CITY OF DES PLAINES-CONCRETE PROGRAM

SIDEWALK, CURB AND DRIVEWAY GUIDELINES

SUMMARY AND INTENT OF PROJECT

The City of Des Plaines Curb and Sidewalk Program is intended to repair damaged or deteriorated sidewalk and curb locations within the right-of-way. Driveway aprons are not included in the program. The locations are generated primarily by resident requests, and repaired after evaluation by the Public Works and Engineering Department in a "first come-first serve" order. The purpose of the program is to repair specific locations of immediate concern, not necessarily entire blocks or streets. Additional locations will not be added due to proximity of scheduled and/or budgeted work. These locations will be added to the inspection list and be completed when budgeting allows. Any damaged or deteriorated locations that are unable to be repaired due to available funds will be temporarily repaired by the Public Works Division until funding becomes available. Also any locations may be deferred to the time when the street is scheduled for Rehabilitation or Reconstruction due to the scope and severity of the defects that cannot be properly repaired under the guidelines of this program.

EVALUATION NOTES

1. Sidewalks, Carriage walks, and Service walks.
    a. Sidewalks with height discrepancies, major cracks, significant spalling and other deterioration should be replaced.
    b. Height discrepancies are defined as more than 2” height differential. A rule of thumb is if you can easily catch your foot dragging it over the area, the square should be replaced.
    c. Major cracks where there is a piece of concrete missing or the expansion joint has eroded away and a huge gap is left should be replaced. If there is a small crack (hairline) in the sidewalk and no settling or spalling has occurred, the walk should not be replaced. If it appears that further deterioration will occur or the parkway is beginning to settle, the walk should be replaced.
    d. Areas that contain significant spalling or pitting shall be replaced.
    e. Sidewalks being replaced shall be finished to match the adjacent areas.
        i. If matching the adjacent areas results in improper drainage or new height discrepancies, the Engineer shall replace the surrounding areas as needed. A minimum of one extra square of sidewalk should be removed and replaced in order to transition to the correct slope. This includes both service walks in the parkway and private property.
        ii. Replacement of service walks will be allowed up to a maximum of 6 feet outside the right-of-way. If the condition of the surrounding area is so poor that this limit needs to be exceeded, the Engineer shall contact the resident to discuss the situation.
2. Curbs.
    a. Curbs with severe drainage problems resulting in water or ice accumulating on the pavement should be replaced. Rolled curbs in good condition with no drainage problems will <u>not</u> be replaced.
    b. Curbs that have settled and resulted in obvious low spots, or curbs that have raised up and have caused drainage issues in the pavement shall be replaced.
    c. Most curbs with significant spalling or deterioration have been damaged by snow plows. Typically large 8-12” pieces of the curb will be missing. If the curb is in this condition the curb will be patched with asphalt and then fully replaced when the street is scheduled in the 5 year CIP program.
    d. New curbs shall be replaced as a depressed curb if the driveway apron is also being replaced. At locations where the concrete apron is in good condition, new curbs shall be replaced as a mountable or rolled curb provided that the flow line is at the proper elevation to provide positive drainage.
    e. New curbs shall be finished to match the existing curb and/or apron elevations. Curbs replaced on over-laid streets shall be finished to match the existing curb, and over-laid with the appropriate thickness of asphalt.
    f. Tie bars will be required for integral curb and gutter.
3. Driveway Aprons.

a. **Typically, entire driveway aprons will <u>not</u> be replaced.** Depending on the nature and extent of work around the apron and the existing apron condition, the Engineer may replace the apron entirely or only partially. This applies to both the curb and sidewalk work adjacent to the driveway aprons.
b. Apron replacement should be done only if one of the following conditions is met:
    i. The existing driveway apron is old, cracking and deteriorated to the point where a patch cannot be made such as: asphalt driveways that are completely alligatored, concrete with cracks and settlement, or any material that has completely deteriorated or has obvious drainage problems.
    ii. A utility structure such as a sewer manhole, water valve vault or water service box located within the apron and requires adjustment.
    iii. The entire apron should be replaced where both adjacent curb and sidewalk are being replaced.
c. New aprons shall be constructed in concrete per current City standards.
d. Partial apron replacement should be done where the existing aprons are in generally good condition.
    i. For asphalt aprons, approximately 2' behind the curb or sidewalk should be repaired (either full depth or surface removal and replacement). The Engineer will determine the exact limits for repairs based on the condition of the driveway. This also applies to repairs on the private side of the driveway as necessary.
    ii. For concrete aprons, the repairs shall extend to the closest joint (typically 5-6' behind the curb or walk). If there is no joint, the Engineer will direct the contractor to saw cut the limit. Any repair section smaller than 4' should be checked for proper drainage and shall not cause additional bumps or height discrepancies.
e. The allowable limit of replacement outside the right-of-way is 6 feet. If the existing driveway condition is completely deteriorated, the Engineer shall contact the resident to discuss the situation.

4. Pavement Patches.
    a. Asphalt streets should be repaired to fix any overcuts for placing curb forms or spalling caused by the removal and replacement of the curb. Depending on the existing condition of the street either a full depth patch or surface patch may be required.
    b. Full depth asphalt repairs will require 4" of stone base and 6" asphalt in two lifts. The patch shall be a minimum of 2' wide, and extend the entire length of the curb replacement area. All limits shall be cleanly saw cut.
    c. Surface repairs will require only the 2" surface course to be removed and replaced. Width and length may vary depending on the extent of surface spalling that occurred when the curb was removed. This can be used for areas where the curb was removed cleanly with little or no damage to the existing pavement. Surface removal can be done by mechanical grinder or saw cut and removed by hand.
    d. For concrete streets with asphalt overlays, the new curb shall match the existing curb, and the flow line shall be overlaid for positive drainage. Tie bars shall be drilled and grouted into the adjacent pavement. If an over cut is necessary, the concrete shall be poured monolithically with the curb and gutter. Asphalt shall be overlaid after the concrete has cured.

PRIVATE AND ADDITIONAL WORK

1. Private work is defined as any work on private property that is the outside allowable project limits and beyond intent of the program.
    a. The maximum allowable limit to be included in the project (at no cost to the resident) is 6 feet outside the right-of-way. Any areas beyond this limit will be considered private work.
    b. All private work areas will require the homeowner to acquire a building permit, hire a licensed contractor, and arrange for review and inspection through Community Development.
2. Additional work is defined as areas within the City right of way that are requested for improvements by a resident but do not qualify for repairs.
    a. If the Engineer determines that the additional work does not qualify for repairs, the resident will be given the option to pay for the improvement. The Engineer will prepare a cost estimate agreement for the resident to sign.
    b. If agreed to, the work will be included in the project, and the City will invoice the resident.
    c. No additional work will be performed prior to the agreement form signed by the resident and received by the Engineer.

Examples

QUALIFIES

Figure 1 – Sidewalk Height Discrepancy

The sidewalk squares should be replaced from the height discrepancy to the cracks. If proper drainage is achieved, the new walk should be finished to meet the service walk. Depending on the grades, the adjacent square of service walk may need to be replaced also.

DOES NOT QUALIFY

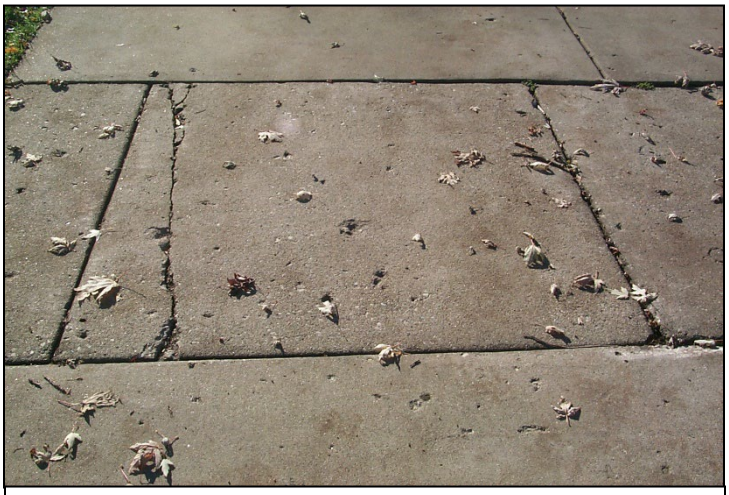

Figure 2 – Crack in Sidewalk

Although this sidewalk is cracked, it is not a height discrepancy. The crack is beginning to spall, but not severely. The Engineer may decide to replace this walk depending on factors such as potential future deterioration, loose concrete material, or evidence of settlement.

QUALIFIES

Figure 3 – Deteriorated Sidewalk

Obvious deterioration like this should be replaced.

QUALIFIES

Figure 4 – Tilting Sidewalk

This sidewalk should be replaced. Rebar should be placed in the new section of walk due to the adjacent sewer manhole.

Examples (continued)

QUALIFIES

Figure 5 – Pitted Sidewalk

This walk should be replaced. Note that the adjacent driveway apron will need to be patched due to its poor condition.

QUALIFIES

Figure 6 – Cracked Sidewalk and Apron

The sidewalk squares are cracked and settled and should be replaced. The Apron is cracked from a City utility and should be replaced.

DOES NOT QUALIFY

Figures 7 & 8 – Hairline Crack in Sidewalk

There is a small crack in this sidewalk, but the walk is in good condition and does not need to be replaced. The crack is not a height discrepancy, and there are no signs of spalling, chipping or further deterioration.

Examples (continued)

QUALIFIES

Figure 9 - Deteriorated Curb, Asphalt Apron

The curb should be replaced through the entire driveway. The apron is in good enough condition to repair behind the curb with an asphalt patch. The street will require a patch that extends out to incorporate the pavement crack.

DOES NOT

Figure 10 – Broken Curb, Concrete Apron

The broken section of curb will not replaced. The curb will be patched with asphalt. The driveway apron is in good condition and should not be replaced. The street is in good condition, and the contractor should aim for minimal damage to the street when removing the curb.

QUALIFIES

Figures 11 & 12 - Deteriorated Curb, Asphalt Apron (Before and After)

Although this curb is not in poor condition, there are several chips and spalls that were patched with asphalt. Only this short section of curb should be replaced. Care should be taken to protect both the street and driveway since both are in good condition. In this case, the new curb should not be depressed.

Examples (continued)

QUALIFIES

Figures 13 & 14 - Deteriorated Curb and Cracked Apron if it is creating drainage issues in the pavement

The curb should be replaced at a minimum through the left half of the driveway only if the damaged curb is creating ponding within the pavement. The apron is in poor condition and should be replaced also. Note that the sidewalk has already been replaced through the driveway. The curb should be replaced as a depressed curb instead of a rolled curb. The street will require a full depth patch where the curb is deteriorated.

DOES NOT QUALIFY

Figures 15 & 16 – Rolled Curb in Good Condition

These are two examples of rolled curb that is in good condition. The aprons are also in good condition. No replacement should be done.