PSU Access Enhancements

for the Design and Construction Manual
Americans with Disabilities Act (ADA) related

Compiled by the Office of Physical Plant
ADA Steering Committee (OPPADASC)

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FORWARD

The Pennsylvania State University (PSU) is dedicated to ensuring accessibility to programs, services and activities in accordance with the Americans with Disabilities Act, Title II. The Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the PSU Access Enhancements manual are followed to provide access to programs, services and activities.

The PSU Access Enhancements were developed to meet the needs of disabled students, faculty and staff and comply with ADAAG and ANSI A117.1. The PSU Access Enhancements are a compilation of experiences by challenged students, community groups and legal advice to the University Access Committee (UAC). For this reason, the PSU Access Enhancements set a standard beyond the minimum requirements of the ADAAG and the building code.

This manual is periodically updated to reflect the University’s community needs. Check the website http://www.opp.psu.edu/planning-construction/design_and_construction_standards/Division-01#section-14 “design standards” or contact the appropriate PSU project leader.
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GENERAL

Curb Cuts or Curb Ramps mean the same
- Offset the curb cuts from the major pedestrian flow. This curb placement allows the sight impaired to detect a curb drop off with a cane or Seeing Eye dog, so people will not wander into intersections.
- All curb ramp surfaces shall have a tactile warning system consisting of scored penetrations the full length and width of the curb ramp surface, parallel with the direction of travel, using a ramp bull float (UNDER REVIEW by OPP).
- Maintain curb ramp slope of 1:12 (8.33%) slope; curb wings slope of 1:10 (10%). If there is not enough room at the top of the curb ramp for a wheelchair to make a turn (48 inches min.) then the side flares shall have a slope of 1:12 (8.33%).

Note: Curb Cuts or Curb Ramps that fall within a PennDOT right-of-way must follow PennDOT requirements.

Parking lots (New Construction)
- ADA parking spaces shall have an accessible pathway exiting the front of the lay down space, so as not to discharge people into vehicular traffic.
- Illustration of typical ADA parking sign (60” to top of sign on an approved metal pole). See PSU Signage manual.

Interior Signage

Restrooms (building common areas)
- Single roll toilet tissue dispenser (Kimberly-Clark dispenser no. 09554) in the accessible stall shall be installed with bottom edge 12” above grab bar.
- Install automatic flush controls on the water closet and urinals.
- Install self-closing valves on accessible rest room sinks.
- Accessible stalls shall have self-closing doors and a door latch and handles that are ADA/Code approved.
- Install shelf in accessible stall where possible. Shelf installation at maximum 48” A.F.F. if applicable (in stall arrangement).
- Mounting heights of all accessible controls and operating mechanisms shall be a maximum 48” A.F.F. with compliant clear floor space.
- Install Low Energy Power Operated Door opener where there is no minimum 18” side clearance at pull side of restroom door.

Counters
- All counters where goods, services or information is distributed shall have a section with a maximum counter height of 28-34” A.F.F., minimum 36” width and minimum 24” depth (if applicable), with a vertical clearance of 27” for knee space.
Low Energy Power Operated Door (LEPOD)
- The accessible main entrance on each grade level shall have a Low Energy Power Operated Door. Install the push button door opener 32” on center A.F.F. These push buttons should be installed in line with the door being opened. (Note: this push button placement might be site specific and should be verified by OPP)

- A standard sign available at the University Park Campus OPP sign shop shall identify Low Energy Power Operated Doors. Standard adhesive backed sign shall be installed on the Low Energy Power Operated Door surface at 53” on center A.F.F., 5” from door hinge side. (Note: this sticker placement might be door specific and should be verified by OPP)

LEPOD Push Button Heights/Proximity Card Readers and Bollard Locations
- Push buttons for Low Energy Power Operated Doors should be 5’-0” from the door frame to allow sufficient clear floor space to open the door. The push button operator shall be 32” O.C. A.F.F. If a proximity card reader is needed, it shall be 29” O.C. A.F.F. If the site has a bollard with both a push button and a proximity card reader, the height is 36” O.C. for push buttons instead of the standard 32” O.C.

Clearance at Latched Doors
- Clearance on the front approach, push side of an interior door on an accessible route, with a latch only, shall be 12” minimum. The clear approach space in front of the interior door shall comply with code standards for maneuvering clearances at doors.

Traffic Pole Push Buttons
- Pedestrian signal buttons shall have a 2” diameter and be mounted 32” O.C. above the finished surface. There shall be a 60” diameter, firm, stable, clear, level surface next to the pedestrian button location.

NOTE: Traffic Pole Push Buttons that fall within a PennDOT right-of-way (ROW) must follow PennDOT requirements.

Emergency Shower & Eye Wash Stations
- Where eye wash stations are located, an accessible station is required. If only one station is provided, it shall be accessible, along an accessible route and located in close proximity to the other eye wash stations for that space.

Emergency Phone Stations (Code Blue)
- Where emergency phone stations are provided, they shall be approachable and usable by challenged people (i.e. clear, level ground surface and operable parts not higher than 48” A.F.F., Braille instructions and visual operation indication).

The following Appendix illustrates the above-developed guidelines. These are general guidelines and site conditions may vary. Contact the PSU project leader with design layout questions. For your reference the PSU Access Enhancements are posted on the web at http://www.opp.psu.edu/planning-construction/design_and_construction_standards/Division-01#section-14 “design standards”.
APPENDIX
ALL CONCRETE CURB RAMPS SHALL BE OFFSET FROM MAJOR PEDESTRIAN FLOW AND SHALL BE SCORED WITH BULL FLOAT THE FULL LENGTH AND WIDTH OF RAMP.

WHEN PATHWAY IS BRICK PAVERS THE CURB RAMPS SHALL CONTAIN COMPLIANT TACTILE BRICK PAVERS THE FULL LENGTH AND WIDTH OF RAMP.

DIST. VARIES TO MAINTAIN 1:12 SLOPE (TYP.) (REFER TO PROJECT SITE PLAN/DETAILS)

THERE SHALL BE A RETURN CURB ALONG THE PLANTED/NON-WALKING SURFACE SIDE(S)

CURB CUT W/FLARED SIDES, 1:10 SLOPE (TYP.)

42" MIN. TYP. (REFER TO PROJECT SITE PLAN/DETAILS)

LANDING AREA SHALL BE 48" MIN. CLEAR OR SIDE FLARES SHALL BE 1:12 (REFER TO PROJECT SITE PLAN/DETAILS)

NOTE: ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY, SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

PATHWAY DIST. VARI

REFER TO PROJECT SITE PLAN/DETAILS

PLANTED/ NON-WALKING SURFACE

CROSSWALK

ROAD

ADOPTED: JUNE 1, 2010

PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

CURB CUT PLACEMENT SCENARIOS

NOT TO SCALE
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

SLOPED CURB BEYOND
CURB EDGE FLUSH
OR 1/4" MAX. ABOVE
PROPOSED ROAD
ELEV. BEVEL EDGE
1:2 IF 1/4"-1/2".
LIP SHALL NOT BE
OVER 1/2".

SURFACE BEYOND
SCORE RAMP SURFACE AS NOTED ON DETAIL SHEET. SEE SCORING TOOL NOTE FOR MANUFACTURER.

ROADWAY
PAVING, SEE PROJECT SITE PLAN (IF APPLICABLE)

1 20

ADJOINING SURFACE
MAX. SLOPE

EXIST. APPROACH PAVEMENT

EXP. JT.

SCORING TOOL NOTE:
BON TOOL COMPANY
4430 GIBSONIA ROAD
GIBSONIA, PA. 15044
ORDERLINE:
800-444-7060
OTHER CALLS:
412-443-7080
MODEL #: 12-517-B6
OR APPROVED EQUAL

NOTE:
SEE PROJECT SITE PLAN FOR LAYOUT OF SLOPED CURB, DEPRESSED CURB AND RAMP WINGS

CURB CUT PAVING DETAIL
NOT TO SCALE
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

SCORE FULL LENGTH & WIDTH OF RAMP WITH CORRUGATED RAMP BULL FLOAT 3/8" DEEP X 3/8" WIDE PENETRATIONS ON 2" CENTERS. SEE SCORING TOOL NOTE FOR MANUFACTURER.

RAMP WING COARSE TEXTURED BROOM FINISH (TYP.)

SCORE LINE (TYP.) SEE PLAN

CURB RAMP SLOPE 1:12

48" MIN. FOR 90° TURNS OTHERWISE, RAMP WINGS SHALL BE 1:12

SCORE LINE (TYP.) SEE PLAN

WING SLOPE 1:10

CURB CUT DETAIL

SLOPED CURB

DEPRESSED CURB SECTION SHALL BE FULL WIDTH OF APPROACH PATH, UNLESS AT ROAD INTERSECTIONS THAN SHALL BE OFFSET FROM PEDESTRIAN FLOW. SEE PAGE 1.

CURB EDGE FLUSH OR 1/4" MAX. ABOVE PROPOSED ROAD ELEV. BEVEL EDGE 1:2 IF 1/4"-1/2" LIP SHALL NOT BE OVER 1/2".

NOT TO SCALE

CURRENTLY UNDER REVIEW - 9/30/2015

SCORING TOOL NOTE:
BON TOOL COMPANY
4430 GIBSONIA ROAD
GIBSONIA, PA. 15044
ORDERLINE:
800-444-7060
OTHER CALLS:
412-443-7080
MODEL # 12-517-B6
OR APPROVED EQUAL

Currently Under Review - 9/30/2015

NOTE: ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY, SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.
PSU ACCESS ENHANCEMENTS
BY THE UNIVERSITY ACCESS COMMITTEE
ADOPTED: JUNE 1, 2010

WHEN PATHWAY IS BRICK PAVERS THE CURB RAMP SHALL CONTAIN COMPLIANT IN-LINE TACTILE BRICK PAVERS THE FULL LENGTH AND WIDTH OF RAMP.

APPROACH PATH WIDTH REFER TO PROJECT SITE PLAN

CURB RAMP SLOPE 1:12

48° MIN. FOR 90° TURNING OTHERWise RAMP WINGS SHALL BE 1:12

CURB CUT TACTILE DETAIL

NOT TO SCALE

NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY, SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.
NOTE:
WHEN PATHWAY IS BRICK PAVERS THE CURB RAMPS SHALL CONTAIN
COMPLIANT IN–LINE TACTILE BRICK
PAVERS THE FULL LENGTH AND WIDTH
OF RAMP (SIMILAR TO PAGE 4).

PLANTED OR OTHER
NON–WALKING SURFACE

SCORE FULL LENGTH & WIDTH OF
RAMP WITH CORRUGATED RAMP BULL
FLOAT 3/8" DEEP x 3/8" WIDE
PENETRATIONS ON 2" CENTERS. SEE
SCORING TOOL NOTE FOR
MANUFACTURER.

SCORE LINE (TYP.)
SEE PLAN

NOTE:
ILLUSTRATION ONLY, SITE
CONDITIONS MAY VARY, SEE
PROJECT LEADER FOR FINAL
LAYOUT QUESTIONS.

CURB RAMP
SLOPE 1:12

DEPRESSED CURB SHALL
BE FULL WIDTH OF
APPROACH PATH, UNLESS
AT ROAD INTERSECTIONS,
THEN SHALL BE OFFSET
FROM PEDESTRIAN FLOW.
SEE PAGE 1.

CURB EDGE FLUSH OR 1/4" MAX.
ABOVE PROPOSED ROAD ELEV.
BEVEL EDGE 1:2 IF 1/4"–1/2". LIP
SHALL NOT BE OVER 1/2".

RETURN CURB CUT DETAIL
NOT TO SCALE

RETURN CURB & RAMP WIDTH REFER TO PROJECT SITE PLAN

48" MIN. FOR 90° TURN
WINGS TO BE 1:10 OTHERWISE
RAMP WINGS SHALL BE AT 1:12

SCORING TOOL NOTE:
BON TOOL COMPANY
4430 GIBSONIA ROAD
GIBSONIA, PA. 15044
ORDERLINE:
800–444–7060
OTHER CALLS:
412–443–7080
MODEL #: 12–517–86
OR APPROVED EQUAL
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE
ADOPTED: JUNE 1, 2010

NOTE 1:
PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF ACCESSIBLE ROUTE (NEED 36" MIN. WIDTH)

NOTE 2:
PARKING SIGN MARKED "VAN ACCESSIBLE"

NOTE 3:
ONE PARKING SIGN W/HORIZONTAL ARROWS PLACED BETWEEN TWO ACCESSIBLE SPACES IS PERMITTED, EXCEPT FOR SPACES MARKED "VAN ACCESSIBLE".

PREFERRED ACCESSIBLE PARKING ARRANGEMENTS
NOT TO SCALE
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

STALL - REAR WALL
NOT TO SCALE

STALL - SIDE WALL
NOT TO SCALE

ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

NOTE:
ACCESSIBLE STALL DIMENSIONS SHALL FOLLOW ANSI A117.1 STANDARDS.
A STANDARD SHELF SHALL BE MOUNTED IN STALL AT 48" A.F.F.
NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE
ADOPTED: JUNE 1, 2010

NOTE:
DOOR "ID" STICKER IS AVAILABLE FROM OPP SIGN SHOP. STICKER SHALL BE PLACED ON EACH SIDE OF THE DOOR BEING OPENED, AT THE SPECIFIED HEIGHT. EXACT STICKER PLACEMENT LOCATION MIGHT BE DOOR SPECIFIC. CHECK WITH DESIGNER TO VERIFY.

DOOR ID PLACEMENT STICKER
NOT TO SCALE:

SITE CONDITIONS MAY NOT ALLOW PUSH BUTTON OPERATOR TO BE INSTALLED ON WALL NEXT TO DOOR. BOLLARD POST MAY BE USED INSTEAD. SEE PROJECT SITE PLAN FOR LOCATION. SEE APPROPRIATE SHEET

LOCATION OF PUSH BUTTON AND/OR ACCESS CARD READER TO BE MOUNTED 32" A.F.F.

PUSH BUTTON LOCATIONS
NOT TO SCALE: (NON-BOLLARD APPLICATIONS)

NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

NOTE:
IN NEW CONSTRUCTION
BOLLARD CAN BE LOCATED
ON CONCRETE PATHWAY

BOLLARD PLAN
NOT TO SCALE:

NOTE:
IF APPLICABLE, THE PUSH BUTTON
MOUNTING HEIGHT SHALL BE 36" O.C.
INSTEAD OF THE STANDARD 32" O.C. TO
ACCOMMODATE A PROX. CARD READER
29" O.C. ON THE SAME SIDE OF
BOLLARD.

NOTE:
ILLUSTRATION ONLY, SITE
CONDITIONS MAY VARY, SEE
PROJECT LEADER FOR FINAL
LAYOUT QUESTIONS.

BUTTON MOUNTING HEIGHTS
NOT TO SCALE:
NOTE:
ILLUSTRATION ONLY. SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

CLEARANCE AT LATCHED DOOR (w/o closer)

NOT TO SCALE:
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

POLE BASE
POLE
PUSHBUTTON

WHEELCHAIR APPROACH SIDE w/5FT. DIA. LEVEL LANDING.

A-A POLE SECTION
NOT TO SCALE

CROSSWALK SIGNAL PUSHBUTTON ON POLE.

SURROUNDING BASE FLUSH WITH FINISHED PEDESTRIAN PATH, IF POSSIBLE

36" O.C. ABOVE PATHWAY

GENERAL NOTE:
FOR ILLUSTRATION ONLY, ACTUAL POLE MAY DIFFER. SEE PROJECT SITE PLANS FOR CURB CUT LOCATION AND ACTUAL PUSH BUTTON ORIENTATION.

TRAFFIC POLE PUSH BUTTON DETAIL
NOT TO SCALE

NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY, SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

GENERAL NOTES:
CONTROLS & OPERATING
MECHANISMS SHALL BE
OPERABLE WITH ONE HAND
AND SHALL NOT REQUIRE
TIGHT GRASPING, PINCHING
OR TWISTING OF THE WRIST.

PIPING ARRANGEMENT AND
EQUIPMENT MAY BE
DIFFERENT THAN SHOWN.
DIMENSIONS FOLLOW
CURRENT CODE FOR
REACHES, APPROACHES AND
CLEAR FLOOR SPACE.

REQUIRES APPROPRIATE ADA
SIGNAGE
NOTE: SIGN MUST BE
MOUNTED IN A
CONSPICUOUS PLACE ON OR
NEAR THE STATION. SIGN
SHOWN ROTATED FOR
ILLUSTRATION.

ACCESSIBLE EMERGENCY SHOWER & EYE WASH STATION

NOTE:
ILLUSTRATION ONLY, SITE
CONDITIONS MAY VARY. SEE
PROJECT LEADER FOR FINAL
LAYOUT QUESTIONS.

NOT TO SCALE:
GENERAL NOTES:
CONTROLS & OPERATING
MECHANISMS SHALL BE
OPERABLE WITH ONE HAND AND
SHALL NOT REQUIRE TIGHT
GRASPING, PINCHING OR
TWISTING OF THE WRIST.

PIPEING ARRANGEMENT AND
EQUIPMENT MAYBE DIFFERENT
THAN SHOWN. DIMENSIONS
FOLLOW CODE.

SHALL BE CLEAR FLOOR SPACE
OF 48"L x30"W MIN. IN FRONT
OF WASH STATIONS.

SEE SHEET 13. FOR
PLACEMENT OF SIGNAGE AND
ADDITIONAL INFO.

EMERGENCY SHOWER & EYE WASH STATION PLAN

NOT TO SCALE:
PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

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NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

A-A CLEAR APPROACH SPACE

IF APPROACH IS STRAIGHT ON, SHALL HAVE A FIRM AND STABLE CLEAR SPACE OF 30" WIDE x 48" DEEP. IF APPROACH IS FROM THE SIDE, SHALL HAVE CLEAR SPACE OF 48" WIDE x 30" DEEP, IN FRONT OF PHONE PUSH BUTTON.

SPEAKER/TRANSMITTER 54" MAX. A.F.F.

CONTROL PUSH BUTTON, SHALL BE 2" IN THE SMALLEST DIMENSION AND BE RAISED OR FLUSH

CONCRETE BASE (IF APPLICABLE) SHALL BE FLUSH OR 1/4" MAX. A.F.F. IF HORIZONTAL REACH RANGE IS 10" MAX.

FINISHED LEVEL, FIRM AND STABLE SURFACE

EMERGENCY PHONE – SIDE ELEV.

NOT TO SCALE: