DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

DAIM-ZA

APR 13 2012

MEMORANDUM FOR

Commander, United States Army Corps of Engineers (CEMP), 441 G St NW, Washington, DC 20314
Director, Installation Management Command, 2405 Gun Shed Road, Fort Sam Houston, TX 78234

SUBJECT: Army Standard for Access Control Points

1. The enclosed, Army Standard for Access Control Points (ACP) is approved for implementation. Only the Assistant Chief of Staff for Installation Management has authority to approve exceptions to this standard. Waivers from the Army Standard must be approved in accordance with AR 420-1.

2. The Army Standard is effective for Military Construction design and mandatory, where possible within statutory limitations, for major renovation projects in FY2013 and beyond. Designs based on the Army Standard and the Army Standard Design will be developed consistent with the MILCON Business Process.

3. The points of contact (POC) for the Facilities Design Team are Ms. Elizabeth Troeder, DAIM-ODO, elizabeth.g.troeder.civ@mail.mil, 571-256-8148; Mr. Eugene Smith, DAPM-MPO, eugenea.smith@us.army.mil, 703-695-4210; and Mr. William Miller, USACE NWO, william.d.miller@usace.army.mil, 402-995-2118.

Encl

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The Army Standard (AS) for Access Control Points (ACPs)

13 April 2012

Description:
An Access Control Point (hereafter referred to as ACP) is a corridor at an Installation perimeter through which all vehicles and/or pedestrians must pass when entering or exiting an Installation cantonment area. An ACP provides the first physical security boundary layer that restricts access to Department of Army (DA) Installation cantonment areas.

ACP Classifications:
DA ACP classifications are: (a) Primary, (b) Secondary, (c) Limited Use, and (d) Pedestrian. Primary and Secondary ACPs can accommodate privately owned vehicles (POV)s, commercial vehicles (trucks), pedestrians or any combination thereof. Primary and Secondary ACPs shall provide the means to defeat a vehicular and/or pedestrian threat via permanent measures defined in this Army Standard for ACPs. Limited Use ACPs shall provide means to defeat vehicular and/or pedestrian threats via temporary or permanent measures. Limited Use ACPs shall not have routine hours of operation. A Pedestrian ACP may be part of an ACP that accommodates vehicles or it may stand alone.

Applicability:
The Army Standard for ACPs applies to the cantonment areas for:

1. All Army Active Installations, the following Army Reserve Installations: Fort McCoy, Fort Dix, Fort Buchanan, Fort Hunter Liggett, Camp Parks, and, Devens Reserve Forces Training Area and the following Army National Guard Installations: Camp Roberts, Arlington Hall, Fort Indiantown Gap, Camp Atterbury, Camp Shelby, Camp Robinson and Gowen Field.
2. Army Reserve Training Centers and Army National Guard sites where movement of personnel or vehicles is from outside the cantonment area and where a U.S. Army Active Installation cantonment area can be accessed from the reserve center. For the purposes of this Standard, Movement of personnel or vehicles between Army Reserve Center or Army National Guard site and U.S. Army Installation does not require an ACP.
3. All Army controlled Joint Base Operations and the ACP projects funded by the Army on Joint bases controlled by others.
4. Active Army Installation access between cantonment and non-cantonment areas where adjacent non-cantonment areas can be accessed by non-vetted personnel.
5. Both CONUS and OCONUS ACPs.

This Army Standard for ACPs supersedes all previous versions and any facility space allowance standards and/or criteria contained in other facilities engineering and/or Installation management documents and serves as the primary authority for Army ACPs worldwide.

If a difference exists between the Army Standard for ACPs and the Army Standard Design for ACPs the Army Standard for ACPs shall govern.

Waivers:

- Only the Assistant Chief of Staff for Installation Management (ACSIM) has authority to approve waivers and exceptions to the Army Standard for ACPs.
- Waivers from the Army Standard for ACPs must be requested in accordance with Army Regulation (AR) 420-1 *Army Facilities Management* (see Appendix G).
- All waiver requests to the Army Standard for ACPs require Center of Standardization (COS) for ACPs conflict resolution prior to submission by the Garrison Commander to the respective IMCOM Region, HQ IMCOM and the ACSIM. Non-IMCOM Installations or activity requests are sent, upon endorsement by their Senior Commander, to their owning Army Command (ACOM), Army Service Component Command (ASCC), or Direct Reporting Unit (DRU) instead of the IMCOM Region and HQ IMCOM, and then sent to the ACSIM.
- Waiver requests must be received in sufficient time to allow the Facility Design Team (FDT) to complete review and development of recommendation(s) or course(s) of action for the Army Facilities Standardization Committee (AFSC) to consider prior to its deliberation for approval or rejection and the possible implementation into project design by the appropriate parties.
- All waiver requests shall include compelling rationale of functional and operational deviations to include substantiating documentation in sufficient detail for DA to assess implications of approving the waiver.
- All Headquarters, Department of the Army (HQDA) approved exceptions shall be documented in Installation master plans thereby serving as the Installation's modified standards for the ACP affected. Late submissions or project delays are not sufficient stand alone justification for accelerated review or other dispensation to meeting the Army Standard for ACPs contained herein.

Design Guidance:

The Design Guidance section of this Army Standard for ACPs provides instructions and definitions necessary for the application of the mandatory requirements contained in the Army Standard for ACPs. As such, they shall be used in conjunction with the Army Standard for ACPs in order to ensure the intent and embedded functionality will meet the DA's mandatory requirements set forth by this standard. If a difference exists between the tabular section of the Army Standard for ACPs and the design guidance section, the tabular section of the Army Standard for ACPs shall govern.

Standard Design:

The Army Standard Design is published under separate cover providing prescriptive details for design and programming of ACP projects, regardless of funding source. Neither of the documents is intended for standalone use but must instead be used together for the programming and design of Army ACPs. If differences exist between the ACP Standard Design and the ACP Standard, the Army Standard shall govern.

ARMY STANDARD for ACPs
Primary and Secondary ACPs

Item	Primary and Secondary ACP Mandatory Criteria
Gross Area of Facilities	ACP gross area of facilities not to exceed: Shown in Square Feet (SF) VISITOR CONTROL CENTER (VCC): 1. Two processor VCC 900 SF (3) 2. Three processor VCC 2,480 SF 3. Six processor VCC 2,960 SF 4. Nine processor VCC 3,440 SF 5. VCC function of a combined VCC and Search Building 900 SF (3) 6. VCC function of a combined VCC and Command and Control function 900 SF (3) 7. VCC function of a combined VCC, Search Bldg, and Command & Control function 900 SF (3) Note: VCCs larger than two processors may trigger requirement for conformance with UFC 04-010-01 'Minimum AT Standards for Buildings'. GUARD BOOTHS: 1. ID Check Guard Booth 40 SF Note: ID Check Guard Booths used for guards responsible for validation of vehicle driver's credentials shall not be combined with other facilities. 2. Pedestrian Guard Booth 140 SF SEARCH BUILDINGS: 1. Bus Shelter 75 SF 2. Small Search Building 660 SF 3. Large Search Building 1,200 SF 4. Search Building function of a combined VCC and Search Building 75 SF 5. Search Building function of a combined Command & Control function and Search Bldg 75 SF 6. Search Building function of a combined VCC, Search Bldg, and Command. & Control function 75 SF COMMAND & CONTROL / ELECTRICAL and COMMUNICATIONS ROOM: 1. Gatehouse as a standalone building 940 SF (3) 2. Command and Control as a standalone building 530 SF (3) 3. Storage as a standalone building 50 SF

Item	Primary and Secondary ACP Mandatory Criteria
	4. Electrical & Communications Room as a standalone building 530 SF 5. Latrine Facility as a standalone building 110 SF 6. Gatehouse without storage as a standalone building 910 SF (3) 7. Command & Control function of a combined Command & Control Function and Search Bldg 264 SF 8. Command & Control function of a combined Command & Control Function and VCC 264 SF 9. Command & Control function of a combined Command & Control Function, VCC, & Search Bldg 264 SF OVERWATCH BUILDING: 1. Standard Overwatch Building 36 SF 2. Overwatch Building combined with Command & Control Function (No Latrine or Storage) 230 SF NOTES: 1. Gross Area of Facilities GSF (Gross Square Feet) Deviation: Facility constructed gross area shall not exceed 105% of space allocation set forth in this document to accommodate site, construction, or environmental factors. 2. Design projects will fully comply with the Sustainable Design & Development (SDD) policy as stated in Memorandum, ASA (IE&E), Latest edition, Subject: Sustainable Design and Development Update (Environmental and Energy Performance). The programmed amount and square footage will be adjusted by Department of Army after the 3086 review to incorporate energy enhancements to fully comply with the SDD policy. 3. Where unisex facilities are not permitted an additional 110 SF of latrine facility is authorized.
Planning	1. All Installation ACP improvements shall be based either on a Surface Deployment Distribution Command Transportation and Engineering Agency (SDDCTEA) traffic engineering study or a traffic engineering study generated by others that SDDCTEA has validated. 2. All ACP planning shall include coordination with the COS for ACPs. 3. Concepts developed for planning purposes shall include analysis of vehicle turning movements, show primary geometric dimensions and be to scale. 4. Planning shall be conducted to validate ACP requirements and to preclude unsafe off-post queuing of vehicles 5. ACP shall be designed to include queuing to minimize lanes and the number of ID check lanes shall be the minimum required to prevent unsafe off-Installation queuing of vehicles.
Site Selection	1. The appropriate AT/FP stand-off distances shall be in accordance with 'UFC 4-010-01 'Minimum Antiterrorism Standards For Buildings' and shall be incorporated into the design of an ACP. The entire area within the ACP corridor shall be considered to be outside a controlled perimeter. 2. The site selected shall minimize off-Installation impacts.

Item	Primary and Secondary ACP Mandatory Criteria
	3. Capacity and safety limitations of both internal and external road networks shall be considered during site selection.
Traffic Engineering Study	A traffic engineering study shall be performed and completed prior to planning, design or construction of a new ACP or prior to modification of an existing ACP. For the purposes of the traffic engineering study, the term 'modification' shall include, but not be limited to, any of the following: 1. Modifications which include changes to ACP road alignment. 2. Relocation of Identification (ID) Check Area. 3. Projects which include modifications intended to alter ACP traffic volume capacity. The traffic engineering study shall, at a minimum, include the following: 1. Current and proposed peak hour volume for both POVs and commercial vehicles. 2. Current peak hour vehicle search volume for both POVs and commercial vehicles. 3. Current peak hour pedestrian and bicycle volume. 4. Reasonable development of proposed Design Hourly Volume (DHV). 5. ACP capacity impacts caused by intersections or other roadway features prior to the approach zone and immediately after the response zone. Intersections and other roadway features that are located within the approach and response zones shall also be analyzed for traffic volume impacts. 6. Identify the number of ID check lanes associated with Level of Service (LOS) D.
Signage and Marking	All signs and pavement markings will: 1. Be in conformance with state, local and/or host nation criteria. 2. Signs and markings shall comply with all applicable retroreflectivity requirements.
Geometrics	Design roadway in accordance with applicable AASHTO, and/or host nation criteria.
Threat Vehicle	The 4630-pound baseline vehicle threat, as determined by Office of the Provost Marshal General (OPMG) and described in the guidance portion of this Standard and in the Army ACP Standard Design, shall be utilized for all ACP efforts. In addition, the local threat assessment(s) and/or policy shall be reviewed and, if applicable, used to modify the baseline vehicle threat. 1. The threat vehicle utilized shall not be less substantial than the baseline threat vehicle mass established by OPMG unless a waiver, in accordance with AR 420-1, has been requested and approved. 2. The threat vehicle (after incorporation of 'local' threat assessment(s) and policy) shall not be less substantial than the

Item	Primary and Secondary ACP Mandatory Criteria
	baseline threat vehicle mass unless a waiver is acquired 3. Where 'local' threat assessment and/or policy identifies a vehicle with a mass in excess of the OPMG baseline threat vehicle the vehicle with the greater mass will be utilized as the threat vehicle.
Approach Zone	The Approach Zone begins at the ACP entrance and extends to the beginning of the Access Control Zone. It provides an area for incoming vehicles to be sorted and queued.
Entry Gate	Provide an Entry Gate that: 1. Joins with the Installation cantonment perimeter to close off the ACP. 2. Provides equivalent security as the adjoining perimeter barrier/fence/topographic feature; however, is limited in kinetic energy mitigation capacity to a level of 1,200,000 ft-lbs unless a higher level is required by 'local' threat analysis and/or policy.
Passive Vehicle Barriers	Provide Passive Vehicle Barriers that: 1. Tie into the Entry Gate and the Control Zone passive vehicle barriers to form a continuous anti-vehicular corridor. 2. Are capable of defeating the OPMG identified baseline threat vehicle and any vehicle of greater mass identified through mandatory incorporation of all applicable 'local' threat assessments and policy. 3. Are not required to exceed 1,200,000 ft-lbs of kinetic energy in vehicle stopping/mitigation capacity unless a threat vehicle in excess of 15,000 lbs is identified in 'local' threat assessment and/or policy. 4. Are on the DOD anti-ram vehicle barrier list. 5. Comply with all applicable roadside safety criteria.
Visitor Control	Provide the capability to process visitors at each Installation. 1. Installation must be capable of processing the current and projected visitor volume. 2. Visitor processing will be conducted prior to entry into the Installation. 3. If function is combined with the command and control function a physical separation of the two functions is required. 4. Where visitor processing is conducted, non-vetted personnel shall be separated from guard personnel with partition(s), glazing and lockable doors having a ballistic rating equivalent to the requirement for the guard facility exterior. 5. Space utilized for visitor processing must include HVAC in accordance with local climate. 6. The visitor processing area must comply with the required stand-off distance for a building not within a controlled perimeter as per UFC 4-010-01.
Lighting	Provide lighting: 1. In appropriate levels and with appropriate color rendition for

Item	Primary and Secondary ACP Mandatory Criteria
	roadway, parking areas and pedestrian crossings. 2. In appropriate levels and with appropriate color rendition for security areas. 3. That meets the Minimum Maintained Illumination level design objective. 4. With appropriate uniformity. 5. Illumination and color rendition levels will be as prescribed in the Army Access Control Points Standard Design.
Access Control Zone	Provide an Access Control Zone that: 1. Begins at the turn around prior to the ID check and extends to the end of the turn-around immediately after the ID Check Area. 2. Enables guard defeat of all prescribed OPMG threat scenarios which are described in the design guidance section of this Standard.
Passive Vehicle Barriers	Provide Passive Vehicle Barriers that: 1. Tie into the approach zone passive barriers and response zone passive barriers to provide a continuous anti-vehicular corridor. 2. Are capable of defeating the OPMG identified baseline threat vehicle and any vehicle of greater mass identified through mandatory incorporation of all applicable 'local' threat assessments and policy. 3. Are not required to exceed 1,200,000 ft-lbs of kinetic energy in vehicle stopping/mitigation capacity unless a threat vehicle in excess of 15,000 lbs is identified in 'local' threat assessment and/or policy. 4. Are on the DOD anti-ram vehicle barrier list. 5. Comply with all applicable roadside safety criteria.
ID Check Area	Provide an Identification Check Area that: 1. Is established within the Access Control Zone where guards and/or automated equipment validate drivers and vehicle occupant's identifications. 2. Includes a canopy. 3. Includes the number of entry lanes sufficient to process the traffic volume identified in the traffic engineering study. 4. Shall have adequate lighting to support ACP operations. 5. Shall have raised curbed traffic islands to separate all inbound lanes. 6. Shall have one Guard Booth building for each inbound lane, located on the raised curbed traffic island.
ID Check Area Canopy	ID Check Area Canopy Shall: 1. Cover all inbound lanes 2. Be a roof structure supported by columns 3. Not include columns or other features which obstruct more than 11 degrees line of sight for all routinely occupied guard positions. 4. Not impair guards line of sight for critical functions identified in the Army ACP Standard Design.

Item	Primary and Secondary ACP Mandatory Criteria
Turn Arounds	As a minimum, two Turn Around lanes shall be provided with: 1. One located before the ID Check Area 2. One located immediately after the ID Check Area.
Search Area(s)	Provide Vehicle Search Area(s) that: 1. Is located within the Access Control Zone. 2. Has a covered area(s) easily accessible from the ID Check Area. 3. Is sized in accordance with the search volumes identified in an SDDCTEA conducted and/or validated traffic engineering study. 4. Truck and POV search operations may be co-located. 5. If designed for POVs, is accessible for vehicles from the inbound lanes both prior to and after the ID Check Area. 6. Provides shelter for vehicle occupants removed from vehicles during search operations. 7. Includes adequate lighting to support vehicle search operations. 8. May be incorporated into the ID check area as a second lane under the ID check area canopy when projected peak hour traffic volumes are at or below 290 vehicles per hour.
Search Area Canopy	The Search Area Canopy shall: 1. Where commercial vehicles are accommodated, include a Truck Search Area canopy sized to accommodate, at a minimum, one tractor trailer of the largest size allowed on roadways approaching the Installation. 2. Where POVs are allowed, include a POV search area sized to accommodate, at a minimum, one POV.
Guard Facilities	1. ID Check Area shall include a guard booth for each entry lane at the ID check area (unless the ACP includes an OPMG approved automated means that allows a single guard to monitor multiple lanes in which case the number and locations of guard booths shall be in accordance with OPMG identified automation requirements). 2. ID Check guard booths used by guards responsible for validation of vehicle drivers credentials shall provide a 360 degree field of view for occupants. 3. ID Check guard booths used by guards responsible for validation of vehicle drivers credentials cannot be combined with other facilities. 4. ACP shall include a Command and Control functional location which provides guard(s) a clear view (line of sight with augmentation by CCTV where no line of sight exists) of operations in the ID Check Area and of vehicles directed to reject (both from ID Check and Search area). This location shall include an Active Vehicle Barrier (AVB) master control panel. This location will be located in either the Control Zone or the Response Zone. 5. Guard facilities shall include passive barrier protection unless located more than 3' behind the face of a curb or, in the

Item	Primary and Secondary ACP Mandatory Criteria
	absence of a curb, at least 7' from the edge of all traveled vehicle paths. 6. All routinely occupied ACP guard positions and overwatch facility shall be provided ballistic rating of UL 752 level III as a minimum. Ballistic rating shall be increased when warranted by local threat assessment and/or policy. 7. Ballistic rated structures shall be provided with both air conditioning and heating. Capacity of heating and cooling system(s) shall be in accordance with the geographic location.
Control Zone Facilities	Control Zone shall include: 1. Latrine facilities. Latrine facilities shall comply with all applicable building codes and shall be easily accessible from the ID check area. 2. Storage for items routinely utilized at ACP ID Check Areas and Search Areas (e.g. under vehicle mirrors, traffic cones, signs, etc.). 3. Commercial exterior power outlets in close proximity to all locations where routine guard presence is anticipated. 4. An electrical/communications room sized to accommodate all required equipment.
Closed Circuit Television (CCTV) and Electronic Security Systems	1. ACPs shall include infrastructure to support CCTV camera system(s) identified in the Army ACP Standard Design. 2. ACP facilities shall include infrastructure for Electronic Security systems identified in the Army ACP Standard Design.
Automation	Provide infrastructure for automation as prescribed in the Army ACP Standard Design.
Back-Up Power	1. The ACP shall have one or more Uninterruptible Power Supply(s) (UPS) to power critical security and safety loads. 2. UPS shall accommodate lighting for, as a minimum, one fixture for each ID Check Lane located near the guard position and at the AVB(s). 3. The ACP shall have a dedicated back-up generator with automatic start-up and automatic transfer after the normal source of electrical power fails with alternate fuel source and/or sufficient on-site fuel to maintain full-load operation for a minimum of 12 hours.
Lighting	Provide lighting: 1. In appropriate levels, and with appropriate color rendition for roadway, parking areas and pedestrian crossings. 2. In appropriate levels and with appropriate color rendition for security areas. 3. Where identification validation is conducted and locations where searches are conducted shall be provided with lighting appropriate for such procedures. 4. That meets the Minimum Maintained Illumination level design objective. 5. With appropriate uniformity. 6. Illumination and color rendition levels will be as prescribed in the

Item	Primary and Secondary ACP Mandatory Criteria
	Army Access Control Points Standards Design.
Response Zone	Provide a Response Zone that: 1. Begins at the end of the Turn-around immediately after the ID Check Area and extends to the AVBs. 2. Enables guard defeat of all prescribed OPMG threat scenarios which are described in the design guidance section of this Standard.
Passive Vehicle Barriers	Provide Passive Vehicle Barriers that: 1. Tie into the Control Zone passive barriers as well as the AVBs to form a continuous anti-vehicular corridor capable of preventing circumvention or penetration by a vehicle. 2. Are capable of defeating the OPMG identified baseline threat vehicle and any vehicle of greater mass identified through mandatory incorporation of all applicable 'local' threat assessments and policy. 3. Are not required to exceed 1,200,000 ft-lbs of kinetic energy in vehicle stopping/mitigation capacity unless a threat vehicle in excess of 15,000 lbs is identified in 'local' threat assessment and/or policy. 4. Are on the DOD anti-ram vehicle barrier list. 5. Comply with all applicable roadside safety criteria.
AVB Barriers/ AVB Safety System/ AVB Controls System	1. Active Vehicle barriers (AVBs), controlled by ACP guards, shall be installed in all inbound and outbound lanes at the end of the Response Zone to permit or deny vehicle access. 2. AVBs shall be capable of mitigating/defeating the kinetic energy associated with the baseline threat vehicle (or modified threat vehicle if applicable) at the speed and angle achievable prior to impact. 3. The kinetic energy mitigation/defeat capacity of active vehicle barriers is not required to exceed 1,200,000 ft-lbs except where threat vehicles in excess of 15,000 lbs are identified in 'local' threat assessment and/or policy. 4. Active vehicle barrier(s) shall be selected from the DOD anti-ram vehicle barrier list. 5. AVBs deployed in the normally-open operating mode shall have an Emergency-Fast-Operate (EFO) control capability. The EFO shall deploy all AVBs related to the ACP to form a continuous vehicle barrier (with the exception of the entry gate). 6. EFO control of the AVBs shall be provided in the Command and Control Guard functional location, ID Check Guard Booths, Overwatch Position, and the Search Area(s). Actuation of any EFO button shall close all AVBs in all inbound and outbound lanes. 7. Shall include an AVB Safety scheme developed and/or approved by the SDDCTEA. 8. All AVBs that must be deployed in reaction to a perceived threat (normally open) must have a barrier travel time of 2 seconds or less under EFO conditions. 9. AVBs shall include barrier controls in accordance with Unified

Item	Primary and Secondary ACP Mandatory Criteria
	Facility Guide Specification (UFGS) 34 41 26.00 10 "Access Control Points Control System".
AVB Commissioning	AVBs shall be commissioned in accordance with UFGS 34 41 26.00 10 "Access Control Points Control System" by the U.S. Army Corps of Engineers (USACE), Protective Design Mandatory Center of Expertise (PD-MCX) or their designated representative.
Overwatch Position	1. ACP shall have a strategically placed Overwatch Position, which serves as a fighting position, located near (as defined in the Army ACP Standard Design) the AVBs and from which guards are able to assess conditions at the ID Check Area (direct line of sight or augmented by CCTV). 2. The Overwatch shall be either a building with communications, power, and AVB controls, or a paved pad designed to support, at a minimum, one HMMWV. 3. Paved pad overwatch shall also include a pedestal containing a lockable junction box with quick connections to telecommunications, power, and AVB controls. 4. Overwatch building shall be provided ballistic rating of UL 752 level III as a minimum. Ballistic rating shall be increased where warranted by local threat assessment and/or policy. 5. Overwatch building must include a 360 degree field of view for occupants.
Back-Up Power	1. The ACP shall have one or more Uninterruptible Power Supply(s) (UPS) to power critical security and safety loads. 2. UPS shall accommodate lighting for, as a minimum, one fixture at the AVB(s).
Lighting	Provide lighting: 1. In appropriate levels and with appropriate color rendition for roadway, parking areas and pedestrian crossings. 2. In appropriate levels and with appropriate color rendition for security areas. 3. In appropriate levels and with appropriate color rendition for Active Vehicle Barrier location(s). 4. That meets the Minimum Maintained Illumination level design objective. 5. With appropriate uniformity. 6. Illumination and color rendition levels will be as prescribed in the Army Access Control Points Standards Design.
Telecommunications	1. Guards at the Command and Control Guard functional location, Guard Booths, Search Area(s), Overwatch Position, and VCC shall have a minimum of two (2) means of communication with each other and with the Central Security Monitoring Station (if applicable). 2. Telecommunications infrastructure shall meet the (USAISEC) Technical Guide for Installation Information Infrastructure Architecture (I3A) and ANSI/TIA/EIA 568 and 569 requirements. 3. Telecommunications Room(s) (TR) shall be provided for the voice and data network associated with the ACP.

Item	Primary and Secondary ACP Mandatory Criteria
Information Connectivity & Distribution	1. The Command and Control Guard functional location, ID Check Guard Booths, VCC, Overwatch Position permanent building and Search Area Building (when included and utilized to process drivers) shall include counters, LAN connections, and all other infrastructure necessary for computer and communications equipment identified in the Army ACP Standard Design. 2. Outside plant connectivity shall be In accordance with DA I3A guidance.
Energy Policy	ACP shall comply with all energy policy requirements.
Sustainable Design Development	All ACP components shall be designed to meet current sustainable development and design policy requirements as established by the DA.
Accessibility	1. The VCC and Search Area Building (where utilized) shall comply with all requirements contained in applicable accessibility documents. 2. The public portion of combined facilities and other ACP buildings intended for public use shall also comply with applicable accessibility documents.

ARMY STANDARD for ACPs
Limited Use ACPs

Item	Limited Use ACP Mandatory Criteria
Planning	Planning: 1. An analysis of traffic needs shall be conducted to validate requirements and to preclude unsafe off-post queuing of vehicles. 2. No formal Traffic Engineering Study required.
Site Selection	The appropriate Anti-Terrorism/Force Protection (AT/FP) stand-off distances shall be in accordance with 'UFC 4-010-01 'Minimum Antiterrorism Standards For Buildings' and shall be incorporated into the design of an ACP. The entire area within the ACP corridor shall be considered to be outside a controlled perimeter.
Approach Zone	The Approach Zone begins at the ACP entrance and extends to the beginning of the Access Control Zone. It provides an area for incoming vehicles to be sorted and queued.
Entry Gate	1. Has an Entry Gate to close off the ACP at the Installation perimeter. 2. Entry Gate shall adjoin to and provide equivalent security as the

Item	Limited Use ACP Mandatory Criteria
	adjoining perimeter barrier/fence; however, it is not required to exceed a kinetic energy mitigation capacity of 1,200,000 ft-lbs unless required by 'local' threat analysis and/or policy.
Passive Vehicle Barriers	Provide Passive Vehicle Barriers and/or operational procedures that are capable of defeating or enabling defeat of the OPMG identified baseline threat vehicle and any vehicle of greater mass identified through incorporation of all applicable 'local' threat assessments and policy.
Lighting	Provide lighting in appropriate levels: 1. For the safety of drivers, pedestrians and guards via permanent or temporary measures when ACP is operational. 2. And with appropriate color rendition for security areas via permanent or temporary measures when ACP is operational.
Access Control Zone	Provide an Access Control Zone that begins at the turn around prior to the ID check and extends to the end of the turn-around immediately after the ID Check Area.
Passive Vehicle Barriers	Provide Passive Vehicle Barriers and/or operational procedure that are capable of defeating or enabling defeat of the OPMG identified baseline threat vehicle and any vehicle of greater mass identified through mandatory incorporation of all applicable 'local' threat assessments and policy.
Identification Check Area	Provide an Identification Check Area that: 1. Is established within the Access Control Zone where guards or automated equipment verify pedestrians, vehicles, and vehicular occupant's identifications; direct vehicles to other areas of the ACP; and validate authorizations to enter the installation. 2. Has adequate lighting to support validation of credentials and other ACP operations.
Search Area(s)	Provide a Search Area that: 1. Is of sufficient size to process designated vehicles 2. Is located in the Access Control Zone
Guard Facilities	ACP guards conducting validation of credentials shall be protected from errant vehicle impact.
Lighting	Provide lighting: 1. In appropriate levels for the safety of drivers, pedestrians and guards 2. In appropriate levels and with appropriate color rendition for security areas.
Response Zone	Provide a Response Zone that enables guard defeat of all prescribed OPMG threat scenarios.
Passive Vehicle Barriers	Provide Passive Vehicle Barrier System and/or Operational Procedure that: 1. Is capable of defeating or enabling defeat of the OPMG identified baseline threat vehicle and any vehicle of greater mass identified

Item	Limited Use ACP Mandatory Criteria
	through mandatory incorporation of all applicable 'local' threat assessments and policy. 2. Where utilized, passive vehicle barriers are not required to exceed 1,200,000 ft-lbs of kinetic energy in vehicle stopping/mitigation capacity unless a threat vehicle in excess of 15,000 lbs is identified in 'local' threat assessment and/or policy.
AVB Barriers/ AVB Safety System/ AVB Controls System	Provide Active Vehicle Barrier System and/or Operational Procedure that is capable of defeating or enabling defeat of the OPMG identified baseline threat vehicle and any additional threat vehicles identified through incorporation of all applicable 'local' threat assessments and policy.
AVB Commissioning	When AVBs are utilized they shall be commissioned in accordance with UFGS 34 41 26.00 10 "Access Control Points Control System" with oversight by the U.S. Army Corps of Engineers (USACE), Protective Design Mandatory Center of Expertise (PD-MCX).
Overwatch Position	ACP shall have a strategically placed Overwatch Position, located near the AVBs but within sight of the ID Check Area.
Telecommunications	Guards shall have a minimum of two (2) means of communication.
Energy Policy	ACP shall comply with all energy policy requirements.

ARMY STANDARD for ACPs
Pedestrian ACPs

Item	Pedestrian ACP Mandatory Criteria
Pedestrian Access	Pedestrian ACPs shall utilize guard personnel and/or automated access equipment (where applicable) to safely permit or deny entry while maximizing pedestrian throughput. Pedestrian ACPs shall provide: 1. Passive Pedestrian Barriers and Active Pedestrian Barriers arranged to form a contiguous perimeter. 2. An ID Check Area where the guards or automated equipment validate credentials. 3. A ballistic rated guard location with, as a minimum, a 180 degree field of view If guards are utilized at the ACP for validation of credentials. Where automated means are utilized and guard participation is remote no guard booth is required. 4. Security and safety lighting in conformance with local, state, federal and/or applicable host nation criteria. 5. Pedestrian safety features in accordance with all applicable standards. 6. Accessibility in conformance with all applicable criteria.

DESIGN GUIDANCE SECTION

Facility Category Code: No unique Category Code exists for Access Control Points. A complete and usable ACP includes the following:

CATEGORY CODE	DESCRIPTION
14113	Access Control Building (entrance control posts, guard and watchtowers, sentry stations, area to conduct personnel identification and visitor control. This CATCD is for buildings (enclosed); for open-sided structures use 14179, Overhead Protection.
14179	Overhead Protection
87210	Fencing & Walls
87250	Entrance Gates

General:

The following guidance for application of the Army Standard for ACPs is provided for design agent use in coordination with the Garrison and associated Directorates. All design agents shall incorporate the mandatory design features described herein in close coordination with the USACE designated Center of Standardization (COS) for ACPs. All ACP projects must be reviewed by the COS.

Compliance Threshold:

The Army Standards (AS) may identify an Army regulation, technical guide or other written guidance as mandatory criteria. The COS provides the first line technical compliance review. The FDT, in conjunction with the COS, will resolve any issues where there may be conflicting, unclear, or no compliance measurement threshold. Resolution may require senior leadership guidance or amendment of the AS. Only the ACSIM may approve adjustments or changes to the requirements in an AS. The AS is not intended to provide compliance criteria detailed in references, regulations, industry standards, or standard design.

Citing project execution delays is insufficient justification for expedited review or other accelerated dispensation for deviating from meeting the Army Standard for ACPs contained herein. Late submissions must be substantiated by unforeseen and documented life safety, health and welfare, or compelling mission imperatives that cannot be met without an approved waiver.

Definitions:

Installation: The definition of Installation is as found in AR 420-1

Primary ACP: Operates 24 hours per day during weekdays. These are often open 24 hours per day during weekends as well; however, weekend operation is not required for an ACP to be construed as 'Primary'.

Secondary ACP: Operates during regular hours but less than 24 hours per day.

Limited Use ACP: Operates only for special purposes or special events. ACPs open for scheduled hours (even if not daily) are not to be considered Limited Use.

Approach Zone: The Approach Zone provides an area for incoming vehicles to be sorted and queued. This zone may include visitor control and traffic calming measures.

Access Control Zone: Vehicle occupants and pedestrian ID validation are validated within this zone. Vehicle and/or pedestrian searches are also done within this zone. This zone includes the turn-arounds before and after the ID check area.

Response Zone: This zone extends from the final turn-around to the active vehicle barriers. Overwatch capability is included in this zone.

CONUS: Continental United States. Used to describe the 48 contiguous U.S. States.

OCONUS: Outside Continental United States. Any location other than the 48 continental U.S. States.

FDT: Facility Design Team. The AFSC establishes an FDT for each facility type, or group of facility types, to be standardized. Specific working teams may be established as necessary within each team to address specific elements, or geographical and regional variations of the facility type.

AFSC: Army Facilities Standardization Committee. The AFSC is responsible for the overall Army Facilities Standardization program. It directs the activities of the Facility Design Group (FDG), the Technology Standards Group, and the various Design Teams that develop and recommend the Army Standards and Standard Design/Criteria.

Design Hourly Volume: A design hourly volume (DHV) is the calculated volume or number of vehicles passing over a point in an hour. The DHV would be used for design purposes to accommodate variations in traffic volume and expected growth or decline in traffic volumes. Although a design hourly volume (DHV) of traffic is commonly related to the thirtieth highest hourly traffic volume for the design year, if less data is available it is prudent to derive a DHV based on a measured peak hourly volume, taking into account periods within an hour of higher rates of traffic flow, and possible growth for the design life of a project.

Peak Hour Volume: A peak hourly volume is the volume or number of vehicles passing over a point in the busiest hour within a peak period. A day may have several peak periods, such as a morning, noon, and afternoon peak.

Contact Information:

SDDCTEA website: http://www.tea.army.mil/DODProg/TE/default.htm

COS for ACPs website: http://mrsi.usace.army.mil/cos/SitePages/Home.aspx

Description:

An ACP provides the first physical security boundary layer that restricts access to Department of Army (DA) Installations and real property through centralized perimeter and access controls. The ACP also provides the appropriate vehicular and pedestrian throughput, to prevent vehicles from queuing in an unsafe manner. All functions of the ACP must meet applicable safety standards. The AVB system must perform in accordance with the applicable safety schemes. Also, the perimeter of the ACP will consist of both passive and active barriers arranged to form a continuous barrier to pedestrians and/or vehicles. ACP guards control the active pedestrian and vehicle barriers to deny or permit entry into the Installation.

ACP Classifications:

Department of the Army ACP classifications are: (a) Primary, (b) Secondary, (c) Limited Use, and (d) Pedestrian. Primary and Secondary ACPs can accommodate POVs, trucks, pedestrians or any combination thereof. There are only operational differences between a Primary and a Secondary ACP. Limited Use ACPs are only open for non-routine and non-predicable special purposes and special events. Primary and Secondary ACPs shall provide the means to defeat the vehicle and/or pedestrian threat via permanent measure defined in this Army Standard for ACPs. Limited Use ACPs shall provide a means to defeat the vehicle and/or pedestrian threats via temporary and/or permanent physical measures and/or operational procedure. A Pedestrian ACP can be part of an ACP that accommodates other vehicles or it can be standalone.

Design Philosophy:

The ACP is a complex combination of force protection and traffic control elements. It must enable defeat of identified OPMG threat scenarios while allowing throughput in accordance with the demand identified in the Traffic Engineering Study, and it must do so while providing safe conditions for vehicle occupants, guards and pedestrians. The Traffic Engineering Study is critical to the design of an ACP. The TES provides the data the designer uses to size many of the components of an ACP.

The adaptation of these Standards to a specific site is a complicated process. Requirements related to the defeat of threats may seem to contradict requirements for throughput and/or safety; they do not. Each category of requirement (security, safety, and throughput) must not be looked at individually but must rather be considered part of a system.

The amount of land necessary for an ACP can be considerable. The land must be sufficient to meet the requirements contained in this Standard as well as requirements contained in UFC 4-010-01 'Minimum AT Standards For Buildings'. It is important to note that the basis for standoff for 'occupied' buildings within the ACP and for those buildings adjacent to the ACP must be 'parking and roadways without a controlled perimeter'. The boundaries of the ACP corridor are considered to be the controlled perimeter for these purposes.

Key Points about Army Standard ACPs:

1. The ACP is designed and constructed to comply with the Army Standard and Standard Design for ACPs.
2. Manpower efficiency has been considered during the development of these Standards. Site adaptation of the ACP should always include an evaluation of manpower constraints and requirements.
3. The Standards are not dependent upon the existence of Installation perimeter vehicle barriers, fencing or other security measures.

Planning:

1. Involvement of the U.S. Army Corps of Engineers Center of Standardization (COS) for ACPs in the planning process is essential. The incorrect programming of ACP projects has been prevalent in those situations where the COS has not been involved prior to submittal of programming documents.
2. A review of 'local' threat assessment and policy will be conducted prior to the programming and/or design of an ACP.
3. A Traffic Engineering Study that specifically addresses ACP requirements is necessary prior to the development of programming documents. The TES must be conducted or validated by the SDDCTEA before it can be utilized for the planning, design or construction of an ACP. The size of many ACP features must be based on the traffic volumes identified in the TES. The TES process can take a year to conduct so plan accordingly.
4. Vehicle Threat Scenarios. ACPs shall be designed to defeat all identified OPMG vehicle threat scenarios. Additional vehicle threat scenarios shall be defeated when required by a 'local' threat assessment or policy.
5. A baseline threat vehicle and a set of baseline threat scenarios is provided by OPMG. All applicable 'local' threat assessment and/or policies must be reviewed and utilized to modify the prescribed baseline threat. No waiver is required for the addition of threat scenarios or adding to the mass of the threat vehicle. Waivers will be required for any reduction of the baseline threat or any of the threat scenarios.
6. ACP shall be capable of processing the expected traffic types, which may include: tractor-trailer trucks, POVs, official DOD Vehicles, tactical vehicles, pedestrians and bicycles.
7. Guard reaction time shall be three (3) seconds for threat scenarios where there has been no notice to guard personnel that a specific vehicle has been identified for a specific action. Guard reaction time shall be one (1) second for situations where guard personnel have been notified of a specific action to be taken by an identified vehicle and guard personnel have had time to prepare for activation of the AVBs.
8. Vehicle Threat Scenario calculations, and corresponding vehicle threat paths, shall be conducted to verify that the AVBs are located where defeat is possible for the shortest timed path of travel through the ACP for each Threat Scenarios.

Threat Scenarios:

OPMG Vehicle Threat Scenarios. ACPs shall be designed to defeat the following four minimum vehicle threat scenarios. Additional vehicle threat scenarios shall be included if required by a local threat assessment.

1. Vehicle Threat Scenario #1. Threat vehicle enters the ACP in the inbound or outbound lane(s) at the maximum speed attainable at the ACP entrance and then immediately accelerates at its maximum acceleration rate through the ACP.
2. Vehicle Threat Scenario #2. Threat vehicle enters the ACP in the inbound or outbound lane(s) at or under the posted ACP Speed Limit and then, later at some point further in the Approach Zone, accelerates at its maximum acceleration rate through the rest of the ACP.
3. Vehicle Threat Scenario #3. Threat vehicle feigns compliance and stops in lane. The guard detects threat behavior or criminal status through observation or electronic means and moves to guard booth to initiate denial process. Threat vehicle occupants attempt to force entry (tactics include potential use of direct fire weapons and acceleration through the ACP).
4. Vehicle Threat Scenario #4. Similar to Threat Scenario 3 above, except the driver of the denied vehicle drives toward the Turn-around or Search Area at the ACP Speed Limit as if complying with guard instructions, but then fails to turn and instead accelerates at its maximum acceleration rate

Threat Vehicle:

1. The baseline threat vehicle shall be a large passenger car as defined in ASTM F2656. The mass of the baseline threat vehicle is 4630 pounds.
2. Other threat vehicle characteristics and capabilities are located in the Army ACP Standard Design.

Site Selection:

1. The site selected must be suitable for conformance with these Standards. Modifications to adjacent facilities, relocation of intersecting roadways and other features may be necessary. Future facility locations identified in Master Planning documents must be considered and adjusted where conflicts are identified.

AVB Barriers/ AVB Safety Systems/ AVB Controls Systems:

1. AVBs, controlled by ACP guards shall be installed in all inbound and outbound lanes at the end of the Response Zone to permit or deny vehicle access.
2. Only SDDCTEA established AVB safety schemes shall be used.
3. Normally open AVB systems will include EFO controls. When pushed, an EFO will result in the deployment of all open AVBs and will result in the locking in place of all AVBs already deployed at the time of EFO activation. Barrier deployment shall not take place until the time identified for the SDDCTEA safety scheme used.
4. The SDDCTEA AVB safety scheme utilized must be based on throughput as well as Installation needs and preferences. Some safety regimes place additional restrictions on throughput and could be perceived as being unduly inconvenient by drivers or other Installation personnel. Where adequate space exists, the default safety scheme should be 'Signs and Signals'.

AVB Commissioning:

AVBs shall be commissioned in accordance with Unified Facility Guide Specification (UFGS) 34 41 26.00 10 "Access Control Points Control System" by the U.S. Army Corps

of Engineers Protective Design Center (USACE, PD-MCX) or their designated representative.

Approach Zone:

1. The Approach Zone begins at the ACP entrance and proceeds to the beginning of the vehicle Turn-around immediately prior to the ID Check Area.
2. Provide an area for incoming vehicles to be sorted and queued.
3. The VCC can be in either the Approach or Access Control Zones. However, the processing of visitors must be accomplished prior to the ID check area.
4. The aesthetic treatment of the entry gate should be consistent with the adjoining perimeter barrier fencing.

Access Control Zone:

1. The Access Control Zone is located between the Approach Zone and the Response Zone.
2. The access control zone includes both the ID Check Area and all the Search Areas. It is within this Zone that credentials of vehicle drivers and pedestrians are validated and vehicles are searched.

Response Zone:

1. The Response Zone starts from the end of the Turn-around immediately after the ID Check Area and continues to the AVBs.
2. It is completely contained by AVBs and Passive Barriers.
3. The Response zone includes AVBs, controlled by ACP guards, which shall be installed in all inbound lanes at the end of the Response Zone and all outbound lanes at the end of the Response Zone to permit or deny vehicle access.
4. It has an Overwatch that shall be located near the AVBs but within sight of the ID Check Area. If conditions are such that the overwatch guard is not able to view operations in the Access Control Zone, augmentation of view through use of CCTV can be used to mitigate deficiencies.

Command and Control Guard functional location:

1. A Command and Control Guard functional location will be provided at each ACP. This location will be located in either the Access Control Zone or the Response Zone. A guard in this location will be able to assess conditions in the Control Zone (to include ID Check Area, Search Area, turn-arounds and rejections). Locaion will be provided with controls for the Active Vehicle Barriers as well as augmentation, where necessary, to ensure guards ability to assess aforementioned areas.
2. The ballistic rating of this location, as with all other ACP guard facilities, must be modified when a rating above UL 752 level III is identified in 'local' threat analysis and/or policy. Applicable analysis/policy shall be sufficient justification for a higher ballistic rating. A lower ballistic rating, even where identified by such analysis/policy shall require a waiver.

Overwatch Position:

1. Each Installation ACP shall have a strategically placed Overwatch Position, which serves as a fighting position. It will be located near the AVBs but within sight (either direct view or with augmentation by CCTV) of the ID Check Area. The Overwatch shall be either a building with communications, power, and AVB controls, or a paved pad with a pedestal containing a lockable junction box containing quick connections for communications, power and AVB controls. The paved pad will be designed to support, as a minimum, one HMMWV.
2. The ballistic rating of this structure, as with all other ACP guard facilities, must be modified in accordance with all 'local' threat analysis and/or policy. Directly applicable analysis/policy shall be sufficient justification for a higher ballistic rating. A lower ballistic rating, even where identified by such analysis/policy shall require a waiver.

HVAC for Ballistic Rated Structures:

1. The requirement for both Air Conditioning and Heating is essential for a ballistic rated structure to function as intended. Ballistic rated structures do not provide significant opportunity to cool through use of open windows or other methods of fresh air ventilation.

Visitor Control Center (VCC):

1. Each Installation must have at least one VCC.
2. The VCC must be located outside the point at which vetting of personnel occurs.
3. Access to and egress from the VCC must not be such that it provides bypass of the ID check area.

Pedestrian Access:

1. Pedestrian ACPs shall safely convey/pass personnel, prevent unauthorized entry and process the pedestrian volume identified in the Traffic Engineering Study.

Back-Up Power:

1. The ACP shall have one or UPS to power critical security and safety loads during an interruption in electrical service.
2. The following loads shall be on UPS:
    - Primary communications system
    - Duress alarm system
    - Computers
    - CCTV systems
    - Intrusion Detection Systems (IDS)
    - Prescribed Lighting, Traffic signals and warning devices
    - AVB controls
    - AVB activation system for one complete cycle (open to close and close to open), and all equipment associated with the AVB safety scheme

    Lighting levels and other details can be found in the Army ACP Standards Design.
3. The ACP shall have a dedicated back-up generator with automatic start-up and automatic transfer after the normal source of electrical power fails and shall have an

alternate fuel source (e.g. natural gas) or sufficient on-site fuel to maintain full-load operation for a minimum of 12 hours.

4. The following loads shall be on Back-up Power:
    - Interior lighting for the Command and Control functional location, Guard Booths, Overwatch position, and Search Area Building
    - Canopy lighting in prescribed levels at the ID Check and Search Area(s)
    - External lighting in prescribed levels for the Access Control Area from and including the turn-arounds before and immediately after the ID check area.
    - External lighting in prescribed levels for 50' of Approach Zone and Response Zone lighting prior to the turn-around before and immediately after the ID Check Area
    - External lighting, in prescribed levels within 50 feet on both sides of the AVBs; and all items on Uninterruptible Power Supply(s) (UPS).

Lighting levels and other details can be found in the Army ACP Standards Design.

Remainder of Army ACP Standards:

No further discussion is offered for the remainder of the Standards.

Reference Criteria: Use the latest editions of the following criteria for design of the Access Control Point:

- American with Disabilities Act and Architectural Barriers Act Accessibility Guidelines
- ANSI/TIA/EIA-568-B Commercial Building Telecommunications Cabling Standard
- ANSI/TIA/EIA-568-B Commercial Building Standard for Telecommunications Pathways and Spaces
- ANSI/TIA/EIA 569
- AR 55-80 DOD Transportation Engineering Program
- AR 190-13, The Army Physical Security Program
- AR 405-70, Utilization of Real Property
- AR 420-1, Army Facilities Management
- ASHRAE 189.1, Standard for the Design of High-Performance Green Buildings
- ASTM F-2656 Standard for impact testing of anti-ram vehicle barriers
- ETL 1110-3-491, Sustainable Design for Military Facilities
- Memorandum, ASA (IE&E), 27 Oct 10, Subject: Sustainable Design and Development Update (Environmental and Energy Performance)
- SDDC-TEA Pamphlet 55-15
- UFC 1-200-01, General Building Requirements
- UFC 3-600-01, Design: Fire Protection Engineering for Facilities
- UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings
- UFC 4-023-03, Security Engineering: Design to Resist Progressive Collapse
- Unified Facility Guide Specification (UFGS) 34 41 26.00 10 "Access Control Points Control System"
- USAISEC Technical Guide for Installation Information Infrastructure Architecture (I3A)
- USAISEC Technical Guide for the Integration of SECRET Internet Protocol (IP) Router Network (SIPRNET)