



## COUNTY OF BEXAR

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### DRIVEWAY APPROACH SPECIFICATIONS

#### Curbed Streets

#### Residential

**Applicability:** All residential driveways on curbed streets must have a concrete driveway.

**Maximum Width:** 20 feet (up to a two car garage or each additional driveway) or 28 feet (greater than two car garage)

**Modification to existing curb:** Existing curb may remain in place and may be shaved to the appropriate size and shape of the driveway opening. If rebar is exposed, the rebar must be removed and the impression or hole must be filled in using an epoxy grout.

**Subbase:** Minimum 2" flexible base material, cement treated base, or asphaltic concrete base. Recycled concrete will not be accepted as subbase material for driveways.

**Reinforcement Supports:** Reinforcement shall NOT be supported by pebbles, pieces of broken stones or brick, metal pipe or wooden blocks. Precast concrete blocks or manufactured supports, chairs, bolsters, spacers, or dobies are acceptable.

**Reinforcement:** Concrete reinforcement must be one of the following:

- 1) # 3 rebar 12" on center both ways with no splices with all intersections tied with wire, or
- 2) 6" x 6" W/ D5 x W/D5 welded wire flat sheets. Overlap shall be no less than 8" wire tied at all intersections.

**Concrete:** 3,000 psi minimum compressive strength @ 28 days (5 sack mix, 2" - 5" slump, 7% maximum water-cement ratio).

**Minimum Slab thickness:** 5"

**Finish:** Broom Finish with troweled rounded edges (no other finish or coatings will be allowed).

**Typical Sections and Profiles:** Refer to the latest Concrete Driveway Standards standard drawings posted on the City of San Antonio website. If there is a conflict between the City's details and this specification, this specification shall apply.

**Expanding Existing Driveway Approach or Adding a Driveway Approach:** The expansion of a driveway approach or the addition of a driveway will only be permitted when all the following have been submitted with the permit application:

- 1) A letter from the President or Manager of the Property Owners Association registered with the Bexar County Clerk acknowledging the driveway approach modification will be allowed;
- 2) Plot plan shows limits of:
  - a. sidewalk to be removed and replaced with the driveway approach section
  - b. limits of curb to be shaved or removed

**Sidewalks:** All the above apply, except: **Minimum Width:** 4' (provide passing space every 200 feet if sidewalk width is less than 5 feet); **Slab thickness:** 4"; **Reinforcement:** # 3 rebar 18" on center both ways with all intersections tied or 6" x 6" W/D 2.9 x W/D 2.9 welded wire flat sheets with minimum 8" overlap and all intersections tied.

# BEXAR COUNTY DRIVEWAY APPROACH SPECIFICATIONS

## Curbed Streets

### Commercial (Area used for trading goods and services).

**Applicability:** All commercial driveways may be asphalt, concrete, or flexible base.

**Maximum Width:** 40 feet

**Modification to existing curb:** Existing curb must be removed since the thickness of the curb will be less than the driveway section. Existing curb is to be saw cut where the driveway flair or curb transition will end and replaced with a 1' x 1' lug (thicken slab) sloped back towards the driveway to the desired slab thickness to be poured at the same time the driveway approach is poured.

### Concrete Driveway Approaches

**Subbase:** Minimum 2" flexible base material, cement treated base, or asphaltic concrete base. Recycled concrete will not be accepted as subbase material for driveways.

**Reinforcement Supports:** Reinforcement shall NOT be supported by pebbles, pieces of broken stones or brick, metal pipe or wooden blocks. Precast concrete blocks or manufactured supports, chairs, bolsters, spacers, or dobies are acceptable.

**Reinforcement:** Concrete reinforcement must be one of the following:

- 1) # 4 rebar 12" on center both ways with no splices with all intersections tied with wire, or
- 2) 6" x 6" W/ D10 x W/D10 welded wire flat sheets. Overlap shall be no less than 8" wire tied at all intersections.

**Concrete:** 3,000 psi minimum compressive strength @ 28 days (5 sack mix, 2" - 5" slump, 7% maximum water-cement ratio).

**Minimum Slab thickness:** 6"

**Finish:** Broom Finish with troweled rounded edges (no other finish or coatings will be allowed).

**Typical Sections and Profiles:** Refer to the latest Concrete Driveway Standards standard drawings posted on the City of San Antonio website.

### Asphalt Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Flexible Aggregate Base Thickness:** Minimum of 8"

**Asphalt Thickness:** 2" HMAC, Type D (surface treatment not allowed)

### Flexible Base Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Flexible Aggregate Base Thickness:** Minimum of 8"

**Sidewalks:** All the above apply, except: **Minimum Width:** 4' (provide passing space every 200 feet if sidewalk width is less than 5 feet); **Slab thickness:** 4"; **Reinforcement:** # 3 rebar 18" on center both ways with all intersections tied or 6" x 6" W/D 2.9 x W/D 2.9 welded wire flat sheets with minimum 8" overlap and all intersections tied.

# BEXAR COUNTY DRIVEWAY APPROACH SPECIFICATIONS

## Curbed Streets

### Industrial (Area used for production or warehousing of goods).

**Maximum Width:** 40 feet

**Modification to existing curb:** Existing curb must be removed since the thickness of the curb will be less than the driveway section. Existing curb is to be saw cut where the driveway flair or curb transition will end and replaced with a 1' x 1' lug (thicken slab) sloped back towards the driveway to the desired slab thickness to be poured at the same time the driveway approach is poured.

#### Concrete Driveway Approaches

**Subbase:** Minimum 4" flexible base material, cement treated base, or asphaltic concrete base. Recycled concrete will not be accepted as subbase material for driveways.

**Reinforcement Supports:** Reinforcement shall NOT be supported by pebbles, pieces of broken stones or brick, metal pipe or wooden blocks. Precast concrete blocks or manufactured supports, chairs, bolsters, spacers, or dobies are acceptable.

**Reinforcement:** Concrete reinforcement must be one of the following:

- 1) # 4 rebar 12" on center both ways with no splices with all intersections tied with wire, or
- 2) 6" x 6" W/ D10 x W/D10 welded wire flat sheets. Overlap shall be no less than 8" wire tied at all intersections.

**Concrete:** 4,000 psi minimum compressive strength @ 28 days (6 sack mix, 3" - 4" slump, 7% maximum water-cement ratio).

**Minimum Slab thickness:** 6"

**Finish:** Broom Finish with troweled rounded edges (no other finish or coatings will be allowed).

**Typical Sections and Profiles:** Refer to the latest Concrete Driveway Standards standard drawings posted on the City of San Antonio website.

#### Asphalt Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Flexible Aggregate Base Thickness:** Minimum of 12"

**Asphalt Thickness:** 3" HMAC, Type D (surface treatment not allowed)

#### Flexible Base Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Flexible Aggregate Base Thickness:** Minimum of 12"

**Sidewalks:** All the above apply, except: **Minimum Width:** 4' (provide passing space every 200 feet if sidewalk width is less than 5 feet); **Slab thickness:** 4"; **Reinforcement:** # 3 rebar 18" on center both ways with all intersections tied or 6" x 6" W/D 2.9 x W/D 2.9 welded wire flat sheets with minimum 8" overlap and all intersections tied.

# BEXAR COUNTY DRIVEWAY APPROACH SPECIFICATIONS

## Streets Without a Curb

### Residential

**Maximum Width:** 20 feet (up to a two car garage or each additional driveway) or 28 feet (greater than two car garage)

**Culvert:** When the slopes of a typical driveway without culvert section cannot be met without raising the bottom of the bar ditch, a pipe or box culvert will be required. The inspector will determine the size of the culvert when visiting the site or the owner or contractor may hire an engineer with experience in drainage to design the culvert crossing. The pipe culvert shall have a minimum diameter of 15 inches. A 12" arched pipe culvert may be substituted for a standard 15" diameter pipe culvert. The culvert must be a minimum of 9" below the top of driveway but cannot be more than 12" below the top of driveway unless otherwise specified by the pipe manufacturer. Culvert pipe may be corrugated metal, concrete, or approved equal.

**Culvert Concrete End Treatment:** Concrete end treatments are required at all culvert crossings. The maximum slope is 6:1 when the pipe end treatment edge closest to the road is within 12 feet of the edge of the travel lane. The maximum slope must not exceed 4:1 if the closest edge of the pipe end treatment is beyond 12 feet of the edge of the travel lane.

**Expanding Existing Driveway Approach or Adding a Driveway Approach:** The expansion of a driveway approach or the addition of a driveway will only be permitted when all the following have been submitted with the permit application:

- 1) A letter from the President or Manager of the Property Owners Association registered with the Bexar County Clerk acknowledging the driveway approach modification will be allowed;
- 2) Plot plan shows limits of sidewalk to be removed and replaced with the driveway approach section (if applicable)

### Concrete Driveway Approaches

**Subbase:** Minimum 4" flexible base material, cement treated base, or asphaltic concrete base. Recycled concrete will not be accepted as subbase material for driveways.

**Reinforcement Supports:** Reinforcement shall NOT be supported by pebbles, pieces of broken stones or brick, metal pipe or wooden blocks. Precast concrete blocks or manufactured supports, chairs, bolsters, spacers, or dobies are acceptable.

**Reinforcement:** Concrete reinforcement must be one of the following:

- 1) # 4 rebar 12" on center both ways with no splices with all intersections tied with wire, or
- 2) 6" x 6" W/ D10 x W/D10 welded wire flat sheets. Overlap shall be no less than 8" wire tied at all intersections.

**Concrete:** 3,000 psi minimum compressive strength @ 28 days (5 sack mix, 2" - 5" slump, 7% maximum water-cement ratio).

**Minimum Slab thickness:** 6"

**Finish:** Broom Finish with troweled rounded edges (no other finish or coatings will be allowed).

**Typical Sections and Profiles:** See attached drawings.

### Asphalt Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Compacted Flexible Aggregate Base Thickness:** Minimum of 6"

**Asphalt Thickness:** 1.5" HMAC, Type D or Two Course Surface Treatment

**Typical Sections and Profiles:** See attached drawings.

### Flexible Base Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Compacted Flexible Aggregate Base Thickness:** Minimum of 6"

**Typical Sections and Profiles:** See attached drawings.



# BEXAR COUNTY DRIVEWAY APPROACH SPECIFICATIONS

## Streets Without a Curb

### Commercial (Area used for trading goods and services).

**Maximum Width:** 40 feet

**Culvert:** When the slopes of a typical driveway without culvert section cannot be met without raising the bottom of the bar ditch, a pipe or box culvert will be required. The inspector will determine the size of the culvert when visiting the site or the owner or contractor may hire an engineer with experience in drainage to design the culvert crossing. The pipe culvert shall have a minimum diameter of 15 inches. A 12" arched pipe culvert may be substituted for a standard 15" diameter pipe culvert. The culvert must be a minimum of 9" below the top of driveway but cannot be more than 12" below the top of driveway unless otherwise specified by the pipe manufacturer. Culvert pipe may be corrugated metal, concrete, or approved equal.

**Culvert Concrete End Treatment:** Concrete end treatments are required at all culvert crossings. The maximum slope is 6:1 when the pipe end treatment edge closest to the road is within 12 feet of the edge of the travel lane. The maximum slope must not exceed 4:1 if the closest edge of the pipe end treatment is beyond 12 feet of the edge of the travel lane.

#### Concrete Driveway Approach

**Subbase:** Minimum 4" flexible base material, cement treated base, or asphaltic concrete base. Recycled concrete will not be accepted as subbase material for driveways.

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**Typical Sections and Profiles:** See attached drawings.

#### Asphalt Driveway Approaches

**Subgrade Preparation:** When subgrade has been exposed, scarify the top 6" of the subgrade, recompact, and shape to proper line and cross-section of the proposed approach.

**Flexible Aggregate Base Thickness:** Minimum of 8"

**Asphalt Thickness:** 2" HMAC, Type D (surface treatment not allowed)

**Typical Sections and Profiles:** See attached drawings.

#### Flexible Base Driveway Approaches

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