



Pedestrian Ramp Technical Infeasibility/Structurally Impractical Application Instructions for City or State Agencies or Developers

Guidance

This guidance and form is intended for City or state agencies, or developers, when constructing pedestrian (curb) ramps. Use of the term construction means an upgrade or installation of a pedestrian ramp.

This form must be submitted via email to pedrampTIF@dot.nyc.gov with the exception of forms submitted by The Department of Design and Construction (DDC). Hand-written or scanned forms will not be accepted.

The term “Technically Infeasible” is only applicable to the upgrade of an existing pedestrian ramp. The term “Structurally Impracticable” is only applicable to the installation of a new pedestrian ramp.

Construction of pedestrian ramps must comply with the latest version of the New York City Department of Transportation (NYC DOT) Highway Rules, Standard Specifications, Standard Details of Construction, and the Americans with Disabilities Act (ADA) Standards for Accessible Design. This form must be completed when any element or component of a pedestrian ramp cannot be constructed to meet all ADA standards. If it is not feasible to construct a ramp that meets all ADA standards due to technical infeasibility or structurally impracticable as defined in the ADA, it is the responsibility of the designer/builder to construct a pedestrian ramp that is compliant to the maximum extent feasible.

“Technically infeasible” means “something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.”¹

Where a technical infeasibility is encountered, compliance is still required to the maximum extent technically feasible.²

“Structurally impracticable” means rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.³

For example, if a ramp cannot be constructed to have a pavement grade of 1:12 due to the presence of a transit vent, the sidewalk must be graded to the lowest feasible slope, with all other ramp elements meeting the latest ADA standards – unless other technical infeasibilities or structural impracticability affect the remaining ramp elements.

This form must be submitted detailing the site conditions that cause any technical infeasibility or structural impracticability. When reviewed and approved, the ramp can then be constructed without triggering corrective action requests. This form must be used for only one ramp, not multiple ramps, though this form must indicate all instances of a technical infeasibility or structural impracticability that impact the construction of that one ramp.

¹ As defined in the 2010 ADA Standards for Accessible Design, Section 106.

² As defined by the United States Access Board - <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-2-alterations-and-additions>.

³ As defined in the 2010 ADA Standards of Accessible Design, 28 CFR § 35.151(a)(2).



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Instructions

1. **SUBMISSION INFORMATION:** Complete SUBMITTED BY and SUBMISSION DATE, entering the full name of the submitter, no abbreviations.

Enter the APPLICATION TRACKING №, SEQUENCE №, PERMITTEE NAME, and PERMITTEE ID if the Technical Infeasibility Form (TIF) is being submitted by a permittee.

Complete BUSINESS NAME, STREET ADDRESS, CITY, STATE, ZIP CODE, E-MAIL, PHONE.

2. **PROJECT INFORMATION:** Select one of the project categories. If applicable enter the PROJECT ID, and indicate the TYPE OF PROJECT.

3. **LOCATION INFORMATION:** Enter the BOROUGH, CORNER ID, and RAMP ID for this form, corner is defined as the location where the work is being performed, defined by intersecting streets, and includes islands, medians, mid-block locations, and the top of T-intersections.

RAMP ID and CORNER ID: Identifying numbers can be found at <http://arcg.is/1D48GO>. Solely for the purposes of data collection on this form, pedestrian access routes at cut-throughs are being identified as ramps.

For NORTH-SOUTH STREET and EAST-WEST STREET enter the full legal street names of the streets intersecting at the corner. If the corner is at a mid-block location, island, etc. enter the nearest cross street.

CORNER DIRECTION is primarily the ordinal directions (*Southwest, Northwest, Northeast, or Southeast*) if the street is a 3 or 4 leg intersection; or secondarily the cardinal directions (*North, South, East, or West*) if the intersection contains more than four legs. The corner location for the top of a "T"-intersection is chosen as if they were part of a 4 leg intersection with one of the legs missing; the four ordinal corners still remain.

T-INTERSECTION is either yes or no.

For CORNER TYPE choose either intersection corner, island/median, or mid-block/top of "T".

RAMP CONSTRUCTION: Select whether the ramp is a *New Install* (no ramp exists) or an *Upgrade* of an existing ramp.

4. **EXPLANATION FOR TECHNICAL INFEASIBILITY / STRUCTURAL IMPRACTICABILITY:** Select all that apply. Identifying a technical infeasibility or structural impracticability that may prohibit an element of a pedestrian ramp from fully and strictly complying with minimum standards of the ADA requirements. Each element that does not meet the standards will require an explanation.
 - LIMITED RIGHT-OF-WAY (ROW): For many projects, limited public right-of-way (PROW) or encroachment exists at the site. ROW research and outcome must be documented for complex projects (and be included in the Design Approval Document and Plans Specifications & Estimates documents for federally funded projects). For simple corners that do not have a design component, ROW acquisition is considered out of scope. Note that where ROW is limited, all solutions that meet the minimum ADA standards must be explored (such as parallel and combination ramps). In the event that a simple solution cannot be applied, fill out the technical infeasibility form. If an existing ramp cannot be constructed without acquiring ROW or removing an encroachment, or where consent from property owners cannot be obtained, the ramp design and layout may have to be modified to fit the limited space.



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- **EXISTING TOPOGRAPHY:** For many projects, the grade of abutting streets is steeper than ADA requirements, and this may impact the ability to design and layout ramp elements that meet the minimum standards. Please note that if constructing a pedestrian ramp that meets the standards entails chasing an existing longitudinal grade for more than 15 feet, the pedestrian ramp may be limited to be no more than 15 feet long [180 inches]⁴. If the design and layout of a pedestrian ramp negatively alters a roadway profile, resulting in standing water upstream or at the ramp, or does not maintain positive drainage cross slopes, this may impact the ability to design and layout ramp elements that meet the minimum standards.
 - **EXISTING UTILITIES:** Existing utilities may interfere with the construction of a ramp. In these instances, the ramp design and layout may have to be modified if relocating or modifying existing utilities is outside the scope of work.
 - **STRUCTURES, BUILDINGS, VAULTS, BRIDGES:** Existing structures, buildings, sub-surface building vaults and areaways, or bridges may interfere with the construction of a ramp. In these instances, the ramp design and layout may have to be modified to avoid the structural interference.
 - **TREES, NATURAL FEATURES:** This category is evaluated on a case-by-case basis. Trees must not be removed without written approval from DOT, and if approved, a permit from the Department of Parks and Recreation (DPR) will be required. The construction of a pedestrian ramp may interfere with significant natural features, such as a mature tree. If such natural features interfere with the construction of a ramp, the ramp design and layout may have to be modified to avoid the interference. Other trees, such as small minor trees that may be relocated, replaced or removed, may not constitute a technical infeasibility or a structural impracticability and their relocation, replacement, including restitution costs (not applicable to private utility companies), must be considered to be within the scope of work of the project.
 - **NYCT – STRUCTURES, ENTRANCES, VENTS:** For many projects, the relocation, and modification of New York City Transit elevated and at grade subway structures, entrances and vents are outside the scope of work. If such structures interfere with the construction of a ramp, the ramp design and layout may have to be modified to avoid the interference, and may render ramp elements that do not meet minimum ADA standards.
 - **HISTORIC FEATURES:** The construction of a pedestrian ramp may interfere with historic features, such as a historic balustrade. If such historic features interfere with the construction of a ramp, the ramp design and layout may have to be modified to avoid the interference, and may render ramp elements that do not meet minimum ADA standards.
 - **OTHER:** This category must be used on a case-by-case basis and is subject to the evaluation and approval of DDC and DOT. Utilization of drainage as category must not be pursued without specific approval from DOT.
5. **WHY REQUIREMENTS CANNOT BE ACHIEVED:** Please provide a brief explanation for each technical infeasibility, referencing numbered elements in the submitted photos in section 8 of this form.
6. **RAMP ELEMENTS THAT DO NOT MEET THE MINIMUM ADA STANDARDS:** List all ramp elements that are not compliant with the latest ADA standards.

⁴ As specified in the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, sections R304.2.2, R304.3.2.



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7. **INVESTIGATION:** The Designer must evaluate all feasible design solutions including, but not limited to, [NYCDOT Standard Details of Construction H-1011](#), [NYSDOT Standard Sheet 608-01](#), and [Public Right of Way Accessibility Guidelines \(PROWAG\)](#). The Designer must check the box to confirm that an investigation was performed at the location and that this technical infeasibility form is still required, as a pedestrian ramp that meets ADA 2010 Standards is not feasible at this particular location. Space is available for the Designer to provide any additional explanation(s) for the approvers consideration.
8. **PHOTO LOG:** Insert at least four existing condition photos. The photos must clearly indicate any site features that will render dimensions and grades of proposed ramp elements technically infeasible with minimum ADA standards. Ensure that the site features that are being indicated in sections 4 and 5, as resulting in the technical infeasibility are called out and numbered in the photos with arrows or circles, which do not obstruct important elements in the photo. The photos must clearly show the entire ramp location so as to limit any additional requests for information. Features called out in the photos must be referenced in section 5 of this form.
9. **EXISTING AND PROPOSED SITE DESIGN/LAYOUT:** Insert a sketch/site detail of the existing and proposed ramp design/layout as needed. Clearly call out all features, including crosswalk pavement markings, utility castings, buildings, fences, curbs, trees, etc.
10. **STATEMENT AND SIGNATURES:** A currently registered licensed professional (Architect, Landscape Architect, or Engineer) in the State of New York must complete and sign the form (including license number). This form must be approved by DOT or DDC, prior to ramp construction. Once approved, this form must be submitted to DOT Pedestrian Ramp Program for record. This form must be submitted via email to pedrampTIF@dot.nyc.gov.



Pedestrian Ramp Technical Infeasibility/Structurally Impractical Form

Must be filled out for Pedestrian Ramps that contain elements not meeting the minimum ADA standards

1. SUBMISSION INFORMATION

SUBMITTED BY: _____		SUBMISSION DATE: _____	
APPLICATION TRACKING №: _____		SEQUENCE №: _____	
PERMITTEE NAME: _____		PERMITTEE ID: _____	
BUSINESS NAME: _____		STREET ADDRESS: _____	
CITY: _____	STATE: _____	ZIP CODE: _____	
E-MAIL: _____		PHONE: _____	

2. PROJECT INFORMATION

<input type="checkbox"/> CITY AGENCY: _____	<input type="checkbox"/> STATE AGENCY: _____	<input type="checkbox"/> TRANSIT AUTHORITY: _____
<input type="checkbox"/> OTHER: _____		
PROJECT ID: _____		TYPE OF PROJECT: _____

3. LOCATION INFORMATION

BOROUGH: _____	CORNER ID: _____	RAMP ID: _____
NORTH-SOUTH STREET: _____		EAST-WEST STREET: _____
CORNER DIRECTION: _____		T-INTERSECTION: <input type="checkbox"/> YES <input type="checkbox"/> NO
CORNER TYPE: <input type="checkbox"/> INTERSECTION CORNER <input type="checkbox"/> ISLAND/MEDIAN <input type="checkbox"/> MID-BLOCK/TOP OF "T"		
RAMP CONSTRUCTION: <input type="checkbox"/> NEW INSTALLATION <input type="checkbox"/> UPGRADE		

4. EXPLANATION FOR TECHNICAL INFEASIBILITY / STRUCTURAL IMPRACTICABILITY (CHECK ALL THAT APPLY)

<input type="checkbox"/> LIMITED RIGHT-OF-WAY	<input type="checkbox"/> EXISTING TOPOGRAPHY
<input type="checkbox"/> EXISTING UTILITIES	<input type="checkbox"/> STRUCTURES, BUILDINGS, VAULTS, BRIDGES
<input type="checkbox"/> TREES, NATURAL FEATURES*	<input type="checkbox"/> NYCT – STRUCTURES, ENTRANCES, VENTS
<input type="checkbox"/> HISTORIC FEATURES	<input type="checkbox"/> OTHER: _____

5. WHY REQUIREMENTS CANNOT BE ACHIEVED

EXPLANATION:

*This category is evaluated on a case-by-case basis, trees must not be removed without specific approval from DOT.



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6. RAMP ELEMENTS THAT DO NOT MEET THE MINIMUM ADA STANDARDS (CHECK ALL THAT APPLY)

- | | |
|---|---|
| <input type="checkbox"/> RAMP WIDTH | <input type="checkbox"/> LANDING DIMENSIONS |
| <input type="checkbox"/> RAMP RUNNING SLOPE | <input type="checkbox"/> LANDING SLOPES |
| <input type="checkbox"/> RAMP CROSS SLOPE | <input type="checkbox"/> GUTTER CROSS SLOPE |
| <input type="checkbox"/> FLARE SLOPES | <input type="checkbox"/> GUTTER FLOW SLOPE |
| <input type="checkbox"/> DETECTABLE WARNING SURFACE | <input type="checkbox"/> OTHER: _____ |

7. INVESTIGATION

- | | |
|--------------------------|---|
| <input type="checkbox"/> | ALL DESIGN SOLUTIONS, INCLUDING NYC DOT H-1011, NYSDOT 608-01, PROWAG, HAVE BEEN CONSIDERED AND A TECHNICAL INFEASIBILITY FORM IS STILL REQUIRED. |
|--------------------------|---|

ADDITIONAL EXPLANATION:



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8. PHOTO LOG

EXISTING CONDITIONS PHOTOS

1

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.

2

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.

3

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.

4

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.

5

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.

6

A large, empty rectangular box with a black border, intended for a photograph of the existing conditions.



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9. EXISTING AND PROPOSED SITE DESIGN/LAYOUT (ATTACH AS NEEDED)



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10. STATEMENT AND SIGNATURES

(Signatures are required for approval to be granted)

I, _____, (ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT NAME) HEREBY CERTIFY, AS A LICENSED PROFESSIONAL IN THE STATE OF NEW YORK, THAT THE DESIGN ELEMENTS LISTED IN THIS PEDESTRIAN RAMP TECHNICAL INFEASIBILITY WAIVER APPLICATION DO PROVIDE A LEVEL OF ACCESSIBILITY TO THE MAXIMUM EXTENT FEASIBLE AT THE LISTED LOCATION(S) UNDER EXISTING CONDITIONS AS OF THIS DATE.

NAME

STATE OF NEW YORK LICENSE №

SIGNATURE

DATE

FOR INTERNAL USE ONLY

☐ APPROVED ☐ DENIED ☐ RESUBMIT (SEE COMMENTS BELOW)

NYC DOT/DDC REPRESENTATIVE (PLEASE PRINT)

TITLE

SIGNATURE

DATE

COMMENTS: