

PENNSSTATE



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)**

June 1, 2010

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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 web site http://www.opp.psu.edu/planning-construction/design_and_construction_standards/Division-01#section-14 "design standards" or contact the appropriate PSU project leader.

CONTENTS

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

- Permanent interior signage to be installed with top edge of sign at 60" above finished floor (A.F.F.) and 9" on center (O.C.) from the door on the latch side. See PSU Signage Manual. http://www.opp.psu.edu/planning-construction/design_and_construction_standards/documents/Penn-State-Signage-Standards-Manual.pdf

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

PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

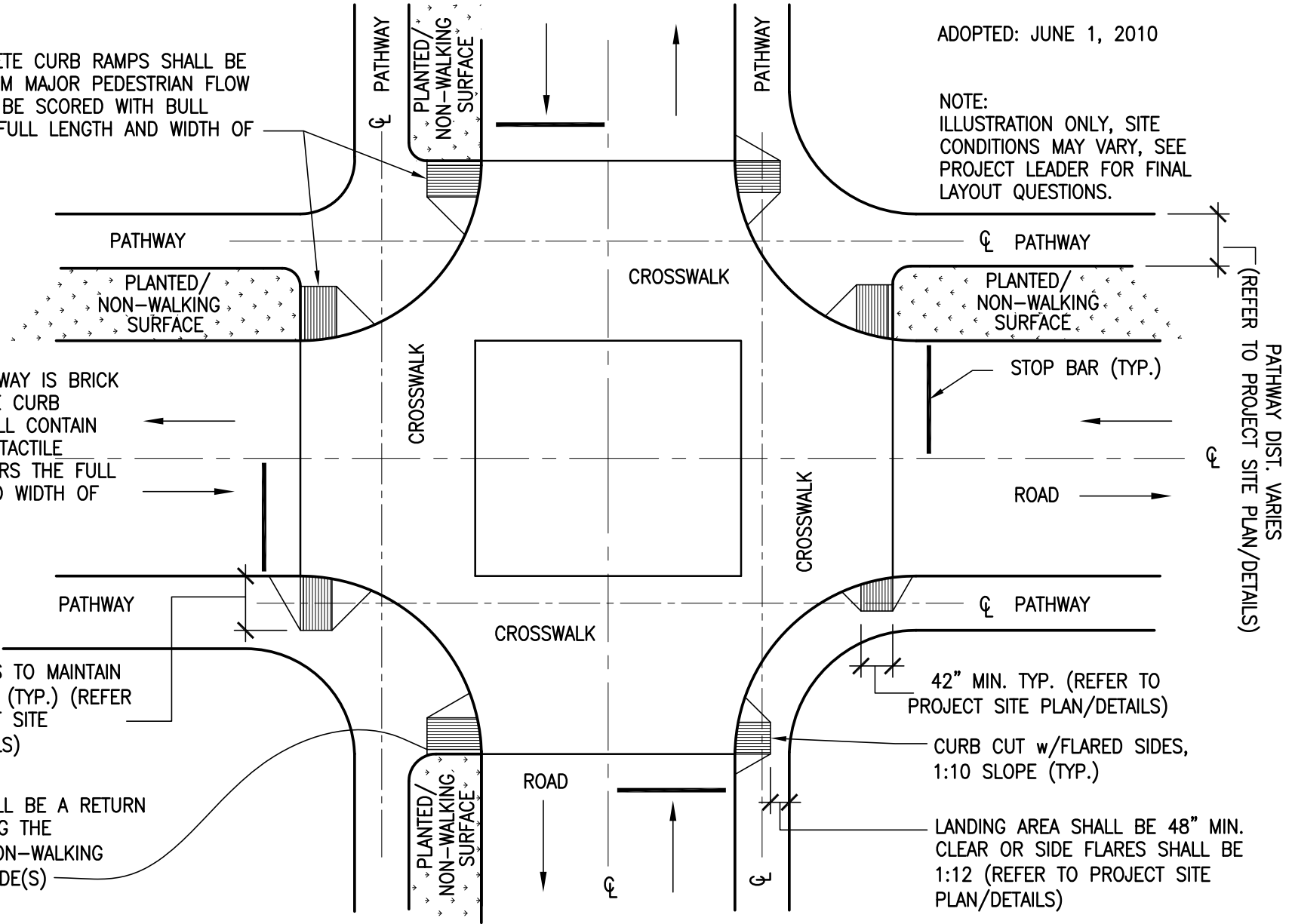
NOTE:
ILLUSTRATION ONLY, SITE
CONDITIONS MAY VARY, SEE
PROJECT LEADER FOR FINAL
LAYOUT QUESTIONS.

ALL CONCRETE CURB RAMP 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)



PATHWAY DIST. VARIES
(REFER TO PROJECT SITE PLAN/DETAILS)

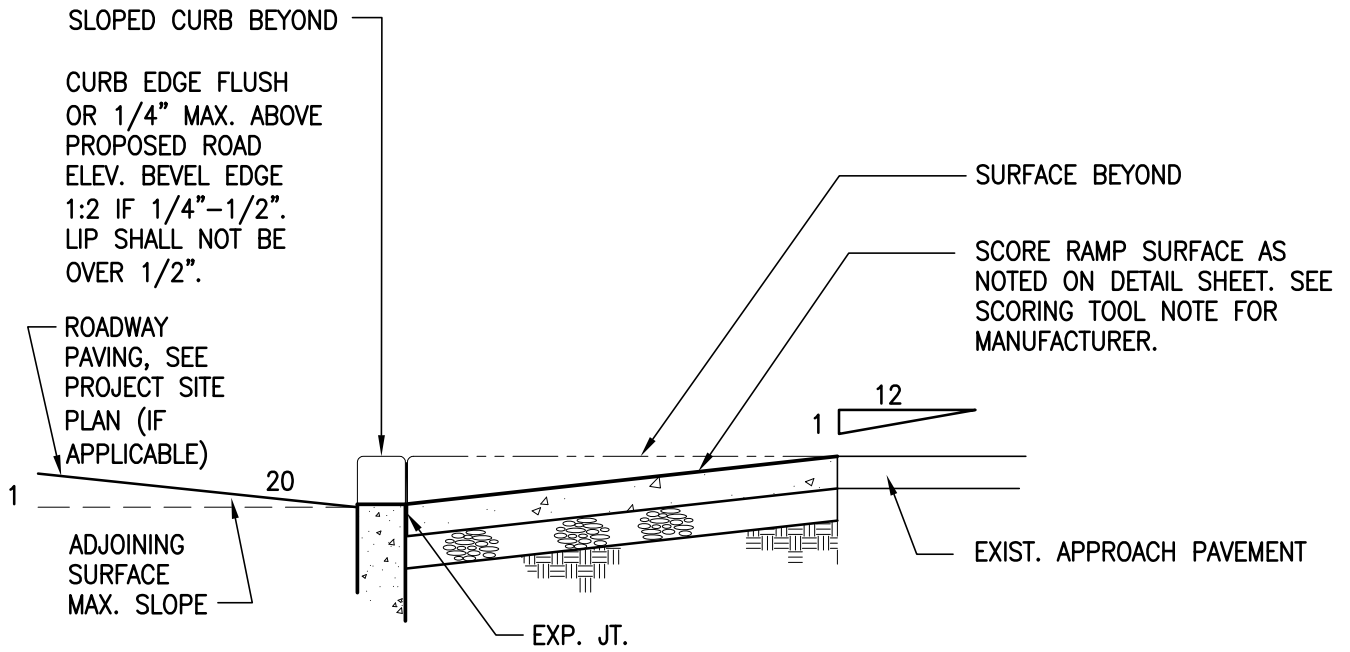
CURB CUT PLACEMENT SCENARIOS

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".

ROADWAY
PAVING, SEE
PROJECT SITE
PLAN (IF
APPLICABLE)

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

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

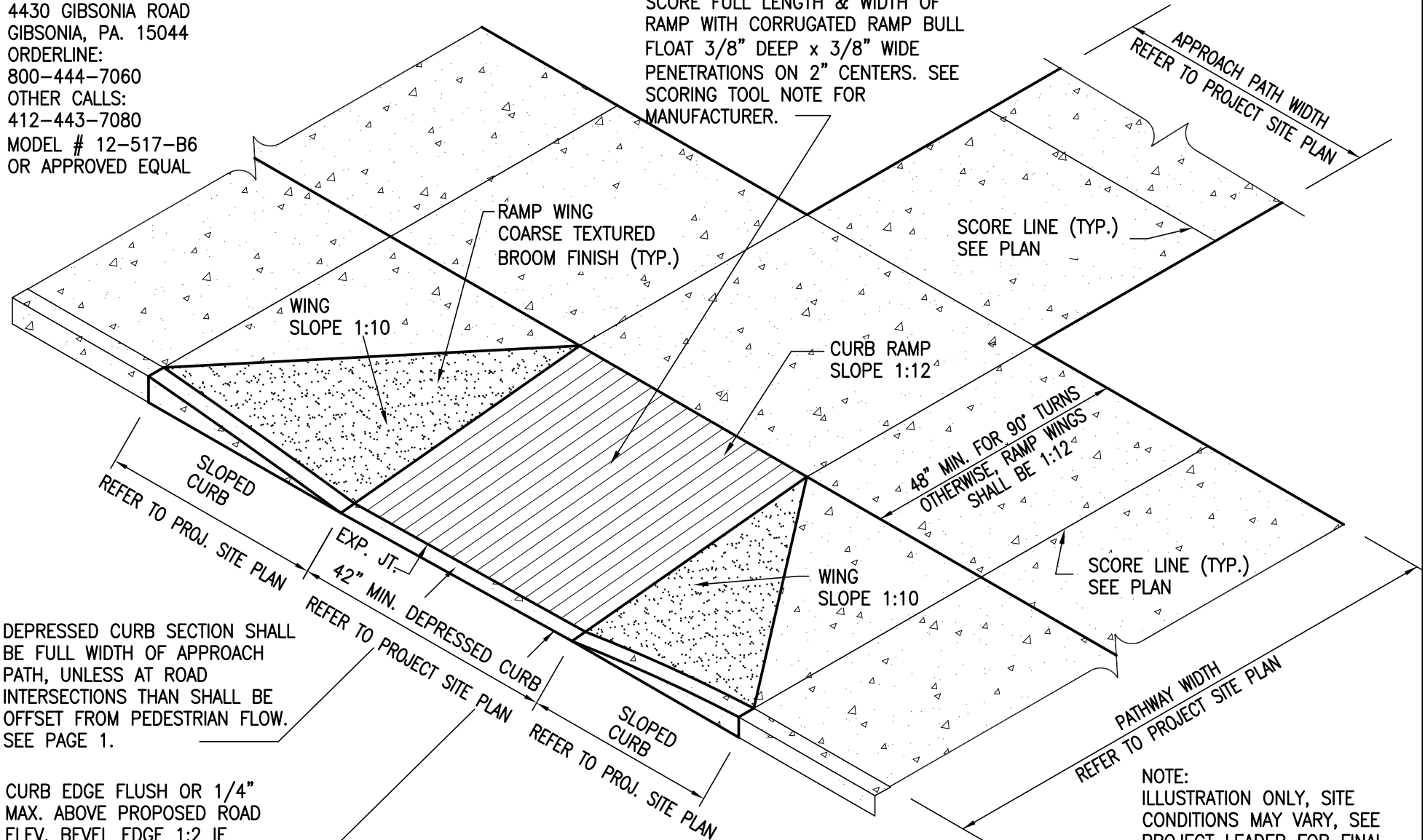
NOT TO SCALE

PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

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

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.



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".

CURB CUT DETAIL

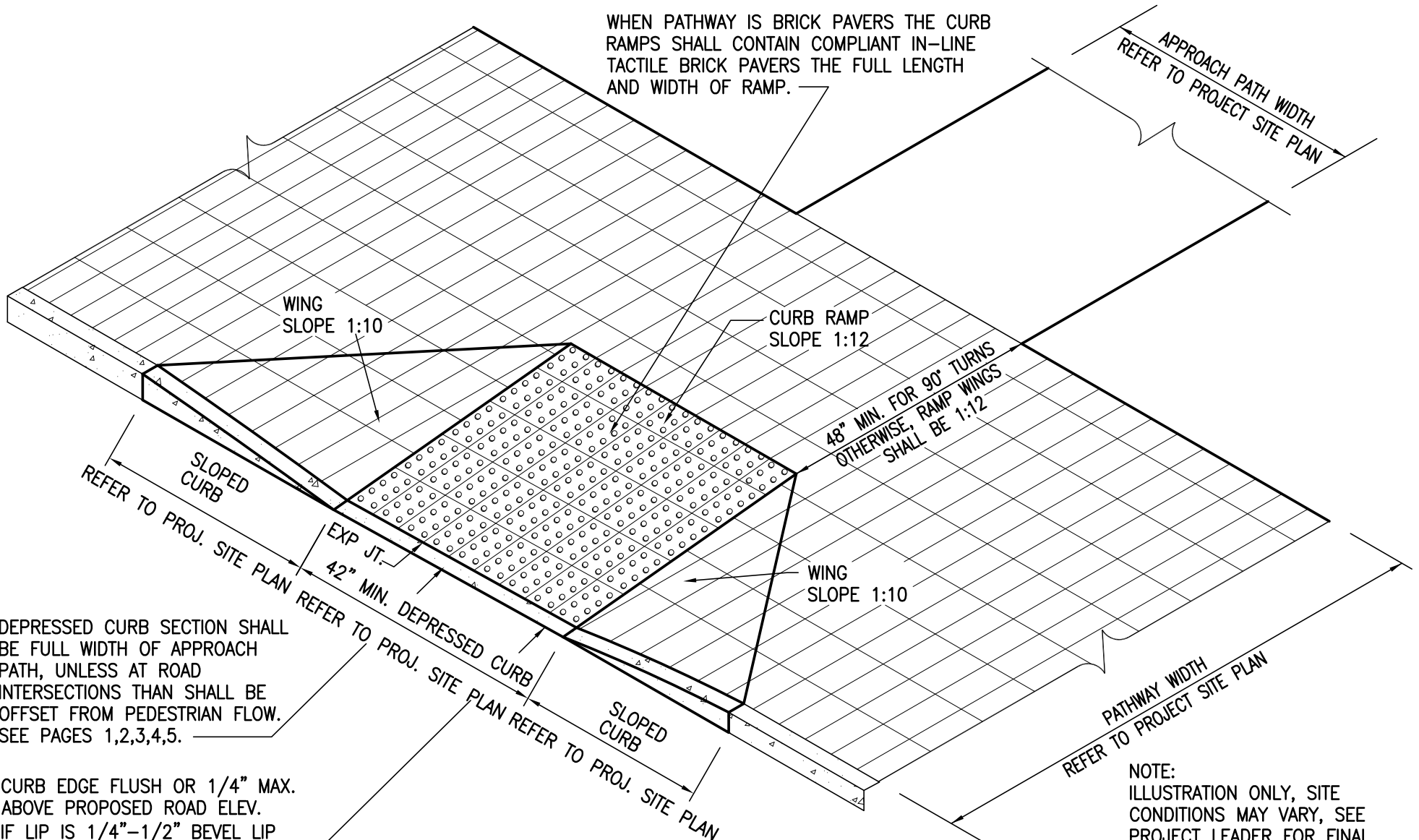
NOT TO SCALE

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.



DEPRESSED CURB SECTION SHALL BE FULL WIDTH OF APPROACH PATH, UNLESS AT ROAD INTERSECTIONS THAN SHALL BE OFFSET FROM PEDESTRIAN FLOW. SEE PAGES 1,2,3,4,5.

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

CURB CUT TACTILE DETAIL

NOT TO SCALE

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

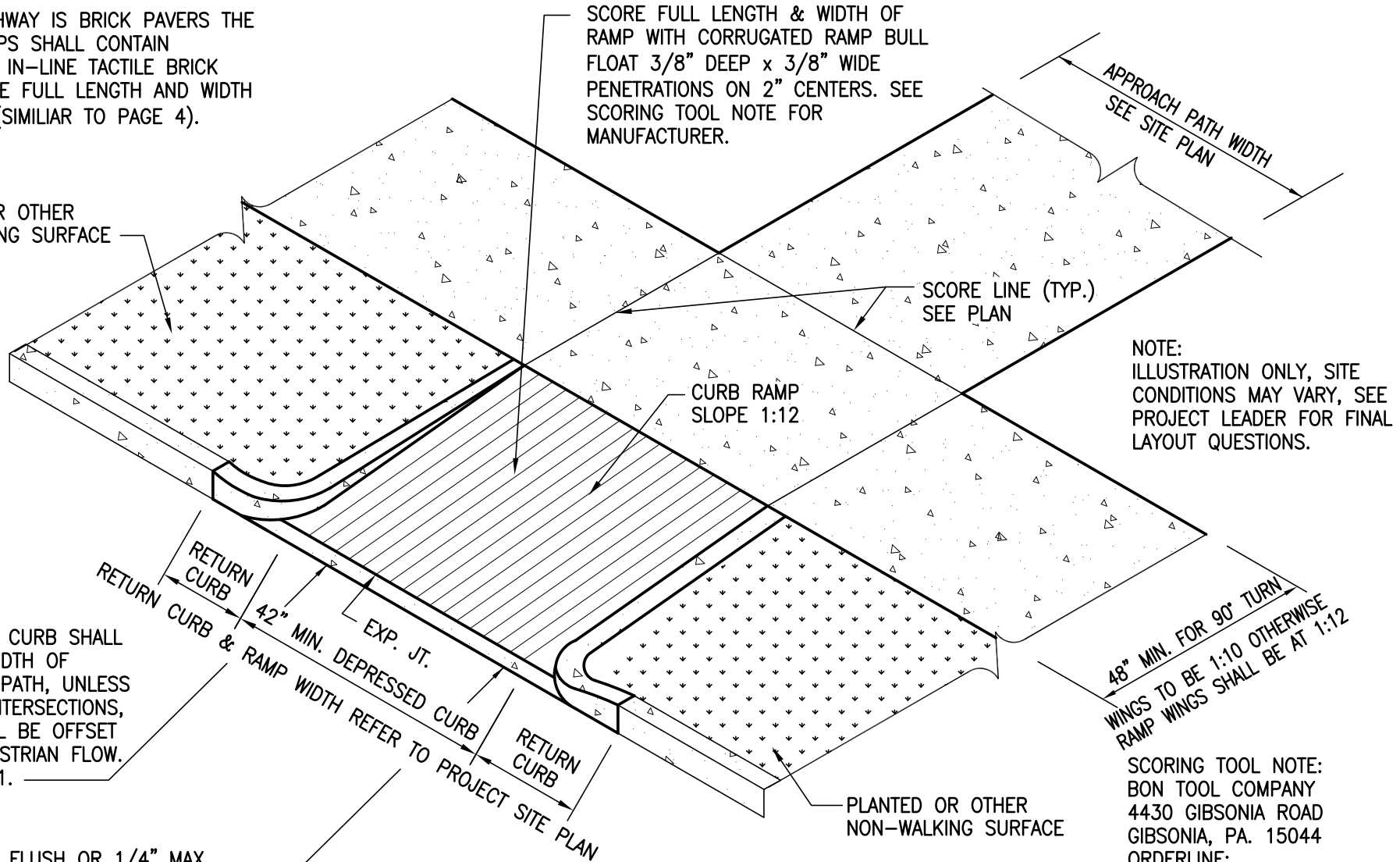
Currently Under Review - 9/30/2015 PSU ACCESS ENHANCEMENTS
 BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

NOTE:
 WHEN PATHWAY IS BRICK PAVERS THE CURB RAMPS SHALL CONTAIN COMPLIANT IN-LINE TACTILE BRICK PAVERS THE FULL LENGTH AND WIDTH OF RAMP (SIMILIAR TO PAGE 4).

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.

PLANTED OR OTHER NON-WALKING SURFACE



SCORE LINE (TYP.)
 SEE PLAN

CURB RAMP
 SLOPE 1:12

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

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

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

PLANTED OR OTHER NON-WALKING SURFACE

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

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

PSU ACCESS ENHANCEMENTS

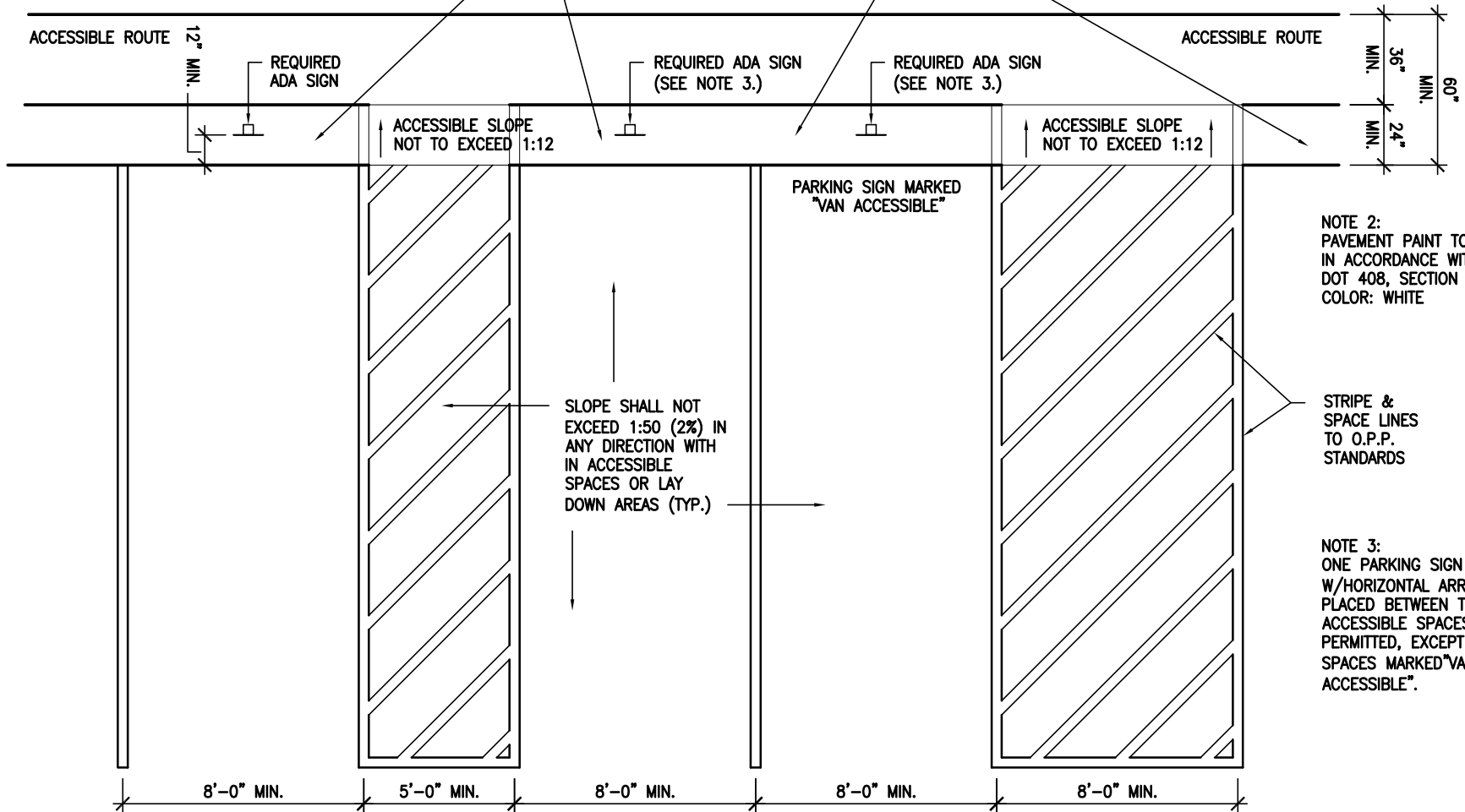
BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010

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

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

NON WALKING SURFACE -
 MULCH, GRASS ETC.
 (IF SITE PERMITS)



NOTE 2:
 PAVEMENT PAINT TO BE IN ACCORDANCE WITH PA DOT 408, SECTION 962 COLOR: WHITE

STRIPE &
 SPACE LINES
 TO O.P.P.
 STANDARDS

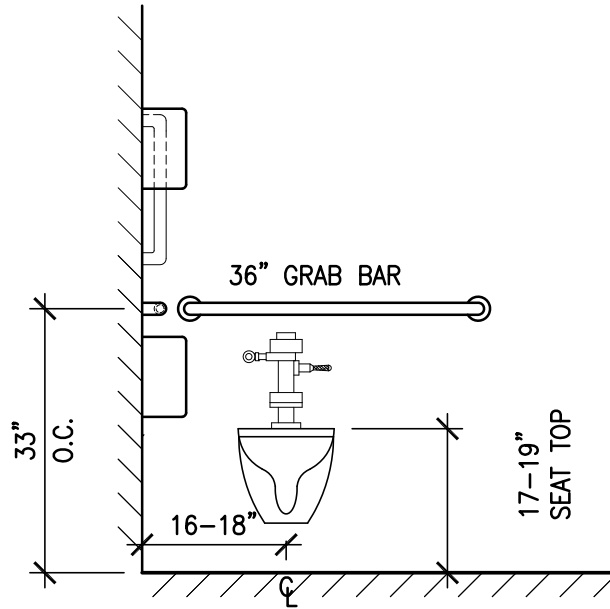
NOTE 3:
 ONE PARKING SIGN W/HORIZONTAL ARROWS PLACED BETWEEN TWO ACCESSIBLE SPACES IS PERMITTED, EXCEPT FOR SPACES MARKED "VAN ACCESSIBLE".

PREFERRED ACCESSIBLE PARKING ARRANGEMENTS

NOT TO SCALE

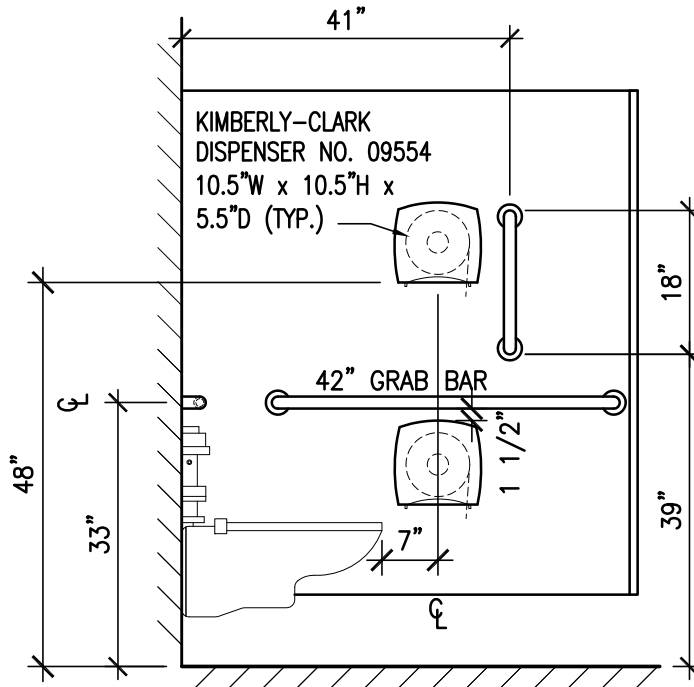
PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010



STALL – REAR WALL

NOT TO SCALE



STALL – SIDE WALL

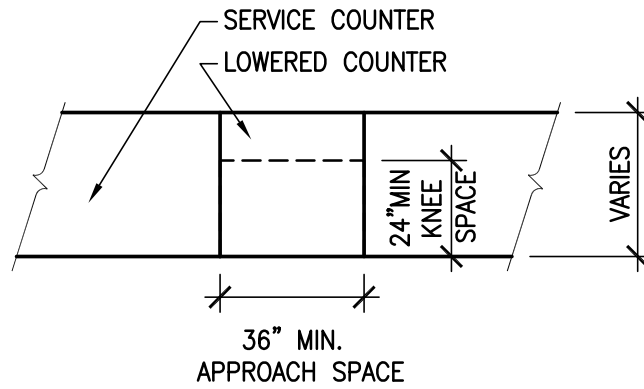
NOT TO SCALE

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.

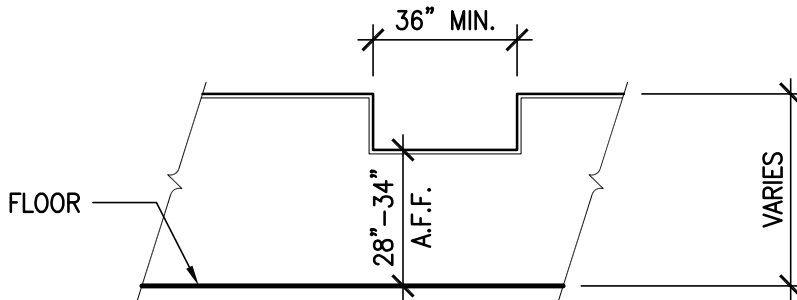
PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

ADOPTED: JUNE 1, 2010



COUNTER PLAN

NOT TO SCALE:



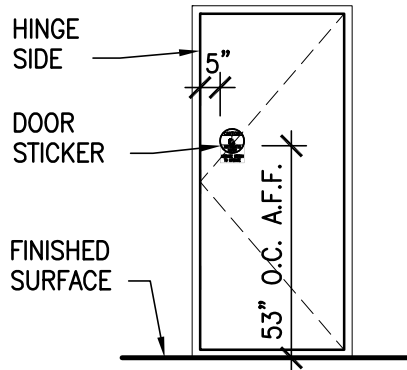
COUNTER ELEVATION

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



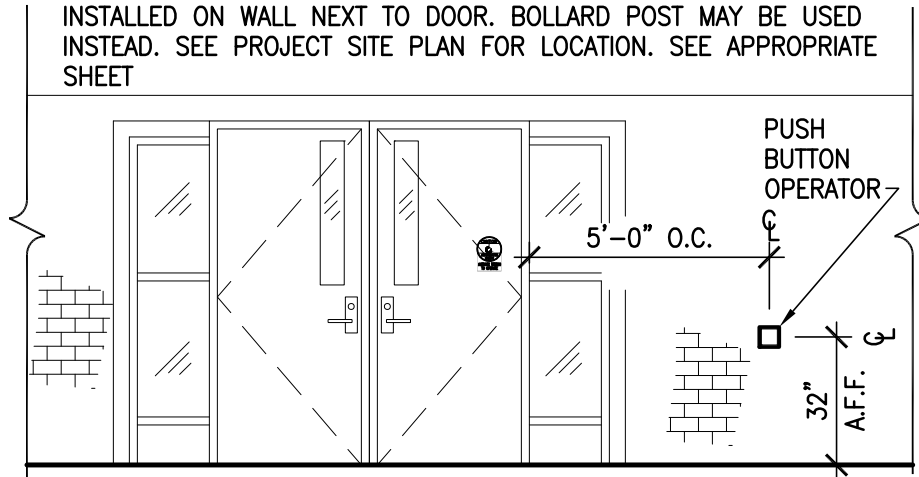
NOTE:
DOOR "ID" STICKER IS AVAILABLE FROM OPP SIGN SHOP. STICKER SHALL BE PLACED ON EACH SIDE OF THE DOOR BEING OPENED, AT THE SPECIFIED HEIGHT. EXACT STICKER PLACEMENT LOCATION MIGHT BE DOOR SPECIFIC. CHECK WITH DESIGNER TO VERIFY.



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)

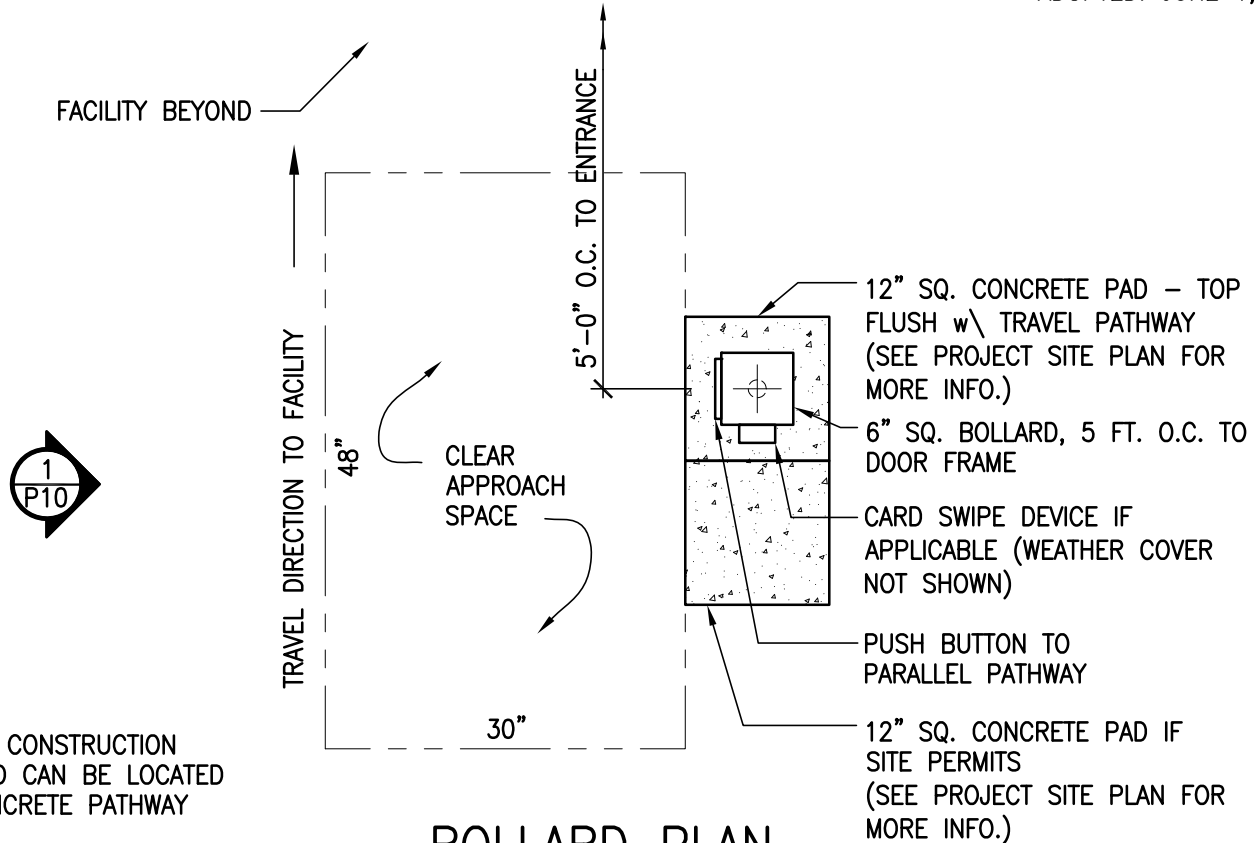
NOTE:
ILLUSTRATION ONLY, SITE CONDITIONS MAY VARY. SEE PROJECT LEADER FOR FINAL LAYOUT QUESTIONS.

PSU ACCESS ENHANCEMENTS

BY THE OPPADA STEERING COMMITTEE

10.

ADOPTED: JUNE 1, 2010



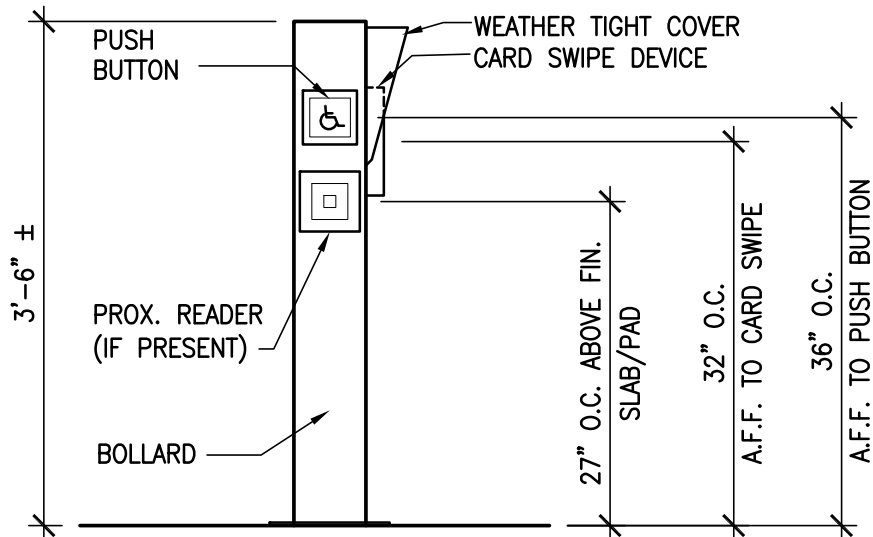
NOTE:
IN NEW CONSTRUCTION
BOLLARD CAN BE LOCATED
ON CONCRETE PATHWAY

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.



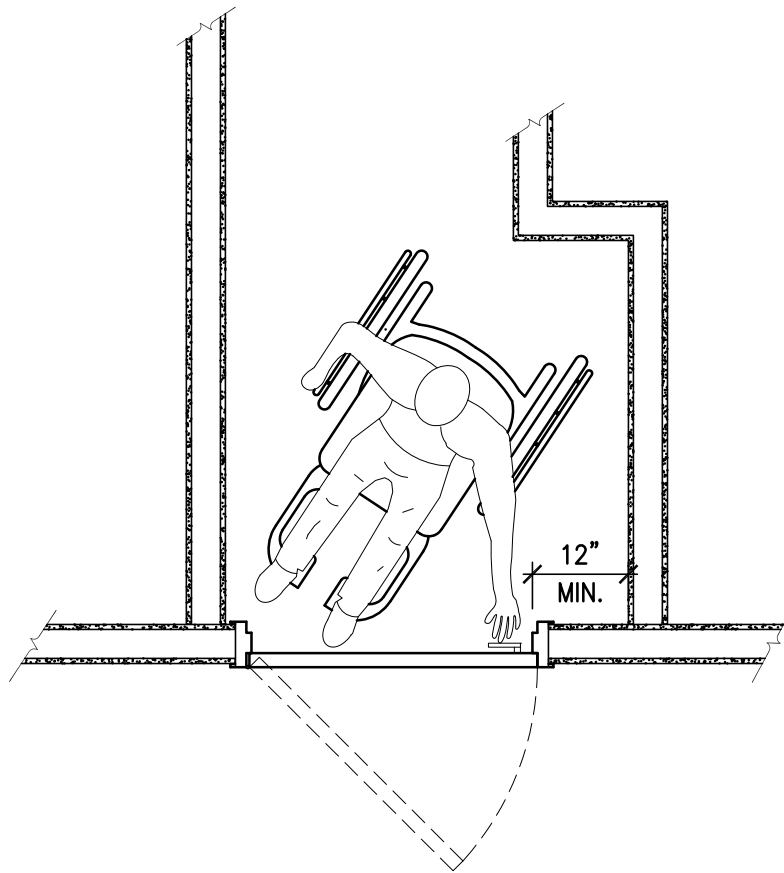
1 BUTTON MOUNTING HEIGHTS

1 P10 NOT TO SCALE:

PSU ACCESS ENHANCEMENTS
BY THE OPPADA STEERING COMMITTEE

11.

ADOPTED: JUNE 1, 2010



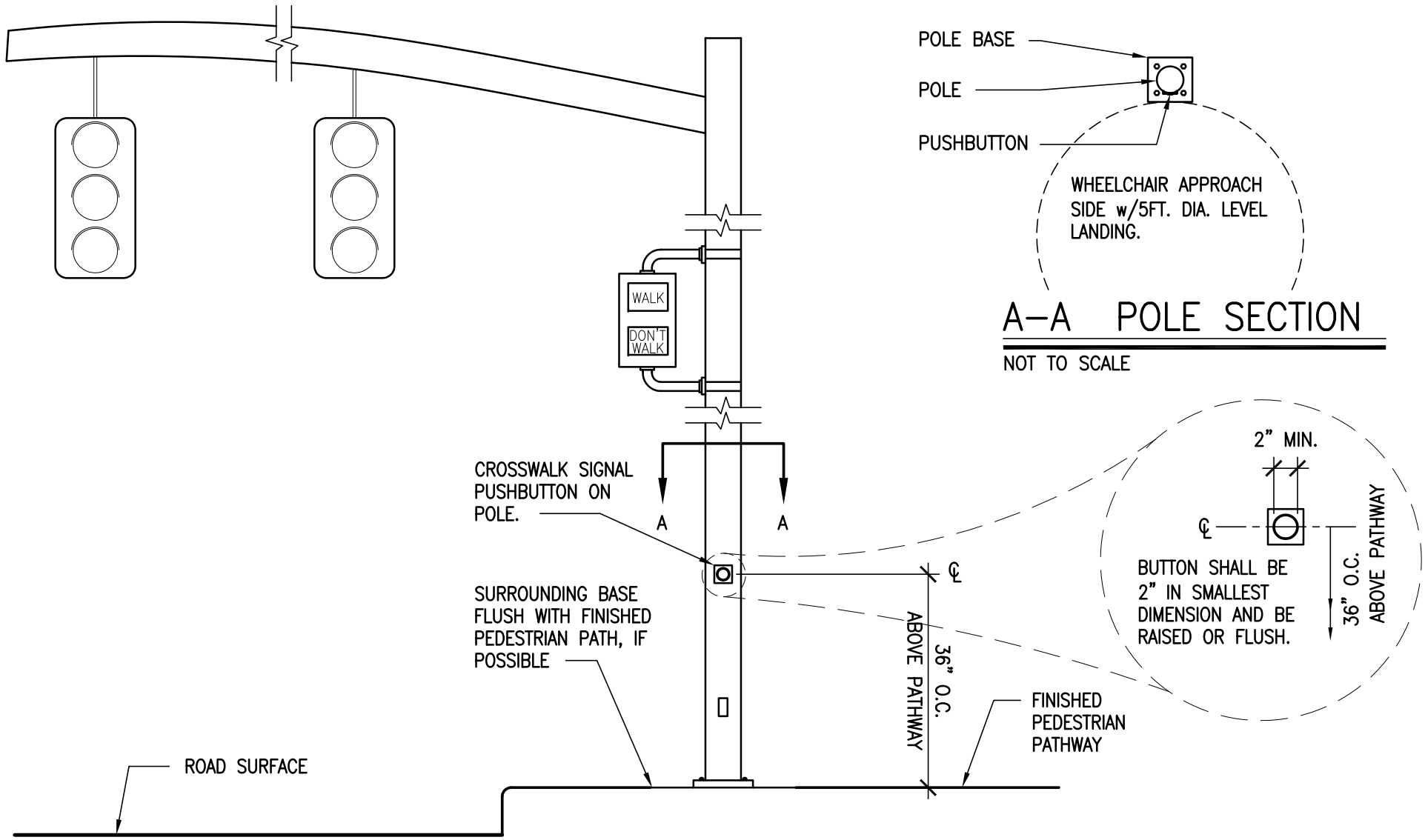
NOTE:
ILLUSTRATION ONLY, SITE
CONDITIONS MAY VARY. SEE
PROJECT LEADER FOR FINAL
LAYOUT QUESTIONS.

CLEARANCE AT LATCHED DOOR (w/o closer)

NOT TO SCALE:

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ADOPTED: JUNE 1, 2010



A-A POLE SECTION
NOT TO SCALE

TRAFFIC POLE PUSH BUTTON DETAIL
NOT TO SCALE

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

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

PSU ACCESS ENHANCEMENTS

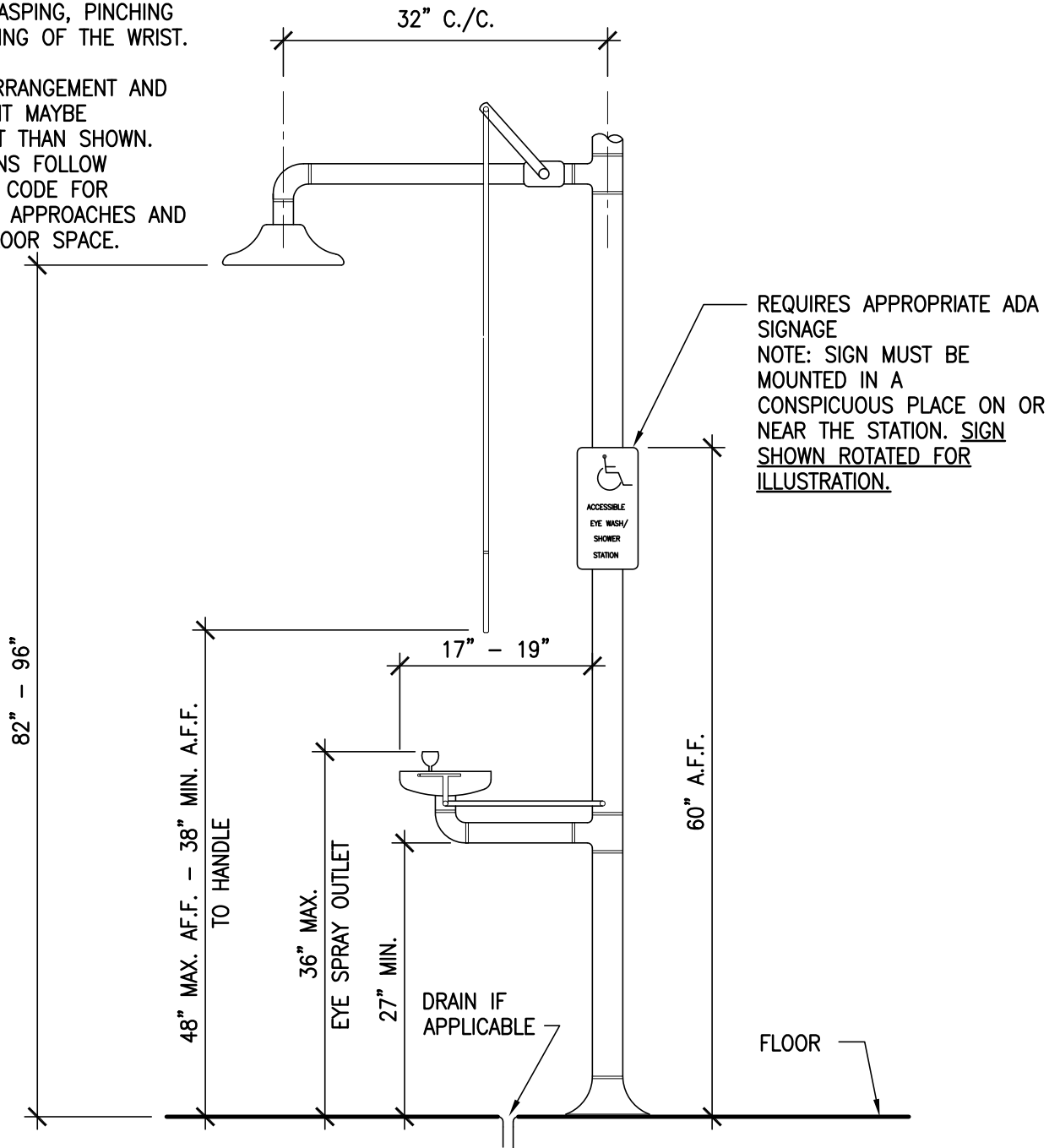
BY THE OPPADA STEERING COMMITTEE

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 MAYBE
 DIFFERENT THAN SHOWN.
 DIMENSIONS FOLLOW
 CURRENT CODE FOR
 REACHES, APPROACHES AND
 CLEAR FLOOR SPACE.

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



ACCESSIBLE EMERGENCY SHOWER & EYE WASH STATION

NOT TO SCALE:

PSU ACCESS ENHANCEMENTS BY THE OPPADA STEERING COMMITTEE

14.

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NOTE:
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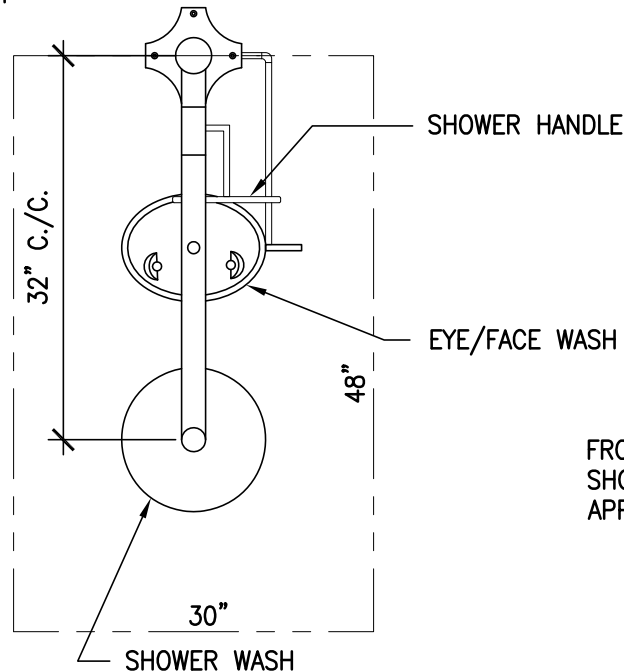
GENERAL NOTES:

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 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.



FRONT APPROACH
SHOWN, SIDE
APPROACH PERMITTED

EMERGENCY SHOWER & EYE WASH STATION PLAN

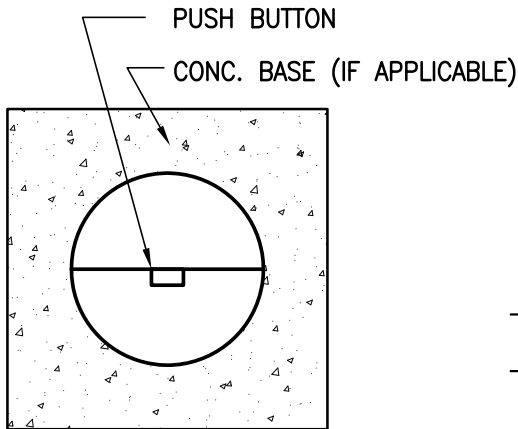
NOT TO SCALE:

PSU ACCESS ENHANCEMENTS

BY THE OPPADA STEERING COMMITTEE

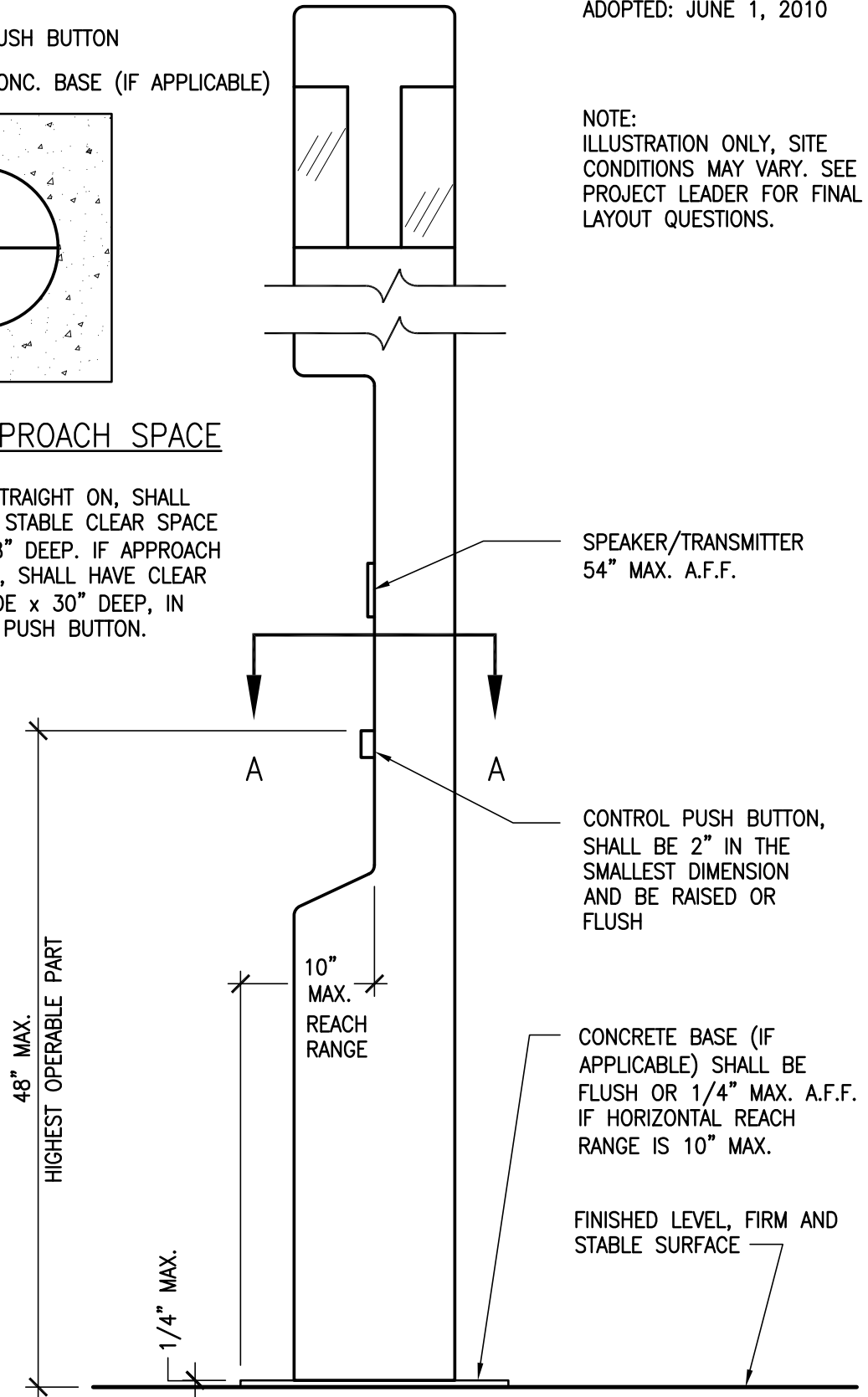
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NOTE:
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LAYOUT QUESTIONS.



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.



EMERGENCY PHONE – SIDE ELEV.

NOT TO SCALE: