January 2024

Flatwork & Driveway Approach Guidelines

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BUILDING INSPECTIONS
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Web page - https://www.colleyville.com/government/departments-a-l/building-inspections

FLATWORK AND DRIVEWAY APPROACH PERMIT OVERVIEW

Flatwork Permit Required: A flatwork permit shall be obtained in advance of installing any impervious surface not covered by a roof or shade structure **located on private property.** This may include, but is not limited to paved parking, driveways, patios, lead walkways (from dwelling to City right-of-way) *Flatwork permits are administered by the Community Development/Building Inspections department*

Driveway Approach Permit Required: A driveway approach permit shall be obtained in advance of installing any impervious surface **located within the City right-of-way**. This may include, but is not limited to the approach, culvert or public sidewalk. *Driveway Approach permits are administered by the Public Works/Engineering department.* A separate Right-of-Way permit is NOT required.

Activities Prohibited Before Permit Issuance: Excavation and setting of forms/steel cannot begin until the required permit has been **ISSUED**

IMPERVIOUS COVERAGE LIMITATIONS: Impervious coverage limitations are adopted to minimize negative flooding effects from storm water runoff and to control, minimize, and abate water pollution resulting from urban runoff of rainwater or other non-point specific sources, pursuant to Texas Water Code § 26.177 to public Right of Way. Lot to Lot drainage shall be reviewed pursuant to Texas Water Code § 11.086

DEFINITIONS

- **Approach** – The approach is included with a flatwork permit.
- **Impervious Surface** – Impervious surface is any type of hard-surfaced, man-made area that does not readily absorb or retain water. It includes the combined area occupied by: 1) all principal and accessory buildings, structures; 2) paved parking, patio, sidewalk, and driveway areas; 3) paved recreation areas; 4) graveled parking areas; 5) synthetic grass/turf materials. It does NOT include: Non-compacted areas with gravel used only by pedestrians.
- **Impervious Surface Materials** – Any material used other than soil, sod, sand, or other organic compound. Most common are concrete, asphalt, and pavers
- **Right-Of-Way** – A legally established area or strip of land, either public or private, on which an irrevocable right of passage has been recorded, and which is occupied or intended to be occupied by a street, utility service, water main, sanitary sewer or storm main, or other similar use.

APPLICATION All applications and plans for permits are submitted online as PDF attachments on the CSS portal. Over-the-counter submittals are not accepted.

CONTRACTOR REGISTRATION Contractors must be currently registered in order to create an online permit on the online CSS portal. Registration is completely electronic by downloading an application from the website and uploading the document in PDF format through the CSS portal. Detailed instructions for contractor registration are online on the Building Inspections city webpage. All fees and registration and the permit fee are paid after the plan review is approved.

SEQUENTIAL PROCEDURE FOR CONTRACTORS

1) Create a log-in for the CSS portal to register as a contractor, apply for permits, and schedule inspections.
    a CSS Portal Access: https://selfservice.colleyville.com/energov_prod/selfservice#/home.
2) Complete the contractor registration by submitting all required documents, and wait for registration to be reviewed by the Building Inspections department.
3) Go to the **APPLY** tab and apply for **Flatwork/Approach** permit after registering as a contractor.
4) Upload in CSS the Flatwork/Approach Permit application and construction documents.
5) Complete the setup of forms, steel, etc. and request inspection.
6) Check CSS for pass/fail inspection status.

SITE PREPARATION *Work* shall not commence until a permit has been issued. *Work* includes setting of forms, lot grading, soil removal, soil dumping, brush clearing, tree removal or demolition. Work without a permit is subject to an investigation fee.

PLAN REVIEW The established goal is to complete plan reviews within seven (7) working days, excluding day of submittal. The seven day period begins when all required document submittals requirements are on file. Once the permit is processed and released, the contractor will be notified of all applicable fees and can may payment online, by credit card or by check. Each structure proposed to be built requires a separate building permit, including application and plan review.

CONSTRUCTION DOCUMENT SUBMITTALS

All projects require submittal of construction documents as listed below. Incomplete plans, submittals, and/or applications will create delays.

1. **Flatwork Permit Application Form** All information fields must be completed or application will be classified as incomplete and denied.

2. **Plot Plan**
    - Existing survey - edit to show proposed impervious surfaces
    - Hand-drawn format – may be submitted in lieu of survey but must be of quality and content
    - Identify new impervious surface - shade or hatch area to show the proposed location of the work

3. **Drainage Plan**
    - Show directional flow of lot drainage using topographical imaging and/or drainage arrows and data
    - Demonstrate how new improvements will not impact adjacent properties. The installation of swales, berms, and adding driveway curbs can satisfy this requirement
    - City Engineer reserves the right to mandate lot grading/drainage design by professional engineer

4. **Impervious Coverage Worksheet**
    - Impervious coverage is determined by adding the area of all surfaces related to any roof, patio, driveways, sidewalk, or any other condition which sheds rainwater and dividing by the total lot area
    - Impervious coverage must comply with percentages established by the Land Development Code
    - See *Schedule of District Regulations* at the back of this document for maximums permitted

INSPECTORS are generally available for phone calls from 7:00 a.m. to 8:00 a.m. daily or may be contacted on their cell phones during the work day. At other times, emails are encouraged for inquiries in lieu of phone calls. Messages may be left on voice mail and calls will be returned as soon as time is available.

INSPECTION SCHEDULING: Inspection requests are entirely online via CSS. Inspections cannot be scheduled using IVR system (phone dial-up). Building/flatwork inspections must be scheduled **prior to 7:00a.m.** for same-day inspection. **No same-day inspection for Public Works/Engineering, 24 hour advanced scheduling is required**.

- AM/PM requests are not an option. Early/late requests are not an option.
- The General Contractor is responsible for scheduling all inspections
- The work must be ready for inspection at the time of the request
- If a re-inspection fee is assessed, inspections will not be performed until all fees have been paid
- All inspections held back because of cold weather or rain must be re-scheduled
- No concrete or plumbing rough inspections will be performed if the inspector determines it is too wet

INSPECTION RESULTS Review of inspection results is available online via CSS only as inspection tags are NOT left on site.

INSPECTION CANCELLATIONS Flatwork inspection cancellations shall be requested via email to buildinginspections@colleyville.com. Drive approach inspection cancellations shall be requested via email sent to engineers@colleyville.com

SAME DAY INSPECTIONS Reasonable efforts are made to complete flatwork inspections on the same day requested (when requests are received by the 7 a.m. cut-off time). Circumstances sometimes require some inspections to be moved forward to the next business day. **Driveway approach inspections for Public Works/Engineering are NOT performed the same day and require 24-hour advanced scheduling.**

RE-INSPECTION FEE

$75.00 RE-INSPECTION FEE may be charged when:

- The inspection called for is not ready when the inspector arrives.
- No building address is clearly posted.
- The building is locked or work is otherwise not available for inspection when called.
- A correction tag is issued twice for the same item.
- Violations exist on the property including erosion control, trash control or tree protection.

$125.00 RE-INSPECTION FEE may be assessed for second and subsequent violations of the above.

CONSTRUCTION HOURS

Colleyville municipal code regulates noise construction that is considered a nuisance. By ordinance, construction is permitted from **7:00a.m. - 6:00p.m**., Monday through Saturday, including holidays. Construction work is prohibited on Sundays. Variances to this ordinance are only authorized by the City Council at a public hearing which requires thirty (30) days advance notice to be scheduled on the agenda. For Public Works/Engineering inspections performed on weekends, a fee shall be assessed at a rate of $50/hour fee with a minimum of 4 hours.

EROSION CONTROL

- Erosion control must be maintained at all times throughout the project to including removal of any spoils left in street
- Inspections may be cancelled and re-inspection fees assessed at any time erosion control is not properly maintained.
- All activity on a site shall comply with City, State, and Federal statutes for storm water pollution control.

INSPECTIONS REQUIRED – by permit type:

Drive Approach Permit – (inspections performed by Public Works/Engineering; no same-day inspections 24 hour advanced scheduling is required)

- Right-of-way inspection – automatically performed by City without any inspection request
- Drive Approach (Final) – performed when forms, steel, and/or culverts are set

Flatwork Permit – (inspections performed by Building Inspections)

- Flatwork (Final)

DRIVEWAY APPROACH, CULVERT, and SIDEWALK DESIGN

Concrete Driveway Approach (from Public Works Construction Standards)

All concrete driveways shall have a minimum thickness of six inches (6") for residential driveways and six inches (6") for commercial driveways or shall match existing driveway thickness, whichever is greater. Driveways shall be composed of concrete having a minimum cement content of 5 sacks per cubic yard of concrete, 5% entrained air (± 1.5%) and a minimum compressive strength at 28 days of 3,000 pounds per square inch. The unit bid price shall also include #4 bars on eighteen inch (18") centers both ways, with #4 smooth dowels into existing concrete paving (if applicable). All concrete shall be vibrated and an approved curing compound shall be applied to the surface. All steel shall be DOMESTIC (as per C.O.C. Item B1.13, *Standard Specification for Construction of Highway, Streets, and Bridges TxDot 1993 Item 440)*.

LAND DEVELOPMENT CODE CHAPTER 14-135

Driveway Approach Depth – The driveway shall begin at the street curb and extend to the property line or to a point nine and one-half (9.5') feet from the back of the curb, whichever is

greater. The drive approach shall be constructed such that the height of the drive approach at the property ROW, with a typical nine and one-half (9.5') foot parkway, shall be two and one-half (2-1/2") inches higher than the top of the curb. The tangency point of a driveway curb shall be a minimum of ten (10') feet from a storm water inlet.

Driveway Approach Widths and Spacing – The criteria contained in the table below shall be the minimum and/or maximum standards to be applied in spacing and designing driveways on public streets. For the purpose of this regulation, driveway width shall be measured at the property line. The Director of Public Works may modify these standards based on anticipated traffic flow and in accordance with sound traffic engineering practices. To implement the standards contained in the following table, subdivision plats for new commercial developments shall be required to provide cross-access easements.

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Driveway Spacing and Design Criteria					
Description	Street Classification	Residential Driveway		Commercial Driveway	
		Min.	Max.	Min.	Max.
Driveway Throat Width	Local	12'	25'	25'	35'
	Minor Coll.	12'	25'	25'	35'
	Major Coll.	16'	25'	25'	35'
	Arterial	20'	25'	25'	35'
Driveway Curb Radius	Local	5'	10'	10'	20'
	Minor Coll.	5'	10'	10'	20'
	Major Coll.	10'	10'	10'	20'
	Arterial	15'	15'	20'	30'
Driveway Spacing (centerline)	Local	22'	n/a	100'	n/a
	Minor Coll.	32'	n/a	100'	n/a
	Major Coll.	80'	n/a	150'	n/a
	Arterial	100'	n/a	250'	n/a
Minimum Distance from Driveway to Intersection *(pi to pi)*	Local	30'	n/a	75'	n/a
	Minor Coll.	50'	n/a	100'	n/a
	Major Coll.	100'	n/a	150'	n/a
	Arterial	100'	n/a	180'	n/a

DRIVEWAYS CROSSING BAR DITCHES

A. Culvert Size – The minimum culvert pipe size shall be 18" diameter. However, an engineered design that provides for a larger culvert pipe size may be required by the developer where the Director of Public Works determines that additional drainage capacity may be required. The ends of all culvert pipes shall be a 6:1 slope and safety end treatments will be set or constructed per ICUP page D-6.

B. Radius – Driveways shall be constructed with the return curbs joining the edge of pavement at the street with a minimum ten-foot (10') radius.

C. Slope – The maximum slope from the edge of driveway to the top of the culvert pipe shall be 6:1. The sloped area around the end of the culvert pipe shall be sodded or hydro-mulched to resist erosion.

D. Cross Slope – The minimum cross slope on the drive shall be 1/8 inch per foot. The minimum longitudinal slope between the edge of pavement at the street and the valley over the culvert pipe shall be 1/4 inch per foot.

E. Maintenance – Future maintenance of the drive approach, bar ditch and culvert pipe is the responsibility of the property owner.

F. Grading – During the drive approach installation, all ditch grading upstream and downstream of the proposed driveway culvert is the responsibility of the property owner including any required grading in the right-of way that extends beyond the limits of the property line is required.

G. Driveway Approaches at Pedestrian Crossings – Driveway approaches shall not be located in street intersections or at established pedestrian crossings.

H. Driveway Approaches at Obstructions – Driveways shall be kept at a minimum of five (5') feet away from obstructions such as street light posts, fire hydrants, traffic signals, etc.

I. Accumulative Width of Approaches – Driveway approaches shall not occupy more than forty percent (40%) of the frontage of a lot or tract

CONCRETE SIDEWALKS

A. Minimum Sidewalk or Pathway Width – All sidewalks shall be a minimum of four (4') feet in width, except a sidewalk located within or abutting a collector street, or larger, as shown on the Master Thoroughfare Plan, which shall not be less than five (5) feet in width. All sidewalks and pathways shall be constructed in the area between the curb or grade line of the public street and the abutting property line unless the pathway is situated within a dedicated pathway easement or right-of-way. The edge of the sidewalk or pathway shall generally be parallel with the curb line and be situated no more than one (1') foot from the abutting property line. The Director of Public Works may approve a plan to alter the location of a sidewalk to preserve a tree or for aesthetic purposes. One additional foot of width shall be added to a sidewalk that abuts a street curb. The widths of all sidewalks

and pathways shall be in accordance with the following table, which are further referenced *in Chapter 15 – Public Works Construction Details.*

B. Construction Materials – Sidewalks shall be constructed of Portland cement concrete (minimum thickness five (5") inches). Pathway system sidewalks shall be a minimum thickness of five (5") inches. Concrete for sidewalks and pathways shall be Class "A" and consist of five (5) sacks (minimum) of Portland cement for each cubic yard of concrete mix and have a seven (7) day flexural strength of 500 pounds per square inch (500 p.s.i.) and twenty-eight (28) day compressive strength of 3,000 pounds per square inch (3,000 p.s.i.).

C. Reinforcement shall be in accordance with the construction detail contained in *Chapter 15 – Public Works*

D. *Construction Details*. In such cases, reinforcements shall be **#4 DOMESTIC STEEL** deformed reinforcing bars on eighteen (18") centers.

Architectural Barriers Act – All sidewalk/street intersections shall be constructed so as to provide a ramp that complies with the Architectural Barriers Act and TDLR. Barrier free ramps shall be provided for access to the street. The following specifications shall apply:

1. Ramp to be minimum five (5') feet in width.
2. Ramp to be constructed with Class "A" concrete.
3. Ramp concrete thickness shall be the same as the street (six (6") inch normal residential).
4. #4 bars shall be used for reinforcement (eighteen (18") inch on centers).
5. Curb return shall match existing curb height of the street and taper to the connecting walk with a 1-foot radius.
6. Street shall be blocked out (max. twelve (12") inches) and dowels installed.
7. Saw joints shall be made one and a half (1 1/2") inch minimum depth and sealed with silicone joint sealant material.
8. Subgrade shall be prepared to a minimum depth of six (6") inches.
9. At no time shall the walk running parallel to the street be altered.
10. Surface of walk shall be coarse and ribbed to provide extra traction (see detail P-8).

Where the above specifications do not apply or have jurisdiction, refer to the specifications from the American Disabilities Act.

SECTION 3.24.G – SCHEDULE OF DISTRICT REGULATIONS

MAXIMUM RESIDENTIAL DENSITY; MINIMUM LOT SIZE REQUIREMENTS; MINIMUM YARD REQUIREMENTS; MAXIMUM BUILDING HEIGHT; MAXIMUM LOT COVERAGE; OUTDOOR STORAGE; SCREENING; AND, HOURS OF OPERATION

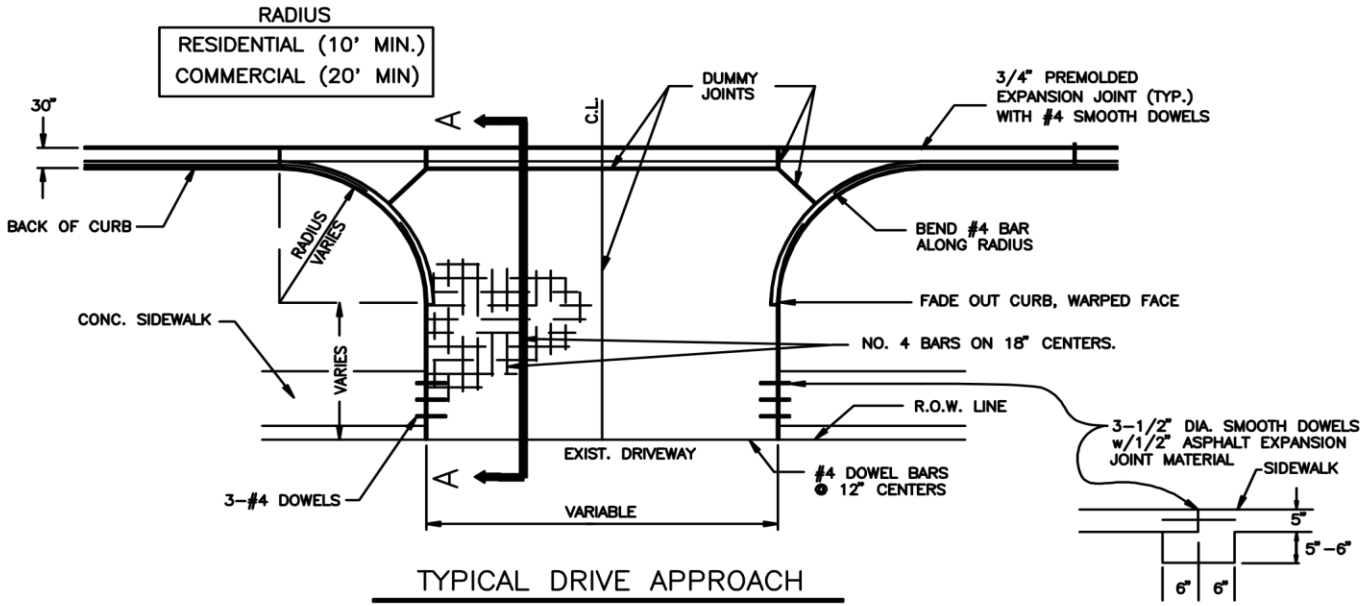
(See District Regulations Notes following Section 3.24.F for explanation of letters in charts)

Zoning Districts		Minimum Lot Size Requirements				Max. Lot Size	Minimum Yard Requirements			Max. Building Height		Max. Lot Coverage	Max. Impervious Coverage
		Area (sq. ft.)		Min. Width in feet	Min. Depth in feet		Front (feet)	Each Side (feet)	Rear (feet)	Stories	Feet	Percent	Percent
Classification		Per Family	Total										
AG	Agricultural	130,680	130,680	200	300	n.a.	40'	25'	40'	2.5	35'	20%	50%
RE	S.F. "Estate" Residential	80,000	80,000	200	300	n.a.	40'	25'	40'	2.5	35'	20%	50%
R-40	Single Family Residential	40,000	40,000	150'	150'	n.a.	40'	15'	25'	2.5	35'	20%	50%
R-30	Single Family Residential	30,000	30,000	125'	125'	n.a.	35'	10'	25'	2 5	35'	25%	55%
R-20	Single Family Residential	20,000	20,000	100'	125'	n.a.	30'	10'	25'	2.5	35'	30%	60%
R-15	Single Family Residential	15,000	15,000	100'	125'	n.a.	30'	10'	25'	2.5	35'	30%	60%
R-D	Two Family Residential	4,000	8,000	70'	115'	n.a.	25'	10'	25'	2.5	30'	50%	60%
R-MF	Mufti-Family Residential (zoned after June 16, 1961)	2,700	18,000	70'	115'	n.a.	25'	10'	25'	2.0	30'	50%	80%
R-MF	Mufti-Family Residential (zoned before June 16, 1961)	1,500	10,000	70'	115'	n.a.	25'	10'	25'	3.0	30'	75%	80%
MH	Mobile Home (Minimum size of mobile home park - 40 spaces)	20,000	20,000	100'	125'	n.a.	30'	10'	25'	2.5	30'	30%	40%
C-PO	Professional Office Commercial	n.a.	7,200	100'	120'	1 acre	40'	15' (B/C)	10' (C/D)	2.0	35'	40%	80%
CN	Neighborhood Commercial	n.a.	10,000	100'	120'	1 acre	40'	15' (B/C)	10' (C/D)	2.0	35'	40%	80%
CC1	Village Retail	n.a.	15,000	150'	120'	5 acres	40' (A)	15' (B/C)	10' (C/D)	2.0	35'	50%	80%
CC2	Shopping Center	n.a.	20,000	150'	120'	none	40' (A)	15' (B/C)	10' (C/D)	2.0	35'	60%	80%
CC3	Highway Commercial	n.a.	10,000	150'	120'	none	40'	15' (B/C)	10' (C/D)	2.0	35'	70%	80%
ML	Light Manufacturing	n.a.	10,000	100'	120'	none	40'	15' (B/C)	10' (C/D)	2.0	35'	60%	80%

City of Colleyville

Impervious Coverage Worksheet

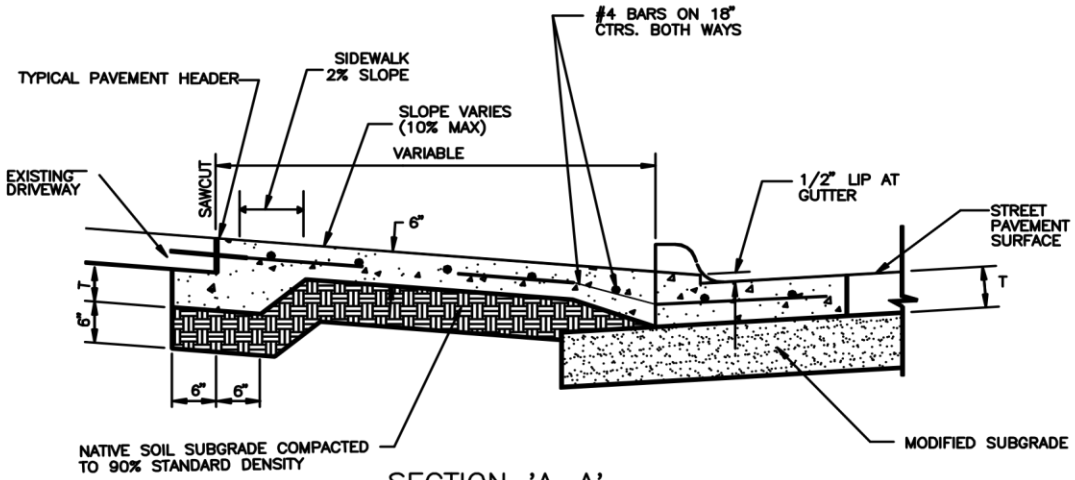
	Building Square Foot		Paved + Pool/Spa Square Foot			
Existing	Dwelling + Garage		Driveway			
	Covered Porch		Sidewalk			
	Covered Patio		Uncovered Patio			
	Accessory Structures		Uncovered Deck			
	Other roofed areas		Pool/Spa (Surface area)			
			Pool/Spa Deck (surface area)			
New	Dwelling + Garage		Driveway			
	Covered Porch		Sidewalk			
	Covered Patio		Uncovered Patio			
	Accessory Structures		Uncovered Deck			
	Other roofed areas		Pool/Spa (Surface area)			
			Pool/Spa Deck (surface area)			
	Total (Under Roof)		Total Uncovered		Total Impervious (Under roof + Uncovered)	
	Total Under Roof/Lot Size	%			Total Impervious/ Lot Size	%
	Lot Size (sq. feet)	SF				



TYPICAL DRIVE APPROACH

NTS

TYPICAL SIDEWALK CONNECTION TO A DRIVE APPROACH



SECTION 'A-A'
(FOR TYPICAL DRIVE APPROACH)

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NOTES:

(1) THE SLOPE OF THE DRIVE WHERE SIDEWALKS CROSS SHALL BE A MAXIMUM 2% . SIDEWALK SHALL BE CONNECTED TO DRIVE WITH #4 BARS ON 18" CENTERS.

(2) REMOVE ANY EXISTING SIDEWALK AT NEAREST JOINT AND CONNECT REPLACED SECTION TO DRIVE WITH 3-#4 SMOOTH DOWELS WITH 1/2" PREMOLDED EXPANSION MATERIAL.

(3) FOR APPROACH CONNECTING TO EXISTING STREET SAWCUT AND REMOVE TO 30" FROM BACK OF CURB OR EXISTING GUTTER LINE.

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REVISIONS	

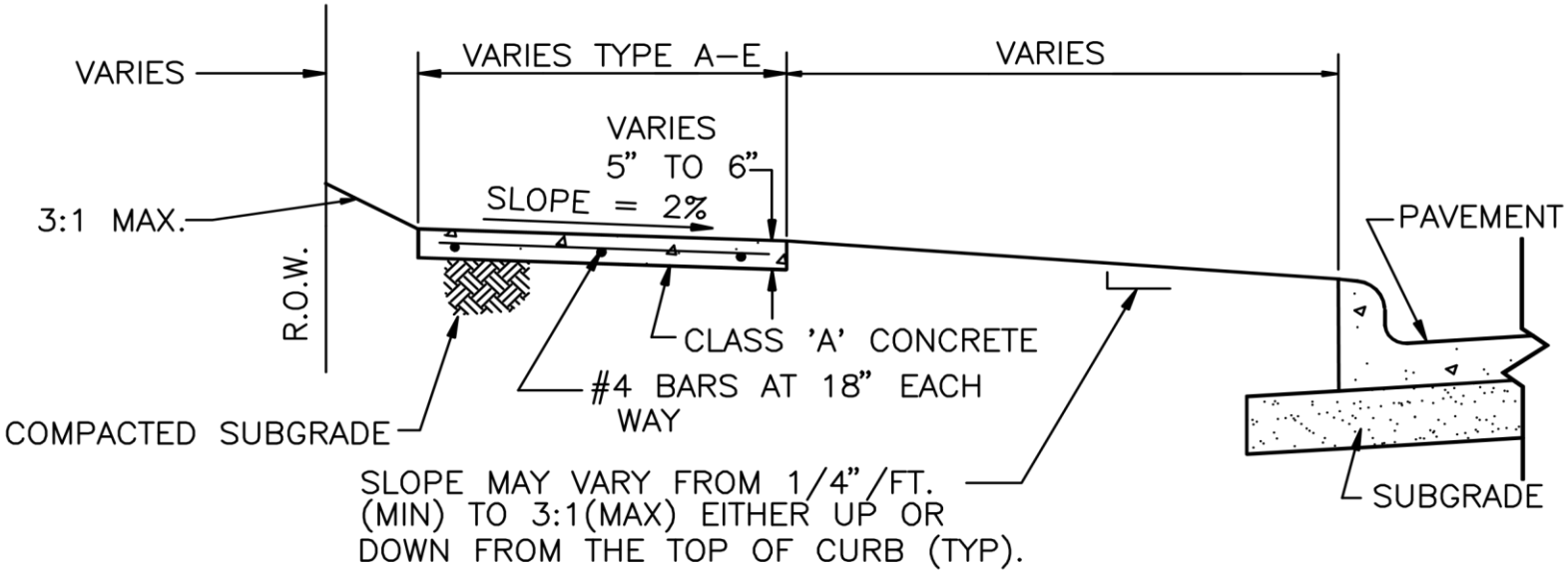
TYPICAL DRIVE APPROACH

CITY OF COLLEYVILLE TEXAS

DEC 2013

WIDTH & THICKNESS

TYPE A – 4'–0" (5" THICK) (ADA : 5' WIDE PASSING LANE EVERY 200')
TYPE B – 5'–0" (5" THICK)
TYPE C – 8'–0" (6" THICK)
TYPE D – 10'–0" (6" THICK)
TYPE E – 12'–6" (6" THICK)



NOTE: TRANSVERSE EXPANSION JOINT (REDWOOD) EVERY 40', (USE #4 SMOOTH DOWELS)

SIDEWALK

NTS

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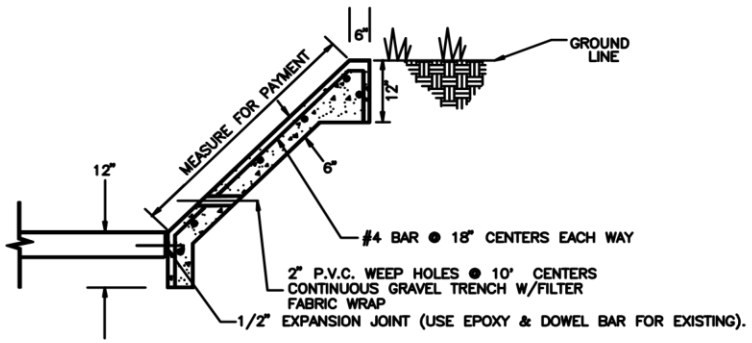
SIDEWALK

CITY OF COLLEYVILLE TEXAS

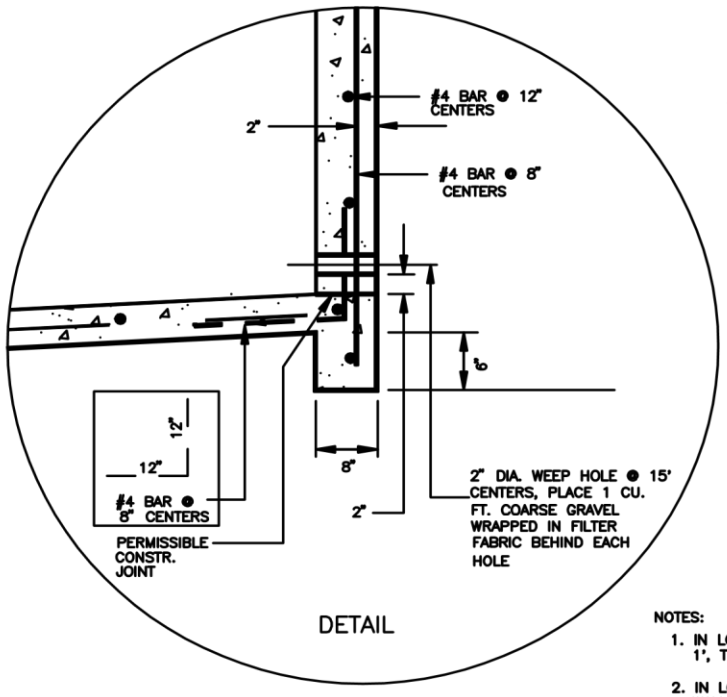
DEC 2013

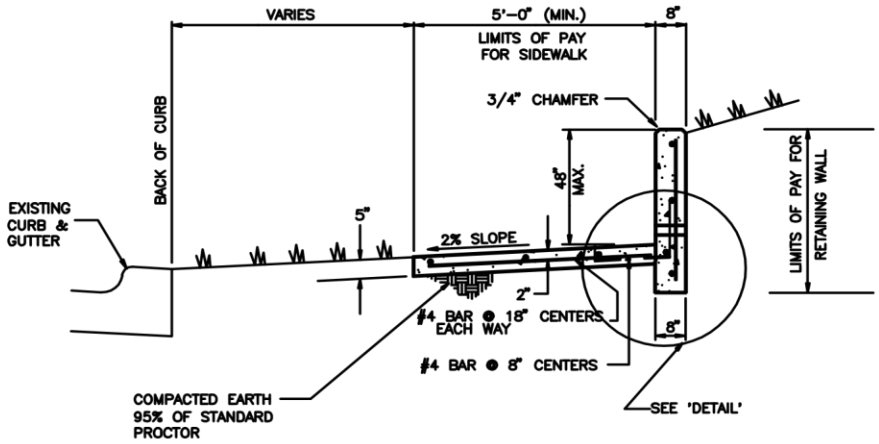
MAXIMUM VERTICAL HEIGHT IS 5'
MAXIMUM SLOPE 1.5H TO 1V

NOTES:
1. STEEL TO BE TIED AND CHAIRED AS NECESSARY TO PLACE STEEL IN CENTER OF 6" SECTION.
2. CONCRETE TO HAVE COMPRESSIVE STRENGTH OF 3,000 psi at 28 DAYS
3. PLACE CONTRACTION/DUMMY JOINTS AT 20' CENTERS AND MATCH EXPANSION JOINTS IN SIDEWALK.
4. FENCE POSTS ARE NOT PERMITTED IN THE CONCRETE.



TYPICAL RIP-RAP
ADJACENT TO SIDEWALK
NTS





NOTES:
1. IN LOCATIONS WHERE WALL HEIGHT DOES NOT EXCEED 1', THE TOE WALL AND WEEP HOLES CAN BE OMITTED.
2. IN LOCATIONS WHERE WALL IS 36" TO 48" THE TOE WALL SHALL BE 1' DEPTH.
3. STEEL REINFORCING IN WALL SHALL BE #4 BARS @ 12" CENTERS HORIZONTALLY AND #4 BARS @ 8" CENTERS VERTICALLY.
4. REDWOOD JOINTS IN WALL SHALL MATCH REDWOOD JOINTS IN THE SIDEWALK. THE WALL SHALL BE DOUBLE CHAMFERED AT THE REDWOOD LOCATIONS.
5. ENDS OF WALL SHALL ALSO BE CHAMFERED.
6. CONCRETE TO HAVE COMPRESSIVE STRENGTH OF 3000 psi AT 28 DAYS.

SIDEWALK WITH WALL
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REVISIONS	

SIDEWALK WALL, RIP RAP

CITY OF COLLEYVILLE TEXAS

DEC 2013