

Site Plan For:

# Target Retail Center

Towne Center Way  
Towne Center Subdivision  
Block 2, Lots 5R-1R2-1  
and 5R-1R2-2 - 2.78 AC  
Bryan, Brazos County, Texas



VICINITY PLAN

OWNER/DEVELOPER:

**Silverdale Alliance, LLC**  
19 N Star Ridge Circle  
The Woodlands, TX 77382

ENGINEER:



Firm # 9951  
PO Box 5192  
Bryan, Texas 77805  
979-739-0567



Know what's below.  
Call before you dig.

Sheet List Table	
Sheet Number	Sheet Title
C1	Notes
C2	Site Plan
C3	Pavement & Grading Plan
L1	Landscape Plan
ST1	BCS Unified Street Details

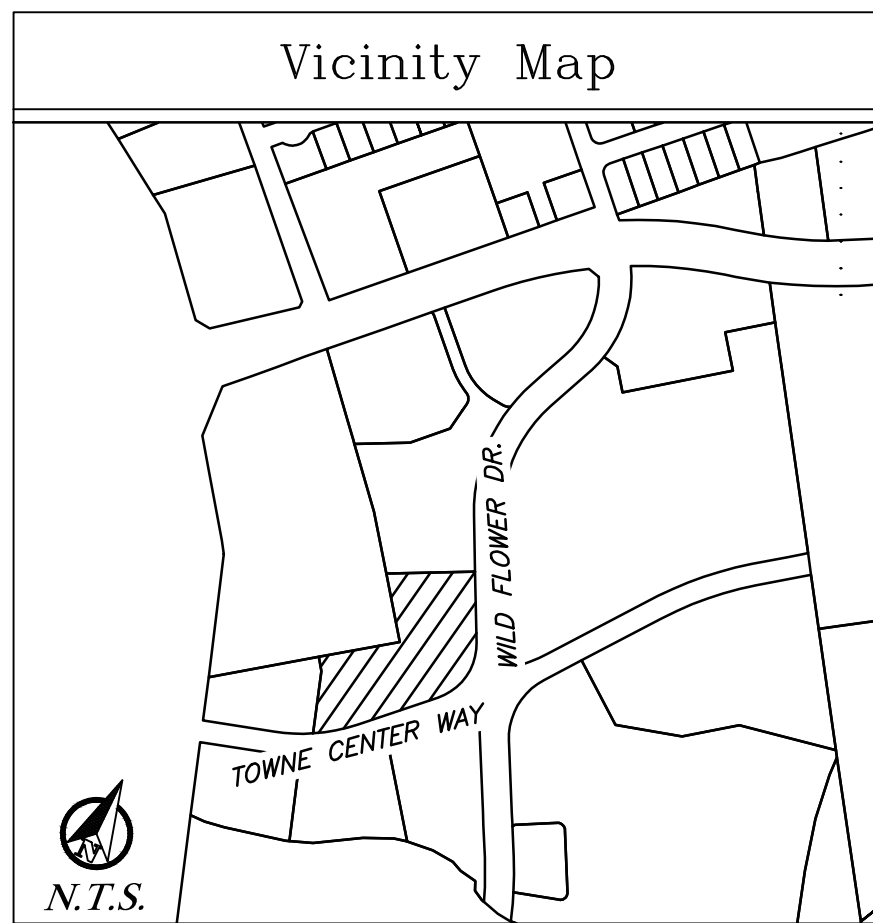
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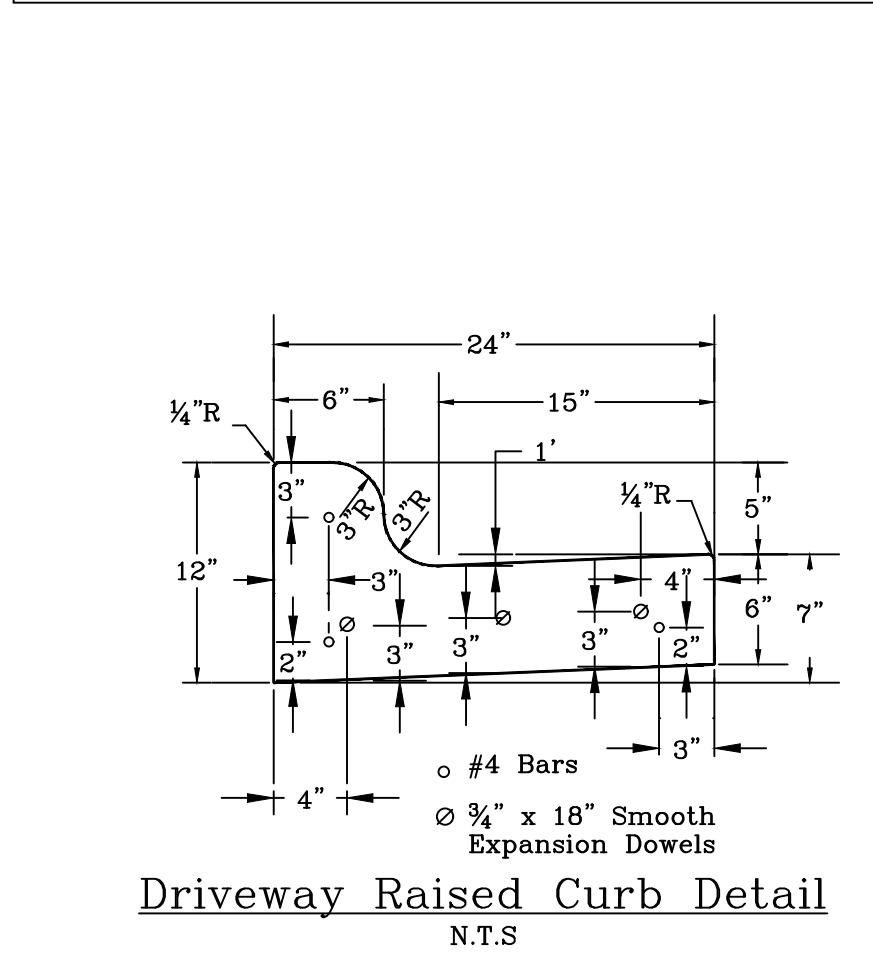
November 2024





**Construction Notes:**

- 12X12 dumpster pad w/ 8" thick reinforced concrete w/ #5 rebar @ 12" O.C.E.W. and the pad shall extend an additional 10' in front of the containment area. Prior to placement of concrete contractor shall contact solid waste @ 979-209-5900 for an on-site review.
- All concrete to be constructed with 3,500 psi (Min) - 28 day strength portland cement concrete.
- All items to be removed during clearing and grubbing. Remove not only the above ground elements, but all underground elements as well. All excavated material shall become the property of the contractor unless otherwise directed by the Owner. All debris must be disposed of off site.
- Prior to grading operations, contractor is to strip the first 6" of soil. Contractor shall proof roll the entire site and remove any unstable materials according to TxDOT Specifications. Select fill is to be used in replacing objectionable material.
- Assure positive drainage across project site to the storm water structures.
- Normal Domestic Wastewater is anticipated to be discharged from this development.
- Potable Water Protection - All devices, appurtenances, appliances, and apparatus intended to serve some special function and that connects to the water supply system, shall be provided with protection against backflow and contamination of the water supply system. As noted in Texas Administrative code 30 TAC 290.47 - Appendix F.
- Irrigation System - Potable water supply must be protected by either an atmospheric or pressure vacuum breaker, or testable double check valve assembly, and installed per City Ordinance.
- Each utility contractor is responsible for positioning and trenching of service lines. Mark all lines with utility tape. Utility contractors are responsible for coordinating with paving contractor in placement and installation of any necessary utility conduit prior to subgrade preparation. Lines requiring slope control are to be installed first. All other lines not requiring slope control or elevation shall be installed deepest first. Each contractor is responsible for knowing final determination of installation order.
- Materials and methods for pavement markings shall conform to TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges (current edition), with the following exceptions: 1) Type II marking materials need not be purchased from the Department, and 2) Glass beads may be omitted, but marking material shall be Type II paint-type material.
- The Contractor shall be responsible for the containment and proper disposal of all liquid and solid waste associated with this project. The Contractor shall use all means necessary to prevent the occurrence of windblown litter from the project site.
- Demolition/Construction Waste - Site is required to provide containment for wastes prior to and during demolition/construction. Solid waste roll off boxes and/or metal dumpsters shall be supplied by City to permitted contractor(s) only.
- Contractor is responsible for field verifying existing and proposed grades prior to any construction and reporting any inconsistencies to the Owner.



**NOTICE!**

The contractor is specifically cautioned that the location and/or elevation of the existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. It is the contractor's responsibility to avoid all existing utilities and repair any damaged lines, at his own expense, whether the utility is shown on these plans or not. The contractor shall notify the appropriate utility company 48 hours prior to any excavation.

Contact Information:  
 Texas One Call: 800-245-4545  
 Lone Star One Call: 800-669-9344  
 Texas Excavation Safety: 800-344-8377  
 City of Bryan: 979-209-5900  
 System (Digtest):  
 Bryan Texas Utilities: 979-821-5865  
 Atmos Energy: 979-774-2506  
 Frontier: 979-821-4300  
 Suddenlink: 979-846-2229

**Site Specific Notes:**

- The owner of the property is Silverdale Alliance, LLC. The subject property is Bryan Towne Center Subdivision, Block2, Lot 5R-1R2 Bryan, Brazos County, Texas.
- The two proposed single story buildings are Type IIb 10,200SF and 3,000SF without sprinklers, FF=268.00', and Height=26' & Height=16', respectively.
- The subject property is zoned Planned Development (PD).
- Planned use of the site is Retail.
- Fire flow demand is 2,250 gpm, based on the largest building, and can be split between the existing hydrants on the property which will provide the fire flow for this project.
- A portion of this tract lies within a designated 100-yr floodplain according to the F.I.R.M. Maps Panel No. 48041C0215F, Revised Date, April 2, 2014.
- All minimum building setbacks shall be in accordance with City of Bryan Ordinances.
- Owner shall be responsible for the operation, repair, and maintenance of the private stormwater infrastructure facilities.

**Utility Notes:**

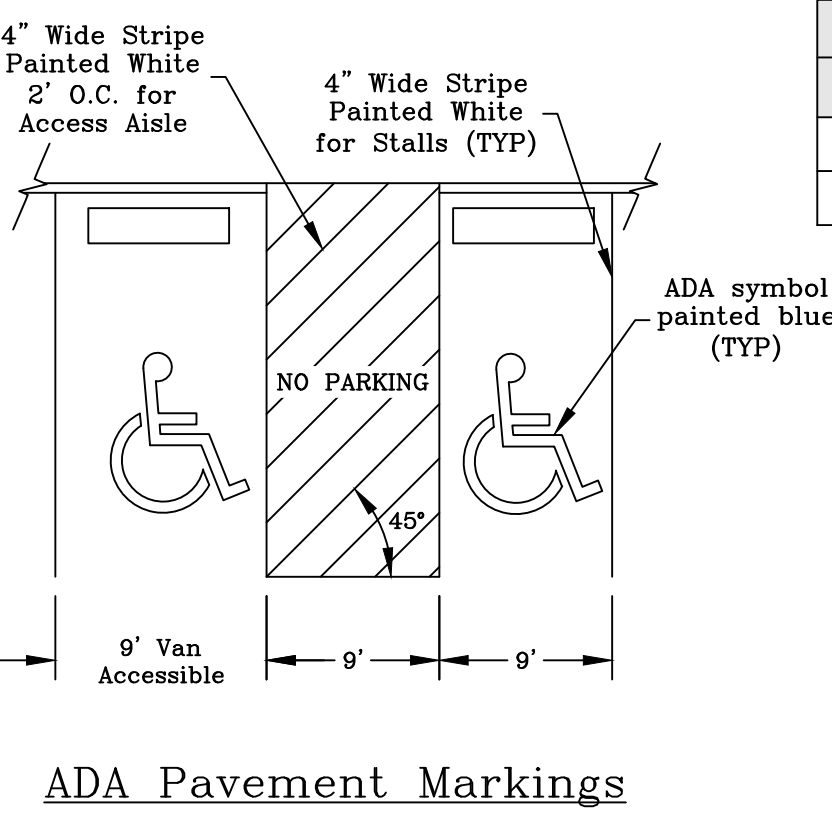
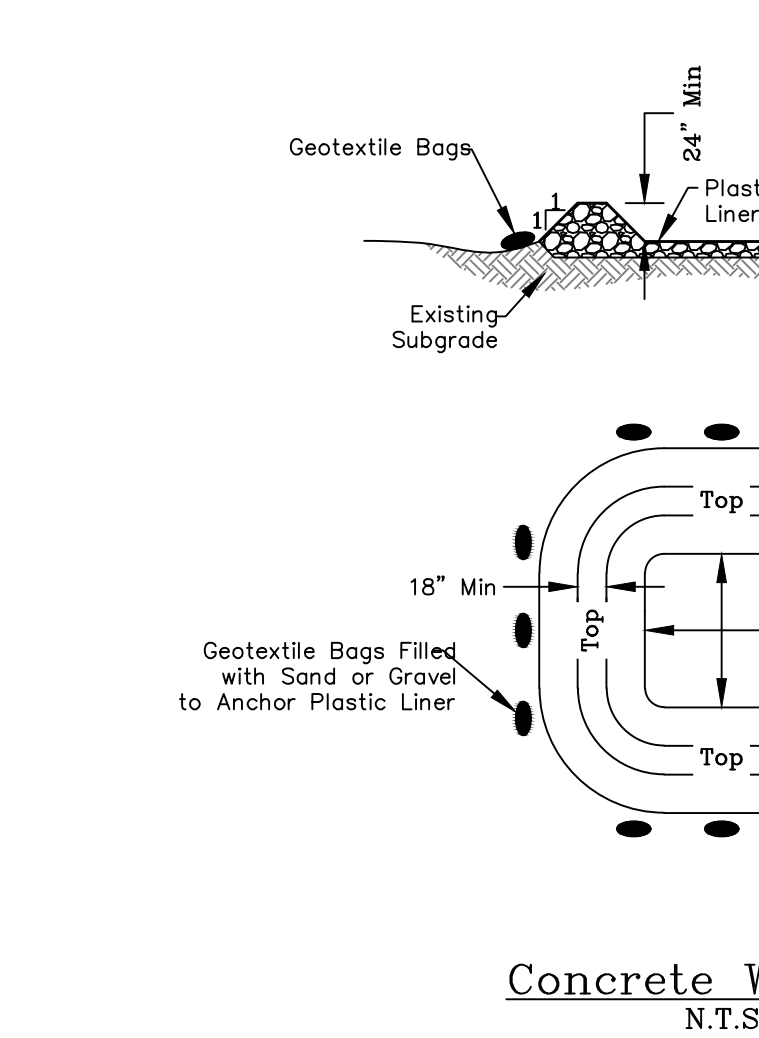
- Private water line and private sanitary sewer line construction shall be in accordance with the plumbing code. Cleanouts shall be installed per plumbing code.
- Private water and sewer line service materials to be in accordance with plumbing code.
- Contractor shall coordinate conduit and/or line installation for telecommunication providers for the site.
- Depth of the existing water and sewer lines to be verified by the contractor.
- Where electric facilities are installed, BTU has the right to install, operate, relocate, construct, reconstruct, add to, maintain, inspect, patrol, enlarge, repair, remove, and replace said facilities upon, over, under, and across the property included in the PUE, and the right of ingress and egress on the property adjacent to the PUE to access electric facilities.

**Fire Lane Stripping:**

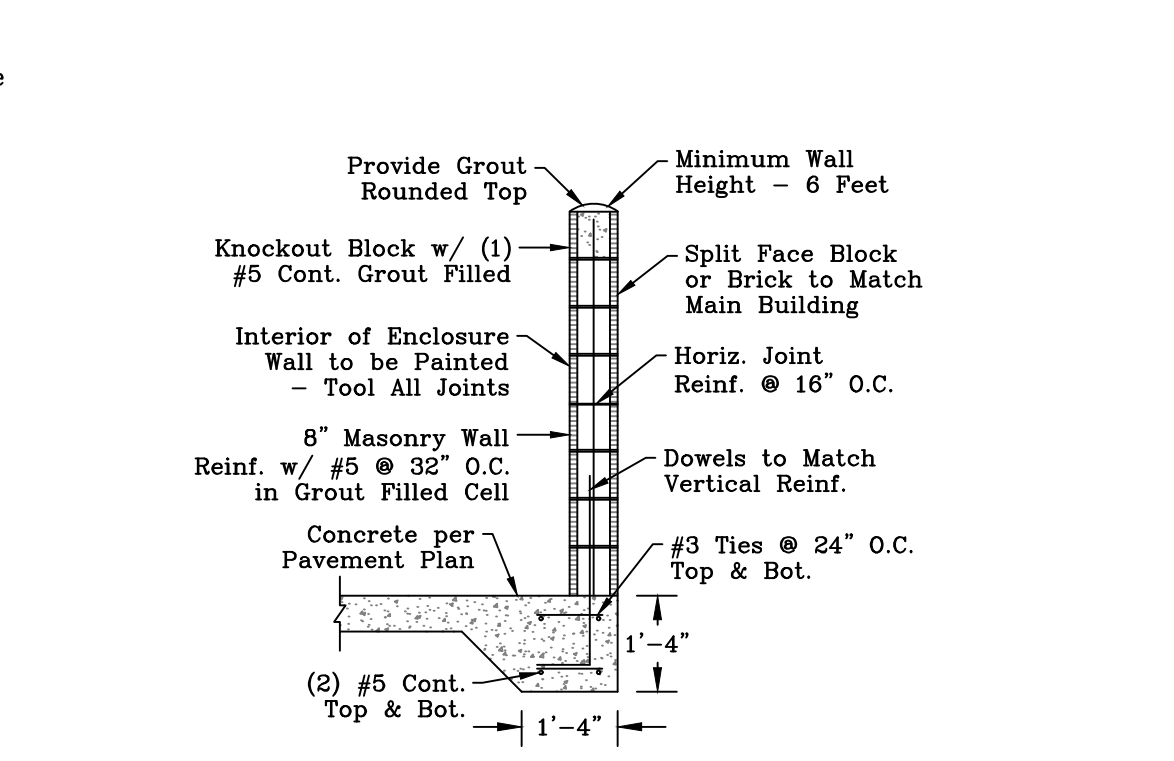
All curbs and curb ends shall be painted red with 4" white lettering stating "FIRE LANE-NO PARKING-TOW AWAY ZONE". The phrases should be spaced 15' apart continuously. Fire Lane line work shown on this Site Plan is used to delineate the location of the FIRE LANE permitting purposes and is not intended to show required painted Fire Lane Stripping.

■ NO PARKING ■ TOW AWAY ZONE ■

Note: Fire lane shall not be painted on Flat work/surface with use of Fire Lane Signage.



CURVE TABLE						
CURVE #	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD LENGTH	TANGENT
C1	200.27'	158.00'	72° 37' 27"	S 6° 53' 14" W	187.13'	116.11'
C2	126.90'	489.99'	14° 50' 19"	S 50° 41' 16" W	126.54'	63.81'



**Parking Analysis:**

Proposed Improvements:  
 1 - 10,200 SF Building  
 1 - 3,000 SF Building

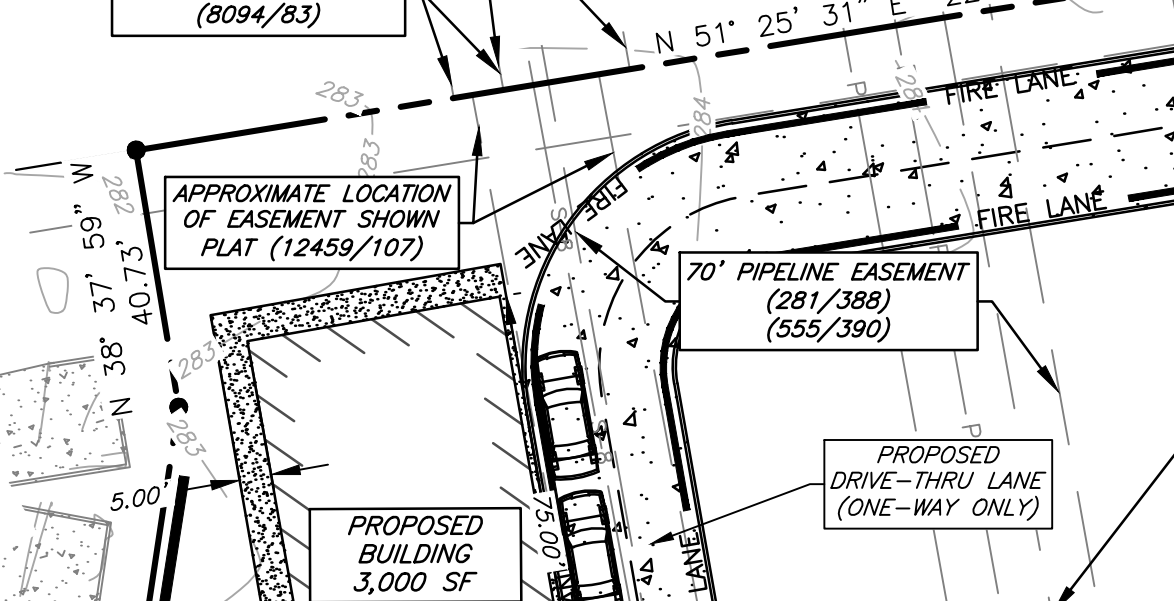
New Required Parking:  
 53...1 Space per 250 SF of Building  
 53... Total Required

Total Proposed Parking:  
 63... Straight in Parking  
 4... ADA Parking  
 67... Total Provided

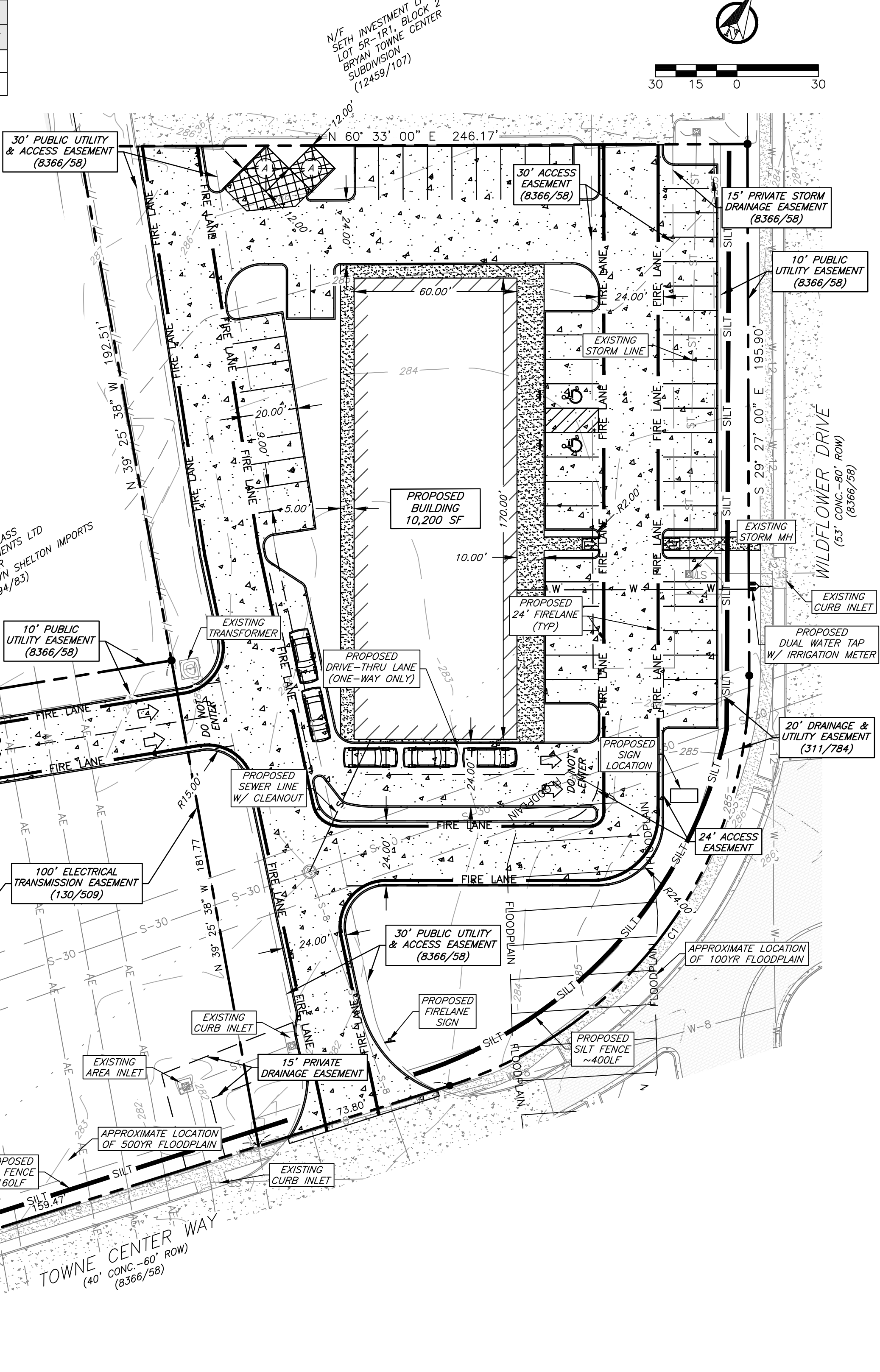
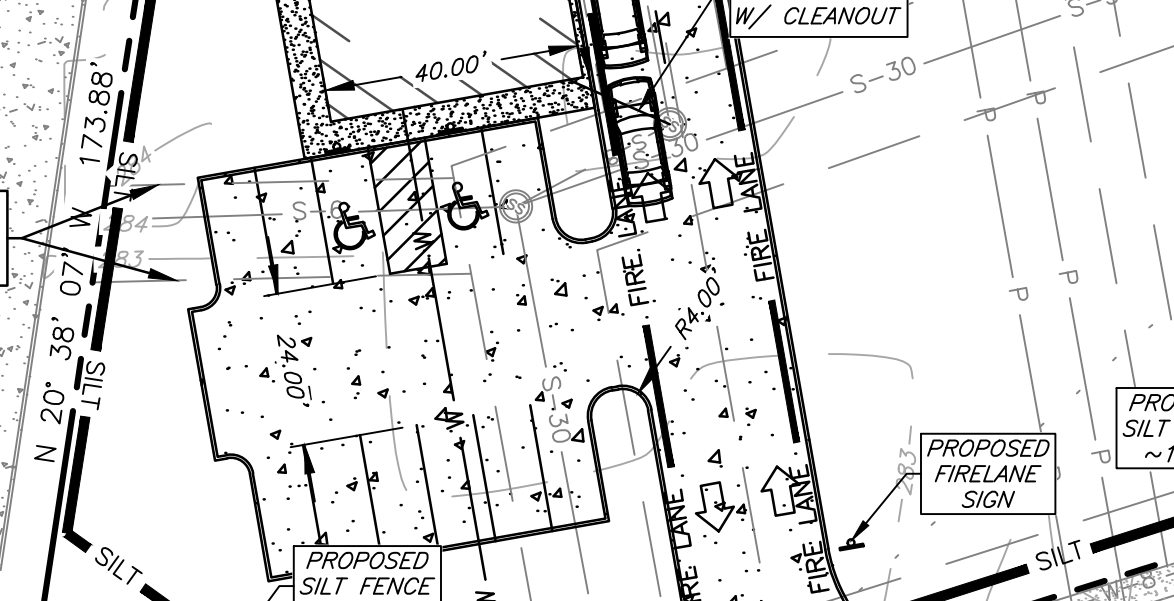
**Fire Lane Sign Detail**  
N.T.S.

- Notes:
- The sign shall be 12" wide by 18" in height stating "FIRE LANE DESIGNATED PARKING ONLY" with a companion sign 12" wide and 6" in height stating "TOW AWAY ZONE" and be mounted in the location shown.
  - Sign shall be painted on white background with symbols, letters, and border in red.
  - Sign shall comply with City of Bryan Ordinance 42-6.

**Construction Exit Detail**  
N.T.S.



**Silt Fence**  
N.T.S.



**Site Plan**

**General Notes:**

- The topography shown is from field survey data.
- Refer to Final Plat for all lot dimensions and bearings.
- All utilities shown are taken from the best available information based on construction utility documents obtained by J4 Engineering from City and Independent agencies and/or above ground field evidence. Shown positions may not represent as-built conditions.
- The contractor shall be responsible for verifying the exact location of all existing underground utilities, whether shown on these plans or not. Notification of the utility companies 48 hours in advance of construction is required.
- All construction shall be in accordance with the current BCS Standard Specifications, Details, and Design Guidelines for Water, Sewer, Streets, and Drainage, unless otherwise noted.
- It is the intent of these plans to comply with all City of Bryan guidelines, details, and specifications.
- See Sheet C1 - General Notes.

**Owner/Developer**  
 Silverdale Alliance, LLC  
 19 N Star Ridge Circle  
 The Woodlands, TX 77382

**Surveyor**  
 Kerr Surveying, LLC  
 TBPIS Firm#10018500  
 409 N. Texas Avenue  
 Bryan TX 77803  
 (979) 268-3195

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 PO Box 5192 - Bryan, Texas - 77805  
 979-739-0567 www.J4Engineering.com  
 Firm# 9951

Project Name and Address:  
**Target Retail Center**  
 Towne Center Subdivision  
 Block 2, Lots 5R-1R2-1  
 and 5R-1R2-2 - 2.773 AC  
 Bryan, Brazos County, TX

Date: November 2024	Sheet: C2
Scale: As Noted	
Drawn By: KB	

**Paving Notes:**

- All concrete for pavement construction shall be to the minimum depth shown on the plans and shall have a minimum 28-day compressive strength of 3,500 PSI. The maximum percentage of fly ash replacement of Portland cement shall be 20 percent by weight.
- Item 360 of the TxDOT "Standard Specifications for Construction and Maintenance of Highways, Street, & Bridges" shall be used as a technical specification for reinforced concrete pavement.
- The subgrade beneath the concrete sidewalks shall be compacted and "proof-rolled" any weak or soft areas identified by the "proof-rolling" shall be removed and replaced.
- A sand leveling course under concrete pavement is NOT permitted.
- Joint sealant material to be Sonneborn SL-1 or approved equal.
- Curing compound shall be applied uniformly to the concrete after the surface finishing is complete at the rate recommended by the manufacturer. The curing compound shall meet the requirements of TxDOT Item 526.
- Contractor shall provide engineer with a proposed pavement expansion and contraction joint plan prior to pavement construction.
- See Sheet C1-General Notes.

**Grading Notes:**

- Fill material used to achieve grade in areas to receive pavement or within the street right-of-way shall be compacted to at least 98% of the maximum dry density as determined by the standard proctor test, (ASTM D698), at a moisture content from optimum moisture content to 4% above the optimum moisture content. Areas outside of the street right-of-way shall be compacted to 95% of the maximum dry density.
- The subgrade beneath the concrete sidewalks and pavement shall be compacted and "proof-rolled". Any weak or soft areas identified by the "proof-rolling" shall be removed and replaced.
- ADA ramp slopes shall not exceed 1v:12h.
- The topography shown is from field survey data.
- Structural backfill for utility or storm drain trenches is required whenever the trench is within 5' of pavement or sidewalk.
- The contractor shall follow the general intent of the grading plans. minor adjustments to the actual elevations shown on the grading plan may be required to match existing ground elevations and structures. the proposed contour lines shown are approximate only, the design grade spot elevations should be used for construction of the site work.
- Refer to pavement plan for pavement construction details and notes.
- The contractor shall salvage all topsoil and replace it on all disturbed areas. all parking lot islands and areas adjacent to parking and sidewalk areas shall receive 6" sandy loam topsoil prior to placement of grass sod or hydromulch.
- The contractor shall field verify and locate all existing utilities on site prior to demolition.
- The contractor shall install all erosion and sediment control devices, as shown, prior to commencing demolition work.
- Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the design engineer immediately to discuss any possible conflicts before proceeding with any work in that area.

**Legend**

- Existing Concrete Pavement
- Existing HMAC
- Proposed Sidewalk
- Proposed 6" Concrete
- Proposed 8" Concrete
- Proposed Gravel

**Subgrade Stabilization Table:**

PI = Plasticity Index	LL = Liquid Limit	
If PI >20 and LL <35, Then Lime Stabilize Subgrade		
If PI >15 and LL >36, Then Lime Stabilize Subgrade		
If PI <5, Then Cement Stabilize Subgrade		
Acceptable soils other than those defined by the limits above, do not require stabilization.		
PI	% Required	Material
<5	5%	Cement
<25	5%	Lime
26-33	6%	Lime
34-40	7%	Lime
>40	Determined by ASTM C977	Lime

**Pavement & Grading Plan**

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- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes

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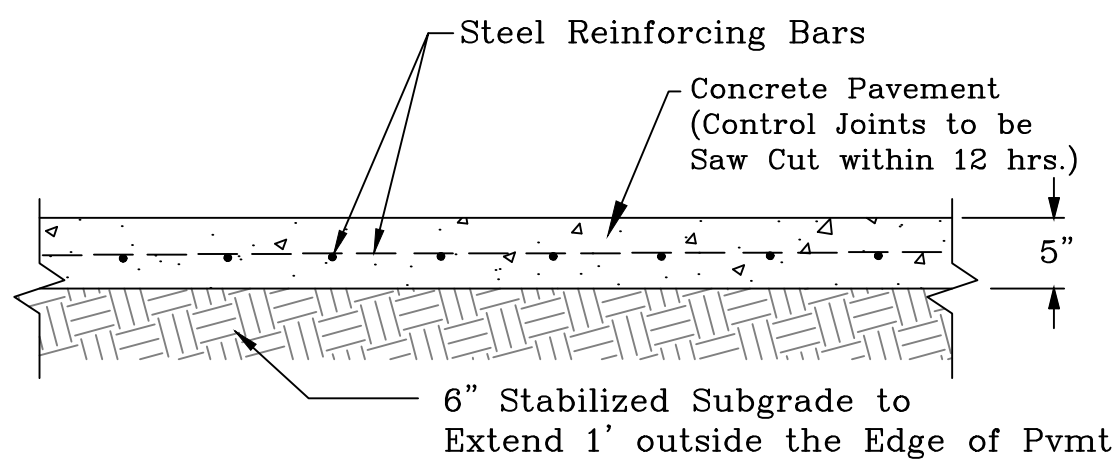
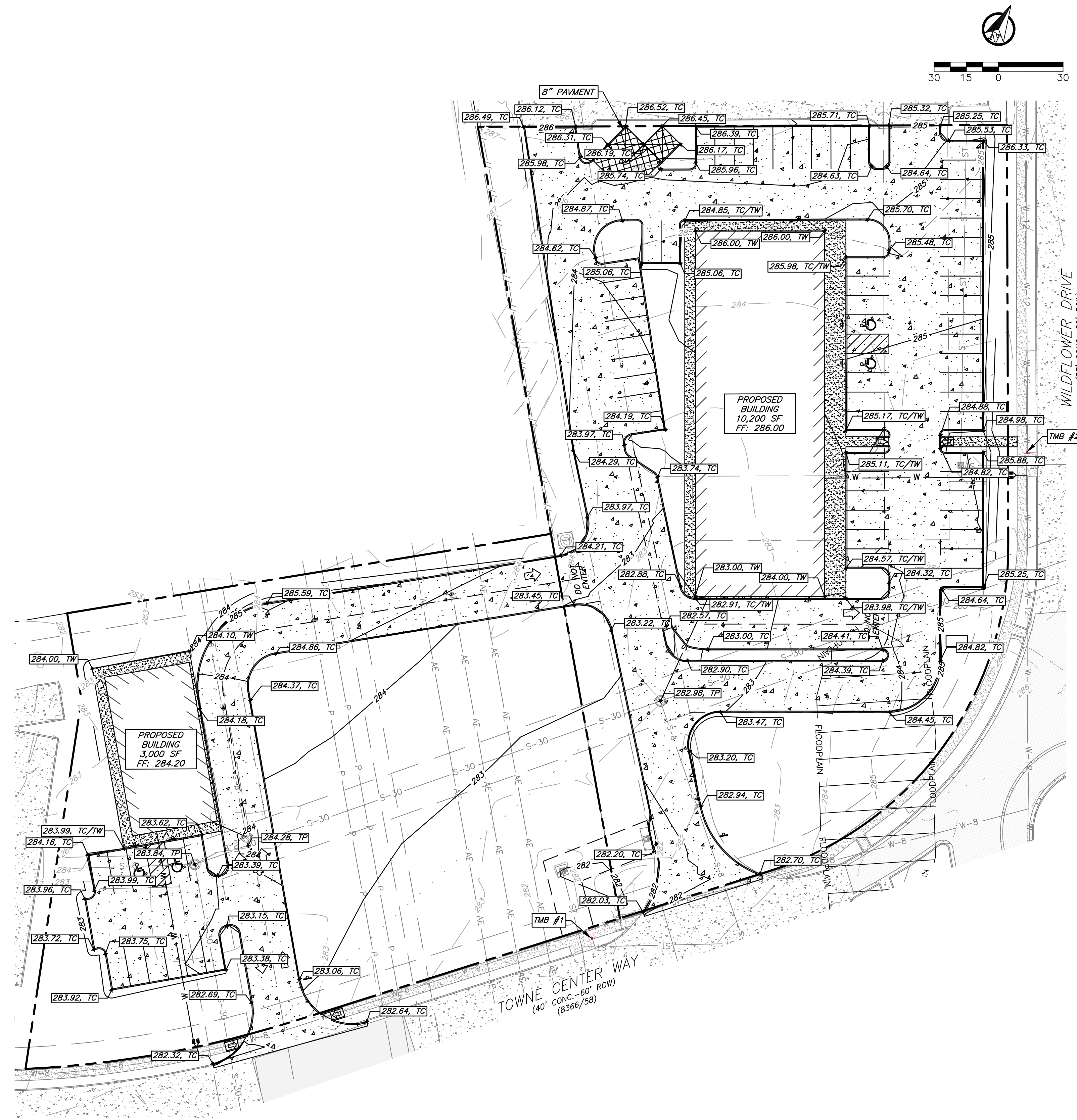
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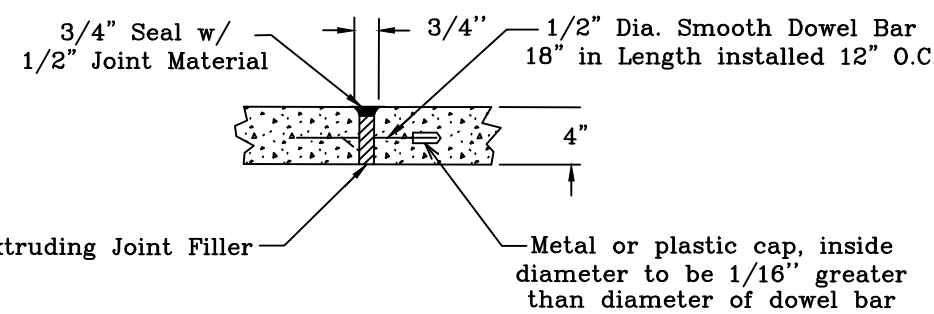
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Date: November 2024	Sheet: <b>C3</b>
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Drawn By: KB	

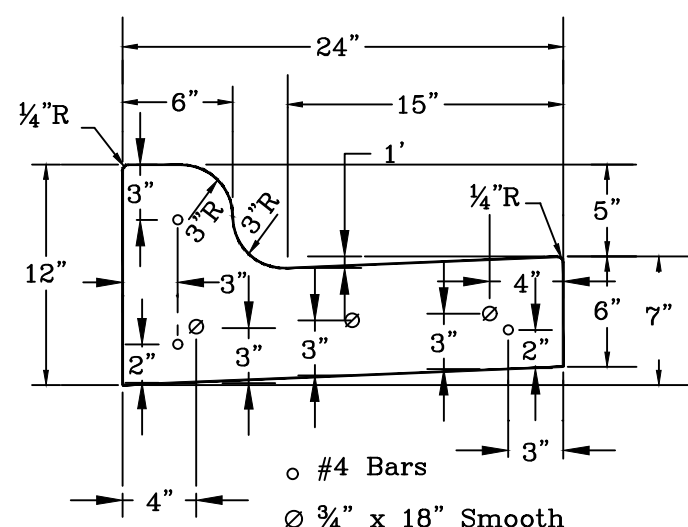


- 6" Pavement - use #4 rebar @ 18" O.C.E.W.
- 8" Pavement - use #5 rebar @ 18" O.C.E.W.

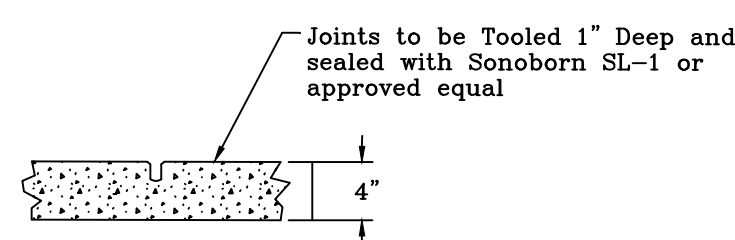
**Typical Concrete Paving Section**  
N.T.S.



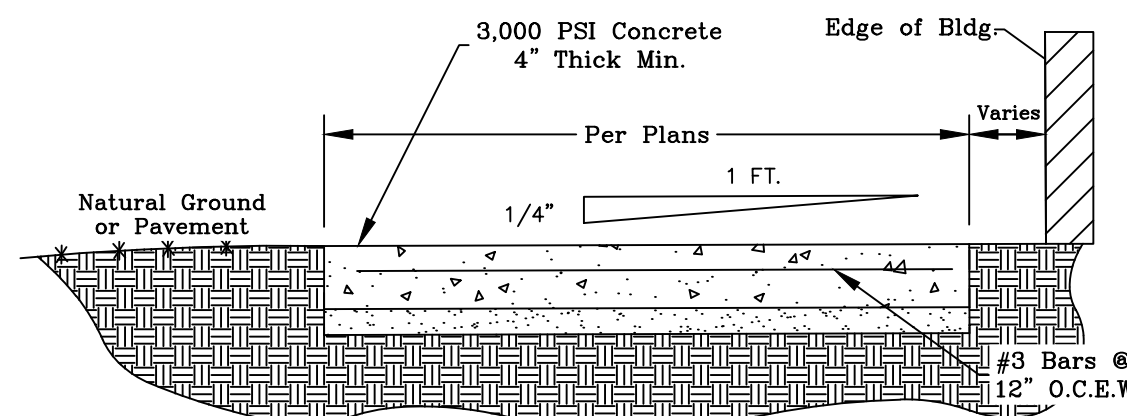
**Expansion Joint Detail**  
N.T.S.



**Driveway Raised Curb Detail**  
N.T.S.



**Contraction Joint Detail**  
N.T.S.



- Note:
- Install expansion joints at 40' max longitudinal spacing and install control joints at 5' longitudinal spacing

**Typical Sidewalk**  
N.T.S.

**Landscape Notes:**

**Landscape Analysis:**

- All trees shall be provided as container grown trees.
- All landscaping plant material shall be guaranteed for a period of thirty days from the date of installation by contractor. After thirty days, the owner will be responsible for maintenance of all landscaping.
- The property owner is responsible for regular weeding, mowing, fertilizing, and other maintenance of all plantings following acceptance from Contractor. The required landscaping must be maintained in a healthy, growing condition at all times.
- Plant material shown here is represented at its mature size. Plantings to be installed will be significantly smaller than those shown and should not be expected to reach maturity for several years dependant on growing conditions.
- Contractor is to seed all disturbed areas left unpaired and guarantee coverage of vegetation until establishment of grass. Grass type shall be Bermuda grass or Rye/Bermuda mixture.
- All water meters, hydrants, valves, manholes, and cleanouts, on or adjacent to the property, must remain accessible during construction and upon the completion of necessary grading and landscaping.
- "Cal." indicates caliper at 12" above the ground. Multi-trunk trees' caliper is measured with the single, largest cane.
- Existing Trees used for landscape credit must have a minimum trunk diameter of four and one-half inches or larger and be in a healthy physical state. Should existing trees used for landscape credit die, they shall be replaced with new trees according to the requirements of section 62-422(a)(3)(c). Existing trees with a trunk diameter less than four and one-half inches may be given the same landscape credit as that given newly planted trees with similar characteristics.
- Replacement of dead landscaping shall occur within 90 days of notification. Replacement material must be of similar character as the dead landscaping. Failure to replace dead landscaping as required by the zoning official or his/her designee, shall constitute a violation of this article subject to the general penalty provisions of City Code section 1-14.
- To ensure the growth of trees in end islands, a minimum 24-inch soil depth and 250 cubic feet of appropriate planting medium is required per tree, with topsoil mounded to a center height.
- All landscaping is to be maintained by irrigation. The irrigation system will be designed and permitted separately.

**Construction Activities:**

Parking & Pavement	=	48,400 SF
Building	=	19,200 SF
<b>Net Total</b>	=	<b>61,600 SF</b>

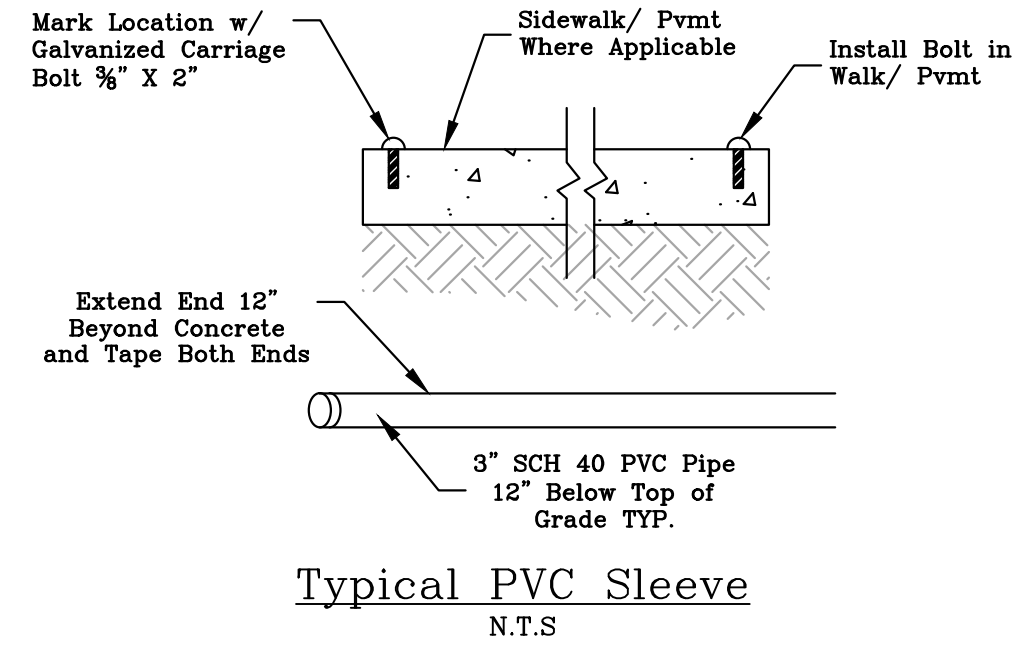
**Requirements:**

Building, Parking, & Pavement	=	9,240 SF
61,600 SF @ 15%	=	9,240 SF
<b>Net Total</b>	=	<b>9,240 SF</b>

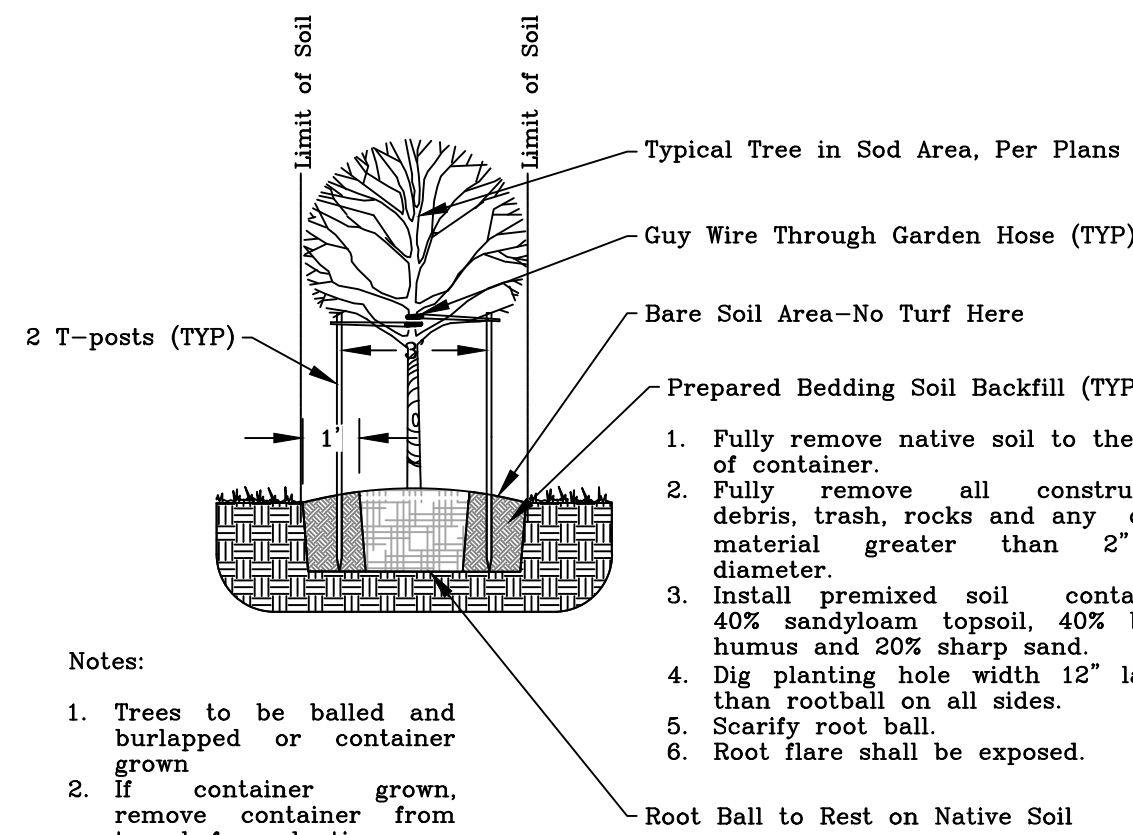
**Provided:**

Canopy Trees	=	5,600 SF
28 @ 200 SF	=	5,600 SF
Non-Canopy Trees	=	3,500 SF
35 @ 100 SF	=	3,500 SF
15 Gal Shrubs	=	1,245 SF
83 @ 15 SF	=	1,245 SF
<b>Net Total</b>	=	<b>10,345 SF</b>

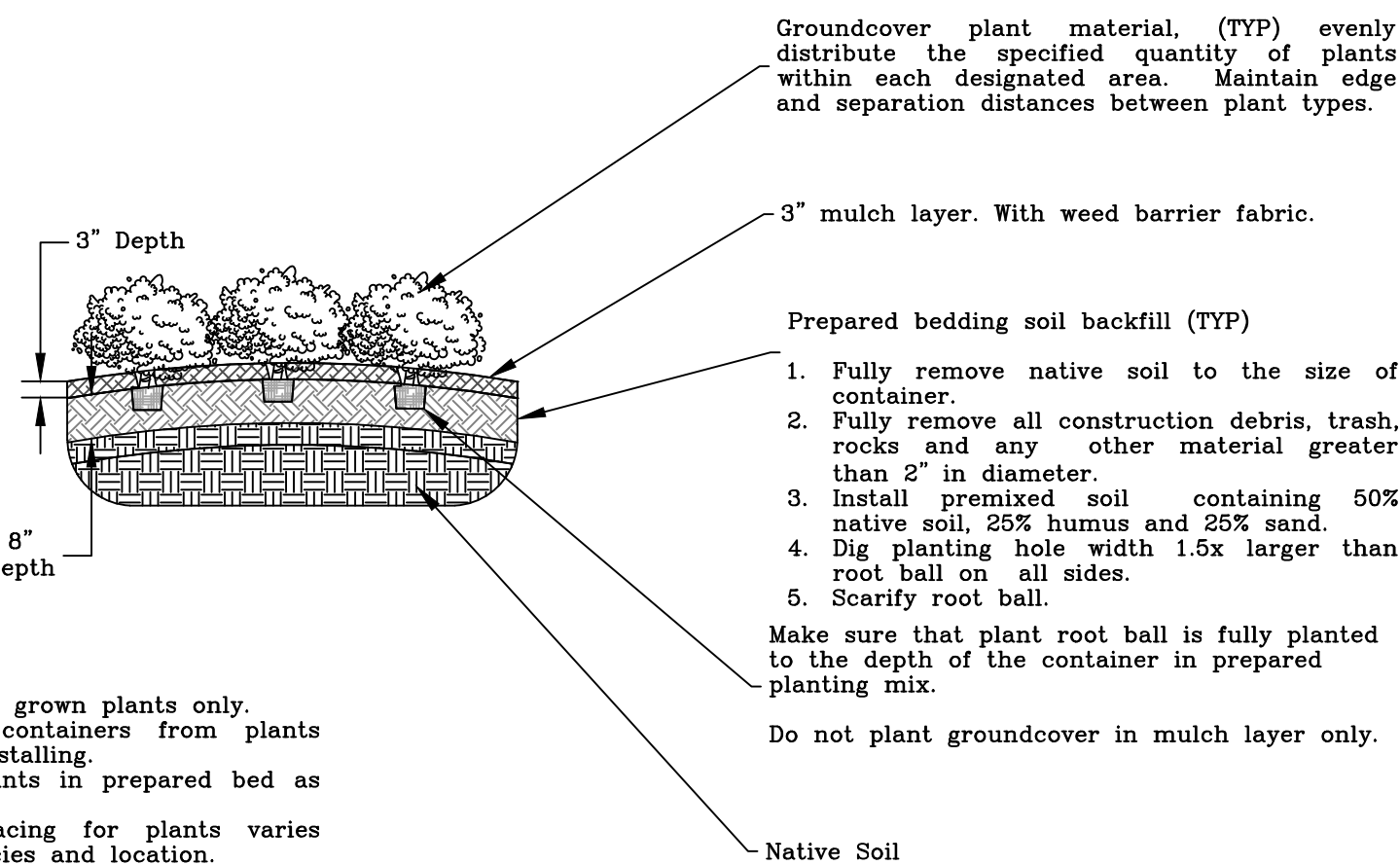
Symbol	Qty.	Common Name	Botanical Name	Size
	28	Cedar Elm	Ulmus crassifolia	<2.5" cal.
	35	Crepe Myrtle	Lagerstroemia indica	1 1/2" cal.
	83	Photinia Species	Photinia X Fraseri	15 Gal.



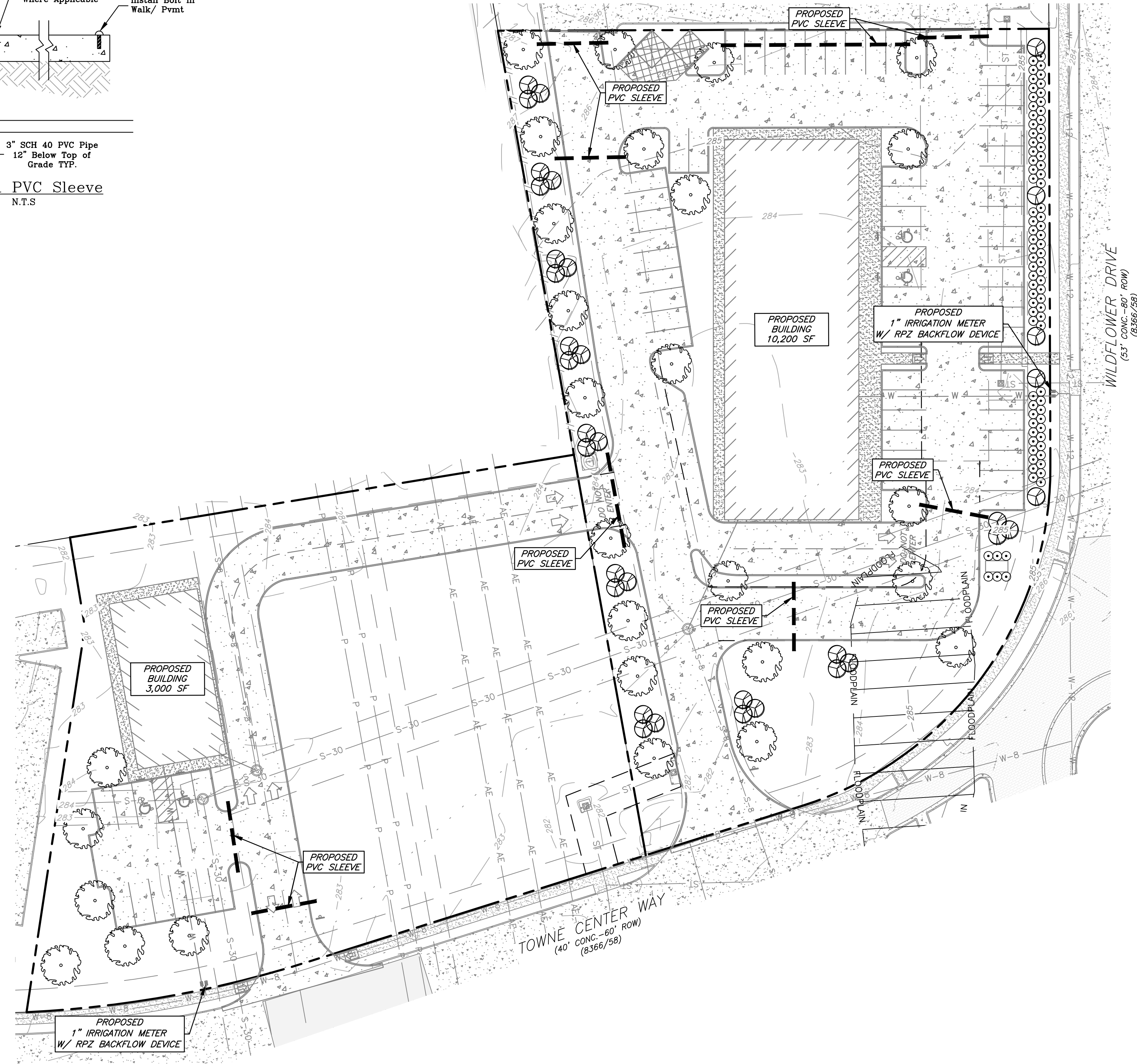
**Typical PVC Sleeve**  
N.T.S.



**Tree Staking & Planting**  
N.T.S.



**Shrub Planting**  
N.T.S.



# Landscape Plan

**General Notes:**

- An irrigation system to service all new plantings will be installed by a certified installer prior to a certificate of occupancy being issued.
- Irrigation system must be protected by either a pressure vacuum breaker, reduced pressure principle back flow device, or a double-check back flow device and installed as per city ordinance 2394.
- All backflow devices must be installed and tested upon installation as per city ordinance 2394.
- 100% coverage of groundcover, decorative paving, decorative rock(not loose) or a perennial grass is required in parking lot islands, swales and drainage areas, the parking lot setback, rights-of-way, and adjacent property disturbed during construction.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications, & details.
- See Sheet C1-General Notes.

No.	Revision/Issue	Date

Firm Name and Address:

**J4 Engineering**

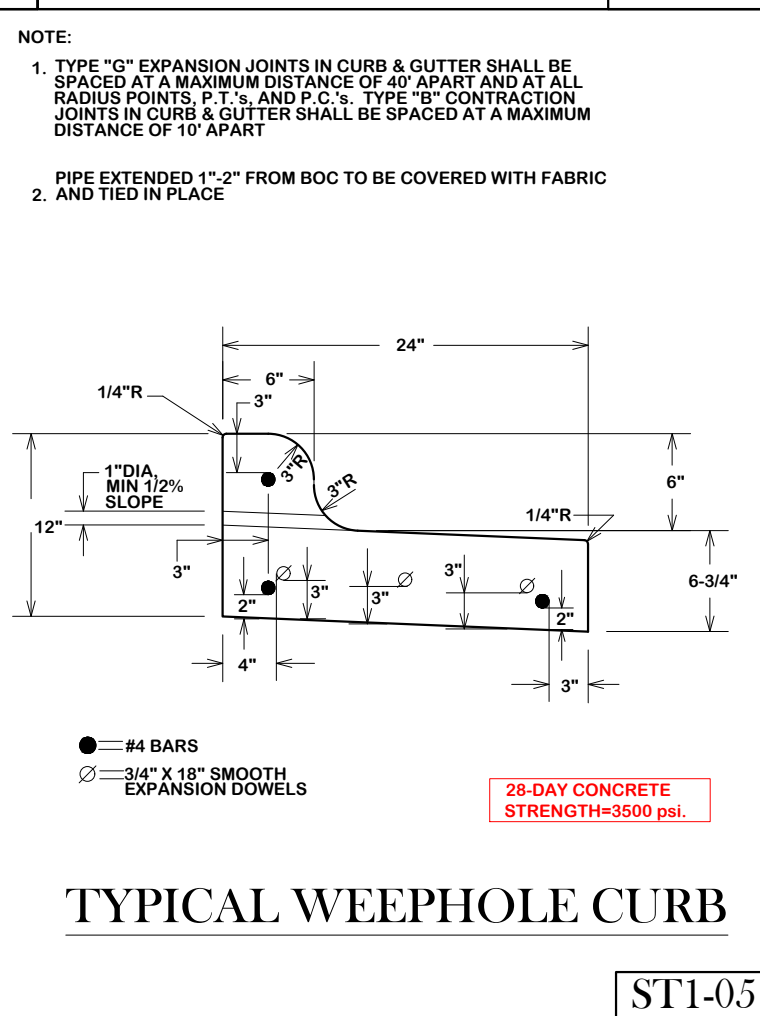
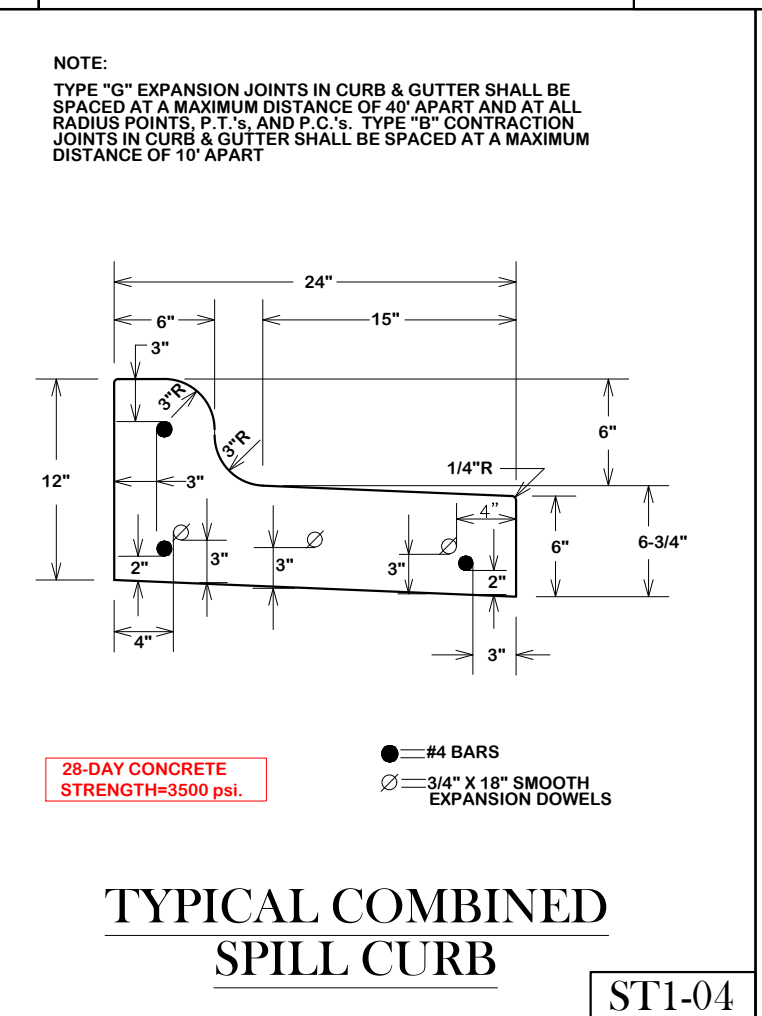
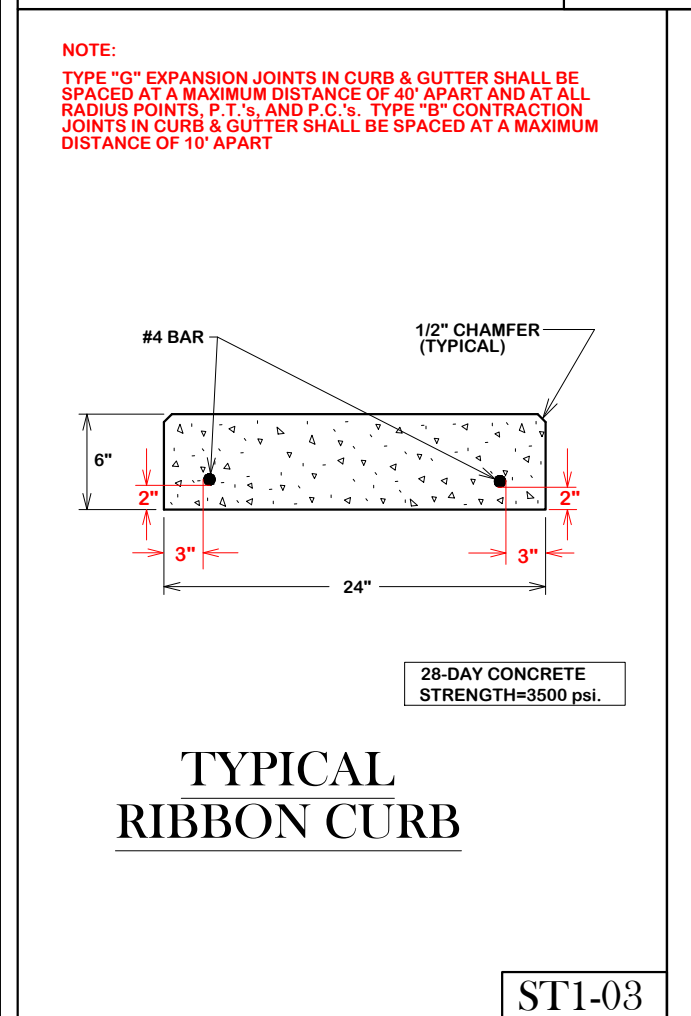
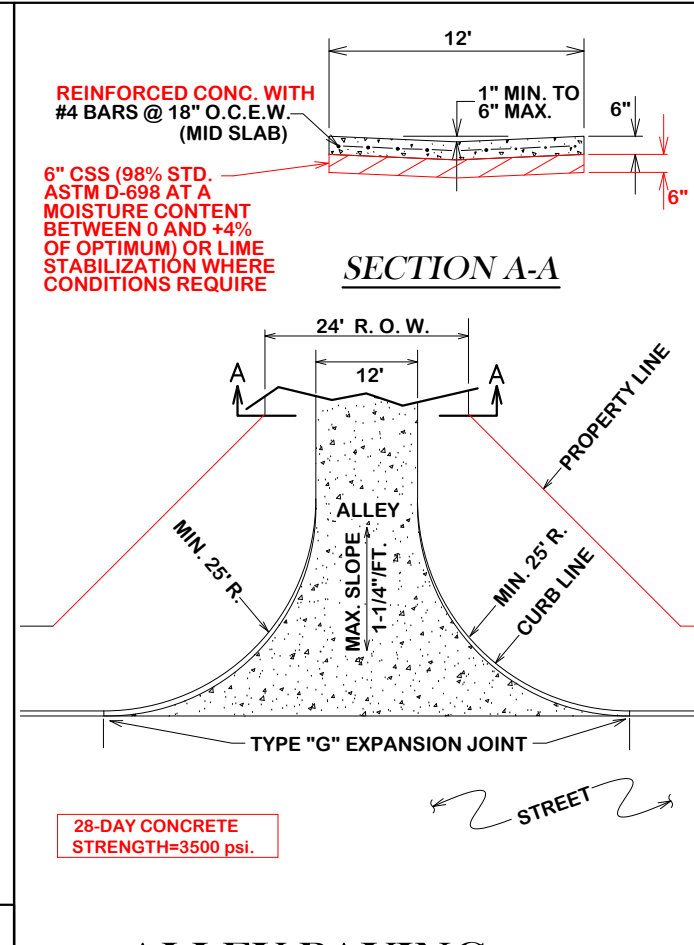
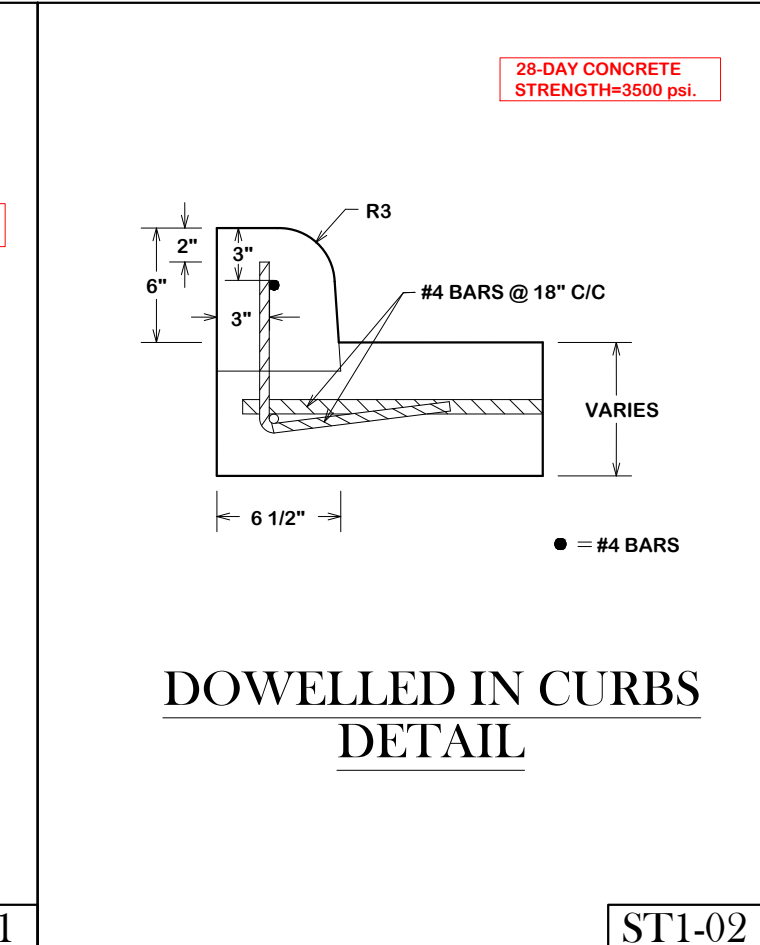
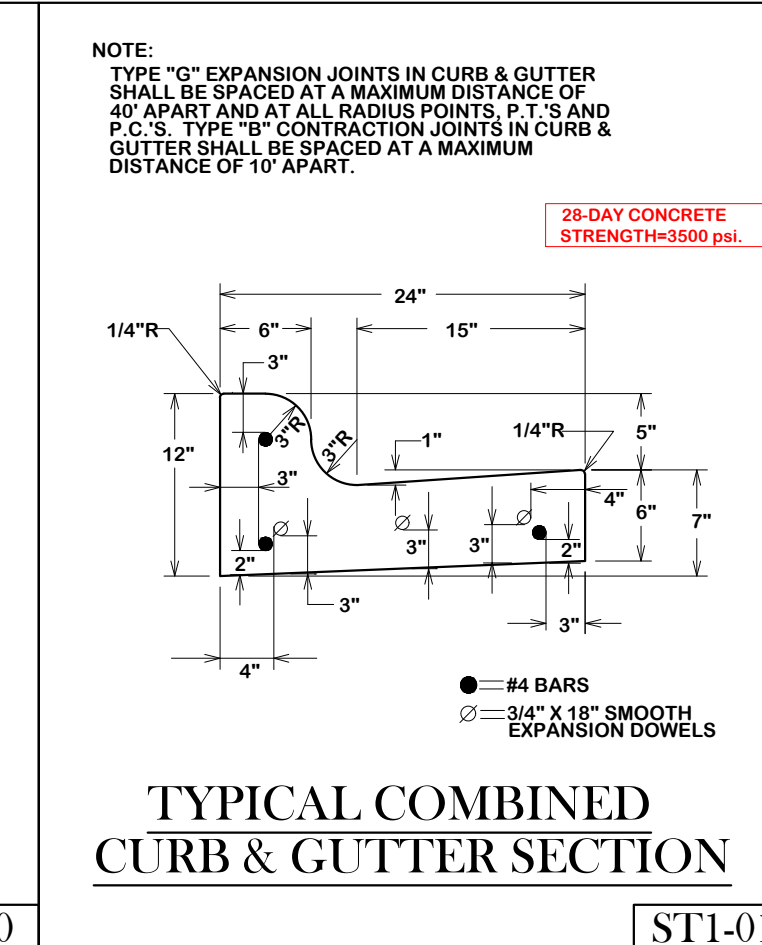
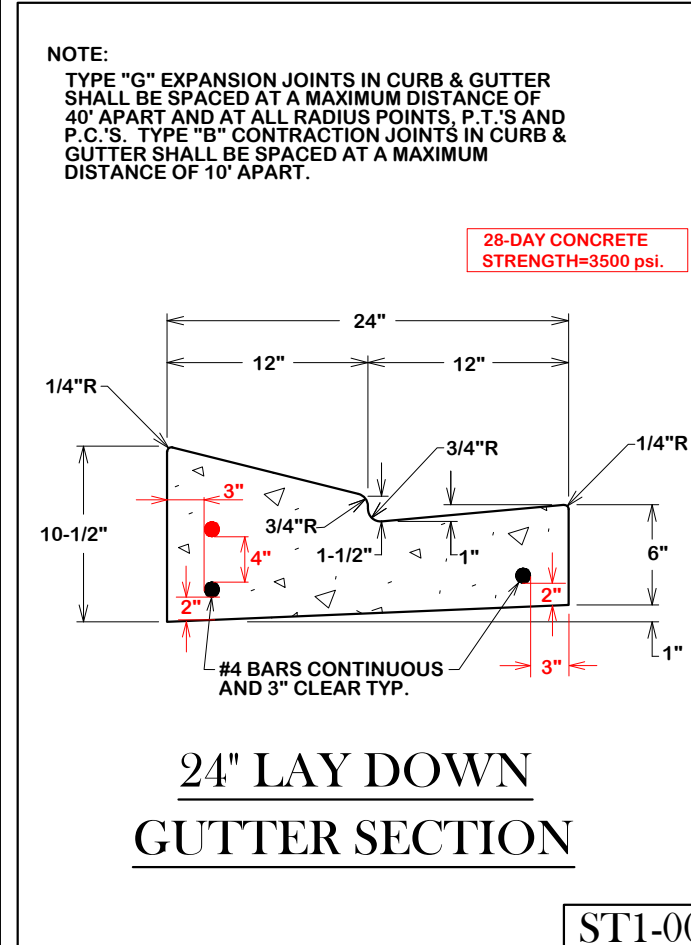
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Date:	November 2024	Sheet:	L1
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**GENERAL NOTES:**

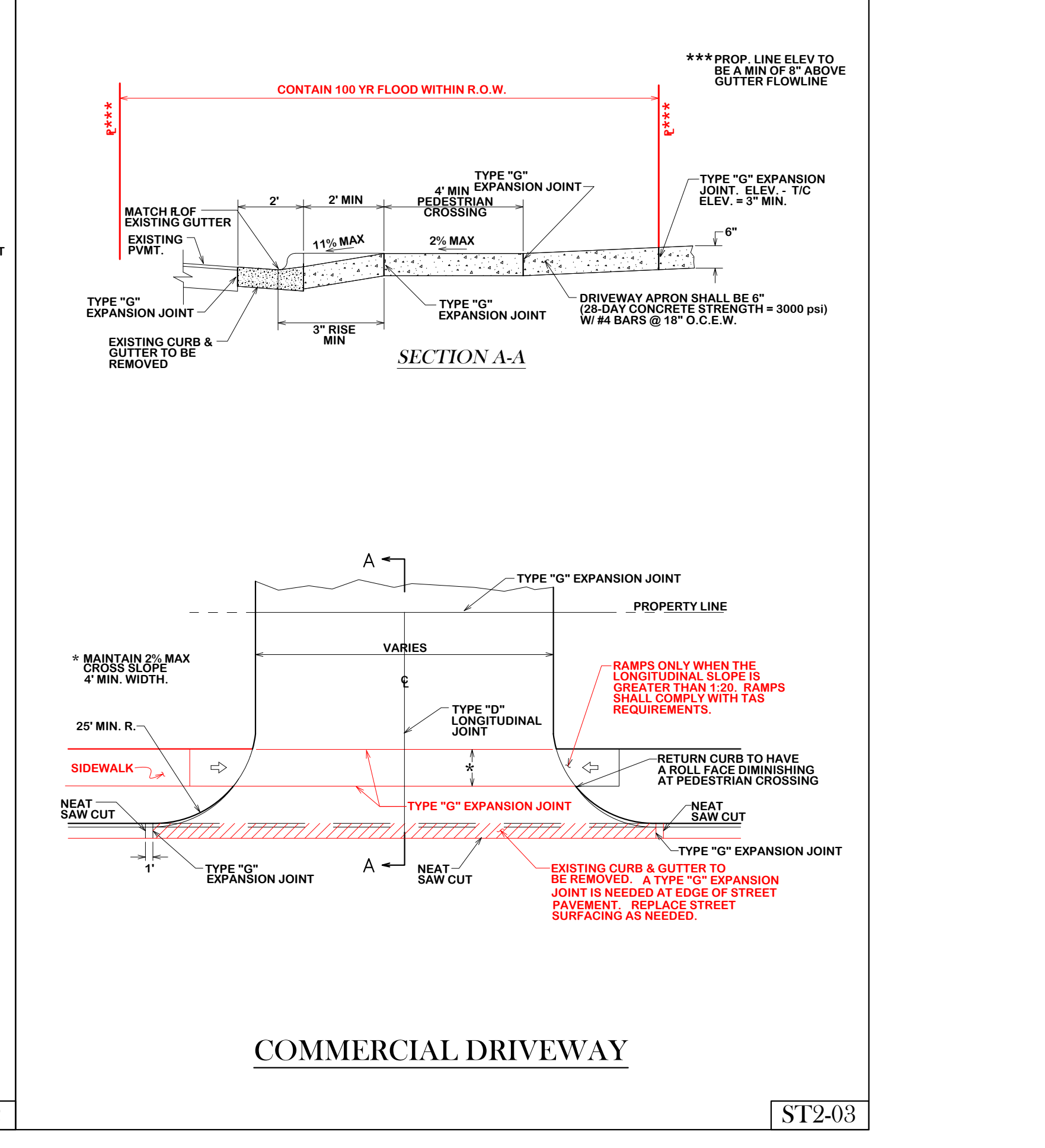
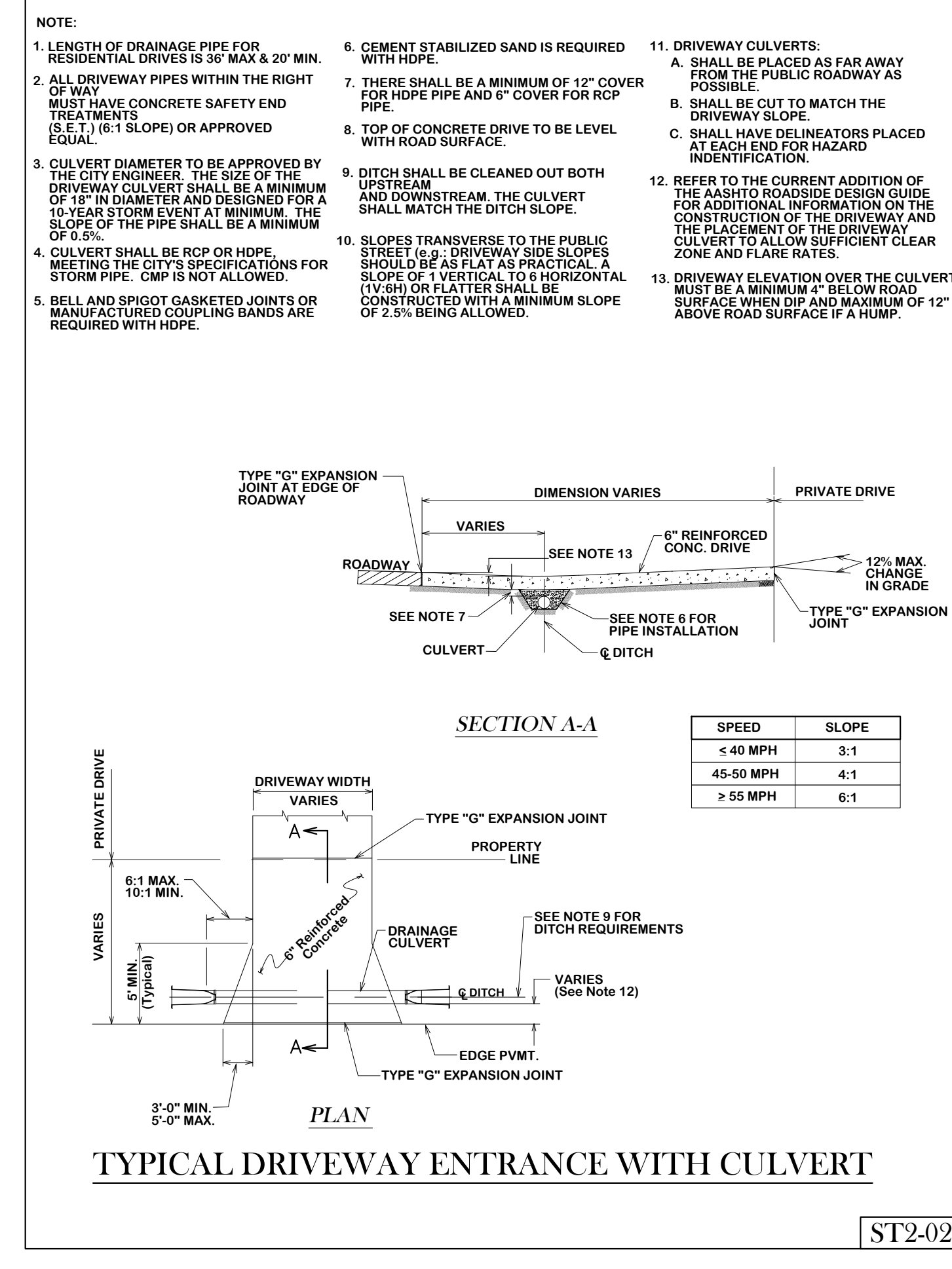
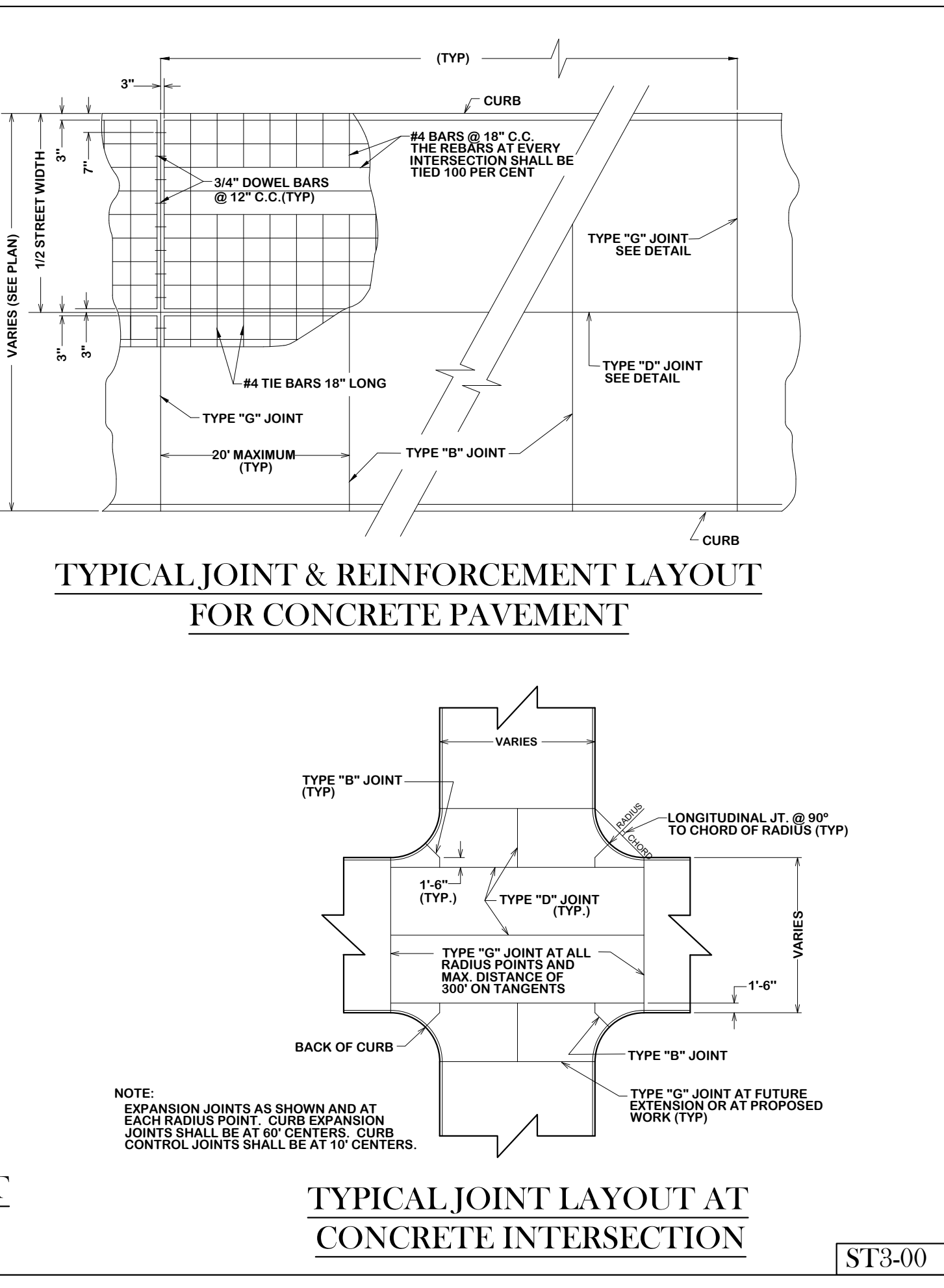
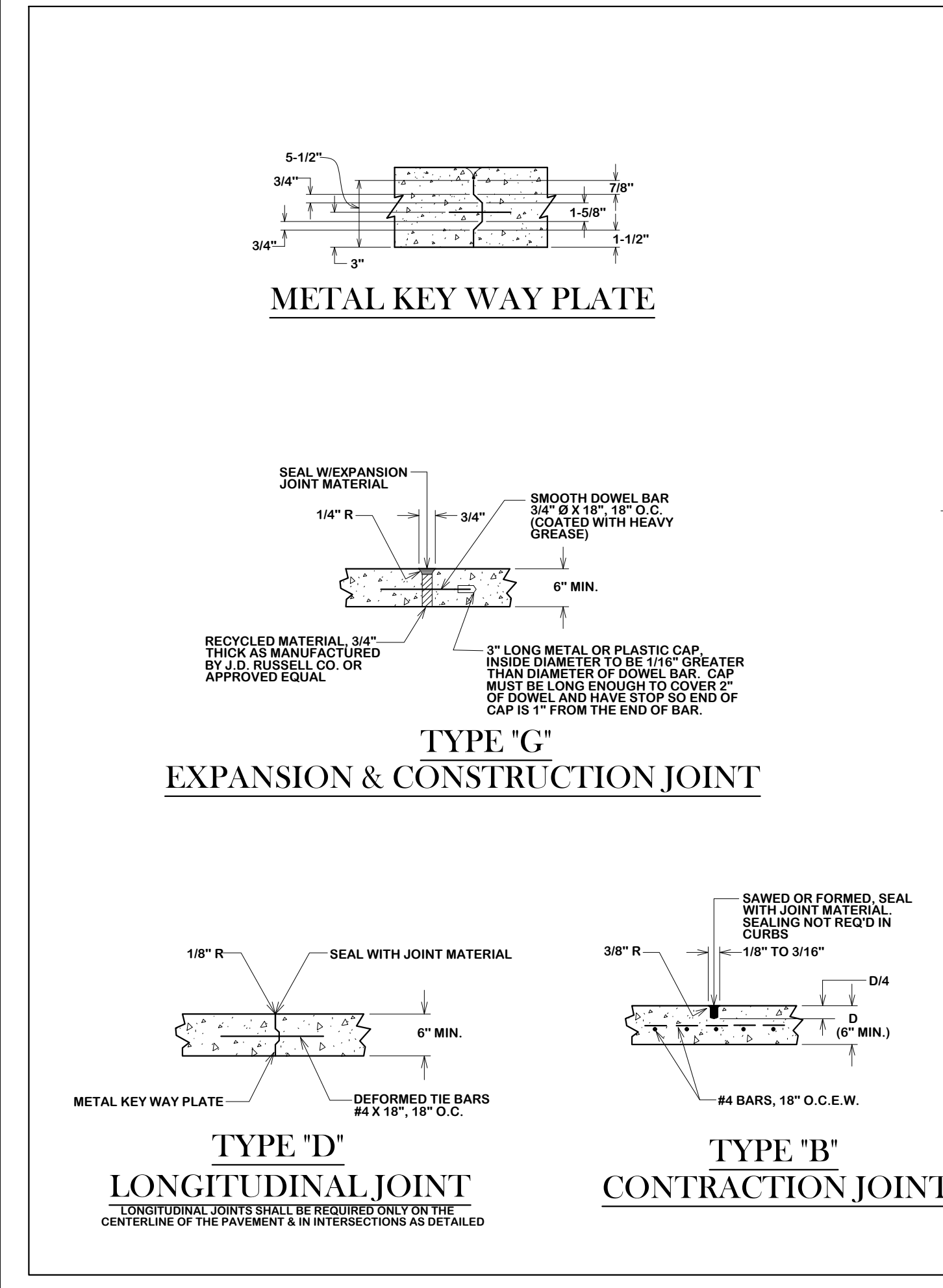
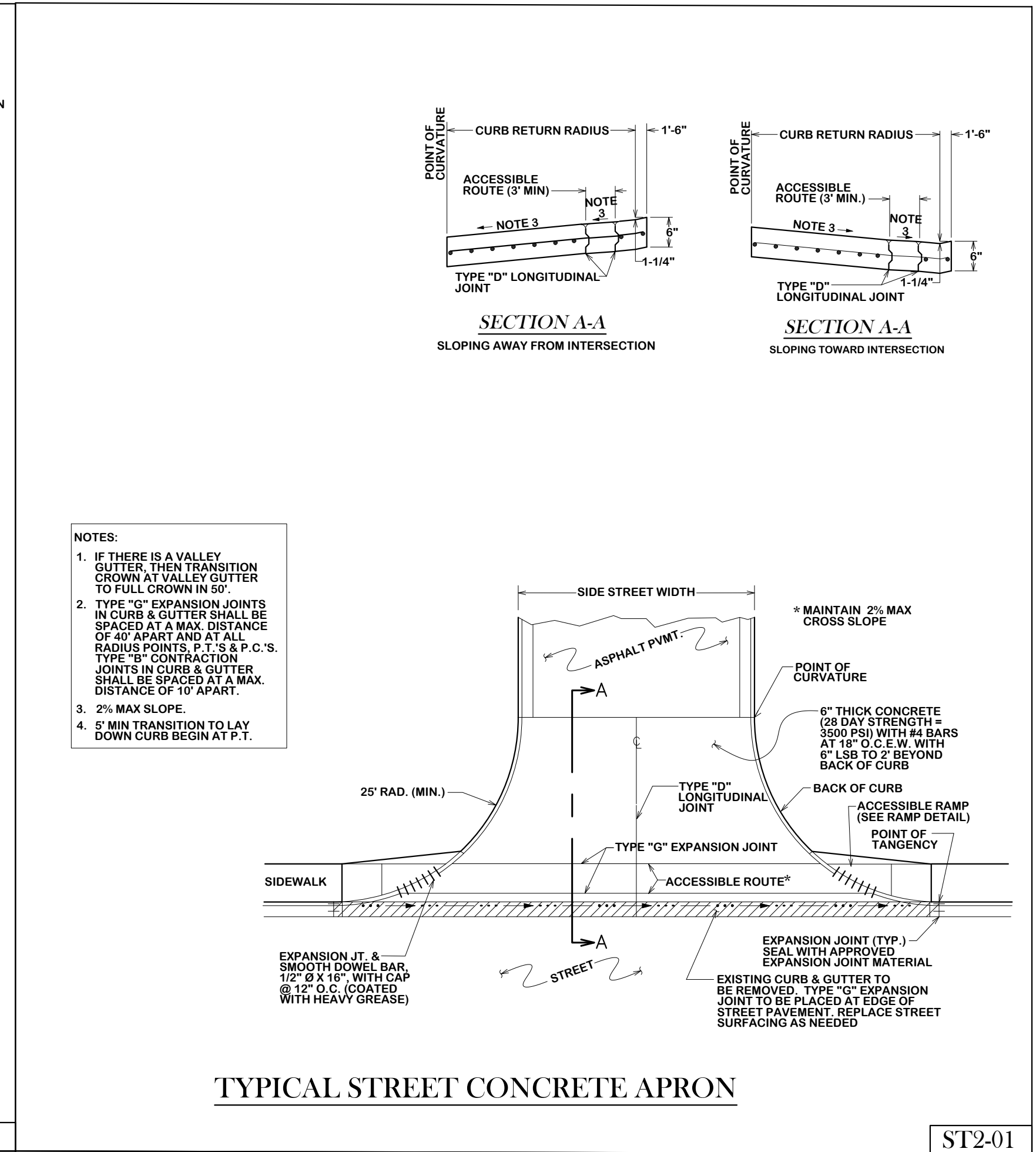
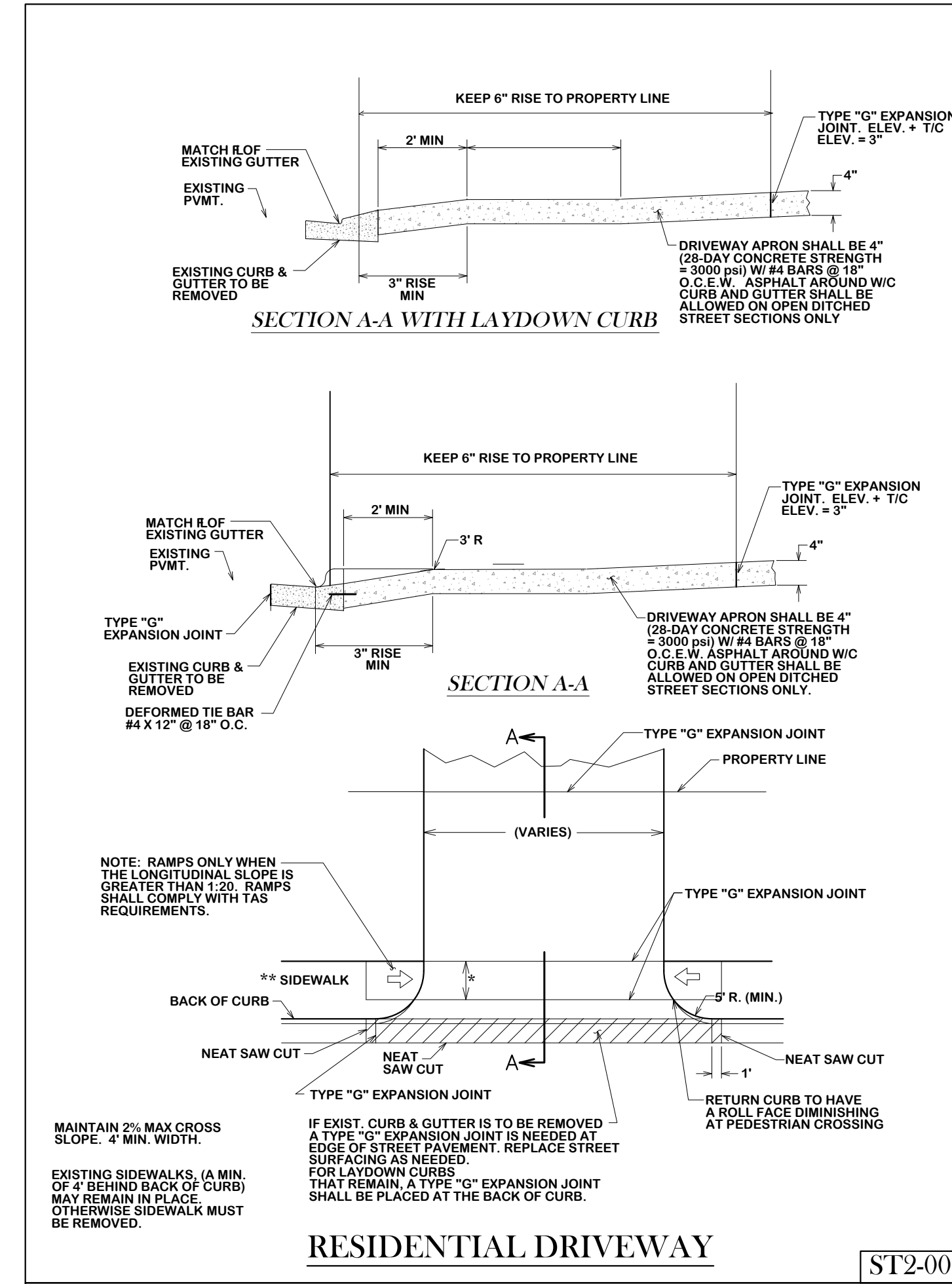
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY GROWN IN. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, SOLO GRASS SHALL BE MAINTAINED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

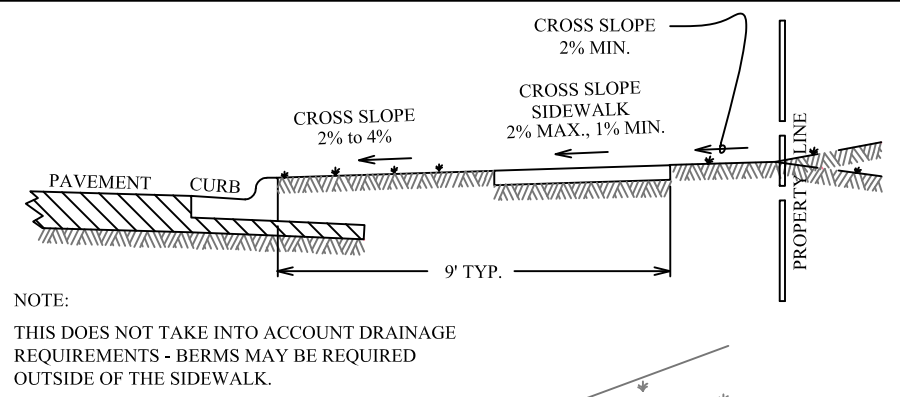
APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TxDOT STANDARDS.

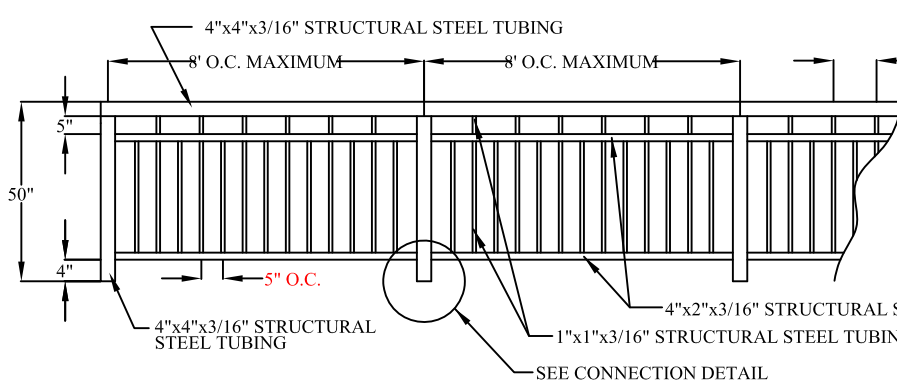
REFER TO SPEC 31.17.23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.





**SIDEWALK SLOPE REQUIREMENTS**

SW1-00



**TYPICAL PEDESTRIAN GUARDRAIL**

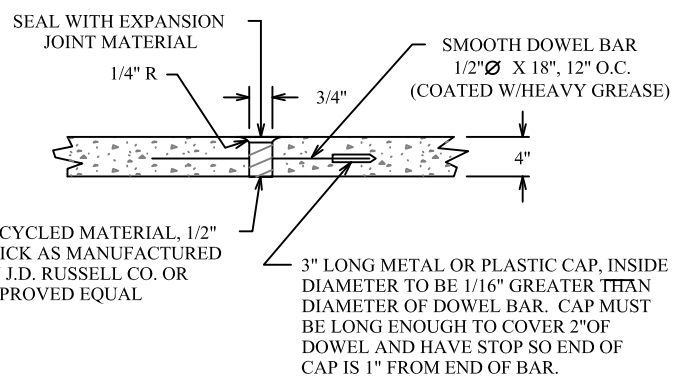
CONNECTION DETAIL

SW1-01

**GENERAL NOTES:**

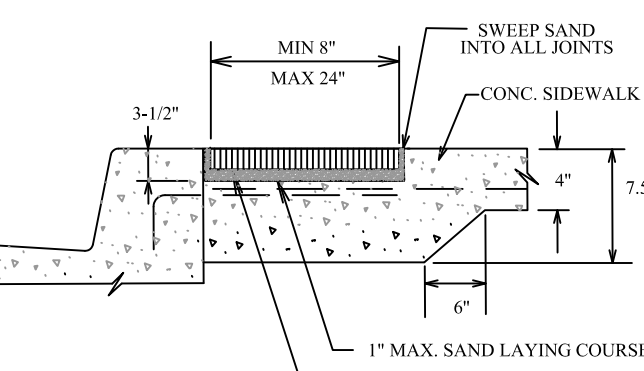
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY RESEED OR HYDROSEED, MULCH AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOIL WILL BE REQUIRED. BARED AREAS SHALL BE RESEED OR SOODED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.  
APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.  
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.  
ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TxDOT STANDARDS.  
REFER TO SPEC 311.17.2.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.

- NOTES:
1. SIDEWALK PLACEMENT SHALL BE IN ACCORDANCE WITH BCS UNIFIED DESIGN GUIDELINES.
  2. FINISH LIGHT BROOM FINISH. JOINTS TO BE TOOLED 1" DEEP AT AN INTERVAL EQUAL TO THE SIDEWALK WIDTH. EXPANSION JOINTS @ 40' O.C. CONSTRUCTION JOINTS @ 4' O.C.
  3. DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT TO SIDEWALK (DRIVEWAY, INLET BOX, CURB, JUNCTION BOX, ETC.) WITH #3 X 12" BARS @ 12" O.C. OR #4 X 12" BARS @ 18" O.C.
  4. COMPACTION: COMPACTED SUBGRADE MATERIAL COMPACTED TO A DENSITY AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY PROCTOR COMPACTION TEST ASTM D698 (STANDARD) AND SHALL BE 64% WET OF THE OPTIMUM MOISTURE CONTENT
  5. A MINIMUM CLEAR PEDESTRIAN WIDTH AS DEFINED BY TAS AND ADA SHALL BE PROVIDED FOR ENTIRE LENGTH OF SIDEWALK.



**SIDEWALK EXPANSION & CONSTRUCTION JOINT**

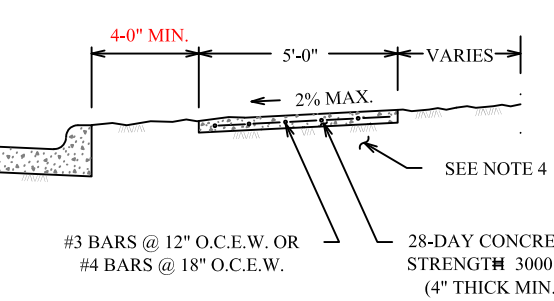
**SIDEWALK CONTRACTION JOINT**



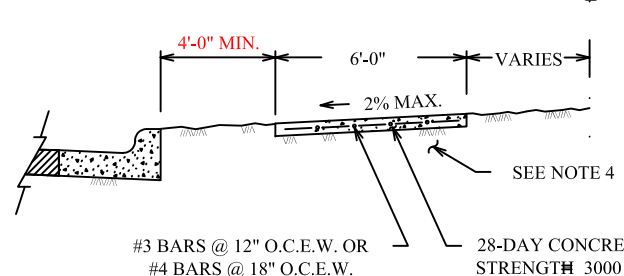
**SIDEWALK PAVES SECTION**

**CONCRETE SIDEWALK**

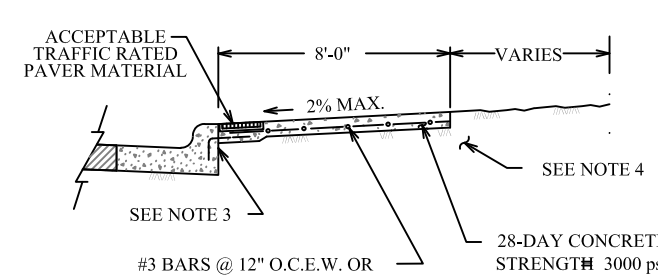
SW1-02



**ALONG LOCAL STREETS**

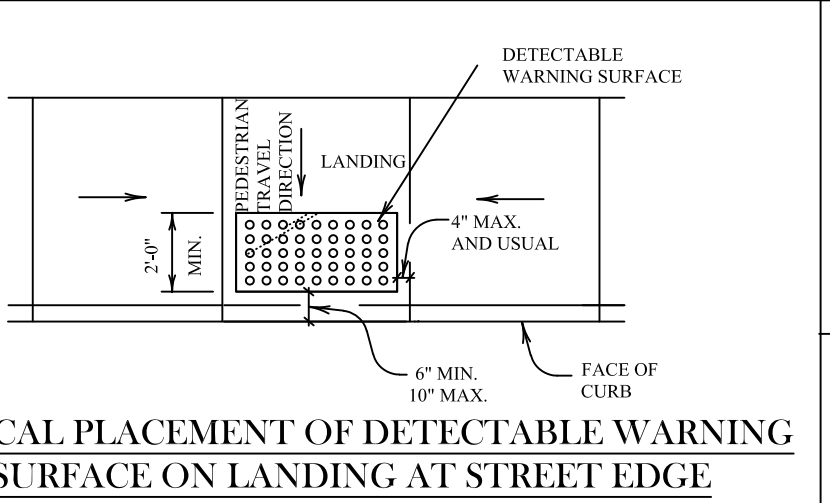


**ALONG MINOR COLLECTORS AND LARGER**



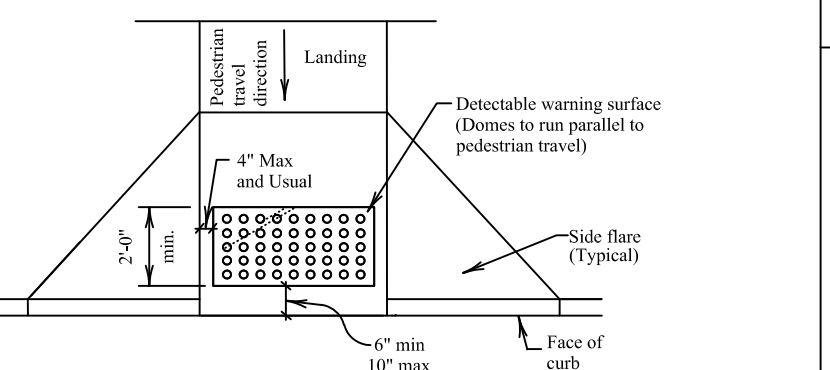
**ALONG MINOR COLLECTORS AND LARGER**

SW1-02



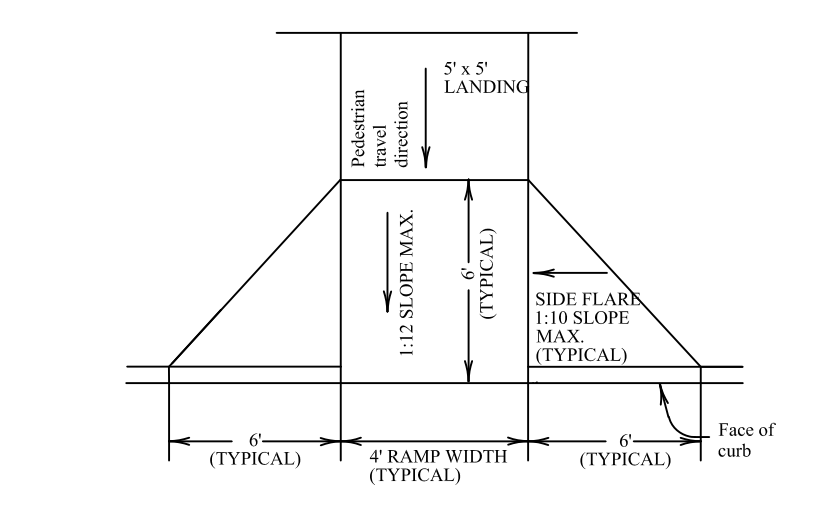
**TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE**

SW2-00



**TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN**

SW2-01



**TYPICAL AMBULATORY RAMP W/ FLARED WINGS**

SW2-02

**DETECTABLE WARNINGS GENERAL NOTES**

1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 4-29 OF THE TEXAS ACCESSIBILITY STANDARDS (TAS). THE SURFACE MUST CONTRAST VISUALLY WITH ADJACING SURFACES, INCLUDING SIDE FLARES. FINISH DARK BROWN OR DARK RED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.
2. DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.
3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
4. SHADED AREAS ON SHEETS 3 AND 4 INDICATE THE APPROXIMATE LOCATION FOR THE DETECTABLE WARNING SURFACE FOR EACH CURB RAMP TYPE.
5. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN HEIGHT IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
6. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 10" FROM THE EXTENSION OF THE FACE OF CURB. DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADII.
7. ACCEPTABLE PAVEMENT MATERIAL SHALL BE CLAY, VITRIFIED PUCKER COMPOSITE, PRECAST POLYMER CONCRETE, AND CONCRETE.

SW2-GN00

**CROSSWALKS GENERAL NOTES**

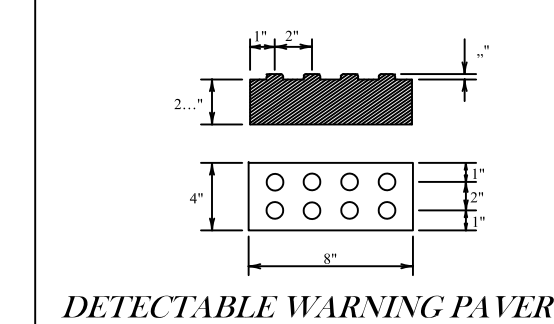
1. CROSSWALK MARKINGS ARE IMPORTANT TRAFFIC CONTROL DEVICES AT CONTROLLED INTERSECTIONS. THESE DEVICES IDENTIFY THE APPROPRIATE LOCATION FOR PEDESTRIANS TO CROSS THE INTERSECTION AS WELL AS INFORMING DRIVERS WHERE PEDESTRIANS MAY BE PRESENT. NOT ALL LOCATIONS NEED THE CROSSWALKS MARKED. HOWEVER, TYPICALLY COLLECTOR AND ARTERIAL STREETS DO, AS STATED IN THE TMDOT. AN ENGINEERING STUDY SHOULD BE PERFORMED BEFORE CROSSWALKS ARE INSTALLED AT LOCATIONS OTHER THAN CONTROLLED INTERSECTIONS.
2. THE CITY OF BRYAN'S PREFERENCE FOR MARKING CROSSWALKS IS THE LONGITUDINAL OR "LADDER" STYLE. THE CITY OF COLLEGE STATIONS PREFERENCE IS THE TYPICAL "TRANSVERSE" STYLE. HOWEVER, IN THE NORTHWEST AREA, ADJACENT TO SCHOOL OR SCHOOL ZONES, AND OTHER HIGH PEDESTRIAN CROSSINGS, THE LONGITUDINAL OR "LADDER" STYLE IS PREFERRED. DEVIATION FROM THESE PREFERENCES WILL BE ALLOWED ONLY WITH THE APPROVAL OF THE CITY ENGINEER.
3. THE LONGITUDINAL "LADDER" STYLE MARKING SHALL BE 24" WIDE AND 8 FEET IN LENGTH SPACED 48 INCHES APART. CONSIST OF 1/2 INCH WIDE WHITE LONGITUDINAL LINES SPACED 24 INCHES APART LONGITUDINALLY. THESE MARKINGS SHALL EXTEND 8 FEET. THE TRANSVERSE MARKINGS SHALL CONSIST OF TWO 12 INCH WIDE LINES SEPARATED BY 4 FEET OF UNMARKED PAVEMENT. ALL CROSSWALK PAVEMENT MARKINGS SHALL ALWAYS MEET TDDOT'S SPECIFICATION FOR TYPICAL MARKINGS UNLESS OTHERWISE BE THERMOPLASTIC, UNLESS A DIFFERENT MATERIAL IS APPROVED BY THE CITY ENGINEER.
4. ADDITIONAL INFORMATION ABOUT CROSSWALK MARKINGS CAN BE FOUND IN THE TMDOT.
5. CROSSWALKS WITH THICK PAVERS, STAMPED ASPHALT, STAMPED CONCRETE, ETC., SHALL ALSO REQUIRE RETRO-REFLECTIVE THERMOPLASTIC TRANSVERSE STRIPPING.

SW2-GN01

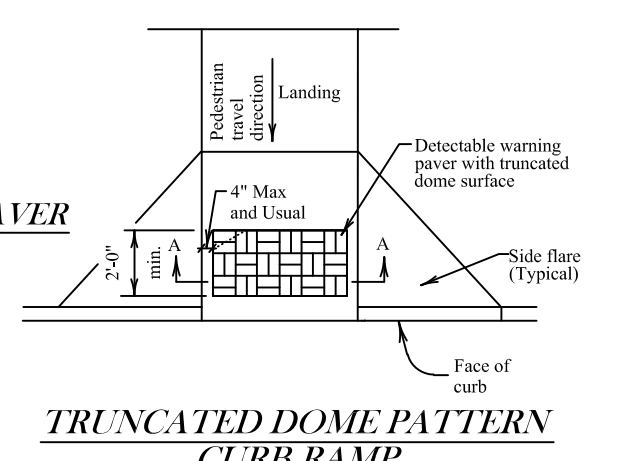
**PEDESTRIAN FACILITIES GENERAL NOTES**

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL BE USED PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
2. LANDINGS SHALL BE A 5' X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
3. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4' X 4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL PATH.
4. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP IS 2%.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED. OTHERWISE, PROVIDE FLARED SIDES.
6. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC 46.46.
7. TO SERVE AS A PEDESTRIAN REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 3' WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
8. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, CURB RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
9. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
10. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. PROVIDE CURB RAMPS WHEREVER ON ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
11. SEPARATE CURB RAMP AND LANDINGS FROM ADJACENT SIDEWALK AND ANY OTHER ELEMENTS WITH PREMOLD OR BOARD JOINT OF 3/4" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET.
13. FLARE SLOPE SHALL NOT EXCEED 10% MEASURED ALONG CURB LINE.

SW2-GN02

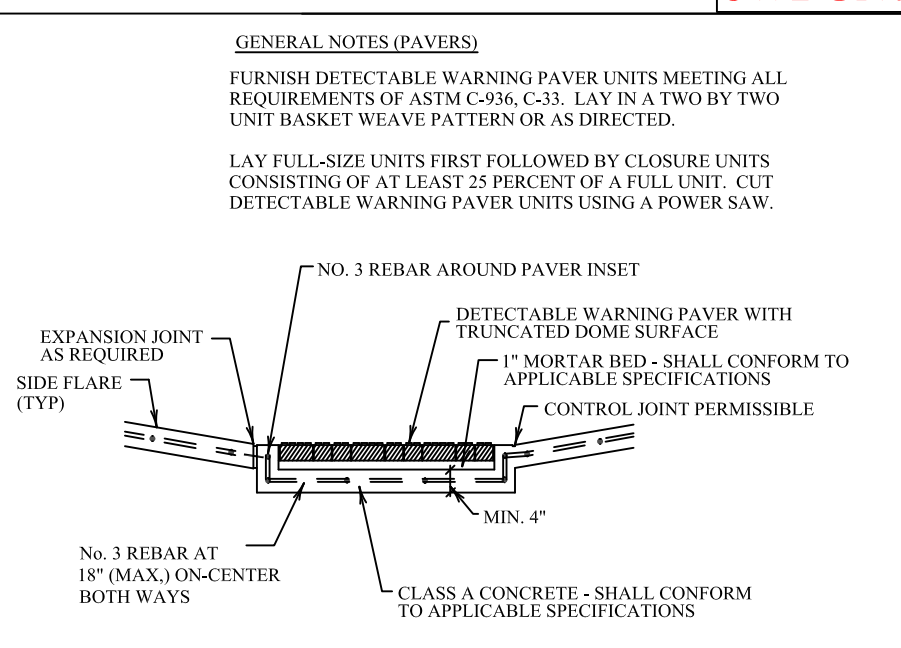


**DETECTABLE WARNING PAVER**



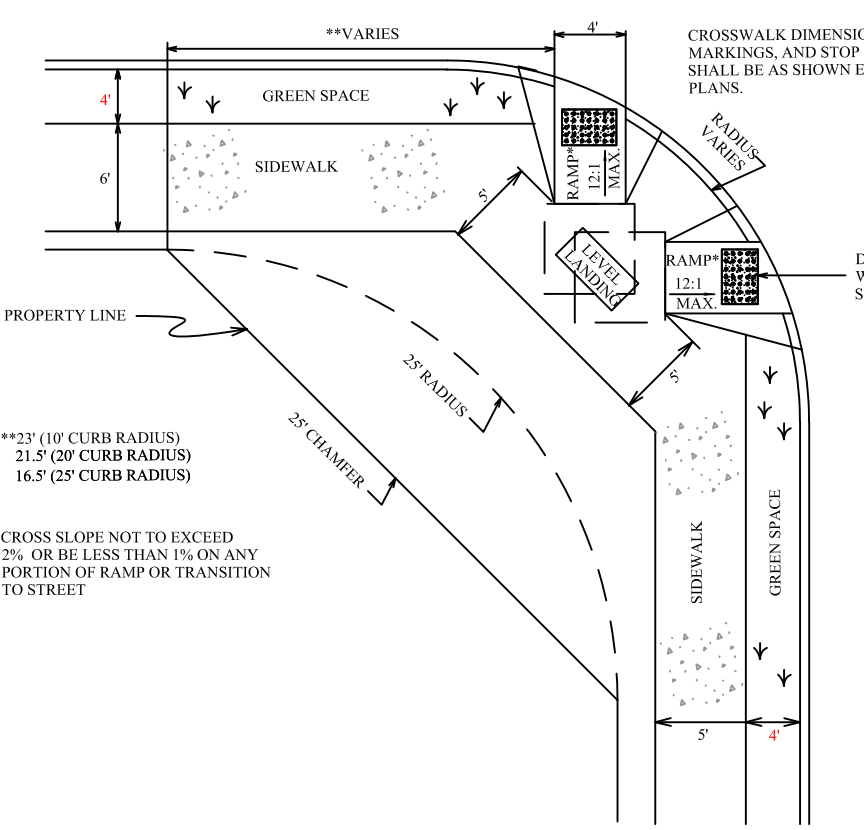
**TRUNCATED DOME PATTERN CURB RAMP**

**DETECTABLE WARNING PAVER**



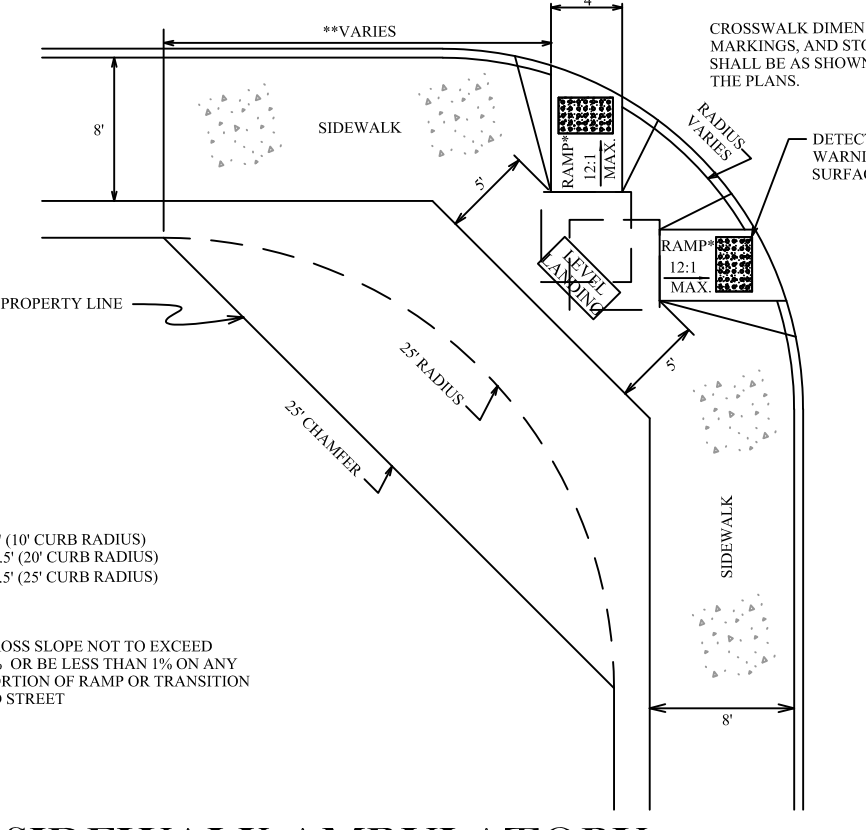
**SECTION A-A**

SW2-03



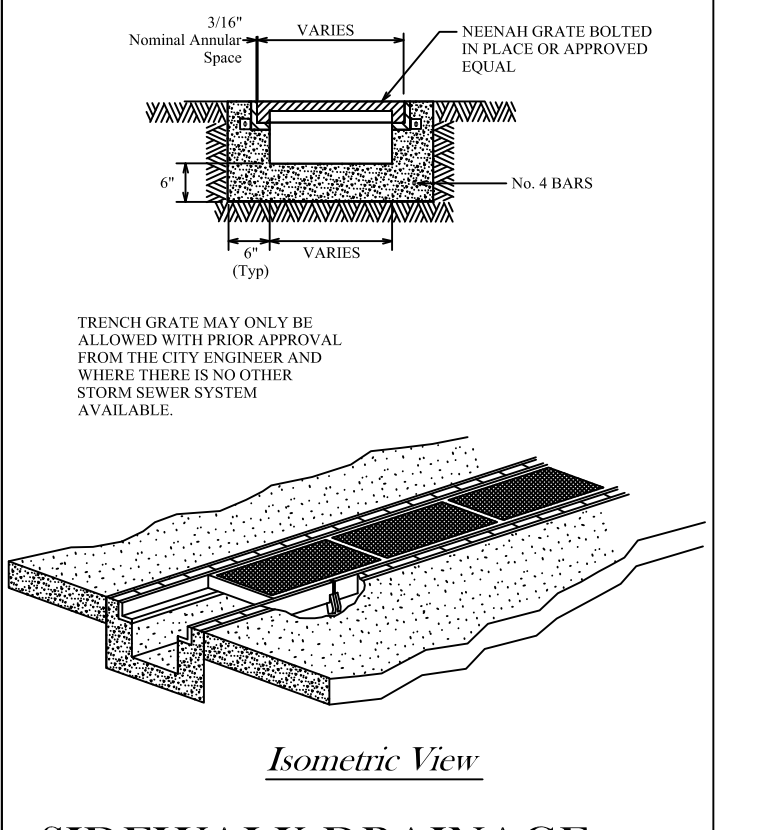
**5/6 SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION**

SW3-00



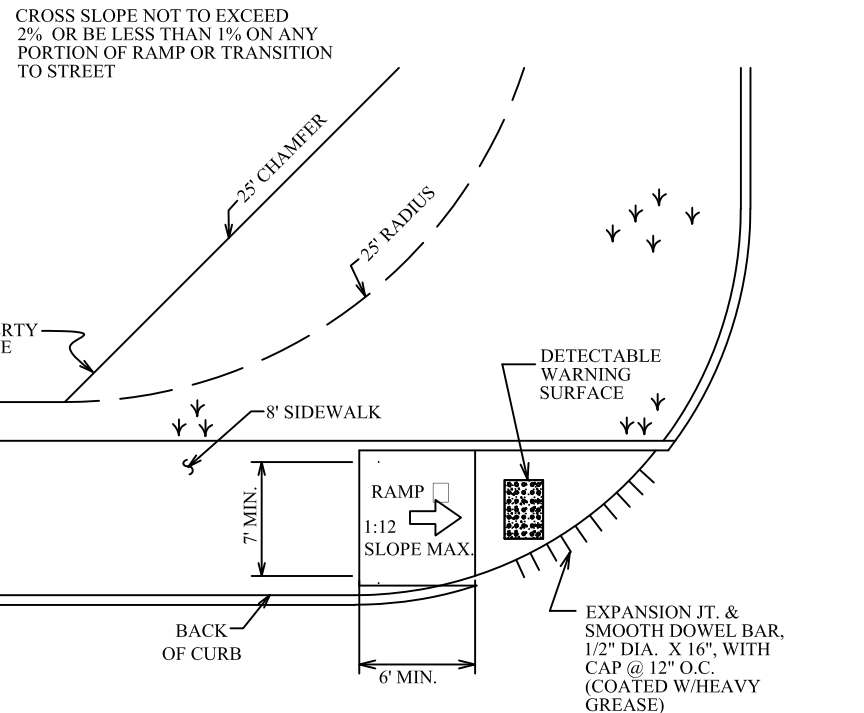
**8 SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION**

SW3-01



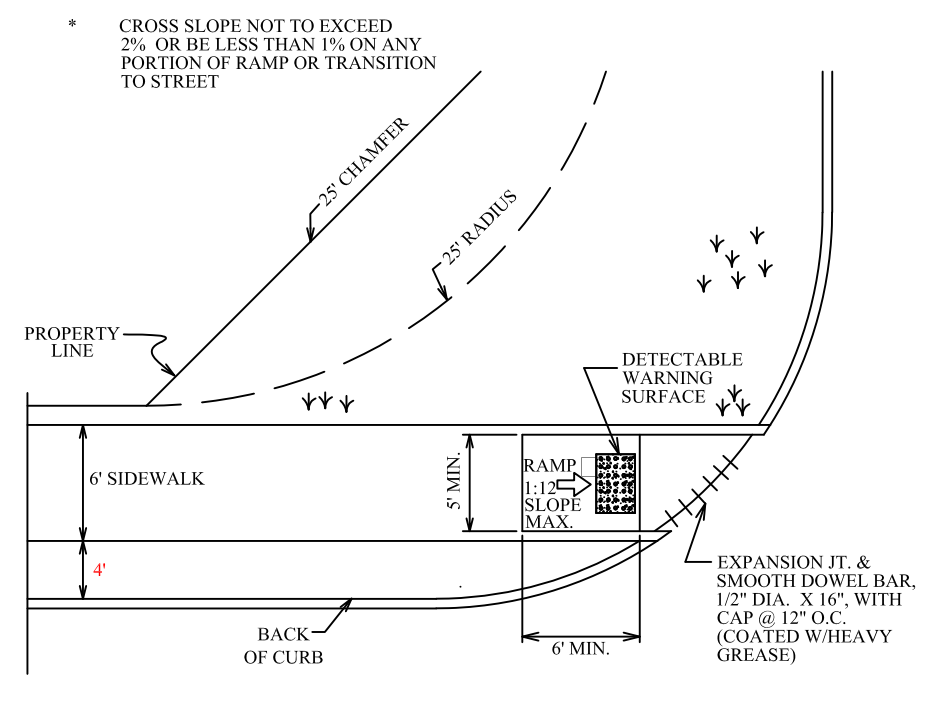
**SIDEWALK DRAINAGE TRENCH GRATE**

SW3-02



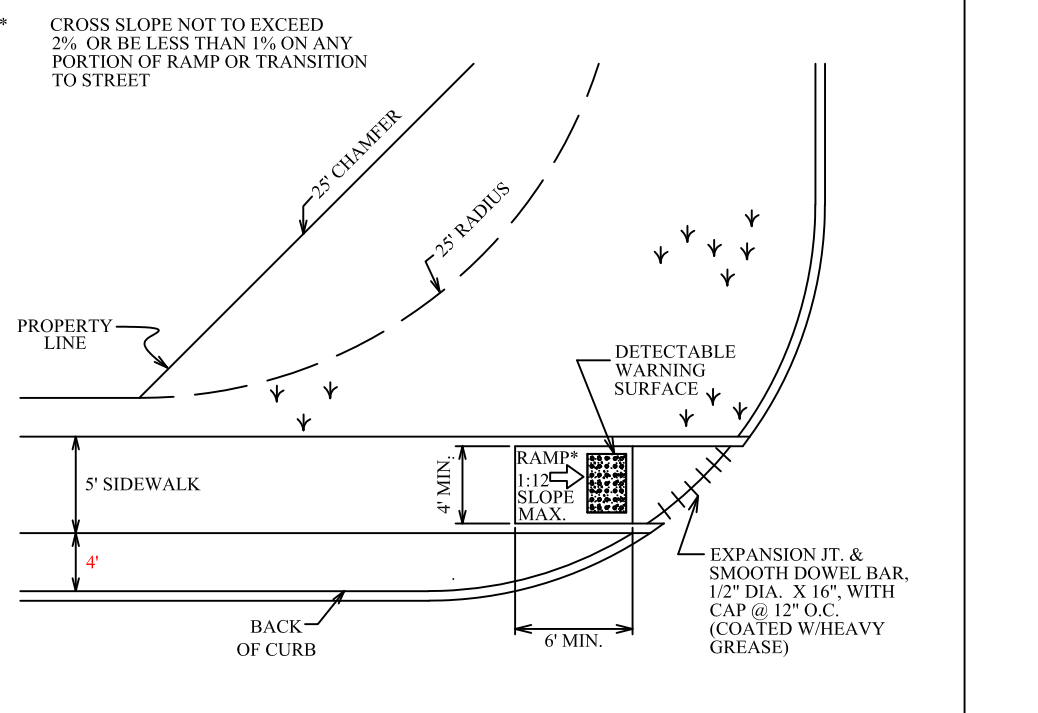
**8 SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES**

SW3-03



**6 SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES**

SW3-04



**5 SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES**

SW3-05

REVISIONS:										
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**BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS**



DRAWN BY: B.I.  
DATE: 12/2020  
SCALE: N.T.S.  
APPROVED: W.P.K.

FIGURE:  
**SW1**  
SHEET 1 OF 1