# GENERAL NOTES

#### 1. CHEEK WALLS

- CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING.

#### 2. CROSSWALKS

- FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES.

- SHOULD BE PLACED A MINIMUM DISTANCE OF 4'-0" FROM STOP AND YIELD LINES.

- FOR UN-SIGNALIZED AREAS, CROSSWALKS SHOULD BE PLACED A MINIMUM DISTANCE OF 20'-0" AWAY FROM ON ROAD PARKING ZONES. FOR SIGNALIZED AREAS, CROSSWALKS SHOULD BE PLACED A MINIMUM DISTANCE OF 30'-0" FROM ON ROAD PARKING ZONES.

- PEDESTRIAN CROSSWALK IS 6'-0" MINIMUM.

- USE LONGITUDINAL LINES AT 6'-0" LONG AND 2' WIDE WITH A SPACING OF 2' APART. SPACING SHOULD BE DESIGNED SO THE PAINTED AREAS AVOID THE WHEEL PATHS.

### 3. CURB RAMPS

CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0" X 4'-0" CLEAR SPACE BEFORE THE CURB FACE, WITHIN THE WIDTH OF THE

SLOPES THAT EXCEED 8.00%, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
 PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.

DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE (MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL).

### - CURB RAMP WIDTH IS 4'-0" MINIMUM.

- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 SLOPE.

THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 8.00% AND IT IS NOT NECESSARY TO HAVE THE LENGTH GREATER THAN 15'-0".

- FOR BLENDED TRANSITION CURB RAMPS (TYPE 3), THE MAXIMUM RUNNING SLOPE IS 5% WITH A MAXIMUM 2% CROSS SLOPE.

#### 4. FLUSH CURB

CONSTRUCT TOP OF PLAIN CEMENT CONCRETE FLUSH CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS,

CONSTRUCT FLUSH CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. THE VERTICAL ALIGNMENT OF A CURB RAMP, EXCLUDING FLARES, SHALL BE PLANAR. GRADE BREAKS SHALL BE FLUSH AND PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, TURNING SPACES, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL

- FOR TYPE 3 RAMPS AND BLENDED TRANSITIONS, THE FLUSH CURB MUST EXTEND FROM THE OUTER MOST EDGE OF EACH CROSSWALK.

#### 5. DETECTABLE WARNING SURFACES

- NO SEPARATION BETWEEN DETECTABLE WARNING SURFACES FOR MEDIANS LESS THAN 4'-0" BETWEEN BACK OF CURBS.

PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.

- ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB WHEN APPROPRIATE.

- THE PUBLIC SIDEWALK CURB RAMP, DETECTABLE WARNING SURFACES (SHADED AREA) SHALL BE SAFETY RED COLOR, EXCEPT IF THE MUNICIPALITIES HAVE ESTABLISHED AN ALTERNATIVE COLOR SCHEME.

FOR TYPE 3 RAMPS AND BLENDED TRANSITIONS, THE DETECTABLE WARNING SURFACE MUST BE PLACED ALONG THE ENTIRE FLUSH CURB AND THE DOMES MUST BE PLACED IN SUCH A WAY THAT THE DIRECTION OF TRAVEL IS ORIENTED INTO THE CROSSWALK.

### 6. DRIVEWAYS

- 6.00 % MAXIMUM SLOPE FOR THE DRIVEWAY APRON.

1 1/2" MAXIMUM VERTICAL CHANGE IN HEIGHT BETWEEN THE ROAD SURFACE AND THE DEPRESSED CURB AT THE DRIVEWAY APRON.

### 7. JOINTS

PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
 SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.

### 8. TURNING SPACES

- TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS, UNLESS AN EXCEPTION IS GRANTED.

- DO NOT EXCEED 2.00% FOR RUNNING AND CROSS SLOPES.

TURNING SPACE SHOULD BE 4'-0" X 4'-0" MINIMUM CLEAR SPACE. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, IT MUST BE 4'x5' WITH THE 5' LENGTH ALONG THE UNOBSTRUCTED SIDE. FOR TYPE 3 RAMPS AND BLENDED TRANSITIONS, THE TURNING SPACE MUST HAVE A MINIMUM OF A 5'-0" DEPTH (INCLUDING THE DETECTABLE WARNING SURFACE) ALONG THE FLUSH

- 4'x4' TURNING SPACES ARE REQUIRED AT EVERY ACCESSIBLE PEDESTRIAN SIGNAL/PUSH BUTTON LOCATION.

- TURNING SPACES SHALL BE CONSTRUCTED AT THE TOP OF EVERY PERPENDICULAR RAMP AND AT THE BOTTOM OF EVERY PARALLEL RAMP.

### 9. NON-WALK SURFACES

- NON-WALK AREA IS AN OBSTRUCTION OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.

#### 10. PEDESTRIAN PUSH BUTTONS

- THE DETAILS DEPICT PEDESTRIAN PUSH BUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSH BUTTONS. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSH BUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSH BUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.

- PUSH BUTTON LOCATION SHALL BE COMPLIANT WITH THE CURRENT MUTCD.

- ADJACENT TO A LEVEL NON-SLIP SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS A NON-SLIP WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP
- WITHIN 5'-0" OF THE CROSSWALK EXTENDED
- BETWEEN 1'-6" AND 10'-0" OF THE EDGE OF CURB, SHOULDER OR PAVEMENT
- PARALLEL TO THE CROSSWALK TO BE USED

- MOUNT PEDESTRIAN PUSH BUTTON 42" ABOVE THE SIDEWALK OR FINISHED GRADE TO THE CENTER OF THE PUSH BUTTON AND 10"
MAXIMUM LATERALLY FROM TURNING SPACE. IN ADDITION, THE PEDESTRIAN PUSH BUTTON MUST ALSO BE 5'-0" MINIMUM DISTANCE
FROM THE CURB RAMP AND 2"-0" MINIMUM DISTANCE BETWEEN A CATCH BASIN AND THE PEDESTRIAN PUSH BUTTON.

#### 11. SIDE FLARES

- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 SLOPE.

- SIDE FLARES 10.00% MAXIMUM SLOPE WHERE THE PEDESTRIAN PATH CROSSES THE CURB RAMP.
- SIDE FLARES MUST BE PARALLEL TO THE CURB LINE.
- GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 (1:3) MAXIMUM. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN ACCESS ROUTE.
- SIDE FLARE WIDTH IS TYPICALLY 24" AND A MINIMUM OF 12".

#### 12. SIDEWALKS

- NOTES THE AREA CONSIDERED TO BE THE "PEDESTRIAN ACCESSIBLE ROUTE"

- THE MAXIMUM SIDEWALK CROSS SLOPE IS 2.00% (MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL). THE MAXIMUM GRADE IS 5.00%. FOR SIDEWALKS ALONG STREETS; HOWEVER, THE LONGITUDINAL GRADE OF THE SIDEWALK SHOULD BE CONSISTENT WITH THE GRADE OF THE ADJACENT ROADWAY. IF THE 5.00% GRADE IS NOT FEASIBLE DUE TO TOPOGRAPHY AND OTHER PHYSICAL CONSTRAINTS, THE LOWEST PRACTICAL GRADE GREATER THAN 5.00% SHOULD BE USED.

SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.

### 13. TRAVEL LANES

- THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.

14. CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.

15. ALL HANDICAP RAMPS CONSTRUCTED IN THIS CONTRACT SHALL MEET ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES.

#### 16. GRADE BREAKS

- GRADE BREAKS AT THE TOP AND BOTTOM OF THE CURB RAMP SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.

- GRADE BREAKS ARE NOT PERMITTED ON THE SURFACE OF RAMP RUNS OR TURNING SPACES.

- SURFACE SLOPES THAT MEET AT THE GRADE BREAKS SHALL BE FLUSH.

17. ALL VERTICAL SURFACE DISCONTINUITIES SHALL NOT EXCEED ¼" IN HEIGHT. ANY VERTICAL SURFACE DISCONTINUITY BETWEEN ¼" AND ½" SHALL BE BEVELED AT A SLOPE NO GREATER THAN 50% ACROSS THE ENTIRE DISCONTINUITY.

18. HORIZONTAL OPENINGS IN GRATES AND JOINTS SHALL NOT EXCEED ½" IN DIAMETER AND THE GRATES SHALL BE PLACED SO THE LONG DIMENSION IS PERPENDICULAR TO THE DIRECTION OF TRAVEL.

19. THE CROSS SLOPE FOR CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM. AT PEDESTRIAN STREET CROSSINGS WITHOUT YEILD OR STOP CONTROL, THE CROSS SLOPE SHALL BE PERMITTED TO MATCH THE STREET GRADE. PEDESTRIAN STREET CROSSINGS WITHOUT YEILD OR STOP CONTROL ARE CROSSINGS WHERE THERE IS NO YEILD OR STOP SIGN, OR WHERE THERE IS A TRAFFIC SIGNAL THAT IS DESIGNED FOR THE GREEN PHASE.

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5	TYPE 2 CURB RAMPS	DOUBLE EXIT INTO ROADWAY; SEPARATE EXIT RAMPS					
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### NOTE TO ENGINEER:

# DETECTABLE WARNING SURFACE (DWS) INSTALLATION INSTRUCTIONS

 LAY OUT AND PROPERLY FIT EACH UNIT PRIOR TO SETTING IN WET CONCRETE.

2. CUT UNITS AS NECESSARY ALONG PERIMETER OF DETECTABLE WARNING SURFACE.

3. PLACE UNITS ACROSS THE ENTIRE WIDTH OF THE

CURB RAMP SURFACE AND/OR WHERE THE CURB IS FLUSH.

4. PRESS UNITS INTO FULL CONTACT WITH THE

FRESH CONCRETE.

5. ADJUST HEIGHT OF EACH UNIT EDGE TO BE LEVEL

WITH ADJACENT RAMP SURFACES.

6. ONLY TRUNCATED DOMES SHOULD BE ABOVE THE ADJACENT FINISHED CONCRETE.

7. FILL ANY SAW CUT GAPS WITH APPROVED JOINT SEALANT MATERIAL.

#### DWS NOTES:

- THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.

#### DETECTABLE WARNING UNIT DIMENSIONS:

- THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.

#### DOME ALIGNMENT:

- THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP TURNING SPACE OR CURB RAMP AND THE STREET.

- WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.

#### COLOR REQUIREMENTS:

- THE DETECTABLE WARNING FIELD SHALL BE THE COLOR "SAFETY RED" UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS AND MUST MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

### DETECTABLE WARNINGS LOCATIONS:

- DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR THE ROADWAY EDGE (12" WHERE TRAVERSABLE CURB IS USED).

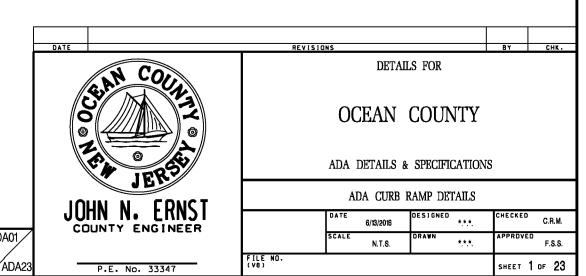
- THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 6'-0" MINIMUM AND 15'-0" MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL.

# **EQUIVALENT SLOPES**

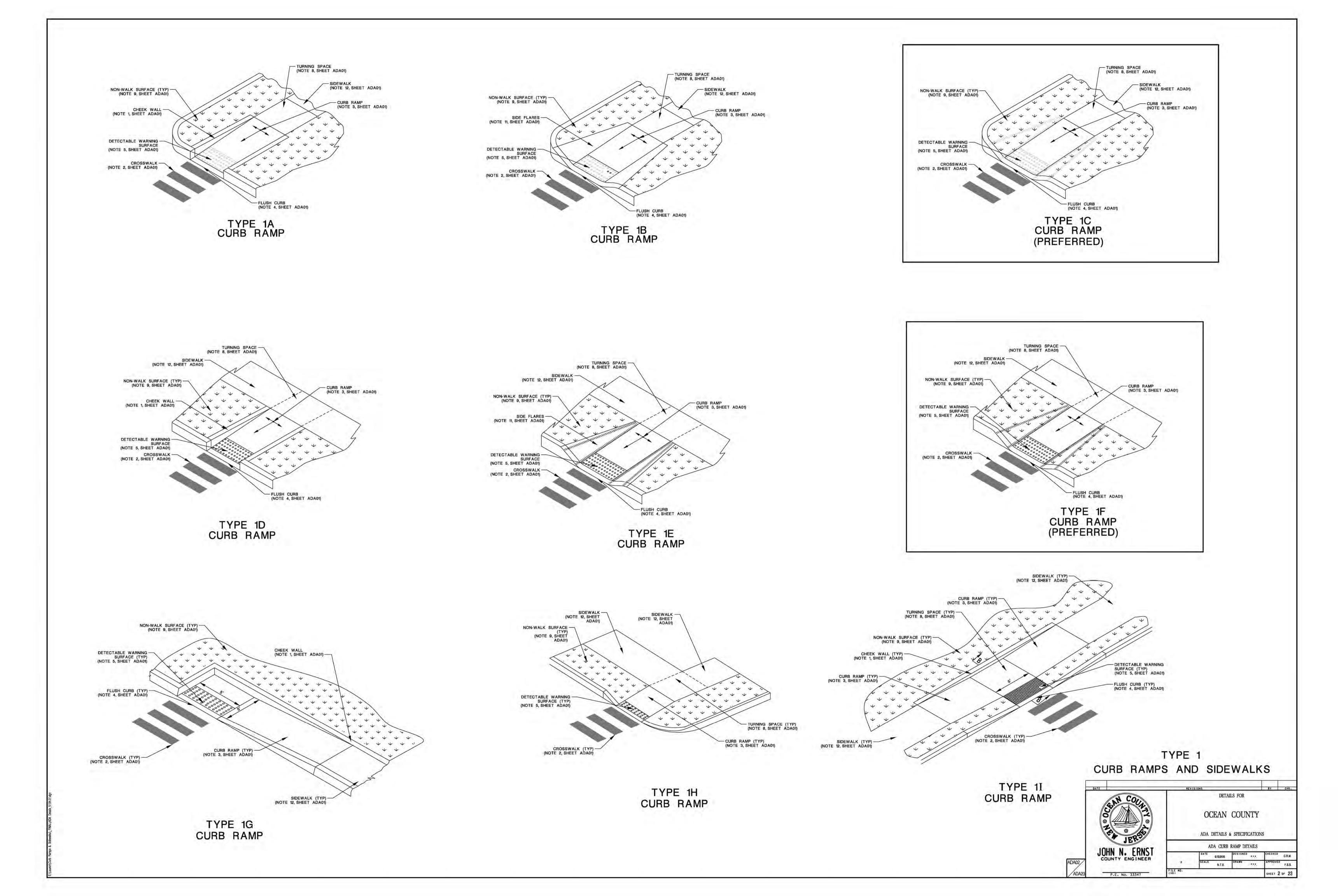
PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1
8.33%	12:1
7.14%	14:1
5.00%	20:1
2.00%	50:1
1.00%	100:1

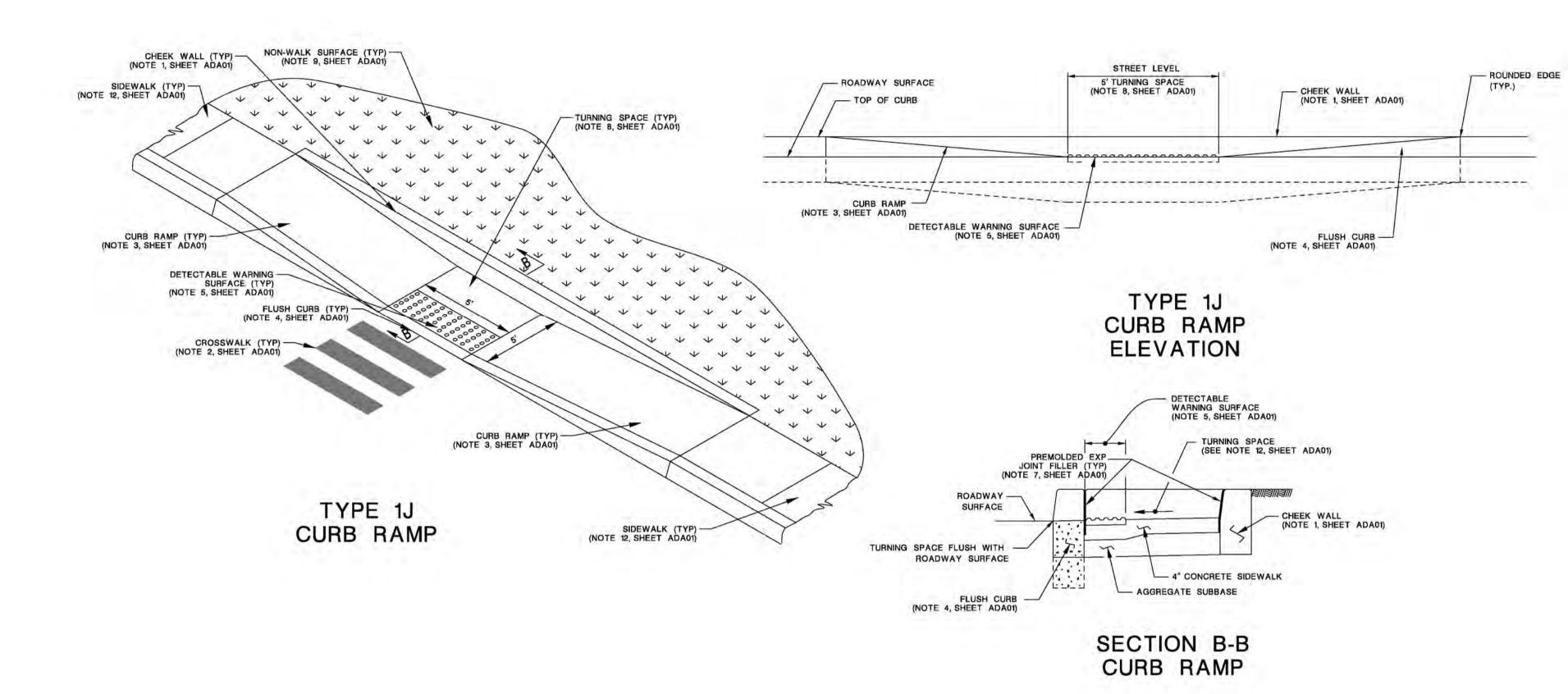
CURB RAMPS AND SIDEWALKS

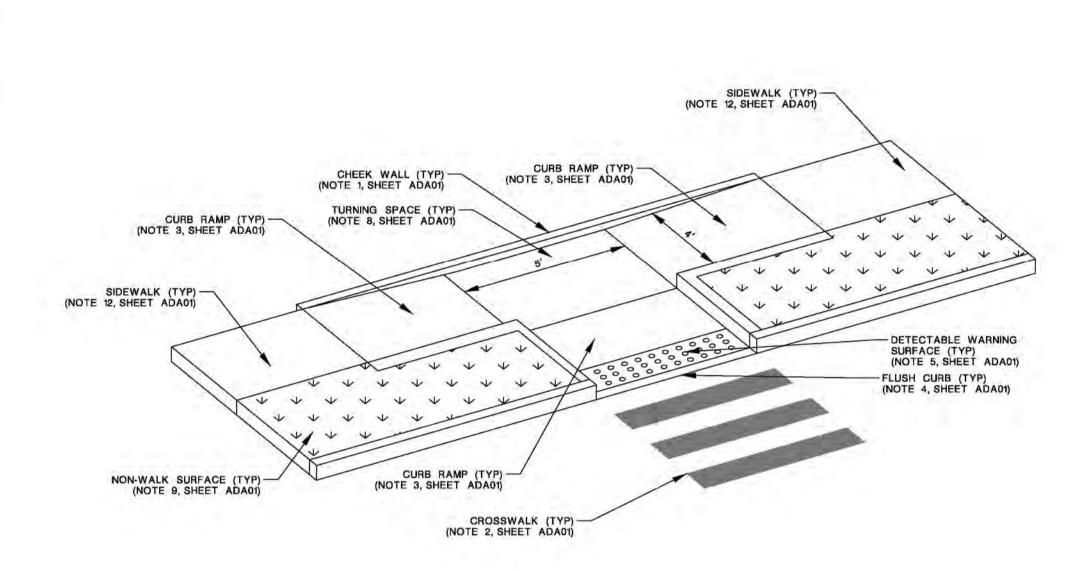
**GENERAL NOTES** 



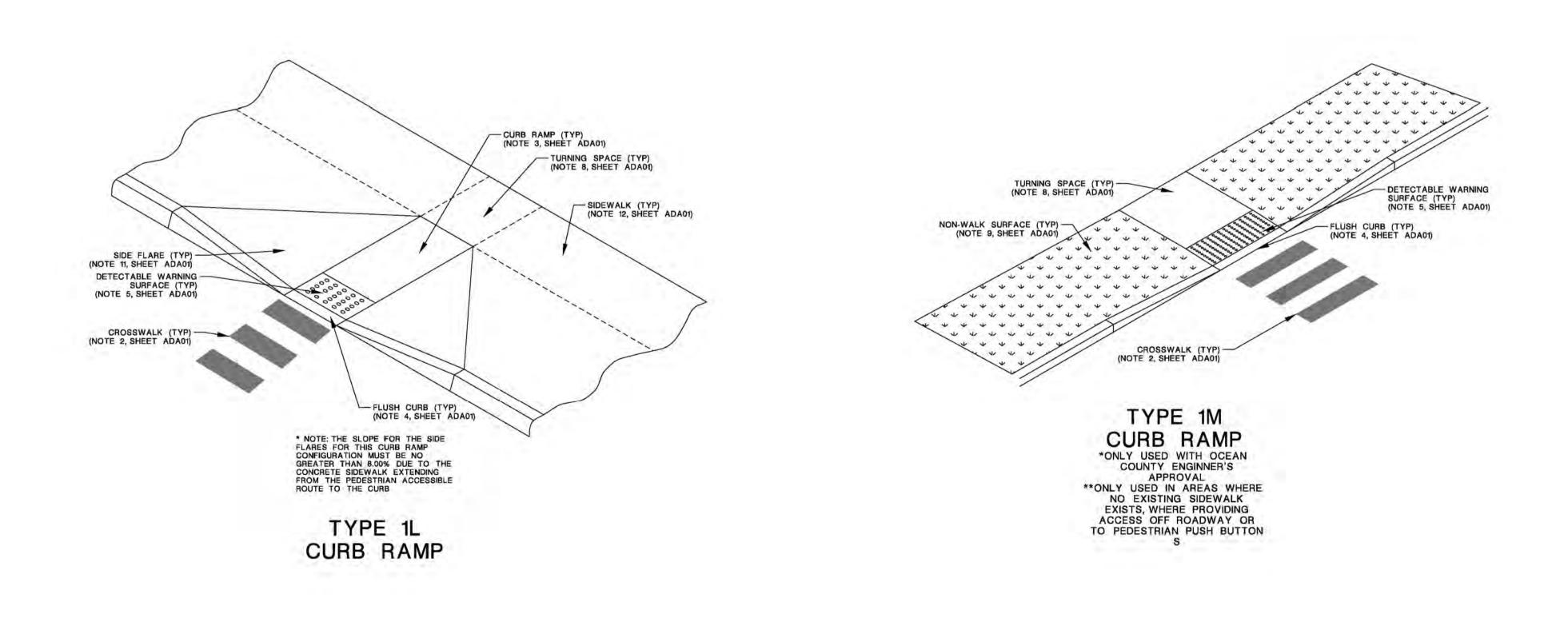
ren\Curb Ramps & Sidewalks\ FINAL\ADA Details\_17.04.07.dgn

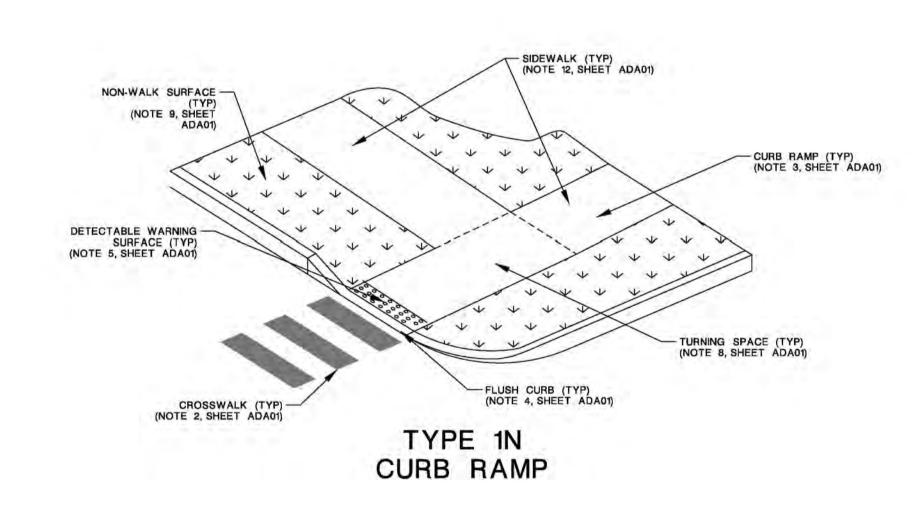


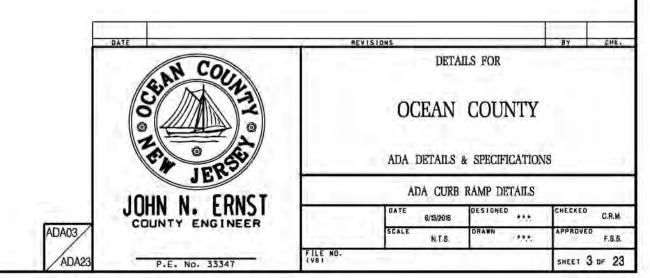


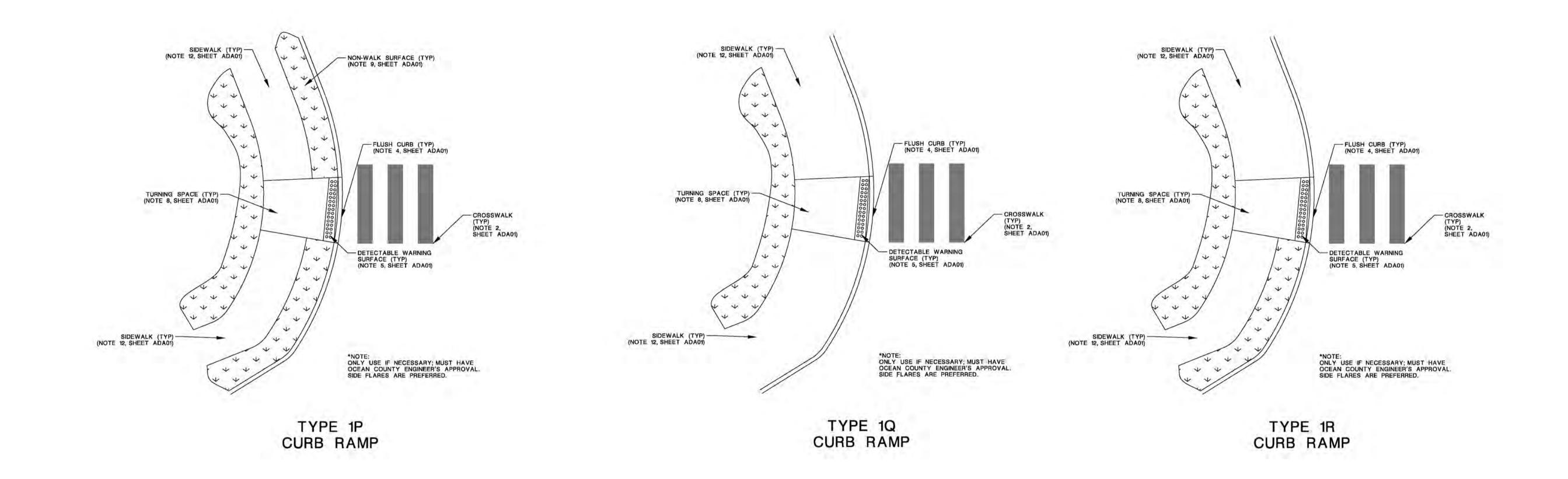


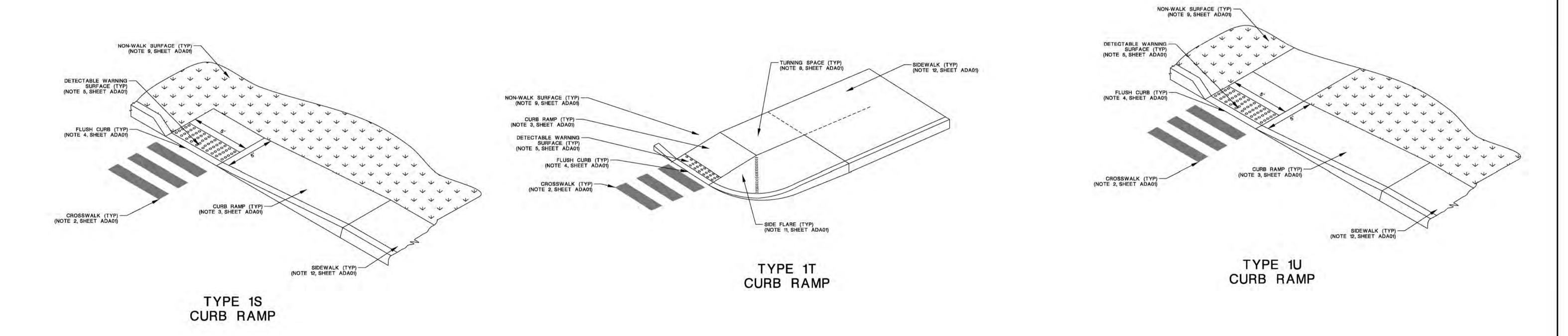
TYPE 1K CURB RAMP

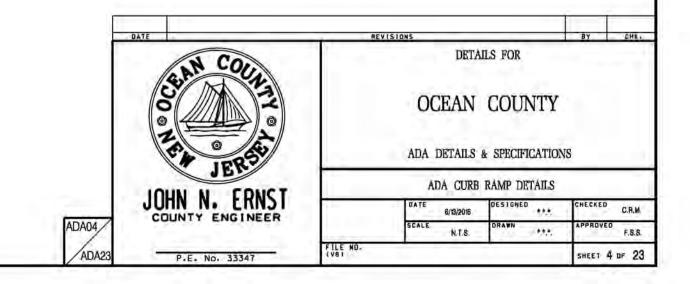


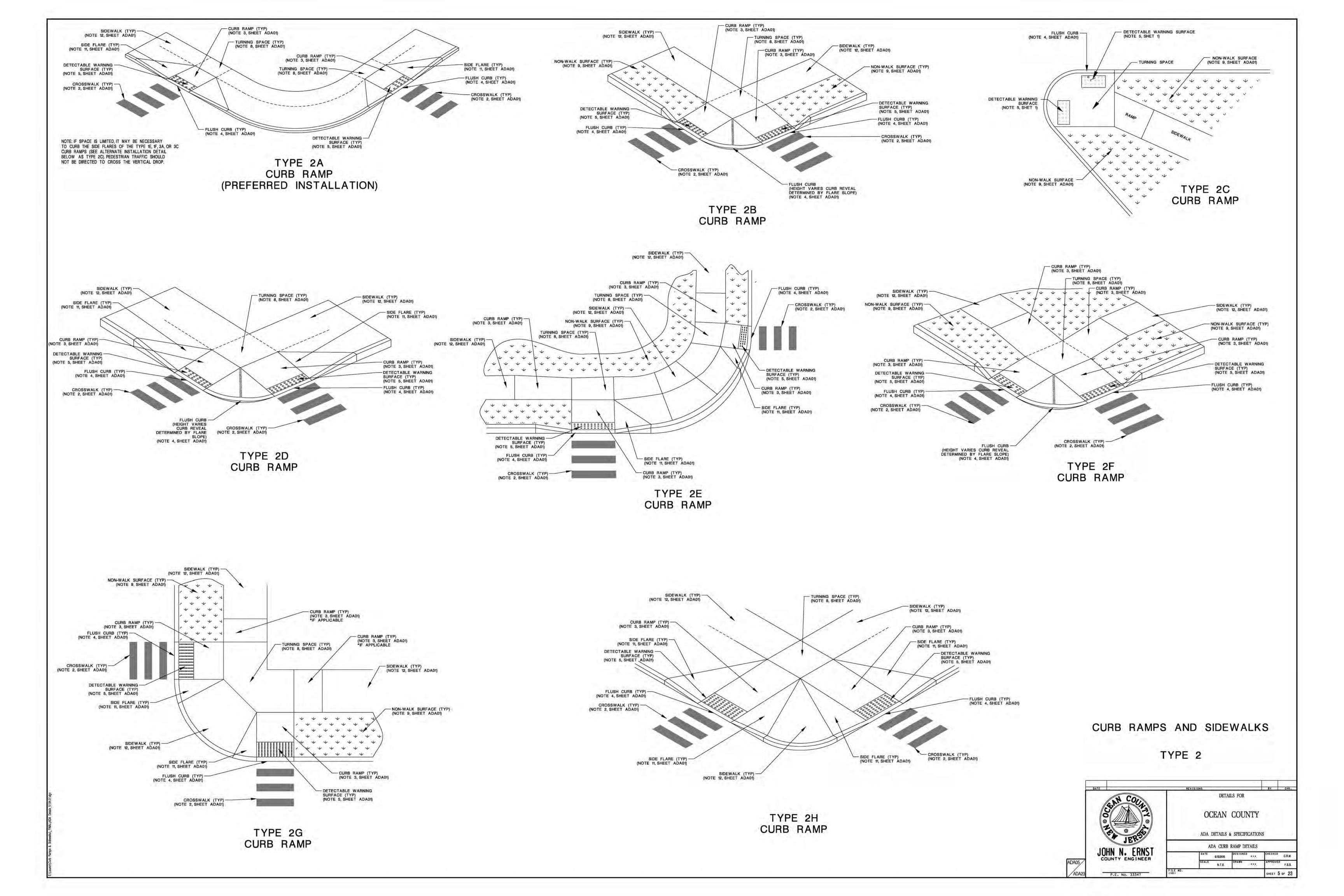


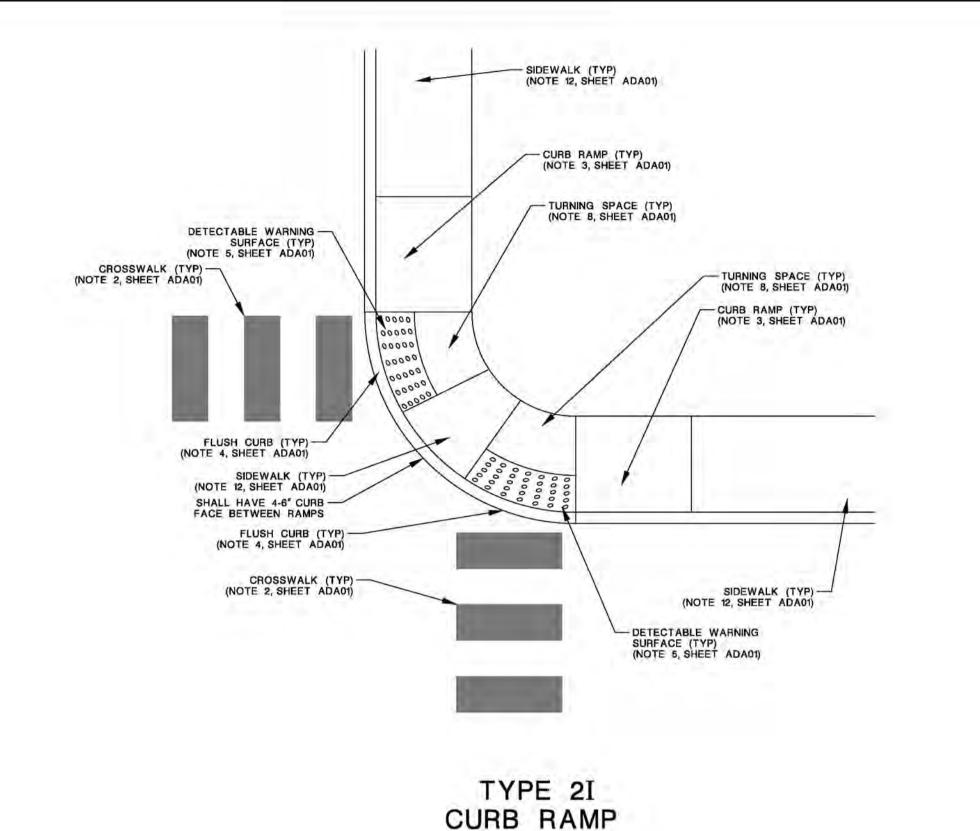


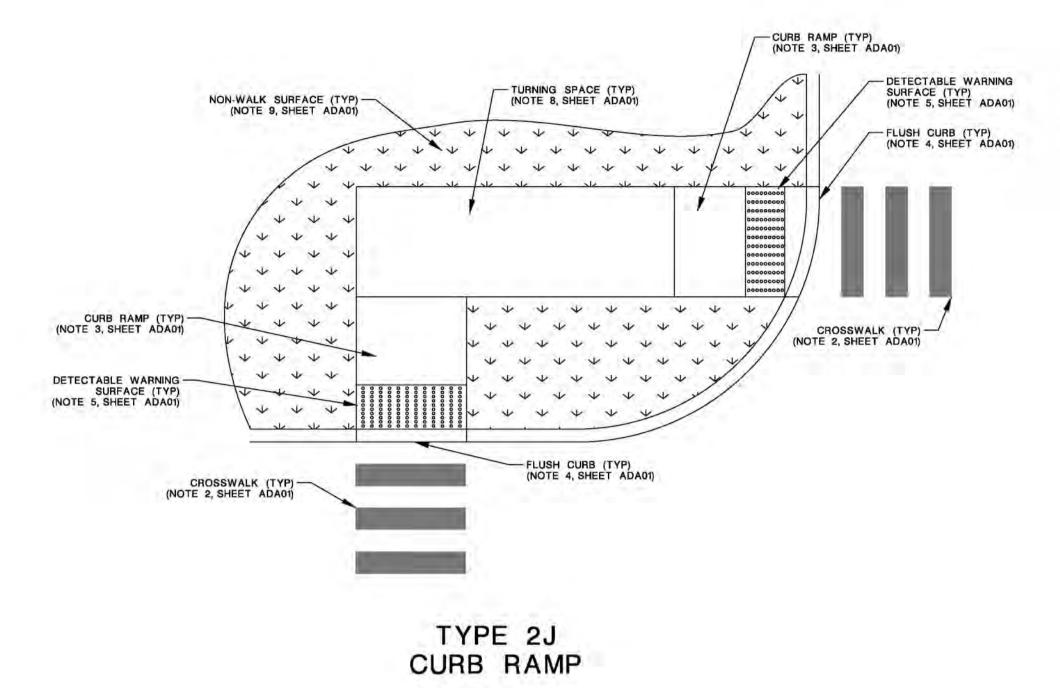


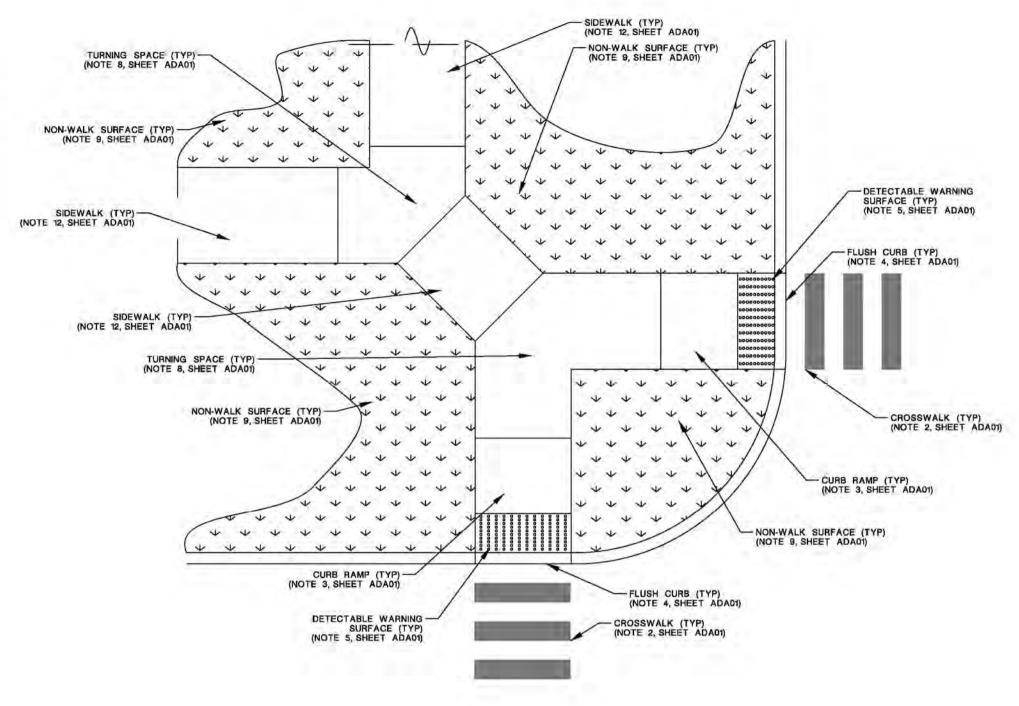




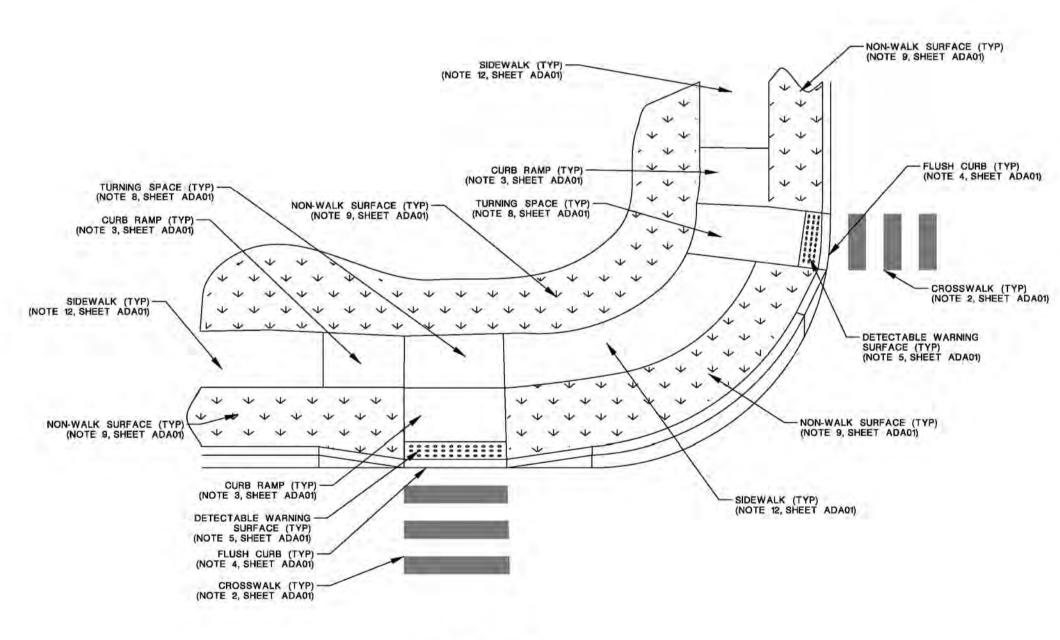


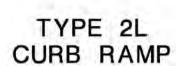


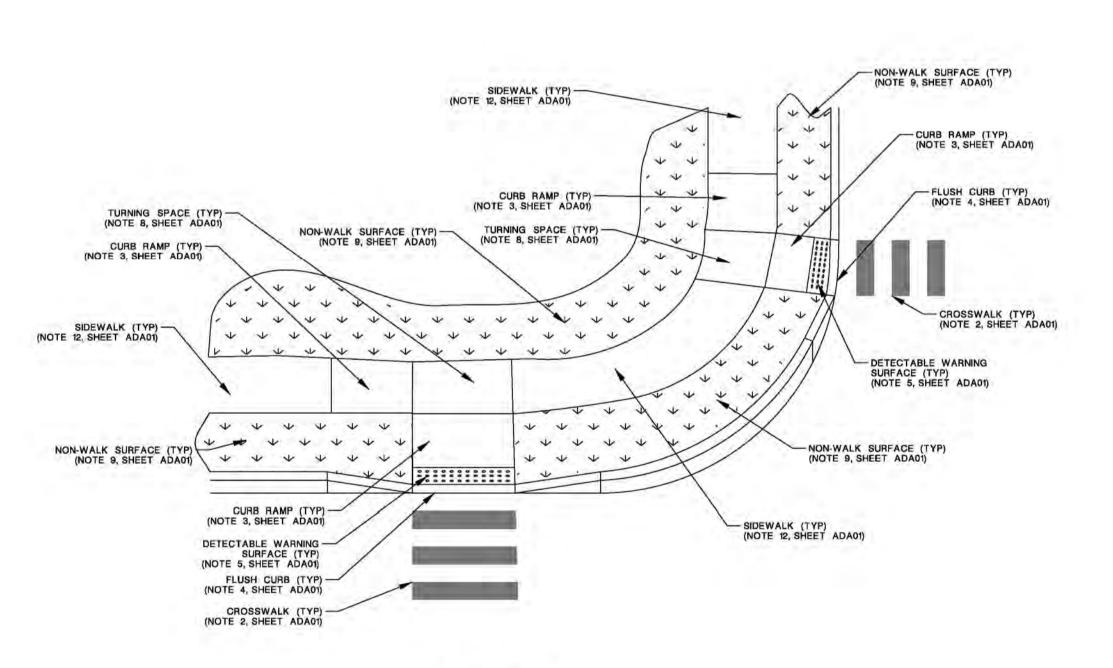




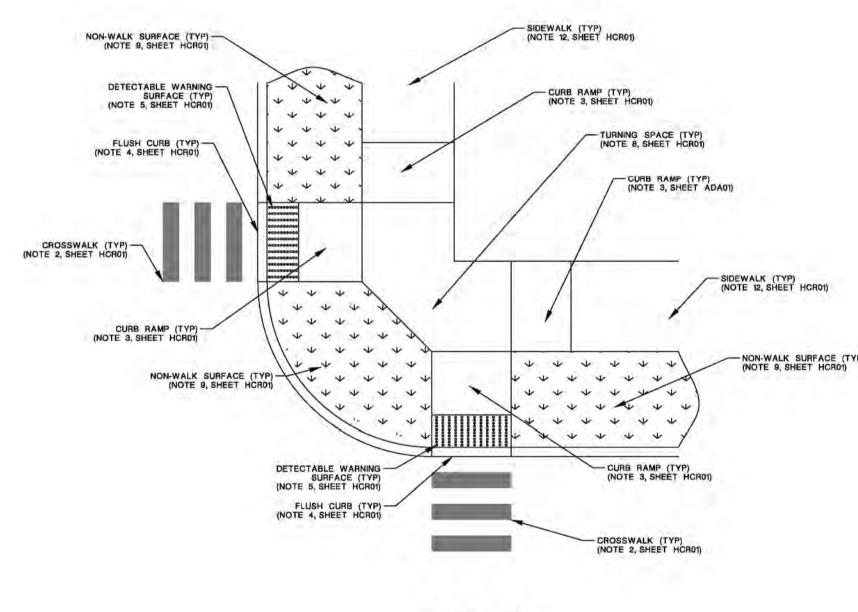
TYPE 2K CURB RAMP







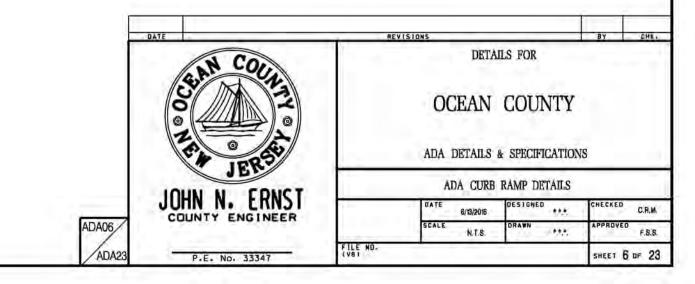
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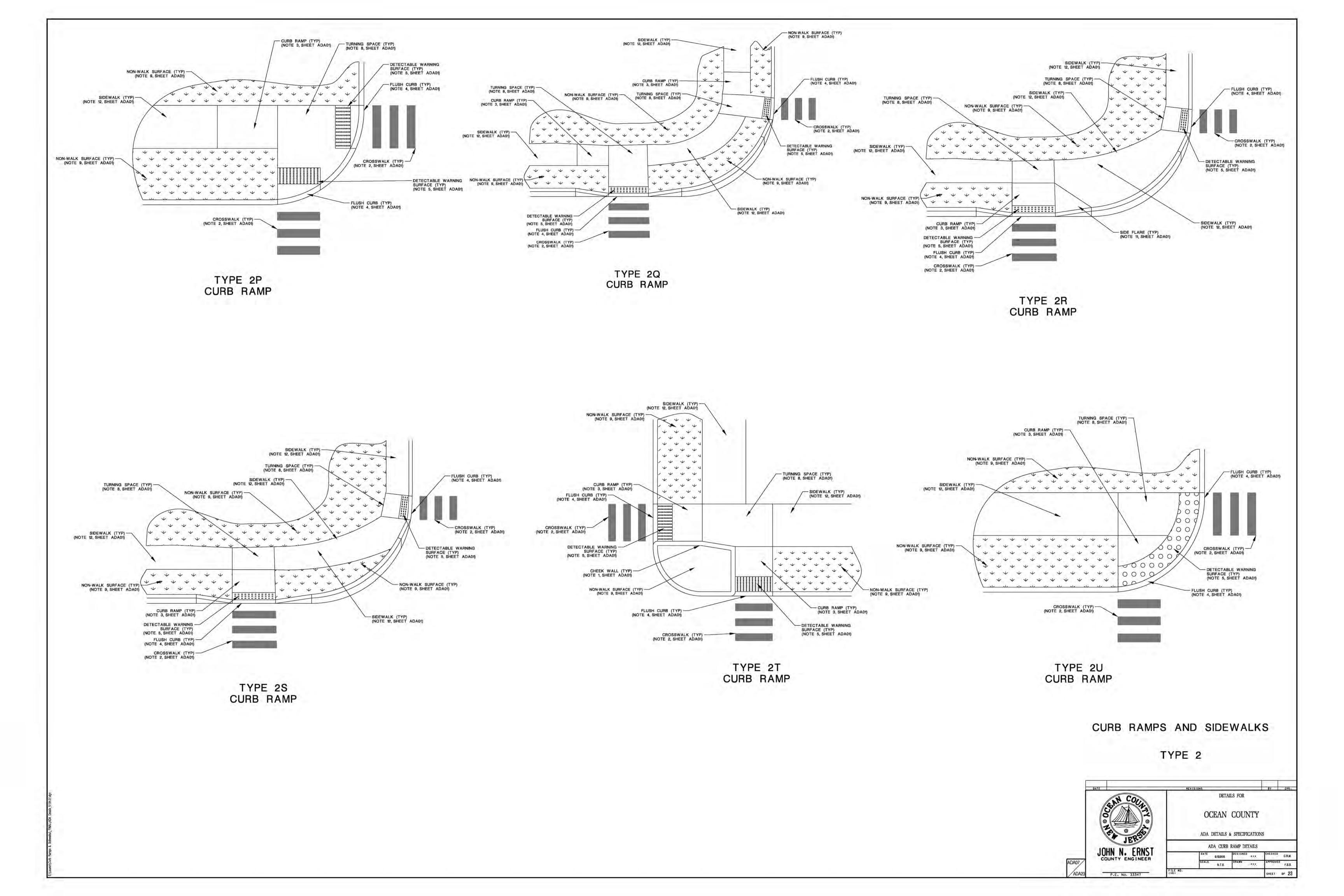


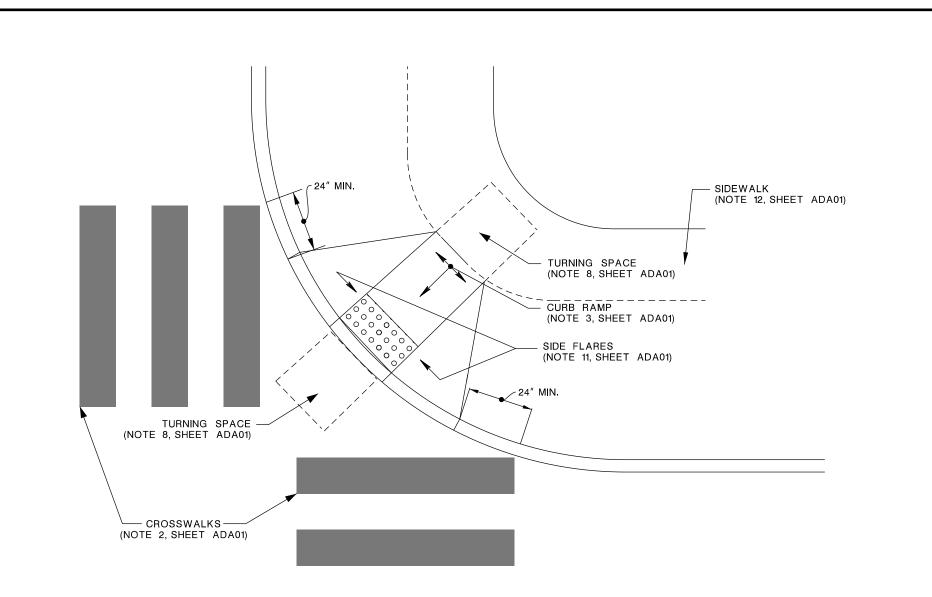
TYPE 2N

CURB RAMP

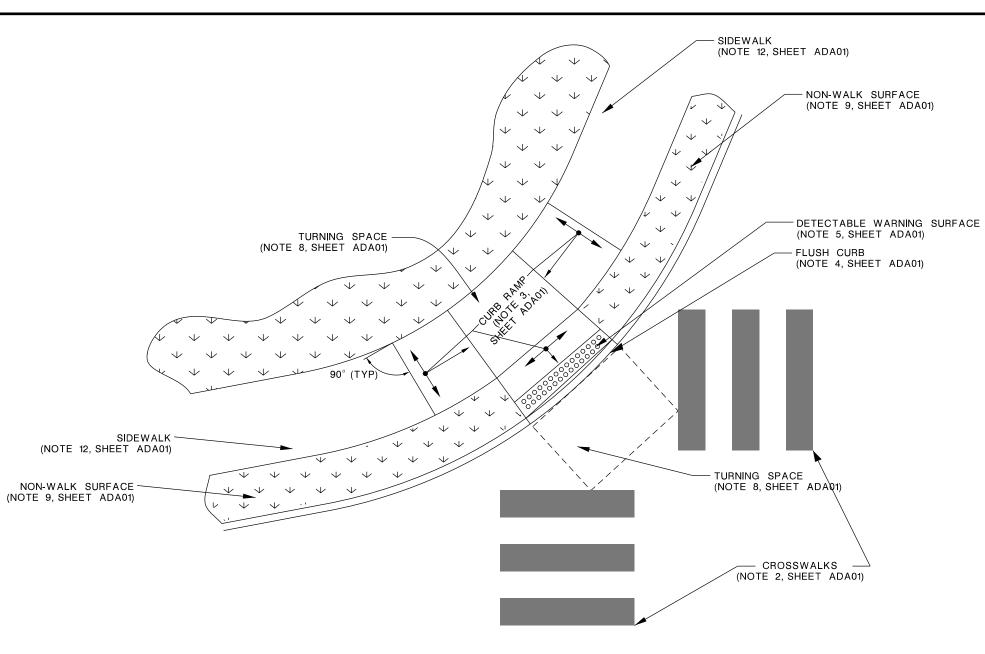
CURB RAMPS AND SIDEWALKS



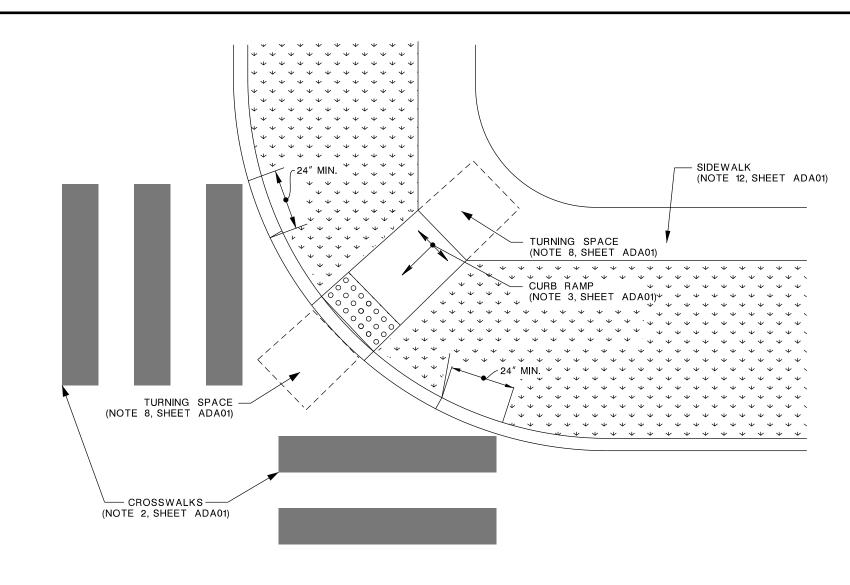




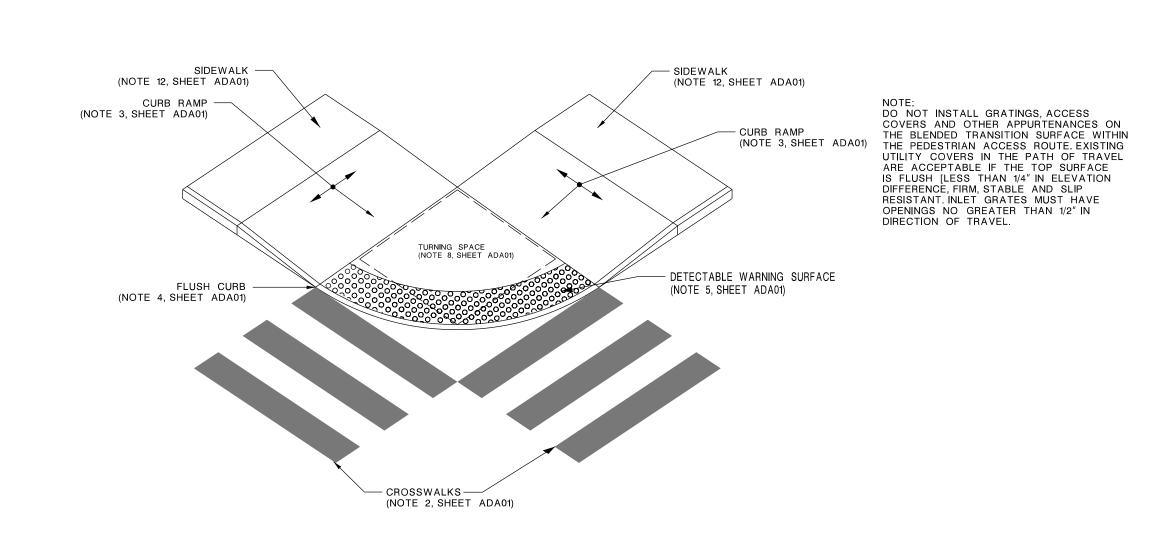
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CURB RAMP
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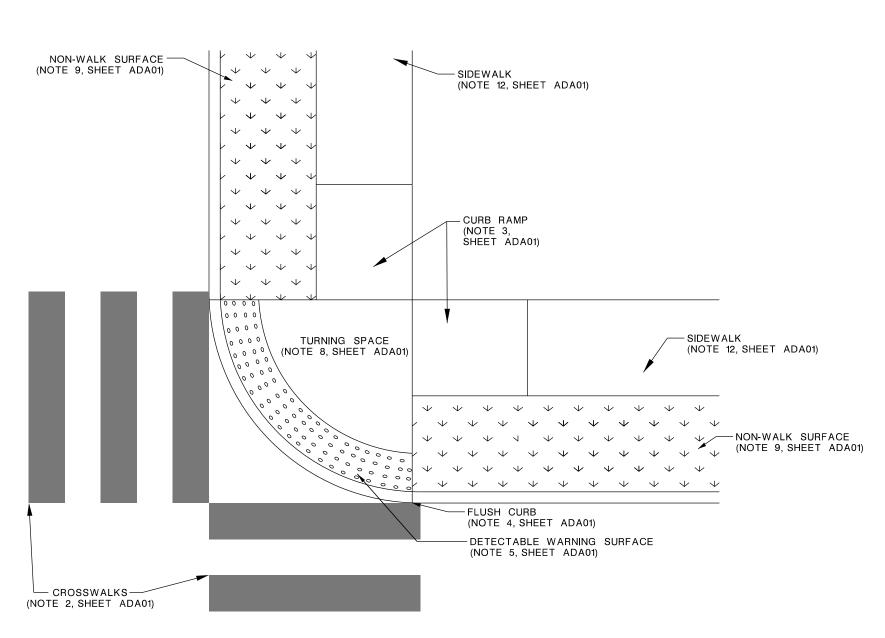
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CURB RAMP
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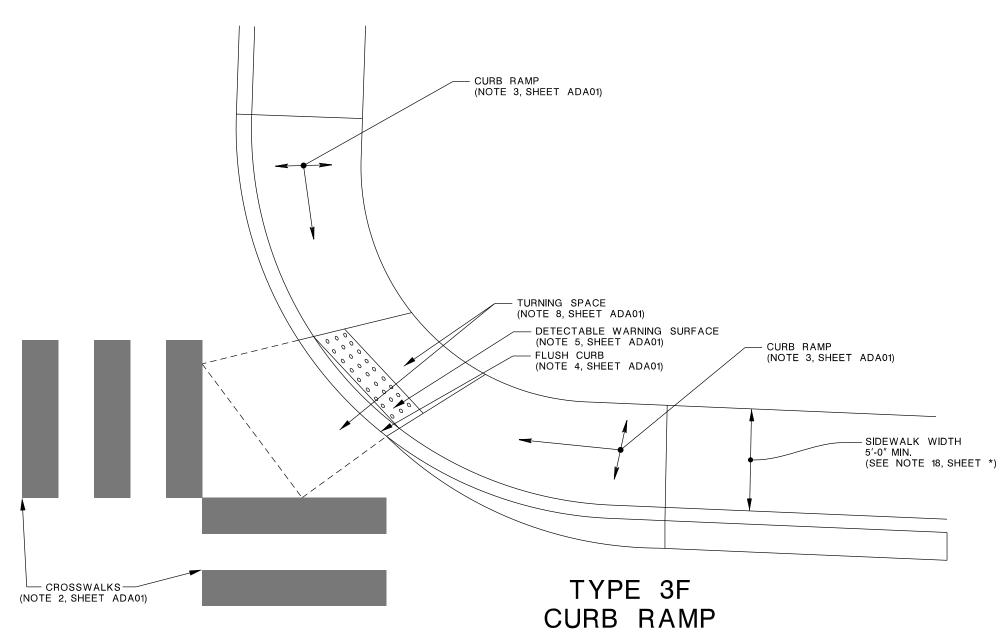
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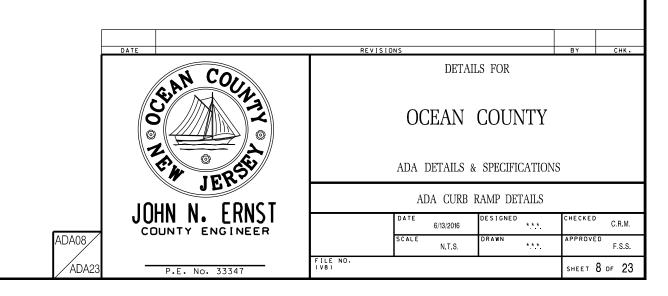
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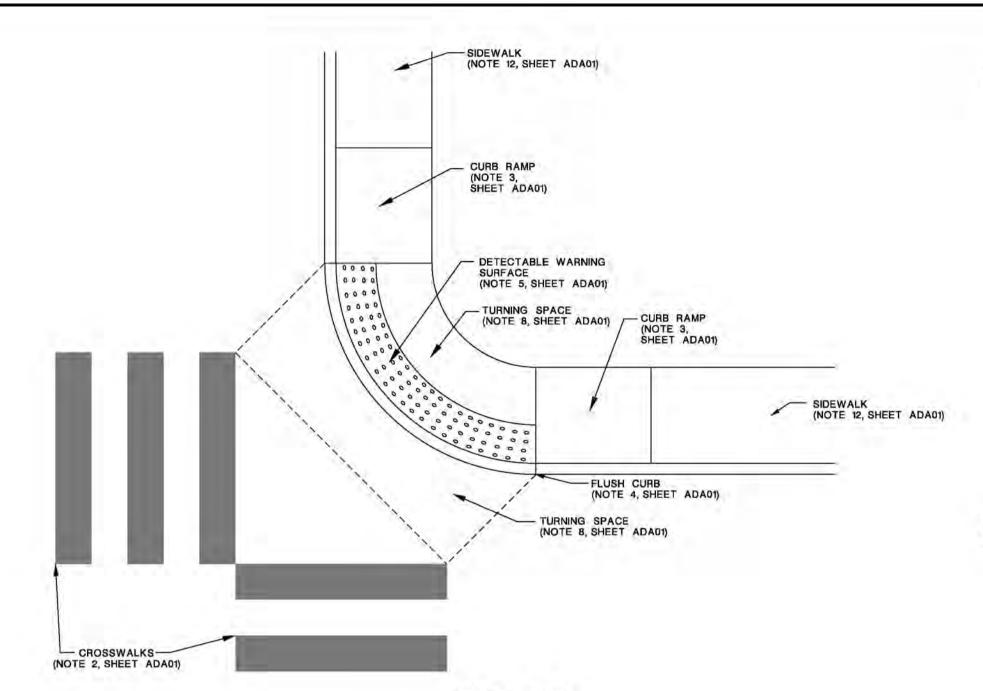


TYPE 3E BLENDED TRANSITION



(DIAGONAL - REQUIRES OCEAN COUNTY ENGINEERING DEPARTMENT APPROVAL)





TYPE 3G BLENDED TRANSITION (DIAGONAL - REQUIRES OCEAN COUNTY ENGINEERING DEPARTMENT APPROVAL)

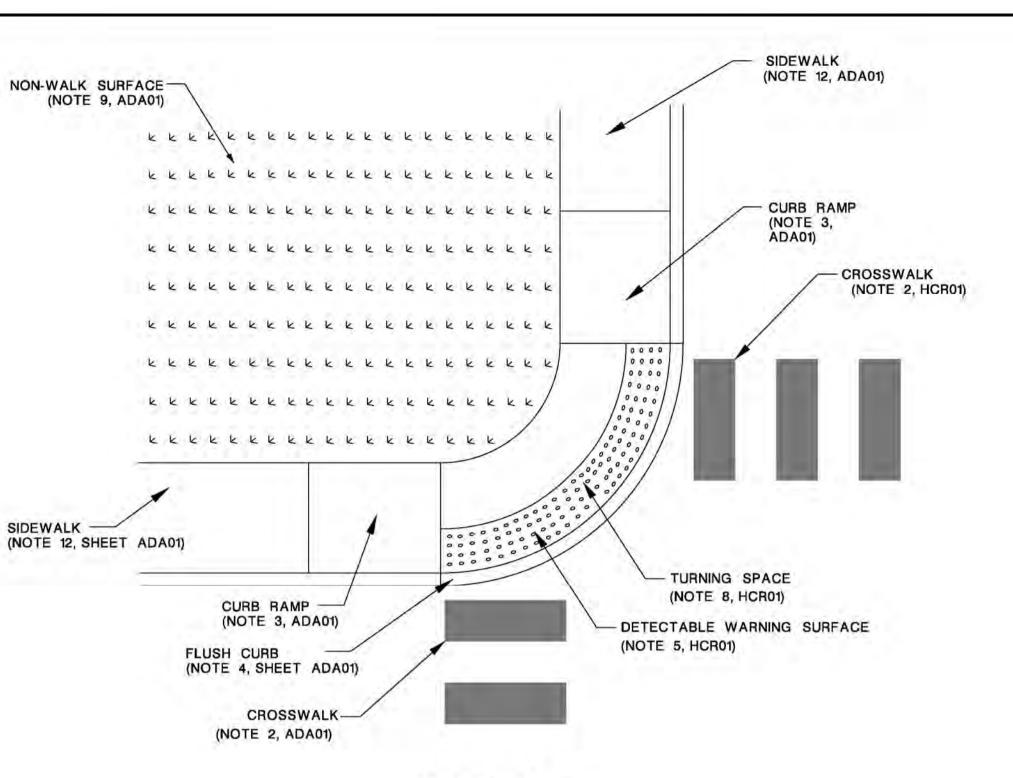
SIDEWALK

(NOTE 12, SHEET ADA01)

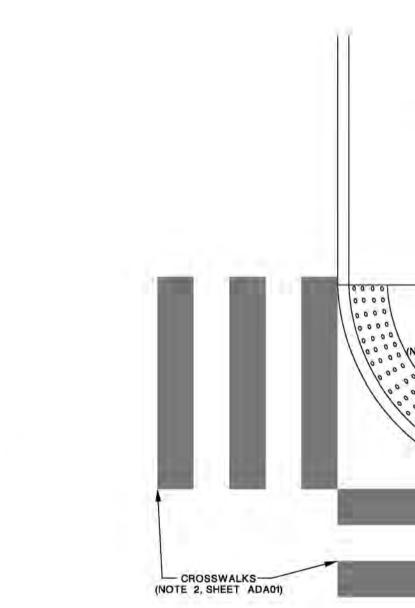
- FLUSH CURB (NOTE 4, SHEET ADA01)

DETECTABLE WARNING SURFACE (NOTE 5, SHEET ADAO1)

SIDEWALK (NOTE 12, SHEET ADA01)



TYPE 3H BLENDED TRANSITION

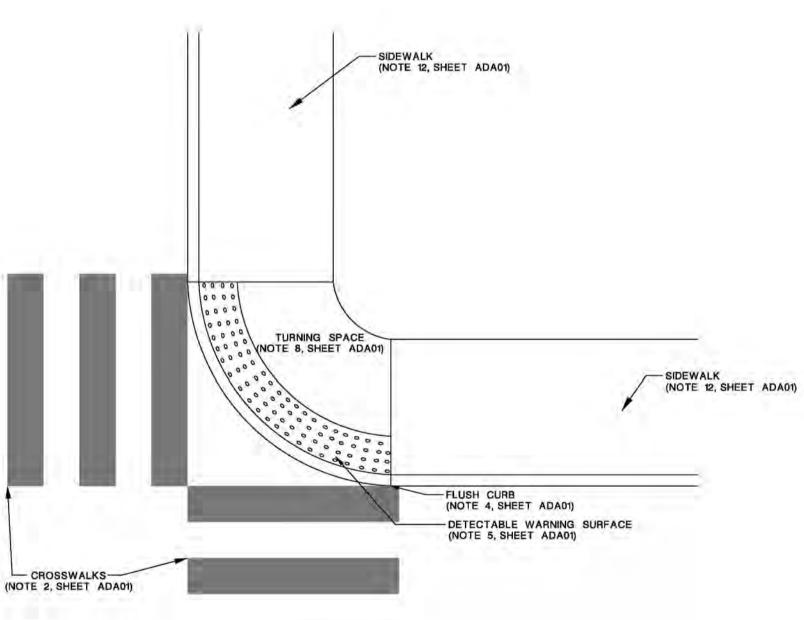


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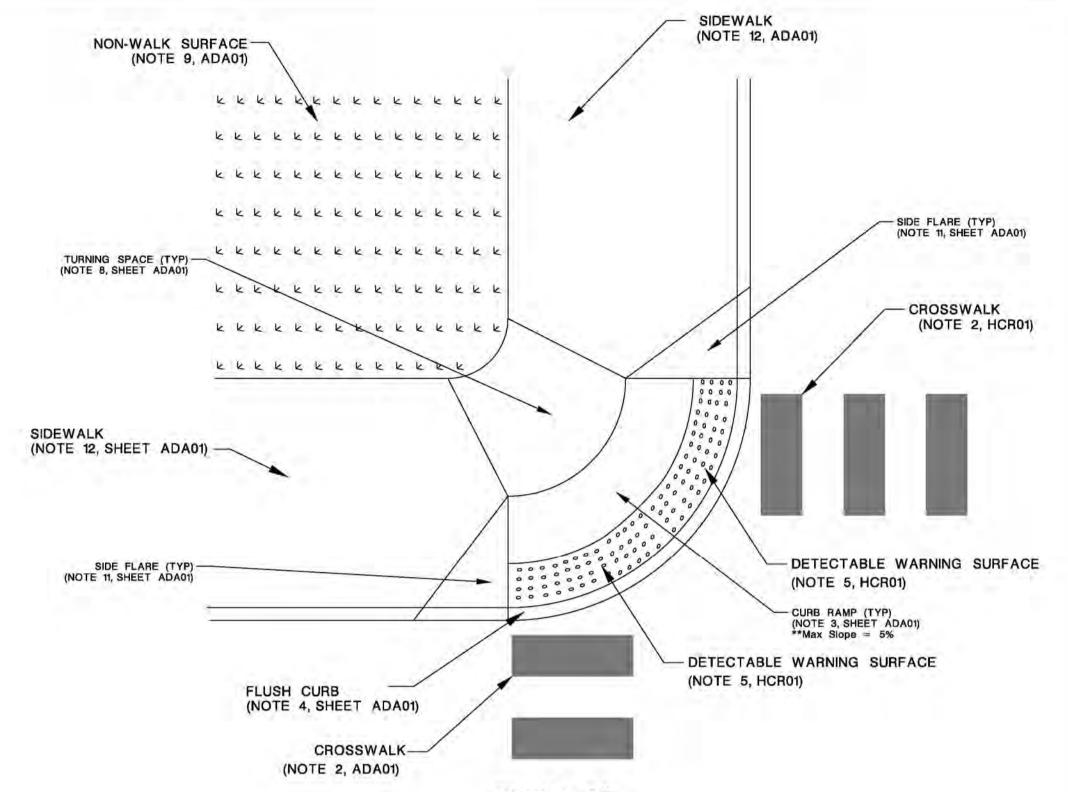
TURNING SPACE

NON-WALK SURFACE (NOTE 9, SHEET ADAO1)

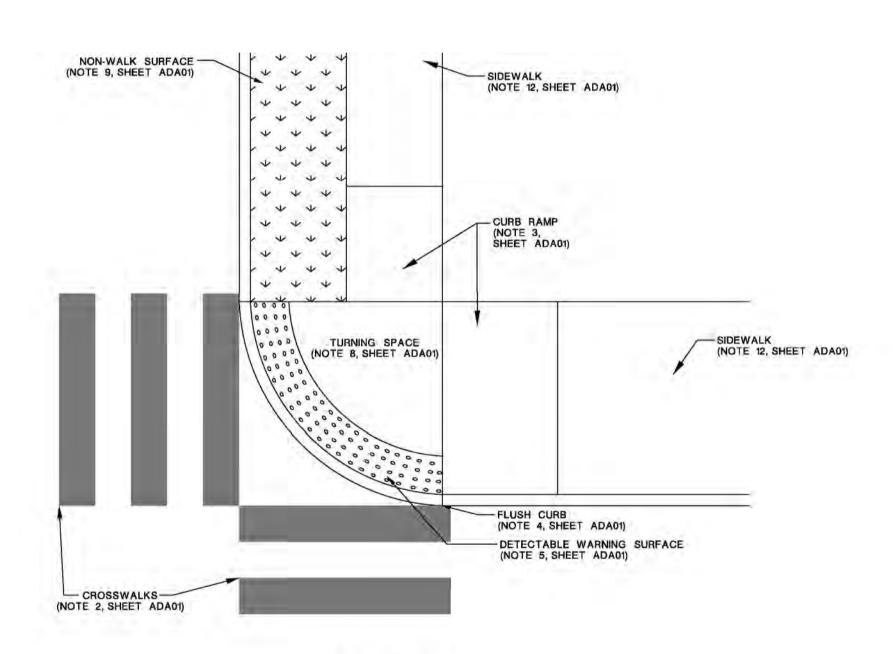
- CROSSWALKS-(NOTE 2, SHEET ADA01)



TYPE 3K

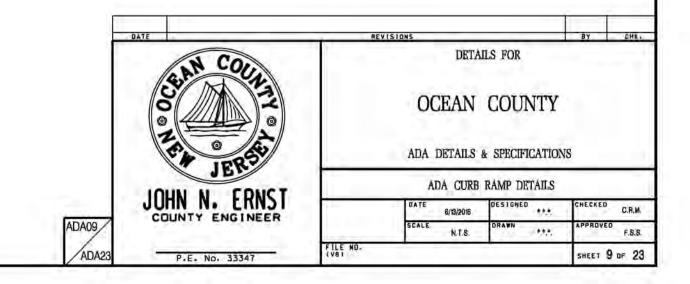


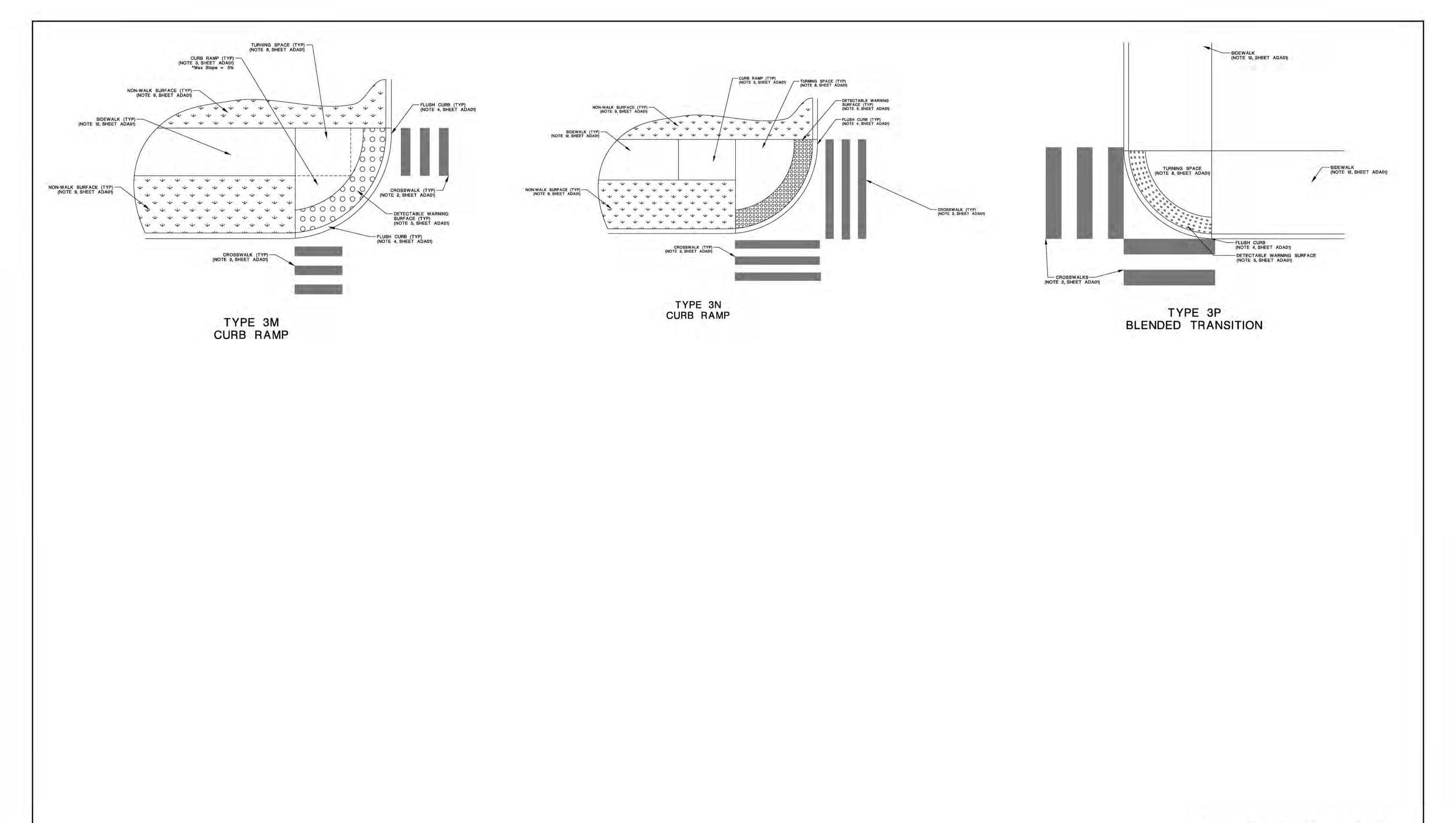
TYPE 3I BLENDED TRANSITION (DIAGONAL - REQUIRES OCEAN COUNTY ENGINEERING DEPARTMENT APPROVAL)

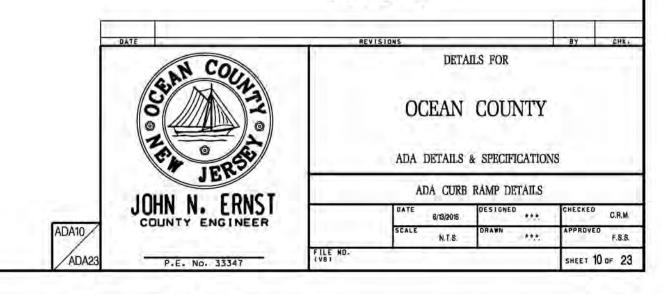


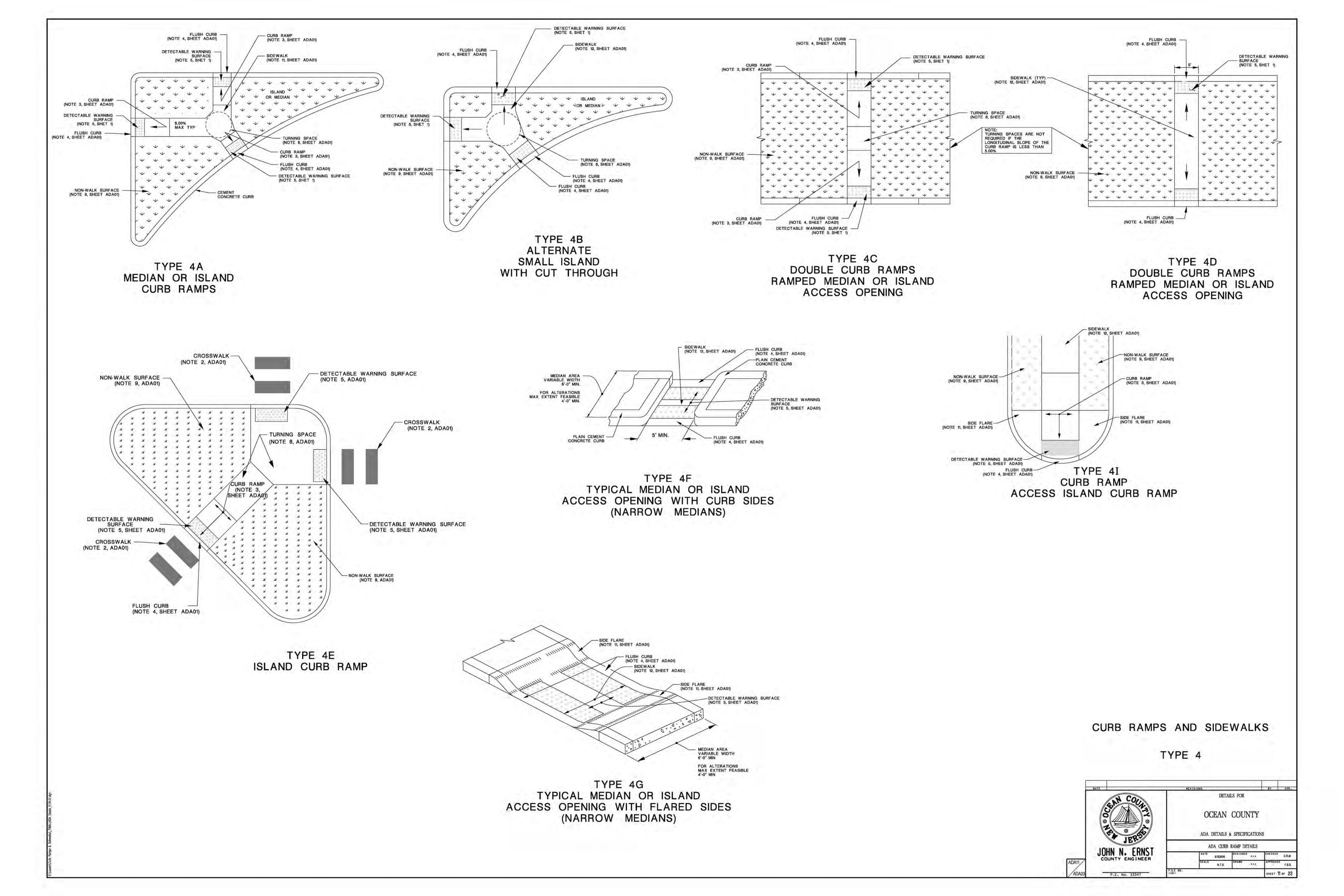
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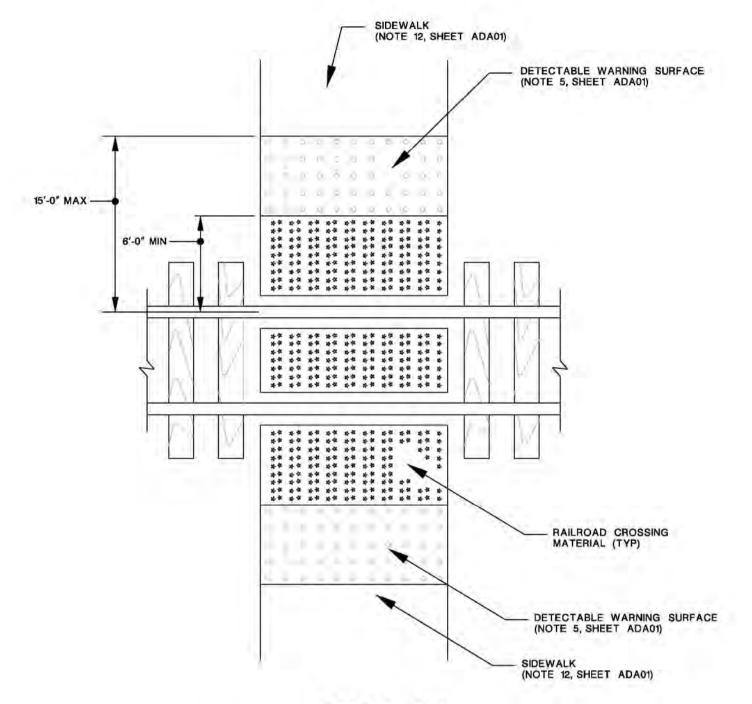
### CURB RAMPS AND SIDEWALKS



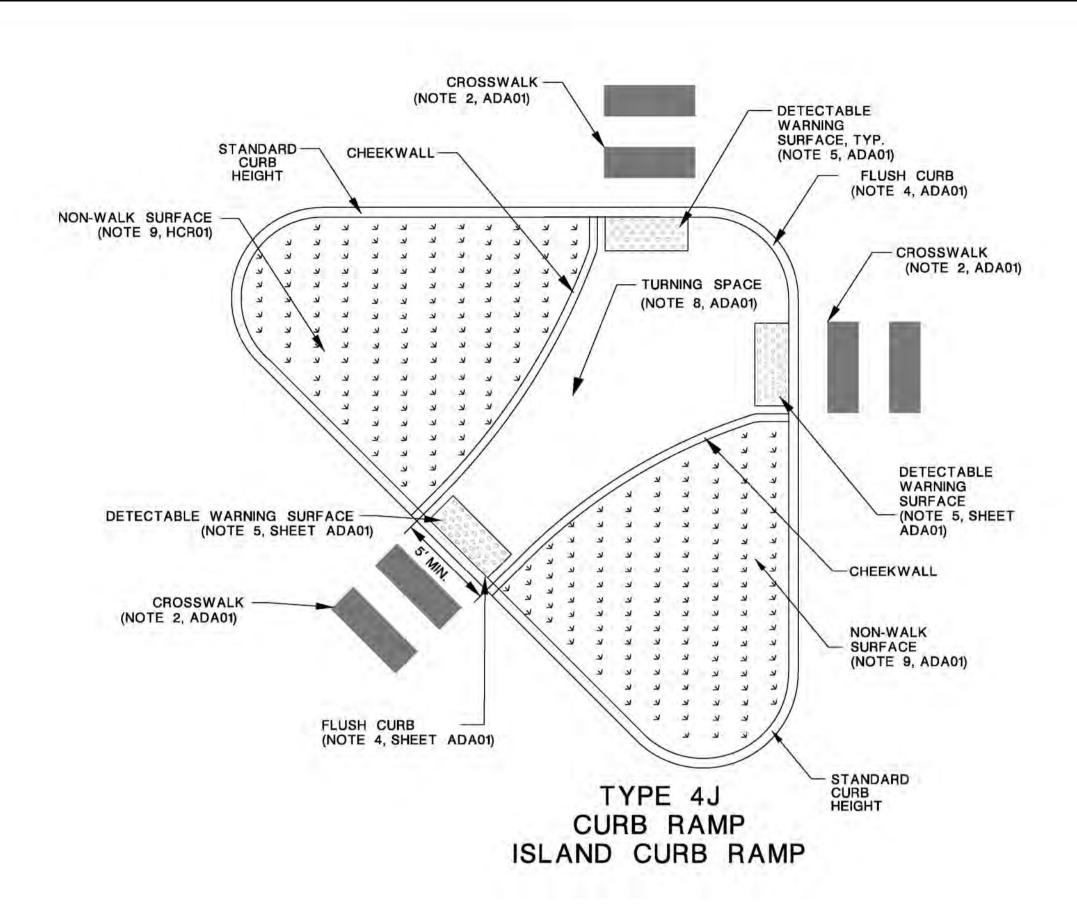


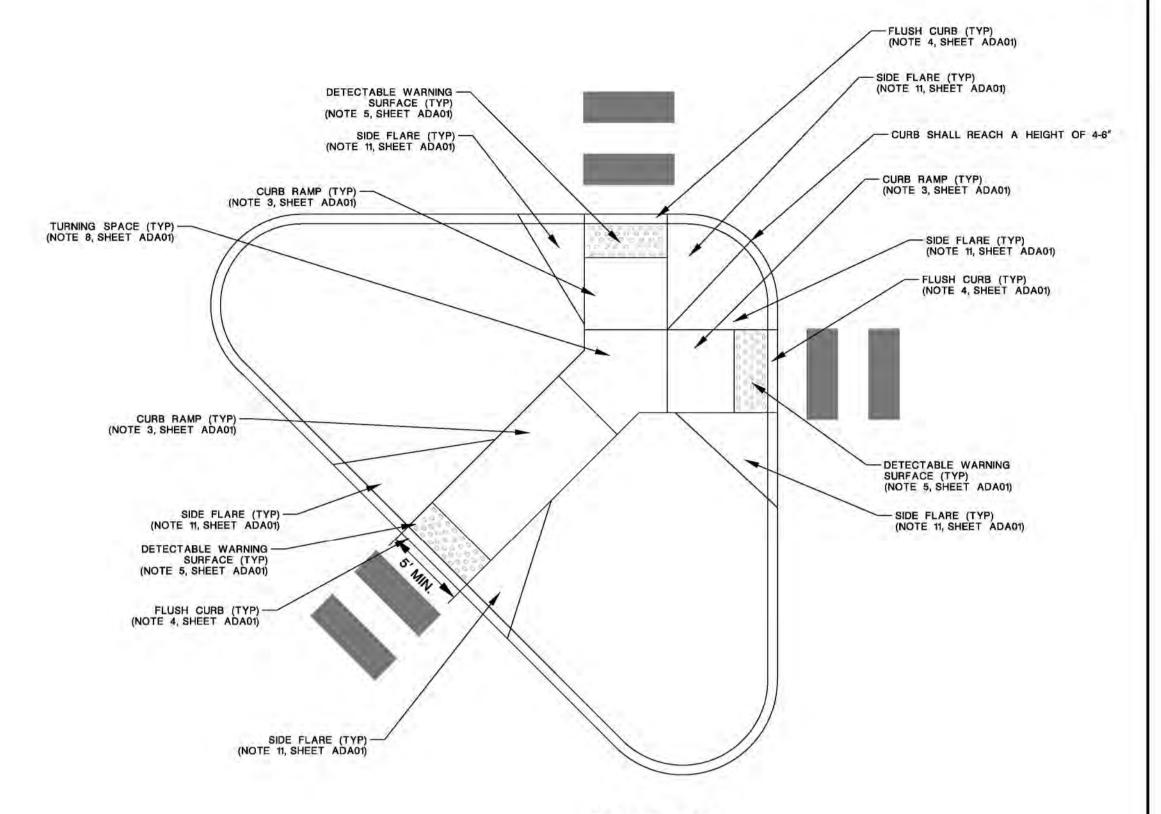




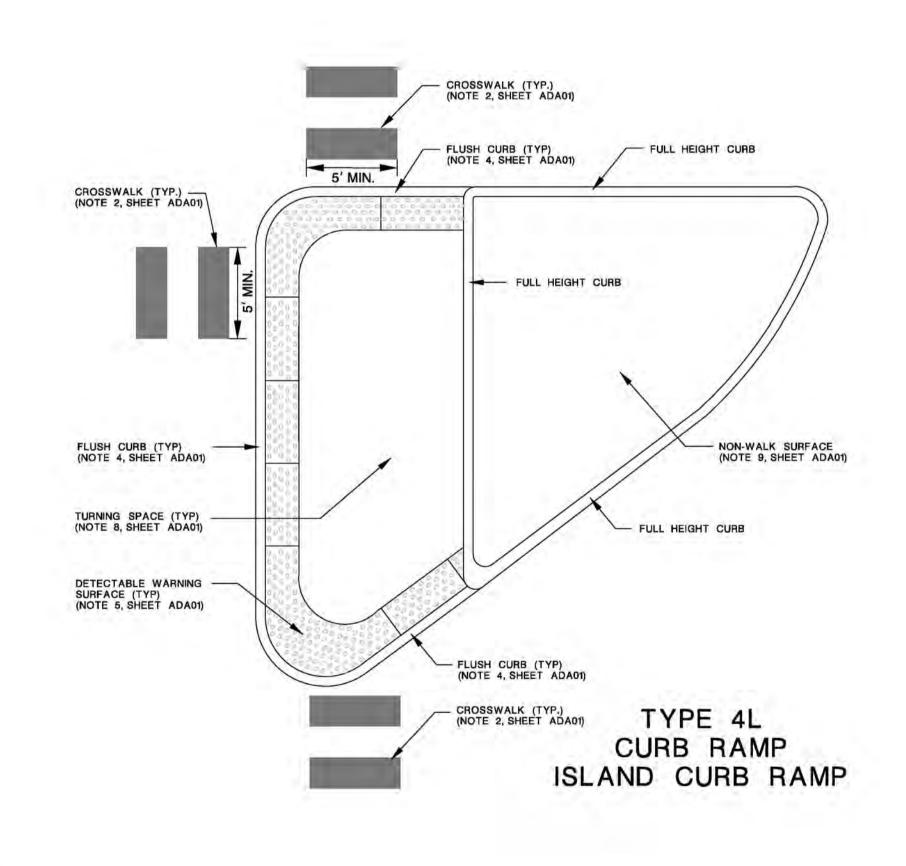


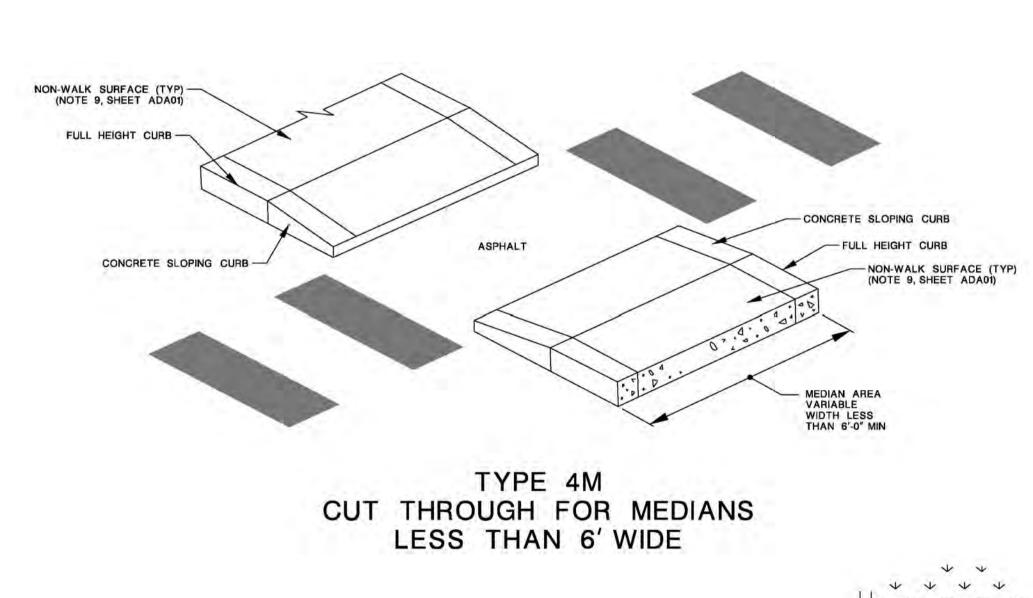
TYPE 4H
TYPICAL DETECTABLE WARNING
SURFACE AT RAILROAD CROSSING

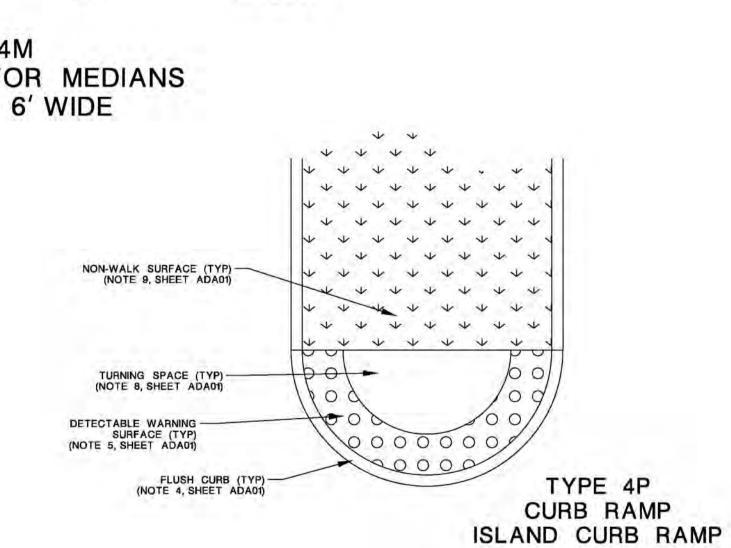


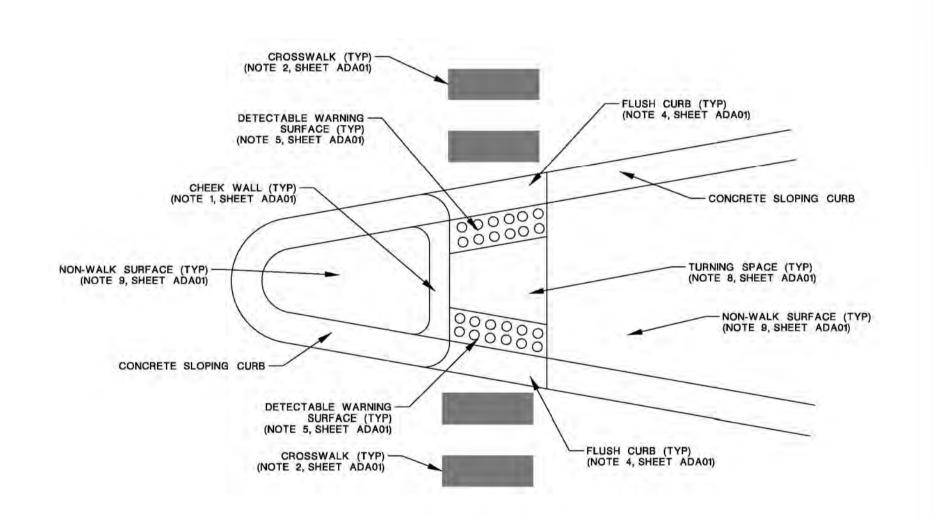


TYPE 4K
CURB RAMP
ISLAND CURB RAMP

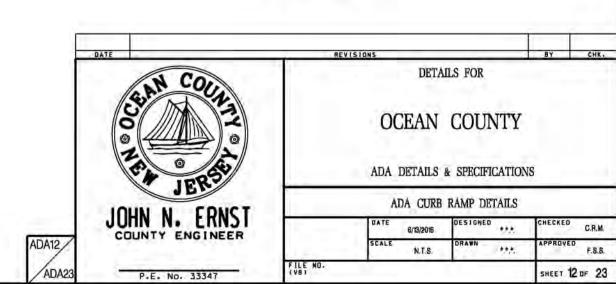








TYPE 4N CURB RAMP ISLAND CURB RAMP

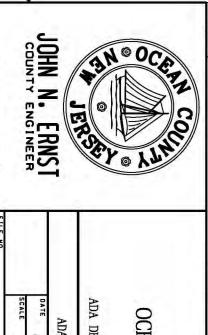


TURNING SPACE (TYP) (NOTE 8, SHEET ADAOT) N-WALK SURFACE (TYP) (NOTE 9, SHEET ADA01) CURB RAMP (TYP) (NOTE 3, SHEET ADAO1) FLUSH CURB (TYP) -(NOTE 4, SHEET ADA01) DETECTABLE WARNING SURFACE (TYP) (NOTE 5, SHEET ADAO1) CURB RAMP (TYP) - (NOTE 3, SHEET ADA01) TYPE 4Q CURB RAMP ISLAND CURB RAMP CURB RAMP (TYP)
(NOTE 3, SHEET ADA01) DETECTABLE WARNING SURFACE (TYP) (NOTE 5, SHEET ADA01) FLUSH CURB (TYP) (NOTE 4, SHEET ADA01) NON-WALK SURFACE (TYP) (NOTE 9, SHEET ADA01) NON-WALK SURFACE (TYP) URB SHALL REACH A HEIGHT OF 4-6" FLUSH CURB (TYP) (NOTE 4, SHEET ADA01) TYPE 4S SMALL ISLAND DETECTABLE WARNING SURFACE (NOTE 5, SHET 1) - DETECTABLE WARNING SURFACE (TYP) (NOTE 5, SHEET ADAO1) (NOTE 4, SHEET ADA01) SIDEWALK (5' WIDE)
(NOTE 12, SHEET ADA01) TURNING SPACE (NOTE 8, SHEET ADA01) TURNING SPACE (TYP) (NOTE 8, SHEET ADAO1) NON-WALK SURFACE (TYP) -(NOTE 9, SHEET ADA01) CURB RAMP (TYP) - (NOTE 3, SHEET ADAO1) DETECTABLE WARNING — SURFACE (TYP) (NOTE 5, SHEET ADAO1) FLUSH CURB (TYP) - (NOTE 4, SHEET ADA01) CURB RAMP (TYP) (NOTE 3, SHEET ADA01) DETECTABLE WARNING — SURFACE (TYP) (NOTE 5, SHEET ADAO1) TYPE 4R
CURB RAMP
ISLAND CURB RAMP DETECTABLE WARNING SURFACE (TYP) (NOTE 5, SHEET ADAO1) -NON-WALK SURFACE (TYP) (NOTE 9, SHEET ADA01) FLUSH CURB (TYP)
(NOTE 4, SHEET ADA01) NON-WALK SURFACE (TYP) CURB SHALL REACH A HEIGHT OF 4-6" -CURB RAMP (TYP) (NOTE 3, SHEET ADA01) -FLUSH CURB (TYP) (NOTE 4, SHEET ADA01) - CHEEK WALL (TYP) (NOTE 1, SHEET ADA01)

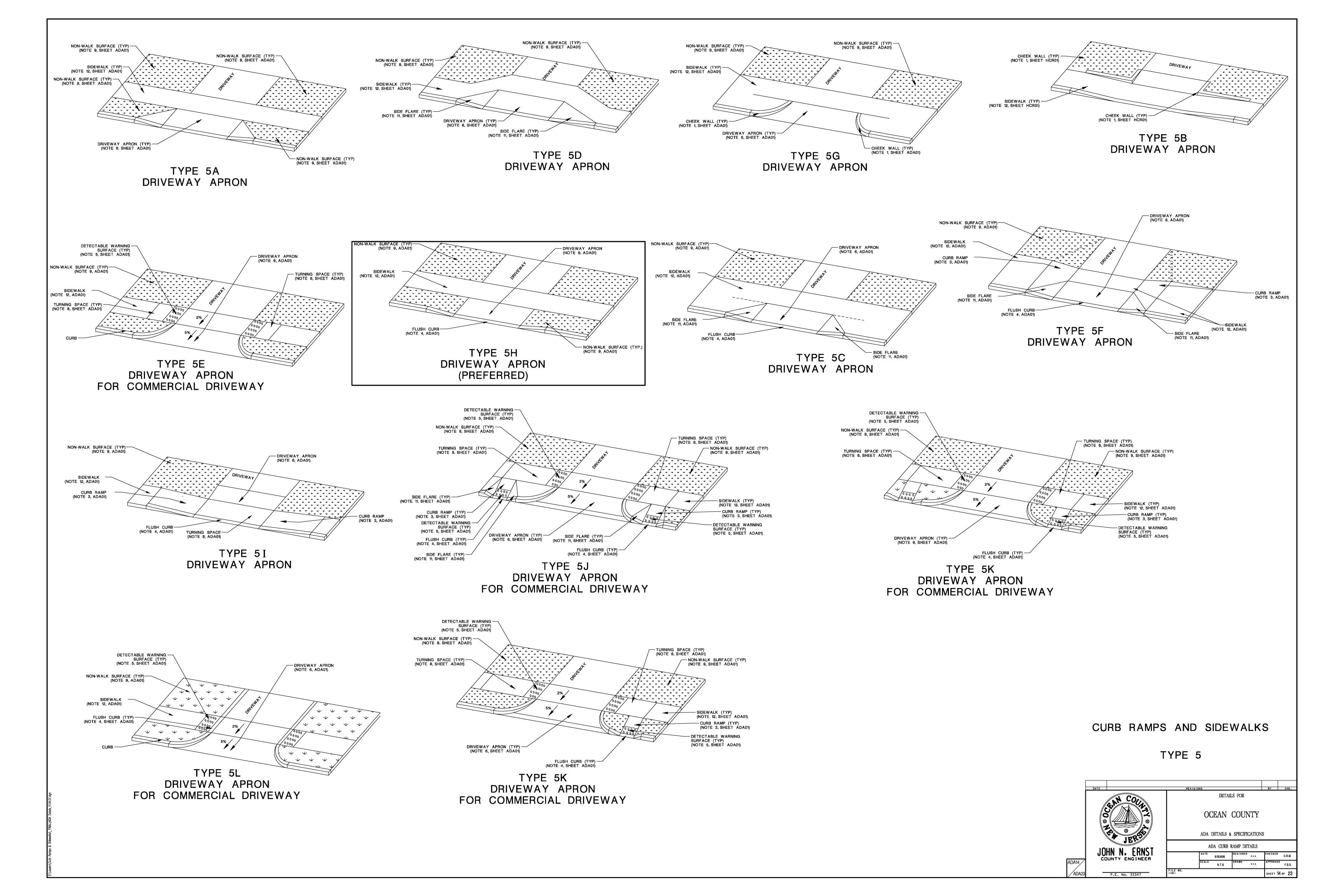


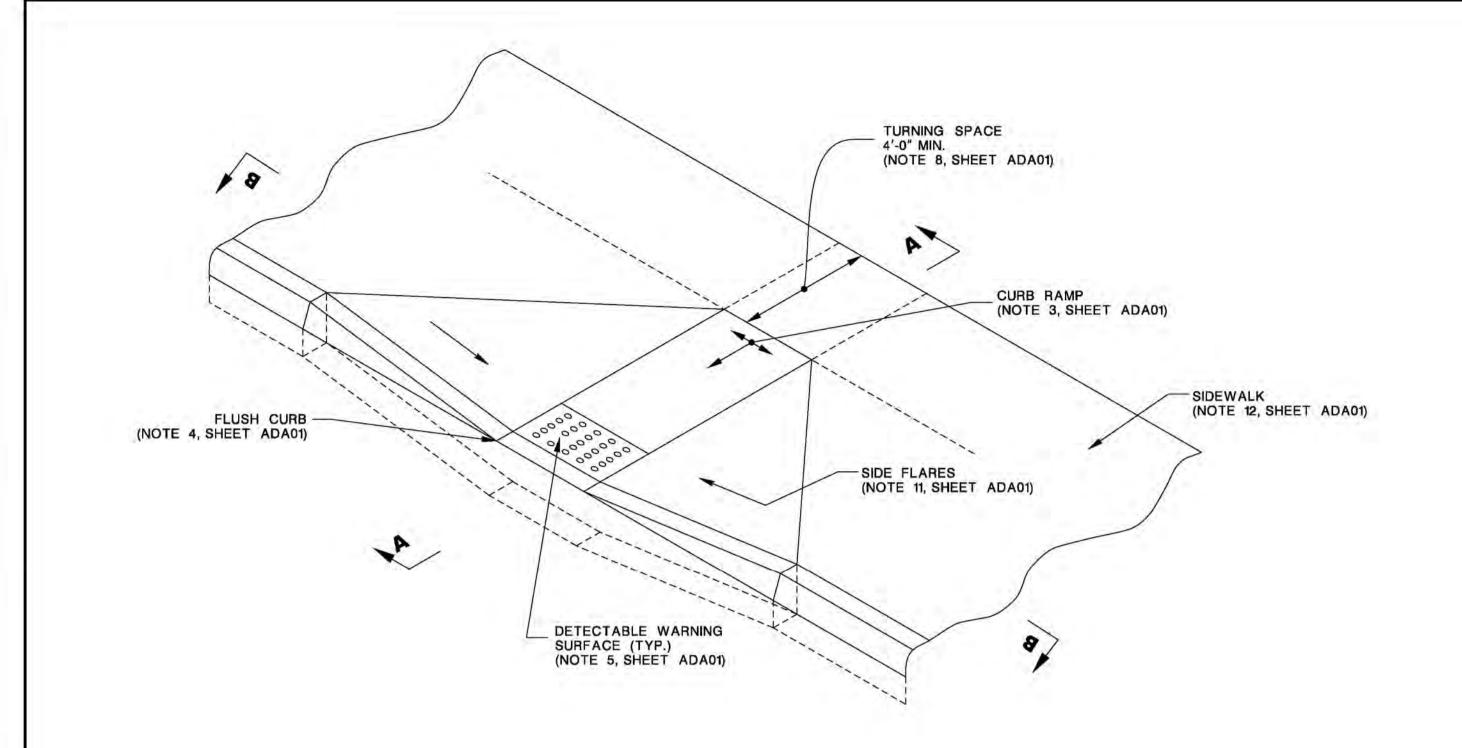
TYPE 4

CURB RAMPS AND SIDEWALKS

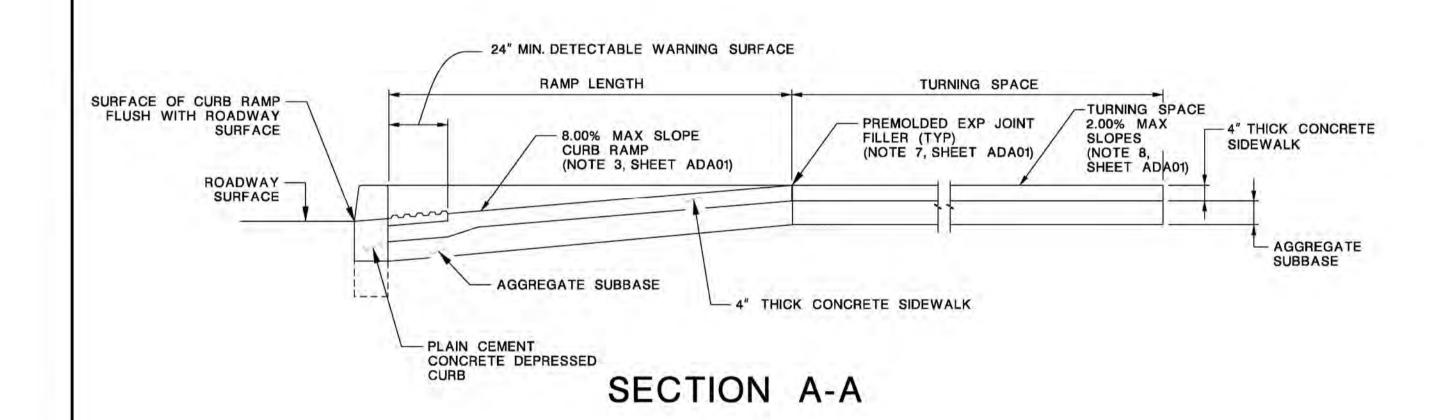


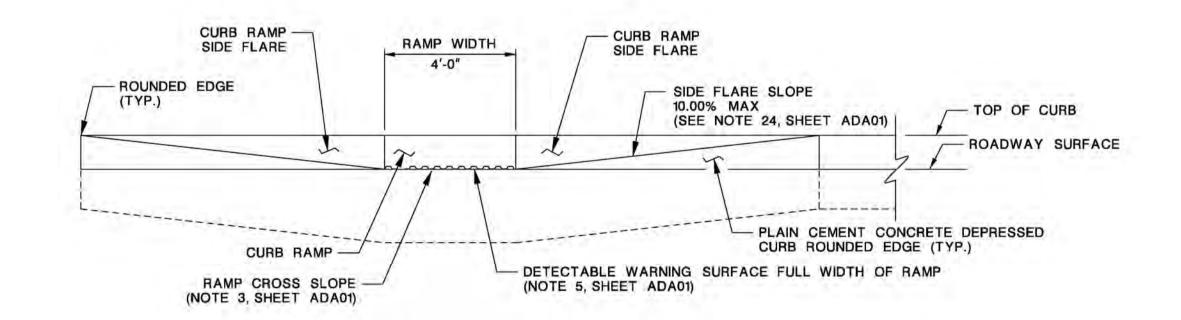
DETAILS FOR  OCEAN COUNTY  ADA DETAILS & SPECIFICATIONS  ADA CURB RAMP DETAILS		FONCT	E ROSE	○ YTK	COL	
	IDESTRUED	ADA CURB RAMP DETAILS	ADA DETAILS & SPECIFICATIONS	OCEAN COUNTY	DETAILS FOR	



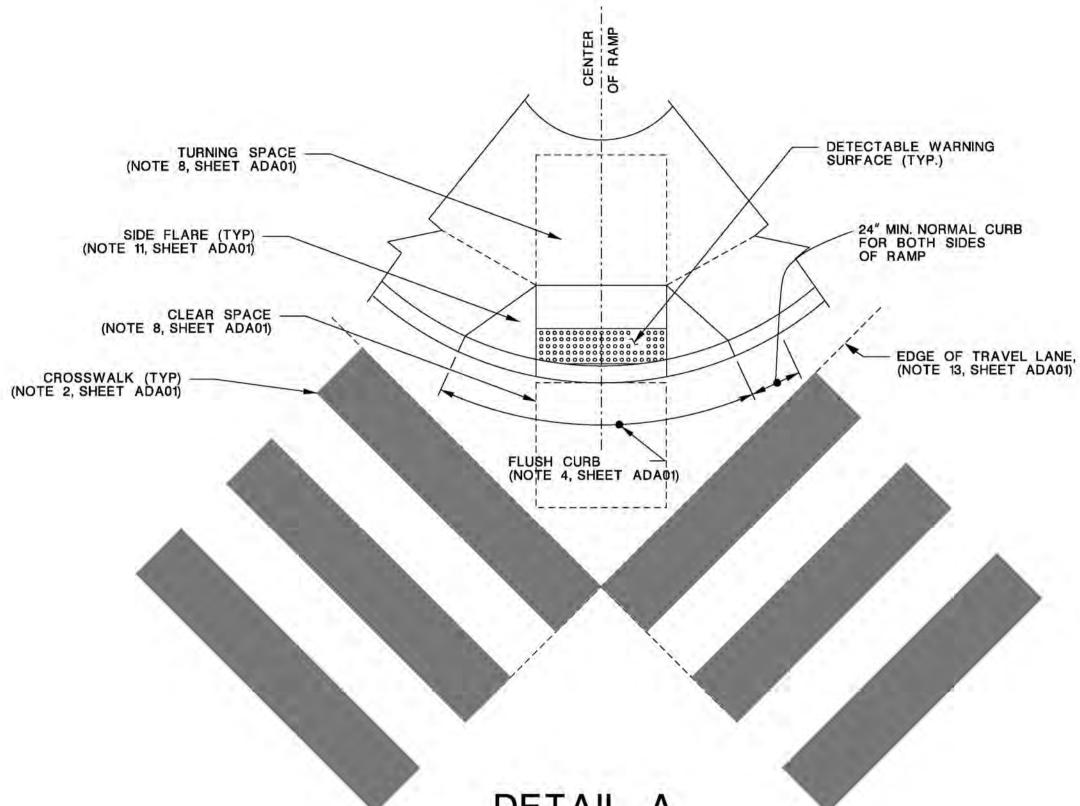


# TYPICAL TYPE 1 CURB RAMP

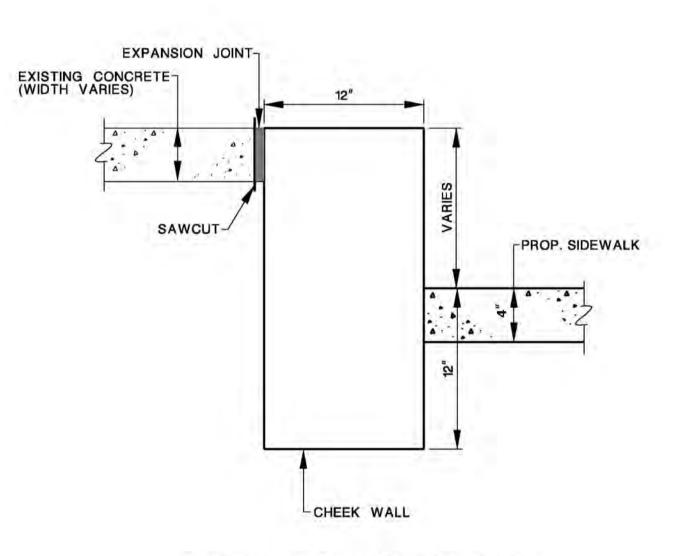




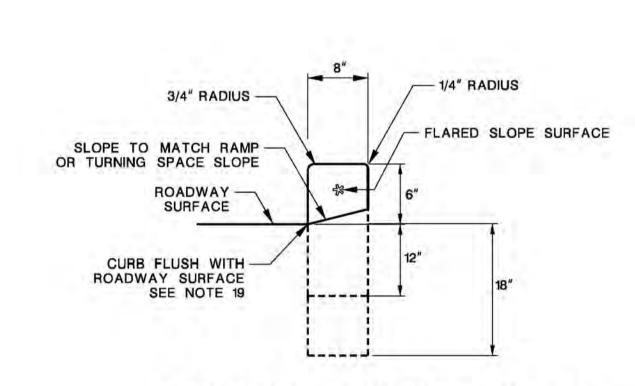
SECTION B-B



DETAIL A
CLEAR SPACE
AT CROSSWALK MARKINGS PLAN
(DIAGONAL - REQUIRES OCEAN COUNTY
ENGINEERING DEPARTMENT APPROVAL)



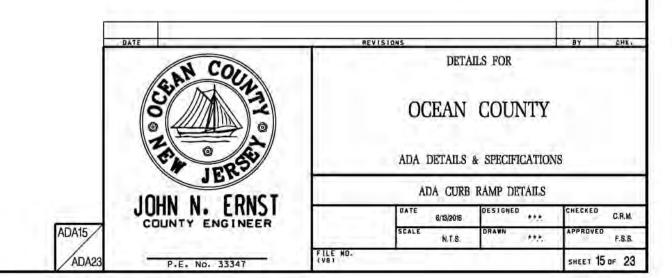
INSTALLATION OF SIDEWALK & CHEEK WALLS IN AN EXISTING CONCRETE ISLAND

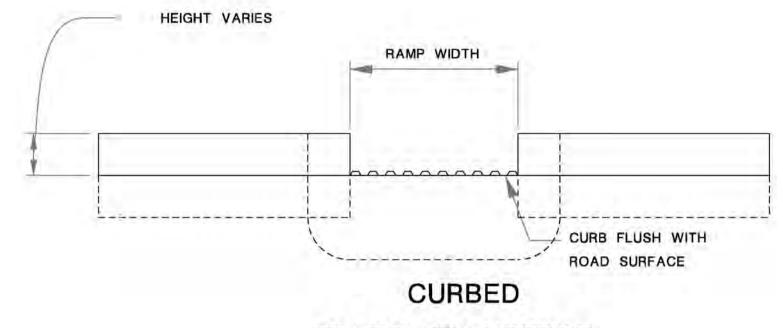


TYPICAL FLUSH CURB FOR CURB RAMPS

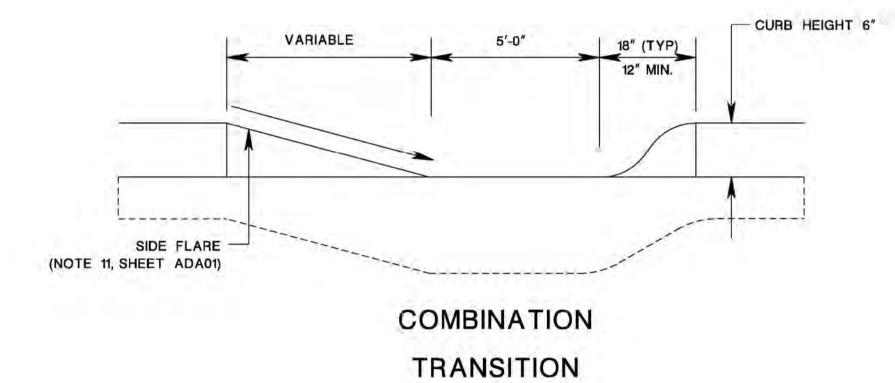
CURB RAMPS AND SIDEWALKS

TYPICAL SECTIONS





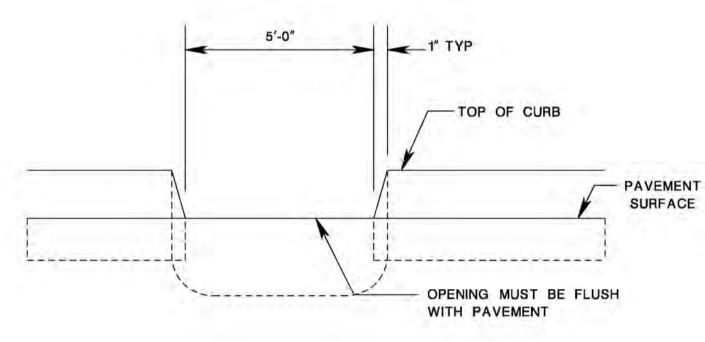
FLARE TRANSITION

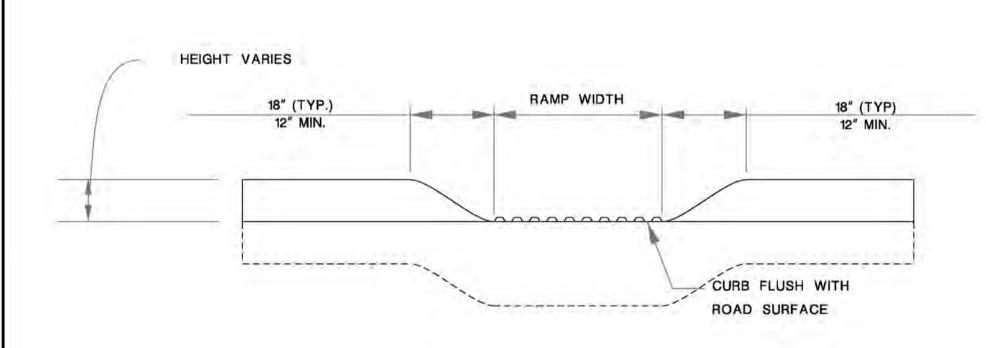


\_\_\_\_\_ \_\_\_\_\_\_ COMBINATION

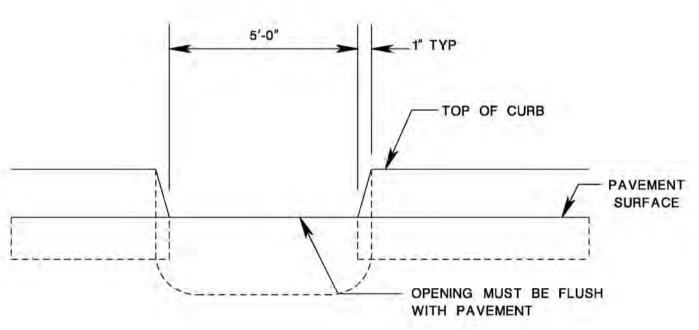
TRANSITION

HEIGHT VARIES

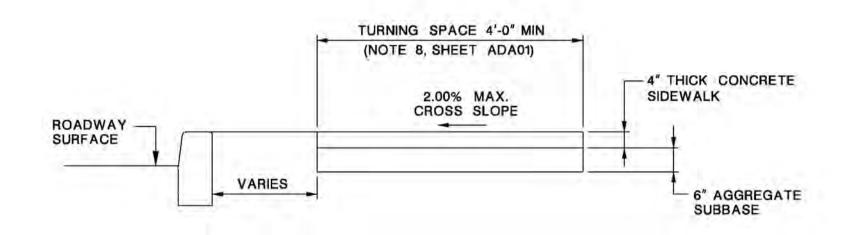




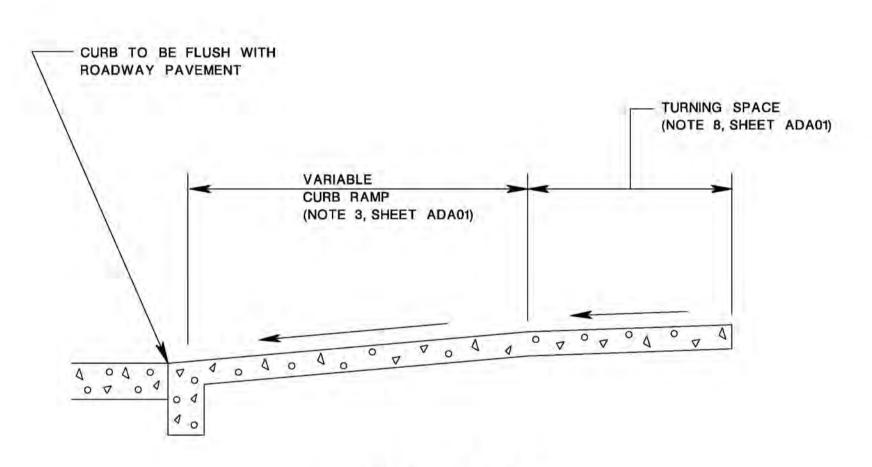
NON-TRAVERSABLE ROLLED FLARE TRANSITION



MEDIAN/ISLAND TRANSITION



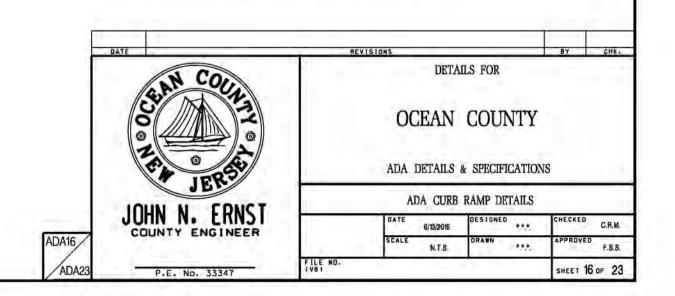
SIDE VIEW OF TURNING SPACE



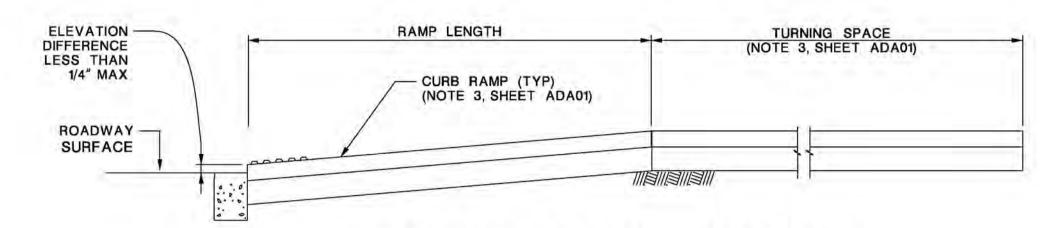
SIDEWALK TYPICAL SECTION

CURB RAMPS AND SIDEWALKS

TYPICAL SECTIONS

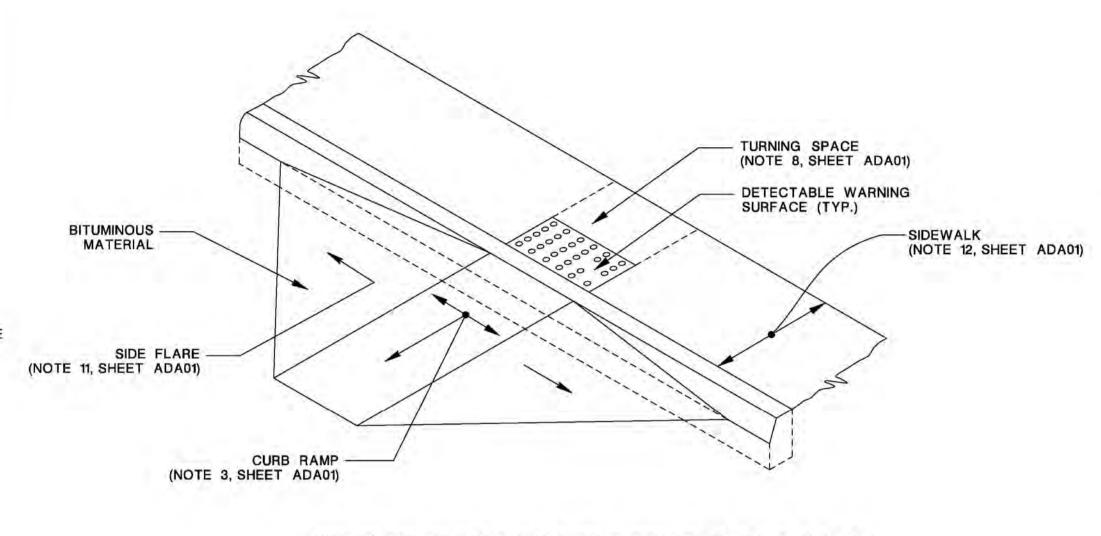


TYPICAL ELEVATIONS FOR FLUSH CURBS



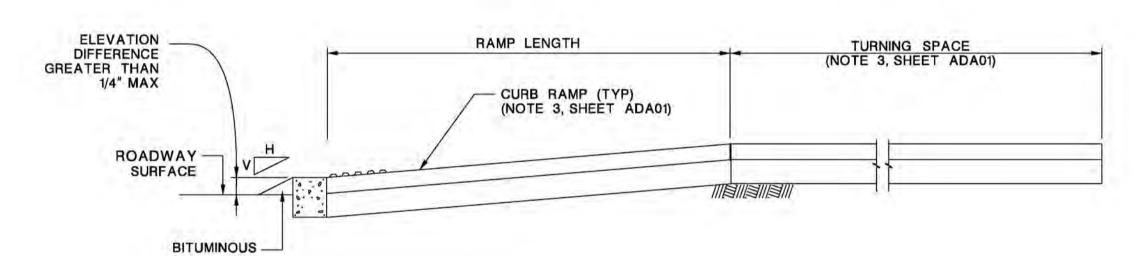
# EXISTING RAMP SECTION (VERTICAL DROP AT RAMP)

RECOMMENDED CORRECTION: RECONSTRUCT THE ENTIRE (OR PORTIONS OF) RAMP, TURNING SPACES AND FLARES WHERE APPLICABLE (SEE RAMP RECONSTRUCTION DETAIL ON SHEET ADA019)



NOTES: DO NOT USE TYPE 1J CURB RAMPS IN VEHICULAR TRAFFIC LANES, PARKING SPACES, OR ACCESS AISLES. CONSTRUCT TYPE 1J BUILT-UP CURB RAMP OF BITUMINOUS MATERIAL AS INDICATED, INCLUDING SURFACE PREPARATION AND TACK COAT, AS REQUIRED.

# (BUILT-UP, FOR ALTERATIONS ONLY) OCEAN COUNTY ENGINEERING DEPARTMENT APPROVAL REQUIRED

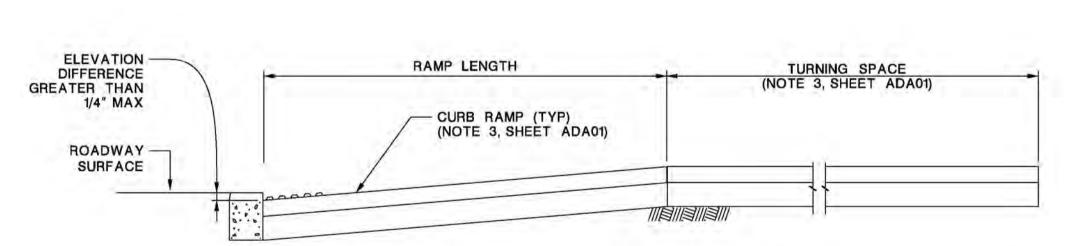


# EXISTING RAMP SECTION (VERTICAL DROP AT ROAD SURFACE)

RECOMMENDED CORRECTION: ELEVATION DIFFERENCE GREATER THAN 1/4" AND LESS THAN OR EQUAL TO 1/2": PLACE BITUMINOUS MATERIAL AT FACE OF CURB TO BEVEL TRANSITION AT A 2:1 (HORZ: VERT) RATE AS SHOWN.

ELEVATION DIFFERENCE GREATER THAN 1/2", USE 8.00% MAX: PLACE BITUMINOUS MATERIAL AT FACE OF CURB TO BEVEL TRANSITION AT A SLOPE EQUAL TO THE RAMP SLOPE OR TURNING SPACE SLOPE.

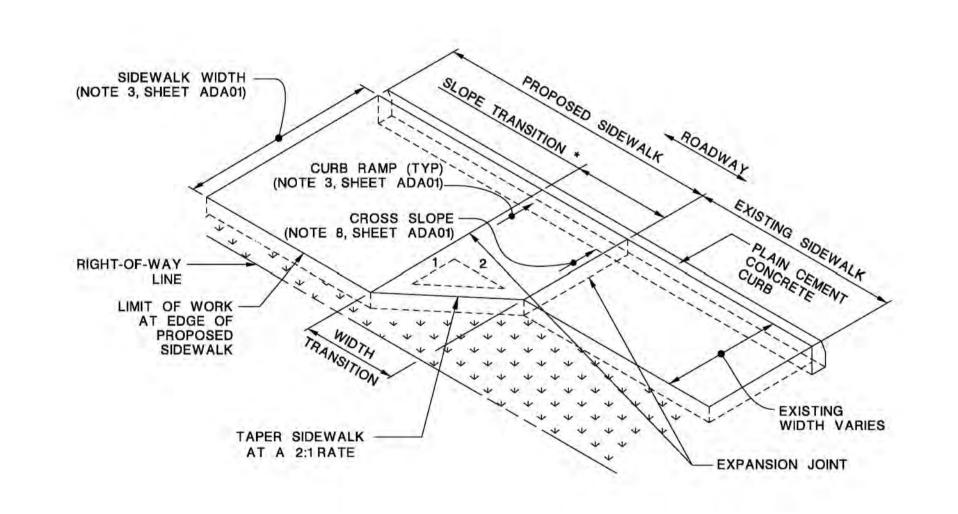
GRINDING THE CURB TO PROVIDE A MAXIMUM SLOPE OF 8.00% IS ACCEPTABLE & FINISHED SURFACE MUST NOT HAVE ELEVATION DIFFERENCES GREATER THAN 1/4".



# EXISTING RAMP SECTION (RAMP SETTLEMENT)

RECOMMENDED CORRECTION: RECONSTRUCT THE ENTIRE (OR PORTIONS OF) RAMP, TURNING SPACES AND FLARES WHERE APPLICABLE (SEE RAMP RECONSTRUCTION DETAIL ON SHEET ADA019)

ALTERATION DETAILS



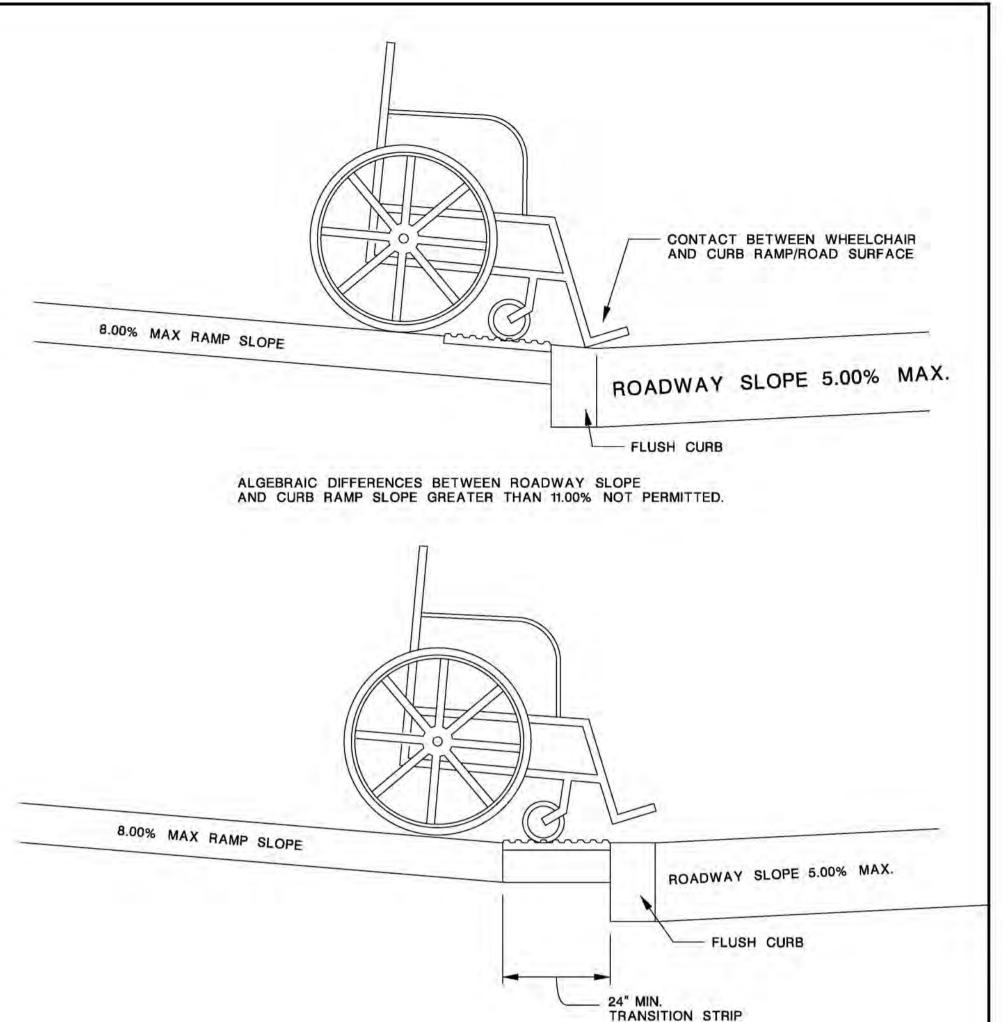
# TRANSITION TO EXISTING SIDEWALK DETAIL

\* MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: DELTA % SLOPE X 0.5'.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: CHANGE IN WIDTH X (2).

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE, FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.



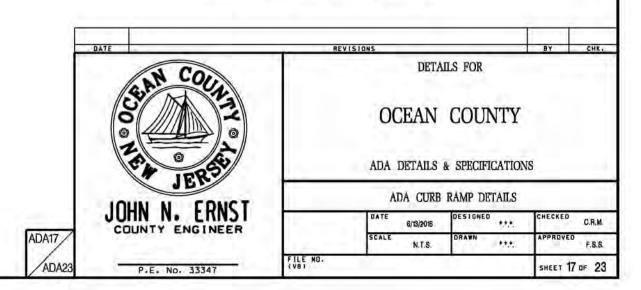
DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE ARE GREATER THAN 11.00%.

TRANSITION STRIP SLOPE NOT TO EXCEED 2.00%

CHANGE OF GRADE LIMITATIONS

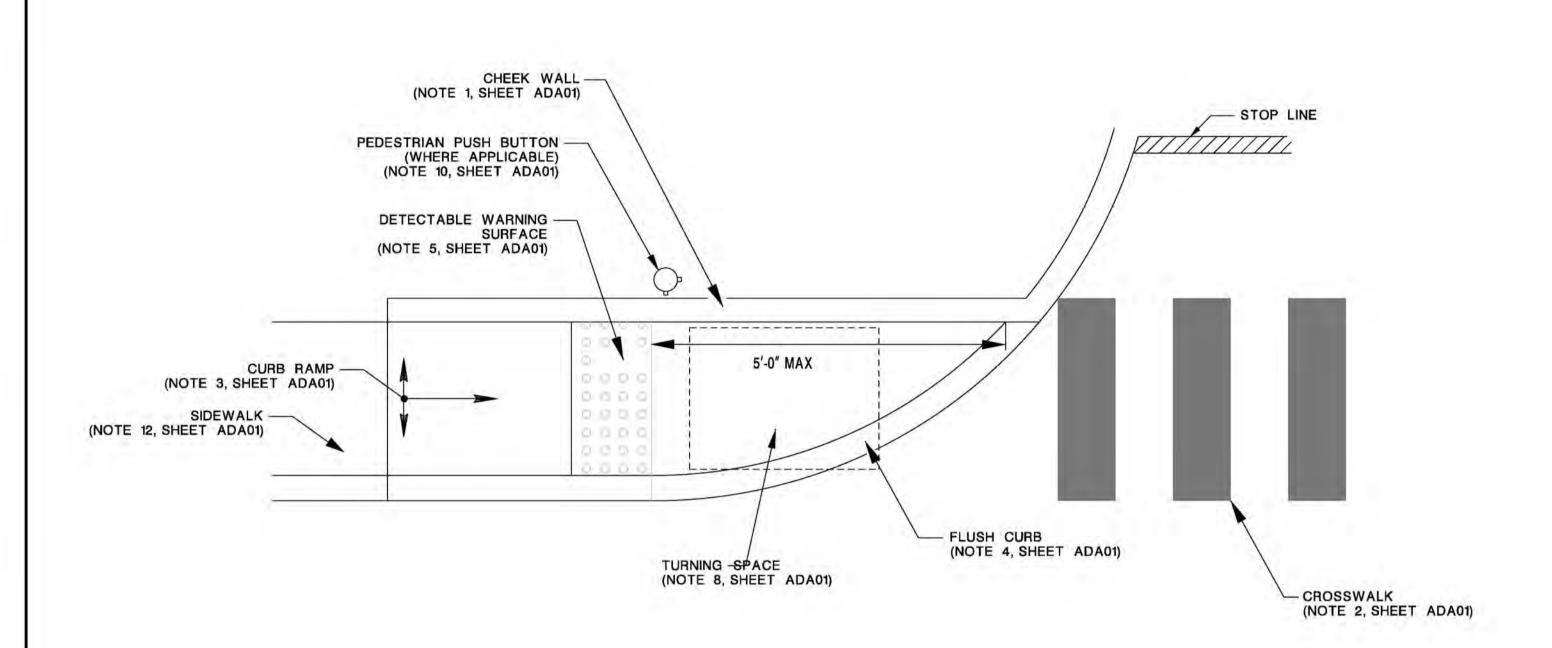
### CURB RAMPS AND SIDEWALKS

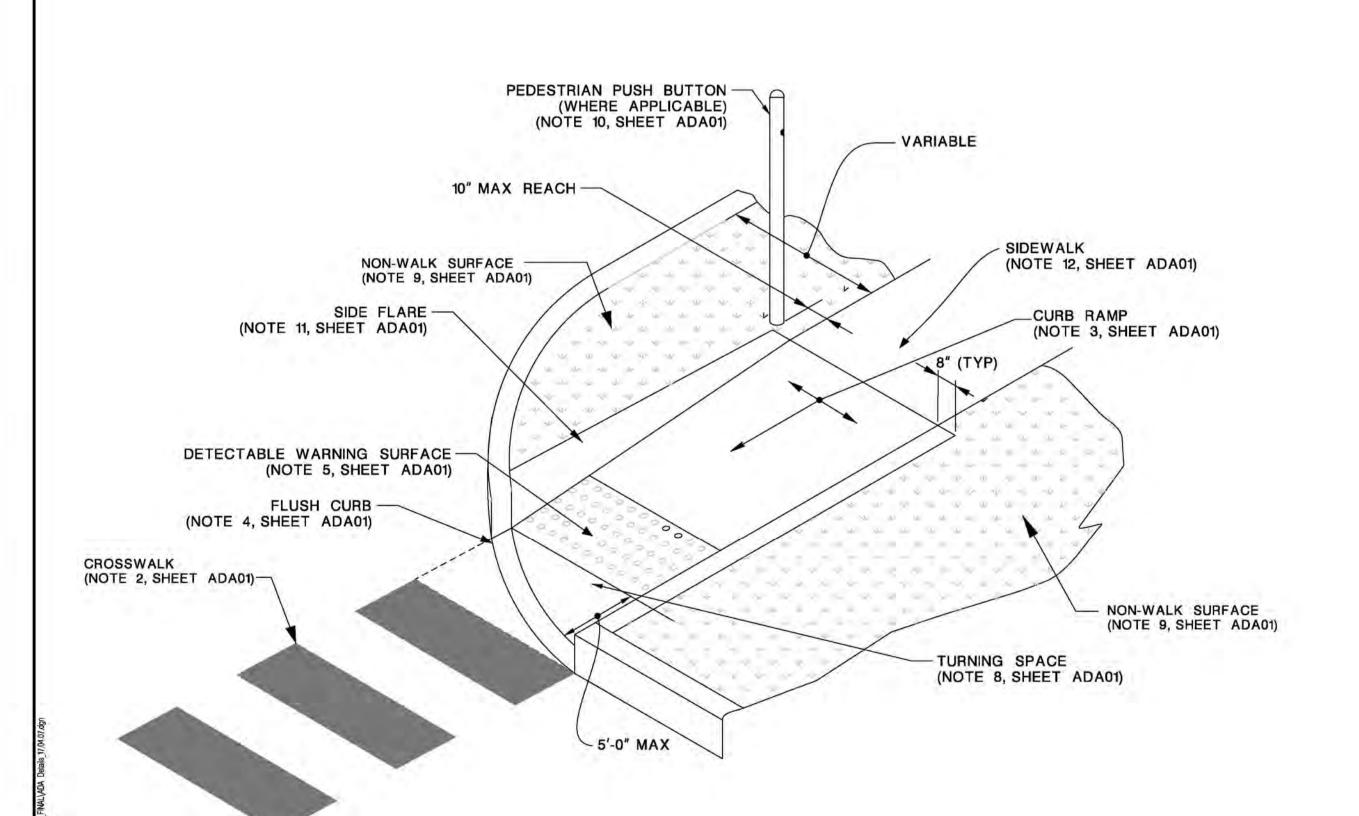
RAMP & SIDEWALK SPECIFICATIONS

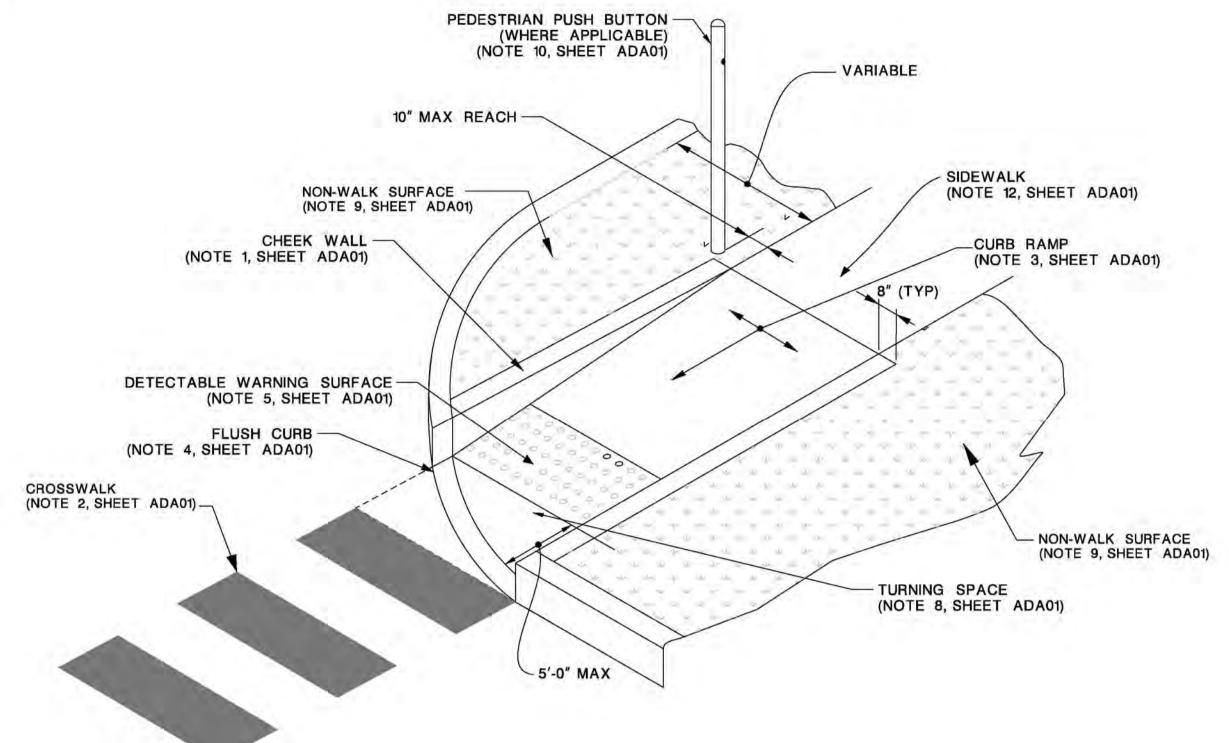


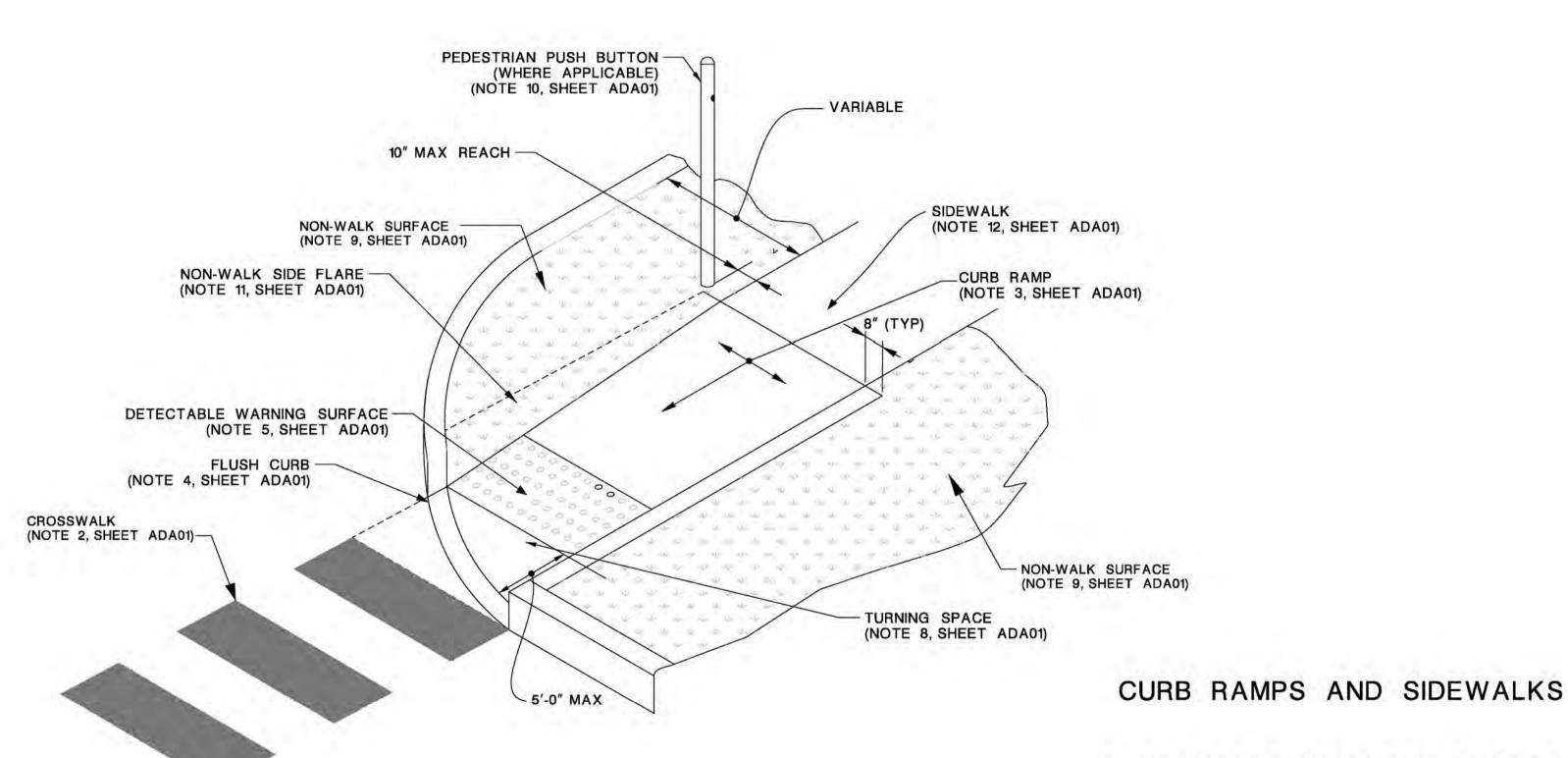
# EXAMPLES OF DETECTABLE WARNING SURFACE PLACEMENT FOR CURB RAMPS PLACED IN THE RADIUS

PROVIDE A LEVEL TRIANGULAR TURNING SPACE WHEN DIRECTIONAL RAMPS ARE INSTALLED ON A CURB RETURN TO TRANSITION THE GRADE BREAK.

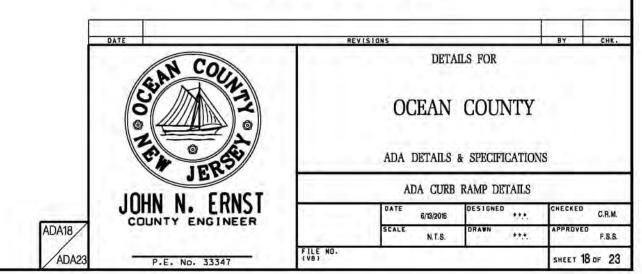


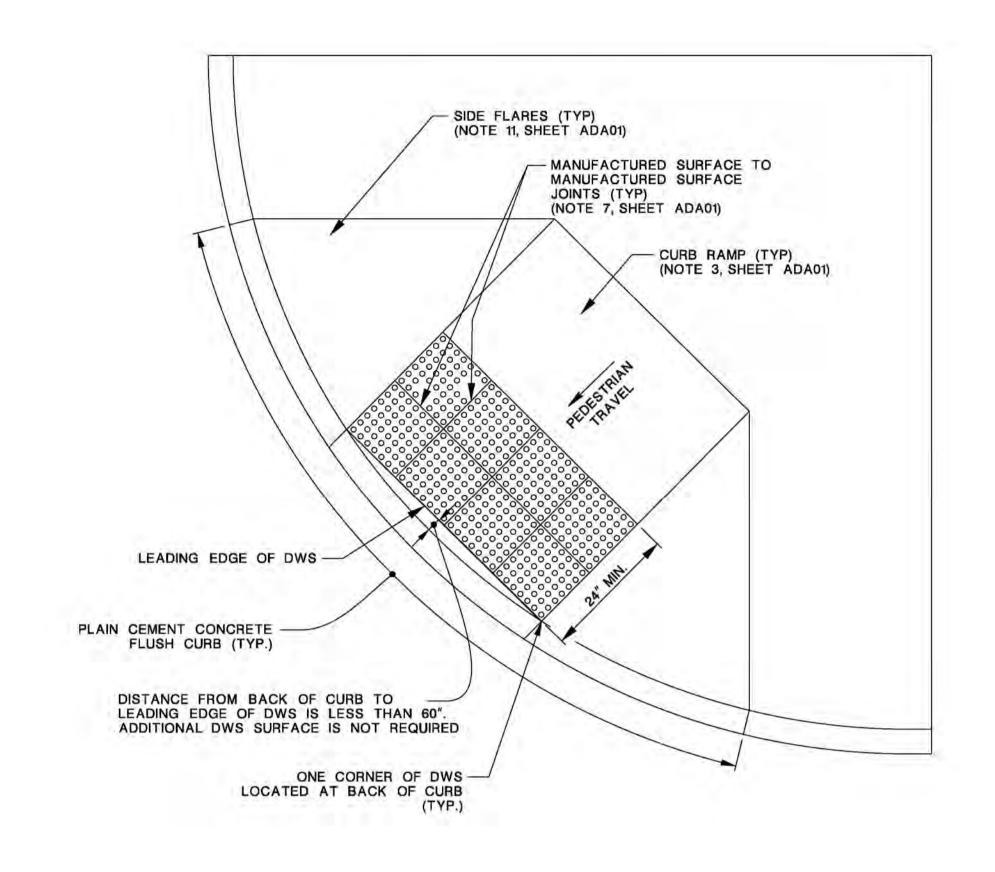


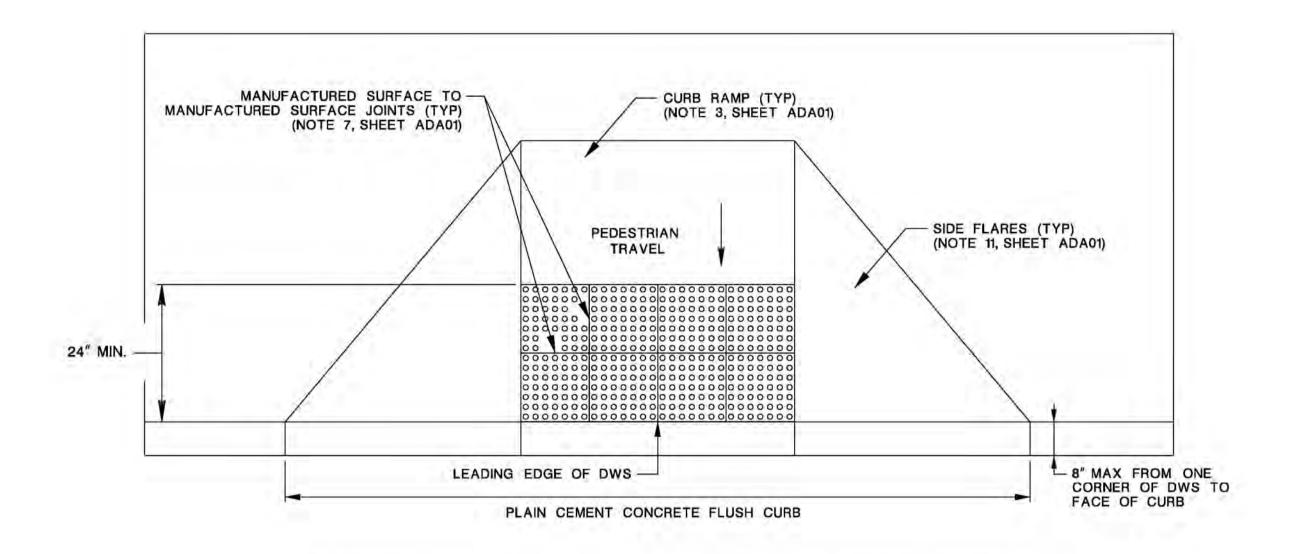




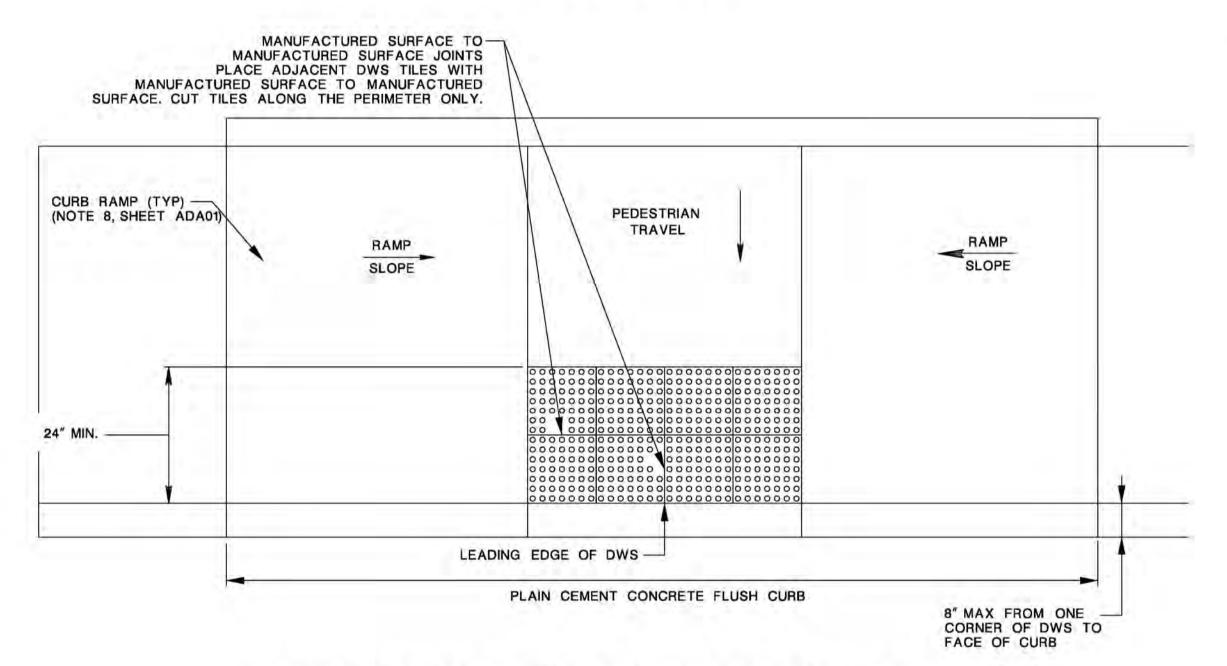
DETECTABLE WARNING SURFACE SPECIFICATIONS



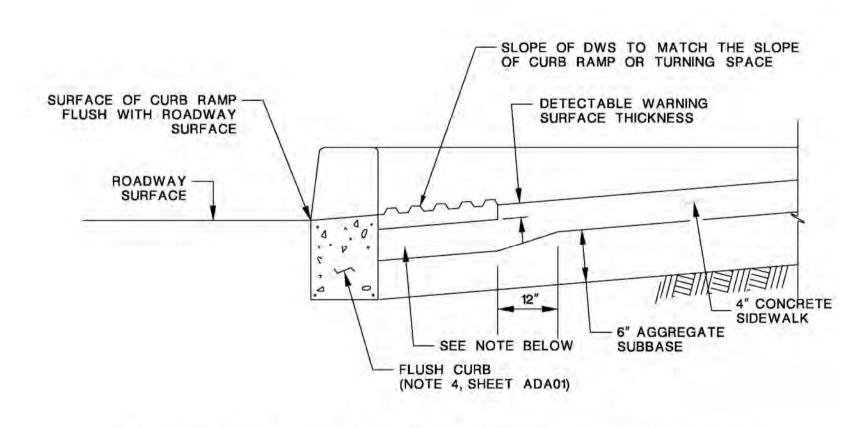




# DETECTABLE WARNING SURFACE (DWS) ON TYPE 1 CURB RAMP

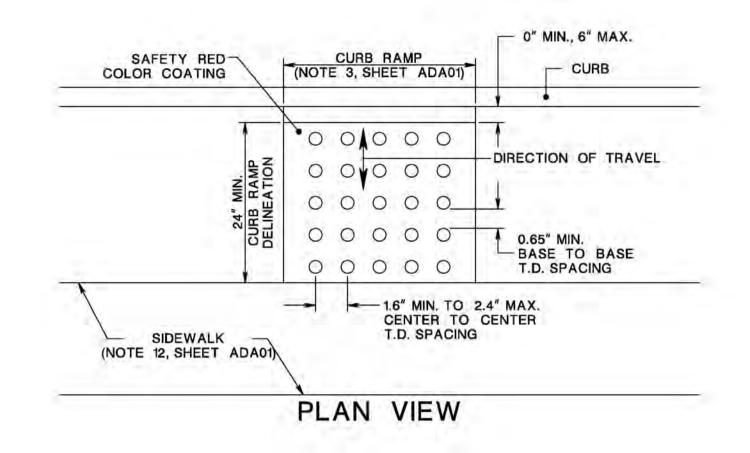


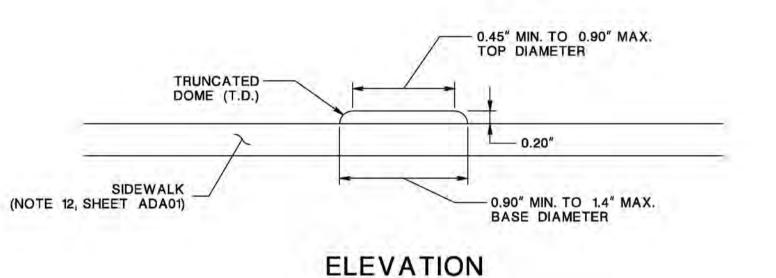
# DETECTABLE WARNING SURFACE (DWS) ON TYPE 2 CURB RAMP



NOTE: CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.

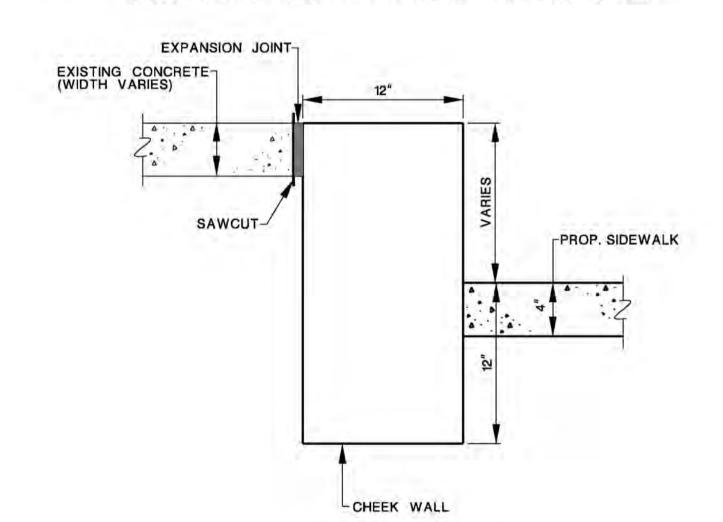
DETECTABLE WARNING SURFACE EMBEDDING DETAIL





# DETECTABLE WARNING SURFACE

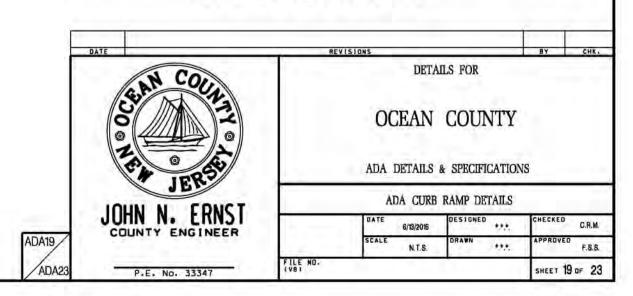
TRUNCATED DOME DETAILS

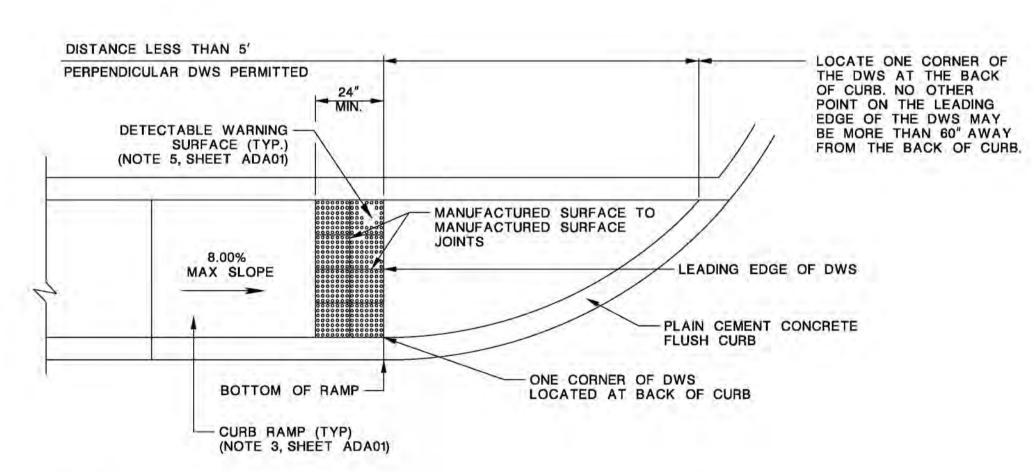


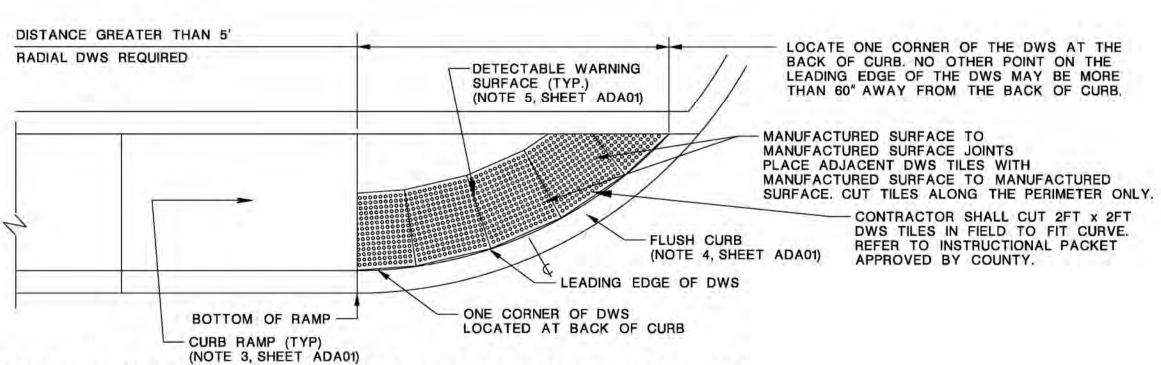
# INSTALLATION OF SIDEWALK & CHEEK WALLS IN AN EXISTING CONCRETE ISLAND

CURB RAMPS AND SIDEWALKS

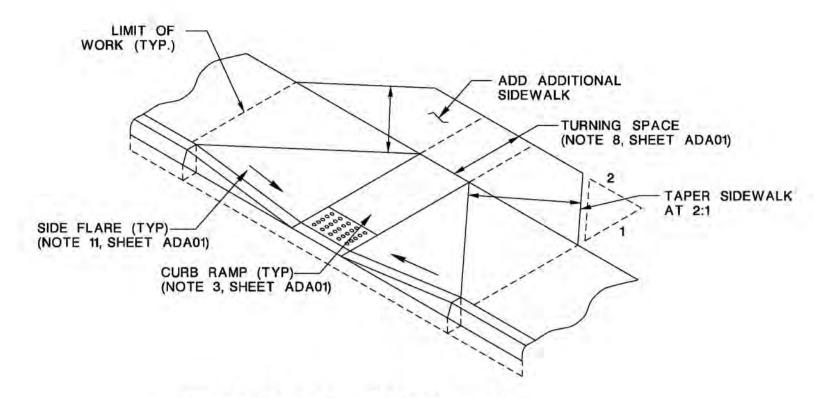
DETECTABLE WARNING SURFACE SPECIFICATIONS



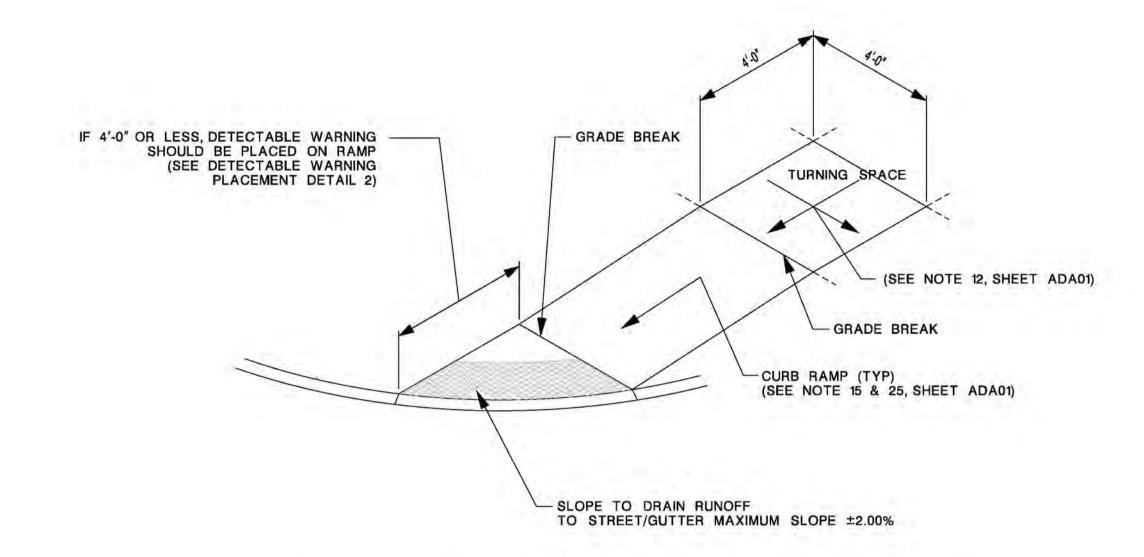




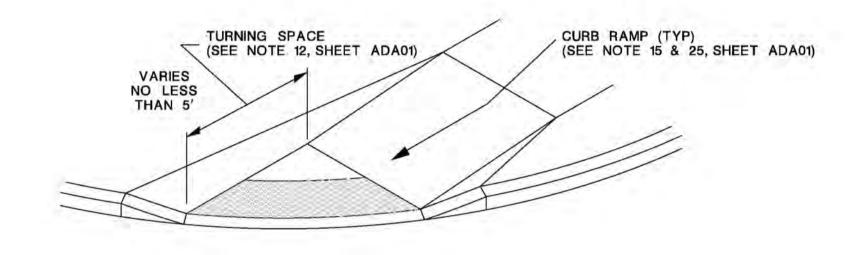
DETECTABLE WARNING SURFACE (DWS)
ON CURVED SURFACES



TYPICAL TYPE 1
CURB RAMP
TURNING SPACE INSTALLATION

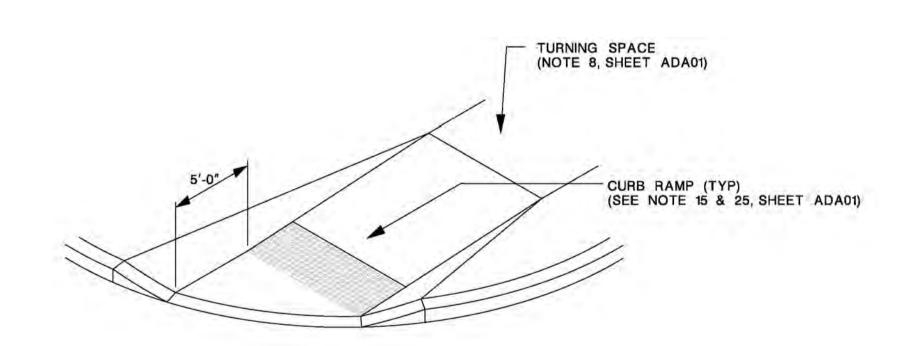


CURB RAMP WITHOUT SIDE FLARES
TYPICAL DIMENSIONING



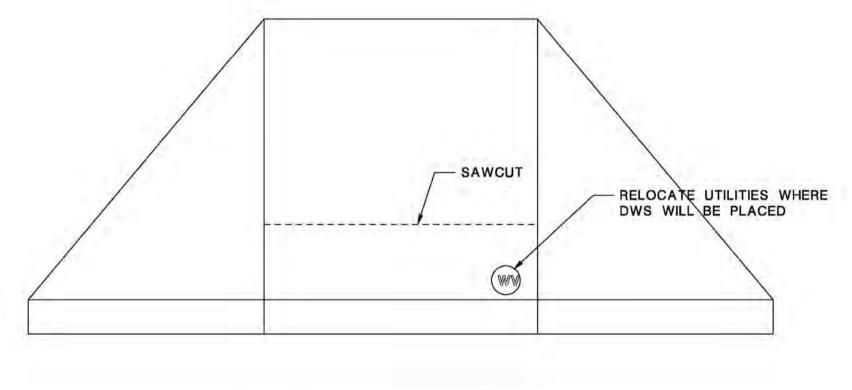
# TYPICAL TYPE 4 DETECTABLE WARNING PLACEMENT DETAIL 1

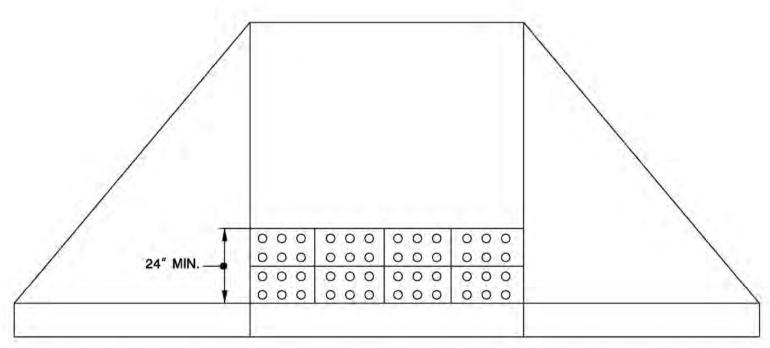
NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS GREATER THAN OF EQUAL TO 4'-0", DETECTABLE WARNINGS SHOULD BE PLACED ALONG THE RADIUS OF THE CURVE AS SHOWN IN THE ABOVE DETAIL.



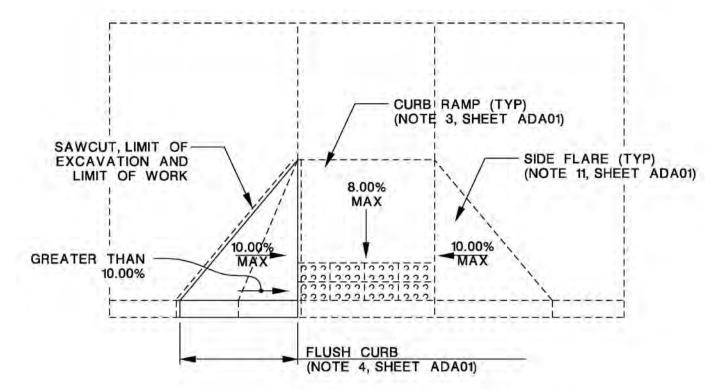
# TYPICAL TYPE 4 DETECTABLE WARNING PLACEMENT DETAIL 2

NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS LESS THAN OR EQUAL TO 4'-0", DETECTABLE WARNINGS SHOULD BE PLACED ON THE CURB RAMP ALONG THE BOTTOM GRADE BREAK WITH ONE CORNER 5" TO 9" FROM THE FRONT OF THE CURB OR EDGE OF THE ROADWAY.



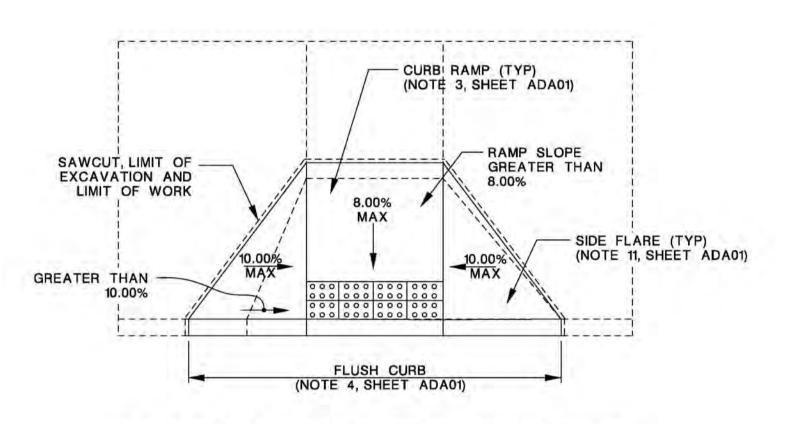


DETECTABLE WARNING SURFACE (DWS)
INSTALLATION DETAIL



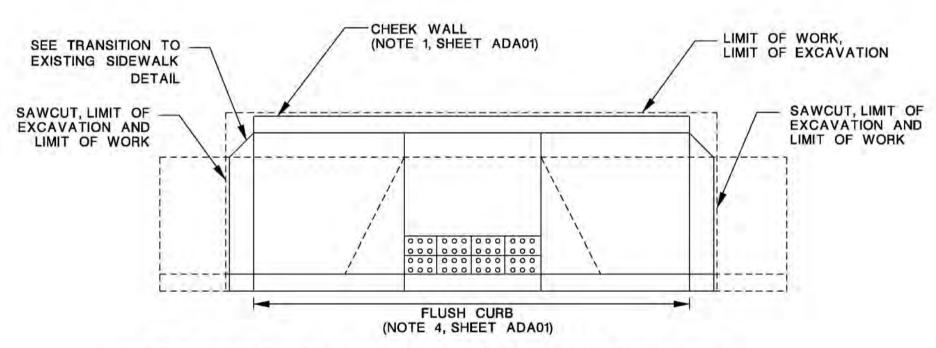
DETAIL ILLUSTRATES FLARE REMOVAL AND REPLACEMENT.

# SIDE FLARE RECONSTRUCTION



DETAIL ILLUSTRATES CURB RAMP (INCLUDING FLARES) REPLACEMENT.

# TOTAL RAMP RECONSTRUCTION

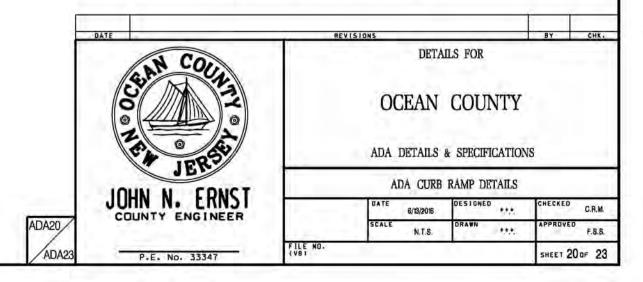


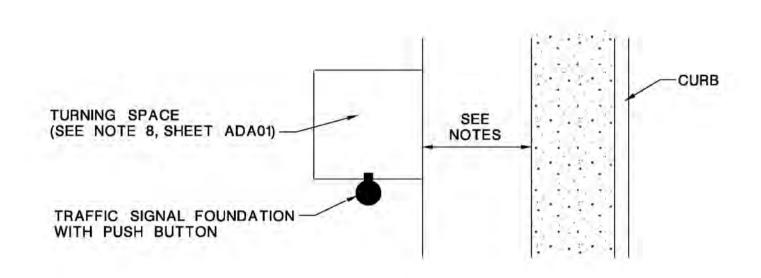
DETAIL ILLUSTRATES A TYPE 1 EXISTING RAMP REPLACED WITH A TYPE 2 RAMP. USE THIS DETAIL AS AN EXAMPLE TO REPLACE ANY RAMP WITH A DIFFERENT CURB RAMP TYPE.

# TOTAL RAMP RECONSTRUCTION (RAMP TYPE CHANGE)

CURB RAMPS AND SIDEWALKS

DETECTABLE WARNING SURFACE SPECIFICATIONS

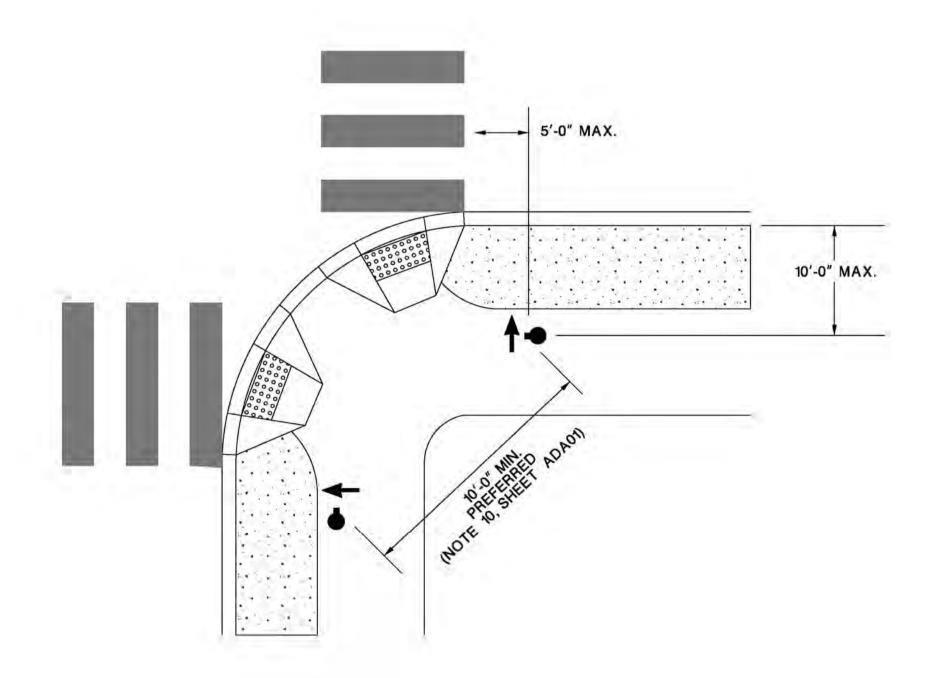




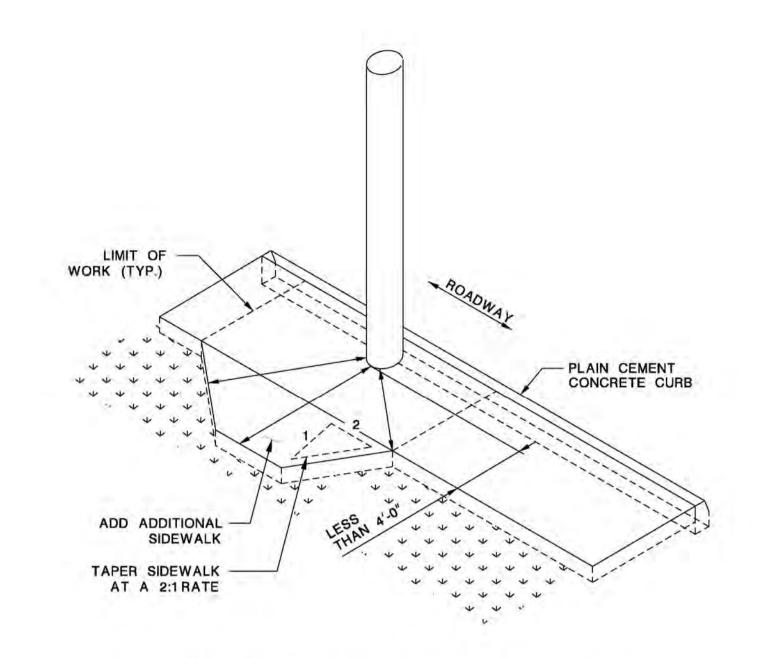
#### NOTES:

- 1. TURNING SPACE CENTERED BY PUSH BUTTON & CONNECTED TO PEDESTRIAN PATH/ FACILITIES.
- LOCATION OF PUSH BUTTON IN REFERENCE TO THE CROSSWALK MUST BE M.U.T.C.D. & A.D.A. COMPLIANT.

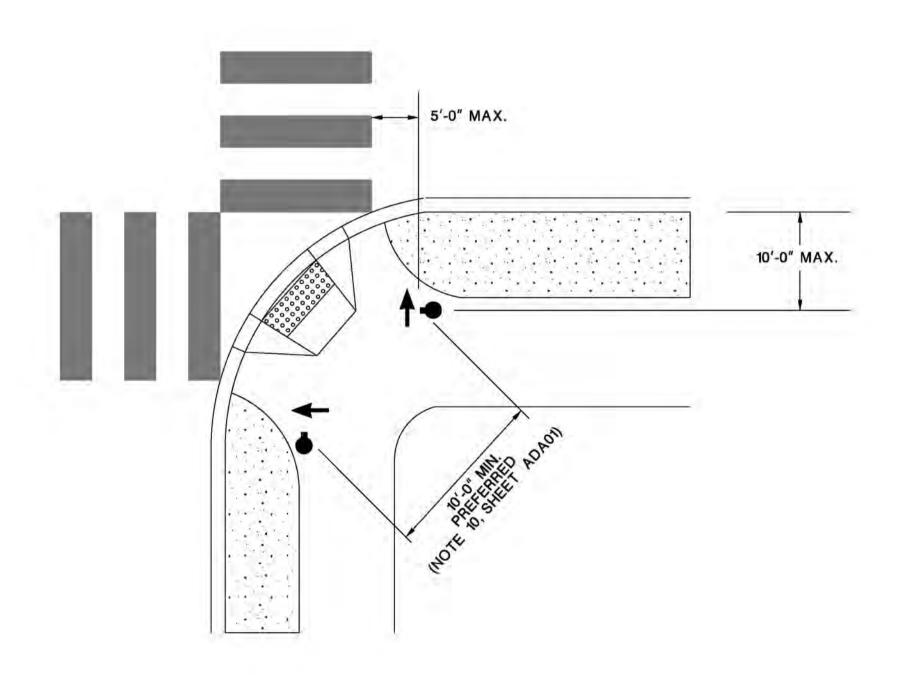
# PEDESTRIAN ACCESS TO PUSH BUTTONS



RECOMMENDED PUSH BUTTON LOCATIONS



SIDEWALK ADDITION DUE TO
OBSTRUCTIONS
(REQUIRES OCEAN COUNTY ENGINEERING
DEPARTMENT APPROVAL)



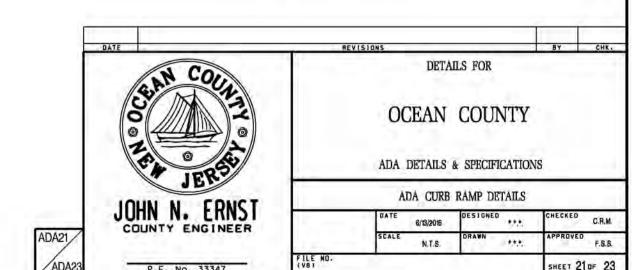
RECOMMENDED PUSH BUTTON LOCATIONS

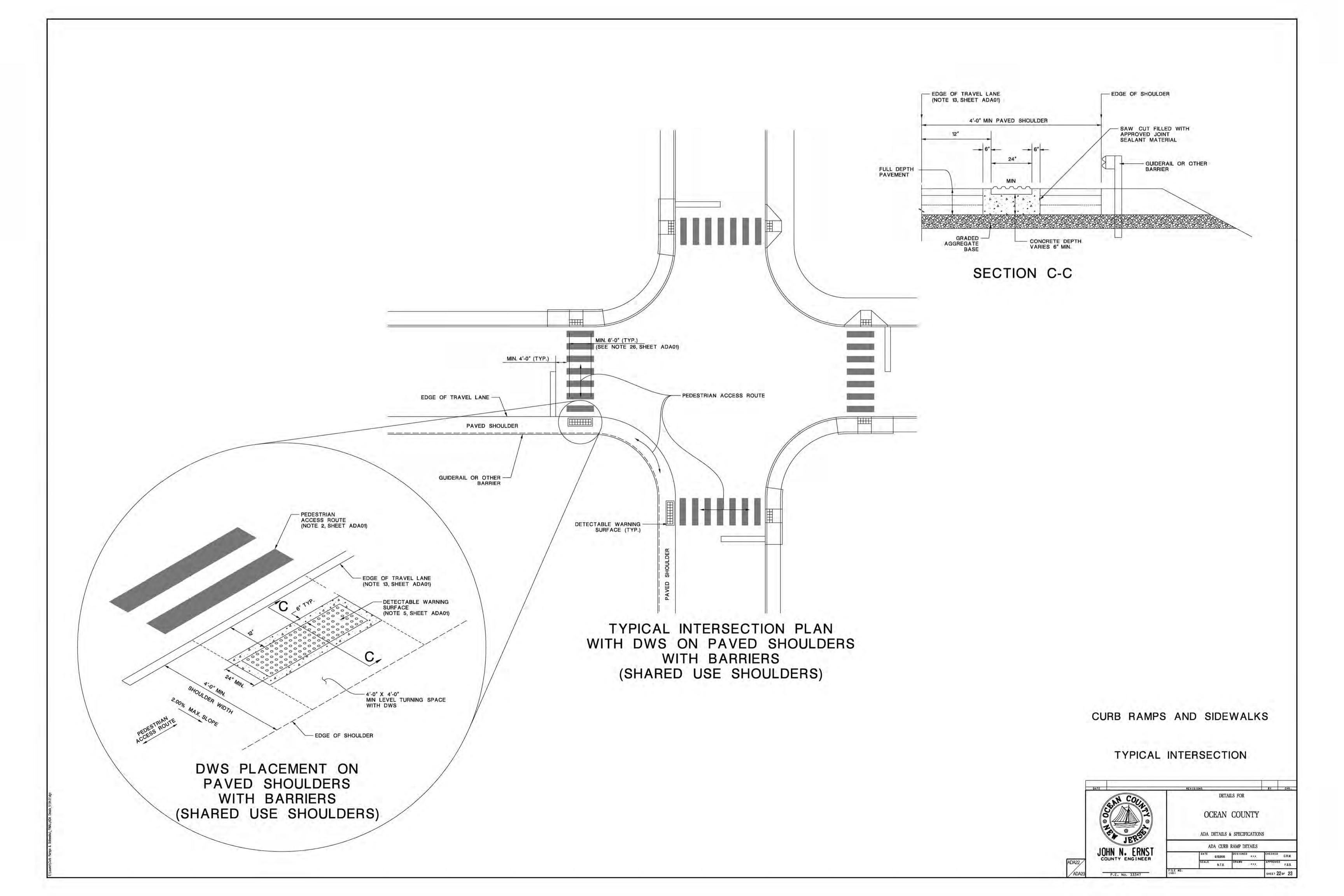


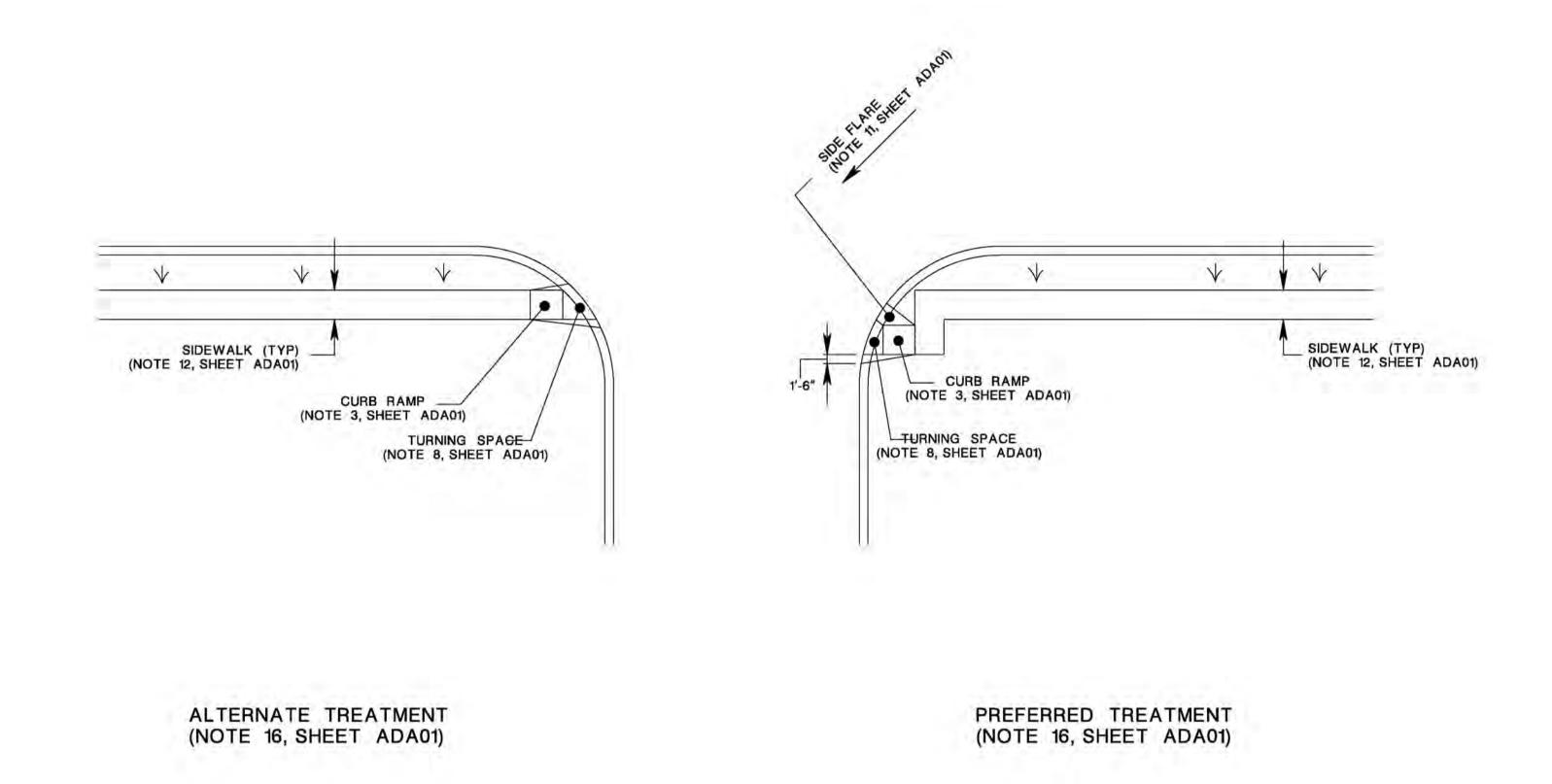
PEDESTRIAN PUSH BUTTON

CURB RAMPS AND SIDEWALKS

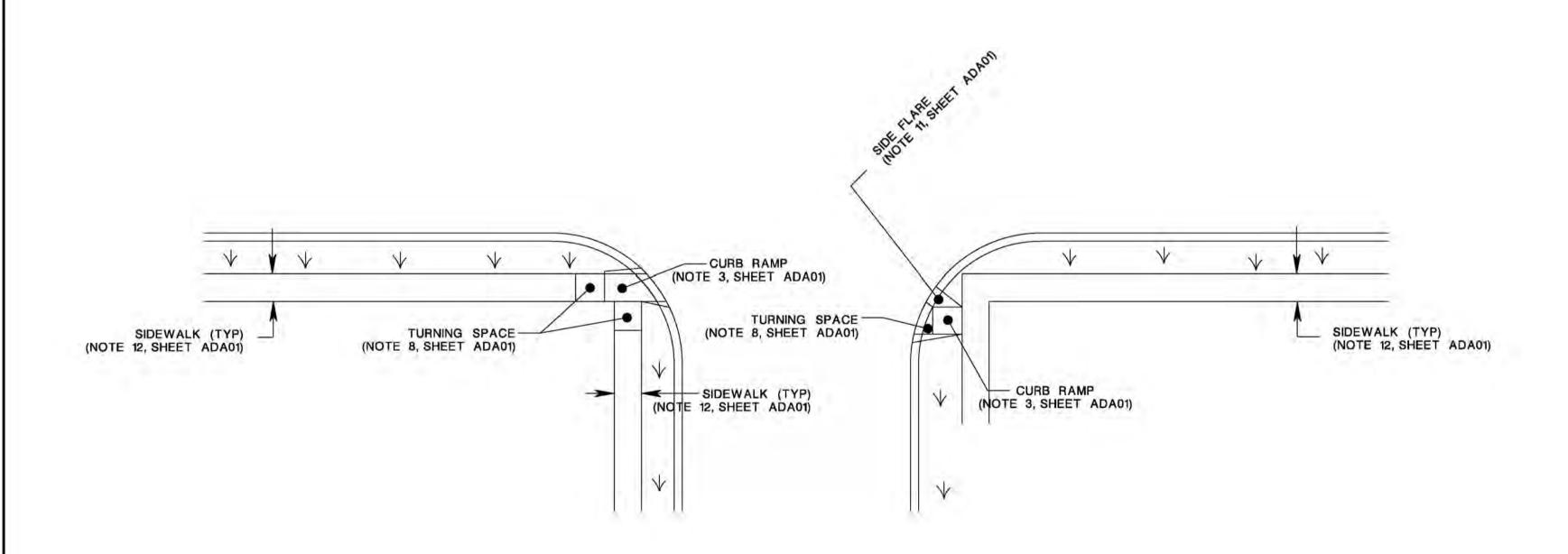
PUSH BUTTON







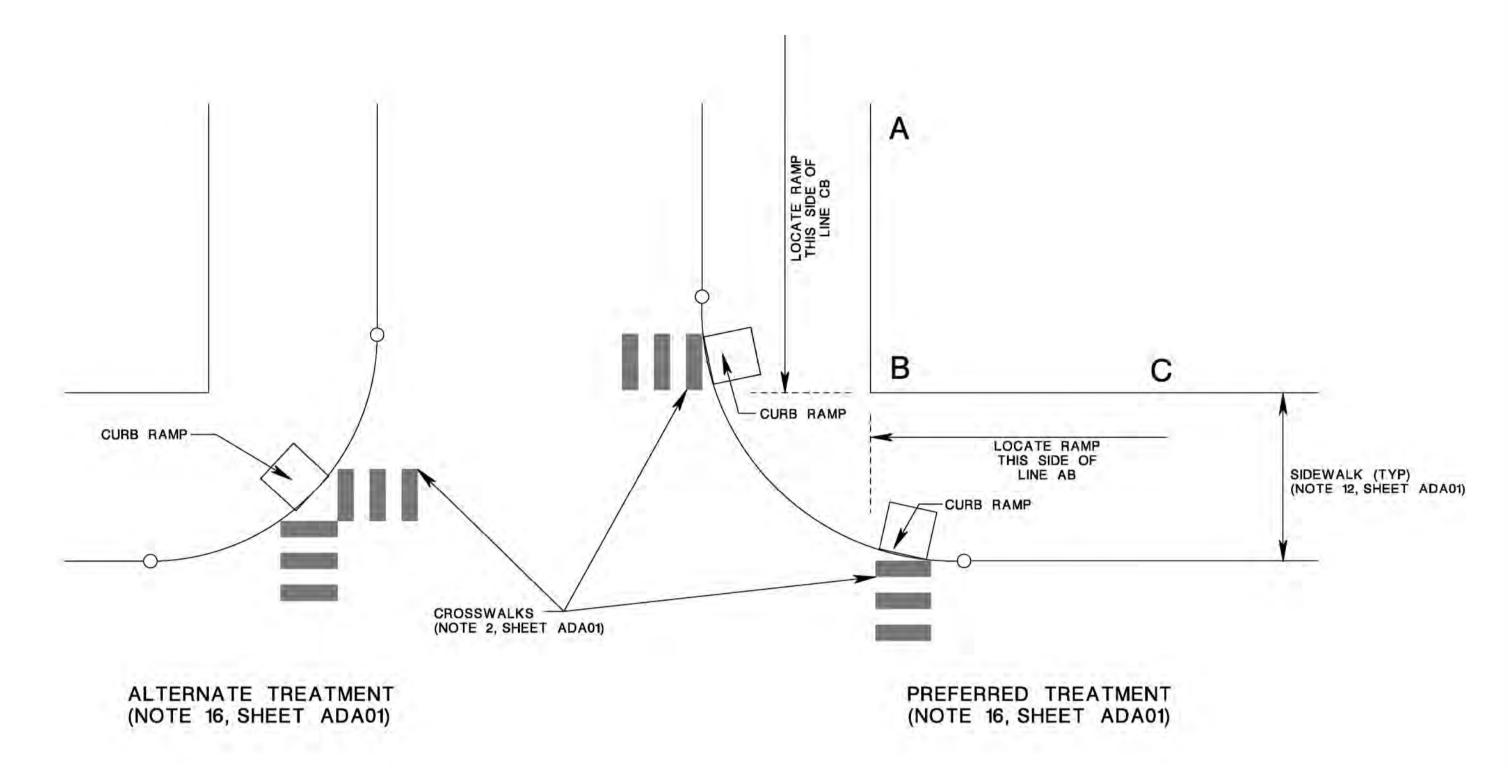
# CURB RAMP CROSSING PARALLEL TO HIGHWAY



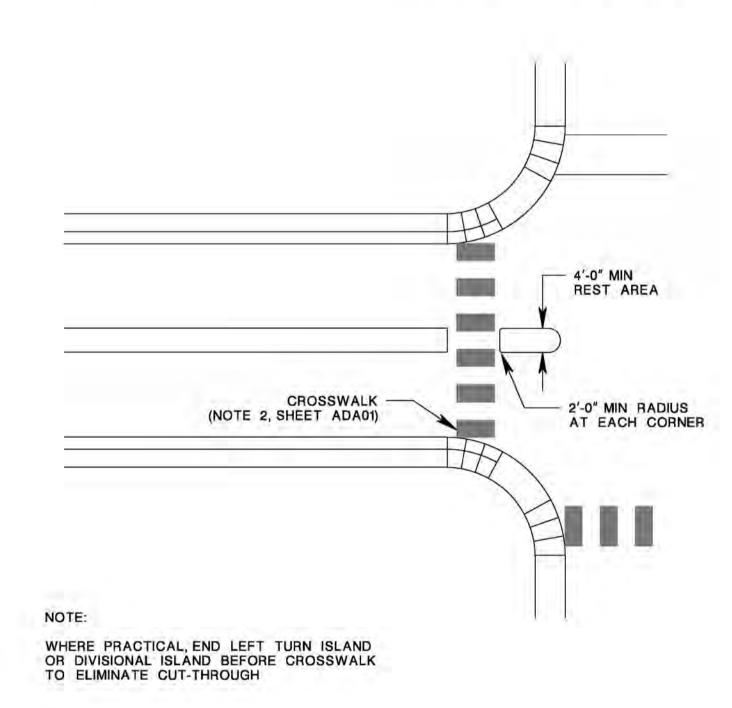
ALTERNATE TREATMENT (NOTE 16, SHEET ADA01)

PREFERRED TREATMENT (NOTE 16, SHEET ADA01)

CURB RAMP
CROSSING PARALLEL TO HIGHWAY ONLY



# LOCATION OF CURB RAMP FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



ISLAND WALKWAY OPENING AT INTERSECTION

CURB RAMPS AND SIDEWALKS

TYPICAL INTERSECTION

