

## SECTION 600

### CONCRETE SIDEWALKS, DRIVEWAYS, CURBING, CURB AND GUTTER

#### SECTION 601 – CONCRETE SIDEWALKS

##### 601-1 DESCRIPTION

This work shall consist of the construction of Air-Entrained Portland Cement Concrete Sidewalks in accordance with these specifications and standard details at the locations and to the lines and grades shown on the plans or as directed by the ENGINEER. This work shall also include the removal of old sidewalk or block walk, slabjacking, and sidewalk repair when listed on the proposal, as shown on the plans, or as directed by the ENGINEER.

##### 601-2 MATERIALS

**601-2.1** Materials shall meet the requirements of Subsection 501-2.

##### 601-2.2 ADA RAMPS.

The following detectable warning panel systems have been approved:

Composite Paver Inline Dome by ADA Tactile Systems, ADA Solutions, Inc., North Billerica, Massachusetts 01862, <http://www.adatale.com>.

Composite Panel Inline Dome by ADA Tactile Systems. The detectable warning panels shall be homogenous glass and carbon reinforced composite with fiberglass reinforced domes. The panel color shall be uniform throughout and shall not rely on any type of paint coating to achieve color stability.

##### PHYSICAL CHARACTERISTICS SHALL BE:

Compressive Strength	28,900 psi	ASTM D 695
Flexural Strength	29,300 psi	ASTM D 790
Water Absorption	.07%	ASTM C 570
Slip Resistance	1.18 Dry/1.05 Wet	ASTM C 1028
Flame Spread Index	20	ASTM E 84
Salt Spray	No Change (200 hours)	ASTM B 117
Chemical Stain Testing	No Deterioration	ASTM 1308
Abrasion Resistance	549	ASTM C 501
Accelerated Weathering	Delta E < 5.0 (2,000 hours)	ASTM G 155
Tensile Strength	11,600 psi	ASTM D 638
Adhesion to Concrete (20° -180°)	No Delamination or Degradation	ASTM C 903
Freeze/Thaw/Heat	No Disintegration	ASTM C 1026

Cast In Tact Tactile Warning Panels by Masco (Masons Supply Co. of Portland, Oregon). The detectable warning panels shall be a lightweight concrete paver panel having a minimum size of 1' X 2' and be at least 3/4" thick. The concrete panel shall be capable of reaching 10,000 psi in accordance with ASTM C39 and reinforced with high tensile stainless steel prestressed tendons. The panels shall include a waterproofing admixture and surface treated with penetrating silane sealed for resistance to deicing chemicals, increased freeze/thaw durability, scaling resistance, and decreased water absorption. The panel shall be safety yellow color throughout the panel.

Armor-Tile Tactile System by Engineered Plastics, Inc.

The vitrified polymer composite tiles shall be embedded in the new concrete. Tiles shall be an epoxy polymer composition with ultraviolet stabilized coating employing aluminum oxide particle in the truncated domes. The panel shall be safety yellow color throughout the panel. The panel shall be resistant to chemical stains and fire resistant. Tiles shall meet the Accelerated Aging and Freeze Thaw Test ASTM D1037. The tile shall show no evidence of cracking, delamination, warpage, checking, blistering, color change, loosening of tiles, or other defects. Tiles shall show no deterioration or other defects when salts or deicers are applied. Embedment flange spacing shall be 3.0 inches minimum to 3.1 inches maximum center-to-center spacing. Tiles shall be installed per the manufacturer's recommendations. Embedment flanges shall not be removed without approval of the manufacturer and ENGINEER.

Tiles shall be held within the following dimensions and tolerances:

Length and Width: 12" x 12," 24" x 24," 24" x 36," 24" x 48," or 24" x 60"

Depth: 1.400" ±5% max.

Face Thickness: 0.875" ±5% max.

Warpage of Edge: ±5% max.

Water Absorption: 0.35% max., ASTM D570

Slip Resistance: not to be less than 0.80 on top of domes and field area, ASTM C1028

Compressive Strength: not less than 18,000 psi, ASTM C695

Tensile Strength: not less than 10,000 psi, ASTM D638

Flexural Strength: not less than 24,000 psi, ASTM C293

Abrasive Wear: not to exceed 0.030" after 1,000 abrasion cycles, ASTM D2486.

## **601-3 CONSTRUCTION REQUIREMENTS**

Construction requirements shall conform to Subsection 501-3 with the following additional provisions:

**601-3.1 SIDEWALK REMOVAL.** All concrete sidewalk removed shall be disposed of in accordance with Subsection 501-3.16. All repaired sidewalks must be removed to the nearest joints.

**601-3.2 JOINTS.** Expansion joints shall be placed in sidewalks at intervals as shown on the Standard Details or as directed by the ENGINEER. Expansion joints shall be used when adjoining private concrete slabs unless otherwise approved by the ENGINEER. The expansion joint material shall have a thickness of 3/4 inch.

The sidewalk shall be divided into sections by contraction joints formed by a jointing tool or sawing.

**601-3.3 FORMS.** Forms shall conform to Subsection 501-3.11. Forms for use on curves shall be capable of installation to within 1/2 inch of the true curve; if the radius is less than 400 feet, they shall be either flexible material or shaped to fit the curve.

**601-3.4 CONTRACTOR'S STAMP OR NAME PLATE.** The CONTRACTOR shall mark at the ends of the sidewalk, either by stamping or by inlaying an approved metal plate, which shall conform to Subsection 501-3.15.

**601-3.5 BACKFILL.** The sidewalk shall be backfilled within 14 days of placement to a level width of at least 2 feet along all edges and to a height equal to the top finished grade of the sidewalk. The backfill shall be compacted in accordance with Section 202 "Excavation and Embankment."

**601-3.6 JACKING.** This work shall consist of raising, leveling, void filling, and stabilizing concrete slabs by drilling through the concrete slab and forcing a fluid like material on the bottom of the slab.

Materials shall meet the requirements of Subsection 501-2.11.

jacking shall not be done during the following weather conditions:

1. Excessive rain or when temperature is below 32 degrees.
2. When frost is in the ground.
3. During hot weather where the mixture could stand for any length in time causing setup to occur.

jacking holes shall be drilled into slabs 1 1/2 to 2 5/8 inches in diameter.

Equipment used to drill holes shall not strike too heavy a blow and shall avoid breaking

off the lower side of the slab as the drill goes through. Any damage to existing adjacent slabs or to the slab to be repaired shall be the responsibility of the CONTRACTOR. Spacing and location of holes shall be drilled according to the particular job and the way the slab must be lifted, tilted, and voids filled.

jacking holes shall be finished by removing excess jacking materials and finishing off each hole with a dry cement mix leaving a slight crown in the middle to allow shrinkage of cement. Any finished surface which has settled below the slab grade shall be removed and refinished. All joints adjacent or within the jacked area wider than 3/8 inches shall be sealed in accordance with Subsection 501-2.9.

The work area shall be kept clean and shall be safe at all times.

When a finished slab does not meet the following tolerances, it will be considered a failure and therefore not accepted by the ENGINEER and no payment will be made:

Curb & Gutter Joints. Sags no more than ¼ inch per 10 linear feet (LF) or ¼ inch vertical separation at a joint.

4"-6"-8" Sidewalks. ½ inch vertical separation per joint.

Valley Gutters and Driveways. Will be at the discretion of the ENGINEER.

**601-3.7 4-INCH EXPANSION JOINT WITH DOWELS.** Four-inch expansion joint shall be doweled in accordance with standard details. Dowels shall be 1/2 inch by 12 inches long, smooth or #4 x 12" deformed (reinforcing bar). Dowels shall be centered on the 4-inch slab perpendicular to the surface of the slab at 12-inch centers. Paper tubes shall be used as approved by the ENGINEER. 4-inch Expansion Joints with Dowels shall be incidental to other bid items.

**601-3.8 4-INCH SIDEWALK REPAIR.** This item shall include 4-inch concrete removed and replaced. All 4-inch concrete shall be removed to the nearest existing joints. All joints not broken adjacent to the repair shall be sawed. All existing concrete must be drilled, and 12-inch #4 reinforcing steel shall be installed. Drills for transverse joints shall be set on 12-inch centers perpendicular to the existing slab surface, and placed mid-depth on the slab. Drills for longitudinal joints shall be set at 2-foot intervals, placed mid-depth on the slab and perpendicular to the existing slab surface. The depth of the drilled hole shall be no less than 6 inches and shall be drilled ¼ inch larger than the dowel bar or reinforcing steel specified. Expansion joints and paper tubing for reinforcing steel or dowel shall be added at the direction of the ENGINEER. Expansion joints shall be sealed in accordance with Section 502-4.9. All subgrade preparation, sawing, expansion joints, dowels, reinforcing steel or drilled in dowels, and joint sealing shall be considered incidental to the bid price for 4-Inch Sidewalk Repair.

**601-3.9 CONCRETE QUALITY CONTROL AND SUBGRADE TESTING.** Testing frequencies shall conform to Section 501-3.4. Payment shall be considered incidental to other bid items.

**601-3.10 ADA CURB RAMPS.** ADA curb ramps must be installed when installation of new sidewalks and repair of existing sidewalks, curbs, valley gutters, and utility cuts are made at an intersection. For any repair done to an existing ADA curb ramp that does not have the detectable warning panels, the CONTRACTOR shall remove the additional concrete to install a detectable warning panel.

The ADA curb ramps shall be tied to adjacent concrete pavements and curb with 1-foot #4 reinforcing bars spaced at 1-foot centers.

The curb ramp landing lengths, directions, and placements of the detectable warning panels shall be determined by the ENGINEER in the field.

The ADA curb ramps shall be protected by steel fence posts until construction of adjacent sidewalks is completed. The number of fence posts and the location shall be in accordance with standard details or shall be determined by the ENGINEER. Cost of furnishing and installing steel fence posts shall be considered incidental to the price bid for ADA Ramp.

The detectable warning panels shall consist of a surface of truncated domes aligned in a square grid pattern in the predominant direction of travel.

**Dome Size:** Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inches minimum to 1.4 inches maximum, a top diameter of 50% of the base diameter minimum to 65% of the base diameter maximum, and a height of 0.2 inches.

**Dome Spacing:** Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches minimum and 2.4 inches maximum and a base-to-base spacing of 0.65 inches minimum measured between the most adjacent domes on the square grid.

**Size:** Detectable warning surface shall extend 24 inches in the direction of travel and the full width of the curb ramp landing.

The detectable warning surface shall be located so that the nearest edge is 6 inches minimum and 8 inches maximum from the face of the curb, or determined by the ENGINEER in the field.

The detectable warning panels shall be installed according to the manufacturer's recommendation and in accordance with Standard Detail Nos. 1304C and 1304C1. All costs of labor, materials, and equipment to install panels shall be included in the price for ADA Curb Ramps. .

## **601-4 MEASUREMENT AND PAYMENT**

**601-4.1 4-INCH CONCRETE SIDEWALK.** Concrete sidewalk shall be measured by the square foot (SF) and paid for at the unit price bid for 4-Inch Concrete Sidewalk complete in place and accepted by the ENGINEER.

**601-4.2 4-INCH SIDEWALK REPAIR.** Measurement and payment shall be per square foot (SF) of Sidewalk Repair for sidewalk removed and replaced, sawing, subgrade preparation, dowels and drilled in dowels, expansion joints, sealed, complete in place and accepted by the ENGINEER.

**601-4.3 SIDEWALK REMOVAL.** Sidewalk removed and disposed of shall be measured by the square foot (SF) and paid for at the unit price bid for "Sidewalk Removal." All sidewalk removed which is less than 6 inches in thickness will be paid for under this item. All sidewalk removed which is 6 inches and less than 8 inches in thickness will be paid for under Section 602-4.3 "Driveway Removal." All sidewalk removed which is 8 inches or more in thickness will be paid for under Section 602-4.2A "8-inch Concrete Removal."

**601-4.4 JACKING 4-INCH CONCRETE SIDEWALK.** jacking 4-inch concrete sidewalk shall be measured by the square foot (ft) and paid for by the unit price for "jacking 4-Inch Concrete" complete, in place, and accepted by the ENGINEER.

**601-4.5 ADA CURB RAMPS.** Measurement and payment shall be by the square foot (SF) for ADA Ramp complete in place and accepted by the ENGINEER.

## **SECTION 602 – CONCRETE DRIVEWAYS**

### **602-1 DESCRIPTION**

This work shall consist of the construction of new, removed, and replaced slabjacking of Air-Entrained Portland Cement Concrete Driveways, and Valley Gutters. 8-inch concrete shall be any concrete 8 inches or thicker, and 6-inch concrete shall be 5 inches and up to less than 8 inches in thickness in accordance with these specifications and standard details at the locations and to the lines and grades shown on the plans or as directed by the ENGINEER.

### **602-2 MATERIALS**

Materials for Portland Cement Concrete shall meet the requirements of Subsection 501-2.

### **602-3 CONSTRUCTION REQUIREMENTS**

Construction requirements shall conform to Subsection 501-3 with the following additional provisions:

**602-3.1 CONTRACTOR'S STAMP OR NAME PLATE.** The CONTRACTOR shall mark in each driveway, either by stamping or by inlaying an approved metal plate conforming to Subsection 501-3.15.

**602-3.2 BACKFILL.** The driveway shall be backfilled within 14 days of placement to a level width of at least 2 feet along all edges and to a height equal to the top finished grade of the driveway. The backfill shall be compacted in accordance with Section 202 "Excavation and Embankment."

**602-3.3 DRIVEWAY REMOVAL.** Driveway removal shall consist of removal of concrete that is 5 inches or greater in thickness and less than 8 inches. All curb and gutters or concrete pavements attached shall be paid for as curb removed, curb repaired, or full-depth pavement repair. Disposal shall be in accordance with Section 501-3.16.

**602-3.4 SEALING JOINT.** Joints sealed shall be sealed in accordance with Subsections 501-3.22 and 501-2.9 and shall be incidental to other bid items.

**602-3.5 DRIVEWAY JACKING.** jacking of driveways shall be in accordance with Subsection 601-3.6.

**602-3.6 TREE REMOVAL OR TREE ROOT CUTTING.** Construction methods and measure and payment shall meet the requirements of Section 201.

**602-3.7 FORMS.** Forms shall conform to Subsection 501-3.11. All tops of driveway forms for driveways shall be set at a 90-degree angle to the street or curb and gutter alignment unless otherwise approved by the ENGINEER.

**602-3.8 JOINTS.** Expansion joint materials shall not be used in driveway aprons unless approved by the ENGINEER. Jointing shall conform to Detail drawings 600-7 and 600-8 or joints approved by the ENGINEER. Jointing shall be done with appropriate jointing tool or sawed. All joints sawed into driveways must be sawed with a double blade in order for joint sealant to be installed to proper width and depth.

**602-3.9 DRIVEWAY REPAIR.** Driveway Repair shall include 6-inch or 8-inch concrete driveway removed and replaced. All existing concrete shall be drilled and #4 12-inch reinforcing steel installed and set perpendicular to the existing slab surface at mid-slab depth. Drill holes shall be set on 12-inch centers for transverse joints and 24-inch centers for longitudinal joints. Depth of the drilled hole shall be no less than 6 inches. Holes drilled for reinforcing steel shall be drilled ¼ inch larger than the steel specified. Remove slabs to the nearest existing joint. All joints not broken adjacent to the repair shall be sawed. If an existing crack runs perpendicular without protruding in all directions, a joint may be sawed along the crack. Such cracks must be 4 feet from the closest joints and may not be smaller. All joints in the non sidewalk portion of the driveway must be sealed to include the curb connected to the driveway. Sealing materials shall be in conformance with Section 502-4.9. All removal, sawing, expansion joints, dowels, reinforcing steel or drilled in dowels, sealing of joints, and subgrade preparation shall be considered incidental to bid price for Driveway Repair.

**602-3.15 CONCRETE QUALITY CONTROL AND SUBGRADE TESTING.** Testing shall conform to Section 501-3.4. Payment shall be considered incidental to other bid items.

#### **602-4 MEASUREMENT AND PAYMENT**

**602-4.1 6-INCH CONCRETE DRIVEWAY.** Six-inch concrete driveway shall be measured by the square foot (SF) and paid for at the unit price bid for "6-Inch Concrete Driveway" complete in place and accepted by the ENGINEER.

**602-4.2 8-INCH CONCRETE DRIVEWAY.** Eight-inch concrete driveway shall be measured by the square foot (SF) and paid for at the unit price bid for "8-Inch Concrete Driveway" complete in place and accepted by the ENGINEER.

**602-4.2A 8-INCH CONCRETE REMOVAL.** Eight-inch or thicker concrete removed and disposed of shall be measured by the square foot (SF) and paid for at the unit price bid for "8-Inch Concrete Removal." All 8-inch or thicker concrete removed shall be disposed of in accordance with Subsection 501-3.16.

**602-4.3 DRIVEWAY REMOVAL.** Driveway removed and disposed of shall be measured by the square foot (SF) and paid for at the unit price bid for "Driveway Removal." All driveway removed which is less than 8 inches in thickness will be paid for

under this item. All driveway removed which is 8 inches or more in thickness will be paid for under Section 602-4.2A "8-Inch Concrete Removal."

**602-4.4 JACKING 6-INCH CONCRETE DRIVEWAYS.** jacking 6-inch concrete driveways and sidewalk shall be measured by the square foot (SF) and paid for by the unit price bid for "jacking 6-Inch Concrete" complete in place and accepted by the ENGINEER.

**602-4.5 JACKING 8-INCH CONCRETE DRIVEWAYS.** jacking 8-inch concrete driveways and sidewalk shall be measured by the square foot (SF) and paid for by the unit price bid for "jacking 8-Inch Concrete" complete in place and accepted by the ENGINEER.

## **SECTION 603 – CONCRETE CURB AND COMBINED CURB AND GUTTER**

### **603-1 DESCRIPTION**

This work shall consist of the construction of Air-Entrained Portland Cement Concrete Standard Curb, Combined Curb and Gutter with 6-inch or 8-inch gutters sections, and, Mountable Curb and Gutter, and Curb and Gutter Repair in accordance with these specifications and standard details at the locations and to the lines and grades shown on the plans or as directed by the ENGINEER.

This work shall also include the removal of old curbing and curb and gutter when listed on the proposal, as shown on the plans, or as directed by the ENGINEER.

### **603-2 MATERIALS**

**603-2.1** Materials shall meet the requirements of Subsection 501-2.

### **603-3 CLASSIFICATION**

**603-3.1 STANDARD CURB.** The curb constructed under the designation shall be one course unreinforced or reinforced concrete construction as shown on the standard details. All curbing constructed on a straight line or on a curve shall be considered standard curb.

**603-3.2 STANDARD CURB AND GUTTER.** The work to be completed under this item shall be one course reinforced or unreinforced concrete construction as shown on the standard details as a combined curb and gutter section. All curb and gutter constructed on a straight line or on a curve shall be considered as standard curb and gutter.

**603-3.3 MOUNTABLE CURB AND GUTTER.** The work to be completed under this item shall be one course reinforced or unreinforced concrete construction as shown on Standard Details as a combined mountable curb and gutter section. All mountable curb and gutter constructed on a straight line or on a curve under this item shall be classified as mountable curb and gutter.

**603-3.4 CURB AND GUTTER REPAIR.** The work to be completed under this item shall conform to Subsections 603-3 and 603-4.

### **603-4 CONSTRUCTION REQUIREMENTS**

Construction requirements shall conform to Subsection 501-3 with the following additional provisions:

**603-4.1 GENERAL.** The curb and curb and gutter constructed under this item shall be one course concrete construction.

When curb and gutter sections are removed for repairs or new construction of driveways or a valley gutter, the curb and gutter shall be removed to the nearest joint. If the existing curb is cracked, the cracked joint shall be sawed. The sawed joint shall be no closer than 5 feet to the existing joint in place. All jagged joints shall be sawed.

When new curb and gutter is installed, and ends do not tie into an existing curb, the ends of the curb and gutter shall have the curb tapered down from 6 inches to 1 inch for 2 feet in length which shall be paid for as standard curb and gutter..

**603-4.2 FORMS.** Forms for use on curves shall be capable of installation to within 1/2 inch of the true curve, and if the radius is less than 400 feet, they shall be either flexible material or shaped to fit the curve. On small radius curves such as driveways and street intersections, the CONTRACTOR may use masonite or equal, metal, or 1/2 inch dimension lumber.

**603-4.3 DOWEL BARS.** All dowel bars as detailed shall be considered incidental to each item of curb or curb and gutter construction.

**603-4.4 DOWELED EXPANSION JOINTS.** Doweled expansion joints shall consist of two (2) dowels and one (1) expansion boot, three (3) reinforcement bars, and one (1) expansion boot in accordance with Subsections 501-2.8 "Expansion Joint Material" and or 501-2.10 "Reinforcing Steel." Doweled expansion joint boot shall be 1/2 to 1/4 inch lower than the surfaces of the top of the curb and gutter.

One (1) doweled expansion joint shall be placed every 100 feet on any new or repaired curb and gutter sections and at both ends of street intersection radii.

Every attempt should be made to center or position the doweled expansion joint to improve the overall appearance of the curb and gutter section.

**603-4.5 SURFACE FINISH.** The final surface finish shall be obtained by uniformly brushing or brooming the surface. No plastering will be permitted.

**603-4.6 BACKFILL.** The curbing shall be backfilled within 14 days of placement to a level width of at least 2 feet along the front of the gutter and back of the curb to a height equal to the top finished grade of the curbing. The backfill shall be compacted in accordance with Section 202 "Excavation and Embankment."

**603-4.7 CONTRACTOR'S STAMP OR NAME PLATE.** CONTRACTOR shall mark every 100 LF for continuous pours of new curb and gutter laid, and every curb and gutter patch done per city lot, by stamping or by inlaying an approved metal plate conforming to Subsection 501-3.15.

**603-4.8 CURB OR CURB AND GUTTER REMOVAL.** All curb or curb and gutter removed shall be disposed of in accordance with Subsection 501-3.16.

**603-4.9 CURB AND GUTTER EXTRUSION MACHINE.** This type of machine shall be capable of producing concrete curb, curb and gutter, or mountable curb and gutter to conform to the requirements of this section and line, grade, shape, and dimensions given in the plans and specifications or approved by the ENGINEER using materials conforming to the specifications.

The CONTRACTOR shall provide the ENGINEER with the following information prior to being given permission to produce a test section with the machine:

1. Complete machine specifications regarding the machine and its performance.
2. Details of the proposed section of curb or curb and gutter to be produced by the Machine.
3. Provide evidence of having previous experience of operating and maintaining the proposed machine.

If the above items are found to be satisfactory to the ENGINEER, written permission will be given to the CONTRACTOR to provide a 100-foot test section in place with the proposed machine.

If the manufacture of the test section and the performance of the extrusion machine prove to be satisfactory, the ENGINEER shall then issue final written approval to the CONTRACTOR. If during the course of construction on the project said manufacture and said performance becomes unsatisfactory, the ENGINEER shall disallow the continued use of said machine.

**603-4.10 SEALING JOINTS.** All expansion joints shall be sealed in accordance with Subsections 501-3.22 and 501-2.9.

**603-4.12 JACKING. Curb and gutter and curb with 8-inch gutter.** jacking curb and gutters shall be in accordance with Subsection 601-3.6.

**603-4.13 CURB AND GUTTER REPAIR.** This item shall include standard curb and gutter (6-inch gutter) and Standard Curb removed and replaced. Curb and gutter removed shall be removed to the closest joint. If the curb is cracked, a joint shall be sawed. The joint shall be no closer than 5 feet to the existing joint in place. All joints not broken adjacent to the repair shall be sawed.

Curb and gutter shall be drilled and #4 12-inch deformed bar or dowel bar installed once at 6 inches below and perpendicular to the top of the curb surface, and two more times 12 inches apart centered perpendicular and mid-depth to the gutter surface. Depth of the drill shall be no less than 6 inches. Expansion joint boots shall be installed on the curb and gutter at the discretion of the ENGINEER. When expansion joint boots are installed, the boot shall be installed one-half inch lower than the surface of the top of the curb and the gutter surface to allow for sealant. All subgrade preparation, sawing,

expansion joint boots, dowels, reinforcing steel, drilled-in dowels, and sealing shall be considered incidental to the bid price for Curb and Gutter Repair.

**603-4.15 CONCRETE QUALITY CONTROL AND SUBGRADE TESTING.** Testing shall meet the requirements of Section 501-3.4. Payment shall be considered incidental.

## **603-5 MEASUREMENT AND PAYMENT**

**603-5.1 CURB AND GUTTER REPAIR.** Measurement and payment shall be per linear foot (LF) of Curb and Gutter Repair for curb and gutter removed (incidentally), replaced, sealed, and accepted by the ENGINEER.

**603-5.2 STANDARD CURB.** Standard Curb shall be measured by the linear foot (LF) and paid for at the unit price bid for "Standard Curb" complete in place and accepted by the ENGINEER.

**603-5.3 STANDARD CURB AND GUTTER.** Standard Curb and Gutter shall be measured by the linear foot (LF) and paid for at the unit price bid for "Standard Curb and Gutter" complete in place and accepted by the ENGINEER. When reinforcing steel is required, the reinforcing steel shall be considered incidental.

**603-5.4A MOUNTABLE CURB AND GUTTER.** Mountable curb and gutter shall be measured by the linear foot (LF) and paid for at the unit price bid for "Mountable Curb and Gutter" complete in place and accepted by the ENGINEER. When reinforcing steel is required, the reinforcing steel shall be considered incidental.

**603-5.6 CURB AND GUTTER REMOVED.** Curb and curb and gutter removed shall be measured by the linear foot (LF) and paid for at the unit price bid for "Curb and Gutter Removed" complete in place and approved by the ENGINEER.

**603-5.7 JACKING STANDARD CURB AND GUTTER.** jacking standard curb and gutter shall be measured by the linear foot (LF) and paid for at the unit price bid for "jacking Standard Curb and Gutter" complete in place and accepted by the ENGINEER.