the most current Request Form available on the Airport's website.

2.7 FENCE

A. The Contractor shall submit plans for any fence installation or relocation (temporary or permanent) which shall include fence layout and a phasing plan to Airport Security sixty (60) days in advance for approval. Failure to comply with this requirement may delay the project. The lead time is required for the Airport to seek and receive TSA approval for the changed condition.

B. The Contractor or his employees shall not cut, remove, alter or displace any AOA perimeter fencing, ESS or signs without prior approval from an Airport Security Manager.

1. The Contractor shall contact Airport Security at least 48 hours in advance for approval prior to removing any fencing, ESS or signs.

C. Prior to removing or altering any existing AOA perimeter fencing, a permanent or temporary fence shall be in place and have been inspected and approved by an Airport Security Manager.

D. Any temporary fence shall still meet the standard fence security requirements. Any alternate details must be pre-approved by Airport Security.

E. AOA perimeter fencing may require the installation of the Airport's perimeter detection system (Infinity 2000) depending on the

project/location. Airport Security will make this determination based on the project.

F. Any AOA fence that is displaced whether temporarily or permanently, or any new AOA fence shall be 10 (ten) foot chain link with top and bottom tension wires.

1. There shall be at least five (5) fence ties attaching the fabric to each post and at least 5 ties (ea. top and bottom) attaching the tension wire to each section of fence.
2. The fence shall be topped with dual, "V" Type, outriggers with a minimum of three (3) strands of barbed wire on each outrigger.
3. The barb wire shall be fastened securely.
4. The fence fabric is to be placed on the public side of the fence posts.
5. All gaps—including those from the bottom of the fence or gate to the ground (Figure 1C), and between a gate leaf and a post or another gate leaf (Figure 1B)—shall not exceed three and a half inches (3.5”).
6. To allow proper clearance for Airport Fire and Maintenance equipment, all vehicle gates shall allow a minimum clear opening of sixteen feet (16’).
7. To prevent gates from sagging, there shall be support cross braces for a minimum of two (2) sections on either side of the gate leaves.
8. To address erosion concerns and the subsequent risk of pedestrian and wildlife access, all fencing shall have at least three feet (3’) of flat ground on either side.
9. New permanent fence installations must have wildlife deterrent fencing (i.e., skirting).
10. All fence posts shall be secured in concrete.
11. If new or replacement fence is installed adjacent to existing fence that is at a different height, the fence shall transition to the different height in not more than one section.

G. All permanent AOA fence (chain link and decorative) shall have a physical barrier protecting the fence from forced penetration. Options can include: fence on barrier wall, guard rail, berms, or other natural or manmade barriers. Physical barrier option will require prior approval by an Airport Security Manager.

H. Decorative wrought iron fence is an acceptable alternative in certain locations. Aegis II – Invincible manufactured by Ameristar Fence Products is the current Airport approved standard. The wrought iron fence shall have one-inch (1”) 14-gauge aluminum pickets, steel cross members and posts and be at least 10’ (ten feet) high with an additional height to support the curving in the same direction as an outrigger. Pickets shall be spaced at a maximum of three and one-half inches 3.5”) between each picket.

1. The fence shall be installed by Airport-approved methods which vary depending on the material in which the fence is installed on.

I. Guardrail or fence installed on concrete barrier wall is required for all permanent fence locations unless a natural or man-made barrier already exists to prevent vehicular penetrations. Any alternate barriers must be approved by Airport Security.

1. To prevent damage, guardrail shall be placed at least six feet (6') from the AOA fence in all parking areas and areas immediately adjacent to an AOA checkpoint booth and associated gates.
2. The guardrail shall be installed on the public side of the fence and meet DOT highway standards unless approved by Airport Security to be installed on the AOA side.
3. The guardrail is to be of sufficient height to prevent semis and other large trucks from backing into or along the fence.
4. The Airport's Inspector or Engineer shall approve the installation.

J. Fence and Gate Signs requirements.

1. All signs shall be the same size, material and design as existing Airport signs.
2. All signs shall be securely fastened to the fence posts to prevent alarming the perimeter detection system.
3. All non-parking areas or driveways adjacent to the AOA fence shall have "NO PARKING" signs installed every one-hundred feet (100') and on all gates.
4. The Contractor shall install "Restricted Area Keep Out" signs every one-hundred feet (100') on the Public Side of the fence and on all gates.
    i. The sign shall be reflective with red background and white lettering - 12" (twelve inches) high by 24" (twenty-four inches) wide. The signs shall be securely fastened to the fence posts.
5. In all parking areas adjacent to the AOA fence, shall have "Head-In Parking Only" signs installed every one-hundred feet (100').
6. The Contractor shall install a gate identification sign on the Public Side of the gate.
    i. The signs shall be made of reflective material and securely fastened. Gate signs shall be 12" wide by 18" high and have white letter/number on a blue background for Intellikey locations. Non-Intellikey locations shall be black letters/number on a white background.
7. The Contractor shall install fence identification signs on the Public Side of the fence.
    i. The signs shall be made of reflective material and securely fastened. Identification signs is installed every 1,000 feet and shall be 12" wide by 6" high and have green letter/number on a white background.
    ii. Airport Security will provide the identification numbering sequence. Contractor may be required to re-number a section larger than the work area to maintain the Airport's numbering sequence in order.

K. To comply with 49 CFR 1542.207, the Contractor shall supply and install an "Intellikey" locking mechanism on all manual security gates. Contact a Security Manager for further information on parts and components.

1. The lock shall be programmed by Airport Security and shall become the property of Airport Security and will not be returned to the Contractor.
2. All Intellikey locks become the Airport's property after the project, even if being utilized on temporary fence line.

3. The fence post that the locking unit shall be attached to is to be two (2) inches minimum in diameter.
4. A spacing of no more than 4 inches (4”) is required between gate posts to allow for adequate clearance for the mechanism. Additional posts may be required to be installed above and below the Intellikey lock to prevent any gap issues.
5. Intellikey locks shall be bolted and welded to the gate leaf, per the Manufacturers’ instructions.
6. The Intellikey lock shall be mounted so that the battery compartment is located on the secure/AOA side of the gate.
7. To prevent any damage to the Intellikey locks, a drop rod shall be installed on all gate leaves; this prevents the wind from pulling on the locks.

L. All culverts, drains, ditches or piping shall be secured to prevent pedestrian and wildlife access. Piping diameter of 4” or greater that extends from the public to the security sensitive area shall also be secured by means approved by an Airport Security Manager. There should be no gaps greater than four inches by four inches (4”x4”), including gaps between the bars of the exclusion device and gaps between the exclusion device and the structure being excluded (e.g. culvert, pipe; Figure 1A). If rebar is used, all cross rebar should be welded and secured into the ground at a depth of at least 36”.

1. The location shall be identified utilizing the Airport’s identification system and a sign shall be installed at the contractor’s expense. The sign shall be 12” high by 18” wide white letter/number on green background.

M. Fence shall not be installed within six feet (6’) of any utility pole or device that could be used to climb over the fence.

1. If unavoidable, the device shall be equipped with an anti-climb device. The anti-climb device or method shall be approved by an Airport Security Manager prior to any installation.

N. Landscaping shall not be placed in areas that would prevent monitoring of the AOA fence from perimeter roads or CCTV systems.

O. Landscaping shall not be placed in areas that would create a climb point or may cause further decay or damage to the fence due to vegetation, roots or other growth.

P. Fencing shall not be installed within six feet (6’) of existing landscaping.

Q. Areas of the fence line that may be susceptible to vehicle impact, such as end of roadways, open lots, etc. may require additional barricades or physical layout alteration. Airport Security shall approve any additional barricades in these vulnerable locations.

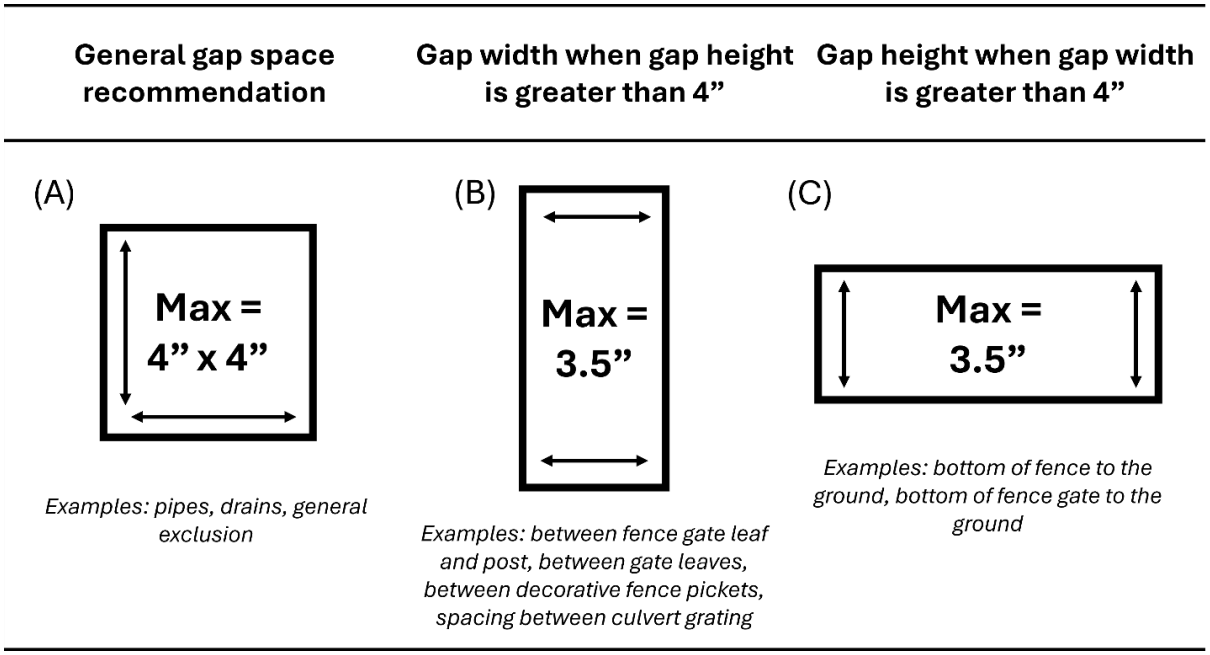

Figure 1. Maximum gap-space limits for fencing and other exclusion devices that separate public areas from security-sensitive areas, including chain-link fences, gates, decorative fences, culverts, drains, ditches, and piping.

2.8 PASSENGER SCREENING CHECKPOINT

A. The Contractor shall first receive approval of the Screening Checkpoint layout, new installation or redesign by the TSA and Airport Security. At least sixty (60) day advance notice is required to the Airport for changes to the Airport Security Program.

1. This approval is required prior to commencing any construction. Failure to comply with this requirement may delay the project.

B. CCTV shall be installed and integrated into the Airport's CCTV live and recorded systems – see CCTV Section. The layout, number of cameras, type of cameras and type of installation shall be submitted for approval to an Airport Security Manager prior to fabrication and installation.

1. A local monitor connected to the existing CCTV system shall be installed to allow for the review of recorded video playback and live cameras.
    i. The location of the monitor shall be approved by Airport Security prior to installation.
2. CCTV coverage shall be of the entire screening checkpoint area including any associated exiting areas. This includes all access points into and out of the screening area.
3. There shall be additional CCTV coverage to allow for the verification of the direction of travel of an individual approaching and leaving the screening checkpoint area.

C. Emergency Screening Checkpoint direct line phone and Silent Alarm Button with ESS Interface shall be installed at each screening lane.

1. Contact Technology Services (734) 247-0000 for phone and alarm specifications and Airport Security for ESS interface.

D. A "Caution Alarm" shall be installed

1. The alarm shall have a twist to reset switch/button.
2. The alarm shall be interfaced into the CCTV and ESS.
3. The alarm shall include a local Audible and visual alarm.
    i. The audible alarm shall deactivate after 30 seconds but the visual alarm shall remain active until the reset of the Caution Alarm.
4. The activation alarm shall match all existing buttons within the terminals. Placement of the alarm equipment shall be coordinated with a Security Manager.
5. The exit lane may require an additional "Caution Alarm" activation button depending on checkpoint layout.
6. As part of the "Caution Alarm" system, manual or automatic isolation gate(s) and associated CCTV coverage may be required to be installed adjacent to the screening checkpoint and exit lane(s). Exact location shall be determined by TSA and Security.

E. Installation of a full partition gate shall be installed in front of the screening checkpoint and any associated exit lane to allow for complete closure.

1. The gate shall not allow for any persons or items to be introduced into the sterile area from under, through or over the gate.
2. The gates shall have ESS installed with alarm contacts, CCTV coverage and be card reader controlled.
3. Exit lane technology should be considered as the approved method for any new permanent screening locations.

F. The exit lane shall have a LEO authorization ESS reader installed with red “denied” and green “authorized’ lights.

1. The lights and reader shall be tamper proof.
2. Area shall be covered by CCTV.

G. Validation readers shall be installed with red “denied” and green “authorized’ lights.at the TSA document checking stations (TDC) location to validate employees.

1. The lights and reader shall be tamper proof.
2. Area shall be covered by CCTV.

H. The Contractor shall install necessary TSA Airport Foreign Advisory Notice signs and associated bulletin boards and all other signs including x-ray and magnetometer numbers.

1. The Foreign Advisory Sign shall be a locking cabinet 36” high by 24 “ wide. Keys are to be given to Airport Security. X-ray equipment and magnetometer numbers shall be a minimum ofinches high of a contrasting color. The numbers shall be placed on all equipment

I. Contractor shall install a Sterile Area access corridor adjacent to the screening checkpoint to allow Airport and Emergency personnel access to the sterile area at the permit holder’s expense. A camera will be installed so that the corridor door shall be monitored via the Airport’s CCTV system with both live and recorded video.

1. Corridor access will be controlled by a maglock door with card reader integrated into the ESS (see ESS requirements).
2. The Corridor shall be a one-way door.
3. All new Security doors or gates shall have the appropriate signs and be numbered using Airport Security’s numbering system. The signs shall match (look and material) the existing security related signs and shall be provided by the Contractor at their expense. Security shall approve all signs prior to production. Signs must be in place prior to door or gate activation.

4. Design and layout will be like that of existing access corridors at other screening checkpoints. The corridor shall be unobstructed to the screening operations and away from the public’s view.
5. An addendum to the permit must be submitted for approval. The addendum shall include the layout/design of the corridor and associated equipment.
6. The Contractor shall provide CCTV coverage at the new corridor location. Cameras are to be like that at other screening locations. Security shall pre-approve CCTV placement (See CCTV requirements).

7. Provide all other fire and security signs (this includes informational and directional signs currently located at the existing corridor.
8. Install a securable bulletin board within the corridor. The board shall match existing boards. Exact location to be approved by Security.
9. A Known Flight Crew lane may be required depending on location.

2.9 EMPLOYEE SCREENING

J. The Contractor shall first receive approval of the Screening Checkpoint layout, new installation or redesign by Airport Security. At least sixty (60) day advance notice is required to the Airport for changes to the Airport Security Program.

1. This approval is required prior to commencing any construction. Failure to comply with this requirement may delay the project.

K. CCTV shall be installed and integrated into the Airport's CCTV live and recorded systems – see CCTV Section. The layout, number of cameras, type of cameras and type of installation shall be submitted for approval to an Airport Security Manager prior to fabrication and installation.

1. CCTV coverage shall be of the entire screening checkpoint area including any associated exiting areas. This includes all access points into and out of the screening area.
2. There shall be additional CCTV coverage to allow for the verification of the direction of travel of an individual approaching and leaving the screening checkpoint area.
3. An audible speaker should be installed and integrated into the Airport's CCTV System.

L. Silent Duress Alarm Buttons shall be installed and tied into the Phoenix / building alarm system with annunciation in the ARC.

M. Installation of a full partition gate shall be installed in front of the screening checkpoint and any associated exit lane to allow for complete closure.

1. The gate shall not allow for any persons or items to be introduced into the sterile area from under, through or over the gate.
2. The gates shall have ESS installed with alarm contacts, CCTV coverage and be card reader controlled.

2.10 TEMPORARY VEHICLE CHECKPOINT

A. Contractor may be required to furnish additional Security personnel at the entrance to the job site. Security will provide the specific procedures required for the position.

1. The Airport's Contract Security company is required to be used at the Contractor's expense.

B. All equipment shall be approved by an Airport Security Manager prior to installation and operation. Contact an Airport Security Manager for detailed specifications of the above equipment.

C. The contractor shall provide the labor, equipment, and material needed to maintain the operational maintenance of the checkpoint for contractor access to the AOA.

1. The contractor must clean the interior and exterior of the checkpoint booth(s) for the duration of the project.
2. The contractor is responsible for sweeping the vehicle lanes and placing fine grade aggregate in the lanes.
3. The contractor shall place jersey barriers along the vehicle lanes and straighten them when needed. This will be coordinated with the Airport Security Manager so they are properly placed.
4. The contractor shall keep spare parts for the checkpoint (e.g. gate arms) to prevent a long period of being disrupted if there is a maintenance issue.

D. Installation of CCTV & ESS may be required and will be at the discretion of Airport Security.

1. This may include the installation of wireless camera and readers.

E. Temporary booths shall be furnished and installed at the locations as indicated in the drawings and/or as directed by Airport Security.

1. Contractor shall furnish all utilities required to heat, air condition, and light the booth for the duration of the project.
2. The Contractor shall maintain the booth for the duration of the Contract, including repair of air conditioning, heating, lighting, removal of garbage, and cutting of grass around the booth.

F. The booth shall be no less than five feet wide by eight feet long (5'x8').

1. Shall have two counters, one in front, one in back (maximum depth of 16 inches
2. Two doors (one on each side) to allow contract security officers to check entering and exiting vehicles.
3. Windows on all sides, large enough for contract security officer to observe from a seated position.
4. One chair with turning radius of 360 degrees, at a height which allows contract security officer to observe restricted areas through windows.
5. Trash cans (dumping daily responsibility of Contractor).

G. The Contractor shall provide a portable toilet facility near the booth for the use of the Contract Security Officer and shall be maintained by the Contractor.

H. The Contractor will be responsible for maintenance of the booth during the duration of the project and will return the booth in the same condition or better should updates need to be completed by the contractor.

I. The Contractor will be responsible for providing power to the booth. If a generator is used it must be maintained by the contractor (including fuel) for the duration of the project. The contractor must be available to respond always while the booth is powered by a generator.

J. On a case-by-case basis, with Security approval, Contract Security Officer Service may be provided without a booth if the request is for “one time” access with a period of less than eight (8) hours. The Contractor will be responsible for all vehicle expenses.

K. The Contractor shall remove all temporary booths from the project site at the completion of the project.

1. Booths provided by the contractor remain the property of the Contractor.

L. Install enhanced (cable re-enforced) gate arm operators. The gate arm operator switch shall be installed at the front counter of the temporary booth. All equipment shall remain the property of the Airport.

1. The gate arms shall be a similar model to existing equipment in current use at the Airport and must be approved by Security.
2. Installed per Manufacturers’ specifications.
3. The gate arms shall have a minimum clear opening of sixteen feet (16’).
4. A lightweight ‘stop’ sign shall be installed on the gate arms (see other locations for example).
5. The gate arms will function manually with the switches inside of the booth at the front counter.
6. Environmentally Friendly oil shall be used.
7. Seal all expansion joints around the foundations.
8. The enhanced gate arms shall have the ability to be controlled from the ESS.

M. To prevent ESS and booth damage, guardrail or other approved barriers, shall be installed on the inbound and outbound lanes of the booth.

N. Concrete jersey barriers shall be installed at least sixty (60) feet on both public and AOA sides of the gate to form a chute.

1. The barriers shall match other checkpoint locations.
2. The barriers shall be painted safety yellow.
3. The barriers shall have reflective tape/signs installed.

O. Provide and install all necessary signs. The signs shall be same size and design of other locations and made with outdoor reflective materials. The signs shall be approved by Security prior to fabrication and installation. Listed below are some of the required signs:

1. “Stop - Wait Until Traffic is Clear” - mounted on the inbound lane, prior to start of the barrier chute, with a white Stop-Line painted on the ground adjacent to the sign.
2. “Stop” sign - installed adjacent to the gate arm operators on the inbound and outbound lanes.
3. “Wait Until Gate is Closed Before Proceeding - No Tailgating” - on both sides of the inbound and outbound automatic gate leaf’s.
4. “Restricted Area – Keep Out” on each gate leaf.
5. “Warning - Restricted Area. Area.
6. All Vehicles and persons are subject to search’, and Prevent Runway incursions shall be mounted at the checkpoint approach,

not to obstruct view from inside booth of approaching vehicles/individuals. The sign shall be the same size and design as other checkpoint booth signs.

7. "No Pedestrians" – mounted on all gate leaf's.
8. "Stop – Ensure Gate is secure before departing" on the secured side at the end of the barrier chute with a white Stop-Line painted on the ground adjacent to the sign.
9. Install Checkpoint Identification number on booth.

2.11 PERMANENT VEHICLE CHECKPOINT

A. All equipment shall be approved by an Airport Security Manager prior to purchase installation and operation. Contact an Airport Security Manager for detailed specifications of the ESS equipment.

Power Requirements: the power at the checkpoint shall be configured to allow generator support for the entire location.

If the checkpoint has more than one lane, each lane and associated equipment should be controlled independently.

Power requirements and configuration need to be evaluated at each location to ensure that there is sufficient power to handle the loads at full equipment usage. Evaluations should also be made to determine if items such as Line Conditioners need to be provided and installed to level out any power fluctuations or surges.

B. A booth is required for vehicle access checkpoints.

1. Installation of the booth shall meet all Manufacturers' specifications. Each manufacturer has specific requirements for concrete foundation pad thickness, the foundation pad should be a minimum of 24 inches wider than the building footprint dimensions.
2. Final booth location must be approved by a Security Manager.
3. Booth design and layout and shall be approved by an Airport Security Manager prior to fabrication and installation.
4. The booth shall be designed and fabricated with inbound and outbound doors and windows like existing checkpoint booths.
5. The 36" sliding steel doors should be 36 inches wide with weather stripping, ball bearing hangers, heavy duty track, safety glazing, hook bolt lock. The locks should be equipped with a seven (7) pin interchangeable core to accommodate the Best Core System. Each door will have a horizontal sliding window and hardware.
6. Booth shall be a minimum of eight feet (8' length) by six feet (6' width) in size and gray in color. Booth shall have a 12" canopy overhang on all sides. Front and rear downspout.
7. Booth shall be equipped with a heavy-duty (240V/4800 watt) heater and air conditioner.
   i. Heater should be wall mounted with a protective cover and a Integral Thermostat Control .
   ii. Air conditioner should be heavy duty 120V/13,500 BTU roof mounted with Integral Thermostat Control,
8. Install a minimum of 2 interior duplex 110VAC GFI outlets (front and back of booth interior, under the countertop).

9. Install two (2) interior lights with wall switch, 24” LED light fixture with acrylic lens. Light(s) should be ceiling mounted over each countertop. Switch should be installed above each counter.
10. Install four (4) duplex exterior LED bulb spotlights with photocell included in the fixture, mounted on the soffit of each corner of the booth.
11. Wall switch for exterior lights above front countertop.
12. Install circuit breaker panel mounted under rear counter – 120/240V rated (can be fed with 120/280V), 12 space 1-3 wire with ground bar, 100 amp main breaker and branch breaker for factory installed devices.
13. Junction box mounted in wall near floor slot for low voltage conduit termination.
14. Data prep mounted below counter with ½” raceway to junction box.
15. Camera prep - 2" x 4" device box surface mounted on header with ½” raceway to junction box.
16. Install exterior mirrors on the inbound and outbound sides of the booth.
17. Front and back counters painted galvanized steel, 18 inches deep, mounted 32” A.F.F.” and include at least one drawer per counter. Each counter shall have two (2) 2-inch diameter holes for drop cords.
18. Install infrared heaters on both sides of the exterior eaves, above doors, minimum 240V/1600W – Mounted on fascia as high as possible.
19. Install wall thermostat for Fostoria Infrared Heaters.
20. LED Red/Green traffic light with 3 position wall switch – mounted on exterior header. 3 position wall switch for traffic light mounted inside above countertop
21. Foundation should be a minimum of 6” deep and a minimum of 24 inches wider that the building footprint. Provide and install pull down tinted mylar shades for all windows (like other booth locations). Shades must not interfere with either of the door slides.
22. Provide an anti-fatigue mat installed on the entire floor.
23. The booth shall have at least a one (1) year warranty.

Install exterior mirrors on the inbound and outbound sides of the

C. The booth shall be at enough distance from the automatic gate so that when a vehicle is stopped for physical verification, the safety loop for the gate is activated but also that the enhanced gate arm can be down. Final equipment layout shall be pre-approved by an Airport Security Manager.

D. Inside the booth there shall be toggle switches that open the automatic gates. The toggles shall be independent of each gate opening.

1. The Security Officer shall open the NEMA enclosure via the interior ESS card reader. The enclosure shall contain toggle switches to open and close the individual automatic gate leaf’s
2. An alarm shall enunciate in the ESS when these toggle switches are used.
3. An alarm shall enunciate in the ESS when the enclosure is opened without a valid card swipe.

E. Provide independent CCTV coverage (see CCTV requirements) for the checkpoint. An Airport Security Manager shall approve all CCTV locations and views during the design phase. CCTV coverage shall include:

1. PTZ camera(s) to view an overview of the checkpoint including all lanes. Depending on the checkpoint layout, an individual camera may be required for each lane.
2. A stationary camera to be installed on or near the booth to view the interaction between the security officer and the driver of the vehicle.
3. PTZ camera(s) to view the approach area of the checkpoint from the view of the Security Officer (i.e. tower located behind the booth or adjacent to the booth, etc.)

F. Permanent Vehicle Checkpoint shall be equipped with automatic gates and enhanced barriers/gate arms. The checkpoint should be equipped with 3 lanes. The contractor will be required to pass the System's Acceptance Test, prior to the completion of the project (see ESS section for requirements).

1. Installation of the automatic gate and enhanced barriers shall meet all Manufacturer's specifications.
2. Gate design and layout shall be approved by an Airport Security Manager prior to fabrication and installation. This includes card reader, loop, photo sensor placement, etc.
3. A key switch shall be installed, within the booth, that prevents activation of any ESS device (i.e., gate, barrier etc.,) if removed.
4. To access the gate from either side, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system).
    i. The card readers shall be placed at an approved height and distance so that a vehicle is not activating the ground loops for the gate while swiping at the reader.
    ii. Once the system has validated the card, the appropriate gate shall open.
    iii. Once the system has validated the card, the green tamper proof "Authorized" light within the booth shall illuminate.
    iv. If the card is not validated, the red tamper proof "Denied" light within the booth shall illuminate and the gate shall remain secured. A lockout alarm also enunciates in the ESS.
    v. There shall be two loop detectors for the entrance (inbound) side. First is a safety, tailgating and loitering detector, the second is a safety loop.
        1. The traffic control light shall remain 'RED' until the gate is fully open.
        2. Once the gate is fully open the traffic control light shall turn 'GREEN'.
        3. Additional photo eyes may be required. See Manufacturers' specifications.
        4. Loops should be installed so that once an inbound vehicle pulls forward for Security Officer interaction, the vehicle should be triggering one of the loops to keep the automatic gate open.
5. Once the vehicle clears the last ground loop detector, the gate shall automatically close.

i. The signal light shall illuminate ‘RED’ once the vehicle clears the ground loop and as soon as the closing process has begun for the gate.

6. Once open, if the gate does not close in a predetermined time, an alarm will enunciate in the ESS.
7. Once the gate is secured, it shall take another valid card read to reopen the gate.
   i. If the safety edge of the gate is activated the gate will automatically re-open and an alarm shall enunciate in the ESS.
8. Any attempt to open the gate without a valid card read shall enunciate an alarm in the ESS.
9. When a vehicle is detected on a ground loop prior to a valid card read, after a predetermined time, an alarm will enunciate in the ESS.

G. Vehicle checkpoints shall have installed enhanced (cable re-enforced) gate arm operators at each opening.

1. The gate arms shall be a similar model to existing equipment in current use at the Airport and must be approved by Security.
2. Installed per Manufacturers’ specifications.
3. The gate arms shall have a minimum clear opening of sixteen feet (16’).
4. A lightweight ‘stop’ sign shall be installed on the gate arms (see other locations for example).
5. The gate arms will function manually from the switches inside of the booth at the front counter.
6. An override function shall be programmed into the ESS to allow for remote activation of the gate arm.
7. Environmental Friendly oil shall be used in locations where it is required
8. Seal all expansion joints around the foundations.
9. The enhanced gate arms shall have the ability to be controlled from the ESS and ARC.
10. Programming to include knowing when the gate arm buttons were activated.

H. The checkpoint may need space and facilities to accommodate screening of persons and property. Each location should be evaluated with Airport Security during the design phase regarding this requirement.

I. Provide for at least three (3) parking spaces on the public side for contract security officers. The parking spots shall be signed “Security Parking Only”.

J. To prevent damage, guardrail shall be installed on the inbound and outbound lanes protecting the booth. Guardrail layout and specifications shall be submitted to an Airport Security Manager for approval prior to installation. All guardrails shall be painted safety yellow and meet DOT highway standards.

K. Guardrail shall be installed on the AOA side of the fence around the checkpoint at a minimum of 500’ (five hundred) feet on either side of the gates. Contact an Airport Security Manager for approval prior to

installation. All guardrails shall be painted safety yellow and meet DOT highway standards.

L. Concrete jersey barriers shall be installed at least sixty (60) feet on both public and AOA sides of the gate to form a chute.

1. The barriers shall match other checkpoint locations
2. The barriers shall be painted safety yellow.
3. The barriers shall have reflective tape/signs installed.

M. Provide for adequate slope and drainage to prevent water ponding in or around the booth and associated security equipment.

N. Provide and install all necessary signs. The signs shall be same size and design of other locations and made with outdoor reflective materials. The signs shall be approved by Security prior to fabrication and installation. Listed below are some of the required signs, not all inclusive depending on current security requirements:

1. "Stop - Wait Until Traffic is Clear" - mounted on the inbound lane, prior to start of the barrier chute, with a white Stop-Line painted on the ground adjacent to the sign.
2. "Stop" sign - installed adjacent to the gate arm operators on the inbound and outbound lanes.
3. "Wait Until Gate is Closed Before Proceeding - No Tailgating" - on both sides of the inbound and outbound automatic gate leaf's at the end of the barrier chute.
4. "Restricted Area – Keep Out" on each gate leaf.
5. "Warning - Restricted Area.

   All Vehicles and occupants are subject to search', and Prevent Runway incursions shall be mounted at the checkpoint approach, not to obstruct view from inside booth of approaching vehicles/individuals. The sign shall be the same size and design as other checkpoint booth signs.
6. "No Pedestrians" – mounted on all gate leafs.
7. "Stop – Ensure Gate is secure before departing" on the secured side at the end of the barrier chute with a white Stop-Line painted on the ground adjacent to the sign.
8. Install Checkpoint Identification number on booth.

O. Provide validation reader to be used with the Airport's ESS. The readers shall be interfaced with green "Authorized" and red "Denied" indicator lights located inside the booth that shall illuminate upon authorization or denial from the ESS.

1. The lights shall be tamper proof.
2. The reader installation within the booth shall allow for easy and frequent access.

P. Provide wiring for the installation of a wireless reader.

Q. Protection posts are required to surround all security equipment (i.e., card readers, panels, gates, operators, etc.) to prevent damage.

1. Layout of protection posts shall be approved by Security.
2. Posts must have plastic protective covers.

R. Paint all lanes, hold short and directional lines.

PART 3 - E LECTRONIC SECURITY SYSTEM (ESS)

3.1 GENERAL ELECTRONIC SECURITY SYSTEM (ESS) REQUIREMENTS

A. ESS includes equipment and systems such as CCTV, access control, Intellikey, Perimeter Detection and enhanced gate arms.

B. Installation of any ESS equipment and associated hardware shall meet all Manufacturers' specifications.

C. The Contractor is required to submit detailed plans for the installation of the ESS at least sixty (60) days prior to the expected completion date. Failure to submit the plan may result in delays.

1. TSA approvals may take up to 45 days.

D. The Contractor is responsible for all costs associated with installation, termination and programming of the ESS equipment and the associated infrastructure.

1. This includes any interconnectivity or programming necessary between systems such as camera call-ups for alarms.

E. Final tie in and programming of new ESS equipment shall be completed by the Airport's ESS service provider at the Contractor's cost.

1. The Airport's on-site technicians cannot be pulled from normal duties to be used by the Contractor. Additional coverage will have to be coordinated, with the costs to be incurred by the Contractor.

F. All parts and equipment associated with the ESS must match existing hardware and be approved by a Security Manager prior to purchase and installation.

G. Protection posts are required to surround all security equipment (i.e., card readers, panels, gates, operators, etc.) to prevent damage.

1. Layout and size of protection posts shall be approved by Security.
2. Posts must have plastic protective covers.

H. Fiber installation shall meet the requirements and be approved by the WCAA's Technology Services and Power Systems Divisions.

1. Other communication means may be considered depending on location or type of equipment being installed. The Contractor/designer is required to submit a Networking/Communications Plan to an Airport Security, Technology Services and Power Systems for approval.

I. All ESS equipment and associated wiring installed shall be labeled. This includes panels, cameras, wiring etc.

1. The labeling plan must be approved by a Security Manager and TS prior to implementation.

J. The Contractor shall provide or obtain a 1-year warranty on all parts and service associated with the ESS equipment and installation. The warranty period will not start until Security testing is complete and the items have passed.

K. The system shall be designed and installed to prevent tampering with any of the ESS components. This includes, but is not limited to, tamper resistant screws, tamper switches and key locks.

L. All wiring shall be shielded cabling in conduit and unless otherwise approved, may not be exposed. All wiring that is to be maintained underground, shall meet the specifications for underground rated wiring.

M. All equipment that is to be exposed to the elements, shall meet Airport Security's standards for weather conditions (i.e. NEMA rated enclosures).

1. The enclosures shall be installed on the secured side of the location within lockable security dedicated cabinets.

N. The Contractor shall submit an addendum to the permit indicating the ESS installation specifications and layout for approval by Security prior to start of work and shall provide As-Built of the ESS installation.

O. All ESS doors shall have card readers and door handles installed on both sides of door regardless if crash bar or other door hardware is installed.

1. Some locations may allow for the installation of a Request to Exit (REX) device and may be installed only after approved by a Security Manager.

P. All fire rated ESS doors require latching hardware per Fire Code.

Q. Proper signage is the Contractor's responsibility as part of any ESS installation or relocation (i.e., door signs, panel labeling).

R. Power for all ESS components shall be routed to a dedicated breaker panel with automatic generator emergency hook-up.

1. The breakers shall be labeled.
2. Contact Airport electricians for generator load requirements and connector specifications.

S. Communication for the security equipment should be designed and requires approval from Security prior to any work authorization.

1. Equipment associated with the communication network shall be secured.

T. All security equipment shall be installed in an area to allow for maintenance accessibility. The locations shall be approved by Security prior.

1. Any exterior CCTV or Access Control installations must be accessible via a drivable maintenance path.

U. The following items are not allowed in conjunction with any ESS door installation: Motion Detectors, electric strikes, door cords, maglocks with

external contacts, delayed egress maglocks, chex-its, or key switch overrides.

V. Emergency Doors

1. All new emergency doors must have a dedicated camera approved by airport security.

W. Fire System Interface

1. The fire system output for releasing the doors in an alarm state shall be interfaced with the Airport's ESS doors. The fire system shall provide an alarm output relay for both alarming and monitoring of the fire system status directly from the ESS.
2. The Contractor shall install an override for the fire system while the system is undergoing maintenance or should a system failure occur.
3. When the fire system activates, the system should release power to the maglocks in the specific zone.
   i. An alarm shall enunciate in ESS that identify the maglock has lost power due to the fire alarm. All other functions of the card reader and door status monitoring shall not be affected.

X. Testing of any new equipment shall be completed by the Contractor using the Security Acceptance Test Forms.

1. The Contractor will be required to submit their test sheets to Security for review and approval.
2. Once the Contractor has completed their testing, Security will complete final acceptance testing.

Y. If any manufacturer or safety regulations differ from the security standards established here, change orders shall be submitted to Airport Security for approval prior to any work being completed.

Z. As part of Project Close-Out, a Security Manager will complete and authorize a Performance and Installation Completion Form (Test Sheet) as part of the equipment and installation test. Unless otherwise approved by a Security Manager, the equipment may not be utilized until it has been tested and approved by Security.

3.2 Special Systems Rooms (SSR): All ESS equipment inside of buildings shall be routed and terminated within Special System Rooms (SSR) within independent lockable cabinets/racks/panels dedicated to Security equipment and/or WCAA Technology Services equipment that is tied in to the Security equipment.

A. Cores: Contact Airport Security for details on the security lock system/cores currently being utilized.

B. CCTV: SSR’s shall have at least 2 cameras. One interior camera and one exterior camera. The cameras and views must be approved by an Airport Security Manager.

C. Access Control: Doors allowing access to SSRs should have access control installed and be tied into the Airport’s ESS.

1. Entry into the SSR should be via valid card read.

2. Exit out of the SSR should be via an ESS egress lever handle that acts as an authorized release of the maglock and doesn't activate an alarm. The public side of the handle should not interact with the ESS and should act solely as a physical "handle" to be used for opening and closing the door.
3. All alarms required for pedestrian doors shall apply to SSRs.
4. An emergency key switch shall be installed on the outside of all SSR rooms. The key switch will have the Security core installed.
5. An emergency release pull handle should be installed inside the SSR within 5' from the door.
    i. This emergency release, when activated, will drop the power to the maglock in the event of an emergency or system issue that would otherwise restrict access out of the room.
    ii. This emergency release should activate an alarm in the ESS when it is pulled.
    iii. A separate intrusion alarm should activate if the door is opened while the release is active.
    iv. The model of the emergency release should duplicate what is currently installed at the Airport (Model CM-722). If not available, an alternative should be presented for approval prior to purchase or installation.

D. Access Control Panel: The DIB panel containing the ESS equipment for the SSR door(s) should be installed outside the SSR, if possible. This will allow the technician access to the panel in case of system issues.

1. If the panel is located inside the room and the door is unable to be opened, then there may be no way to get access to the necessary equipment to make repairs or troubleshoot.
2. This panel will need to have appropriate labeling, tampers, power supplies, etc. and should be a model that allows for locking via a padlock versus just a generic panel key core.
3. This panel will need to be suitable for the environmental conditions present outside the SSR.

E. Environmental & Power Considerations: Environmental and electrical systems should be sufficient to accommodate all equipment in the SSR, as well as for potential future expansion.

1. If additional equipment is being installed within a current SSR, the contractor is required to ensure HVAC and electrical is addressed to sufficiently supply the new equipment. This may require the purchase and installation of additional equipment or expansion of the existing systems.

F. Equipment Racks: All exposed cabling coming into and out of a rack should be stored in cable trays or conduit depending on the location and conditions present at that location.

1. For wall mounted racks all power supplies should be installed in a lockable enclosure. There should be no external transformers or equipment that could be subject to tampering.

3.3 Pedestrian Operational Doors: The following is a synopsis of ESS pedestrian door operations. This information applies to both single and double leaf pedestrian doors.

A. Installation of the door shall meet all Manufacturer's specifications.

B. The door shall be tied in to the ESS system to allow for remote monitoring and control of the door. Programming shall allow for items such as Tamper Alarms, Prop Alarms, Intrusion Alarms, Power Alarms, etc.

C. A maglock shall be installed at the top of the door in the standard configuration used at the Airport.

1. Other door configurations or styles which may require distinctive maglock installation (such as a full glass door) or specialty hardware outside of a standard WCAA install, will need to be reviewed with Airport Security prior to purchase and installation but is highly discouraged.
2. Depending on the specific operation and configuration of the door, a dual leaf door may require either one single maglock covering both leaf's or may require a maglock dedicated to each leaf. For dual leaf doors where one leaf is the primarily access point and the second leaf is only used for oversize items, the second leaf may also require a pin installation to keep the leaf in place while still allowing access on the master leaf.

D. Card readers shall be installed on both sides of the door. To access the door from either side, a valid card read and PIN entry is required. The readers are to operate the same as other card readers in the system.

1. Some doors may allow for the installation of a Request to Exit (REX) device, depending on the specific location. This design must be pre-approved by an Airport Security Manager. If approved, the public side of the door will require a card reader meeting the specifications presented.
2. Depending on the specific operation and configuration of the door, a dual leaf door may be required to be programmed as two independent doors, resulting in 4 readers'.
3. If the reader is exposed to the elements, a protective reader cover and/or shield may be required.
4. The reader shall have a tamper installed that is tied in to the ESS.

E. Once the system has validated the card entry, or the REX is engaged, the maglock will release allowing the door to be opened.

F. Once the door is secured, it shall take another valid card read or activation of the REX, to be reopened.

G. A horn and strobe shall be mounted adjacent to the door on the public side.

1. The horn and strobe shall be mounted high enough and have adequate protection to deter tampering.
2. The horn/strobe shall have a timer where the audible portion of the alarm resets (programmable time) while the strobe remains active until reset by the ESS system.
   i. Currently, most horns are set to 30 seconds.

3. On a Prop Alarm, the horn and strobe will activate after a predetermined time set within the ESS system.
    i. The horn and strobe will automatically reset after the door is closed and the Prop Alarm has reset.
4. On an Intrusion Alarm, the alarm and horn and strobe shall activate immediately. The strobe will remain active until reset remotely through the ESS system.
5. Under certain circumstances, such as a close quarters situation, Airport Security may require that the horn and strobe be modified or adjusted for volume concerns or may be removed from the configuration.

H. If the fire alarm is activated, see Fire System Interface requirements, the maglock will automatically release. An alarm will enunciate in the ESS that the fire alarm is active for that door. If the door is then opened, an Intrusion Alarm will activate in the ESS, as well as the local horn and strobe.

I. Depending on the location and operational purpose of the door, additional functionality may be required such as:

1. Emergency Pull Station release and associated alarms (interior of room)
2. Emergency Keyswitch release and associated alarms (exterior of room)
3. Remote push button or toggle release

J. The component enclosure shall be installed in the immediate vicinity of the primary door.

1. The enclosure shall be lockable and shall be key-cored to match the other enclosures in that building.
2. The enclosure shall have a tamper installed that is tied in to the ESS.
3. The enclosure shall be installed in such a manner that it remains easily accessible and has adequate clearance for maintenance purposes.
4. The enclosure shall have external labeling that matches that being used in the software programming to identify the cabinet. Labeling shall also indicate that the contents are “Property of Airport Security – 734-942-5304”.

K. Live and recorded CCTV coverage of the area may be required. See CCTV Requirements.

L. Airport Security will provide the Contractor with the details on the specific make and models of ESS currently in use.

M. To streamline maintenance and inventory requirements and/or to ensure that certain system requirements and functionality are maintained, Airport Security may require that specific brands or models of equipment are utilized.

3.4 DELAY HARDWARE OPERATIONS**:** The following is a synopsis of the delay hardware operations (The Contractor will be required to pass the Acceptance Test, prior to completion of the project.):

A. Installation of the door shall meet all Manufacturers' specifications.

B. To access the door from the public side of the door, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system).

1. A REX or card reader on the restricted side of the door will allow access into the building. The door location will determine the requirements for the restricted side of the door. Security to approve the device(s) proposed.

C. Once the system has validated the card or the Request to Exit (REX) is activated, the maglocks will release allowing the door to be opened.

D. A horn and strobe shall be mounted adjacent to the door on the public side.

1. The horn and strobe shall be mounted high enough and have adequate protection to deter tampering.
2. The horn/strobe shall have a timer where the audible portion of the alarm resets (programmable time) while the strobe remains active until reset by the security system.
3. On a Prop Alarm, the horn and strobe will activate after a predetermined time set with the ESS system
   i. The horn and strobe will automatically reset after the door is closed from the prop alarm.
4. On a forced open (Intrusion) alarm, the alarm shall activate and remain active until reset remotely through the ESS system.

E. Once the door is secured, it shall take another valid card read to reopen the door.

F. If the crash/touch bar is held for greater than 3 seconds, an irreversible timer will engage causing the door to unlock in 15 seconds. When the maglock releases and the door is opened, an alarm shall enunciate in the ESS.

1. The locking mechanism shall have the ability to be reset remotely within the ESS.
2. The strobe shall remain active until reset remotely by the ESS.
3. No key switch overrides are allowed in the crash bar.

G. If the fire alarm is activated, the maglock will automatically release, and the local horn and strobe will activate.

1. An alarm will be enunciated in the ESS that the fire alarm is active for that door.
2. An Intrusion Alarm will be activated if the door is opened.

3.5 BAG BELT OPERATION: The following is a general synopsis of baggage door operations: (The Contractor will be required to pass the Acceptance Test, prior to completion of the project.):

A. Installation of the door shall meet all Manufacturers' specifications.

B. Monitoring of all baggage system doors that lead from any sterile or public area to the secured area is required.

C. To access the door, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system). The door operator should not allow the door to be opened without authorization from the ESS system.

1. The door operator should not allow the door to be opened without authorization from the system. An alarm will enunciate in the Airport Response Center () if the door is opened without an authorized card read.
2. Once access is granted via the reader, the green "Open Door" light on the reader will light allowing access to the door operator controls.
3. To open the door, press the door "Open" button on the door operator controls. (Note: the “Open” button must be pressed while the green “Open Door” light is lit on the card reader. If the button is not pressed during this time, the individual will need to re-swipe their badge in the reader.)

D. Auxiliary lights shall be installed near the card reader. The green "Closed/secured" indicator light should stay lit until the door begins to open. Once the door has started to open, the red "Open/unsecured" light will activate – activated off the door contacts. The lights shall be tamper proof.

E. To close the door, press and hold the door "Close" button until the door is secure and the green "Close" light is activated on the door operator. No swiping of the card reader is required to close the door.

F. Once the door is closed, it shall take another valid card read to be reopened.

G. Any attempt to open the door without a valid card read shall enunciate as an alarm in the ESS and activate the local horn/strobe.

H. Depending on the system operations, the door may be allowed to be propped open. An alarm shall enunciate in the ESS if the door fails to secure after a pre-determined time or after the system has sent the close command.

I. Any override of the card reader shall enunciate an alarm in the ESS.

J. The door shall have restricted area signs installed.

3.6 OVERHEAD CARGO DOOR OPERATIONS: The following is a synopsis of the Overhead Cargo door operations (The Contractor will be required to pass the Acceptance Test, prior to completion of the project.):

A. Installation of the door shall meet Manufacturer’s specifications.

B. To access the door, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system). The door operator should not allow the door to be opened without authorization from the ESS system.

C. Auxiliary lights shall be installed near the card reader. The green "Closed/secured" indicator light should stay lit until the door begins to open. Once the door is fully open, the red "Open/unsecured" light will activate. The lights shall be tamper proof.

D. Once access is granted via the reader, the green "Open Door" light on the reader will light allowing access to the door operator. To open the doors, press the door “Open” button. If the button is not pressed during this time, the individual will need to re-swipe their badge in the reader.)

E. To close the door press and hold the door "Close" button until the door is secure and the green “Closed” indicator light is lit. Swiping at the card reader is not required to close the door.

F. Once the door is closed, it shall take another valid card read to be reopened.

G. Any attempt to open the door without a valid card read shall enunciate as an alarm in the Airport Response Center.

H. All cargo doors shall be numbered and signed to meet the Authority’s standards.

I. A local horn and strobe will activate if the door is not closed in a predetermined time. In addition, am alarm will annunciate in the Airport Response Center. (The horn and strobe will automatically reset after the door is closed from the prop alarm.)

1. The horn and strobe is to be mounted adjacent to the door on the public side. The horn and strobe shall be mounted high enough and have adequate protection to deter tampering.
2. The horn /strobe shall have a timer where the audible portion of the alarm resets (programmable time) while the strobe remains active until reset by the security system.

J. Cargo doors that will be left are not allowed to be left open without being manned or active loading or unloading is being performed.

3.7 AUTOMATIC GATE OPERATIONS

A. Installation of the gates shall meet all Manufacturers’ specifications.

B. All gates shall have a minimum clear opening of 16 (sixteen) feet.

C. Gate design and layout, including equipment location, shall be pre-approved by an Airport Security Manager prior to fabrication and installation. This includes the locations of the card readers, photo sensors and/or ground loops.

D. High speed chain driven gate shall be used. The gate operator shall be approved by Security prior to purchase and installation.

E. The control panel for the security system and the gate operator shall be placed on the restricted side of the fence. All panels and gate controllers shall be lockable.

F. To access the gate from either side of the gate, a valid card read and PIN entry is required (The reader is to operate the same as other card readers in the system).

1. The location of the card readers shall be coordinated with security as to not allow the presence of a vehicle on the ground loops when utilizing the card reader.
2. Card readers shall be on a stanchion and there shall be a high and low card reader. The height of the stanchion and placement of the card readers shall be pre-approved by Security to ensure that the height and location is sufficient.

G. Once the system has validated the card, the appropriate gate shall open.

1. At locations where a booth is present - Once the system has validated the card, the green “Authorized” light within the booth shall illuminate. See booth requirements.

a. If the card is not validated, the red “Denied” light within the booth shall illuminate and the gates remain secured.

H. At a minimum, there shall be two loop detectors for the entrance (inbound) side. First is a safety, tailgating and loitering detector, the second is a safety loop.

1. The placement of the loops shall follow Manufacturer’s recommendations but must be pre-coordinated with Security so that a vehicle at the card reader is not on the loop but a vehicle at the booth is on the loops. In addition, the loops shall not be placed too close to the gate that the metal in the gate will interfere with the operation of the gate.
2. When a vehicle is detected, after a predetermined time, on a ground loop prior to a valid card read, an alarm will enunciate in the ESS.

I. Once open, if the gate does not close in a predetermined time, an alarm will enunciate in the ESS.

J. Once the gate is secured, it shall take another valid card read to reopen the gate.

1. If the safety edge of the gate is activated, the gate will automatically re-open and an alarm shall enunciate in the ESS.

K. Any attempt to open the gate without a valid card read shall enunciate an alarm in the ESS.

L. The gate shall have safety edges installed and be tied into the ESS.

M. Gates may require the installation of heavy duty gate catch and welded in such a way to not interfere with gate operation

N. The gate shall have PTZ CCTV coverage installed that allows for 24/7 live and recorded viewing of the location. The camera(s) location shall be approved by Security. See CCTV requirements.

O. To prevent damage, protection posts shall be installed to protect the card readers, gate operators, gate opening, panels etc.

1. The protection posts shall be of a sufficient height to protect the equipment (example – same height or higher at card reader to deflect vehicle mirrors).
2. The protection posts shall have yellow plastic protective covers.

P. A manual key switch shall be installed at each gate operator to allow an override of the ESS system for maintenance or in emergency situations.

1. The key switch cylinder shall accept the 7 pins “Best” series key cores (Notify an Airport Security Manager for installation of an Airport Core for the key switch).
2. The key switch shall be installed on the AOA/Secured side of the gate.
3. The key switch shall enunciate an alarm in the ESS when operated.

Q. The slope of the gates shall be such to provide proper drainage and prevent ponding of water, erosion and/or ice building up.

3.8 CCTV REQUIREMENTS: Depending on the type of operation and location, CCTV coverage of the area may be required

A. Installation of the CCTV system shall meet all Manufacturers’ specifications.

B. All components used shall be compatible with the existing CCTV system and shall be approved prior to installation.

C. Airport Security will specify the type and number of cameras required.

D. Any exterior CCTV installations must be accessible via a drivable maintenance path and pad.

E. Final tie into the existing security equipment shall be by a contractor authorized to work on said equipment (i.e., Honeywell, Verint. Etc.)

1. Programming shall include live and recorded video and all associated monitor programming. Frame rate, quality and video retention shall at least meet current requirements and must be pre-approved by Security.
2. The system design shall be coordinated with Security.

F. All parts and equipment associated with the CCTV system shall match existing hardware and be approved by a Security Manager prior to installation.

1. Installation shall include all CCTV interfacing and ESS programming (i.e. camera call up for alarms).

G. All associated camera system equipment shall be installed within SSR rooms within independent lockable dedicated security cabinets.

H. Camera video is required to be incorporated into both the Airport’s live and digital Recording System. The interface into the recording system shall be by a company authorized by the vendor to perform such installation.

1. It shall be the Contractor's cost if additional equipment is needed to support the installation of the new camera(s). This may include but not be limited to licensing, expansion of recording system, additional hardware, etc.
2. The Contractor is responsible for expansion of the system to allow for at least 15% expansion. Using current unused portions of the CCTV system will not be allowed.

I. The Contractor is responsible for all costs associated with installation of the CCTV System equipment.

1. The Airport's on-site technicians cannot be pulled from normal duties to be used by the Contractor. Additional coverage will have to be coordinated, with the costs to be incurred by the Contractor.

J. Testing of any new equipment shall be completed by the Contractor using Security Acceptance Test Forms. The Contractor will be required to submit their test sheets to Security for review and approval. Once the Contractor has completed their testing, Security will complete final acceptance testing.

K. The Contractor shall obtain a one (1) year warranty on all parts and service associated with the CCTV equipment and installation. The warranty period will not start until Security testing is complete and the items have passed.

L. The system shall be designed and installed to prevent tampering with any of the CCTV components. This includes, but is not limited to, tamper resistant screws, tamper switches and key locks.

M. All wiring shall be shielded cabling in conduit and unless otherwise approved, may not be exposed. All wiring that is to be maintained underground, shall meet the specifications for underground rated wiring.

N. All equipment that is to be exposed to the elements, shall meet Airport Security's standards for weather conditions (i.e. NEMA rated enclosures).

O. The CCTV installation specifications and layout shall be pre-approved by Security prior to start of work.

1. As-Built of the CCTV installation are required.

P. CCTV shall be enclosed in an Environmental housing and be installed to be tamperproof.

Q. Exterior Environmental Housings shall be heated.

R. Camera Electronics shall be heated.

S. Wipers may be required as specified by an Airport Security Manager.

T. All video and control communications shall be via fiber optics or networking unless otherwise approved.

1. Use of existing fiber shall be approved by the Airport Authority – Contact Technology Services (734) 247-0000.

U. All CCTV components make and models shall be approved prior to installation.

V. All camera towers installed shall have “anti-climb” protection and protection posts. Tower height and placement shall be pre-approved by Security.

1. All new camera towers shall have bird spikes installed on them. They must be approved by Security.

W. Lighting shall be provided to illuminate the viewing area.

X. Camera wiring shall be in conduit.

Y. At a minimum, 30-day recording storage shall be provided for all cameras installed.

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