



CITY OF COOS BAY CITY COUNCIL
Agenda Staff Report

MEETING DATE February 4, 2014	AGENDA ITEM NUMBER
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TO: Mayor Shoji and City Councilors

FROM: Randy Dixon, Operations Administrator
Jim Hossley, Director Public Works 

Through: Rodger Craddock, City Manager 

ISSUE: Public Works Sidewalk Maintenance Policy

BACKGROUND:

City staff set out two years ago to inventory all sidewalks in the City in order to create a Sidewalk Maintenance Management Policy. This policy documents inspection and operational procedures to maximize the effectiveness of City sidewalks and maximize public safety while maintaining fiscal responsibility. The goal of the policy is to confirm and formalize Public Works inspection, inventory, and maintenance procedures with respect to curb and sidewalk infrastructure management and balance fiscal responsibility with public safety within respective budget resources.

At the October 1, 2013 City Council meeting, Council requested revisions to the proposed plan, which include a section on finishes. The revisions can be found in the sidewalk maintenance plan under; **2.0 Policy**, which are; **2.2 Replacement:** Any sidewalk that is replaced will match existing surfaces in order to be consistent with the existing sidewalk surface abutting it; **2.3 New Construction:** Any new development of sidewalks where there is no current sidewalk, the sidewalk surface is to be brushed.

Council also asked staff to research cost comparison for exposed aggregate vs. brushed finish. Below staff researched current cost comparison to include maintenance summary regarding exposed aggregate.

Per Sq. Ft. cost for exposed aggregate: about \$6 or 20% more than brushed finish

Per Sq. Ft. cost for brushed finish: about \$5.00

Per square foot cost will vary based on material cost, depth of concrete and reinforcement used

Exposed Aggregate Maintenance:

Longevity; Exposed aggregate can be as strong and durable as the concrete that holds the aggregate together, but the decorative stones on top are more vulnerable to damage. Harsh weather, heavy objects and water damage can loosen or dislodge surface stones, leaving rough

pits in the surface. Once the aggregate begins to wear away, the damage spreads quickly as surface water weakens the bond between the aggregate and concrete.

Repairs; Patching a section of exposed aggregate is more complicated than repairing cracks in concrete. The biggest challenge is blending in the patched surface with the rest of the pavement. You need to find aggregate that matches your existing surface as closely as possible.

Maintenance; Cleaning exposed aggregate is not as simple as hosing off a concrete slab. Debris and dirt get compacted between the textured surfaces, requiring a wire brush or pressure washing to remove. Whether the surface is a driveway, walkway or patio, sealing it every two years will dramatically increase its strength and longevity.

ADVANTAGES:

Protect the City's sidewalk infrastructure and the safety of the public.

DISADVANTAGES:

Cost to maintain serviceable sidewalk infrastructure.

BUDGET IMPLICATIONS:

The funding to support this policy comes from Fund 2, Gas Tax

RELATED CITY GOAL:

Infrastructure and Services: to maintain and improve the City's physical infrastructure and provide quality services for current and future citizens. This project is under "Short Term Activities Aimed at Achieving Goal Priorities".

ACTION REQUESTED:

If it pleases the City Council, please approve and adopt the enclosed Sidewalk Maintenance Policy.

ATTACHMENTS:

Draft Public Works Sidewalk Maintenance Policy



City of Coos Bay

Public Works & Development Dept.

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Sidewalk Maintenance Policy

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1.0 Overview

Over time sidewalks are damaged from weathering, tree roots and regular use. A sidewalk maintenance program to regularly repair or reconstruct damaged sidewalk is important for ensuring pedestrian safety on city sidewalks. The Concrete Sidewalk Maintenance Program for City of Coos Bay is administered by the Public Works Department (PWD) and involves daily field inspection for trip hazards, management of work orders, collaboration with code enforcement to provide immediate short-term repair, and planning to provide timely delivery of long-term repair solutions.

1.1 Goal

The goal of the Concrete Sidewalk Maintenance Program is to prevent and repair sidewalk trip hazards in a timely manner in the interest of public safety and welfare.

1.2 Industry Practices for Responsibility of Sidewalk

According to the U.S. Department of Transportation, Federal Highway Administration (FHWA), city charters commonly specify that the city cannot be held liable for any accidents or injuries incurred due to sidewalk conditions. The City of Coos Bay code assigns complete responsibility of sidewalk maintenance to the owner of the adjacent property. Many other cities have adopted similar type of sidewalk policy.

Coos Bay Municipal Code, Chapter 12.10 Sidewalk Construction and Repair, assigns sidewalk repair responsibility to the abutting property owner. The City of Coos Bay maintains public sidewalks according to Coos Bay Municipal Code, Chapter 12.10, and this Sidewalk Maintenance Policy.

2.0 Policy

2.1 Sidewalk Maintenance Criteria

Sidewalk trip hazards for the City of Coos Bay are defined by the following criteria:

- Vertical separation greater than ½"
- Horizontal separation greater than ½"
- Vegetative overgrowth encroaching onto the concrete sidewalk area
- Obstructions located within the sidewalk area
- Other defects deemed necessary for repair

These criteria are based on the guidelines provided in Chapter 10 Sidewalk Maintenance and Construction Site Safety, of the U.S. Department of Transportation, Federal Highway Administration as well as on current industry practices by municipalities across the United States.

2.2 Replacement

Any sidewalk that is replaced will match existing surfaces in order to be consistent with the existing sidewalk surface abutting it.

2.3 New Construction

Any new development of sidewalks where there is no current sidewalk, the sidewalk surface is to be brushed. Additional information for sidewalks requirements can be found in the City's engineering design standards.

2.4 Responsibilities

As mentioned previously, per Coos Bay Municipal Code (MCBMC), Chapter 12.10 abutting property owners are responsible for repairing the sidewalk when damage is attributable to actions of the abutting property owner (e.g. landscaping, drainage). Appropriate City of Coos Bay staff will investigate reports of sidewalk damage and determine whether the City or the abutting property owner is responsible for repairing the sidewalk.

3.0 Inspections

The City's Sidewalk Maintenance Policy has two inspection components: 1) **proactive inspection** for sidewalk trip hazards and 2) **reactive inspection** of sidewalk trip hazards from public complaints. Proactive inspection involves Public Works Department (PWD) regularly surveying City sidewalks for damage. Reactive inspection involves investigation by Code Enforcement Division and is done in response to public complaint.

3.1 Proactive Inspection

City staff conducts in-house research and field reconnaissance of potential sidewalk trip hazards on a monthly basis. The in-house research includes mapping, cross-referencing with existing work orders generated through complaints, and checking jurisdiction for sidewalk maintenance. The field reconnaissance involves collecting data such as dimensions, approximate location, likely cause of damage and photographs. The sidewalk maintenance program for the City of Coos Bay is divided into 4 zones.

High-volume pedestrian areas are proactively inspected at least once every 1 year. Neighborhood sidewalks are proactively inspected at least once every 5 years.

The following areas are identified as high-volume pedestrian areas:

Zone 1: Downtown District North (See Attached Map)

Zone 2: Downtown District South (See Attached Map)

Zone 3: Downtown District East (See Attached Map)

Zone 4: Downtown District West (See Attached Map)

Proactive sidewalk inspections in zones 1 thru 4 are performed monthly due to the amount of foot traffic. Upon identification of a sidewalk trip hazard, PWD executes one of the following actions:

- Patch the sidewalk trip hazard; OR
- Alert sidewalk users of the hazard by spray painting in white. Repairs will be made when budget resources are available.

Damaged sidewalk requiring permanent repair (full reconstruction) is noted in the field and a work order for the repair is subsequently generated. If the sidewalk damage is thought to be attributable to actions by the owner of the abutting property, PWD is requested to investigate to determine repair responsibility.

3.2 Reactive Inspection

In response to sidewalk concerns reported from the public, other City agencies, and State agencies, PWD conducts on-site investigations and determines if damage is attributable to the actions of the abutting property owner. Sidewalk trip hazards identified by PWD per Section 1, Sidewalk Maintenance Criteria, are spray painted in white by PWD inspectors to alert sidewalk user of the hazard.

If the abutting property owner is found responsible, PWD issues a Notice of Violation (NOV) and the property owner has 90 days after receipt of the notice to repair or reconstruct the sidewalk per City specifications for sidewalk construction standards. If the sidewalk is not properly repaired or reconstructed before the 90-day deadline, PWD then repairs the sidewalk and the costs are charged to the abutting property owner.

For all other sidewalk damage inspected by PWD that needs to be repaired and is not attributable to actions of the abutting property owner, PWD generates and submits cost to be considered through the annual budget process for consideration and ultimately adopted by the City Council.

4.0 Levels of Priority

Sidewalk repairs are limited by funding and manpower, prompting the need for a prioritizing system. The following priority levels are used for scheduling of repairs:

1. Spray paint of hazards should be consistent, discrete and follow the guidelines attached in Attachment 'A': Sidewalk Trip Hazard Examples.
 - Locations where a pedestrian has tripped are top priority for immediate action. PWD remedies the sidewalk trip hazard with short-term repairs within 30 calendar days of being informed of the sidewalk trip hazard unless resources are unavailable in response to unforeseen conditions/events.

- Sidewalk defects that are considered sidewalk trip hazards and are located within a high-volume pedestrian area are second priority.
- Sidewalk defects that are considered as sidewalk trip hazards and are not located within a high-volume pedestrian area are third priority.
- Public complaints on sidewalk defects that are not considered as sidewalk trip hazards and do not involve actual sidewalk trip incidents are fourth priority.

5.0 Reconstruction of Sidewalk

Work orders are entered and managed in a Sidewalk Management Database with a graphical interface. The information is continuously reviewed by PWD. PWD plan sidewalk repair work or reconstruction projects based on priority levels (outlined in Section 4, Levels of Priority), number of sidewalk trip hazards identified in a particular area, in-house capabilities, logistics and funding for contracts to be completed by private vendors.

6.0 Volunteer Services

The City owns several miles of sidewalk, an amount that increases with new subdivision and roadway development. Maintaining all City sidewalks presents a huge challenge. Collaborating with volunteer organizations helps the City in its effort to maintain safe sidewalks and gives the community a significant way to help keep the City of Coos Bay a quality place to live.

The community can participate in the City's sidewalk maintenance program by volunteering to supplement the City's short-term repair activities.

6.1 Volunteer Repair Work

Areas for volunteer involvement are selected based on availability of parking, low volume roads, feasibility and need. PWD conducts field reconnaissance of an area of interest in advance of scheduling a volunteer event. A City staff person is assigned as the Sidewalk Maintenance Volunteer Coordinator. The volunteer coordinator administers the volunteer program and is responsible for such activities as ordering materials and supplies, scheduling volunteer events, conducting safety meetings with key volunteer representatives prior to the volunteer event, obtaining the required signatures on release and authorization forms and overseeing the actual volunteer event. The safety meeting covers proper methods, techniques and protective equipment required to do the work.

The activities expected of the volunteers include: lifting five gallon buckets of material, mixing a cement polymer material with water and adhesive, bending on knees to apply patch material and using tools such as trowels to work the patch material into place. Volunteers will be informed of the expected duties before they sign up for the event. Volunteer representatives are responsible for obtaining permission for minors and for

ensuring that the volunteers are capable of performing the expected activities. All volunteers are required to sign a release form releasing the City from all claims for any damages and/or injuries due to participation in the volunteer event.

6.2 Community Verification

Upon completion of a field reconnaissance and applying short-term patches, follow-up inspection by other volunteer community groups can be coordinated. The follow-up inspection by community groups provides the City with a third-party means for measuring customer satisfaction with the program. The follow-up inspection by volunteer groups involves a cursory review to ensure that all sidewalk trip hazards in a particular area were adequately addressed with short-term repairs.

7.0 City Standards

City standards are updated periodically based on new information and technology. The data collected from the City's Concrete Sidewalk Maintenance Program provides valuable information regarding maintenance requirements. Based on the data and as appropriate, PWD will update sidewalk standards accordingly.

8.0 Sources of Funding

Adequate funding for this program is essential in order to deliver timely repairs. The following is a list of funding sources:

- City operating funds for sidewalk repairs and capital improvement funds for sidewalk reconstruction.
- Federal grants through the Safe Routes to School grant program. Under this grant program sidewalk repairs within a 2 mile radius of a school is eligible for grant money.
- Federal grants through the U.S. Department of Housing and Urban Development, Community Development Block Grant (CDBG) Programs.
- Oregon Lottery Funds; depending on the location of the project these funds are available for new development.

Attachment 'A': Sidewalk Trip Hazard Examples

Sidewalk trip hazards identified in the field are spray painted in white to alert the public. Spray paint markings should be neat, minimal and follow the upper boundary of the sidewalk trip hazard.



Vertical separation at the score line.



Vertical separation along cracks

Attachment 'A': Sidewalk Trip Hazard Examples

Sidewalk trip hazards identified in the field are spray painted in white to alert the public. Spray paint markings should be neat, minimal and follow the upper boundary of the sidewalk trip hazard.



Brick separation along tree wells.



Tree root damage caused to sidewalk

Attachment 'B' Volunteer Agreement

***Attachment 'C' Volunteer Authorization & Release Form for
Participants over Eighteen***

***Attachment 'D' Volunteer Authorization & Release Form for
Participants under Eighteen***

Attachment 'E' Volunteer Sign-in Sheet