Terry Avenue North | Street Design Guidelines

Seattle Department of Transportation
with Seattle Department of Planning and Development

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EXECUTIVE SUMMARY

Opportunity

Terry Avenue North presents an opportunity to create a new type of streetscape in Seattle, where pedestrian use takes priority. Limited, slow-moving traffic make the pedestrian orientation possible; the location and character of Terry Avenue North make pedestrian orientation advantageous.

Terry Avenue North is identified as a "heart" street in the South Lake Union Neighborhood Plan. The street is centrally located in the emerging concentration of biotech jobs just north of Seattle's downtown office core, but traffic is concentrated on parallel Westlake Avenue North and Fairview Avenue North. The area's rich industrial history is evident in the brick and railroad tracks in the street, and Terry Avenue North connects to a major open space in the city – South Lake Union Park - that is about to be expanded and rebuilt.

Purpose

The Terry Avenue North Street Design Guidelines define a master-plan concept of the street so that expected incremental development will be coordinated and the permit process clear. The Guidelines lay out a concept for the street, and identify street geometrics and a palette of materials. The intent is to provide consistency where needed, but to also allow flexibility for designers within the palette of materials, since part of the street's character results from the mix of materials and uses over time.

Process

The Guidelines are a result of extensive community outreach and coordination between City departments. The South Lake Union and Cascade communities have been actively involved in shaping the neighborhood's development, and the Terry Avenue North Street Design Guidelines have been coordinated with the multiple plans for the neighborhood, including the plans for a new streetcar.

Design Intent

The original charter called for a design incorporating principles of a European-style "woonerf", or curbless, design. The project team found throughout the process that our regulatory and legal environment limits some design elements that are possible in European streets. Accessibility regulations, in particular, require definition between pedestrian areas and areas where vehicles are allowed. The design team came to the conclusion that the best way to integrate pedestrians more fully into the street is to have continuity in the paving materials in the street and in the adjacent pedestrian areas, in lieu of a totally "curbless" street more in keeping with a true woonerf. Seattle's most noted urban pedestrian spaces – the Pike Place Market and Westlake Center – both have a continuity in street and pedestrian spaces – with curbs in place.

The second imperative of design is to ensure that traffic volumes and speeds stay low over time so that Terry Avenue North can function as a pedestrian oriented street. In a counter-intuitive manner to typical street design, traffic devices are meant to reduce and slow traffic.

Sustainability was an important factor in the Guidelines, and a high priority for South Lake Union in particular. The Guidelines coordinated related work regarding sustainability in lighting, drainage and landscape.

Other design decisions were intended to reinforce and enhance the specific assets of Terry Avenue, including historic character, topography, setting and connections to downtown and Lake Union.

INTRODUCTION

The South Lake Union area in Seattle is changing rapidly with new development and construction occurring today and proposed for the future. In March 2003, Mayor Greg Nickels launched his South Lake Union Action Agenda to build a great place to work and live and to create thousands of new jobs and fuel growth in the city's economy. The action agenda is meant to:

- Attract biotechnology jobs
- Fix the "Mercer Mess"
- Build a streetcar
- Create a new waterfront park
- Build infrastructure
- Improve neighborhood amenities

Terry Avenue North will be affected by many of these actions, and by proposed development in its northern blocks. These guidelines have been developed to guide and enhance design of the public right-of-way as this development occurs.

OBJECTIVES

The intent of these design guidelines is to take advantage of Terry Avenue North's low vehicle use, location, width and history and to create a pedestrian oriented street in Seattle's South Lake Union neighborhood.

HOW THIS DOCUMENT WORKS

These guidelines are a supplement to the South Lake Union Design Guidelines. (SLU) Any development along Terry Avenue North is encouraged to follow these guidelines as well as the SLU Design Guidelines as part of the Design Review Process. Design guidelines will help improve neighborhood amenities and will accommodate future projects by providing a menu of options to be used for redevelopment of Terry Avenue North. By following these guidelines development can proceed faster and ensure the street provides identity and character to the neighborhood and community.

This document is not meant to present a formalized design plan, but provides design guideline for street improvements to be implemented as development happens. These guidelines are designed so that implementation can be done as part of a larger scale project, such as the streetcar, or on an incremental basis.

Terry Avenue looking south to downtown

Terry Avenue looking north to Lake Union

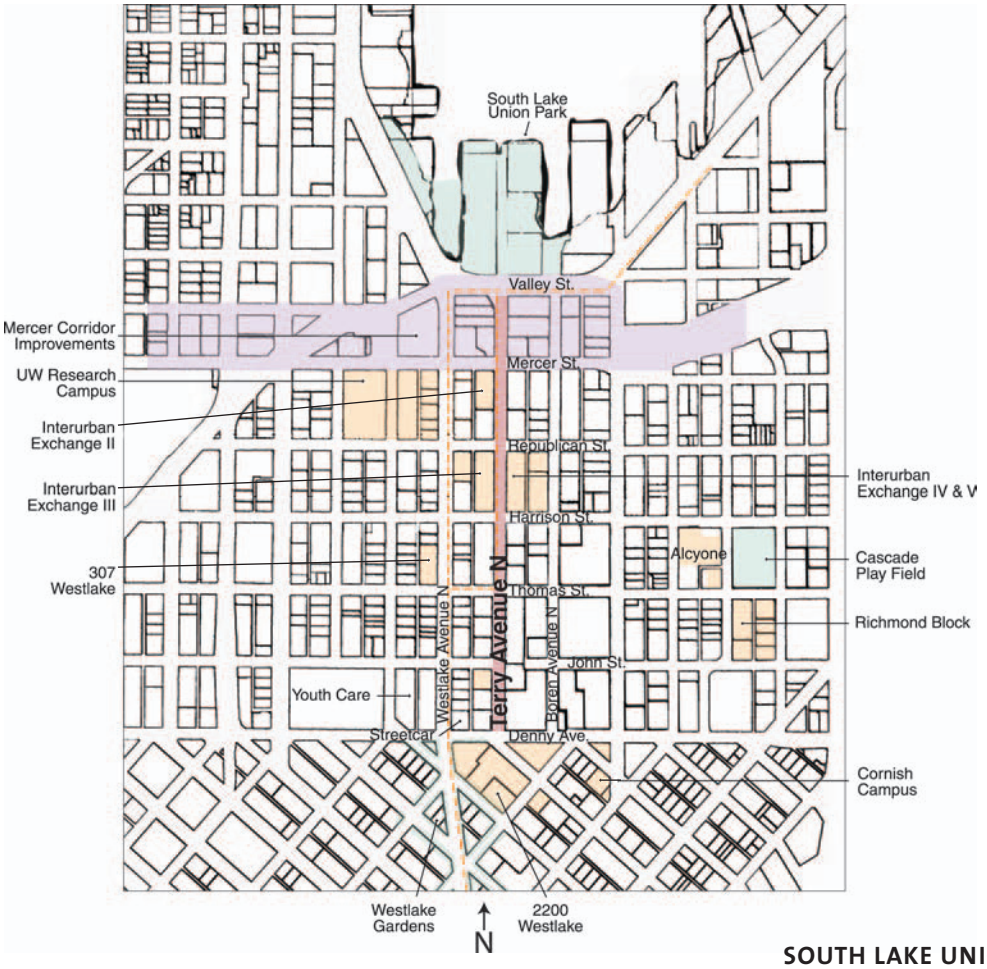
WHY TERRY AVENUE NORTH?

Terry Avenue North, which runs north from Denny Way across Valley Street and into South Lake Union Park, is unique in many ways. It is a non–arterial street in an industrial zone, located near Seattle's downtown and Interstate 5. The history of the street is visible in its abandoned rail tracks and original brick roadway surface. Parts of Terry retain their original character and have no sidewalks, with parked cars abutting the building and trucks jutting into the public right-of-way while loading and unloading.

Terry Avenue North runs parallel to Westlake Avenue North, which has high traffic volumes and ambitions of being a commercial/retail center for the area. By contrast, Terry is a slower moving street with low traffic volumes and a local access function. Given its current characteristics and the prospect of new development along the street, Terry is a good candidate to develop in a different way than most public rights-of- way.

The six blocks of Terry Avenue North between Denny and Valley have been designated a "heart location" by the South Lake Union (SLU) Design Guidelines. This designation indicates that Terry should serve as a social hub for the community, giving identity and character to the neighborhood. As a "heart location", Terry should be rich in pedestrian amenities, such as pedestrian scale lighting, special paving and landscaping, art and public open space.

The SLU Design Guidelines also envision Terry Avenue North as a key north-south pedestrian spine. It will be a key point of entry into the redeveloped South Lake Union Park. Consistent with pedestrian focus, the SLU Design Guidelines recommend that the volume of traffic and speed of traffic remain low.



SOUTH LAKE UNION PROPOSALS

INHABITING THE STREET

In considering the design intent and potential for Terry Avenue North, it became clear that the street should be designed as a pedestrian oriented street where people are encouraged to use the full right-of-way, and traffic is a lower priority. The following discussion illustrates the different way of thinking between design of a right-of-way where traffic is high priority and designing for a low-volume, low-speed pedestrian oriented street.

For most American streets, design assumes the strict separation of vehicles and people. The roadbed itself is designed for smooth, comfortable travel at a selected speed, and the pedestrian zone is clearly segregated. Between pedestrian and vehicle zones, a buffer often shields people from fast-moving, noisy and fume–generating vehicles. The buffer zone can include street trees, lights, seating and other "street furniture" and sometimes a line of parked cars. For most urban streets, this is an excellent and appropriate model, and the pedestrian zone can be an attractive linear zone of movement and activities.

There are, however, other models of street use. Where traffic volumes and speeds are low, the need to dedicate the majority of the public right–of–way to vehicles diminishes. Curbs may disappear and people can share the travel lane with vehicles. The street design can encourage pedestrians to use the street under such conditions. The Dutch formalized this pedestrian-dominated street model with the name "woonerf", a street for living.

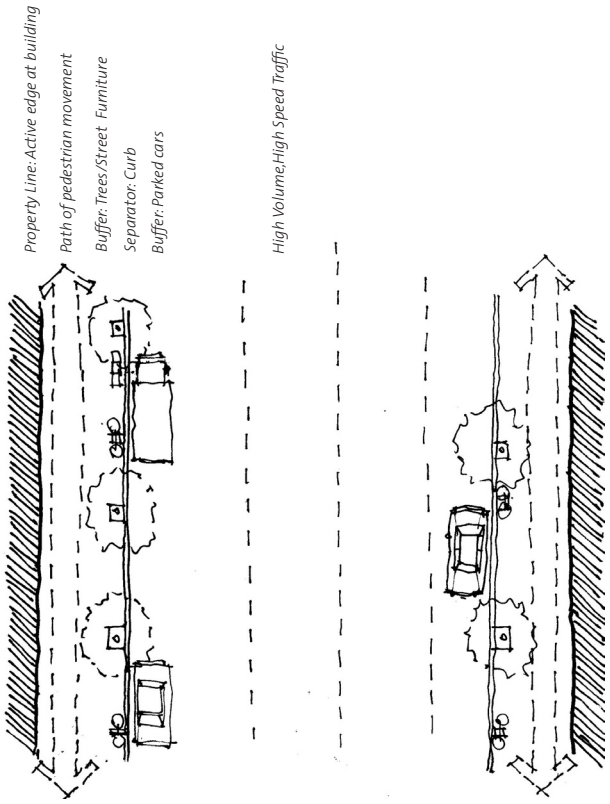


Diagram: Standard Street Design

Pedestrian Zone/Buffered Roadway Example (NW Market Street; Ballard)

Section: Standard Street Design

The inhabited street is not just a European model. While many American models are not true European "woonerfs", there are numerous examples of pedestrians and vehicles sharing the right-of-way. For example, the Pearl District in Portland, Oregon has some streets without sidewalks. Seattle's Pike Place is typically filled with people and very slow moving traffic. There is a curb on the east side only. Alleys, without enough space for sidewalks, are often used by both pedestrians and slow moving vehicles. Post Alley is a local example of an alley well used by pedestrians. The southern blocks of Terry Avenue North currently function without formalized sidewalks.

Each of these examples demonstrate the strong possibilities for placemaking when streets are designed for shared use.

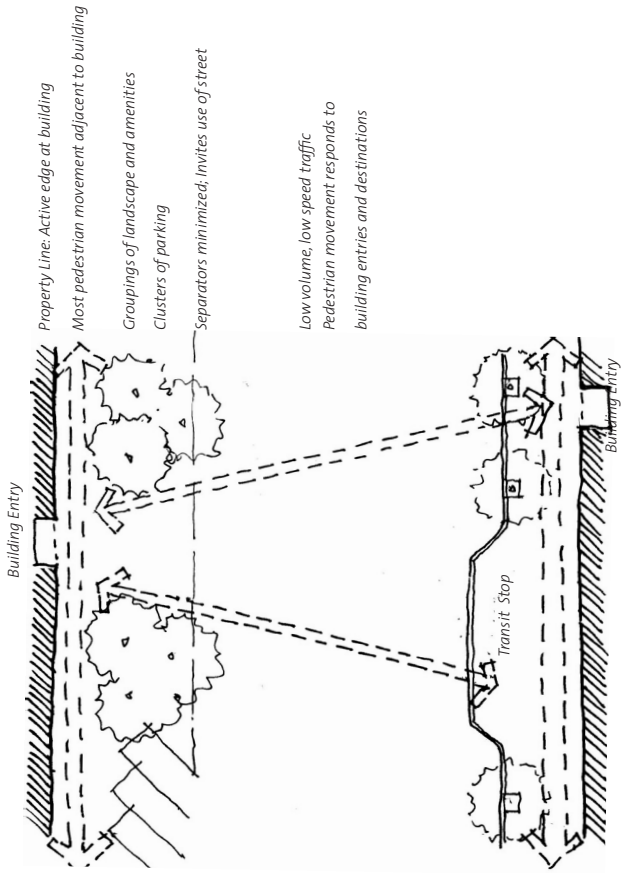
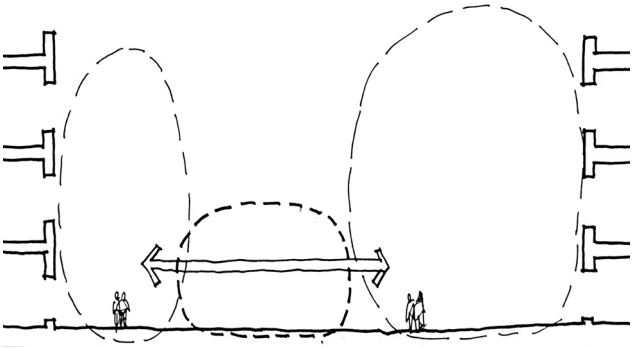


Diagram: Inhabited Street Design

Inhabited Streetscape Example - Pike Place Market



Section: Inhabited Street Design

Inhabited Streetscape Example - Occidental Mall, Pioneer Square

PROJECT PROCESS AND BACKGROUND

In March of 2003 the Seattle Department of Transportation (SDOT) initiated compilation of these design guidelines. The process has involved many steps and stakeholders to get to the final product. The steps and stakeholders are identified below. For a more complete description and documentation of the public process and findings, refer to the Appendix of this document.

Research and Analysis
This phase included documenting opportunities and constraints of Terry Avenue North and the immediate surrounding area. Successful pedestrian-oriented streets from other cities were looked at to generate ideas.

Community Outreach
Much effort was put into gathering input from current users of Terry Avenue North and the community at large before the guidelines were generated. The project team sought public input on what the design guidelines for Terry Avenue North should include in several ways from April through July 2003. Public involvement included:

 Individual stakeholder interviews with property owners and tenants were conducted between April 16 and May 16, 2003. Nine interviews were conducted, representing ten properties. Stakeholders were asked to provide information on their current and future uses of Terry Avenue North as well as suggestions for improvements.

 Public open house held on April 30, 2003. Approximately 25 attendees commented on their current use of Terry Avenue North and gave input and ideas for design guidelines.

 Meetings with community groups. The team presented to the SLUFAN Planning Committee on May 19, 2003, the SLUFAN Executive Committee on June 3, 2003, and the Cascade Neighborhood Council on May 21, 2003.

 Project website presenting information on proposed ideas for Terry Avenue North and methods for public involvement. The site received over 100 hits during June 2003.

 Public open house held on July 15, 2003. Approximately 25 attendees commented on the proposed design guidelines options and possible configurations. The comments from the public have been noted and incorporated into the guidelines whenever possible.

City Input
Given that Terry Avenue North is a public right–of–way, the City provided key input into this project. Key personnel from SDOT, DPD, SPU and SCL and South Lake Union Park were involved with advising and approving the guidelines. This process was guided by an executive committee of senior management from key departments.

Design Commission
The guidelines were presented to the Seattle Design Commission on August 7th, 2003. The commission recommended the following actions.

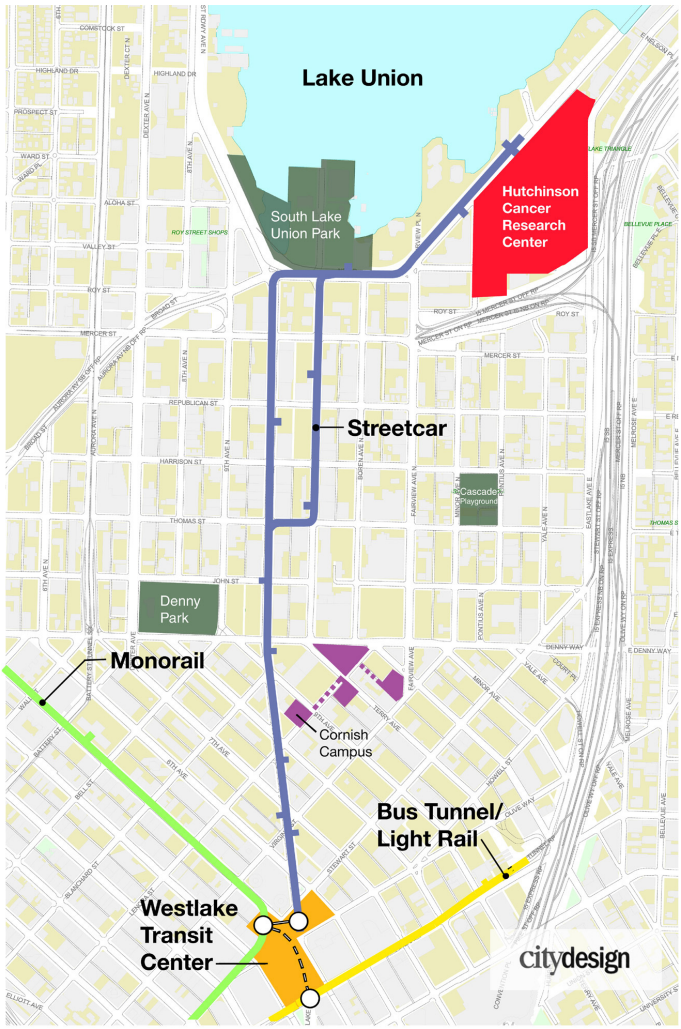
- Encouraged the team to be specific and directive regarding storm drainage and to possibly integrate these guidelines into a neighborhood wide drainage system;
- Urged the team to continue to address pivotal connections from Terry across Mercer and conceptually weave South Lake Union Park into Terry Avenue North;
- Recommended that SDOT add this street typology into their general street guidelines and Street Improvement Manual;
- Cautioned the team to be specific and clear, but must also be flexible, and urged them to be as specific as possible about key elements;
- Encourage the guidelines to acknowledge zones along Terry Avenue North that reflect changing views, topography and different types of vegetation;
- Urged the team to involve the Office of Cultural Affairs in the process to include art in the design guidelines
- Recommended approval of the draft guidelines.

A number of initiatives and plans are currently underway in South Lake Union. The Terry Avenue North Design Guidelines have been conceived with an understanding of the following projects and plans.

Streetcar
A streetcar has been proposed that would run between Westlake Center and approximately Yale Avenue North at the southern end of Lake Union. The streetcar would connect people to jobs, housing, the new South Lake Union Park, and at Westlake Center to the regional transit systems. A segment of the proposed streetcar route runs on Terry between Valley and either Thomas or John, with a proposed stop between Harrison and Republican.

Mercer Corridor
The Mercer Corridor Study is developing and analyzing a conceptual design for improvements to Mercer Street and Valley Street between I-5 and Aurora Avenue North. The concept under consideration is a widened two-way Mercer Street to carry major eastbound and westbound traffic movement through the corridor. This concept allows for a narrower Valley Street along the edge of South Lake Union Park.

South Lake Union Park
This project is currently in the first phase of a long-term redevelopment effort to create the park, which will provide indoor and outdoor spaces for large community gatherings as well as waterfront access for workers and residents of the neighborhood. The park development also will support expansion of Maritime Heritage Center elements, which preserve and display boat/water related history of the region.



South Lake Union Park rendering of potential design

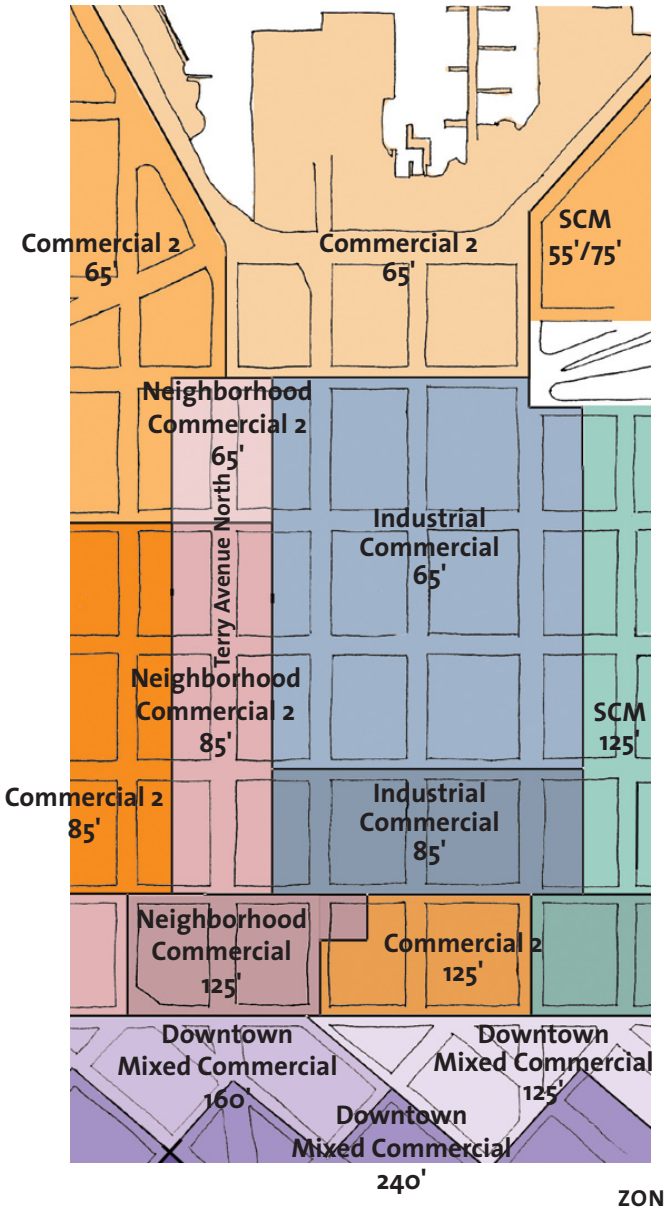
South Lake Union Neighborhood Plan
The South Lake Union Neighborhood Plan lists Terry as a "street of interest". The plan encourages the use of Terry Avenue North as a pedestrian connection to South Lake Union Park and the waterfront businesses, as well as preservation of view corridors and respect for the history and the mix of uses found in the neighborhood.

South Lake Union Public Realm Plan
This plan by the Department of Design, Construction and Land Use's City Design office recommends that Terry be a key pedestrian north-south spine that allows pedestrian free movement anywhere in the right –of-way and assumes very limited capacity for vehicular movement.

South Lake Union Design Guidelines
The Terry Avenue North Design Guidelines are a supplement to the South Lake Union Design Guidelines and further clarify development standards to be used on Terry. Site planning, streetscape compatibility, pedestrian compatibility and landscaping guidelines have been specifically addressed in this document.

The Blue Ring
The Blue Ring is Seattle's recently completed open space strategy for the 10 neighborhoods that comprise the center city. One of the primary goals of the Blue Ring is to provide a premier walking experience in Seattle, and to better connect the city to the waterfront. Terry Avenue North is identified in the plan as the peak connection to South Lake Union.

North Downtown Park Plan
This plan by Seattle Parks and Recreation identifies future parks, open space and recreation facility needs based on growth projections and comprehensive planning standards for the North Downtown neighborhoods. These needs are translated into a set of land acquisition priorities, facility development guidelines and an integrated implementation strategy.



ZONING

EXISTING TERRY

Current Functions & Street Conditions
Terry Avenue North between Valley and Denny is a unique street. It is a non-arterial street. The blocks south of Thomas currently have no sidewalks, which directs pedestrian toward the middle of the street. The street was originally paved in brick. The original brick has been removed in many places and replaced or covered with asphalt.

As late as the 1980's Burlington-Northern ran trains on Terry Avenue North. The main track still runs down the middle of the street from Valley to Denny. Spurs that served various businesses are still visible in many places. The lines have been abandoned by the rail line and are now the property of the City of Seattle. In some locations along the tracks and especially at junctions with spur lines the street condition is poor.

Given the current roughness of the street, the presence of large trucks and the unusual street configuration, traffic is light and moves slowly. Fast, through-moving north bound traffic is found on Westlake Avenue North, a principal arterial located one block to the west. Crossing Denny Way to enter or exit Terry is difficult for vehicles and pedestrians due to the topography of and traffic volumes on Denny. It is very unlikely that the intersection at Terry and Denny will be signalized so plans need to recognize this condition.

Trucks currently serve the three southern blocks of Terry during all hours of the day and every day of the week. Tractor-trailer trucks as long as 53 feet use the street to maneuver to and from loading docks. In some cases these loading docks are located on or close to the property line, forcing the trailers to sit within the right-of way while being loaded and unloaded. These non-conforming uses will be allowed to continue until development or renovation occurs.

Land Use and Zoning
Terry Avenue North is predominantly zoned IC (Industrial-Commerical). The block between Valley and Mercer is zoned C2 (Commercial) and the block between John and Denny is zoned NC3 (Neighborhood-Commercial) with half of the block on the east side zoned C2 (Commercial). Retail is allowed within these zoning classifications but is not required.

Currently there are non-conforming uses of the street. Specifically, loading docks are at or near lot lines so trucks penetrate into the street right-of-way. These uses will continue until redevelopment or renovations of these facilities occur. At that point, all current codes must be met.

Current land uses include warehousing, retail, wholesale, food production, light manufacturing, rehearsal space, office and biotechnology labs.

LAND USE

GOALS & METHODS

The following goals came out of the project research, community outreach and City requirements. These goals and methods are the drivers for the design guidelines. The goals, and the associated methods of accomplishing the goals, fall into two broad categories–a functional right-of-way, and a place with a street with a distinctive and attractive character.

CREATE A FUNCTIONAL RIGHT-OF-WAY THAT...

- Allows all of the existing and potential land uses, including their associated access, loading and parking
- Accommodates all modes of transportation including the proposed streetcar
- Promotes low vehicle speeds and discourages through traffic
- Is safe for pedestrians, bicycles and vehicles
- Is accessible for all people, including those with disabilities
- Is durable and maintainable
- Incorporates utilities efficiently and in a way that will accommodate future needs
- Allows for incremental development
- Provides a balance between right-of-way functions with environmental priorities

CREATE A GREAT PLACE THAT...

- Retains a unique character based on its history, industrial uses, topography and views
- Emphasizes pedestrians, and amenities for pedestrians
- Makes natural systems both multifunctional and visible where possible
- Uses sustainability in materials and systems

HOW CAN WE ACCOMPLISH THE GOALS?

A FUNCTIONAL RIGHT-OF-WAY

Allow existing and potential uses:

- Allow non-conforming street uses to continue until development occurs
- Provide on-street parking
- Let existing uses that are non-conforming remain

Accommodates all modes of transportation:

- Provide street design and turning radii to accommodate vehicle sizes from cars to large trucks
- Provide two lanes for vehicle traffic, one of which would be shared with the proosed streetcar.
- Provide clearances for potential streetcar

Promotes low speeds:

- Install stop signs at intersections. The principal purpose of the stop signs is to control the right-of-way, but they also have the benefit of controlling speeds.
- Use paving materials and visual clues that discourage speed

Promote safety:

- Design street to discourage speed and through traffic
- Define pedestrian only areas well

Meet accessibility:

- Meet applicable ADA requirements for design and materials
- Promote safe conditions for the visually and physically impaired

Use durable, maintainable materials:

- Use materials that are easy to maintain by City agencies
- Allow adjacent property owners to use higher maintenance materials with approved maintenance agreements

Utilities:

- Make utilities easily accessible where possible
- Coordinate placement of light, utility and streetcar poles

Balance right-of-way functions with environmental priorities:

- Minimize stormwater runoff
- Protect water and air quality

Incremental development:

- Ensure that new development and existing uses function together

Retain Terry's unique character:

Keep visible elements of history.

A GREAT PLACE

Emphasize the assets of Terry's setting: Topography
Views to Lake Union, Space Needle, downtown
Connection to South Lake Union Park

- Support a mix of uses
- Highlight the street's assets with the landscape
- Emphasize the assets of Terry's setting.
- Use lighting and other features as elements of potential consistency along the street.

Emphasize pedestrians:

- Give as much space as possible to pedestrians
- Design street to invite pedestrians to use the whole space
- Minimize the distinction between pedestrian and vehicle space as much as possible
- Use pedestrian friendly materials and amenities
- Provide amenities such as seating and landscaping

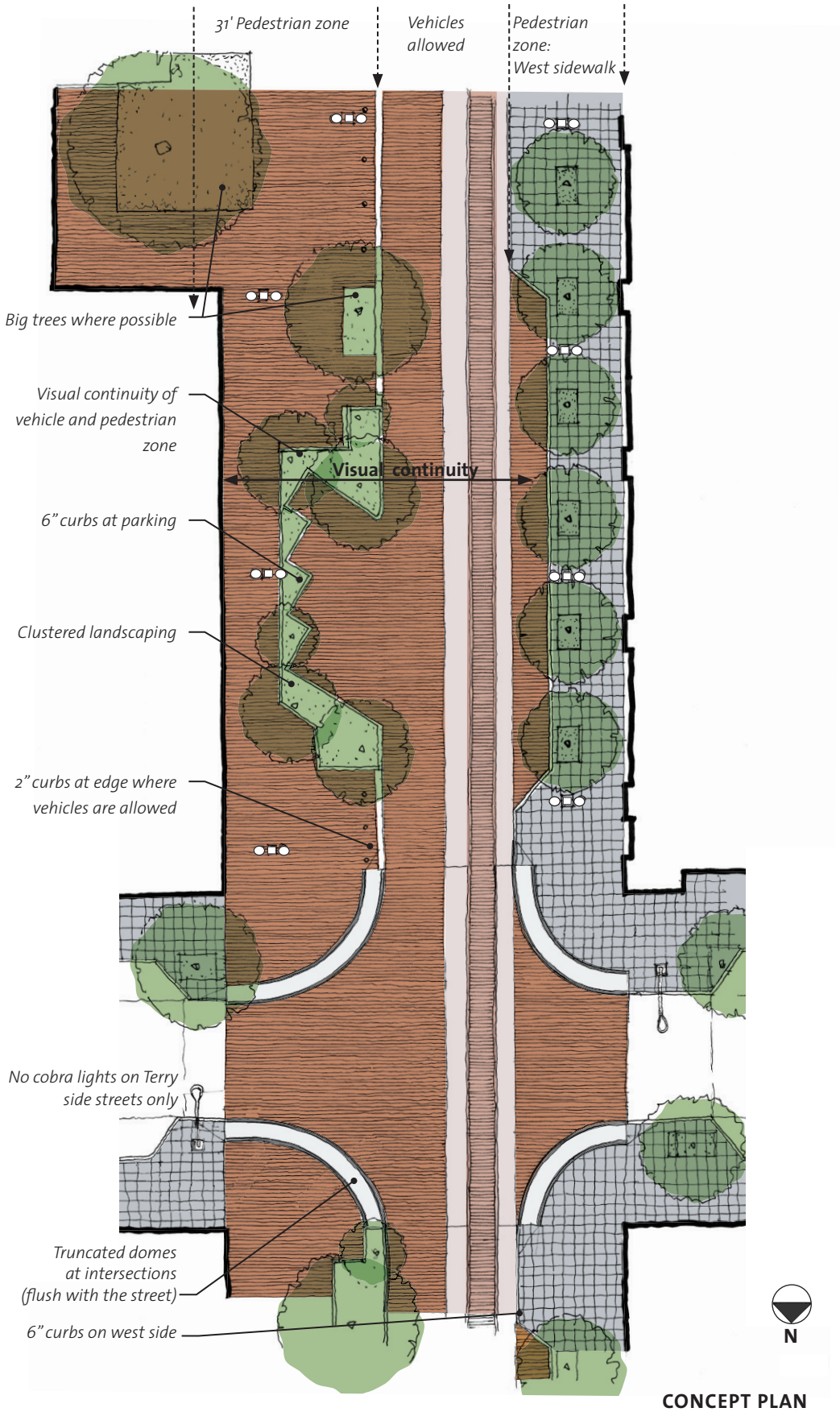
Make natural systems visible:

- Use topography to drain surface storm water
- Select stormwater strategies that protect the water quality of Lake Union

Sustainability:

- Utilize storm water for irrigation where possible
- Choose landscaping that is compatible with Seattle's climate
- Use materials that are durable and locally produced
- Make landscape selections on a cost/benefit basis with a focus on the long term

DESIGN GUIDELINES



CONCEPT PLAN

DESIGN GUIDELINES

The intent of these design guidelines is to create a design framework that will result in an attractive, pedestrian oriented street that will be maintainable over time. The guidelines are intended to result in designs that take advantage of Terry Avenue North's low vehicle use, location, width and history and to create an inhabited street in Seattle's South Lake Union neighborhood.

The intent of creating zones on Terry Avenue North is to maximize pedestrian space, while allowing for a functional mix of trucks, cars and the potential streetcar.

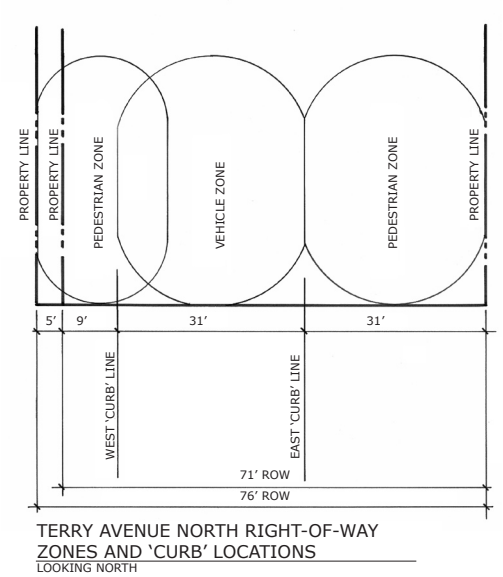


Figure 1

The Design Guidelines are written to convey an intent for the street and its design, along with a palette of materials, dimensions and other criteria.

Some design elements and dimensions need to be consistent along the street, and are set in the Guidelines. These specified dimensions and elements will simplify the permitting process. Other elements benefit by retaining flexibility within a palette for designers in order to have a more interesting street. To this end, the Design Guidelines are formatted to clarify general discussion, the intent of the guidelines, and specifications. The Design Guidelines include for each section a statement of intent, written in italics; general discussion in regular typeface; and specifications with a toned background.

GENERAL SPECIFICATIONS

All materials and construction methods shall meet current City of Seattle standard plans and specifications. Maintenance of materials and elements shall be obtainable using current technologies and existing equipment.

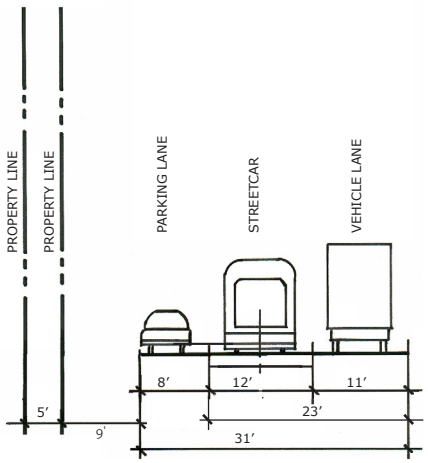
The use of materials of a higher quality, that require a higher level of maintenance may be considered, so long as an agreement is reached with the City that includes developer/owner provided maintenance.

Some design elements and configurations maximize benefits of continuity on the street. In other cases there is a range of options to choose from, so that there is variation within context-responsive design solution.s

RIGHT-OF-WAY ZONES

The right-of-way of Terry is wider then typical streets, varying from 71 to 76 feet. As properties along Terry Avenue North are developed or redeveloped, the configuration of the street will change. The Design Guidelines assign a dimension of 31 feet to the vehicle zone, with north and southbound lanes of traffic, and a parking lane. This cross section is also appropriate should Terry Avenue North become a one-way street in the future with the implementation of the streetcar.

The recently completed Interurban Exchange III building, on the west side of the block between Harrison and Republican, has a traditional sidewalk and curb. The proposed streetcar would have one or more stops on Terry Avenue. It is anticipated that a stop will be located in front of the Interurban Exchange III building. A stop and a sidewalk extension would be constructed when the streetcar line is built. The configuration of this block sets future development of the two adjacent blocks. See Figure 2 for a sample cross-section of where the proposed streetcar tracks would be located within the right-of-way.



VEHICLE RIGHT-OF-WAY and STREETCAR LOCATION
LOOKING NORTH

Figure 2

ZONE SPECIFICATION

Right-of-Way Cross Section:
See Figure 1 for an overall street section showing dimensions of zones and 'curb' location.

VEHICLE ZONE

The vehicle lanes, totaling 23 feet in width, are illustrated in figure 2. The vehicle zone could accommodate either one traffic lane in each direction and a parking lane on the west side of the vehicle zone, or two northbound lanes of traffic with parking. Where parallel parking occurs adjacent to streetcar tracks, the edge of the parking lane will be visible, preferably through contrasting materials, but with striping if necessary. The parallel parking zone is an excellent candidate for retention of existing brick. A minimum of an 8-foot parking lane is recommended.

Slopes for drainage are to be typically 2% cross slopes with a 1% minimum and a 5% maximum for grade adjustments. Some blocks along Terry are currently thrown and some are crowned.

Remove existing rail tracks from street.

PEDESTRIAN ZONES

Along Terry Avenue North the west side pedestrian zone will be either 9 or 14 feet depending on the width of the right-of-way. The west side zone may be a sidewalk with a 6 inch curb. To accommodate landscaping, a minimum dimension of 10 feet 6 inches is recommended.

The east side pedestrian zone will be 31 feet wide.

The minimum required sidewalk width for Terry Avenue North is 8' with no plantings and 10'6" where plantings or street trees occur. On Republican, Harrison, Thomas and John Streets, sidewalk should be a minimum of 13 feet with a 5 foot planting strip adjacent to the street.

New sidewalks need to align with existing sidewalks.

Slopes for drainage are to be typically 2% cross slopes with a 1% minimum and a 5% maximum for grade adjustments.

STREETCAR

New poles for overhead wires should be minimized by using existing poles to the extent possible.

MATERIALS

The community consistently spoke about the desire to retain elements of the history of Terry Avenue. With removal of the existing train rails and with new building construction, the old brick may be the only remnant of Terry's industrial past. Therefore the intent of the guidelines is to preserve as much of the existing brick as possible and use new materials are compatible with the old.

The materials used in the vehicle zones and pedestrian zones, especially the eastern side, must result in visual continuity with the right-of-way. The intent is to make sure that the eastern pedestrian zone does not read as traditional sidewalk separated from the vehicle zone. Consistency of materials should also extend into adjacent plazas.

The surfaces materials help determine character and 'feel' of a street. Older Seattle streets were often surfaced with mortar set brick. Much of this brick still exists throughout the city but is covered in asphalt. Terry Avenue North is one of the few streets in Seattle where brick is still the visible paving material. The great majority of the community that uses Terry wants to retain the brick.

On Terry, most of the existing brick is located on both sides of the main rail track down the street center. As the street improvements above and below the street occur much of the existing street will be removed. It is desired that any large areas of the brick that can remain without compromising the engineering of the street be kept in place. It may be most appropriate to keep the brick intact in the linear parking area on the west side of the street and in the pockets of parking located on the east side of the street where grade may not need to be raised. Resetting the existing brick is desirable but will not be required.

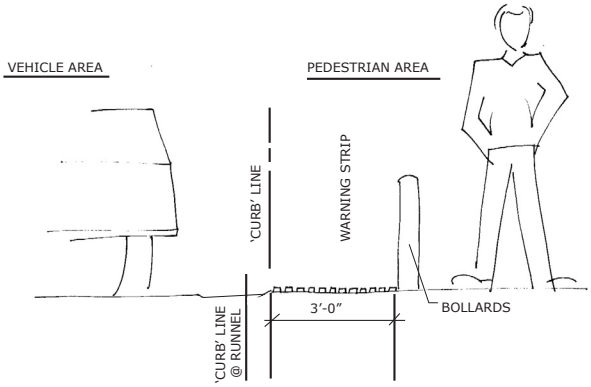


Figure 3

The intent of a material selection is to allow palette of materials that allow variation within a set of compatible elements. Materials have been chosen for durability, ease of maintenance, attractiveness and compatibility with the existing materials on Terry Avenue.

Terry Avenue is a collage of paving that is a result of practical uses. Pedestrian and vehicle areas are not defined by paving materials, and that lack of definition between areas should continue.

MATERIAL SPECIFICATION

Acceptable Paving Materials–General

Acceptable paving materials are existing brick in place, new brick, granite pavers and stamped concrete. Curbs will be concrete or granite.

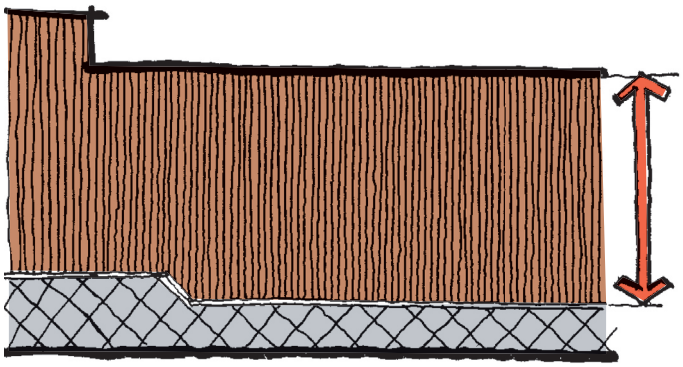
VEHICLE ZONE AND PARKING AREAS:

- **Existing Brick**–maximize the retention of existing brick.
- **New Brick**–New brick should be compatible with the existing brick, but different enough from the older brick to look intentionally different. Brick is to be set in a Running Bond pattern, and set with mortar in a rigid application. Brick in the street must be able to accept weight of trucks.

  Size–3 1/2" x 7 1/2" x 2 1/2"

  Color–Color to be compatible with exsisting brick, but different enough to look intentionally different. An example of a compatible color is Mutual Materials Co.-Newcastle series Carib-Mission.
- **Stamped Concrete**–Concrete may be used with a variety of textures and colors on Republican, Harrison, and Thomas at the intersections with Terry. Heavily textured stamped concrete to attain a 'rumble" effect will be used approaching the intersections to slow down and indicate to vehicles that they are entering a pedestrian zone. It should not be part of the Terry Avenue roadway. Stamped concrete will be allowed as part of the streetcar trackway. Stamped concrete that imitates brick is not desirable.

The intent of a material selection for vehicle zones and parking areas is to create visual continuity between these areas and the pedestrian-only zone.



Visual continuity from the west curb line to the east property line maximizes the pedestrian feel of the street.

Pine Street at Westlake Center is a good example of visual continuity across street and pedestrian area.

Seattle's best pedestrian places have material continuity in the street. Terry Avenue, like the Pike Place Market, will have concrete curb and sidewalk on one side.

PEDESTRIAN ZONES: ACCEPTABLE PAVING MATERIALS

- **Existing Brick**–Retain existing brick where possible.
- **New Brick**–New brick should be compatible with the existing brick, but different enough from the older brick to look intentionally different. Brick is to be set in a Running Bond pattern, and set with sand in a flexible application, sealed with joint sealer

  Size–4"x 8"x 2 1/2"
  Color–Color to be compatible with exsisting brick, but different enough to look intentionally different. An example of a compatible color is Mutual Materials Co.-Newcastle series , Inca-Mission, Carib-Mission or Monterey-Mission.
- **Concrete Pavers**–Set with sand in a flexible application.

  Size–7 7/8" x 7 7/8" x 2 3/8"
  Color–Concrete pavers need to keep visual continuity of brick color palette. An example of an acceptable paver would be Mutual Materials Co.-Holland Series, Autumn Blend Mission, Rustic Blend Mission.
- **Stamped Concrete**
  Concrete may be used when a traditional sidewalk and curb are built on the west side of Terry. On cross streets to Terry a broom finish is acceptable. Concrete used on Terry should have a stamped finish to obtain a random textured pavers affect.

ACCESS SPECIFICATIONS:

Designs for Terry Avenue North will meet all current ADA regulations at the time of construction, and be approved by SDOT as meeting those regulations.

Acceptable Warning Strip Materials

• Warning strips must meet the ADA specifications for truncated domes, and have aggregate and cement that will retain required color contrast over time. An example of such a warning strip is, Terra Paving Products–Type 3/FPX-1009/U-1009.

• **Cast Concrete Panels**–May be used if approved by SDOT

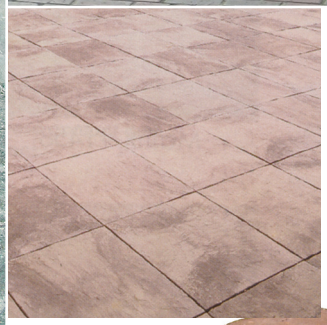
Acceptable Curb Materials:

• Concrete or granite that provide a 70% contrast to adjacent materials.

New brick is compatible with existing brick.

Exsisting brick

Stamped concrete



Concrete Pavers

Granite

Tactile warning strip and contrasting brick

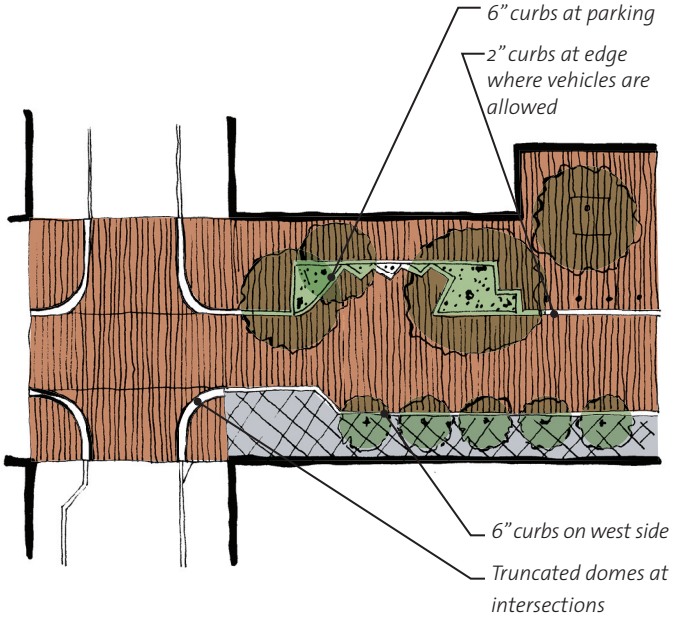
ACCESSIBILITY

Recent Federal regulations require that where pedestrians move into a vehicular zone without a traditional sized curb or other defining element, a 36 inch wide warning strip with truncated domes is required. There must be 70% color contrast between the warning strip and the paving material running parallel and adjacent to the strip. See Figure 3. This condition is required at all intersections and may be used along the length of the east pedestrian zone.

Another alternative is to provide a 2 inch curb at the transition point from pedestrian to vehicle zones. On Terry Avenue, the curb would need to have a 70% color contrast with the adjacent paving materials.

Designs should provide a clear path along the building line and across intersections for blind and sight-impaired pedestrians.

The intent of the guidelines is to make Terry Avenue accessible to all people, and to meet accessibility requirements in an attractive manner. Pedestrians may be separated from areas where vehicles are allowed by a 2" or 4" curb, by a row of truncated domes per ADA specifications, or by a separator such as a planting area.



Westlake Center, shown in the photo to the right, is an excellent model with a low curb. Visual continuity of pedestrian areas and the vehicular area is maintained, but the curb and the gutter are still perceptibly distinct.

Example of low curb with visible distinction of curb/gutter

INTERSECTIONS

The intent of the guidelines are that vehicle zone and parking areas along Terry Avenue North be paved with brick between Denny and Valley including its intersections. Visible indications will be needed to alert vehicles on the cross streets that they are approaching a non traditional street. This can be done with landscaping (see Landscaping section) and a change in the street surface (see Material specifications Vehicle Zone: Acceptable Paving Materials above). All intersections along Terry Avenue North will have stop signs to slow traffic along Terry.

As Terry is zoned for Industrial use, large trucks may continue to use the street even as redevelopment occurs. Curb radii on the east side of Terry will be 30 feet. Curb radii on the west side should be 25 feet and no less then 22.5 feet. Curb bulbs may by designed at Harrison but are discouraged at the other intersections. This is to allow for the proposed streetcar turning at Thomas or John and truck use along John.

INTERSECTION SPECIFICATIONS:

See intersection Figures 4-8 for 'curb' locations and radius, paving boundaries and striping. Terry paving materials shall extend either 5 feet into cross streets or at the edge of curb radii.

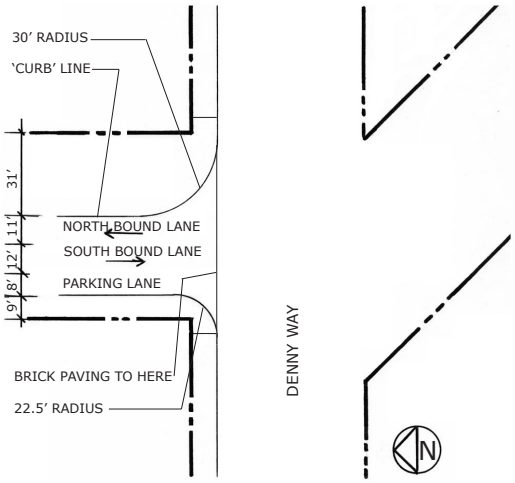
Incorporate heavily textured concrete in east-west streets prior to intersection with Terry for a length of 40 feet before the intersection.

Stop signs are appropriate at all intersections along Terry Avenue North, with traffic signals if warranted. Intersections at Harrison and Thomas shall be four way stops, at John a three way stop.

Denny–The intersection at Denny Way and Terry Avenue North would seem to be a location for a gateway on to Terry from downtown. However, topography and vehicle speeds make the pedestrian crossing across Denny difficult, and crossing at Denny should be discouraged. In order to encourage pedestrians to continue on Denny to the crossing at Westlake, wider sidewalks on the north side of Denny should be considered as part of new development. See Figure 4.

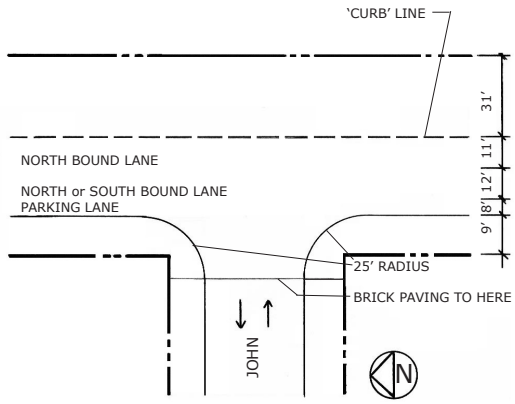
John–John Street runs east from Westlake Avenue to Terry and has low vehicle use. The topography and large grade change between Terry and Boren do not allow for a street. The former City right-of-way between Terry and Boren is now private property, divided between the two adjacent landowners. A portion remains undeveloped and is one of the few green places along the street.

The intent of intersection design along Terry Avenue is to create a safe condition for pedestrians and vehicles that is attractive and compatible with a pedestrian-oriented street.



INTERSECTION AT TERRY AND DENNY
NTS

Figure 4



INTERSECTION AT TERRY AND JOHN
NTS

Figure 5

John is a logical street to encourage pedestrian traffic from Westlake Avenue and downtown. Plantings and art should be used to direct this traffic, possibly the pavement on John between Terry and Westlake should be the same as that on Terry. See Figure 5.

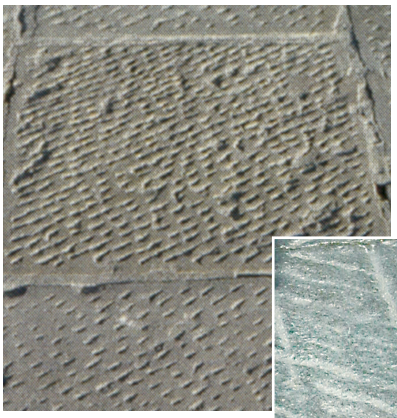
Thomas–The proposed streetcar may turn east on Thomas. Thomas is not an arterial, but is used by pedestrians coming from the east heading to Westlake Avenue or Lake Union. This street is in a sense the gateway from the east onto the street. See Figure 6.

Harrison–Harrison is a non -arterial street. See Figure 7.

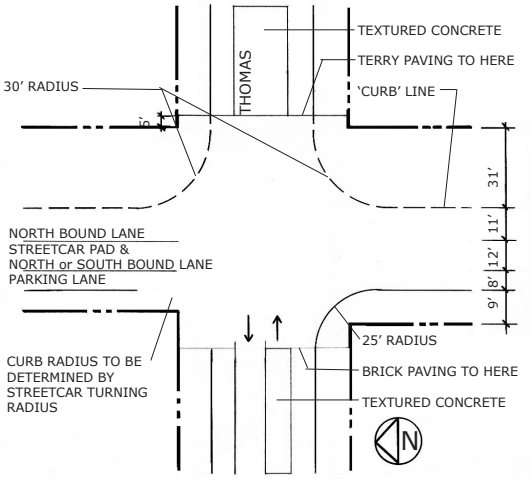
Republican–Republican is an arterial and will have the right-of-way across Terry. See Figure 8.

Mercer–Studies are underway for improvements to the Mercer Corridor. Mercer Street may become a two-way major arterial taking traffic to and from I-5. Terry is potentially a main pedestrian link with South Lake Union Park, and a pedestrian-activated signal may be appropriate.

Valley–Valley Street may also be altered by the Mercer Corridor changes. It may become narrower in size, with slower moving traffic going to the park and to businesses located along the lake. Depending on traffic expectations for Valley, this is likely to be a signalized intersection or 4-way stop.

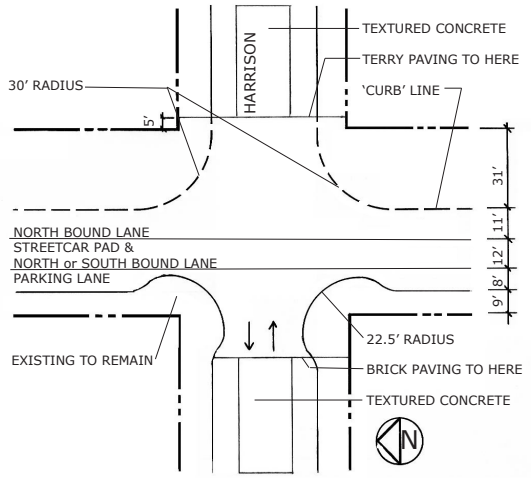


Textured concrete



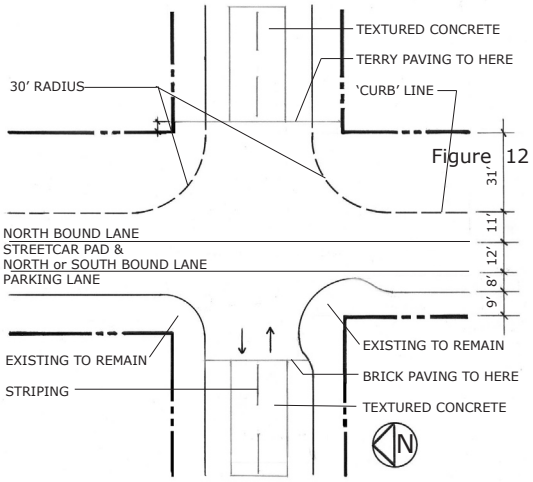
INTERSECTION AT TERRY AND THOMAS
NTS

Figure 6



INTERSECTION AT TERRY AND HARRISON
NTS

Figure 7



INTERSECTION AT TERRY AND REPUBLICAN
NTS

Figure 8

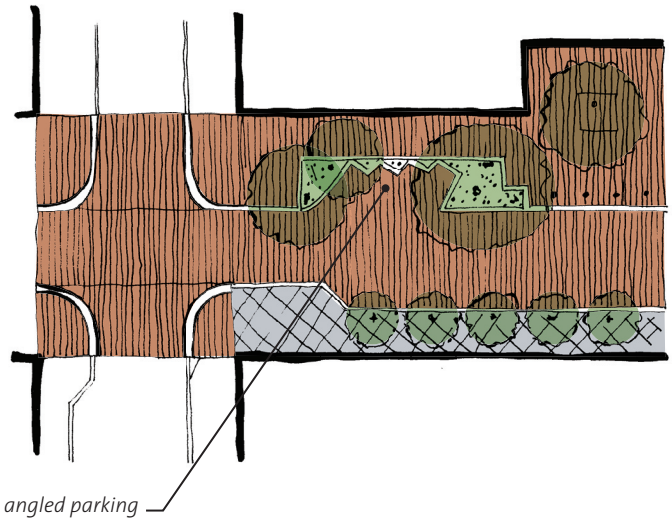
PARKING

Given the nature of the existing use and configuration of the street, it is not uncommon for vehicles to park perpendicular to buildings often up to the façade or property line. With no striping, cars are parked tightly next to one another, and in some cases cars double-park within the right-of-way. While parking anarchy contribute to Terry's character, this way of parking will become less appropriate over time and will be discouraged as development occurs.

Parking along Terry will be provided to serve visitors and customers. Longer term on-street parking for employees is not encouraged as the street develops.

Terry Avenue North is not currently being considered for parking meters. When laying out parking areas they should be sized to accommodate future metering. Should metering occur, the use of pay stations rather than parking meters is encouraged. The edge of the parallel parking lane next to the streetcar will be visible, preferably with a difference in materials. Paint would be used only if necessary.

The intent of the guidelines is to allow for a modest amount of parking to accommodate short term visitor and customer parking. Parking on the west side will continue the pattern of parallel parking along a traditional sidewalk. On the east side the intent is to create clusters of angled parking where needed.



RECOMMENDED PARKING CONFIGURATION:

Parallel Parking

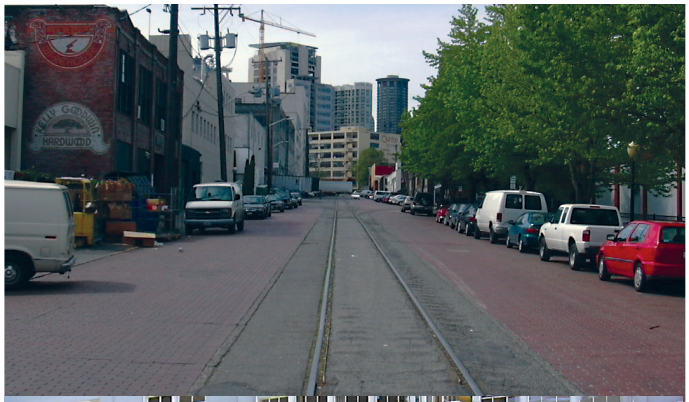
Under these guidelines parallel parking is recommended on the west side of the street and is the only type of parking allowed adjacent to the proposed streetcar line. To encourage pedestrian use of the street parallel parking should not be continuous alone the length of the block.

Angled parking

Angled parking in groups for 3 to 5 cars is allowed along the east side of the vehicle area. Parking should be back in. No more then 12 parking stalls or 3 groups per block should be allowed. The minimum dimension between groups should be 60 feet.

Angled parking should be 60 degrees from the 'curb' line. Stalls will be 9 feet wide (10 feet 6 inches parallel to the street center line) and 20 feet long.

The edge of the angled parking spaces will stop vehicle wheels with a 5-6 inch curb, planter, or other dual use street furnishing. Freestanding wheel stops at grade are not to be used.



BOLLARDS

Bollards may be used along the street where ever there is not a traditional 6 inch curb, 5 foot planting strip, trees, or other street objects to separate the vehicle and pedestrian zone. Their purpose is to ensure that vehicles do not drive or park on the pedestrian zones.

Bollards are intended to prevent vehicular movement into the pedestrian-only zone where those movements are not desired by the private property owner, and there is no curb or other barrier.

BOLLARDS SPECIFICATIONS:

Placement

Bollard, where used, shall be placed 3 feet away from the edge of vehicle right-of-way (curb line) and at parking areas when the curb is less then 5 inches. See Figure 3. Bollards in a linear line shall be placed no more then 4-5 feet apart from each other .

Acceptable Bollards

Bollards to be cast iron, steel, or aluminum.

All Bollards need to be breakaway.

LIGHTING

Lighting is an element of consistency along the street. On the west side of the street, the line of lighting will be located in a standard linear arrangement set back from the curb., following the lead of the Exchange III building. On the east side of the street, lighting may fall into one of two lines, so that the lighting feels organized, but has the ability to respond to the use of the wide pedestrian zone.

Lighting along Terry is intended to support a safe, attractive, pedestrian friendly place. The importance of lighting on Terry is such that a pilot program using induction lighting was put into place, and a special lighting district is being created for a larger area that will include Terry Avenue North. Project proponents need to refer to the Special Lighting District document when it is put into place.

LIGHTING SPECIFICATIONS:

New lights on Terry Avenue are encouraged to match the existing fixtures installed at the Urban Interchange III building in regard to height, housing, pole and base.

Pedestrian Scale Lighting–acceptable lighting fixtures and supports

Luminaires, mountings, poles bases and arms are elements of continuity along Terry. Existing fixtures at Urban Interchange III are Lumec Luminaire–Z60B, with an 85 watt QL Lamp. Color GN8TX. Use this fixture or equal.

Mountings, Poles, bases and arms– Match the existing fixtures installed at Urban Interchange III.

Lighting Level

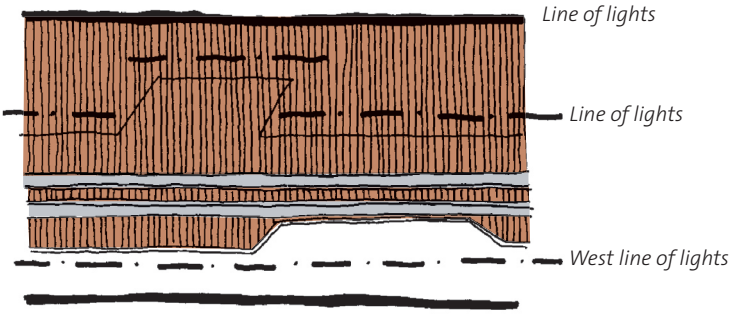
The light on the street is to be 1.5 to 2.0 footcandles, with a minimum uniformity of 3:1.

Spacing

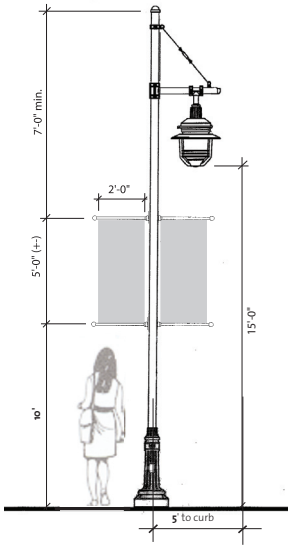
Spacing between lights may range from 40-60 feet on center, and is to be coordinated with street tree layout and other overhead features. Provide adequate space for pedestrian movement along the property line.

Cobra HPS: Acceptable Lighting Fixtures and Supports

Cobra Fixtures are not allowed on Terry Avenue. They may be placed on arterials that intersect with Terry Avenue, set back from the intersection. The luminaire and support for Cobras on the arterials is to be determined by the Special Lighting District.



Lighting on Terry Avenue is a pilot program for induction lighting.



"QL" Induction figure specified for Terry Avenue

LANDSCAPING

Currently, Terry Avenue North is strongly characterized by its urban collage of layered paving textures and building materials. Plants have little presence in this historic Seattle landscape, which was crafted in the practical and industrial spirit of early Seattleites. In deliberate contrast to the famous cloak of green that shrouds Puget Sound's natural landscape, historic downtown Seattle was developed as a decidedly open, treeless landscape. The original, towering forest was entirely cleared away to allow for a grid of efficient, open streets like Terry Avenue North.

The occasional, heroic tree was spared in Seattle's clear cutting progress. Such trees became grand, solitary landmarks in the larger open landscape, casting precious shade, legends, and memories in their enhanced realm. Few street trees were planted in early downtown Seattle, but the rugged, native Big Leaf Maple was the predominant choice when street trees were planted downtown.

Like most preserved, historic streets in downtown Seattle, existing Terry has very few trees along its length. An exception can be found in the row of trees along the west side of the block between Thomas and Harrison, in front of the old train depot. A few smaller trees have been planted between Republican and Mercer, and there is a lone tree outside the Seattle Times building not far from John Street.

The notable green that does exist comes from Terry's cross streets. Over the years, various property owners have planted a variety of ornamental shrubs and small trees and have maintained grass planting strips. This has created an intriguing variety of personality and ownership in the side streets. The clipped and cared-for style in many of these side-street plantings optimize the contrast between Terry's practical, urban brick yards and a more ornamental, residential feeling in the surrounding streets. The vacant land where John Street would be if not for the steep grade change offers an informal pocket of sloped green as one passes along Terry Avenue.

In keeping with Terry's history and overall character, the planting concept proposed for Terry should be highly distinct from a normal street and specific to Terry's historic and contemporary landscape. The street should retain some of the historically open, industrial feel as well as accommodate views north to the lake, south to downtown and west to the Space Needle. At the same time, many users and community members said they wanted greenery in groundcover and tree form. Emphasizing the different views through use of hardscape and green plantings is desirable.

The landscape palette is intended to reinforce the "sense of place" on Terry Avenue, by making the most of the larger scale opportunities of a pedestrian-oriented street; by relating to the setting and historic character of the street; and by reinforcing the link to South Lake Union Park. Landscaping is intended to contribute to a sustainable environment, increasing pervious suface, minimizing water usage, and providing shading for building facades.

Like most industrial urban streets, Terry has few trees along its length.

The east-west cross streets have much greener landscapes.

The Design Guidelines promote a "**Big Trees**" concept, a planting scheme based on Terry's potent expression of downtown Seattle's unique urban history. Landmark plantings of one or two iconic native trees, such as Big Leaf Maple, Western Red Cedar, or Douglas fir would be placed at suitable points along Terry Avenue. These trees would provide shared focal points, generous islands of shade, and, in the spirit of Seattle's famous "survivor" trees, act as grand beacons amongst the built environment. These great trees will pay homage to the original growth of the area and perhaps grow in symbolic defiance of David Denny's sawmill, which was located nearby.

The surface and below-ground landscape around Terry Avenue's "Big Trees" would be designed to accommodate 100-year life-spans for the trees. This long-term approach to the tree plantings will allow the trees to achieve their natural, charismatic scale. Therefore, the trees need to be located where they will not conflict with utilities as they mature. Suitable aerated/uncompacted soil and air exchange surface needs to be provided to ensure long-term tree health and mature growth.

Ideally, the Big Trees would be located in public spaces near the edge of the right-of-way within private property. An adequate area of protected aeration and nutrition should be designed for the expansive root zone of the Big Trees. These areas would be designed around each tree, either as an elevated, planted "knoll" or as a walkable surface of suspended, removable covers. Other trees in the street should be grouped in clusters to provide smaller islands of shade and green along the street. These trees should be in clusters of 3 to 5 and pulled as close to the lot line as possible to retain a clear area down the middle of the right-of-way. The trees should have metal grates over their root opening so that pedestrians may move through the trees. The Acer, or Maple, family of trees is being proposed. This will give continuity to the street but allow some variation.

South Lake Union Park is currently being designed and will be a gate way to Terry. At this time plantings specified for the park are not known, but these design guidelines encourage integrating park landscaping onto Terry between Valley and Mercer Streets.

Within planting strips the concept is to have low native plants that will tolerate the Seattle climate. They should appear to be trying to reclaim the street by pushing "through the cracks".

For the cross streets a landscape of dense green of trees, shrubs and groundcover should be planted. A canopy effect of trees will help slow traffic down as it approaches intersections. A green corridor will also help lead people to Terry from Westlake and Boren. Irrigation from the storm water system will be applied when possible and desired.

LANDSCAPE SPECIFICATIONS

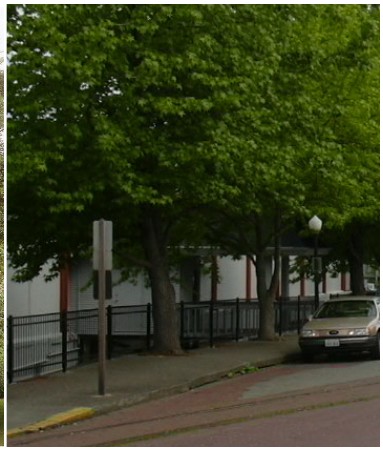
Provide a minimum of 30% tree cover in all blocks.

Locate groupings of trees to allow ease of pedestrian movement and in areas where mature trees will not conflict with utilities. Trees shall be grouped in clusters of 3–5. Locate trees to maximize building shading and other sustainable strategies.

All tree pits shall be engineered to maximize pedestrian access.

Trees may have metal grates to facilitate use of space around trees but ground cover is preferred. Use creative solutions such as "stepping stones", etc. to allow pedestrian movement through tree clusters.

Big Leaf Maple



Existing trees on Terry

PLANTING SPECIFICATIONS:

Acceptable plantings

'Big Tree' Species
For use as specimen trees that take advantage of the larger scale of the street, especially when adjacent private open space is available. Cover aerated/uncompacted area with tree grates, permeable pavers or grass as suitable.

- **Big Leaf Maple–**Needs a minimum diameter aerated/uncompacted soil area of 50'. Prefers cool, moist environment
- **Western Red Cedar–**Needs a minimum diameter aerated/uncompacted soil area of 25'. Prefers, moist, well drained soils and full sun-partial shade, has a swollen or buttressed base
- **Douglas Fir–**Needs a minimum diameter aerated/uncompacted soil area of 25', well drained moist soils and sunny roomy conditions

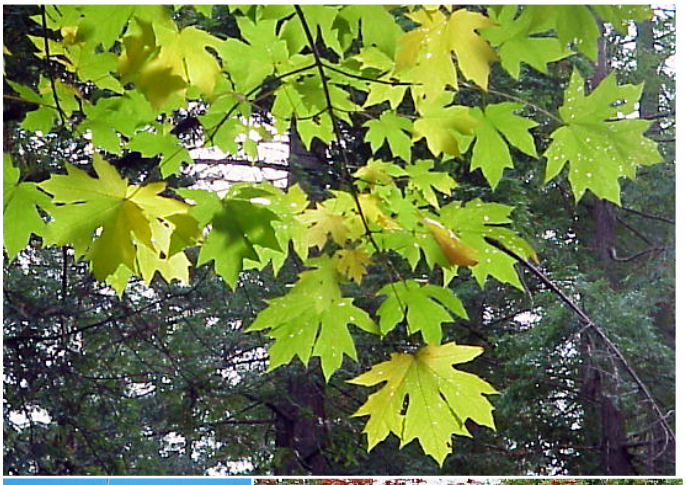
Additional Trees

- **Maple–Acer species–**Provide a minimum of 24 Square Feet of aerated/uncompacted soil for each tree. Size as needed to ensure tree growth and health.

Ground Covers

- Native species, including
- Salal
- Bearberry
- Beach Strawberry

Big Leaf Maple



Western Red Cedar

Japanese Vine Maple

Salal

Bearberry

Beach Strawberry

STORM WATER

The intent of the guidlelines is to maximize use of visible and sustainable storm water strategies within the City's regulatory context.

Terry Avenue North rises sixty feet in elevation from Valley Street to Denny Way. The roadway cross slope varies from 0.75% to 2.8%. In general, the trend of the slope is from the southeast to the northwest. The existing storm water infrastructure in Terry collects water from the adjacent buildings, the street, Boren Avenue, and the runoff from the buildings on its western edge. The runoff from cross streets such as Harrison, Republican, and Mercer St. also join into the 30-inch collection system that runs south to north along Terry. The existing collection system is a combined sanitary sewer and storm drainage line that intersects a 72-inch King County Mainline line on Republican. Storm water from the Terry Basin has been diverted from Lake Union and the lake no longer receives any of the natural runoff flow from this area.

The South Lake Union (SLU) neighborhood recognizes the importance of implementing principles of sustainability. Within SLU there are four distinct sub-areas, which include the Cascade District, a mixed commercial, light industrial and residential neighborhood and a leader in sustainable practices in the Seattle urban area. In 1996, the neighborhood council created "Waterflow Vision," sustainability guidelines with the goal to "remake the community into a functional surface water landscape and ecosystem." Green design has been creatively utilized through out the SLU community that includes the renovation of the Cascade Peoples Center, as a model for sustainable building practices. The renovation includes a green roof and solar panels. Adjacent to the center is the garden featuring drought-tolerant, native plants and a cistern that collects rainwater from the Center's roof. The Terry Avenue design guidelines are consistent with the community's goals.

Given the natural topography and the width of Terry Avenue North, there is an opportunity for a visual representation of storm water flow and/or use down the street. Also, there are many opportunities for implementing sustainability principles and natural drainage system components in the urban environment. These include:

- Harvesting rainwater for irrigation or above ground water features providing a visual connection to the flow of storm water.
- Functional landscape treatments to store, convey, and treat storm water.

Natural drainage systems, a term coined by Seattle Public Utilities to describe drainage improvement projects that strive to meet multiple goals. Goals include infiltration and slowing of storm water flow, filtering and bio-remediation of pollutants by soils and plants, reduced impervious surface, porous paving, increased vegetation, and related pedestrian amenities. These projects use natural features, including open, vegetated swales, storm water cascades, and small wetland ponds, to mimic the functions of nature that have been lost to urbanization. At the heart of all Natural Drainage System projects are the plants and trees, and the deep, healthy soils that support them. All three combine to form a "living infrastructure" that, unlike pipes and vaults, increases in functional value over time.

There has been strong community desire to use street and roof storm water for irrigation of the SLU Park ultimately directing the water to Lake Union instead of the combined sewer/storm water system. There are legitimate concerns that during rainfall, excess water flowing into Lake Union will do harm by stirring up polluted sediments in the lake bed. Further, Seattle, King County, and the EPA are just completing construction of the Denny/Lake Union Combined Sewer Overflow Control Project. This is a public investment of $160 million to reduce combined sewer overflows that provides protection for Lake Union and Elliott Bay. If the Storm Water Specifications on page 36 are met with a decision to redirect some runoff to Lake Union, permit processing could take years. Therefore, at this point, the storm water will be used as much as possible to irrigate landscaping along Terry and its side streets and it will continue to discharge to the combined sewer. Provisions will be made to make the system adaptable so that in the future a separated system can discharge into the lake. Additionally the improvements will allow for off site flows to be conveyed through the Terry corridor.

The design team has looked at a range of usable storm water collection and conveyance systems for Terry Avenue. Two have been deemed possible for use and are described below.

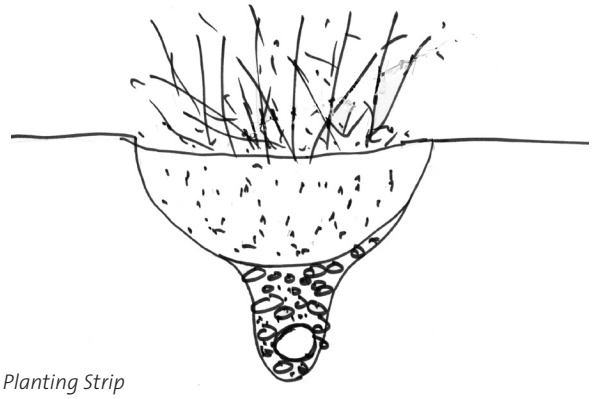
Runnel–A shallow channel constructed of the same paving materials as the street. This system would carry run off from pedestrian areas and divert it to areas where irrigation is needed. Currently two blocks on Occidental Square in Pioneer Square have runnel drainage systems. The system would disappear beneath the street at parking areas and intersections. The runnel should be between 18"-30" wide and no more then 2" deep. It should be designed so that during major storms where storm water exceeds runnel capacity, excess water will drain into the combined sewer/storm water system.

The advantages of this system are:

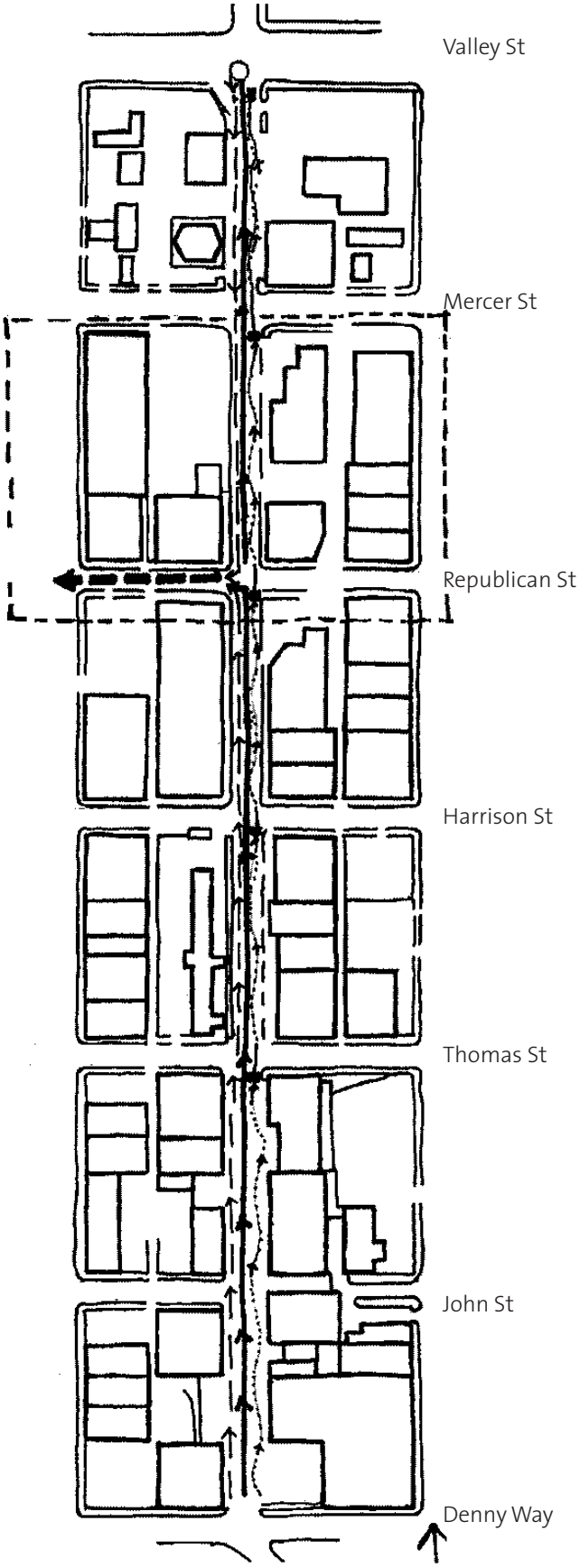
- Reducing the initial amount of storm runoff during a storm
- Improving water quality
- Increasing visual appeal
- Reducing the amount of impervious surfaces
- Providing pedestrian buffer from vehicles

In addition, this system is not a separator, so people can cross at all points. A runnel system may be more appropriate for blocks that have street facing loading access.

Planting Strip–A channel that is planted with vegetation. Settling and filtration of water through the vegetation and into the soil will remove the pollutants from the runoff. The strip should be 5'- 6.5' wide and approximately 1'- 1.5' deep. A perforated pipe in the gravel at the bottom of the strip would carry excess water across intersections or other places where the strip may 'disappear', and that may be diverted to other areas for irrigation.



Section: Planting Strip



Terry Ave North Drainage

STORM WATER SPECIFICATIONS:
Seattle's Stormwater, Grading and Drainage Control Code requires a drainage control plan, detention and flow control prior to discharge to the combined sewer system. The City encourages stormwater reuse and using alternative methods of reducing stormwater runoff volumes and peak flows. Section 22.808.010 B of the Seattle Municipal Code addresses exceptions to the code requirements that are "likely to be equally protective of public health, safety and welfare, the environment, and public and private property as the requirement from which an exception is sought." Project proponents are urged to hold early meetings on drainage, jointly with DPD, SDOT and SPU.

A proposal has been made for a basin-wide drainage system separating runoff from roofs and pedestrian areas from the combined sewer for direct discharge to Lake Union. This proposal is counter to both Seattle Public Utilities general policy to not construct storm drains in the combined sewer service areas and to the specific basin wide alternative selected and constructed for the Denny/ Lake Union Combined Sewer Overflow Control Project. Seattle Public Utilities is willing to consider a proposal if the following criteria are addressed:

- Design for the drainage basin that meets the standards established in the 2004 Comprehensive Drainage Plan.
- Create a funding plan for design and construction.
- Use the existing Broad Street Outfall with stormwater treatment upgrades and no additional outfall permitting.
- Demonstrate to SPU and Ecology that additional stormwater would cause no adverse impacts to Lake Union.
- Demonstrate that the benefits gained would justify the additional maintenance costs.

SEWER
The existing sewer lines are not known to be in need of replacement. They currently run east of the street centerline between Denny and Republican, except between Harrison and Republican where it is located in the right-of-way centerline. Side sewers connecting to a public sewer system are owned by private property from the building to the "T" on the City-owned main in the right-of-way. At Republican lines running from the north and south join the combined 72" King County main line and are connected to newly constructed combined sewer overflow control facilities.

During design of the street, verify with Seattle Public Utilities whether the pipes should be replaced while the street is under construction. Locate new sewer lines so that future access and repair can happen through man-hole access or under pedestrian areas of the street.

WATER /HYDRANT LOCATION
The existing water main is not scheduled for replacement.

The street hydrants will be located as per required by the City Fire Marshall and SPU.

Currently there is an 8-inch, cast iron water main running under Terry Avenue, which is in satisfactory condition. The line has not been scheduled for replacement in the City's Capital Improvement Plan. Between Valley Street and Denny Way there are seven fire hydrants on the northeast corners of the intersections with: John Street, Thomas Street, Harrison Street, Republican Street, Mercer Street, and the southeast corner or the intersection Valley St. The water line is a part of the City's 326 pressure zone and the hydrant on the corner Republican and Terry was tested to have a pressure of over 60 psi.

During redevelopment, existing connections and meters will need to be replaced and sized, dependent on the building demand requirements. The existing line will need to be tapped to provide sprinkler and domestic drinking water to new buildings. New street hydrants and sprinkler stand pipes will be located as per required by the City Fire Marshall to provide the required fire protection coverage.

POWER

Power is currently supplied from overhead lines that run on the east side of Terry. Lines also run on the cross streets. Terry Avenue North is one of four streets in the area where City Light is considering putting the power lines under ground. The proposed development in the area will have high electrical demands and power upgrading will be required. Two levels of circuitry will travel through the street, one that will serve the adjacent development and a higher voltage line that serves the neighborhood.

The existing utility poles are old and lean in different directions, giving a haphazard look. New poles of either wood or metal would keep a more industrial look and feel to the street and be more cost effective then under-grounding. Whether or not local power for individual buildings is under-grounded, the through circuitry could run on the utility poles.

POWER SPECIFICATIONS:

Pole location

All utility poles carrying power lines need to be located so that the power lines are a minimum of 10 feet away from the building surface. Extra setback may be desired by the property owner to allow building maintenance, without power shutdown. Poles shall be located at least 3 feet back from 6" curbs and bollard lines, and 10 feet from the vehicle right-of-way where there are 2" curbs without bollards, and curb less conditions without bollards.

Vault Location

Power vaults placed in the right-of-way shall be located within the pedestrian zone or parking areas of the street. Vehicle access to vaults will need to be provided. Trees and plantings shall be placed to give clearance to the vaults and service vehicles.

Vault covers shall be of metal and are encouraged to be utilized as opportunities for art.

OTHER UTILITY SPECIFICATIONS:

Street features over utilities must be reviewed and approved by the utilities. The public/private utilities in the right-of-way must be designed

- to allow access from the street
- to meet Citiy of Seattle design and construction standards
- with pavement that accommodates heavy trucks

ART OPPORTUNITIES

Art should be incorporated into the right-of-way whenever possible. Terry Avenue's character, pedestrian nature, history, setting, and likelihood of redevelopment offer numerous possibilities for art.

Art is the best opportunity to capture the spirit of the industrial nature of Terry Avenue that will be overlain with new development, housing new industries of the 21st century. The industrial spirit comes from the honest use of functional materials, rather than a more decorative mode. Because elements are functional rather than designed, there is typically a sense of the haphazard and occasionally serendipitous, where elements are not aligned, and are not identical. Materials are simple, and it is easy to understand how they are constructed and what they are (or were) used for. There is a layering of current and abandoned uses.

Art can also play an important role in reinforcing important physical and visual connections between Terry Avenue and its surroundings. Current users of Terry Avenue were not well aware of the views along the street. The art, especially in this case, needs to work together with landscape design to reinforce the views south, to downtown's hardscape, with the views north, to the softer, greener landscape of South Lake Union Park. Views to the west offer a striking view of the Space Needle and art can help people recognize these views, in conjunction with the location of seating and other stopping points for pedestrians.

The intent of integrating art into the design of Terry Avenue is to enrich the character street and reinforce the sense of history and Terry Avenue's connection to South Lake Union, downtown and the Seattle Center.

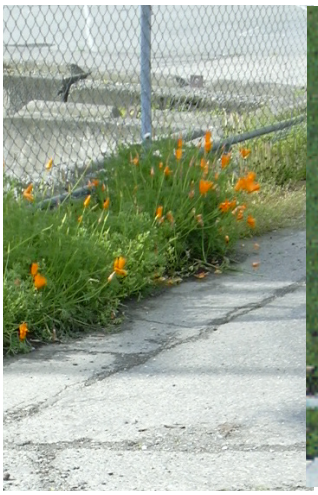
Seattle Department of Transportation has created a comprehensive art plan in coordination with their artist-in-residence. Now in draft form, The Art Plan includes a menu of creative possibilities for integrating art into the range of SDOT's projects. The Art Plan outlines opportunities for street furnishings, surface treatments, art objects, and a variety of creative approaches to material reuse, landscape, and highlighting history. Most of these opportunities are applicable to Terry Avenue.

PUBLIC ART DESIGN GUIDELINES

Art should be integrated into the design of the right-of-way in selecting the surface treatment, landscape, street elements and furnishings.

Art should capture the spirit of the industrial nature of the street and the neighborhood.

Art should reinforce the history and the setting of Terry Avenue, and its connections to surrounding uses and neighborhoods.



In industrial area, life springs up through the cracks.

Design can draw on the idea of industrial landscape

Terry Avenue's advantageous setting can be emphasized by highlighting views south to downtown, west to Seattle Center, and south to Lake Union.

Bollards
Standard bollards are specified under these design guidelines, but art elements are encouraged to serve the same function. For instance, large concrete planters, with seasonal flowers, are used at Westlake Park.

Manhole and Vault Covers:

Metal Tree Grates
Seattle has a tradition of creativity in both these elements, with the downtown map manhole covers, and a variety of tree grates.

Fencing and Screening
In areas where fencing or screening is required, industrial materials can be used expressively, as in the photograph along Post Alley shown on page 37.

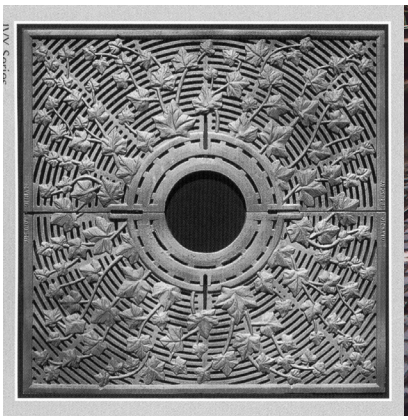
Paving Design
Patterning can create visual interest, using the palette of materials available on Terry Avenue. Westlake Park's pavers have created a distinctive urban park, using paving materials to create a connection across Pine Street.

Street Furniture
Seating, trash receptacles, drinking fountains, newspaper stands and any other street furnishings can be designed by artists as functional, expressive elements.

Planter Design
Planters can be designed to contribute to the character of Terry Avenue, separating vehicular areas from pedestrian areas. Consider designing planters so that when viewed looking uphill toward downtown, there is a plane of hard "urban" material, and when looking downhill toward the lake, present a softer, greener plane.

Bicycle Racks
If the streetcar is built on Terry Avenue, there will be safety issues for cyclists. However, Terry Avenue is within easy biking distance from downtown, the University and many neighborhoods, and bicycling to Terry Avenue should be encouraged in a safe fashion. Bicycle racks could be located on Terry Avenue's cross streets to capture bicycles before reaching Terry. These racks should be visible, in a location that discourages bicycle theft, and designed to be attractive.

Reuse of Existing Materials
Art would be an excellent way to reuse brick, tracks, utility poles and other existing materials. Consider using old rails for surfacing a runnel, or cutting off utility poles to use as seating or bollards. Also, Seattle Department of Transportation collects materials removed from street projects throughout the City that may be usable on Terry Avenue.



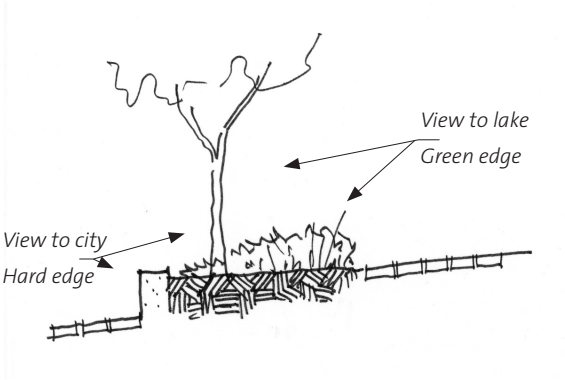
Art tree grate

Portland

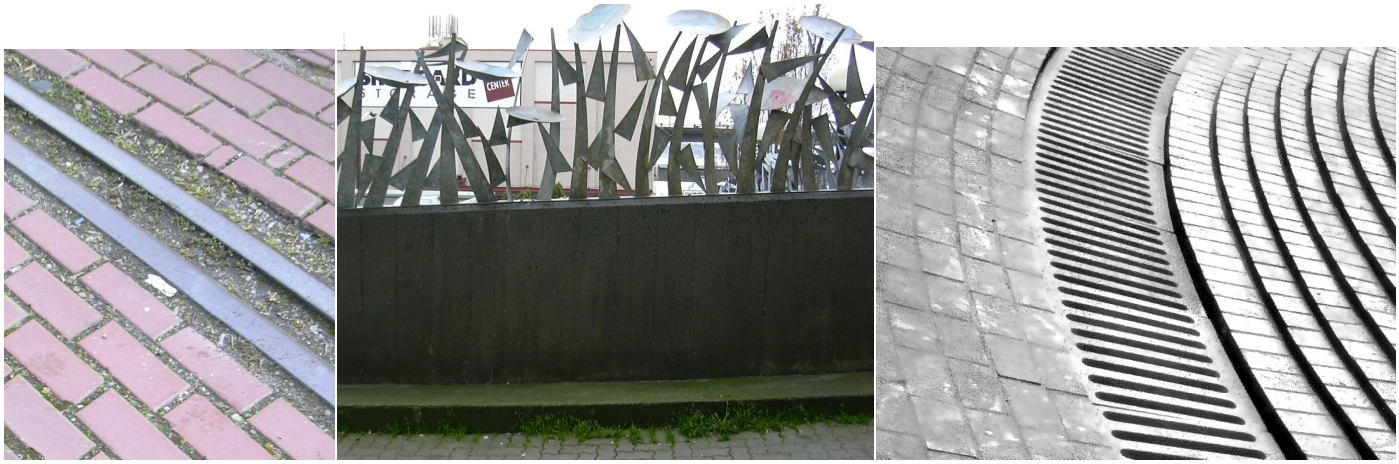
Streetcar
The streetcar may incorporate art along the route. For the station and the alignment on Terry, art should balance consistency along the alignment with art that is specific to Terry Avenue. Consider the surface between the rails, the design of the shelter at the streetcar stop, and elements that will make a comfortable wait for riders, and good connections for pedestrians.

Banners
The lights that have been selected and put in place on Exchange III have banner arms. New lights will also accommodate banners.

Interpretive Art
Incorporating an interpretive component into an art program could help people understand the natural, physical and historic context of Terry Avenue. Consider using multiple small pieces ("tiny art").



Emphasizing views to downtown and views to the Lake: Looking uphill, the planter's hard edge reads; looking down the hill, the planter is seen as green.



Post Alley–Fencing using expressive industrial materials

IMPLEMENTATION

Funding Alternatives

Form an LID
A LID could be formed for all or part of the right-of-way of Terry Avenue. Options would include the entire street right-of-way, the area between curbs (or pedestrian zones), or be limited to only the area of traveled roadway not covered by the streetcar improvement. In the southerly one or two blocks of Terry, this would be the entire roadway width, since the streetcar leaves Terry Ave. at Thomas St. It is assumed that all street furniture and landscaping within each of these described zones would be part of the LID.

Coordinate with Public Capital Project
With the expected growth of the South Lake Union neighborhood, there may be public projects occurring that could be a catalyst for implementing improvements to Terry Avenue. This scenario could also include funding from private property owners in an LID.

Incremental Implementation
The improvements to Terry Avenue are most easily done in larger increments. However, it is possible that only part of the street may be improved at a time by private properties as they develop. In that case, it will be important to phase the design so that early phases function well for all uses, including the needs of any industrial activities.

The blocks south of Thomas or John are not on the proposed streetcar route, and may be implemented separately. For properties on the west side, the plan calls for a typical sidewalk and landscape. The uses on the east side are currently industrial, and if redeveloped, may have different needs for access. The design guidelines are intentionally written to have flexibility on the east side so that any permitted future uses can be accommodated.

Related Projects and Timing Issues

Public and private improvements to Terry Avenue should be timed and coordinated to minimize work needing to be replaced or redone. Likely projects that would involve work in the street include the construction of the streetcar infrastructure, utility work for any new development, possible construction of a new City Light substation in the project area, and changes to the Mercer/Valley corridors.

Adoption of Terry Avenue Guidelines

When plan review in the project area occurs, it is the intent that SDOT's Street Use plan reviewers draw the applicant's attention to these guidelines. The Design Guidelines are to be adopted as a Director's Rule by Seattle Department of Transportation, and incorporated into the Seattle Street Improvement Manual as Appendix C. The Street Improvement Manual is the standards manual used by SDOT's Street Use Division in the permit review process for private contracts.

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