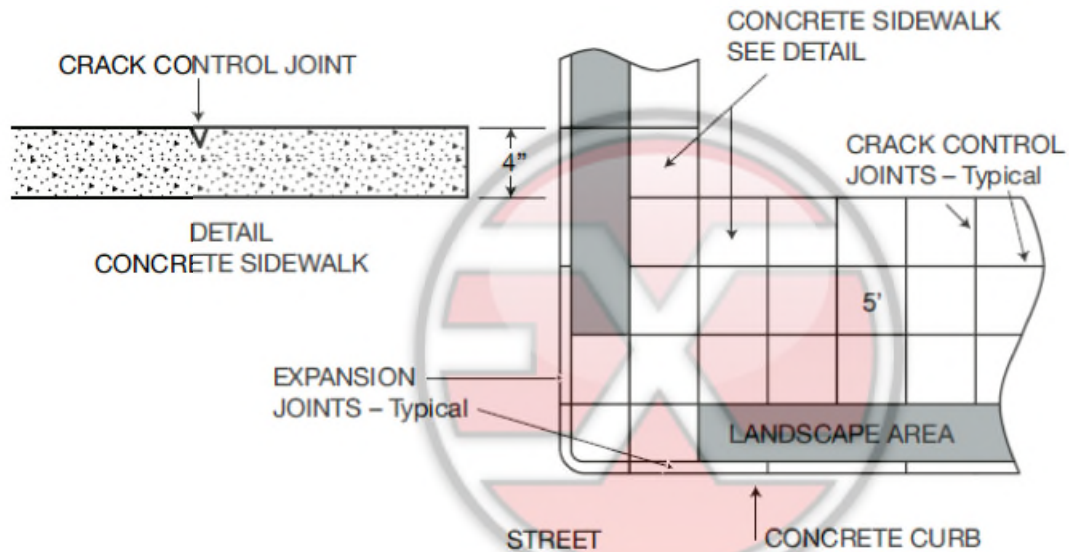




## CONCRETE

# Concrete Sidewalk – Remove and Replace



### SCOPE:

#### Concrete Sidewalk - Remove and Replace

1. Lay out and mark all areas of repair
2. Demolish and remove areas to be repaired to the nearest joint or saw cut. Remove all related debris from the jobsite
3. Cut walls of demolition to produce vertical edges
4. Install forms as necessary to retain and support concrete
5. Compact existing subgrade material to achieve maximum density
6. Install six bag air entrained concrete at a minimum depth of 4" for sidewalk and finish level with top of adjacent concrete. Install expansion joint material as necessary. Concrete surface shall be a light broom finish to insure traction.
7. Apply uniform forms and restore adjacent distributed areas as specified.

### SCOPE:

#### Concrete Sidewalk Replacement (Minimum 4" Depth or Existing whichever is Greater)

1. Lay out and mark all areas of replacement.



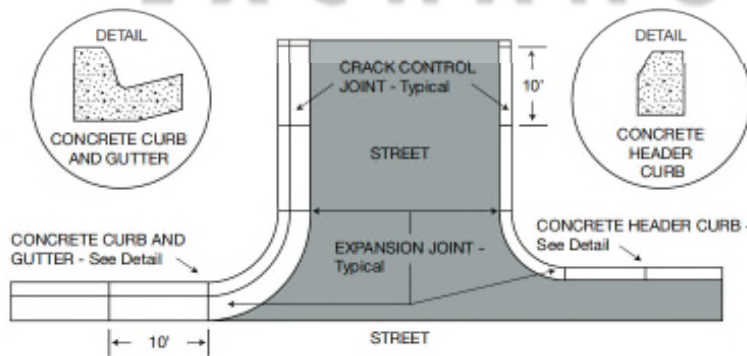
2. Demo and remove areas to be replaced to the nearest joint or saw cut. Dispose of all debris off site.
3. Cut walls of demolition to produce vertical edges.
4. Install forms as necessary to retain and support concrete.
5. Roll existing sub grade materials to achieve maximum density.
6. Install full depth 3,500 PSI air entrained concrete to match existing adjacent curbs. Install expansion joint material at beginning and end of short radii and at the structures. Concrete surface should be light broom finished to ensure traction
7. Apply curing compound and/ or provide protection against elements necessary to promote curing of new installation.
8. Remove forms and backfill adjacent disturbed areas using onsite materials.

**SCOPE:**

**Concrete Flat Work (Minimum of 6" Depth or Existing whichever is Greater)**

1. Saw cut defined limits of repair area.
2. Excavate failed pavement to a depth of 6".
3. Compact sub-grade to ninety-five percent (95%) standard density using a steel wheel roller or vibra-plate compactor, adding cushion sand or base material as necessary.
4. Place 6" concrete with a broom finish. Reinforce with #3 rebar at 18" on center with dowels placed into adjacent concrete on 18" intervals.
5. Concrete shall be 3500 PSI with air entrainment for durability and resistance to surface scaling.
6. Cure concrete with a liquid membrane-curing compound to insure strength development.
7. Saw cut control joints as necessary.
8. Repairs to be barricaded to vehicle traffic for a minimum of 72 hours

## Concrete Curb - Remove and Replace





**SCOPE:**

**Concrete Curb and Gutter Replacement**

1. Lay out and mark all areas of replacement.
2. Demo and remove areas to be replaced to the nearest joint or saw cut. Dispose of all debris off site.
3. Cut walls of demolition to produce vertical edges.
4. Install forms as necessary to retain and support concrete.
5. Roll existing sub grade materials to achieve maximum density.
6. Install full depth 3,500 PSI air entrained concrete to match existing adjacent curbs. Install expansion joint material the structures. Install crack control joints every 10 linear feet. Concrete surface should be light broom finished to ensure traction
7. Apply curing compound and/ or provide protection against elements necessary to promote curing of new installation.
8. Remove forms and backfill adjacent disturbed areas using onsite materials.

**CONCRETE SEALING SPECIFICATIONS (03.31.2010)**

**NOTE:** This is a good preventative maintenance tool in climates with Freeze/Thaw cycles and not as helpful where weather is more temperate!

**SCOPE:**

**Crack Routing and Sealing for Concrete Pavement (Linear Feet)**

1. With mechanical routing tools create a groove about 3/8 inches wide and 3/4 inches deep along the crack to create a reservoir for the crack sealant.
2. Immediately prior to sealing, blow out the crack with compressed air until completely free of dust and water.
3. Seal with a rubber asphalt compound immediately following the final cleaning....Material shall be a resilient, adhesive compound capable of effectively sealing cracks in concrete pavement against the infiltration of moisture.

**SCOPE:**

**Joint Sealing for Concrete Pavement (Linear Feet)**

1. Saw or mechanically wire broom joint to remove sealants, dust, dirt, water and any other foreign materials which would prevent bonding of the new sealants to the concrete.
2. Immediately prior to sealing the joint blow out the joint spaces with compressed air until completely free of dust and water.
3. Joints need to be dry before installation of joint sealant.



4. Seal the joints with rubber asphalt compound immediately following the final cleaning...Material shall be a resilient, adhesive compound capable of effectively sealing joint in concrete pavement against infiltration of moisture

**NOTE: The SCOPE Description above you can insert "Sonneborn or Equivalent" (but it is more expensive and dry times are long) in place of "rubber asphalt compound". You can get Hot Rubberized Crack Fill with a GRAY Coloring that is much more restaurant friendly (dry times are less and it is more cost effective)....not likely to be good for Sidewalks more for large cracks and deteriorated joints in Flat Work.**

**Information Regarding Sonneborn if chosen by the Facility Manager/Construction Manager:**

1. **PRODUCTS:** BASF/ SONNEBORN SL-1 SEALANT, PRECAST GRAY COLOR (similar to medium gray), SELF-LEVELING POLYURETHANE CONCRETE & METAL JOINT SEALANT. 2-GALLON PAIL. PRICE/PAIL.
2. **DESCRIPTION:** The Precast Gray (medium gray) color more closely matches aged concrete for good appearance. Sonneborn SL 1 joint sealant is a one-component, self-leveling, UV resistant, exterior grade, non-priming polyurethane sealant designed for creating, sealing and waterproofing all type of concrete and metal expansion joints up to 3/4" in width.
3. For joints wider than 3/4", SL2 is recommended.
4. SL1 requires no mixing and bonds to many materials without a primer, including concrete, masonry, metals, fiberglass, etc.
5. Use together with Backer Rod to create proper design of expansion joints.

**Recommended APPLICATIONS:** Concrete Floors, Sidewalks, Flat Work Slabs, Parking Garage!

1. With 800% elongation and 350 PSI tensile strength it is recommended where flexibility as well as abrasion and puncture resistance are required.
2. **Not recommended for asphalt sealing, asphalt expansion joints, or contact with asphalt products.**
3. **COVERAGE:** One 825ml TUBE yields about 36 lineal ft. of 1/2" x 1/4" joint.