CONDITIONAL USE PERMIT PLANS

BRYAN FOOD EXCHANGE

2009 SH 21

LOT 16, BLOCK 5, HANUS ADDITION

CITY OF BRYAN

BRAZOS COUNTY, TEXAS

UTILITY & GOVERNING AGENCIES CONTACT LIST

OWNER / DEVELOPER

MOHAMMED YOUNIS
KURO CONSTRUCTION, LLC
PO BOX 130937
SPRING, TX 77393
PH. (832) 708-7676

CIVIL ENGINEER

BEAMON ENGINEERING, LLC
16172 BENCH LANE
BRYAN, TEXAS 77807
PH: (979) 571-2407
CONTACT: DANIEL BEAMON, P.E.

SURVEYOR

KERR SURVEYING
1718 BRIARCREST DRIVE
BRYAN, TX 77802
PH. (979) 268-3195

CITY OF BRYAN WATER SERVICES DEPARTMENT
(WATER, SEWER, & INSPECTION)

JAYSON BARFKNECHT, DIRECTOR
1111 WACO STREET
BRYAN, TEXAS 77803
PH. (979) 209-5900

ELECTRIC COMPANY

BRYAN TEXAS UTILITIES
205 E 28TH ST, BRYAN, TX 77803
PH. (979) 821-5700

TELEPHONE COMPANY

VERIZON
301 INDUSTRIAL BLVD.
BRYAN, TEXAS 77803
979-821-4770

GAS COMPANY

ATMOS GAS
297 N. EARL RUDDER FREEWAY
BRYAN, TEXAS 77802
979-774-2506

FIRE MARSHALL

BRYAN FIRE DEPARTMENT
STATION NO. 2
414 LAWRENCE ST.
BRYAN, TEXAS 77801
PHONE: (979) 209-5960

BENCHMARK NOTES

PROJECT BENCHMARK
CITY OF BRYAN MONUMENT GPS-117
N: 10234456.69, E: 3538482.63, ELEV: 338.00'
(ELEVATION DATUM NAVD 1988, GEOID12B)

TBM #1
5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "KERR SURV. CONTROL POINT" SET 126.43' FROM THE WEST CORNER HEREOF, 303.70' FROM THE SOUTH CORNER HEREOF.
N: 10230489.72, E: 3533889.13, ELEV: 325.17'

TBM #2
5/8 INCH IRON ROD WITH A RED PLASTIC CAP STAMPED "KERR SURV. CONTROL POINT" SET 111.48' FROM THE WEST CORNER HEREOF, AND 52.17' WEST OF A POWERPOLE.
N: 10201784.76 E: 3567806.31 ELEV: 327.46'

TBM #3
5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "KERR TRAV" SET 152.43' FROM THE WEST CORNER HEREOF ON THE NORTH SIDE OF HIGHWAY 21, 132.27' FROM THE NORTH CORNER HEREOF.
N: 10230739.84, E: 3533982.27, ELEV: 325.11'

TBM #4
5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "KERR TRAV" SET 298.54' FROM THE WEST CORNER HEREOF, AND 203.90' WEST OF THE SOUTH CORNER HEREOF.
N: 10230291.19, E: 3533937.14, ELEV: 328.47'

COORDINATES SHOWN HEREON ARE TEXAS STATE PLANE CENTRAL ZONE GRID (NOT SURFACE) NAD 83 COORDINATES

VICINITY MAP
SCALE: 1" = 800'

TABLE OF CONTENTS

BEAMON ENGINEERING
TBPE FIRM NO.: F-21388, 19172
BRYAN, TEXAS 77807
PH.: (979) 571-2407

STATE OF TEXAS
DANIEL F. BEAMON
105978
LICENSED
PROFESSIONAL ENGINEER

DECEMBER 16, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

COVER SHEET

DATE: DEC. 16, 2024
SCALE: 1"=1000'
SHEET NO.: C-1.0

BENCHMARK NOTES

PROJECT BENCHMARK
CITY OF BRYAN MONUMENT GPS-117
N:10234456.69, E:3538482.63, ELEV:338.00'
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COORDINATES SHOWN HEREON ARE TEXAS STATE PLANE CENTRAL ZONE GRID (NOT SURFACE) NAD 83 COORDINATES

SCALE: 1" = 40'

POINT OF BEGINNING
5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP STAMPED 'KERR 4502' FOUND (CM)

1/2 INCH IRON ROD WITH A BLUE PLASTIC CAP STAMPED 'KERR SURVEYING' SET

HIGHWAY 21 WEST

N. RIM SANITARY SEWER MANHOLE (CONCRETE): 325.90'
FL 6" CLAY IN (SW): 322.13'
FL 6" PVC IN (NE): 314.93'
FL 6" PVC OUT (SW): 314.92'

N. RIM SANITARY SEWER MANHOLE (CONCRETE): 323.03'
FL 6" PVC IN (NE): 312.53'
FL 6" PVC OUT (SW): 312.52'

TBM #1

TBM #2

N 57°44'25" E 145.84'

25' FRONT SETBACK LINE (Z)

S 32°08'15" E 277.06'

5' SIDE SETBACK LINE (Z)

N 32°15'35" W 319.85'

5' SIDE SETBACK LINE (Z)

5' REAR SETBACK LINE (Z)

S 40°45'47" W 96.38'

S 42°18'58" W 55.06'

0.999 ACRES

N/F
GUMARO MUNOZ & DIANA H. MUNOZ
CALLED LOT 15-CR1
HANUS ADDITION REPLAT
1578/229 (ORBCT)

N/F
IRMA SANCHEZ & LADRA SANCHEZ
CALLED LOT 15-CR2
HANUS ADDITION REPLAT
19194/214 (OPRBCT)

N/F
TAZEEN BAWAHAB
CALLED 0.999 ACRES
12419/184 (OPRBCT)

2009 HIGHWAY 21 WEST

N/F
BRYAN IRON AND METAL
PER CAD MAP

N/F
JACK FORMAN & GERTRUDE FORMAN
CALLED 14,700 SQ. FT.
308/561 (DRBCT)

POINT FOR CORNER FROM WHICH A 3/8 INCH IRON ROD FOUND BEARS N 39°16'02" E 0.36'

POINT FOR CORNER FROM WHICH A 3/8 INCH IRON ROD FOUND BEARS N 66°40'43" E 0.17'

5/8 INCH IRON ROD FOUND (CM)

GENERAL NOTES

BEARING SYSTEM SHOWN HEREON IS BASED ON THE TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203), GRID NORTH AS ESTABLISHED FROM GPS OBSERVATION USING THE LEICA SMARTNET NAD83 (NA2011) EPOCH 2010 MULTI-YEAR CORS SOLUTION 2 (MYCS2).

DISTANCES SHOWN HEREON ARE SURFACE DISTANCES UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES (NOT AREAS) DIVIDE BY A COMBINED SCALE FACTOR OF 1.00011350800672 (CALCULATED USING GEOID12B).

(CM) INDICATES CONTROLLING MONUMENT FOUND AND USED TO ESTABLISH PROPERTY BOUNDARIES.

NO BUILDINGS WERE LOCATED ON THE PROPERTY AT THE TIME OF SURVEY.

ALL BEARINGS AND DISTANCES ARE CALLED AND MEASURED FROM THE DEED RECORDED IN VOLUME 12419, PAGE 184 (OPRBCT).

THIS SURVEY PLAT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. EASEMENTS AND OTHER MATTERS MAY APPLY.

THIS PLAT WAS PREPARED IN CONJUNCTION WITH A FIELD NOTES DESCRIPTION (METES AND BOUNDS). THE PLAT AND FIELD NOTES ARE INTENDED TO BE ONE INSTRUMENT TOGETHER.

LEGEND:

DRBCT = DEED RECORDS OF BRAZOS COUNTY, TEXAS

ORBCT = OFFICIAL RECORDS OF BRAZOS COUNTY, TEXAS

OPRBCT = OFFICIAL PUBLIC RECORDS OF BRAZOS COUNTY, TEXAS

123/456 = VOLUME AND PAGE FROM PUBLIC COUNTY RECORDS

N/F = NOW OR FORMERLY

( ) = RECORD INFORMATION

- MONITORING WELL
- WATER METER
- SANITARY SEWER MANHOLE
- UTILITY POLE
- GUY WIRE
- GAS METER
- METRONET BOX
- AERIAL TELEPHONE LINES
- AERIAL ELECTRIC LINES
- WOOD FENCE
- CHAIN LINK FENCE
- WIRE MESH FENCE
- CONCRETE
- GRAVEL
- ASPHALT

APPROXIMATE LOCATION OF 6" SANITARY SEWER LINE — SS-6" —

APPROXIMATE LOCATION OF 6" WATER LINE — W-6" —

APPROXIMATE LOCATION OF BURIED GAS LINE — GAS —

ZONING SETBACK NOTES

ACCORDING TO THE CITY OF BRYAN ONLINE ZONING MAP REFERENCED ON 08-05-2024, THIS TRACT IS ZONED RETAIL DISTRICT [C-2] AND IS SUBJECT TO THE FOLLOWING BUILDING SETBACKS (Z) AS SHOWN HEREON:

FRONT SETBACK - 25'
SIDE SETBACK (INTERIOR) - 5'
REAR SETBACK - 5'

FLOOD PLAIN NOTES:

THIS TRACT LIES WITHIN FLOOD ZONE 'X' UNSHADED AND DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA SUBJECT TO THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD PLAIN) ACCORDING TO THE BRAZOS COUNTY FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 48041C0195E, REVISED DATE: 05-16-2012.

SURVEYOR'S CERTIFICATE:

I, DAVID POWELL BRISTER, R.P.L.S. NO. 6537, DO HEREBY CERTIFY THAT THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS MANUAL OF PRACTICE REQUIREMENTS FOR A CATEGORY 1B & 6, CONDITION 3, STANDARD LAND SURVEY & TOPOGRAPHIC SURVEY AS MADE ON THE GROUND UNDER MY SUPERVISION.

8-5-24

DAVID POWELL BRISTER
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6537

STATE OF TEXAS · SURVEYING CORP · DAVID POWELL BRISTER · 6537 · PROFESSIONAL LAND SURVEYOR

TSPS STANDARD LAND SURVEY PLAT & TOPOGRAPHIC SURVEY OF A 0.999 ACRE TRACT CALLED TO BE 0.999 ACRES IN VOLUME 12419, PAGE 184 OPRBCT STEPHEN F. AUSTIN SURVEY SECTION 9, ABSTRACT 62 BRYAN, BRAZOS COUNTY, TEXAS

KERR SURVEYING

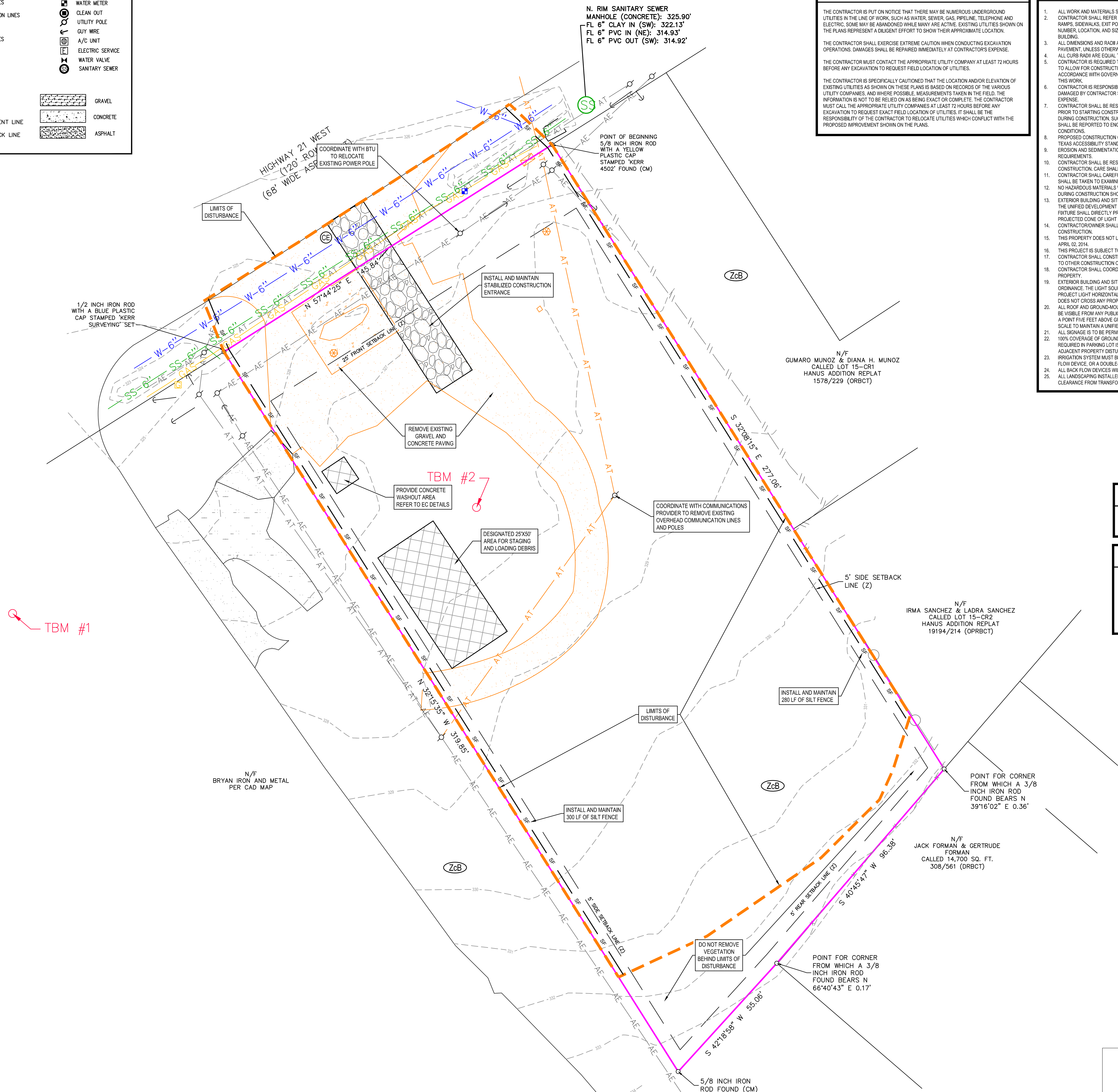
"When one person stands to gain over another, the facts must be uncovered"

SCALE: 1 INCH = 40 FEET
SURVEY DATE: 07-31-2024 | PLAT DATE: 08-05-2024
JOB NUMBER: 24-698 | CAD NAME: 24-698-TOPO
POINT FILE: BOT-GTG (cont); 24-698 (job)
DRAWN BY: WW CHECKED BY: DB

PREPARED BY: KERR SURVEYING, LLC
TBPELS FIRM#10018500
1718 BRIARCREST DRIVE, BRYAN, TEXAS 77802
PHONE: (979) 268-3195
SURVEYS@KERRSURVEYING.NET | KERRLANDSURVEYING.COM

EXISTING LEGEND

AE—AE	AERIAL ELECTRIC LINES
AT	AERIAL COMMUNICATION LINES
GAS	GAS LINES
AE—AE	AERIAL ELECTRIC LINES
W—6"	WATER LINE
SS—6"	SEWER LINE
X — X	BARBED WIRE FENCE
	WIRE MESH FENCE
\\	WOOD FENCE
	EXISTING EASEMENT LINE
	BUILDING SETBACK LINE
	WATER METER
	CLEAN OUT
	UTILITY POLE
	GUY WIRE
	A/C UNIT
E	ELECTRIC SERVICE
	WATER VALVE
SS	SANITARY SEWER
	GRAVEL
	CONCRETE
	ASPHALT



CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRIC, SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF 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 ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, FEDERAL, AND OSHA REGULATION.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF SLOPED PAVING, RAMPS, SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, TOTAL NUMBER, LOCATION, AND SIZE OF DOWNSPOUTS AND ANY OTHER APPURTENANCES WHICH ARE CONNECTED TO THE BUILDING.
3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
4. ALL CURB RADII ARE EQUAL TO 3' UNLESS OTHERWISE NOTED.
5. CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENT/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. NO SEPARATE PAY FOR THIS WORK.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFY OWNER AND/OR ENGINEER PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OR RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS.
8. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
9. EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH LOCAL AND STATE REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGHOUT THE SITE DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PREVENT ANY NEGATIVE IMPACTS TO ADJACENT PROPERTIES.
11. CONTRACTOR SHALL CAREFULLY MONITOR WEATHER PATTERNS AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE THE SITE PRIOR TO WEEKENDS OR ABSENCES FROM THE WORK SITE.
12. NO HAZARDOUS MATERIALS WERE IDENTIFIED DURING PRELIMINARY SITE INVESTIGATIONS. ANY ITEMS FOUND SUSPECT DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
13. EXTERIOR BUILDING AND SITE LIGHTING WILL MEET THE STANDARDS OF SECTION 12-7.11 OUTDOOR LIGHTING STANDARDS OF THE UNIFIED DEVELOPMENT ORDINANCE. THE LIGHT SOURCE SHALL NOT PROJECT BELOW AN OPAQUE HOUSING AND NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY. FIXTURES WILL BE MOUNTED IN SUCH A MANNER THAT THE PROJECTED CONE OF LIGHT DOES NOT CROSS ANY PROPERTY LINE.
14. CONTRACTOR/OWNER SHALL MAKE A REASONABLE ATTEMPT TO NOTIFY ALL ADJACENT LANDOWNERS PRIOR TO BEGINNING CONSTRUCTION.
15. THIS PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOODPLAIN IDENTIFIED IN FEMA FIRM MAP 48041C0310F, EFFECTIVE APRIL 02, 2014.
16. THIS PROJECT IS SUBJECT TO CITY-WIDE IMPACT FEES AT THE TIME OF BUILDING PERMIT ISSUANCE.
17. CONTRACTOR SHALL CONSTRUCT DETENTION FACILITIES AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO OTHER CONSTRUCTION OR GROUND DISTURBING PROCEDURES.
18. CONTRACTOR SHALL COORDINATE WITH NEIGHBORHOOD PROPERTY OWNER PRIOR TO ANY CONSTRUCTION ON ADJACENT PROPERTY.
19. EXTERIOR BUILDING AND SITE LIGHTING WILL MEET THE STANDARDS OF SECTION 7.11 OF THE UNIFIED DEVELOPMENT ORDINANCE. THE LIGHT SOURCE SHALL NOT PROJECT BELOW AN OPAQUE HOUSING AND NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY. FIXTURES WILL BE MOUNTED IN SUCH A MANNER THAT THE PROJECTED CONE OF LIGHT DOES NOT CROSS ANY PROPERTY LINE.
20. ALL ROOF AND GROUND-MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW OR ISOLATED SO AS NOT TO BE VISIBLE FROM ANY PUBLIC RIGHT-OF-WAY OR RESIDENTIAL DISTRICT WITHIN 150' OF THE SUBJECT LOT, MEASURED FROM A POINT FIVE FEET ABOVE GRADE. SUCH SCREENING SHALL BE COORDINATED WITH THE BUILDING ARCHITECTURE AND SCALE TO MAINTAIN A UNIFIED APPEARANCE.
21. ALL SIGNAGE IS TO BE PERMITTED SEPARATELY.
22. 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.
23. IRRIGATION SYSTEM MUST BE PROTECTED BY A PRESSURE VACUUM BREAKER, A REDUCED PRESSURE PRINCIPLE BACK FLOW DEVICE, OR A DOUBLE-CHECK BACK FLOW DEVICE, AND INSTALLED AS PER CITY ORDINANCE 2394.
24. ALL BACK FLOW DEVICES WILL BE INSTALLED AND TESTED UPON INSTALLATION AS PER CITY ORDINANCE 2394.
25. ALL LANDSCAPING INSTALLED AROUND TRANSFORMER BOX SHALL MAINTAIN 3' CLEARANCE FROM SIDES AND REAR AND 10' CLEARANCE FROM TRANSFORMER DOORS.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM. THE CONTRACTOR MUST ALSO CONTACT THE CITY OF BRYAN PUBLIC WORKS DEPARTMENT (979-209-5900) TO LOCATE LINES OWNED BY THE CITY OF BRYAN

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

MS4 NOTE

NOTIFY THE OPERATOR OF THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) LISTED BELOW AT LEAST SEVEN (7) DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

SEND TO:
PAUL KASPAR, P.E.
CITY ENGINEER
300 SOUTH TEXAS AVENUE
BRYAN, TEXAS 77803
PHONE: 979-209-5030

811 Know what's below. Call before you dig.

0 10 20 40 60

1" = 20'

EROSION CONTROL LEGEND

	PROPERTY LINE / R.O.W. LINE
	LIMIT OF DISTURBANCE
-1.00%	DIRECTION AND SLOPE OF EXISTING OVERLAND FLOW
18	EXISTING CONTOUR
SF	TEMPORARY SILT FENCE (APPROXIMATE LOCATION, SHOWN OFFSET FOR CLARITY)
CE	STABILIZED CONSTRUCTION EXIT
CD	ROCK CHECK DAM
SS	SWPPP INFORMATION SIGN, APPROXIMATE LOCATION
TPS	TEMPORARY PARKING/STORAGE AREA (CONTRACTOR TO LOCATE WITHIN LIMITS OF DISTURBANCE AS NECESSARY)
DD	DIVERSION DITCH
ST	SEDIMENT TRAP
SB	SEDIMENT BASIN
TS	TEMPORARY SEEDING / STABILIZATION
IP2	INLET PROTECTION
	SOIL BOUNDARY LINE

SOIL TYPE LEGEND

ZcB	ZACK-URBAN LAND COMPLEX 1 TO 5 PERCENT SLOPES

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

ADDING/RELOCATING BMP'S

CONTRACTOR SHALL RELOCATE OR ADD TO THE EXISTING BMP'S AS NECESSARY TO ENSURE NO SEDIMENT LADEN RUNOFF EXITS THE SITE.

LOCATION OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS

CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE LOCATIONS OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS ON THIS SITE MAP AND ENSURING THAT EACH LOCATION HAS THE NECESSARY PERMITS IF NOT COVERED UNDER THE TPDES GENERAL PERMIT FOR THIS PROJECT. THE SITE MAP SHALL BE REVISED AND DATED IF THESE LOCATIONS CHANGE.

DISTURBED AREA

PROPERTY BOUNDARY ACREAGE = 0.99 ACRES

ONSITE DISTURBED AREA = 0.99 ACRES
OFFSITE DISTURBED AREA = 0.05 ACRES
TOTAL DISTURBED AREA = 1.04 ACRES

OWNER / DEVELOPER

MOHAMMED YOUNIS
KURO CONSTRUCTION, LLC
PO BOX 130937
SPRING, TX 77393
PH. (832) 708-7676

BEAMON ENGINEERING
TBPE FIRM NO. F-21588 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
NOVEMBER 15, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS			
NO.	DESCRIPTION	BY	DATE

EROSION CONTROL PLAN PHASE 1

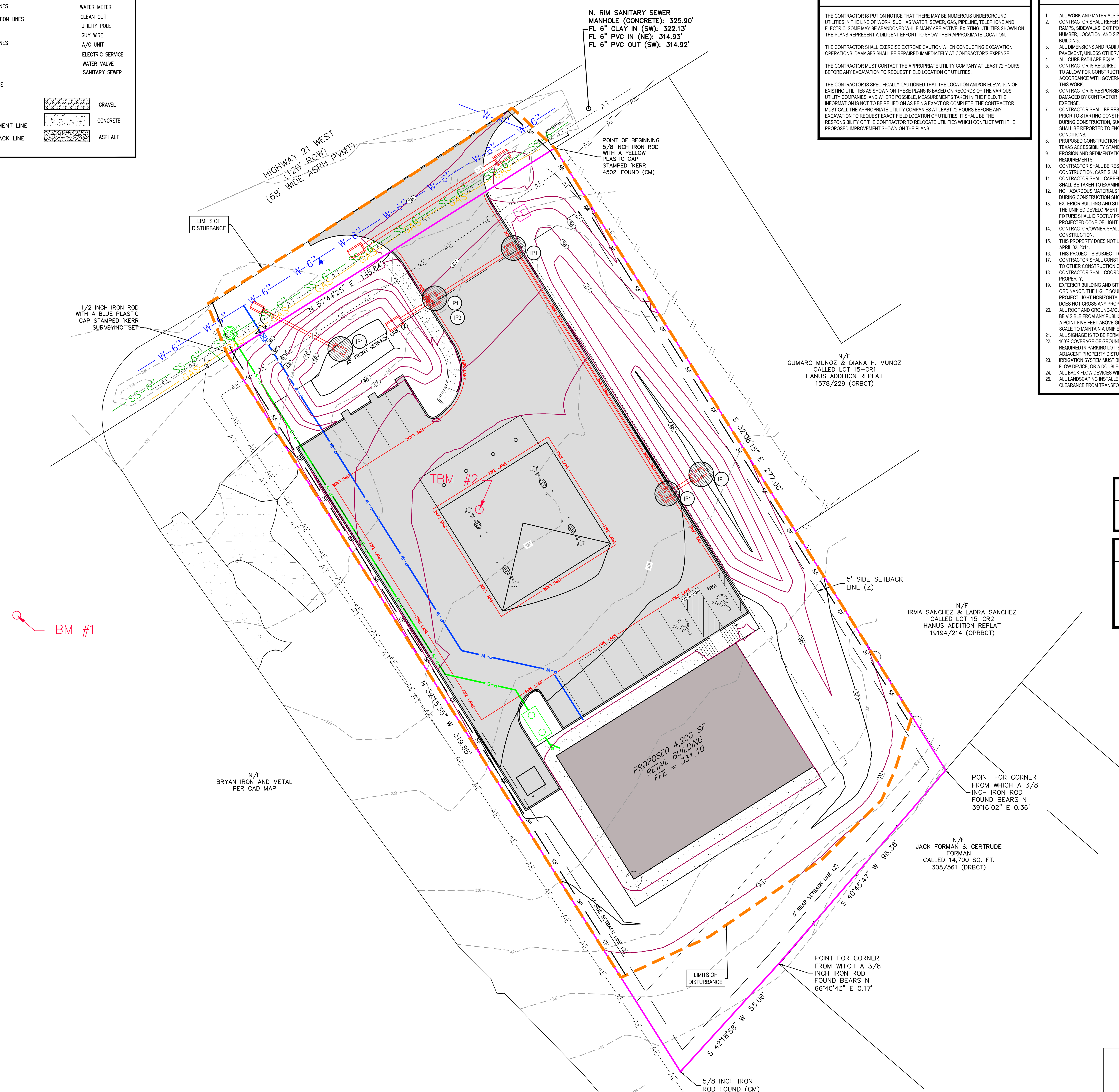
DATE: NOV. 15, 2024
SCALE: 1" = 40'
SHEET NO.: C-2.0

EXISTING LEGEND

AE — AE	AERIAL ELECTRIC LINES
AT	AERIAL COMMUNICATION LINES
GAS	GAS LINES
AE — AE	AERIAL ELECTRIC LINES
W—6"	WATER LINE
SS—6"	SEWER LINE
X — X	BARBED WIRE FENCE
	WIRE MESH FENCE
\\	WOOD FENCE
	EXISTING EASEMENT LINE
	BUILDING SETBACK LINE

WATER METER
CLEAN OUT
UTILITY POLE
GUY WIRE
A/C UNIT
ELECTRIC SERVICE
WATER VALVE
SANITARY SEWER

GRAVEL
CONCRETE
ASPHALT



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3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
4. ALL CURB RADII ARE EQUAL TO 3' UNLESS OTHERWISE NOTED.
5. CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENT/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. NO SEPARATE PAY FOR THIS WORK.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFY OWNER AND/OR ENGINEER PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OR RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS.
8. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
9. EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH LOCAL AND STATE REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGHOUT THE SITE DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PREVENT ANY NEGATIVE IMPACTS TO ADJACENT PROPERTIES.
11. CONTRACTOR SHALL CAREFULLY MONITOR WEATHER PATTERNS AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE THE SITE PRIOR TO WEEKENDS OR ABSENCES FROM THE WORK SITE.
12. NO HAZARDOUS MATERIALS WERE IDENTIFIED DURING PRELIMINARY SITE INVESTIGATIONS. ANY ITEMS FOUND SUSPECT DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
13. EXTERIOR BUILDING AND SITE LIGHTING WILL MEET THE STANDARDS OF SECTION 12-7.11 OUTDOOR LIGHTING STANDARDS OF THE UNIFIED DEVELOPMENT ORDINANCE. THE LIGHT SOURCE SHALL NOT PROJECT BELOW AN OPAQUE HOUSING AND NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY. FIXTURES WILL BE MOUNTED IN SUCH A MANNER THAT THE PROJECTED CONE OF LIGHT DOES NOT CROSS ANY PROPERTY LINE.
14. CONTRACTOR/OWNER SHALL MAKE A REASONABLE ATTEMPT TO NOTIFY ALL ADJACENT LANDOWNERS PRIOR TO BEGINNING CONSTRUCTION.
15. THIS PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOODPLAIN IDENTIFIED IN FEMA FIRM MAP 48041C0310F, EFFECTIVE APRIL 02, 2014.
16. THIS PROJECT IS SUBJECT TO CITY-WIDE IMPACT FEES AT THE TIME OF BUILDING PERMIT ISSUANCE.
17. CONTRACTOR SHALL CONSTRUCT DETENTION FACILITIES AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO OTHER CONSTRUCTION OR GROUND DISTURBING PROCEDURES.
18. CONTRACTOR SHALL COORDINATE WITH NEIGHBORHOOD PROPERTY OWNER PRIOR TO ANY CONSTRUCTION ON ADJACENT PROPERTY.
19. EXTERIOR BUILDING AND SITE LIGHTING WILL MEET THE STANDARDS OF SECTION 7.11 OF THE UNIFIED DEVELOPMENT ORDINANCE. THE LIGHT SOURCE SHALL NOT PROJECT BELOW AN OPAQUE HOUSING AND NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY. FIXTURES WILL BE MOUNTED IN SUCH A MANNER THAT THE PROJECTED CONE OF LIGHT DOES NOT CROSS ANY PROPERTY LINE.
20. ALL ROOF AND GROUND-MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW OR ISOLATED SO AS NOT TO BE VISIBLE FROM ANY PUBLIC RIGHT-OF-WAY OR RESIDENTIAL DISTRICT WITHIN 150' OF THE SUBJECT LOT, MEASURED FROM A POINT FIVE FEET ABOVE GRADE. SUCH SCREENING SHALL BE COORDINATED WITH THE BUILDING ARCHITECTURE AND SCALE TO MAINTAIN A UNIFIED APPEARANCE.
21. ALL SIGNAGE IS TO BE PERMITTED SEPARATELY.
22. 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.
23. IRRIGATION SYSTEM MUST BE PROTECTED BY A PRESSURE VACUUM BREAKER, A REDUCED PRESSURE PRINCIPLE BACK FLOW DEVICE, OR A DOUBLE-CHECK BACK FLOW DEVICE, AND INSTALLED AS PER CITY ORDINANCE 2394.
24. ALL BACK FLOW DEVICES WILL BE INSTALLED AND TESTED UPON INSTALLATION AS PER CITY ORDINANCE 2394.
25. ALL LANDSCAPING INSTALLED AROUND TRANSFORMER BOX SHALL MAINTAIN 3' CLEARANCE FROM SIDES AND REAR AND 10' CLEARANCE FROM TRANSFORMER DOORS.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM. THE CONTRACTOR MUST ALSO CONTACT THE CITY OF BRYAN PUBLIC WORKS DEPARTMENT (979-209-5900) TO LOCATE LINES OWNED BY THE CITY OF BRYAN

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

MS4 NOTE

NOTIFY THE OPERATOR OF THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) LISTED BELOW AT LEAST SEVEN (7) DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

SEND TO:
PAUL KASPAR, P.E.
CITY ENGINEER
300 SOUTH TEXAS AVENUE
BRYAN, TEXAS 77803
PHONE: 979-209-5030

811 Know what's below. Call before you dig.

N

0 10 20 40 60
1" = 20'

EROSION CONTROL LEGEND

	PROPERTY LINE / R.O.W. LINE
	LIMIT OF DISTURBANCE
-1.00%	DIRECTION AND SLOPE OF EXISTING OVERLAND FLOW
18	EXISTING CONTOUR
SF	TEMPORARY SILT FENCE (APPROXIMATE LOCATION, SHOWN OFFSET FOR CLARITY)
CE	STABILIZED CONSTRUCTION EXIT
CD	ROCK CHECK DAM
SS	SWPPP INFORMATION SIGN, APPROXIMATE LOCATION
TPS	TEMPORARY PARKING/STORAGE AREA (CONTRACTOR TO LOCATE WITHIN LIMITS OF DISTURBANCE AS NECESSARY)
DD	DIVERSION DITCH
ST	SEDIMENT TRAP
SB	SEDIMENT BASIN
TS	TEMPORARY SEEDING / STABILIZATION
IP2	INLET PROTECTION
	SOIL BOUNDARY LINE

SOIL TYPE LEGEND

ZaB	ZACK FINE SANDY LOAM, 1 TO 5 PERCENT SLOPES
BoB	BOONEVILLE FINE SANDY LOAM, 1 TO 3 PERCENT SLOPES

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

ADDING/RELOCATING BMP'S

CONTRACTOR SHALL RELOCATE OR ADD TO THE EXISTING BMP'S AS NECESSARY TO ENSURE NO SEDIMENT LADEN RUNOFF EXITS THE SITE.

LOCATION OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS

CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE LOCATIONS OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS ON THIS SITE MAP AND ENSURING THAT EACH LOCATION HAS THE NECESSARY PERMITS IF NOT COVERED UNDER THE TPDES GENERAL PERMIT FOR THIS PROJECT. THE SITE MAP SHALL BE REVISED AND DATED IF THESE LOCATIONS CHANGE.

DISTURBED AREA

PROPERTY BOUNDARY ACREAGE = 0.99 ACRES

ONSITE DISTURBED AREA = 0.99 ACRES
OFFSITE DISTURBED AREA = 0.05 ACRES
TOTAL DISTURBED AREA = 1.04 ACRES

OWNER / DEVELOPER

MOHAMMED YOUNIS
KURO CONSTRUCTION, LLC
PO BOX 130937
SPRING, TX 77393
PH. (832) 708-7676

BEAMON ENGINEERING
TBPE FIRM NO. F-21588 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
NOVEMBER 15, 2024

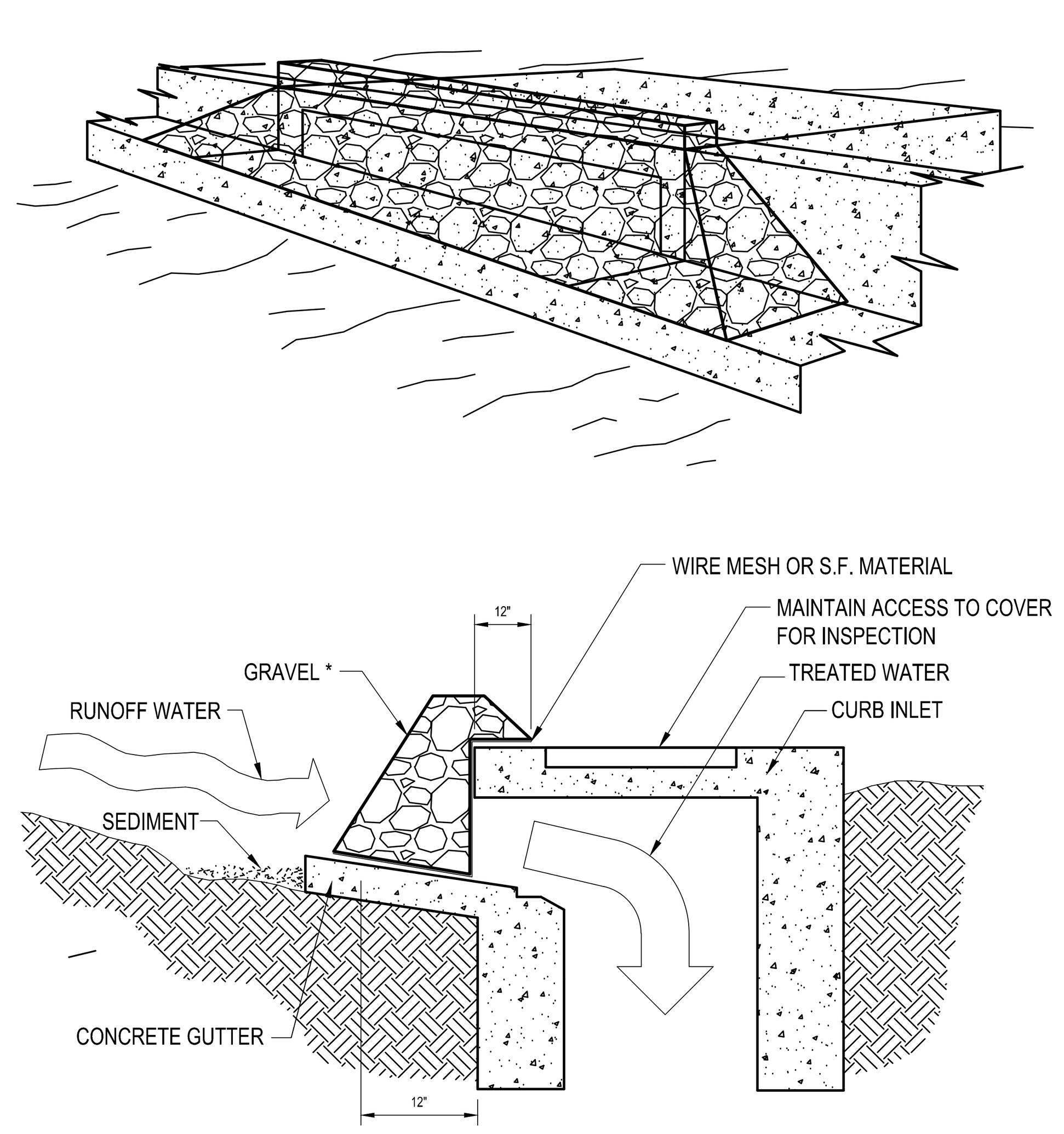
BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

EROSION CONTROL PLAN PHASE 2

DATE: NOV. 15, 2024
SCALE: 1" = 20'
SHEET NO.: C-2.1



SPECIFIC APPLICATION

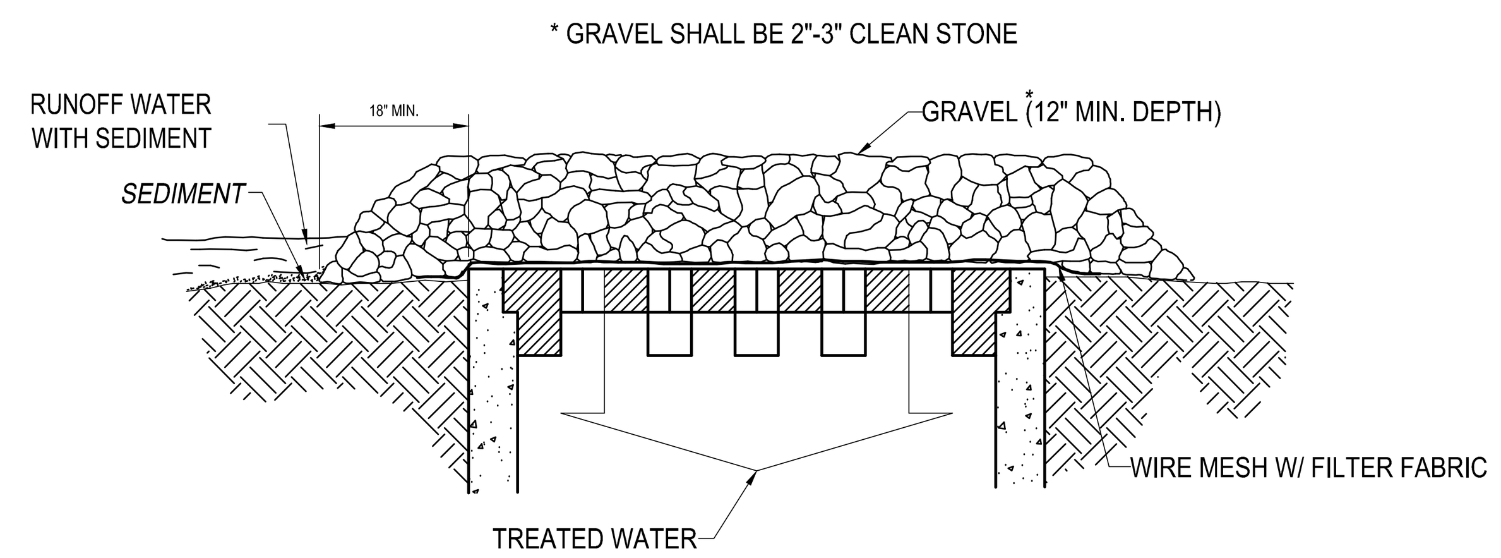
THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE 2"-3" CLEAN STONE

GRAVEL CURB INLET SEDIMENT FILTER (IP2)

N.T.S.

* GRAVEL SHALL BE 2"-3" CLEAN STONE

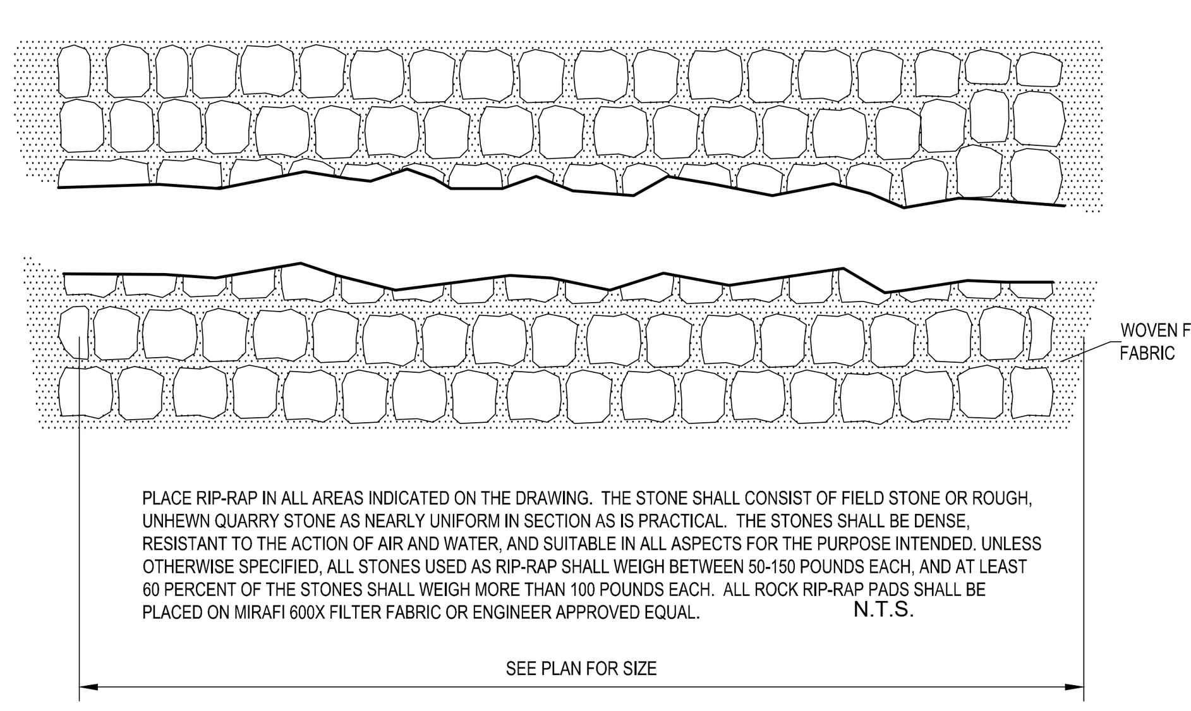


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED ACRES.

GRAVEL AND WIRE MESH INLET SEDIMENT FILTER (IP3)

N.T.S.



PLACE RIP-RAP IN ALL AREAS INDICATED ON THE DRAWING. THE STONE SHALL CONSIST OF FIELD STONE OR ROUGH, UNHEWN QUARRY STONE AS NEARLY UNIFORM IN SECTION AS IS PRACTICAL. THE STONES SHALL BE DENSE, RESISTANT TO THE ACTION OF AIR AND WATER, AND SUITABLE IN ALL ASPECTS FOR THE PURPOSE INTENDED. UNLESS OTHERWISE SPECIFIED, ALL STONES USED AS RIP-RAP SHALL WEIGH BETWEEN 50-150 POUNDS EACH, AND AT LEAST 60 PERCENT OF THE STONES SHALL WEIGH MORE THAN 100 POUNDS EACH. ALL ROCK RIP-RAP PADS SHALL BE PLACED ON MIRAFI 600X FILTER FABRIC OR ENGINEER APPROVED EQUAL. N.T.S.

ROCK RIP-RAP (RR)

N.T.S.

STORM WATER POLLUTION PREVENTION SYSTEM INSPECTIONS AND MAINTENANCE

BETWEEN THE TIME THIS SWPPP IS IMPLEMENTED AND FINAL SITE STABILIZATION IS ACHIEVED, ALL DISTURBED AREAS AND POLLUTANT CONTROLS MUST BE INSPECTED AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 0.5 INCHES OR GREATER. THE PURPOSE OF SITE INSPECTIONS IS TO ASSESS PERFORMANCE OF POLLUTANT CONTROLS. THE INSPECTIONS WILL BE CONDUCTED BY THE GENERAL CONTRACTOR'S DESIGNATED REPRESENTATIVE. BASED ON THESE INSPECTIONS, THE GENERAL CONTRACTOR WILL DECIDE WHETHER IT IS NECESSARY TO MODIFY THIS SWPPP, ADD OR RELOCATE SEDIMENT BARRIERS, OR WHATEVER ELSE MAY BE NEEDED IN ORDER TO PREVENT POLLUTANTS FROM LEAVING THE SITE VIA STORM WATER RUNOFF. THE GENERAL CONTRACTOR HAS THE DUTY TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL.

EXAMPLES OF PARTICULAR ITEMS TO EVALUATE DURING SITE INSPECTIONS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. DURING EACH INSPECTION THE INSPECTOR MUST EVALUATE OVERALL POLLUTANT CONTROL SYSTEM PERFORMANCE AS WELL AS PARTICULAR DETAILS OF INDIVIDUAL SYSTEM COMPONENTS. ADDITIONAL FACTORS SHOULD BE CONSIDERED AS APPROPRIATE TO THE CIRCUMSTANCES.

LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED WHERE VEHICLES ENTER AND EXIT. THIS ENTRANCE WILL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ON VEHICLES.

SEDIMENT BARRIERS MUST BE INSPECTED AND, IF NECESSARY, THEY MUST BE ENLARGED OR CLEANED IN ORDER TO PROVIDE ADDITIONAL CAPACITY. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS WILL BE STOCKPILED ON THE UP SLOPE SIDE. ADDITIONAL SEDIMENT BARRIERS MUST BE CONSTRUCTED AS NEEDED.

INSPECTIONS WILL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVER MUST BE REPAIRED OR SUPPLEMENTED. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.

GRASSED AREAS WILL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70 PERCENT DENSITY. THE DENSITY OF 70 PERCENT OR GREATER MUST BE MAINTAINED TO BE CONSIDERED AS STABILIZED. AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS GOAL. ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.

EXAMPLES FOR MAINTENANCE ITEMS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONAL PROCEDURES SHOULD BE CONSIDERED AS APPROPRIATE TO EACH INDIVIDUAL CIRCUMSTANCE.

A. EROSION AND SEDIMENT CONTROL MEASURES THAT HAVE BEEN IMPROPERLY INSTALLED OR HAVE BEEN DISABLED, RUN-OVER, REMOVED OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY. MAINTENANCE AND REPAIRS WILL BE CONDUCTED WITHIN 24 HOURS OF INSPECTION REPORT.
B. SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC FENCE WHEN IT REACHES ABOUT 1/3 THE HEIGHT OF THE FENCE. SEDIMENT WILL BE REMOVED FROM AROUND THE INLET BARRIERS AND DIKES WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED.
C. BASED ON INSPECTION RESULTS, ANY MODIFICATION NECESSARY TO INCREASE THE EFFECTIVENESS OF THIS SWPPP TO AN ACCEPTABLE LEVEL MUST BE MADE WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE INSPECTION REPORTS MUST BE COMPLETED ENTIRELY AND ADDITIONAL REMARKS SHOULD BE INCLUDED IF NEEDED TO FULLY DESCRIBE A SITUATION. AN IMPORTANT ASPECT OF THE INSPECTION REPORT IS THE DESCRIPTION OF ADDITIONAL MEASURES THAT NEED TO BE TAKEN TO ENHANCE PLAN EFFECTIVENESS. THE INSPECTION REPORT MUST IDENTIFY WHETHER THE SITE WAS IN COMPLIANCE WITH THE SWPPP AT THE TIME OF INSPECTION AND SPECIFICALLY IDENTIFY ALL INCIDENTS OF NON-COMPLIANCE.
D. INSPECTION REPORTS MUST BE KEPT ON FILE BY THE GENERAL CONTRACTOR AS AN INTEGRAL PART OF THIS SWPPP FOR AT LEAST THREE YEARS FROM THE DATE OF COMPLETION OF THE PROJECT.

ULTIMATELY, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ASSURE THE ADEQUACY OF SITE POLLUTANT DISCHARGE CONTROLS. ACTUAL PHYSICAL SITE CONDITIONS OR CONTRACTOR PRACTICES COULD MAKE IT NECESSARY TO INSTALL MORE STRUCTURAL CONTROLS THAN ARE SHOWN ON THE PLANS. (FOR EXAMPLE, LOCALIZED CONCENTRATIONS OF RUNOFF COULD MAKE IT NECESSARY TO INSTALL ADDITIONAL SEDIMENT BARRIERS). ASSESSING THE NEED FOR ADDITIONAL CONTROLS AND IMPLEMENTING THEM OR ADJUSTING EXISTING CONTROLS WILL BE A CONTINUING ASPECT OF THIS SWPPP UNTIL THE SITE ACHIEVES FINAL STABILIZATION.

1/2"Ø GALVANIZED LAG BOLTS WITH HARDWARE (TYP. 6 PER SIGN)

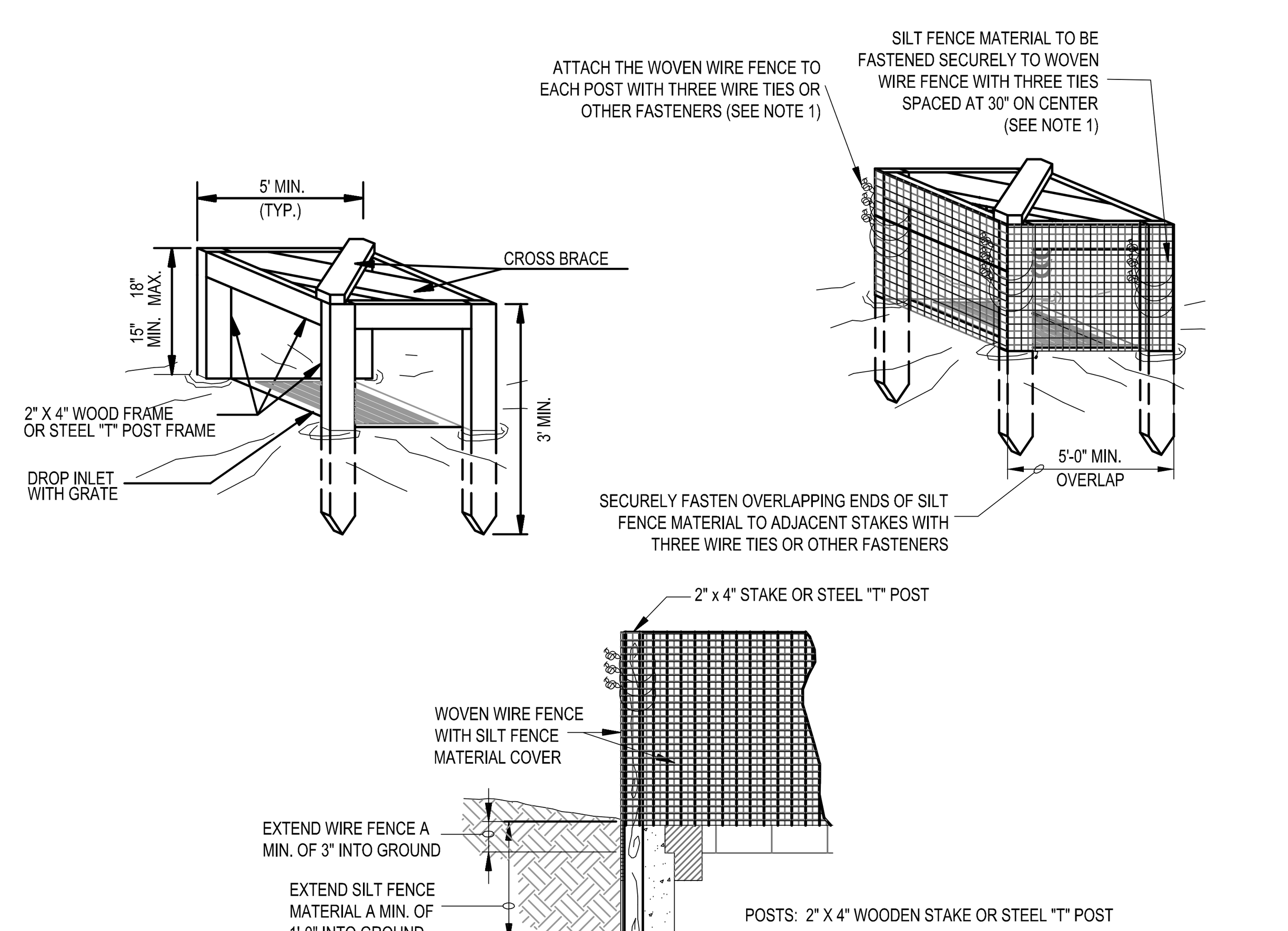
NOTE:
THE FOLLOWING INFORMATION SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION;
A. FOR PROJECTS 5 ACRES AND LARGER, THE TPDES PERMIT NUMBER FOR THE PROJECT, A COPY OF THE NOI, AND A COPY OF THE LARGE CONSTRUCTION SITE NOTICE FOR THE PRIMARY OPERATOR(S) AND THE SECONDARY OPERATOR(S). FOR PROJECTS LESS THAN 5 ACRES, A COPY OF THE SMALL CONSTRUCTION SITE NOTICE.
B. THE NAME AND TELEPHONE NUMBER OF A LOCAL CONTACT PERSON;
C. A BRIEF DESCRIPTION OF THE PROJECT;
D. THE LOCATION OF THE SWPPP IF THE SITE IS INACTIVE OR DOES NOT HAVE AN ONSITE LOCATION TO STORE THE PLAN.

4' x 4' x 3/4" THICK TREATED PLYWOOD (TYP. 1 PER SIGN)

4" x4" x12' LONG TREATED WOOD POST (4' BURY) (TYP. 2 PER SIGN)

PROJECT SIGN DETAIL

N.T.S.



POSTS: 2" X 4" WOODEN STAKE OR STEEL "T" POST
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

1. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
2. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED ACROSS TWO POSTS.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE FABRIC. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
4. ALL SILT FENCE INLETS SHALL INCLUDE WIRE SUPPORT.

SILT FENCE INLET PROTECTION (IP1)

N.T.S.

EROSION CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS REQUIRED BY THE CITY ENGINEER.

NOTE:

POST A SIGN READING "CONCRETE WASH OUT PIT" NEXT TO THE PIT.

VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASH OUT THEIR TRUCKS IN THE PIT AND NO WHERE ELSE.

NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.

EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.

ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.

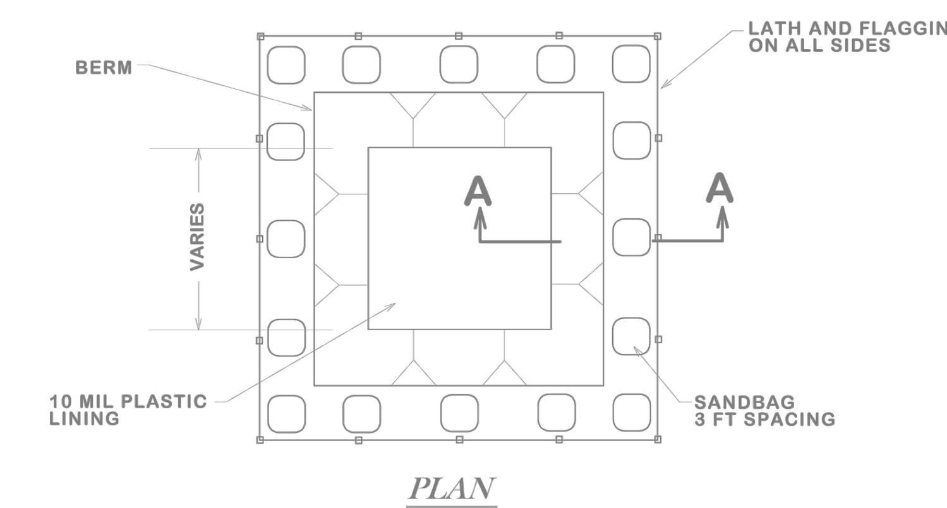
TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

WASHOUT FACILITIES WILL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.

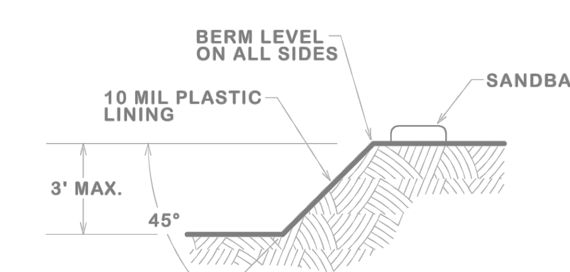
PLASTIC LINING MATERIAL WIL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.

WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF OFFSITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF. BELOW GRADE PITS SHALL BE BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.

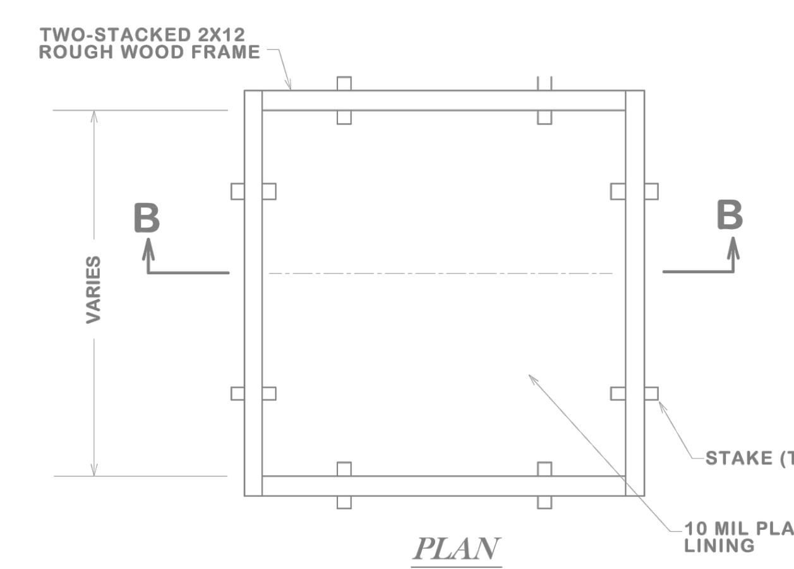
CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCK EQUIPMENT.



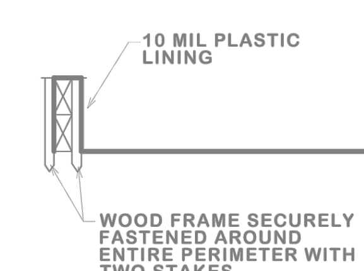
PLAN
TYPE - "BELOW GRADE"



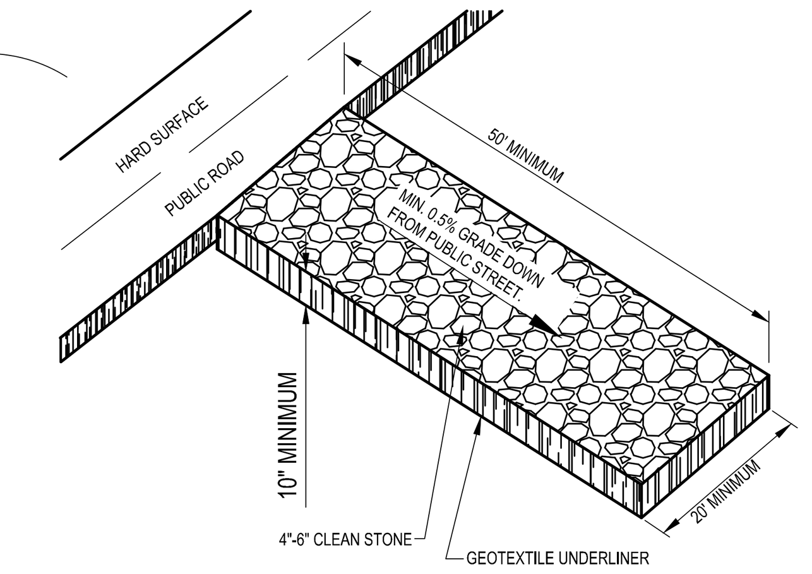
SECTION A-A



PLAN
TYPE - "ABOVE GRADE"



SECTION B-B



STABILIZED CONSTRUCTION EXIT

N.T.S.

CONSTRUCTION NOTES:

1. GRADATION OF ROCK.

SIZE OF ROCK LBS.	% SMALLER BY WEIGHT
200	100
50	35 - 65
3	0

2. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE DRESSING WITH ADDITIONAL STONE AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT CONTROLLING STRUCTURE. USE SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS TO PREVENT SEDIMENT FROM ENTERING ANY STORM DRAIN, DITCH, OR WATER COURSE.
4. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

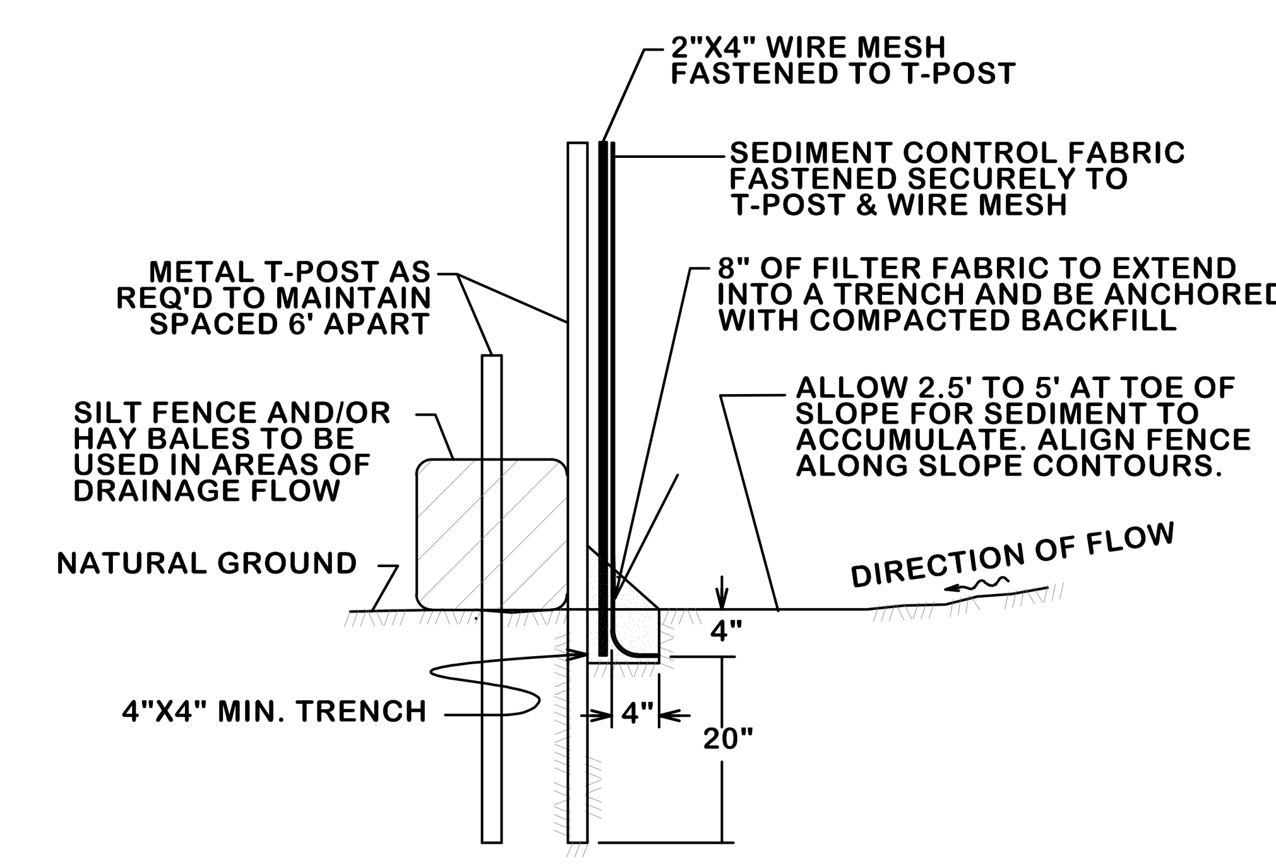
TEMPORARY SEEDING NOTES

NOTES:

1. THE GC IS REQUIRED TO, AT A MINIMUM, INITIATE SOIL STABILIZATION MEASURES IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT LIKELY RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
2. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON-VEGETATED MEASURES, IF UTILIZED.
3. ALL DISTURBED AREAS MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES APPROPRIATE FOR SITE SOIL AND CLIMATE CONDITIONS. MULCH IS REQUIRED FOR ALL SEEDING APPLICATIONS, AND ALL MULCH APPLICATIONS MUST INCLUDE A SUITABLE FORM OF MULCH ANCHORING TO MINIMIZE MOVEMENT OF MULCH BY WIND OR WATER.
4. ALTERNATIVE STABILIZATION MEASURES TO SEEDING, SUCH AS ANCHORED MULCH APPLICATION (WITHOUT SEEDING), MAY BE UTILIZED DURING PERIODS WHEN VEGETATIVE GROWTH IS UNLIKELY (E.G. WINTER MONTHS).
5. IT IS NOT ACCEPTABLE TO ALLOW BARE SOIL TO REMAIN EXPOSED AT ANY TIME DURING THE YEAR, REGARDLESS OF WEATHER/TEMPERATURE/SITE CONDITIONS.
6. ALTERNATIVE STABILIZATION MEASURES INCLUDE, BUT ARE NOT LIMITED TO: ANCHORED STRAW/HAY MULCH, WOOD CELLULOSE FIBER MULCH, SPRAY-ON SOIL GLUES/BINDERS, AND ROLLED EROSION CONTROL PRODUCTS.
7. ALL ROLLED EROSION CONTROL PRODUCTS SHALL HAVE CURRENT QDOR(TM) STATUS ISSUED BY THE EROSION CONTROL TECHNOLOGY COUNCIL (ECTC) PLUS ANY STATE OR AGENCY-SPECIFIC REQUIREMENTS. EVIDENCE OF QDOR(TM) APPROVAL SHALL ACCOMPANY THE PRODUCT SHIPPED TO THE JOBSITE FOR READY IDENTIFICATION BY THE CONTRACTOR OR AGENCY INSPECTOR.
8. ROLLED EROSION CONTROL PRODUCTS (NETS, BLANKETS, TURF REINFORCED MATES) AND VEGETATED AREAS NOT MEETING REQUIRED VEGETATIVE DENSITIES FOR FINAL STABILIZATION MUST BE INSPECTED DAILY. RILING, RUTTING AND OTHER SIGNS OF EROSION INDICATE THE SPECIFIED EROSION CONTROL DEVICE IS NOT FUNCTIONING OR INSTALLED PROPERLY AND/OR ADDITIONAL EROSION CONTROL DEVICES ARE WARRANTED.

GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING (SITE MAP), THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (TPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS, AND MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS OR LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 21 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.



SILT FENCE ASSEMBLY

SWPP1-03

BEAMON ENGINEERING
TBPE FIRM NO. F-21588
16172 BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
NOVEMBER 15, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

EROSION CONTROL PLAN DETAILS

DATE: NOV. 15, 2024
SCALE: AS NOTED
SHEET NO. C-2.2

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, FEDERAL, AND OSHA REGULATION.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF SLOPED PAVING, RAMPS, SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, TOTAL NUMBER, LOCATION, AND SIZE OF DOWNSPOUTS AND ANY OTHER APPURTENANCES WHICH ARE CONNECTED TO THE BUILDING.
3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
4. ALL CURB RADII ARE EQUAL TO 2' UNLESS OTHERWISE NOTED.
5. CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENT/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. NO SEPARATE PAY FOR THIS WORK.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFY OWNER AND/OR ENGINEER PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OR RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS.
8. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
9. EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH LOCAL AND STATE REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGHOUT THE SITE DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PREVENT ANY NEGATIVE IMPACTS TO ADJACENT PROPERTIES.
11. CONTRACTOR SHALL CAREFULLY MONITOR WEATHER PATTERNS AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE THE SITE PRIOR TO WEEKENDS OR ABSENCES FROM THE WORK SITE.
12. NO HAZARDOUS MATERIALS WERE IDENTIFIED DURING PRELIMINARY SITE INVESTIGATIONS. ANY ITEMS FOUND SUSPECT DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
13. CONTRACTOR/OWNER SHALL MAKE A REASONABLE ATTEMPT TO NOTIFY ALL ADJACENT LANDOWNERS PRIOR TO BEGINNING CONSTRUCTION.
14. THIS PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOODPLAIN IDENTIFIED IN FEMA FIRM MAP 48041C0195E, EFFECTIVE MAY 16, 2012.
15. CONTRACTOR SHALL CONSTRUCT DETENTION FACILITIES AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO OTHER CONSTRUCTION OR GROUND DISTURBING PROCEDURES.
16. CONTRACTOR SHALL COORDINATE WITH NEIGHBORHOOD PROPERTY OWNER PRIOR TO ANY CONSTRUCTION ON ADJACENT PROPERTY.
17. EXTERIOR BUILDING AND SITE LIGHTING WILL MEET THE STANDARDS OF SECTION 7.11 OF THE UNIFIED DEVELOPMENT ORDINANCE. THE LIGHT SOURCE SHALL NOT PROJECT BELOW AN OPAQUE HOUSING AND NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY. FIXTURES WILL BE MOUNTED IN SUCH A MANNER THAT THE PROJECTED CONE OF LIGHT DOES NOT CROSS ANY PROPERTY LINE.
18. ALL ROOF AND GROUND-MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW OR ISOLATED SO AS NOT TO BE VISIBLE FROM ANY PUBLIC RIGHT-OF-WAY OR RESIDENTIAL DISTRICT WITHIN 150' OF THE SUBJECT LOT, MEASURED FROM A POINT FIVE FEET ABOVE GRADE. SUCH SCREENING SHALL BE COORDINATED WITH THE BUILDING ARCHITECTURE AND SCALE TO MAINTAIN A UNIFIED APPEARANCE.
19. ALL SIGNAGE IS TO BE PERMITTED SEPARATELY.
20. 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.
21. IRRIGATION SYSTEM MUST BE PROTECTED BY A PRESSURE VACUUM BREAKER, A REDUCED PRESSURE PRINCIPLE BACK FLOW DEVICE, OR A DOUBLE-CHECK BACK FLOW DEVICE, AND INSTALLED AS PER CITY ORDINANCE 2394.
22. ALL BACK FLOW DEVICES WILL BE INSTALLED AND TESTED UPON INSTALLATION AS PER CITY ORDINANCE.
23. ALL LANDSCAPING INSTALLED AROUND TRANSFORMER BOX SHALL MAINTAIN 3' CLEARANCE FROM SIDES AND REAR AND 10' CLEARANCE FROM TRANSFORMER DOORS.
24. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST CITY OF BRYAN STANDARD SPECIFICATIONS AND DETAILS FOR (WATER, SEWER STREETS DRAINAGE). ALL CONSTRUCTION SHALL BE COORDINATED WITH THE CITY ENGINEER'S OFFICE.
25. ALL UTILITY LINES (WATER, GAS, SANITARY SEWER, STORM SEWER, ETC.) SHOWN ARE TAKEN FROM BEST AVAILABLE RECORD INFORMATION BASED ON CONSTRUCTION UTILITY MAP DOCUMENTS OBTAINED FROM CITY & INDEPENDENT AGENCIES AND/OR ABOVE GROUND FIELD EVIDENCE. SHOWN POSITIONS MAY NOT REPRESENT AS-BUILT CONDITIONS.
26. PROPOSED USE IS RETAIL
27. BUILDING SETBACK SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN UNIFIED DEVELOPMENT ORDINANCE (OR PDD IF APPLICABLE).
28. BEARING SYSTEM SHOWN HEREON IS BASED ON THE TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203), GRID NORTH AS ESTABLISHED FROM GPS OBSERVATION USING THE LEICA SMARTNET NAD83 (NA2011) EPOCH 2010 MULTI-YEAR CORS SOLUTION 2 (MYCS2).
29. DISTANCES SHOWN HEREON ARE SURFACE DISTANCES UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES (NOT AREAS) DIVIDE BY A COMBINED SCALE FACTOR OF 1.00011350800672 (CALCULATED USING GEOID12B).
30. (CM) INDICATES CONTROLLING MONUMENT FOUND AND USED TO ESTABLISH PROPERTY BOUNDARIES.
31. NO BUILDINGS WERE LOCATED ON THE PROPERTY AT THE TIME OF SURVEY
32. ALL BEARINGS AND DISTANCES ARE CALLED AND MEASURED FROM THE DEED RECORDED IN VOLUME 12419, PAGE 184 (OPRBCT).
33. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. EASEMENTS AND OTHER MATTERS MAY APPLY.
34. THIS SURVEY WAS PREPARED IN CONJUNCTION WITH A FIELD NOTES DESCRIPTION (METES AND BOUNDS). THE SURVEY AND FIELD NOTES ARE INTENDED TO BE ONE INSTRUMENT TOGETHER.
35. THIS PROPERTY IS LOCATED IN THE WESTERN CORRIDOR OVERLAY.

ELECTRICAL NOTES

1. REFER TO ARCHITECTURAL/MEP BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE PRIMARY ELECTRIC LINES. THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THE PRIMARY CONDUIT WITH PULL STRINGS, SECONDARY CONDUIT AND WIRE, AND TRANSFORMER PADS. THE ELECTRICAL PROVIDER WILL PULL WIRE FOR PRIMARY ELECTRICAL SERVICE, SET THE TRANSFORMERS AND MAKE THE CONNECTIONS INSIDE THE TRANSFORMER.
3. ELECTRIC COMPANY WILL BE RESPONSIBLE FOR THE DESIGN OF PRIMARY WIRE AND CONDUIT SIZES INCLUDING PULL BOXES, AND THE SIZE AND NUMBER OF TRANSFORMERS.

TELEPHONE NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE TELEPHONE CONDUIT WITH PULL STRING. ALL BENDS SHALL BE LONG RADIUS SWEEPING BENDS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TELEPHONE INSTALLATION WITH THE TELEPHONE COMPANY.
2. TELEPHONE COMPANY WILL INSTALL THE UNDERGROUND TELEPHONE CABLE FROM THE END OF THE CONTRACTOR INSTALLED CONDUITS AT THE BUILDING TO THE CONNECTION AT THE POLE AND/OR EXISTING LINES.
3. CONTRACTOR SHALL INSTALL GALVANIZED PULL WIRE OR PURPLE PROPYLPOLYETHYLENE ROPE WITH A MINIMUM PULLING TENSION OF 100 POUNDS IN ALL CONDUIT.

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

TRAFFIC CONTROL NOTE

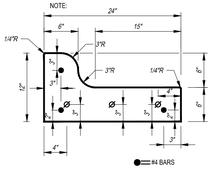
GUIDELINES SET FORTH IN PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS" OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MOST RECENT EDITION AS REVISED) SHALL BE OBSERVED.

ACCESSIBILITY NOTES

1. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
2. ACCESSIBLE ROUTES SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2.0% (1:48). ACCESSIBLE ROUTE SURFACE SHALL BE SLIP RESISTANT AND CONSTRUCTED IN A MANNER THAT WILL NOT RETAIN WATER AND BE A MINIMUM OF 3 FEET WIDE.
3. ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN 5.0% (1:20) IS A RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5' X 5' LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12).
4. SURFACE OF CURB RAMPS SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE TEXTURE AND CONTRASTING COLOR. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12). CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH.
5. ACCESSIBLE PARKING SPACE SLOPES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.

TYPE "G" EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.'S AND P.C.'S. TYPE "B" CONTRACTION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.

NOTE:



● #4 BARS

Ø 3/4" X 18" SMOOTH EXPANSION DOWELS

REFER TO GRADING PLAN FOR PAVEMENT ELEVATIONS

TYPICAL CURB AND GUTTER SECTION

FIRE LANE STRIPING NOTE

LOCATION OF FIRE LANE STRIPING SHALL BE APPROVED BY THE LOCAL FIRE MARSHAL PRIOR TO APPLICATION. UNLESS OTHERWISE DIRECTED BY THE FIRE MARSHAL, FIRE LANE STRIPING SHALL BE 6" RED PAINTED STRIPE ALONG TOP AND FACE OF CURB, FACE OF SIDEWALK, OR DIRECTLY ADJACENT TO PROPOSED PARKING LOT STRIPING, WITH 4" WHITE STENCILED LETTERS "FIRE LANE - NO PARKING" PAINTED ON RED STRIPE AT 25' CENTER TO CENTER.

ALL SIDEWALKS SHOWN ON THIS PLAN SHALL BE ADA COMPLIANT

*NOTE: ALL CURB RETURN RADII ARE 3' UNLESS OTHERWISE NOTED

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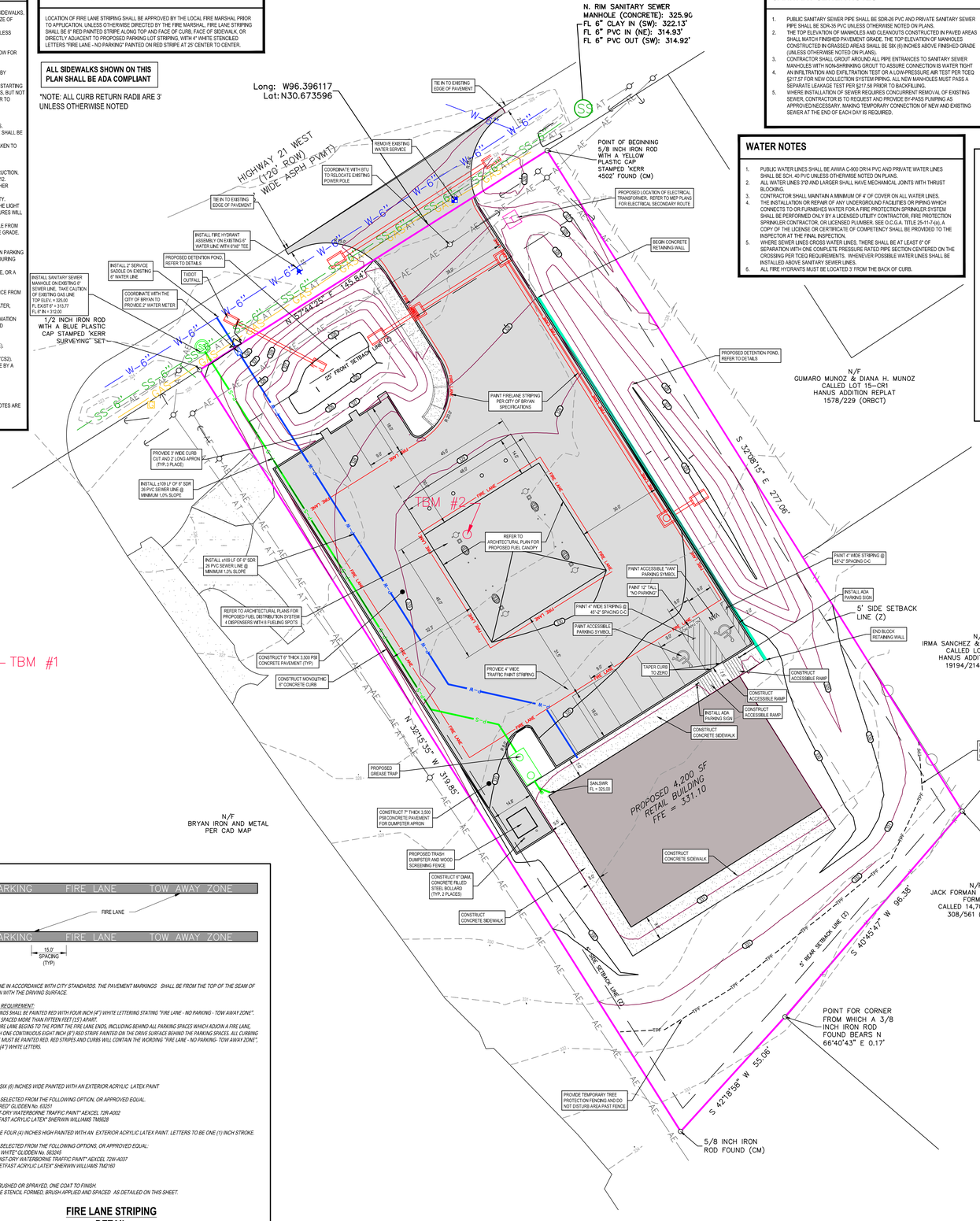
Lat: N30.673596



NO PARKING FIRE LANE TOW AWAY ZONE

FIRE LANE

NO PARKING FIRE LANE TOW AWAY ZONE

15.0' SPACING (TYP)

GENERAL NOTE:

A. STRIPING TO BE DONE IN ACCORDANCE WITH CITY STANDARDS. THE PAVEMENT MARKINGS SHALL BE FROM THE TOP OF THE SEAM OF THE CURB TO A POINT EVEN WITH THE DRIVING SURFACE.

CITY OF COLLEGE STATION REQUIREMENT:

1. *ALL CURBS AND CURB ENDS SHALL BE PAINTED RED WITH FOUR INCH (4") WHITE LETTERING STATING "FIRE LANE - NO PARKING - TOW AWAY ZONE". WORDING MAY NOT BE SPACED MORE THAN FIFTEEN FEET (15') APART.*
2. *FROM THE POINT THE FIRE LANE BEGINS TO THE POINT THE FIRE LANE ENDS, INCLUDING BEHIND ALL PARKING SPACES WHICH ADJOIN A FIRE LANE, SHALL BE MARKED WITH ONE CONTINUOUS EIGHT INCH (8") RED STRIPE PAINTED ON THE DRIVE SURFACE BEHIND THE PARKING SPACES. ALL CURBING ADJOINING A FIRE LANE MUST BE PAINTED RED. RED STRIPES AND CURBS WILL CONTAIN THE WORDING "FIRE LANE - NO PARKING- TOW AWAY ZONE", PAINTED IN FOUR INCH (4") WHITE LETTERS.*

STRIPING DETAIL:

A. PAINT:
- *1. STRIPE SHALL BE SIX (6) INCHES WIDE PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT*
- *A. COLOR SHALL BE SELECTED FROM THE FOLLOWING OPTION, OR APPROVED EQUAL.*
  - *1.) "TRAFFIC RED" GLIDDEN No. 63251*
  - *2.) "RED FAST-DRY WATERBORNE TRAFFIC PAINT" AEXCEL 72R-A002*
  - *3.) "RED SETFAST ACRYLIC LATEX" SHERWIN WILLIAMS TM5628*
- *2. LETTERS SHALL BE FOUR (4) INCHES HIGH PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT. LETTERS TO BE ONE (1) INCH STROKE.*
- *B. COLOR SHALL BE SELECTED FROM THE FOLLOWING OPTIONS, OR APPROVED EQUAL:*
  - *1.) "TRAFFIC WHITE" GLIDDEN No. 563245*
  - *2.) "WHITE FAST-DRY WATERBORNE TRAFFIC PAINT" AEXCEL 72W-A037*
  - *3.) "WHITE SETFAST ACRYLIC LATEX" SHERWIN WILLIAMS TM2160*

B. APPLICATION:
- *1. STRIPE MAY BE BRUSHED OR SPRAYED, ONE COAT TO FINISH.*
- *2. LETTERS SHALL BE STENCIL FORMED, BRUSH APPLIED AND SPACED AS DETAILED ON THIS SHEET.*

FIRE LANE STRIPING DETAIL

SANITARY SEWER NOTES

1. PUBLIC SANITARY SEWER PIPE SHALL BE SDR-26 PVC AND PRIVATE SANITARY SEWER PIPE SHALL BE SDR-35 PVC UNLESS OTHERWISE NOTED ON PLANS.
2. THE TOP ELEVATION OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS SHALL BE SIX (6) INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED ON PLANS).
3. CONTRACTOR SHALL GROUT AROUND ALL PIPE ENTRANCES TO SANITARY SEWER MANHOLES WITH NON-SHRINKING GROUT TO ASSURE CONNECTION IS WATER TIGHT
4. AN INFILTRATION AND EXFILTRATION TEST OR A LOW-PRESSURE AIR TEST PER TCEQ §217.57 FOR NEW COLLECTION SYSTEM PIPING. ALL NEW MANHOLES MUST PASS A SEPARATE LEAKAGE TEST PER §217.58 PRIOR TO BACKFILLING.
5. WHERE INSTALLATION OF SEWER REQUIRES CONCURRENT REMOVAL OF EXISTING SEWER, CONTRACTOR IS TO REQUEST AND PROVIDE BY-PASS PUMPING AS APPROVED/NECESSARY. MAKING TEMPORARY CONNECTION OF NEW AND EXISTING SEWER AT THE END OF EACH DAY IS REQUIRED.

WATER NOTES

1. PUBLIC WATER LINES SHALL BE AWWA C-900 DR14 PVC AND PRIVATE WATER LINES SHALL BE SCH. 40 PVC UNLESS OTHERWISE NOTED ON PLANS.
2. ALL WATER LINES 3"Ø AND LARGER SHALL HAVE MECHANICAL JOINTS WITH THRUST BLOCKING.
3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4' OF COVER ON ALL WATER LINES.
4. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OR PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR A FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR, OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7-(a), A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.
5. WHERE SEWER LINES CROSS WATER LINES, THERE SHALL BE AT LEAST 6" OF SEPARATION WITH ONE COMPLETE PRESSURE RATED PIPE SECTION CENTERED ON THE CROSSING PER TCEQ REQUIREMENTS. WHENEVER POSSIBLE WATER LINES SHALL BE INSTALLED ABOVE SANITARY SEWER LINES.
6. ALL FIRE HYDRANTS MUST BE LOCATED 3' FROM THE BACK OF CURB.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRIC, SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

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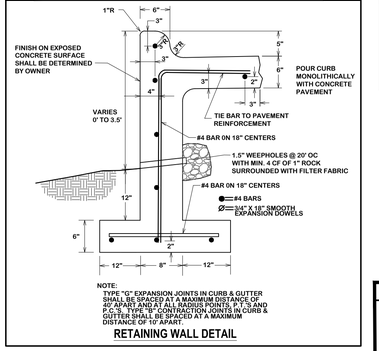
FINISH ON EXPOSED CONCRETE SURFACE SHALL BE DETERMINED BY OWNER



POUR CURB MONOLITHICALLY WITH CONCRETE PAVEMENT

● #4 BARS

Ø 3/4" X 18" SMOOTH EXPANSION DOWELS

NOTE:

TYPE "G" EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.'S AND P.C.'S. TYPE "B" CONTRACTION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.

RETAINING WALL DETAIL

GENERAL UTILITY NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. MAINTAIN A MINIMUM OF 24" VERTICAL CLEARANCE BETWEEN WATER LINES, SANITARY LINE, STORM LINES AND GAS LINES (EXISTING AND PROPOSED) UNLESS OTHERWISE SHOWN IN PROFILE.
4. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED.
5. LINES INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING.
6. ALL STEEL ENCASEMENT PIPE SHALL HAVE A WALL THICKNESS OF 0.375 INCHES UNLESS NOTED OTHERWISE.
7. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING, TO CENTER LINE OF MANHOLE, FACE OF BUILDING, OR BACK OF CURB, UNLESS OTHERWISE NOTED.
8. IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN WHAT IS SHOWN ON THESE PLANS AND WHAT IS FOUND IN THE FIELD THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

811

Know what's **below.**
Call before you dig.

0 10 20 40 60

1" = 20'

TOPOGRAPHIC SURVEY NOTE

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TEXAS ONE CALL SYSTEM

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SITE INFORMATION

DEVELOPER:	MOHAMMED YOUNIS KURO CONSTRUCTION, LLC P.O. BOX 130937 SPRING, TX 77393 CELL: (832) 708-7676		
APPLICANT:	DANIEL BEAMON BEAMON ENGINEERING LLC 16172 BENCH LANE BRYAN, TEXAS 77807 PH: 979-571-2407		
LEGAL DESCRIPTION:	LOT 16, BLOCK 5, HANUS ADDITION BRAZOS COUNTY, TEXAS		
ZONED:	C-2		
ADDRESS:	2009 W SH-21 BRYAN, TEXAS		
LAND USE:	RETAIL		
SETBACKS:	FRONT - 25' SIDE - 5' REAR - 5'		
LAND AREA:	0.999 ACRES		
HEATED SQUARE FOOTAGE	4,200 SF		
MAX. BUILDING HEIGHT:	35'-0"		
END ISLAND AREA REQUIRED		4 ISLANDS @ 180 SF	= 720 SF
END ISLAND AREA PROVIDED			= 815+ SF

PARKING INFORMATION

USAGE	BLDG AREA	REQUIRED PARKING RATIO	PARKING REQUIRED
RETAIL	4,200	1.0 per 200 SF	21
		TOTAL PARKING REQUIRED	21

REQUIRED ACCESSIBLE PARKING:
MIN. 2% OF THE TOTAL SPACES MUST BE ACCESSIBLE = 2 REQUIRED ACCESSIBLE SPACES

1 OF EVERY 6 ACCESSIBLE SPACES, BUT NOT LESS THAN 1, SHOULD BE VAN ACCESSIBLE = 1 REQUIRED VAN ACCESSIBLE SPACES

PARKING PROVIDED	
STANDARD SPACES	11
ADA ACCESSIBLE SPACES	1
ADA VAN ACCESSIBLE SPACES	1
CANOPY SPACES	8
TOTAL PARKING PROVIDED	21

SITE LEGEND

▬ ▬ ▬	PROPERTY LINE
▇	PROPOSED BUILDING
▇	CONC PAVEMENT 6" THICK, 3,500 PSI WITH #4 BARS 18" OCEW ON 8" STABILIZED SUBGRADE
▨	CONCRETE SIDEWALK 4" THICK, 3,500 PSI WITH #4 BARS 18" OCEW
▨	CONCRETE SIDEWALK 5" THICK, 3,000 PSI WITH #4 BARS 18" OCEW REFER TO MULTI-USE PATH PLANS
═	PROPOSED MONOLITHIC CONCRETE CURB
— — 15' SB —	BUILDING SETBACK LINE
12	PARKING SPACES PER ROW
— FIRE LANE —	FIRE LANE (PER COB SPECIFICATIONS) SHOWN OFFSET FROM CURB FOR CLARITY
⌐ — — ¬	PROPOSED 15' WIDE PUBLIC UTILITY EASEMENT
— P-W —	PROPOSED WATER LINE
— P-S —	PROPOSED SANITARY SEWER
═	PROPOSED STORM SEWER
▦	PROPOSED STORM SEWER STRUCTURE
T	PROPOSED TRANSFORMER LOCATION
●	PROPOSED FIRE HYDRANT

EXISTING LEGEND

—AE—AE—	AERIAL ELECTRIC LINES	▣	WATER METER
— AT —	AERIAL COMMUNICATION LINES	◉	CLEAN OUT
— GAS —	GAS LINES	⌀	UTILITY POLE
—AE—AE—	AERIAL ELECTRIC LINES	↩	GUY WIRE
— W—6" —	WATER LINE	◍	A/C UNIT
— SS—6" —	SEWER LINE	E	ELECTRIC SERVICE
— X — X —	BARBED WIRE FENCE	⧓	WATER VALVE
— ——	WIRE MESH FENCE	SS	SANITARY SEWER
—— \\ ——	WOOD FENCE	▨	GRAVEL
— — — — —	EXISTING EASEMENT LINE	▨	CONCRETE
— — — —	BUILDING SETBACK LINE	▨	ASPHALT

BEAMON ENGINEERING
TBPE FIRM NO. F-21588 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER

Daniel Beamon
DECEMBER 16, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

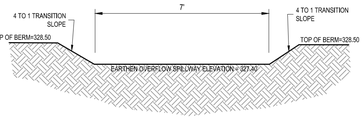
REVISIONS

NO.	DESCRIPTION	BY	DATE

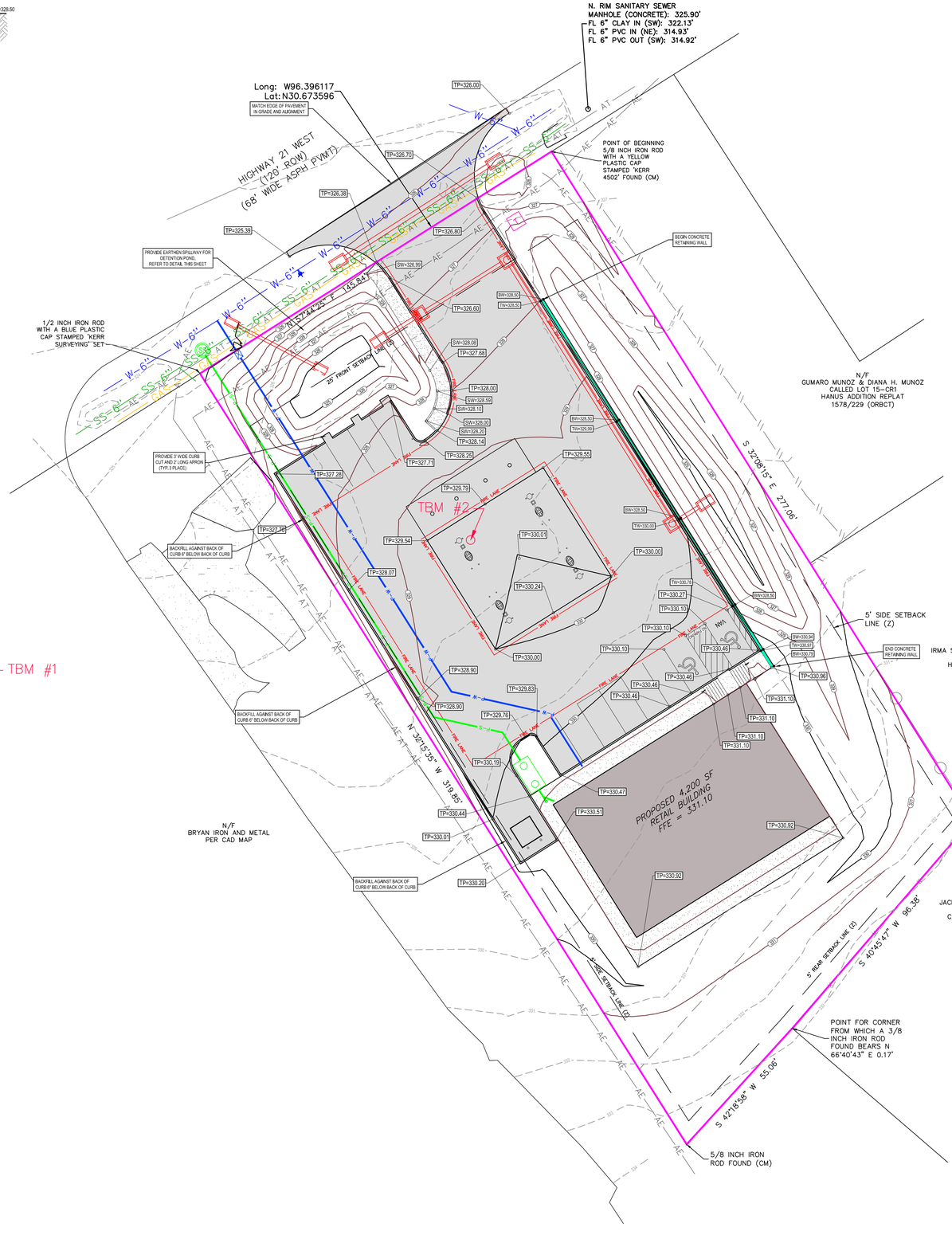
SITE PLAN

DATE:	SCALE:
DEC. 16, 2024	1"=20'

SHEET NO.:
C-3.0



DETENTION POND SPILLWAY N.T.S.



GENERAL GRADING NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
2. ALL CUT OR FILL SLOPES SHALL BE 4:1 MAXIMUM UNLESS OTHERWISE NOTED.
3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4 INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREAS SHALL THEN BE SODDED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES, 3:1 OR STEEPER. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. EXISTING GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT
5. PROPOSED GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT.
6. CONTRACTOR SHALL ADJUST GRADES ADJACENT TO EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
7. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR COMPACTION REQUIREMENTS AND SUBGRADE PREPARATION.

SEEDING AND MULCHING NOTE

CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITHIN THE SUBJECT BOUNDARY NOT PAVED OR OTHERWISE COVERED, PER THE SPECIFICATIONS. ALL AREAS DISTURBED OUTSIDE THE PROPERTY BOUNDARY SHALL ALSO BE SEEDED AND MULCHED AND COVER SHALL BE ESTABLISHED TO PREVENT EROSION. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY WATERING UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

CAUTION - NOTICE TO CONTRACTOR

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811 Know what's below. Call before you dig.

0 20 40 80 120
1" = 40'

ACCESSIBILITY NOTES

1. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
2. ACCESSIBLE ROUTES SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2.0% (1:48). ACCESSIBLE ROUTE SURFACE SHALL BE SLIP RESISTANT AND CONSTRUCTED IN A MANNER THAT WILL NOT RETAIN WATER AND BE A MINIMUM OF 3 FEET WIDE.
3. ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN 5.0% (1:20) IS A RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5' X 5' LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12).
4. SURFACE OF CURB RAMPS SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE TEXTURE AND CONTRASTING COLOR. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12). CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH.
5. ACCESSIBLE PARKING SPACE SLOPES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.

NOTES:

- SLOPES OF SIDEWALKS WITHIN 5' FROM THE ENTRANCE OF BUILDINGS SHALL NOT EXCEED A SLOPE OF 1:48 (2.00%)
- ALL GRASS AND LANDSCAPING SHALL BE INSTALLED BELOW THE FINISHED FLOOR ELEVATION OF BUILDING IN ACCORDANCE WITH BUILDING CODE. IF POSITIVE DRAINAGE CANNOT BE ATTAINED WITH THE INSTALLATION OF LANDSCAPING, THE CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.

LEGEND

TP	TOP OF PAVEMENT
TG	TOP OF GRATE
FG	FINISHED GRADE
FL	FLOW LINE
TW	TOP OF WALL
BW	BOTTOM OF WALL
SW	TOP OF SIDEWALK
FF	FINISHED FLOOR ELEVATION INSIDE GARAGE
TP=166.25	PROPOSED SPOT ELEVATION
	PROPERTY LINE
	FLOW LINE
220	PROPOSED MAJOR CONTOUR
222	PROPOSED MINOR CONTOUR
222	EXISTING CONTOUR
	PROPOSED STORM STRUCTURE
	PROPOSED BUILDING
	PROPOSED PAVEMENT

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TRAFFIC CONTROL NOTE

GUIDELINES SET FORTH IN PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS" OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MOST RECENT EDITION AS REVISED) SHALL BE OBSERVED.

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BEAMON ENGINEERING
TBPE FIRM NO.: F-21388 10172
BEAMON SITE, BRYAN, TEXAS 77807
PH. (979) 571-6407

STATE OF TEXAS
DANIEL R. BEAMON
103078
LICENSED PROFESSIONAL ENGINEER

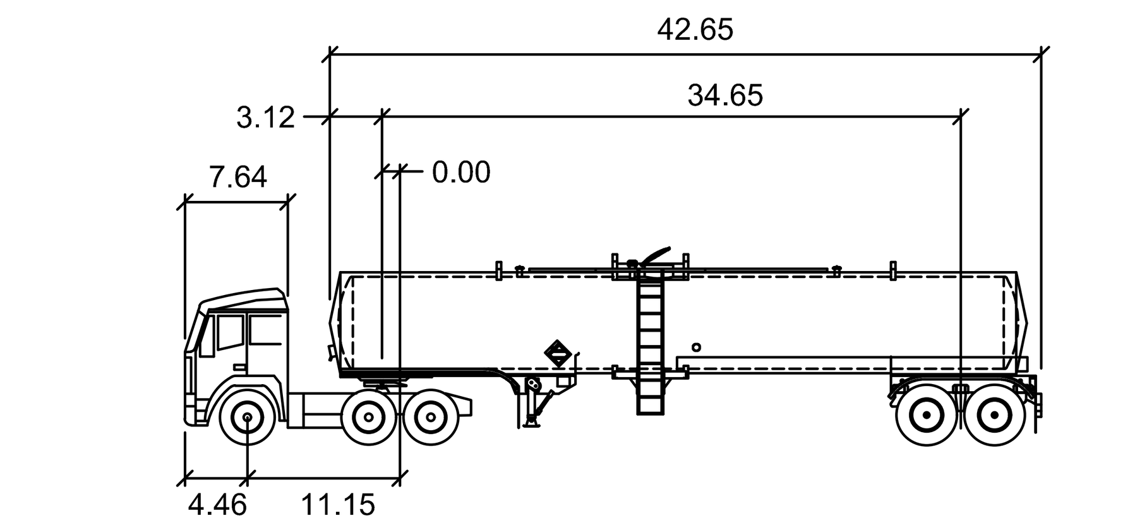
DECEMBER 16, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

NO.	DESCRIPTION	BY	DATE
REVISIONS			

GRADING PLAN

DATE: DEC. 16, 2024
SCALE: 1"=20'
SHEET NO.: C-4.0



FH 16 6x2 Tag WB 3400 - Polar Tank

Feet

Tractor Width	: 8.01	Lock to Lock Time	: 6.0 s
Trailer Width	: 8.01	Steering Angle	: 14.1 deg
Tractor Track	: 8.20	Articulating Angle	: 70.0 deg
Trailer Track	: 8.01		

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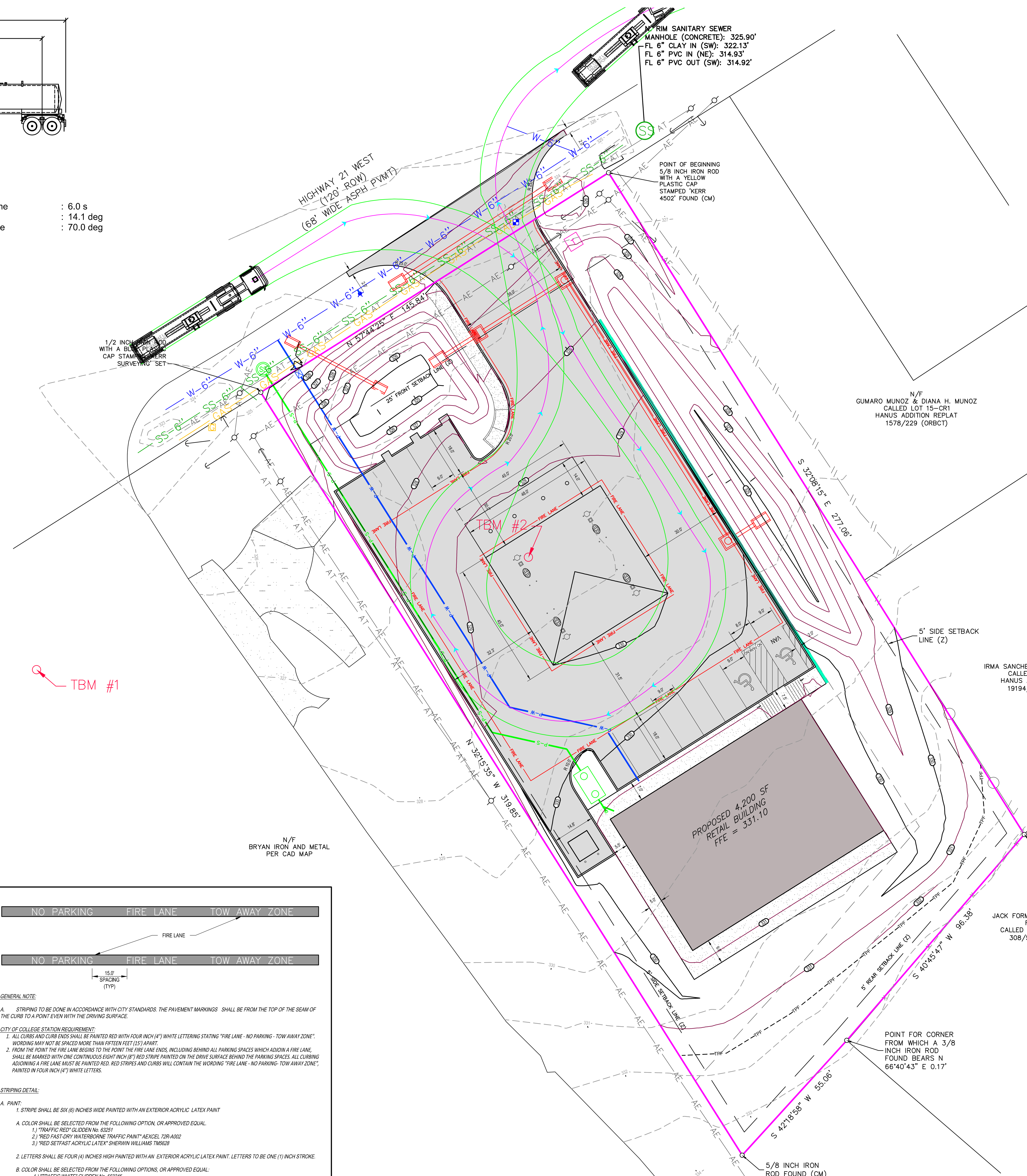
FIRE LANE STRIPING NOTE

LOCATION OF FIRE LANE STRIPING SHALL BE APPROVED BY THE LOCAL FIRE MARSHAL PRIOR TO APPLICATION. UNLESS OTHERWISE DIRECTED BY THE FIRE MARSHAL, FIRE LANE STRIPING SHALL BE 6" RED PAINTED STRIPE ALONG TOP AND FACE OF CURB, FACE OF SIDEWALK, OR DIRECTLY ADJACENT TO PROPOSED PARKING LOT STRIPING, WITH 4" WHITE STENCILED LETTERS "FIRE LANE - NO PARKING" PAINTED ON RED STRIPE AT 25' CENTER TO CENTER.

ALL SIDEWALKS SHOWN ON THIS PLAN SHALL BE ADA COMPLIANT



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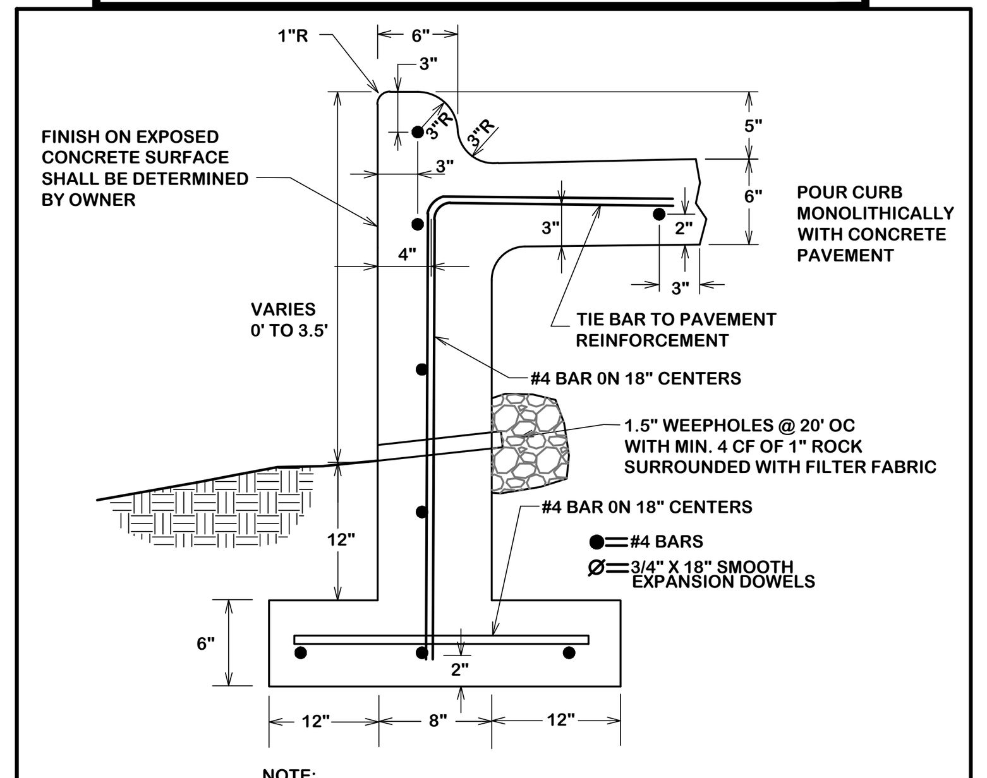

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LEGAL DESCRIPTION:	LOT 16, BLOCK 5, HANUS ADDITION BRAZOS COUNTY, TEXAS		
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ADDRESS:	2009 W SH-21 BRYAN, TEXAS		
LAND USE:	RETAIL		
SETBACKS:	FRONT - 25' SIDE - 5' REAR - 5'		
LAND AREA:	0.999 ACRES		
HEATED SQUARE FOOTAGE	4,200 SF		
MAX. BUILDING HEIGHT:	35'-0"		
END ISLAND AREA REQUIRED		4 ISLANDS @ 180 SF	= 720 SF
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PARKING PROVIDED

STANDARD SPACES	11
ADA ACCESSIBLE SPACES	1
ADA VAN ACCESSIBLE SPACES	1
CANOPY SPACES	8
TOTAL PARKING PROVIDED	21

SITE LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
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- CONCRETE SIDEWALK 4" THICK, 3,500 PSI WITH #4 BARS 18" OCEW
- CONCRETE SIDEWALK 5" THICK, 3,000 PSI WITH #4 BARS 18" OCEW REFER TO MULTI-USE PATH PLANS
- PROPOSED MONOLITHIC CONCRETE CURB
- 15' SB — BUILDING SETBACK LINE
- 12 — PARKING SPACES PER ROW
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- PROPOSED 15' WIDE PUBLIC UTILITY EASEMENT
- P-W — PROPOSED WATER LINE
- P-S — PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER STRUCTURE
- T — PROPOSED TRANSFORMER LOCATION
- PROPOSED FIRE HYDRANT

EXISTING LEGEND

- AE — AERIAL ELECTRIC LINES
- AT — AERIAL COMMUNICATION LINES
- GAS — GAS LINES
- AE — AERIAL ELECTRIC LINES
- W-6" — WATER LINE
- SS-6" — SEWER LINE
- X — BARBED WIRE FENCE
- WIRE MESH FENCE
- WOOD FENCE
- EXISTING EASEMENT LINE
- BUILDING SETBACK LINE
- WATER METER
- CLEAN OUT
- UTILITY POLE
- GUY WIRE
- A/C UNIT
- ELECTRIC SERVICE
- WATER VALVE
- SANITARY SEWER
- GRAVEL
- CONCRETE
- ASPHALT

NO PARKING FIRE LANE TOW AWAY ZONE

FIRE LANE

NO PARKING FIRE LANE TOW AWAY ZONE

15.0' SPACING (TYP)

GENERAL NOTE:

A. STRIPING TO BE DONE IN ACCORDANCE WITH CITY STANDARDS. THE PAVEMENT MARKINGS SHALL BE FROM THE TOP OF THE SEAM OF THE CURB TO A POINT EVEN WITH THE DRIVING SURFACE.

CITY OF COLLEGE STATION REQUIREMENT:

1. *ALL CURBS AND CURB ENDS SHALL BE PAINTED RED WITH FOUR INCH (4") WHITE LETTERING STATING "FIRE LANE - NO PARKING - TOW AWAY ZONE". WORDING MAY NOT BE SPACED MORE THAN FIFTEEN FEET (15') APART.*
2. *FROM THE POINT THE FIRE LANE BEGINS TO THE POINT THE FIRE LANE ENDS, INCLUDING BEHIND ALL PARKING SPACES WHICH ADJOIN A FIRE LANE, SHALL BE MARKED WITH ONE CONTINUOUS EIGHT INCH (8") RED STRIPE PAINTED ON THE DRIVE SURFACE BEHIND THE PARKING SPACES. ALL CURBING ADJOINING A FIRE LANE MUST BE PAINTED RED. RED STRIPES AND CURBS WILL CONTAIN THE WORDING "FIRE LANE - NO PARKING- TOW AWAY ZONE", PAINTED IN FOUR INCH (4") WHITE LETTERS.*

STRIPING DETAIL:

A. PAINT:

1. STRIPE SHALL BE SIX (6) INCHES WIDE PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT

A. COLOR SHALL BE SELECTED FROM THE FOLLOWING OPTION, OR APPROVED EQUAL.
1.) "TRAFFIC RED" GLIDDEN No. 63251
2.) "RED FAST-DRY WATERBORNE TRAFFIC PAINT" AEXCEL 72R-A002
3.) "RED SETFAST ACRYLIC LATEX" SHERWIN WILLIAMS TM5628

2. LETTERS SHALL BE FOUR (4) INCHES HIGH PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT. LETTERS TO BE ONE (1) INCH STROKE.

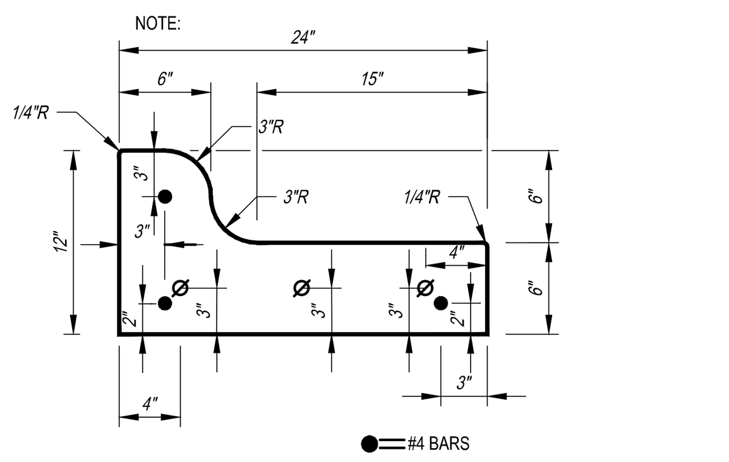
B. COLOR SHALL BE SELECTED FROM THE FOLLOWING OPTIONS, OR APPROVED EQUAL:
1.) "TRAFFIC WHITE" GLIDDEN No. 563245
2.) "WHITE FAST-DRY WATERBORNE TRAFFIC PAINT" AEXCEL 72W-A037
3.) "WHITE SETFAST ACRYLIC LATEX" SHERWIN WILLIAMS TM2160

B. APPLICATION:
1. STRIPE MAY BE BRUSHED OR SPRAYED, ONE COAT TO FINISH.
2. LETTERS SHALL BE STENCIL FORMED, BRUSH APPLIED AND SPACED AS DETAILED ON THIS SHEET.

FIRE LANE STRIPING DETAIL

TYPE "G" EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.'S AND P.C.'S. TYPE "B" CONTRACTION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.

NOTE:



REFER TO GRADING PLAN FOR PAVEMENT ELEVATIONS

TYPICAL CURB AND GUTTER SECTION

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STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER

NOVEMBER 15, 2024

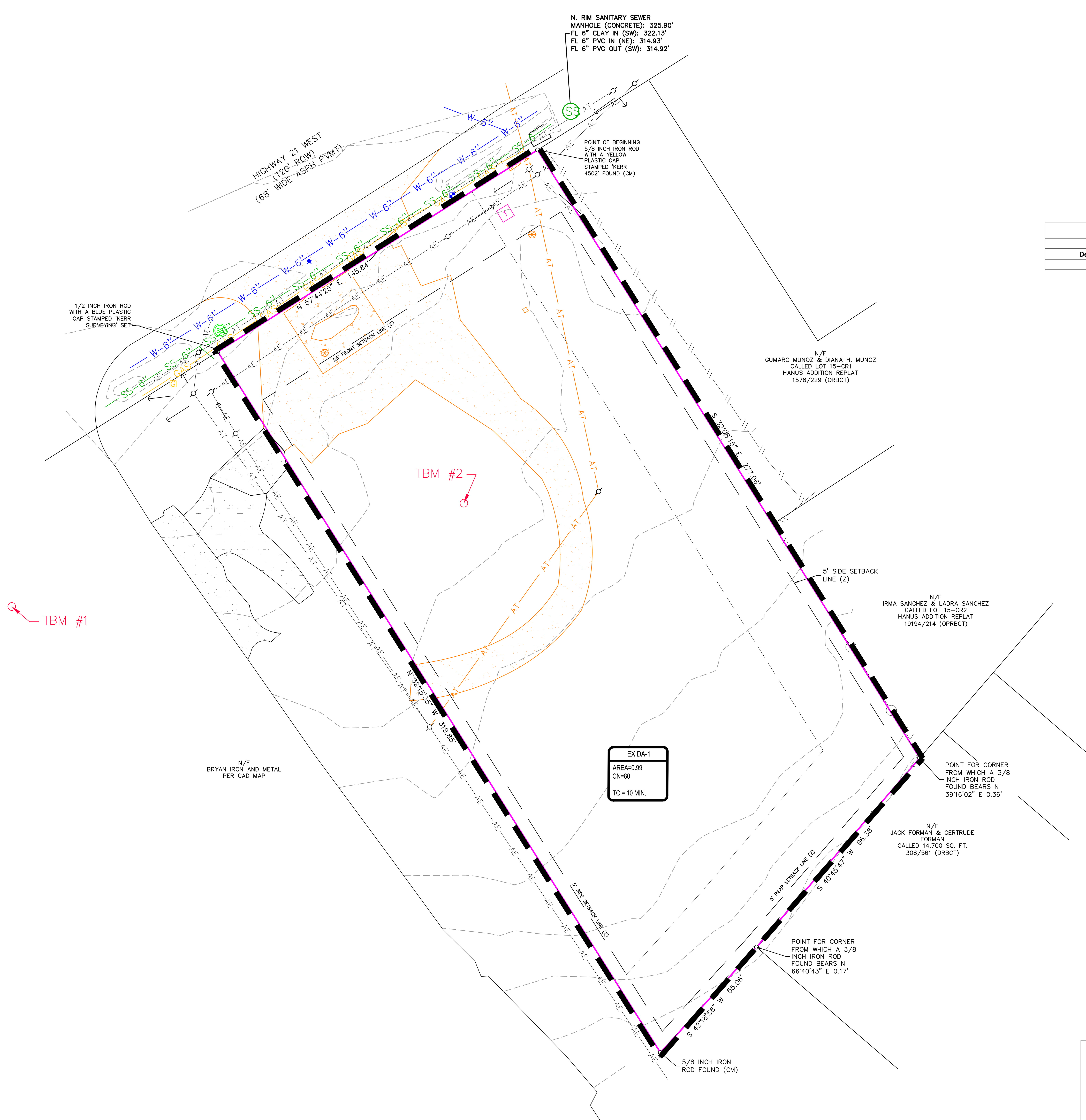
BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

NO.	DESCRIPTION	BY	DATE

REVISIONS

TRUCK TURNING EXHIBIT

DATE: NOV. 15, 2024
SCALE: 1"=20'
SHEET NO.: C-3.1



LEGEND

304	EXIST CONTOUR
	EXISTING DRAINAGE BOUNDARY
	OVERLAND SHEET FLOW
	SHALLOW CONCENTRATED FLOW
	PROPERTY BOUNDARY
FLOW →	FLOW DIRECTION ARROW
EX-DA 1	BASIN NUMBER
AREA=51.24	BASIN AREA (ACRES)
CN=80	CURVE NUMBER
TC = 20 MIN	TIME OF CONCENTRATION

Know what's **below.**
Call before you dig.

0 10 20 40 60
1" = 20'

EXISTING HYDROGRAPH SUMMARY

				STORM FREQUENCY			
Description	Area (ac)	Tc (min.)	Weighted CN	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	100-YR (CFS)
EX DA 1	0.99	10	80	2.19	4.37	6.06	9.26

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NOVEMBER 15, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

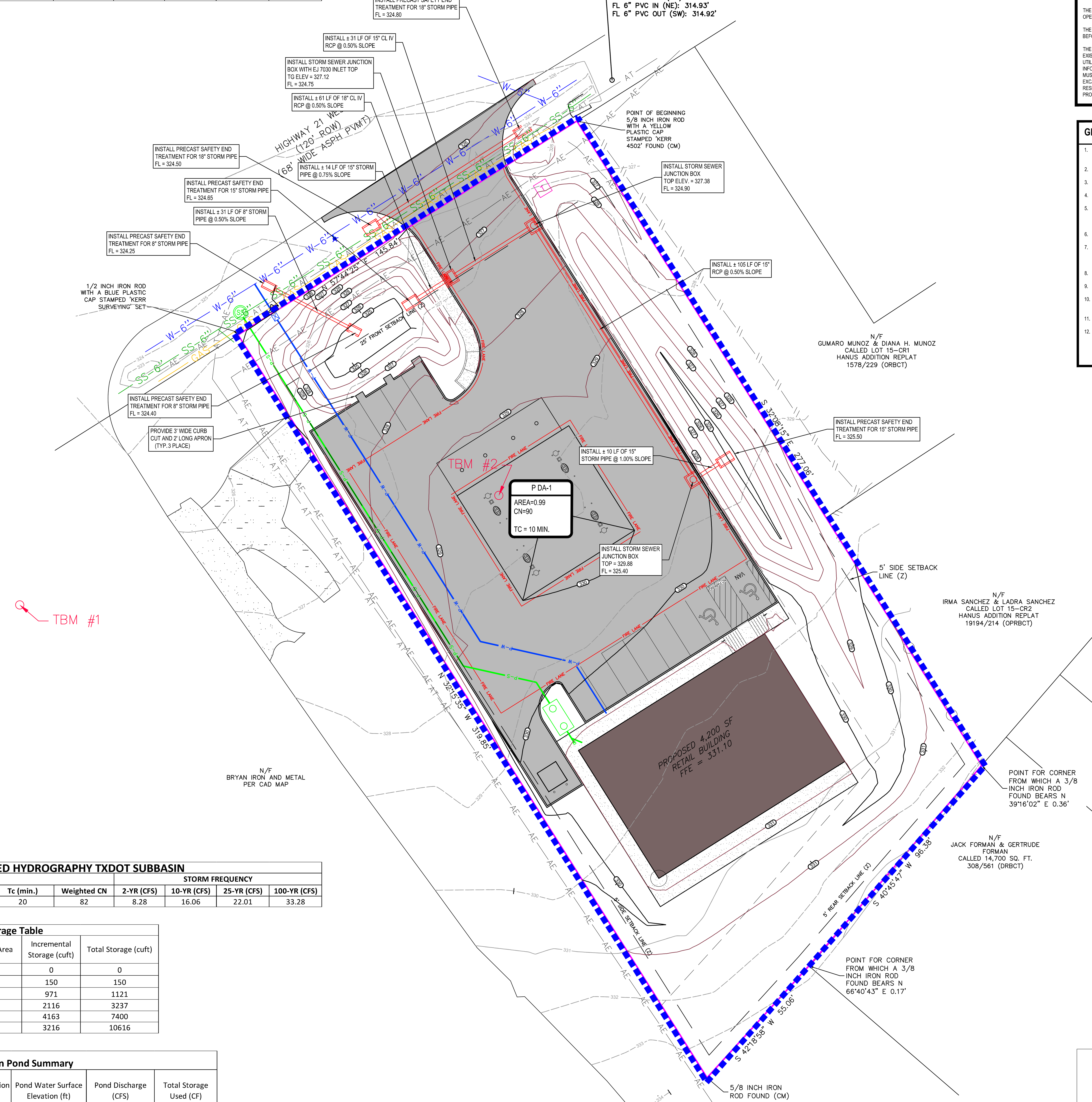
NO.	DESCRIPTION	BY	DATE

EXISTING DRAINAGE MAP

DATE: NOV. 15, 2024
SCALE: 1"=20'
SHEET NO.: C-5.0

PROPOSED HYDROGRAPH SUMMARY

Description	Area (ac)	Tc (min.)	Weighted CN	STORM FREQUENCY 2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	100-YR (CFS)
P-DA 1	0.99	10	90	2.98	5.17	6.80	9.88



PROPOSED HYDROGRAPHY TXDOT SUBBASIN

Description	Area (ac)	Tc (min.)	Weighted CN	STORM FREQUENCY 2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	100-YR (CFS)
TXDOT	4.10	20	82	8.28	16.06	22.01	33.28

Pond Stage Storage Table

Stage	Elevation	Contour Area	Incremental Storage (cuft)	Total Storage (cuft)
0.0	324.50	0	0	0
0.5	325.00	600	150	150
1.5	326.00	1341	971	1121
2.5	327.00	2890	2116	3237
3.5	328.00	5436	4163	7400
4.0	328.50	7427	3216	10616

Detention Pond Summary

Storm Frequency	Exist Condition Runoff (CFS)	Proposed Condition Runoff (CFS)	Pond Water Surface Elevation (ft)	Pond Discharge (CFS)	Total Storage Used (CF)
2 YR	2.19	2.98	326.46	1.71	1,566
10 YR	4.37	5.17	327.44	2.17	3,922
25 YR	6.06	6.8	327.69	3.57	5,488
100 YR	9.26	9.88	327.87	8.06	6,514
UPPER POND STORAGE PROVIDED = 10,615 CUBIC FT					

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRIC, SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF 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 ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL UTILITIES WITHIN THE VICINITY OF CONSTRUCTION PRIOR TO COMMENCING CONSTRUCTION. CALL TEXAS ONE CALL SYSTEM AT 1-800-245-4545.
2. CONTRACTOR SHALL CONTACT THE CITY UTILITIES DEPARTMENT, FOR UTILITY LINE LOCATES A MINIMUM OF TWO WORKING DAYS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL CONTACT THE CITY ENGINEERING DEPARTMENT, TO ARRANGE FOR AN INSPECTION A MINIMUM OF TWO WORKING DAYS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES DURING CONSTRUCTION IN ACCORDANCE WITH TCEQ AND CITY REQUIREMENTS.
5. CONTRACTOR SHALL KEEP DIRT, MUD, AND DEBRIS OFF PUBLIC STREETS AROUND PROJECT. CONTRACTOR SHALL IMMEDIATELY CLEAN DIRT, MUD, AND DEBRIS FROM PUBLIC STREETS AS SOON AS IT IS NOTICED BY THE CONTRACTOR OR NOTIFIED BY THE CITY.
6. CONTRACTOR SHALL RESTORE DISTURBED AREAS TO EXISTING CONTOURS UPON COMPLETION OF UTILITY CONSTRUCTION.
7. CONTRACTOR SHALL PROVIDE PERMANENT SITE STABILIZATION UPON COMPLETION OF CONSTRUCTION, PROVIDE SOLID BLOCK SOD TO MATCH GRASS TYPE IN ESTABLISHED LAWNS, PROVIDE SEED AND FERTILIZER IN OTHER AREAS. DISTURBED AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
8. CONSTRUCT PROPOSED WATER AND SEWER SERVICES AT LOCATIONS SHOWN ON PLANS.
9. THE MINIMUM BURY FOR PROPOSED WATER LINES AND SEWER LINES SHALL BE 4' UNLESS OTHERWISE NOTED.
10. ALL WATER LINES SHALL BE AWWA C-900 PVC UNLESS OTHERWISE NOTED ON PLANS. ALL WATER LINE BENDS AND FITTING SHALL BE DUCTILE IRON AND SUPPORTED WITH THRUST BLOCKING PER WATER DETAILS.
11. ALL SANITARY SEWER LINES SHALL BE SDR-26 PVC UNLESS OTHERWISE NOTED ON PLANS.
12. ALL DIMENSIONS AND STATION OFFSETS ARE TO FACE OF CURB, EDGE OF ROAD, CENTER OF PIPE, CENTER OF OBJECT, UNLESS OTHERWISE NOTED.

Know what's below. Call before you dig.

0 10 20 40 60

1" = 20'

LEGEND

304	EXIST CONTOUR
305	PROPOSED CONTOUR (5 FOOT)
304	PROPOSED CONTOUR (1 FOOT)
	PROPOSED DRAINAGE BOUNDARY
	PROPERTY BOUNDARY
DA-A1	PROPOSED DRAINAGE SUBASIN

GENERAL UTILITY NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. MAINTAIN A MINIMUM OF 24" VERTICAL CLEARANCE BETWEEN WATER LINES, SANITARY LINE, STORM LINES AND GAS LINES (EXISTING AND PROPOSED).
4. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED.
5. LINES INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING.
6. ALL STEEL ENCASEMENT PIPE SHALL HAVE A WALL THICKNESS OF 0.375 INCHES UNLESS NOTED OTHERWISE.
7. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING, TO CENTER LINE OF MANHOLE, FACE OF BUILDING, OR BACK OF CURB, UNLESS OTHERWISE NOTED.

NOTE:

ALL STORM SEWER PIPE SHALL HAVE WATER TIGHT JOINTS.

GENERAL STORM SEWER NOTES

1. PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION.
2. EXISTING DRAINAGE STRUCTURES TO REMAIN ON SITE SHALL BE INSPECTED AND REPAIRED AS NEEDED. EXISTING PIPES SHALL BE CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS PRIOR TO PROJECT COMPLETION.
3. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED WITH NON-SHRINK GROUT TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
4. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE A TRAFFIC RATED RING & COVER. MANHOLE COVERS IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE UNLESS OTHERWISE NOTED. COVERS SHALL BE LABELED "STORM SEWER".
5. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT OUT.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT SIZE, NUMBER AND LOCATION OF BUILDING ROOF DRAINS.
7. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STORM SEWER STRUCTURES, PIPE, AND ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD IF CONFLICT IS DISCOVERED.
8. CONTRACTOR SHALL UTILIZE PREFABRICATED BEND, OR RADIUS PIPE TO ACCOUNT FOR DEFLECTION IN STORM SEWER PIPE WHERE SHOWN HEREON.
9. INLET BOX DIMENSIONS ARE GIVEN TO INSIDE WALL OF BOX.
10. CONTRACTOR SHALL ADHERE TO OSHA RULES AND REGULATIONS REGARDING TRENCH SAFETY. ANY COSTS ASSOCIATED WITH TRENCH SAFETY ARE CONSIDERED SUBSIDIARY TO STORM SEWER PIPE INSTALLATION. NO EXTRA PAY FOR TRENCH SAFETY.

ROOF DRAINAGE NOTE

CONTRACTOR TO REFERENCE PLUMBING PLANS FOR DOWNSPOUT LOCATIONS. ANY DISCREPANCIES OR CONFLICTS SHALL BE COMMUNICATED TO BOTH ENGINEER AND ARCHITECT WITH SUFFICIENT TIME TO RESOLVE. ANY DOWNSPOUT, ROOF DRAIN, FRENCH DRAIN, OR SLOT DRAIN SHOWN ON ONE PLAN BUT NOT THE OTHER SHALL BE ASSUMED TO EXIST WITH NO ADDITIONAL COST TO THE OWNER TO CONNECT.

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM. THE CONTRACTOR MUST ALSO CONTACT THE CITY OF BRYAN PUBLIC WORKS DEPARTMENT (979-209-5900) TO LOCATE LINES OWNED BY THE CITY OF BRYAN

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STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
NOVEMBER 15, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

STORM SEWER PLAN

DATE: NOV. 15, 2024

SCALE: 1"=20'

SHEET NO. C-5.1

PLANT SCHEDULE MINUS BUFFER PLANT MATERIAL

SYMBOL	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	SF VALUE	TOTAL VALUE	REMARKS
CANOPY							
	Platanus mexicana / Mexican Sycamore	2" Cal.	Pot	2	200	400	2" caliper, Singular main leader, 7'HT., 3'SPR.
	Quercus virginiana / Southern Live Oak	2" Cal.	Pot	3	200	600	2" caliper, Singular main leader, 7'HT., 3'SPR.
	Ulmus crassifolia / Cedar Elm	2" Cal.	Pot	5	200	1,000	2" caliper, Singular main leader, 7'HT., 3'SPR.
NONCANOPY							
	Ilex vomitoria / Yaupon Holly	2" Cal.	Pot	5	150	750	2" caliper, Muilti-truck, 5'HT., 2'SPR.
	Lagerstroemia indica x fauriei 'Natchez' / Natchez Crape Myrtle Multi-Trunk	2" Cal.	Pot	8	150	1,200	2" caliper, Muilti-truck, 5'HT., 2'SPR.
SHRUBS							
	Leucophyllum frutescens 'Green Cloud' / Green Cloud Texas Sage	3 gal.	Pot	27	10	270	
	Miscanthus sinensis 'Adagio' / Adagio Eulalia Grass	3 gal.	Pot	22	10	220	
	Muhlenbergia capillaris 'Gulf Coast' / Gulf Coast Pink Muhly Grass	3 gal.	Pot	16	10	160	
	Morella cerifera 'Nana' / Dwarf Southern Wax Myrtle	3 gal.	Pot	20	10	200	
GROUND COVERS							
	Cynodon dactylon '419 Hybrid' / 419 Hybrid Bermudagrass	sod	solid sod	15,936 sf			

SITE AREA = 0.99 ACRES
1.) 20% OF THE DEVELOPED AREA (23,422SF) = 4,685SF - (PER WESTERN CORRIDOR - W. STATE HIGHWAY 21 OVERLAY DISTRICT)
2.) NOT LESS THAN 50% OF REQUIRED AREA SHALL BE TREES - 2,343 SF REQUIRED - **3,950 SF PROVIDED**
3.) NOT LESS THAN 50% OF THE TREES PLANTED SHALL BE CANOPY- 1,950 SF REQUIRED - **2,000 SF PROVIDED**
4.) ALL PARKING ISLANDS MUST HAVE A CANOPY TREE.
TOTAL AREA REQUIRED: **4,685SF**
LANDSCAPE AREA PROVIDED: **4,800SF**
AUTOMATIC IRRIGATION IS REQUIRED FOR THIS PROJECT

BUFFERING NOTES:

- TREES DENOTED WITH A "B" ADJACENT TO THEM DO NOT COUNT TOWARDS THE OVERALL LANDSCAPE AREA REQUIRED SINCE THEY ARE REQUIRED TO REDUCE THE WIDTH OF THE BUFFER AREA ADJACENT TO RESIDENTIAL LOTS.
- EXISTING TREES TO REMAIN INCLUDE A TOTAL OF 253.75" WITH SEVEN DIFFERENT TYPES OF SPECIES. All OF THESE EXISTING TREES WILL COUNT TOWARDS THE REDUCTION OF THE WIDTH OF THE BUFFER AREA ADJACENT TO RESIDENTIAL LOTS. SEE EXISTING TREE LIST ON THIS SHEET FOR DETAILS.

GENERAL LANDSCAPE NOTES

1. **Contractor shall be familiar with all existing conditions and underground utilities, pipes, and structures. Contractor shall take sole responsibility of any cost incurred due to bodily injury and/or damage of Owner's property or said utilities. Contractor is responsible for contacting utility companies before excavation. Contractor shall hand dig planting pits and beds and hand rake seeded areas as required. Locate and verify condition of utilities prior to any excavation. Extreme care shall be exercised in excavating and working near existing utilities.**
2. **Any conflicting information shall be brought to the attention of the Landscape Architect and/or Owner.**
3. **Contractor shall not proceed with construction as designed when unknown obstructions and/or grade differences exist that my have not been known during design. Such conditions shall be immediately brought to the attention of the Landscape Architect. The contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.**
4. **Contractor shall exercise caution when working around existing structures and pavements. Repair of damage to existing structures and pavements incurred as a result of the Contractor's work shall be the financial responsibly of the Contractor.**
5. **Contractor shall be responsible for all coordination with their subcontractors to accomplish their scope of work. Contractor shall coordinate construction with other trades working on the site simultaneously.**
6. **Contractor is responsible for locating and protecting existing irrigation and landscape on site from any damage. Contractor shall notify the Landscape Architect of any conflicts immediately.**
7. **Contractor shall notify Owner and Landscape Architect 48 hours prior to commencement of work to coordinate project inspection schedules.**
8. **The Contractor shall be responsible for field verification of existing conditions, and shall perform field measurements prior to fabrication and/or purchase of any materials and shall contract the Landscape Architect t should existing conditions be different from the design drawings for this project. Conflicts arising due to lack of coordination shall be the responsibility and the expense of the Contractor.**
9. **Any required changes to the drawing resulting from the acceptance of the Contractor's alternates and/or substitutions are the responsibility of the Contractor and shall be submitted to the Landscape Architect and the Owner fro approval.**
10. **The Contractor shall comply with all applicable ordinances and local codes. Required permits shall be obtained by the Contractor.**
11. **Contractor shall comply with all applicable ordinances and local codes. Required permits shall be obtained by the Contractor.**
12. **Contractor shall provide unit prices based on quantities on documents. Field conditions may revise actual location, increasing or decreasing the extent of work bid. Changes to the extent of work resulting in an increase will be based on unit prices and performed subject to the approval of the Landscape Architect and the Owner in the form of a change order. Unit prices shall not only include the cost of the item but also the labor, equipment, and other materials (i.e. backfill mix, mulch, steel edging, etc.) to install them item completely per the drawings.**
13. **All construction covered by these contract documents shall be in conformance with the latest edition of all applicable city and OSHA codes and standards including, but not limited to the Uniform Building Code, enacted by the International Conference of Building Officials, most recent edition, and amendments as adopted by the local government.**
14. **The Contractor shall provide all labor, materials, and supervision necessary to accomplish the work as shown and noted on the drawings unless otherwise specified.**
15. **Contractors and subcontractors are responsible for removal of trash and repair of hazardous conditions (tools, open holes, etc.) on a daily basis by end of the work day.**
16. **Upon completion of construction and prior to final approval, Contractor shall thoroughly clean up the project site of all trash, scrap, brick pieces, mortar, litter, etc. Repair all damage to finish grade including tailing from excavations, wheel ruts, etc., caused by construction.**

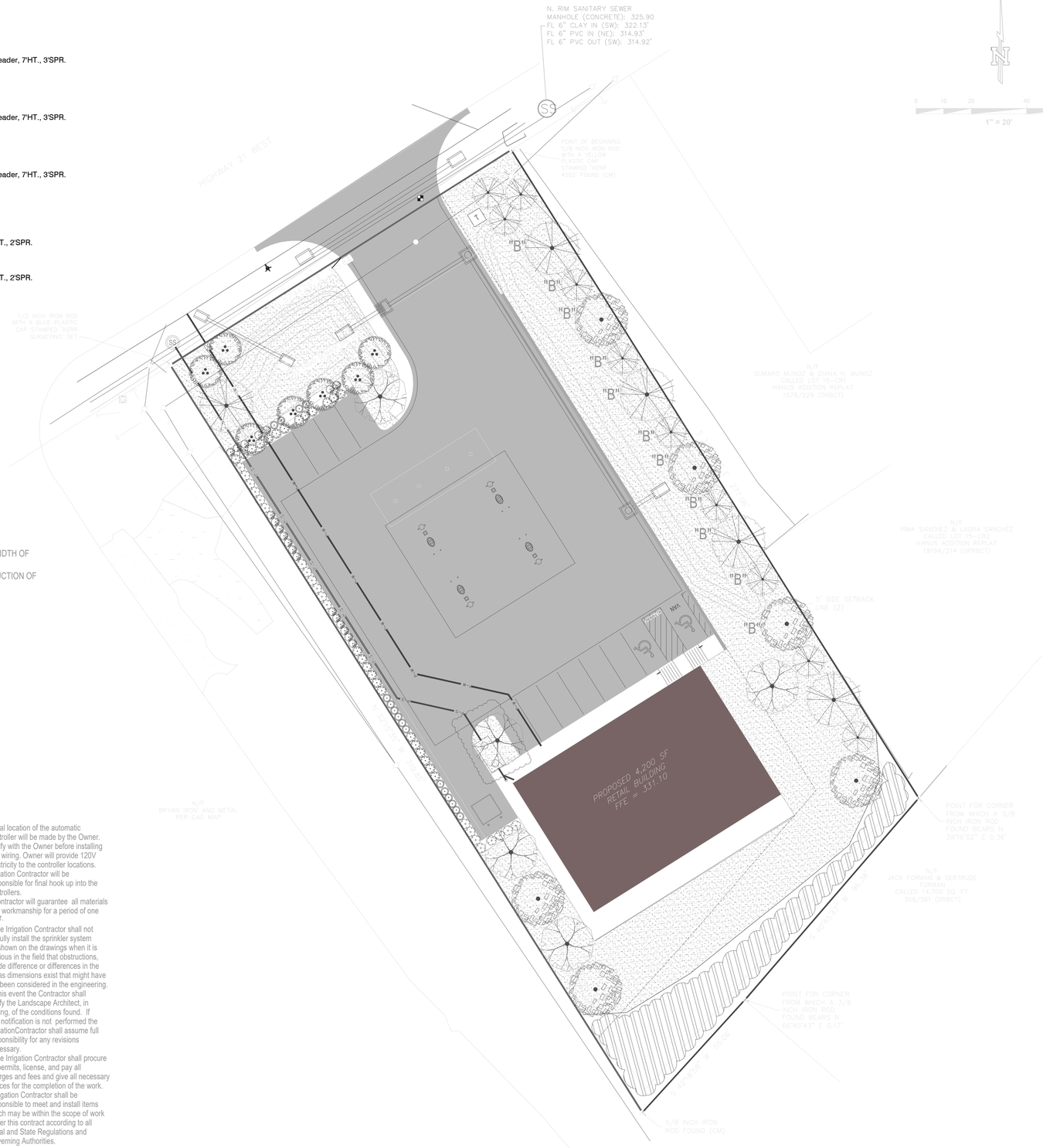
EXISTING TREES TO REMAIN

- MULTI-TRUNK CEDAR ELM - 6", 5", AND 4.5"
- MULTI-TRUNK MESQUITE TREE - 8", 8", AND 8"
- POST OAK - 7"
- DOIS D'ARC - 12"
- GUM TREE - 24"
- MULTI-TRUNK GUM TREE - 6", 6", AND 6"
- HACKBERRY TREE - 10" X 16 TREES
- SHINING SUMAC - 6" X 2 TREES

▨ EXISTING TREES TO REMAIN AREA

IRRIGATION NOTES

1. Contractor shall be a Registered Licensed Irrigator in the State of Texas.
2. Contractor shall provide a complete, functioning automatic irrigation system to includes all material, labor, fees, permits, equipment and other cost incidental to provide this system.
3. All substitutions shall be approved in writing by the Landscape Architect prior to installation.
4. It is the Contractors responsibility to locate existing underground utilities or obstacles. Contractor shall be responsible for all damages resulting from Contractor operations,at no cost to the Owner.
5. Contractor is responsible for verifying site conditions and familiarizing himself with conditions which might affect the work which is being bid.
6. All piping on the plan is schematic. It is the Contractors responsibility to make field adjustments at no additional cost to the Owner. All trenching will be done In a manner which protects existing root zones. Some manual digging may be necessary. The Landscape Architect will be the authority concerning trenching.
7. All Main lines shall have 24" of cover and all laterals to have 12" of cover. Where rock is encountered, all piping and wiring is to be enveloped in 3" of bedding sand.
8. All control wires to be 14 gauge A.W.G. direct burial 600V, single conductor solid copper, plastic insulated cable rated for direct burial installation. UF UL listed. Lead wires to be a different color for each controller as well as the common wires. No same colors will be used for either common or lead wires.
9. Final location of the automatic controller will be made by the Owner. Verify with the Owner before installing any wiring. Owner will provide 120V electricity to the controller locations. Irrigation Contractor will be responsible for final hook up into the controllers.
10. Contractor will guarantee all materials and workmanship for a period of one year.
11. The Irrigation Contractor shall not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that obstructions, grade difference or differences in the areas dimensions exist that might have not been considered in the engineering. In this event the Contractor shall notify the Landscape Architect, in writing, of the conditions found. If this notification is not performed the IrrigationContractor shall assume full responsibility for any revisions necessary.
12. The Irrigation Contractor shall procure all permits, license, and pay all charges and fees and give all necessary notices for the completion of the work.
13. Irrigation Contractor shall be responsible to meet and install items which may be within the scope of work under this contract according to all Local and State Regulations and Governing Authorities.



BRYAN FOOD EXCHANGE
LOT 16, BLOCK 5
HANUS ADDITION
2009 SH-21BRYAN, TEXAS

LANDSCAPE PLAN

ANDREW MORRIS
LANDSCAPE ARCHITECTURE
OFFICE IN:
AUSTIN, TX
TEL 512.769.0524

JACOB A. YOUNG
3107

Jacob Young
12.16.24

Consultants:

Issue Date 12.16.24

Revisions

Project Number:

Drawn By JAY

Checked By JAY

North

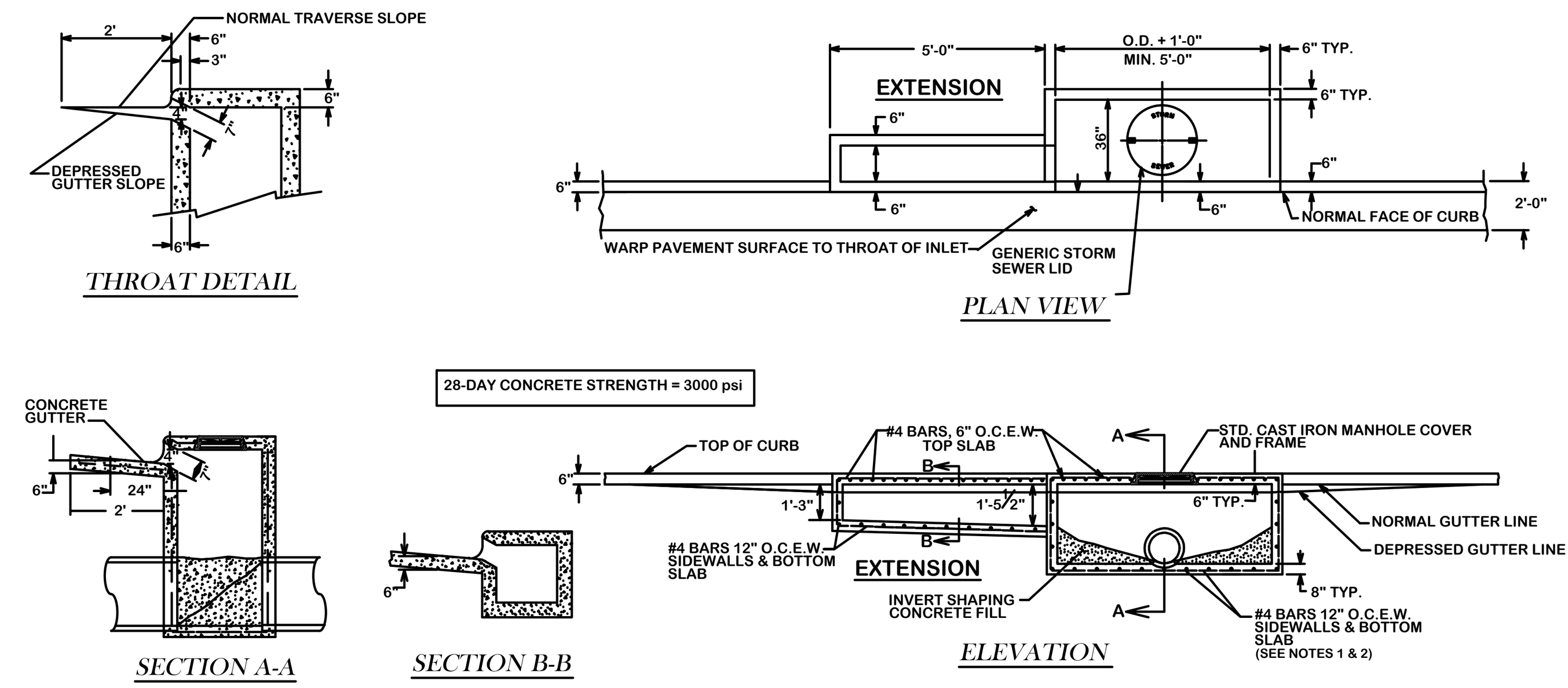
Scale: 1"=20'

CITY OF BRYAN
LANDSCAPE PERMIT PLANS

These Drawings and Specifications are to be an instrument of service and shall remain the property of the Landscape Architect. They are not to be used on other projects or extentions to this project except by agreement in writing with the Landscape Architect. The Landscape Architect is not responsible for construction means, methods, sequences or procedures, or for safety precautions and programs in connection with the project.

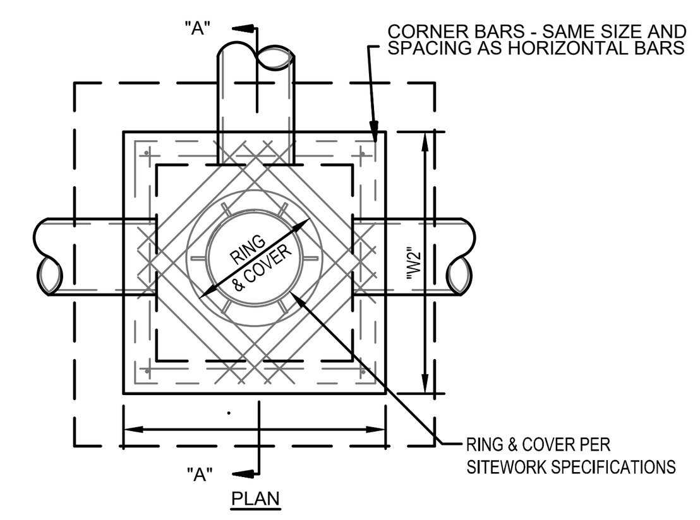
Sheet Number

Sheet L-1.0 of



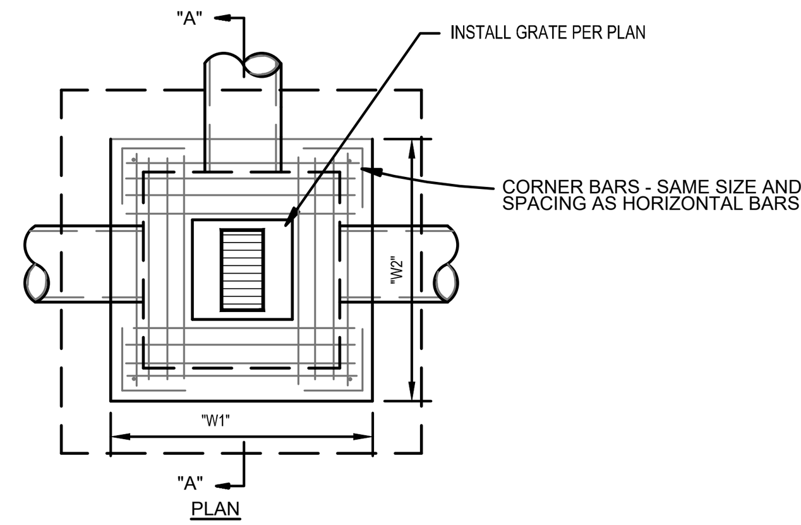
CURB INLET TOP

N.T.S.



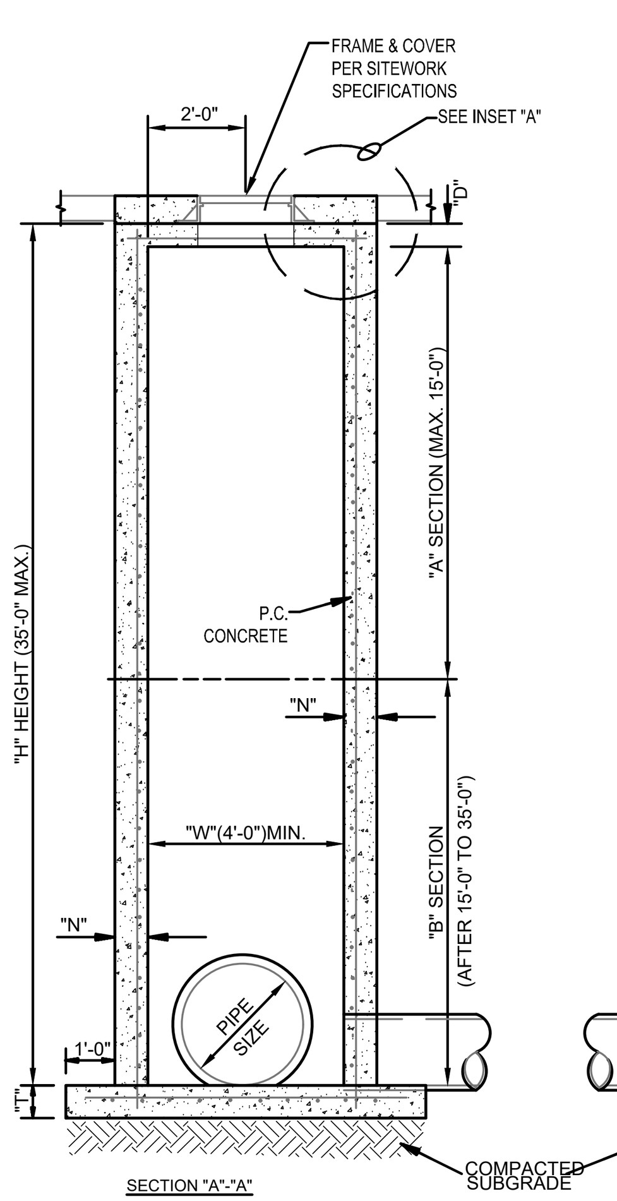
SOLID LID TOP

N.T.S.

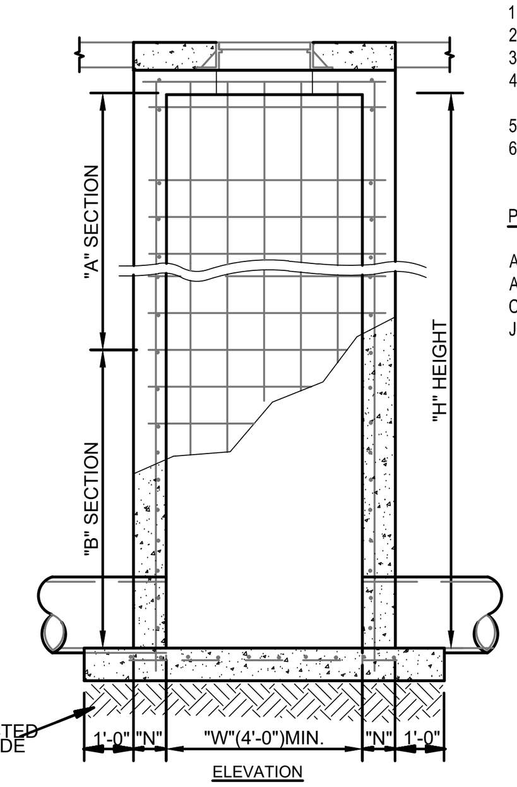


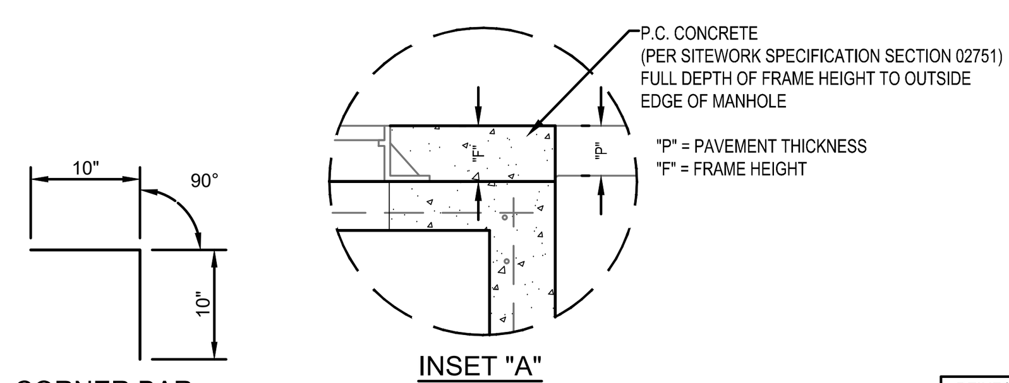
GRATE INLET TOP

N.T.S.



NOTE: TOP OF MANHOLE TO BE LEVEL WITH FINISH GRADE UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. USE ADJUSTMENT RINGS IF TOP OF MANHOLE IS NOT LEVEL WITH FINISH GRADE. ADJUSTMENT RINGS SHALL NOT EXCEED 12" IN HEIGHT.





GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL REINFORCING BARS TO HAVE 2" COVER.
3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.
5. ALL REINFORCING BARS TO BE GRADE 60.
6. PRECAST MANHOLE MAY BE USED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

PRECAST MANHOLE SPECIFICATIONS

ASTM C478 - PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
ASTM C913 - PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES
CONCRETE: 4000 PSI AE (MIN.)
JOINT: WATERTIGHT RUBBER GASKET

REINFORCEMENT SCHEDULE, BASE	
SECTION	
"A"	#4's @ 6" E.W.
"B"	#6's @ 6" E.W.

TABLE OF 'W' DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-6"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

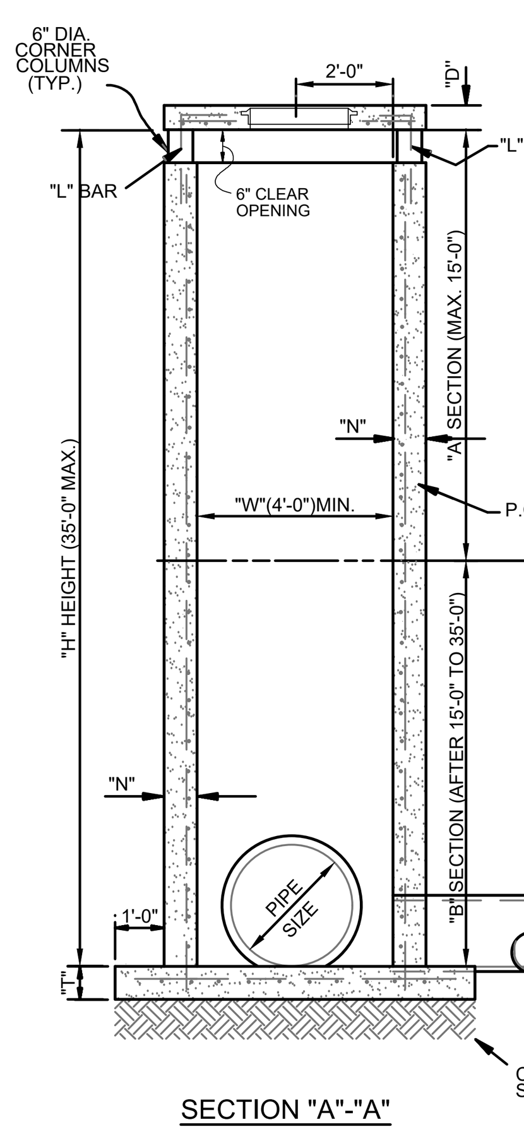
REINFORCEMENT SCHEDULE, WALLS			
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4'	#4's @ 9"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 9"	#4's @ 10"
	GREATER THAN 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	4'	#4's @ 6"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 6"	#4's @ 10"

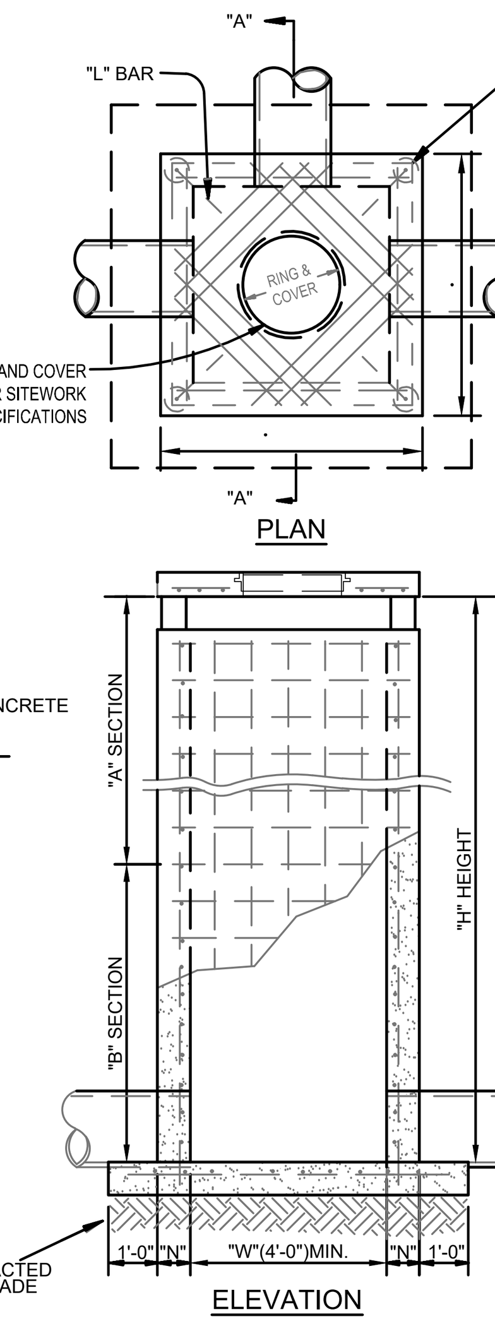
TABLE OF "T" & "N" DIMENSIONS				
SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	4'	6" + PIPE THICKNESS	8"	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

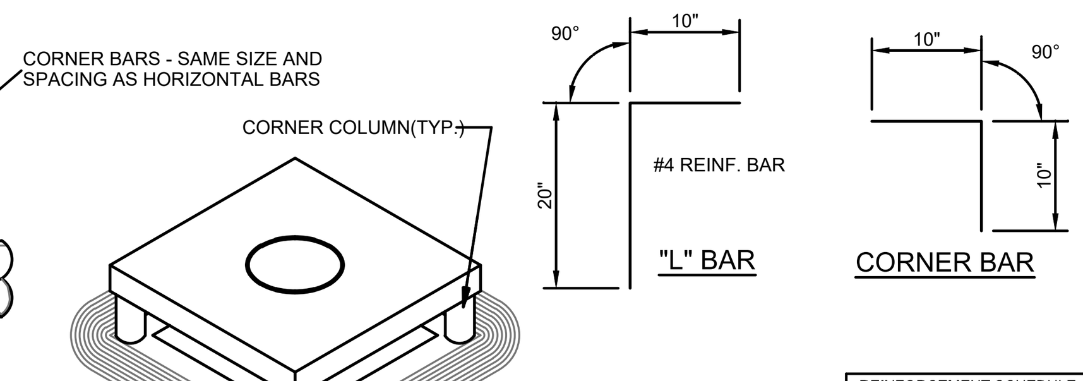
REINFORCEMENT SCHEDULE, TOP		
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4'S @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER

STORM SEWER JUNCTION BOX

N.T.S.







GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL REINFORCING BARS TO HAVE 2" COVER.
3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.
5. ALL REINFORCING BARS TO BE GRADE 60.
6. PRECAST MANHOLE MAY BE USED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

PRECAST MANHOLE SPECIFICATIONS

ASTM C478 - PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
ASTM C913 - PRECAST CONCRETE WATER AND WASTEWATER STRUCTURESCONCRETE: 4000 PSI AE (MIN.)
JOINT: WATERTIGHT RUBBER GASKET

REINFORCEMENT SCHEDULE, BASE	
SECTION	
"A"	#4's @ 6" E.W.
"B"	#6's @ 6" E.W.

TABLE OF 'W' DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-6"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

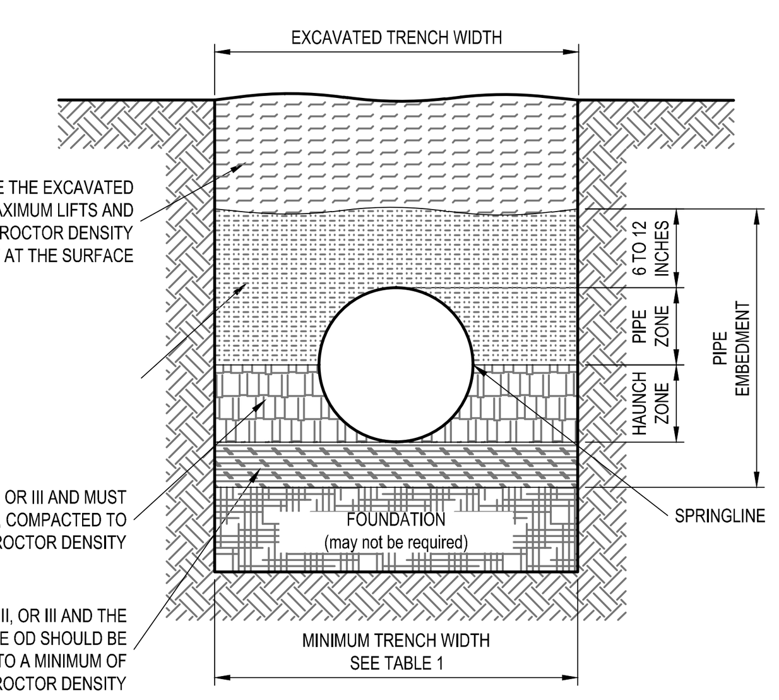
REINFORCEMENT SCHEDULE, WALLS			
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4'	#4's @ 9"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 9"	#4's @ 10"
	GREATER THAN 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	4'	#4's @ 6"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 6"	#4's @ 10"

TABLE OF "T" & "N" DIMENSIONS				
SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	4'	6" + PIPE THICKNESS	8"	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

REINFORCEMENT SCHEDULE, TOP		
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4'S @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER

AREA INLET

N.T.S.



FINAL BACKFILL- FINAL BACKFILL MATERIALS MAY BE THE EXCAVATED MATERIAL AND SHOULD BE PLACED IN 12 INCH MAXIMUM LIFTS AND COMPACTED TO A MINIMUM 85 PERCENT STANDARD PROCTOR DENSITY TO PREVENT EXCESSIVE SETTLEMENT AT THE SURFACE

HAUNCHING- HAUNCHING MATERIALS MAY BE CLASS I, II, OR III AND MUST BE PLACED AND COMPACTED IN 8 INCH MAXIMUM LIFTS, COMPACTED TO 90 PERCENT STANDARD PROCTOR DENSITY

BEDDING- BEDDING MATERIALS MAY BE CLASS I, II, OR III AND THE MIDDLE OF THE BEDDING EQUAL TO 1/3 OF THE PIPE OD SHOULD BE LOOSELY PLACED AND THE REMAINDER COMPACTED TO A MINIMUM OF 90 PERCENT STANDARD PROCTOR DENSITY

CLASS I - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED WITH LITTLE OR NO FINES (1/4 INCH TO 1 1/2 INCHES IN SIZE.)

CLASS II - (GW, GP, SW, SP GW-GC, SP-SM) CLEAN, COARSE GRADED GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/ SAND MIXTURES (1 1/2 INCHES MAXIMUM SIZE.)

CLASS III - (GM, GC, SM, SC) COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS (1 1/2 INCHES MAXIMUM SIZE)

CLASS IV - (ML, CL, MH, CH) FINE GRAINED MATERIALS, SUCH AS FINE SAND AND SOILS CONTAINING 50 PERCENT OR MORE CLAY OR SILT. SOILS CLASSIFIED AS CLASS IVa (ML OR CL) HAVE MEDIUM TO LOW PLASTICITY AND ARE NOT RECOMMENDED IN THE EMBEDMENT ZONE. SOILS CLASSIFIED AS CLASS IVb (MH OR CH) HAVE HIGH PLASTICITY AND ARE NOT RECOMMENDED FOR EMBEDMENT MATERIALS

CLASS V - (OL, OH, PT) THESE MATERIALS INCLUDE ORGANIC SILTS AND CLAYS, PEAT AND OTHER ORGANIC MATERIALS. THEY ARE NOT RECOMMENDED FOR EMBEDMENT MATERIALS

NOTE: EMBEDMENT MATERIALS SHOULD BE PLACED AND COMPACTED AT OPTIMUM MOISTURE CONTENT.

SUGGESTED MINIMUM TRENCH WIDTHS		
NOMINAL PIPE DIAMETER	PIPE OD	MINIMUM TRENCH WIDTH
18"	21.2"	39"
24"	27.8"	48"
30"	35.1"	66"
36"	41.7"	78"
42"	46.75"	83"
48"	52.7"	89"
60"	65.5"	102"

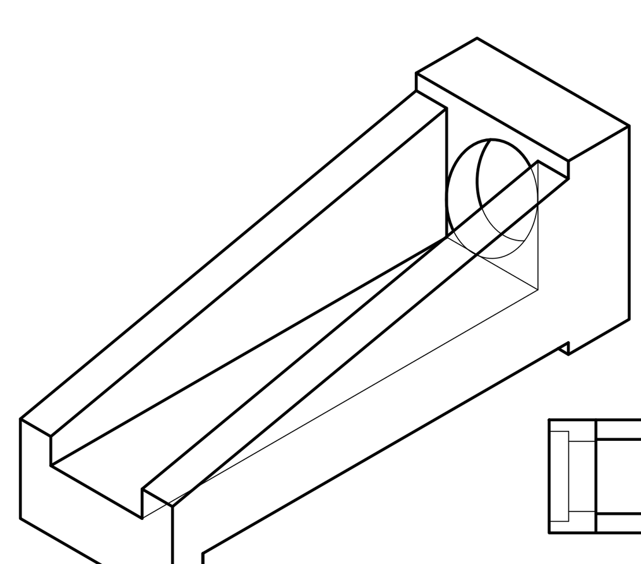
TABLE 1

TRENCH AND BEDDING DETAIL FOR HDPE STORM DRAIN PIPE

N.T.S.

PIPE I.D.	SLOPE	WEIGHT	W	L	WALL	BOT.	A	B	C	D
12"	4 : 1 6 :	1440 Lbs.	26" 26"	60" 84"	5"	5"	17" 17"	3½"	6"	12" 12"
	1 4 : 1 6	2325 Lbs. 1590	26" 26"	60" 84"	5"	5"	20½"	3½"	6"	12" 12"
15"	: 1 3 : 1	Lbs. 2325 Lbs.	29" 29"	54½"	5"	5"	20½"	3½"	6"	14¼"
	4 : 1 6 :	1540 Lbs.	29" 35"	69"	5"	5"	24"	3½"	6"	14¼"
18"	1 3 : 1	2055 Lbs.	35" 35"	97½"	5"	5"	24"	4"	5"	14¼"
	4 : 1 6 :	2985 Lbs.	44" 44"	75" 96"	5"	5"	24"	4"	5"	21" 21"
	1 3 : 1	2935 Lbs.	44" 50"	138"	5"	5"	31"	3¾"	5"	21" 29"
24"	4 : 1 6 :	3520 Lbs.	50" 50"	99"	5"	5"	31"	4"	4"	29" 29"
	1 3 : 1	4840 Lbs.		128"	5"	5"	31"	4"	4"	36" 36"
	4 : 1 6 :	5480 Lbs.		186"	5"	5"	38 .5"	3"	5"	36"
30"	1	7070 Lbs.		120"	6"	6"	38.5"	2"	6"	
		9590 Lbs.		156"	6"	6"	38 .5"	2"	6"	
		7370 Lbs.		228"	6"	6"	45.5"	1½"	5½"	
36"		9180 Lbs.			6"	6"	45.5"	2"	6"	
		12,485 Lbs.			6"	6"	45.5"	2"	6"	
								2"	6"	

GENERAL NOTES:
1. CLASS "C" CONCRETE.
2. REINFORCEMENT: #4 AT 9" O.C.E.W.
3. ALL EXPOSED CORNERS SHALL BE CHAMFERED ¾".



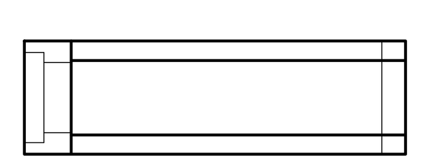
SPECIFICATIONS:

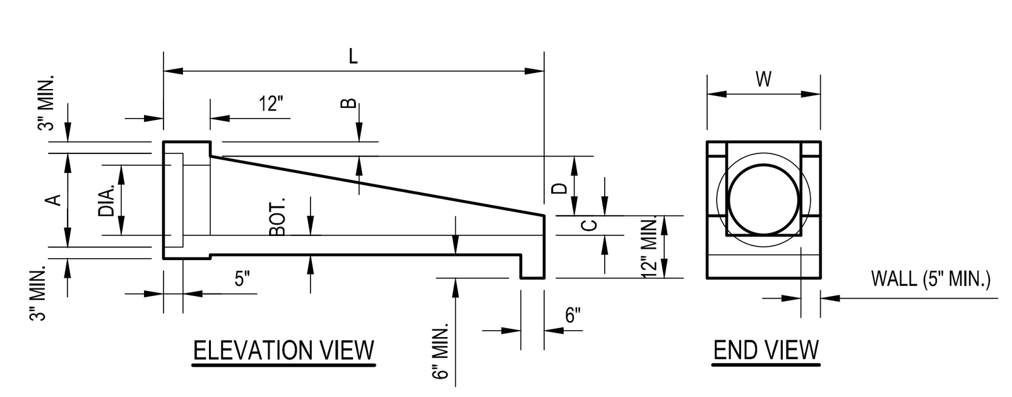
1. CONCRETE:
CONCRETE HAS A DESIGN STRENGTH OF 5500 PSI. AT 28 DAYS.

2. STEEL REINFORCEMENT:
ASTM A-615 GRADE 60 (SEE NOTE 2)

3. LOADING:
DESIGNED FOR H-20 LOADING.

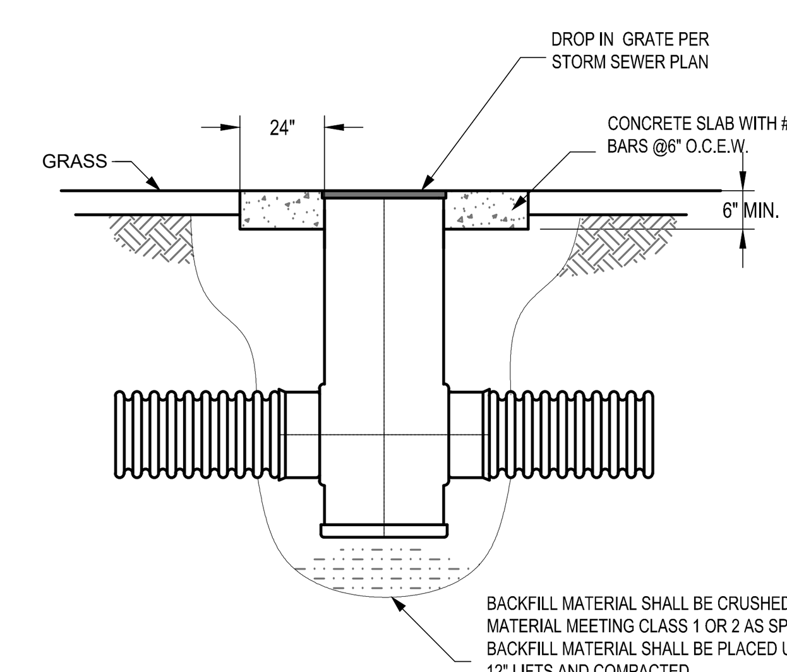
4. C.I. CASTINGS:
ASTM A 48 CLASS 30/35





PRE-CAST SAFETY END TREATMENT

N.T.S.



NOTES: 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

TYPICAL NYLOPLAST DRAIN BASIN WITH SOLID COVER OR DRAIN GRATE (IN GRASS/LAWN AREA)

N.T.S.

BEAMON ENGINEERING
TBPE FIRM NO. F-21588 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407
STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
OCTOBER 7, 2024

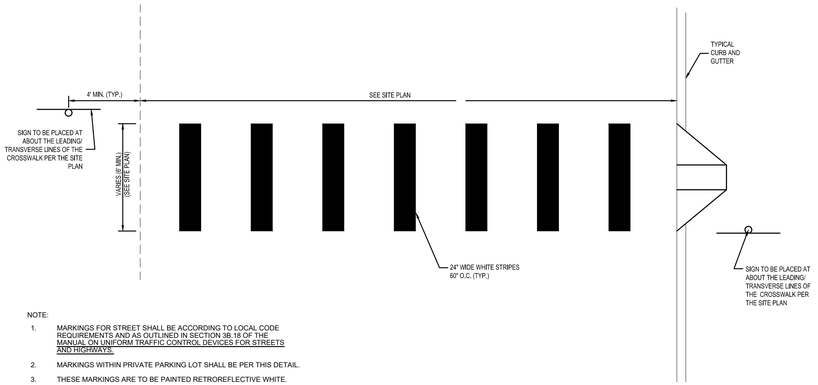
BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

DRAINAGE DETAILS

DATE: OCTOBER 07, 2024
SCALE:
SHEET NO.
SD 3

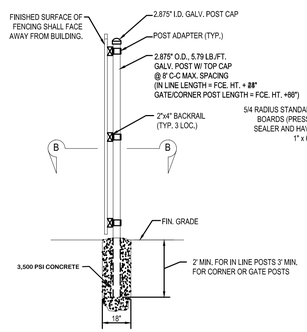


NOTE:

1. MARKINGS FOR STREET SHALL BE ACCORDING TO LOCAL CODE REQUIREMENTS AND AS OUTLINED IN SECTION 3B.18 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. MARKINGS WITHIN PRIVATE PARKING LOT SHALL BE PER THIS DETAIL.
3. THESE MARKINGS ARE TO BE PAINTED RETROREFLECTIVE WHITE.

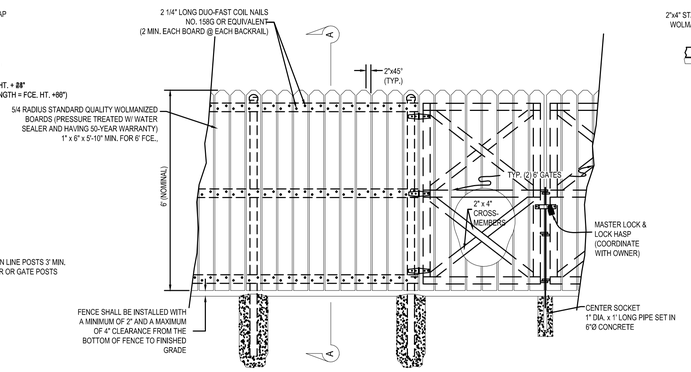
CROSSWALK/PED. CROSSING

N.T.S.



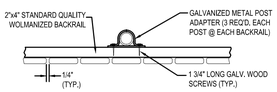
SECTION A-A

N.T.S.



ELEVATION

N.T.S.



SECTION B-B

N.T.S.

GENERAL NOTES

ALL METAL FASTENERS SUCH AS BOLTS, NAILS, HINGES, HASPS, ETC. SHALL BE HOT DIPPED GALVANIZED.

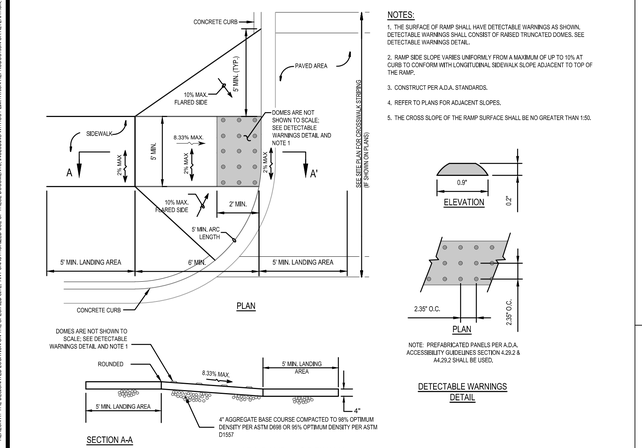
ALL BACKRAIL SPLICES SHALL BE AT POSTS ONLY.

FINISHED SURFACE OF FENCING SHALL FACE AWAY FROM BUILDING.

GATES SHALL BE LOCKABLE WITH LOCKS AND KEYS TO BE HANDED OVER TO THE BUILDING MANAGER.

WOODEN DUMPSTER FENCE

N.T.S.



PLAN

SECTION A-A

ADA RAMP IN SIDEWALK

N.T.S. 03/14/08

NOTES:

1. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP.
3. CONSTRUCT PER A.D.A. STANDARDS.
4. REFER TO PLANS FOR ADJACENT SLOPES.
5. THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.

NOTE: PREFABRICATED PANELS PER A.D.A. ACCESSIBILITY GUIDELINES SECTION 4.29.2 & A4.29.2 SHALL BE USED.

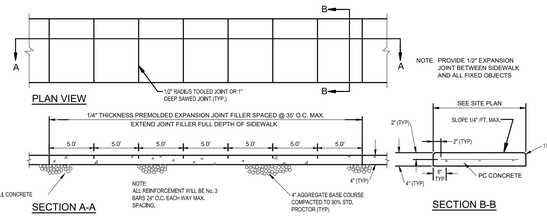
DETECTABLE WARNINGS DETAIL

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 ADJOINING SURFACES, INCLUDING SIDE FLARES. FURNISH 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 DETAILS 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 DEPTH 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 RADIUS.

DETECTABLE WARNING DETAILS

CONCRETE GENERAL NOTES

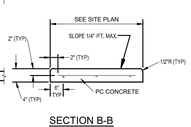
1. DETAILING OF CONCRETE REINFORCING BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI SP-66 "DETAILING MANUAL", PLACING OF REINFORCING BARS SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315R "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" AND CRSI "MANUAL OF STANDARD PRACTICE".
2. MIXING, TRANSPORTING AND PLACING CONCRETE SHALL CONFORM TO ACI 301.
3. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
4. NO. 3 BARS MAY CONFORM TO ASTM A615, GRADE 40, UNLESS NOTED OTHERWISE. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR REVIEWED BY THE STRUCTURAL ENGINEER.
5. REINFORCEMENT DESIGNATED AS "CONTINUOUS" SHALL LAP 30 BAR DIAMETERS AT SPLICES UNLESS NOTED OTHERWISE.
6. OBSERVE HOT & COLD WEATHER CONCRETING PRACTICES RECOMMENDED ON ACI 305 AND 306 RESPECTIVELY FOR EXTREME TEMPERATURES.
7. FORMWORK SHALL COMPLY WITH ACI 347, "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK".
8. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318.
9. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4 INCH, 45 DEGREE CHAMFER.
10. WELDED WIRE FABRIC SHALL NOT BE ACCEPTED.
11. REFER TO JOB SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



PLAN VIEW

NOTE: PROVIDE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND ALL FIXED OBJECTS

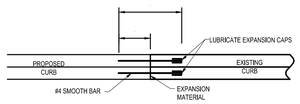
SECTION A-A



SECTION B-B

CONCRETE SIDEWALK

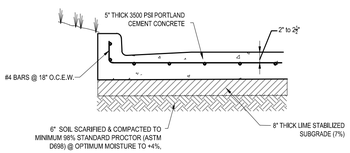
N.T.S.



DOWEL INTO EXISTING CONCRETE CURB w/#4 SMOOTH BAR, 12" LONG

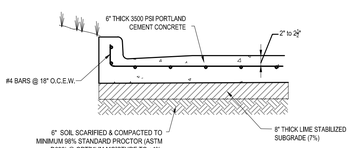
TIE-IN TO EXISTING CURB DETAIL

N.T.S.



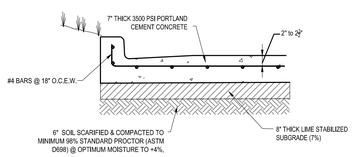
PARKING AREA CONCRETE PAVING

N.T.S.



HEAVY DUTY CONCRETE PAVING

N.T.S.



DUMPSTER PAD CONCRETE PAVING

N.T.S.

GENERAL PAVING NOTES

SUBGRADE PREPARATION:

A. PRIOR TO BEGINNING PAVING OPERATIONS, ALL VEGETATION AND DEBRIS SHALL BE REMOVED AND WASTED.

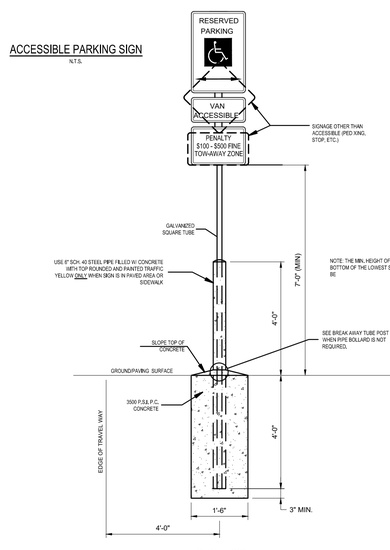
B. WHERE FILL IS REQUIRED TO ACHIEVE THE DESIRED GRADES, THEN SUCH MATERIAL SHALL BE SIMILAR TO THE NATIVE, EXPOSED STRATA AND SHALL BE PLACED IN LIFTS NOT EXCEEDING EIGHT INCHES IN LOOSE THICKNESS AND COMPACTED TO AT LEAST 98 PERCENT OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698). MOISTURE DURING COMPACTION SHALL BE WITHIN THREE PERCENT BELOW TO THREE PERCENT ABOVE THEORETICAL OPTIMUM. EXCESSIVELY WET AREAS MAY REQUIRE AERATION BY DISCING, HYDRATED LIME TREATMENT OR REMOVAL AND REPLACEMENT WITH MORE SUITABLE MATERIAL.

C. NO LIME STABILIZATION FOR SUBGRADE WITH P.I. LESS THAN 20, WHERE ALLOWED BY THE GEOTECHNICAL ENGINEER, THE CONTRACTOR MAY USE A LIME-FLY ASH MIXTURE TO STABILIZE THE SUBGRADE.

D. THE CONTRACTOR SHALL USE 7% LIME FOR BIDDING PURPOSES BUT IS ALLOWED TO DECREASE THE AMOUNT OF LIME BASED ON LIME SERIES TESTS.

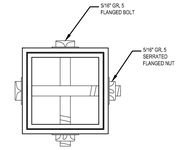
ACCESSIBLE PARKING SIGN

N.T.S.

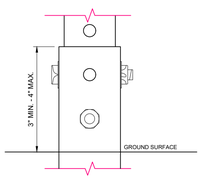


SINGLE POST

N.T.S.



PLAN VIEW



PARTIAL ELEVATION

SQUARE TUBE BREAK AWAY POST

N.T.S.

NOTES:

1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE

   POST TUBES - 2"x2"x.5"/16" 14ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

   ANCHOR TUBE - 2-1/2"x2-1/4"x.5"/16" 14ga
   HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B. STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.

   THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 48" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.

SIGN MOUNTING AND BASE DETAIL

N.T.S.

BEAMON ENGINEERING
TBPE FIRM NO. F-21589 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER

OCTOBER 7, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS			
NO.	DESCRIPTION	BY	DATE

SITE DETAILS

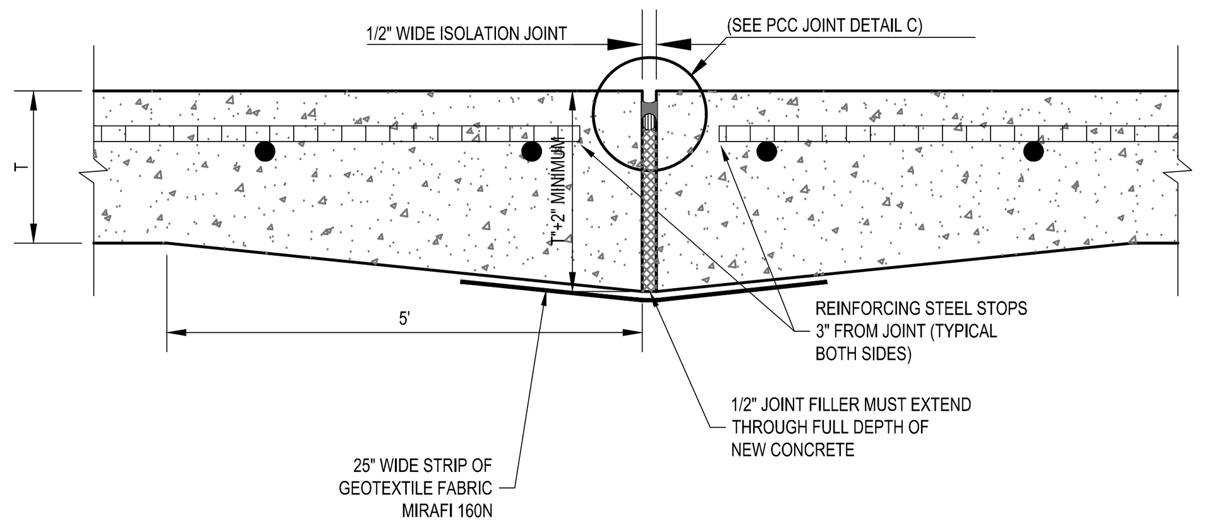
DATE: OCTOBER 07, 2024
SCALE: N.T.S.
SHEET NO.: SD 1

GENERAL CONCRETE PAVING JOINT NOTES

1. CONTRACTION JOINTS SHALL BE CREATED WHILE THE CONCRETE IS STILL PLASTIC BY USING A GROOVING TOOL OR BY INSERTING A PREMOLDED FILLER STRIP, OR A GROOVE CAN BE SAW CUT INTO THE CONCRETE WITHIN 12 HOURS AFTER CONCRETE IS POURED.
2. THE CONTRACTION JOINT PATTERN SHALL DIVIDE THE PAVEMENT INTO PANELS THAT ARE APPROXIMATELY SQUARE. THE LENGTH OF A PANEL MAY BE 25 PERCENT GREATER THAN THE WIDTH.
3. MAXIMUM SPACING SHALL BE ABOUT 30 TIMES THE THICKNESS OF THE SLAB UP TO A MAXIMUM OF 15 FEET, U.N.O. (SEE CHART BELOW).

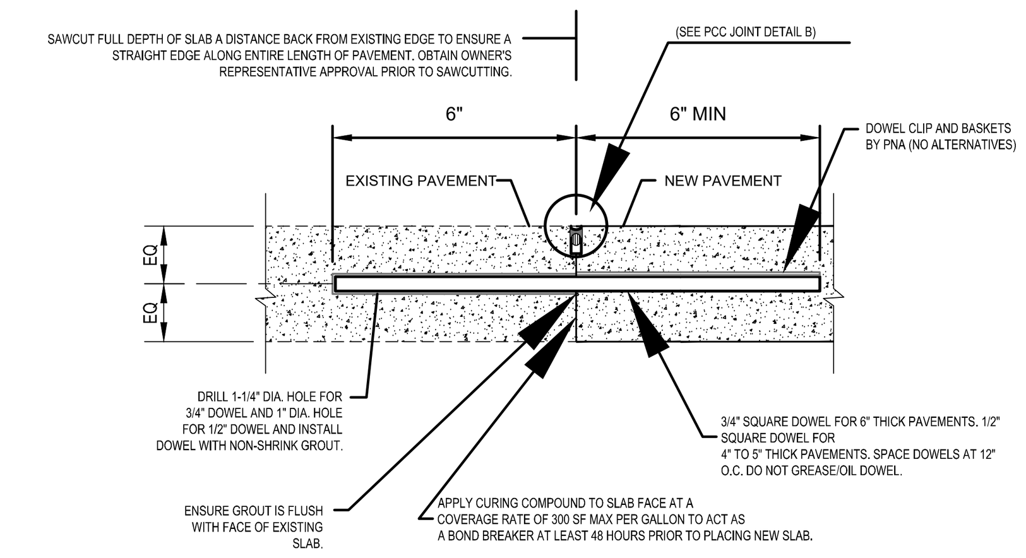
CONCRETE THICKNESS (INCHES)	MAXIMUM JOINT SPACING (FEET)
3.5	8.0
4.0	10.0
4.5	10.0
5.0	12.5
5.5	12.5
6.0	15.0
OVER 6.0	15.0

4. WHEN TRANSVERSE CONSTRUCTION JOINTS ARE NEEDED, THEY SHALL BE INSTALLED AT CONTRACTION JOINT LOCATIONS IF POSSIBLE.
5. THE JOINT FILLER FOR ISOLATION JOINTS SHALL EXTEND THROUGH THE SLAB THICKNESS TO THE SUBGRADE AND SHALL BE RECESSED BELOW THE PAVEMENT SURFACE SO THAT THE JOINT CAN BE SEALED WITH JOINT SEALANT MATERIALS.
6. RECOMMENDED JOINT FILLER MATERIALS INCLUDE BITUMINOUS MASTIC, BITUMINOUS IMPREGNATED CELLULOSE OR CORK, SPONGE RUBBER, OR RESIN-BOUND CORK, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS.
7. DISTRIBUTED STEEL REINFORCEMENT SHALL BE INSTALLED 2" BELOW THE TOP OF SLAB AND SHALL BE HELD IN POSITION BY USING CHAIRS OR PRECAST CONCRETE BLOCKS.



ISOLATION JOINT (IJ) - WITH THICKENED EDGE

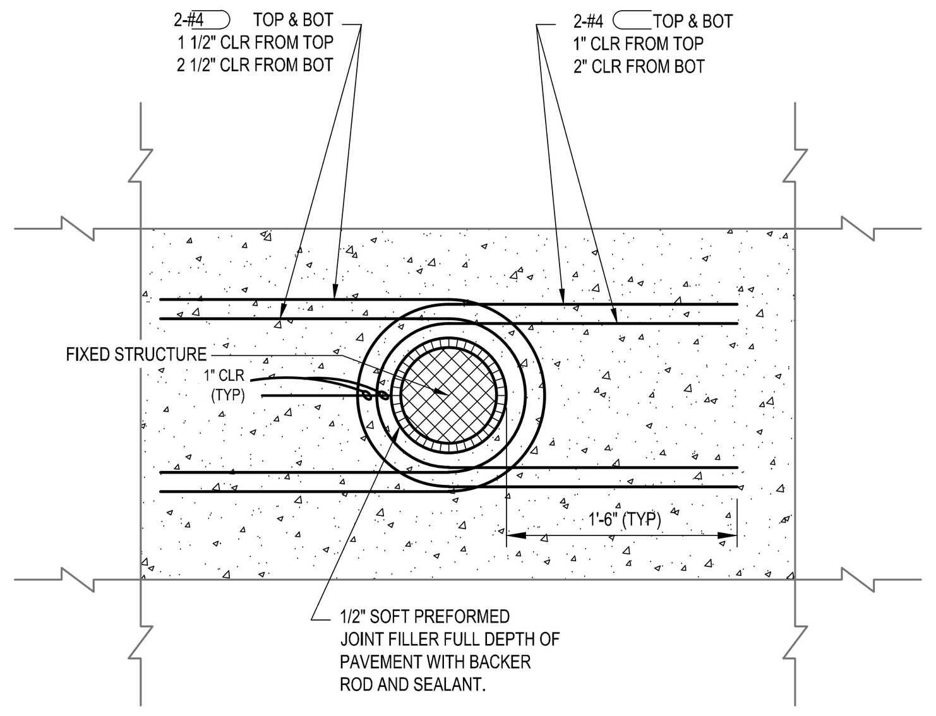
N.T.S.



NOTE: THIS DETAIL IS NOT A TYPICAL CONSTRUCTION JOINT. IT IS USED ONLY WHEN POURING NEW CONCRETE PAVEMENT TO EXISTING CONCRETE PAVEMENT.

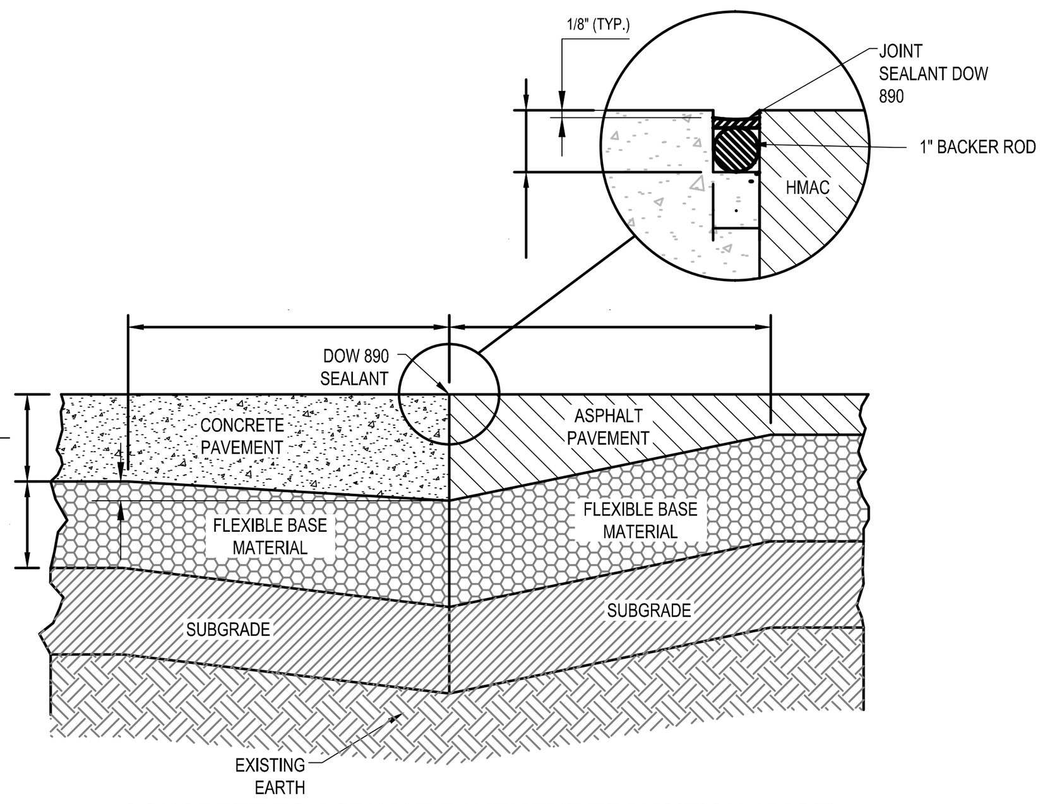
BUTT JOINT/JOINT TO EXISTING PAVEMENT (JAEC)

N.T.S.



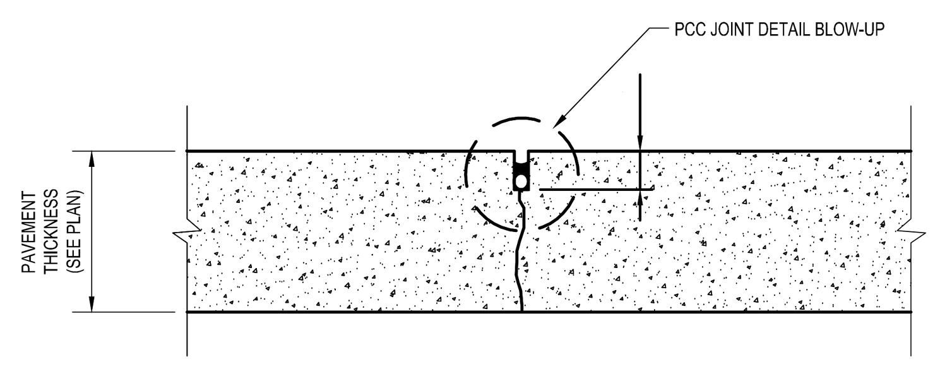
ISOLATION JOINT AT TYPICAL ROUND FIXED STRUCTURE PLAN DETAIL

USES: MANHOLES, LIGHT POLE BASES AND BOLLARDS



CONCRETE TO ASPHALT PAVEMENT TRANSITION (CAPT)

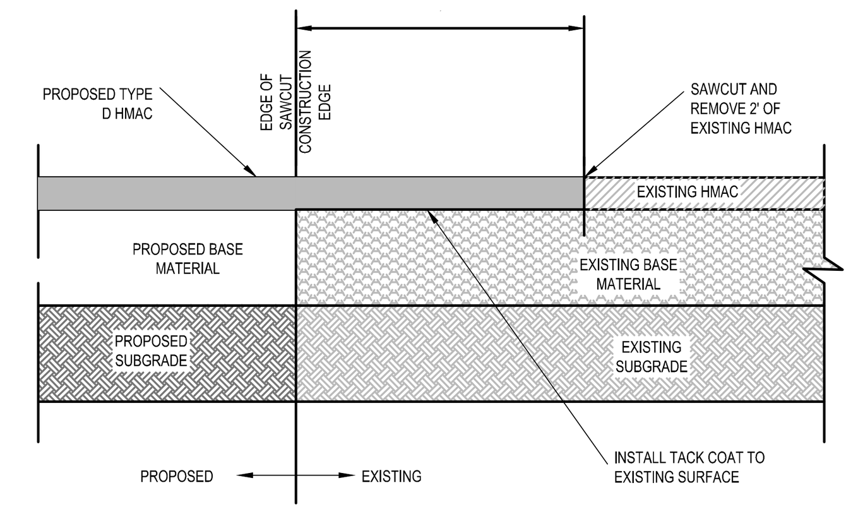
N.T.S.



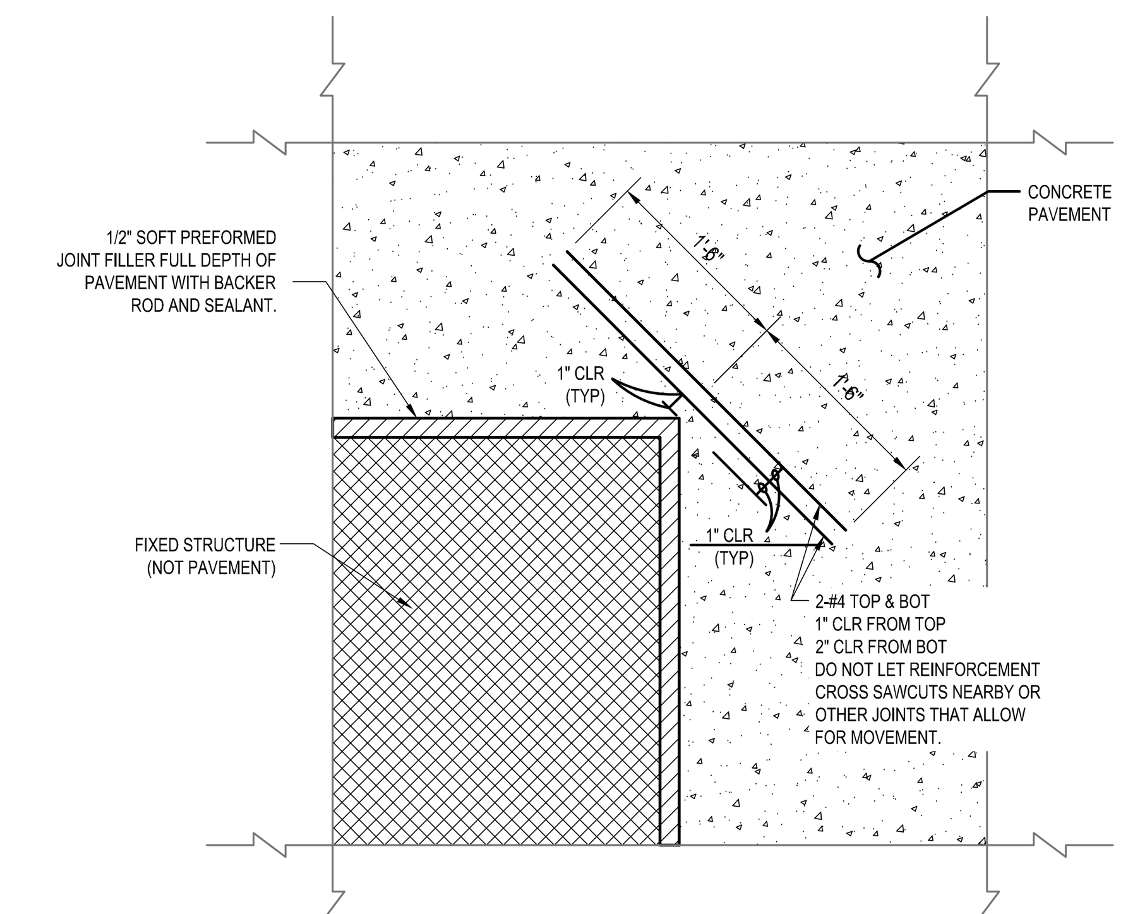
NOTE:
1. SEE PLAN FOR JOINT SPACING.

CONTRACTION/SAWCUT JOINT (SJ)

N.T.S. 11/19/08

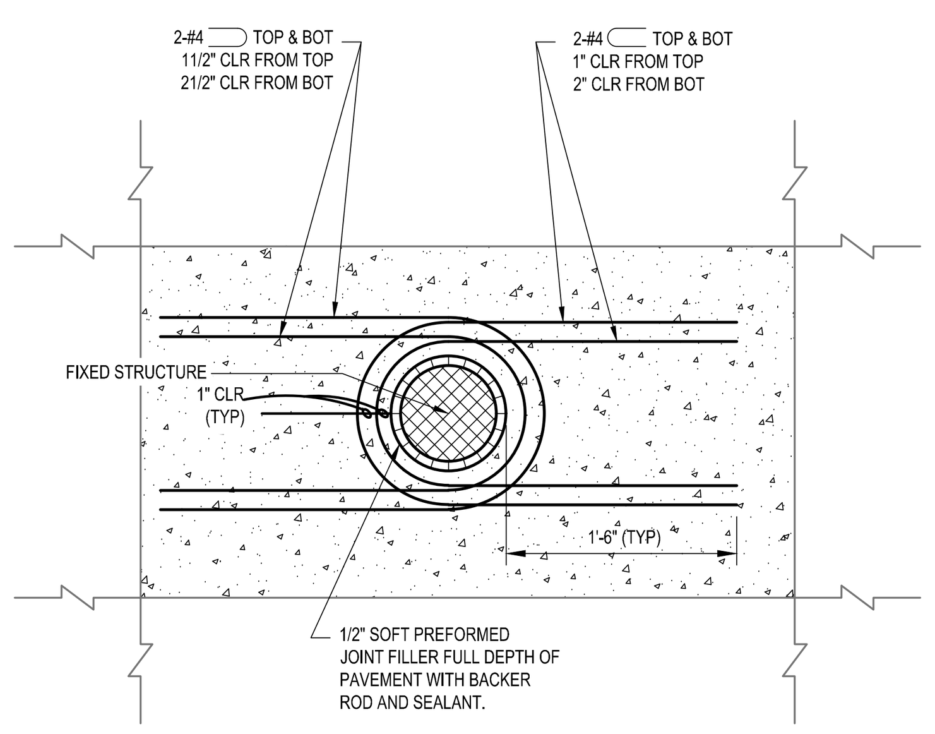


TIE-IN TO EXISTING ASPHALT/PAVEMENT REPAIR DETAIL



ISOLATION JOINT AT TYPICAL RECTANGULAR FIXED STRUCTURE PLAN DETAIL

USES: BUILDINGS, RETAINING WALLS/DOCK WALLS AND DROP INLETS

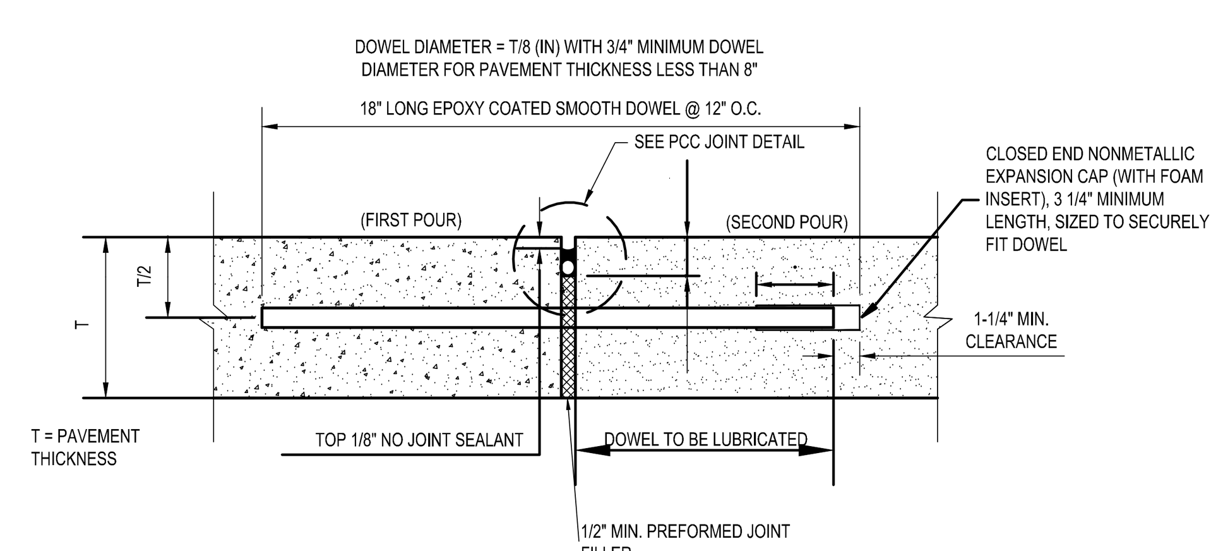


TYPICAL ROUND FIXED STRUCTURE PLAN DETAIL

USES: MANHOLES, LIGHT POLE BASES AND BOLLARDS

ISOLATION JOINT DETAILS

N.T.S.



NOTES:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE, DRILLING BY HAND OR PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

2. REFERENCE SPECIFICATION FOR JOINT SPACING.

EXPANSION JOINT (EJ)

N.T.S.

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STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
OCTOBER 7, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS			
NO.	DESCRIPTION	BY	DATE

SITE DETAILS

DATE: OCTOBER 07, 2024
SCALE: N.T.S.
SHEET NO.: SD 2

NOTES:

1. A MAX. OF 4 AND A MIN. OF 2 THROAT RINGS SHALL BE USED AT EACH MANHOLE IN NEW OR EXISTING RIGHT-OF-WAY.
2. USE ADEKA SEALANT OR APPROVED EQUAL BETWEEN RING/COVER, ADJUSTMENT RINGS AND CHIMNEY OR CORBEL/CONE SECTION.
3. MANHOLE BASE THICKNESS AND FOUNDATION FROM FLOWLINE TO RIM AS FOLLOWS:

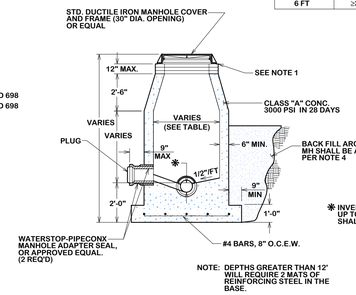
MANHOLE DEPTH (FT.)	BASE THICKNESS
0 - 12	8"
12 AND OVER	12"

4. MANHOLE LOCATION AND COMPACTION AS FOLLOWS:

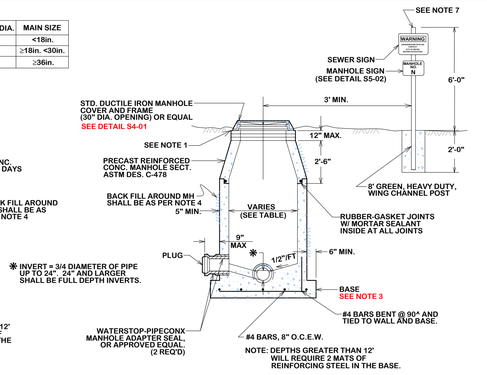
LOCATION	COMPACTION REQUIREMENT
PAVEMENT	98 % STANDARD PROCTOR - ASTM D 698
LANDSCAPE AREA	90 % STANDARD PROCTOR - ASTM D 698

5. IN FLOODPLAINS OR AREAS OF CONCENTRATED FLOW, THE CONE SHALL EXTEND 1 FOOT ABOVE THE BASE FLOOD ELEVATION OR A BOLT DOWN, WATER-TIGHT RING AND COVER SHALL BE USED, VENTED WHERE REQUIRED.
6. WARNING SIGN ONLY TO BE PLACED WHERE SEWER CROSSES OPEN FIELDS.

MANHOLE DIA.	MAIN SIZE
4 FT	<18in.
5 FT	≥18in. <30in.
6 FT	≥36in.



CAST IN PLACE MANHOLE



❋ INVERT = 3/4 DIAMETER OF PIPE UP TO 24". 24" AND LARGER SHALL BE FULL DEPTH INVERTS.

PRE-CAST MANHOLE

STANDARD MANHOLE

S1-00

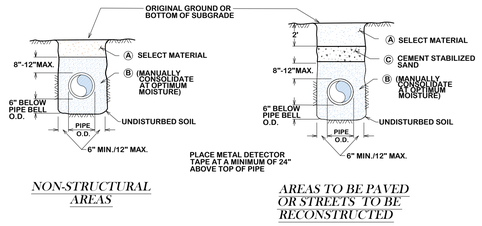
NOTES:

1. FOR BEDDING AND TRENCHING WITHIN ALL EXISTING PAVED AREAS, SEE DETAILS FOR OPEN CUT STREETS. (Details ST4-00, ST4-01, ST4-02). THIS NOTE DOES NOT APPLY TO STREETS BEING RECONSTRUCTED.
2. ALL BEDDING & INSTALLATION OF PVC PIPE SHALL BE IN ACCORDANCE TO ANSI/AWWA STANDARDS FOR PVC PIPE.
3. ALL BEDDING & INSTALLATION OF DUCTILE IRON PIPE SHALL BE IN ACCORDANCE TO ANSI/AWWA C150/A21.50.
4. COMPACTION SHALL BE ATTAINED BY MECHANICAL TAMPING.
5. ALL TRENCHES SHALL BE BACK FILLED AND TEMPORARY PAVING OR PLANKING PLACED AT THE END OF EACH WORKING DAY.
6. EVERY 100 FEET PROVIDE A WATER STOP BLOCK COMPOSED OF CEMENT SAND OR IMPERVIOUS NATIVE MATERIAL DEPENDING ON EMBEDMENT. BLOCK SHALL BE 6 FEET IN LENGTH. NO BEDDING SAND IN THIS AREA.

Ⓐ SELECT NATIVE MATERIAL
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAN TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (ie...YARDS, PASTURES, EASEMENTS) (OPTION 1) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NEW STREET AREAS AND STREETS TO BE RECONSTRUCTED.(OPTION 2)

Ⓑ GRANULAR MATERIAL
MATERIAL SHALL BE BANK RUN RIVER SAND WHICH IS FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL AND WHICH, WHEN TESTED BY STANDARD LABORATORY METHODS, MEET THE FOLLOWING REQUIREMENTS:
MAXIMUM LIQUID LIMIT 45
MAXIMUM PLASTICITY INDEX 15
MAXIMUM PERCENT PASSING NO. 200 SIEVE 35
MINIMUM PERCENT PASSING 3/4" SIEVE 100
THE MATERIAL SHALL BE FREE FLOWING AND WHEN WET, SHALL NOT ADHERE TO FORM A BALL WHEN PRESSED IN THE HAND.

Ⓒ CEMENT STABILIZED SAND



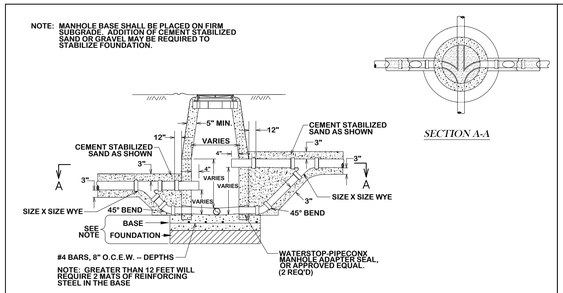
NON-STRUCTURAL AREAS

AREAS TO BE PAVED OR STREETS TO BE RECONSTRUCTED

BEDDING AND TRENCH FOR DI PIPE & PVC PIPE

S1-01

NOTE: MANHOLE BASE SHALL BE PLACED ON FIRM SUBGRADE. ADDITION OF CEMENT STABILIZED SAND OR GRAVEL MAY BE REQUIRED TO STABILIZE FOUNDATION.

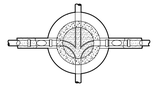


SECTION A-A

CITY OF COLLEGE STATION
OUTSIDE DROP MANHOLE

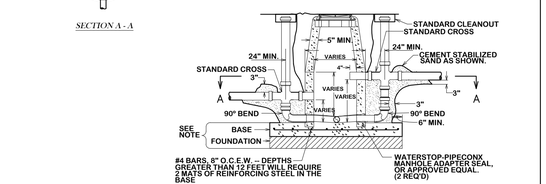
ONLY ALLOWED FOR MAIN LINE CONNECTIONS 60" AND LARGER

S2-00



SECTION A - A

NOTE: MANHOLE BASE SHALL BE PLACED ON FIRM SUBGRADE. ADDITION OF CEMENT STABILIZED SAND OR GRAVEL MAY BE REQUIRED TO STABILIZE FOUNDATION.



CITY OF BRYAN
OUTSIDE DROP MANHOLE

ONLY WHEN APPROVED BY CITY ENGINEER

S2-01

NOTE:
MANHOLE BASE SHALL BE PLACED ON FIRM SUBGRADE. ADDITION OF CEMENT STABILIZED SAND OR GRAVEL MAY BE REQUIRED TO STABILIZE FOUNDATION.

IN EXISTING MANHOLE, PLACE PVC ELBOW ON BENCH, GROUT NEW BENCH TO SPRINGLINE AND TROWEL SMOOTH. FORM SMOOTH CHANNEL TO INVERT.

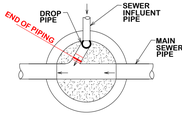
ALL NEW CONNECTION AT EXISTING MANHOLES SHALL BE BY CORING ONLY.

MANHOLE BOOTS SHALL BE SIZED SAME AS INCOMING PIPE.

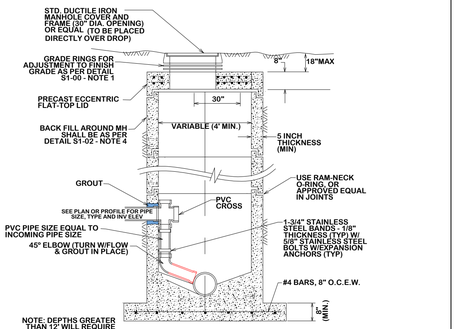
CROSS MUST BE A MINIMUM 24" BELOW CONE SECTION.

5 FOOT DIAMETER MANHOLE WILL BE REQUIRED FOR DROPS 12" AND GREATER.

IF THERE ARE TWO DROPS INSIDE MANHOLE ON OPPOSING SIDES, THEN MANHOLE LID SHOULD BE CENTERED BETWEEN THE TWO DROPS.



PLAN



STANDARD DROP MANHOLE

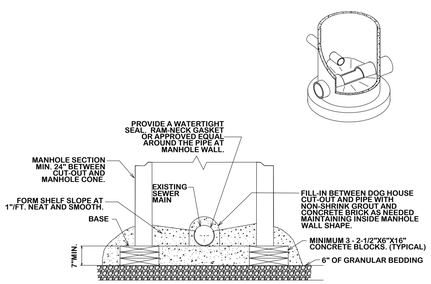
CITY OF BRYAN - DROP MANHOLE TO BE USED ON LINES UP TO 12" IN SIZE

CITY OF COLLEGE STATION - DROP MANHOLE TO BE USED ON LINES UP TO 4' IN SIZE

S2-02

NOTES:

1. FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
2. THIS DETAIL TO BE USED WHEN A 6" OR LARGER LATERAL NECESSITATES CONSTRUCTION OF A NEW MANHOLE.
3. FOR ADDITIONAL STANDARDS NOT SHOWN, SEE "STANDARD MANHOLE" DETAIL S1-02.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF EXISTING SEWER DURING INSTALLATION OF MANHOLE.
5. DOGHOUSE OPENING MAY ONLY BE USED WHEN PLACING A NEW MANHOLE OVER AN EXISTING LINE; OTHERWISE, THE OPENING MUST BE CAST. SIZE, LOCATION, AND ANGLE OF ENTRY SHALL BE AS REQUIRED BY THE PLANS.
6. EXCAVATE TRENCH TO MIN. 13" BELOW BOTTOM OF EXISTING PIPE. COMPACT SUBGRADE. PLACE AND COMPACT 4" SP GRANULAR BEDDING. MONOLITHIC POUR OF MIN. 7" DEPTH, 4" SCUM TOPPING MIX TO BE PLACED INSIDE, UNDER, AND OUTSIDE MANHOLE BARREL FROM SURFACE OF BEDDING, AROUND CONCRETE BLOCK RISERS, TO A POINT APPROXIMATELY AT THE SPRING LINE OF THE EXIST. PIPE.
7. DURING THE SAME POUR, THE FINISH MANHOLE SHELF SHALL BE FORMED AND FINISHED AROUND THE BARREL AND EXISTING PIPE AS SHOWN.
8. AFTER CONCRETE SHELF HAS CURED, THE EXISTING PIPE SHALL BE SAW-CUT ON BOTH SIDES TO THE FINISHED SHELF GRADE AND REMOVED. ONLY AFTER CITY APPROVED, PASSING MANHOLE LEAKAGE TESTING. THE EXISTING PIPE SHALL FORM THE TROUGH OF THE MANHOLE AS SHOWN. FILE CUT PIPE TO GIVE SMOOTH EDGES.

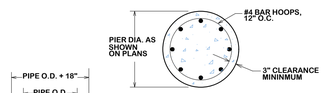


CITY OF COLLEGE STATION
GRAVITY SEWER DOGHOUSE MANHOLE

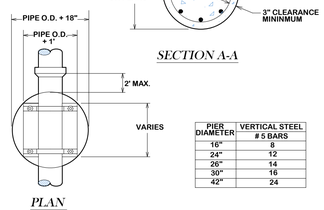
S3-00

NOTES:

1. EACH PIER SHALL BE COMPLETED IN A SINGLE CONTINUOUS POUR.
2. CHAMFER EDGES 3/4".
3. CONTRACTOR SHALL CONSTRUCT CONCRETE PIER TO A MINIMUM DEPTH OF 6' OR TO A DEPTH WHERE A GOOD BEARING SOIL IS ENCOUNTERED.
4. ALL SHAFTS SHALL BE BORED VERTICALLY PLUMB WITHIN 2" TOLERANCE.
5. ALL INFORMATION SHOWN IS CITY MINIMUM. ALL PIERS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.
6. NUMBER OF STRAPS DEPENDENT ON SIZE OF PIERS. MIN. 1 STRAP PER PIER.

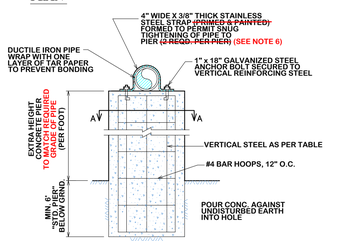


SECTION A-A



PIER DIAMETER	VERTICAL STEEL # 5 BARS
18"	8
24"	12
26"	14
30"	16
42"	24

PLAN

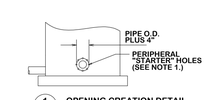


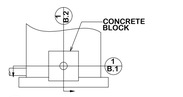
TYPICAL CONCRETE DRILLED PIER FOR AERIAL SEWER

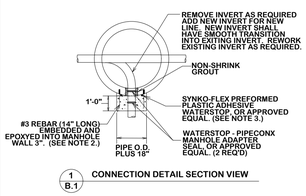
S4-00

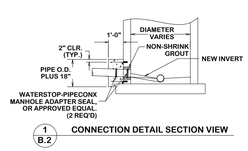
NOTES:

1. 1" DIA. "STARTER" HOLES SHALL BE DRILLED THROUGH WALL OF EXISTING MANHOLE SPACED 3" APART CENTER TO CENTER. AFTER "STARTER" HOLES HAVE BEEN INSTALLED AND APPROVED BY A CITY INSPECTOR, THE CONTRACTOR SHALL BEGIN REMOVING THE CONCRETE INSIDE THE PERIPHERAL "STARTER" HOLES. CONCRETE SHALL BE REMOVED WITH PNEUMATIC HAND TOOLS.
2. THE NUMBER OF REBAR DOWELS SHALL VARY WITH SIZE OF OPENING. REBAR SHALL NOT BE SPACED MORE THAN 12" CC.
3. WATERSTOP SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
4. CONCRETE SHALL BE 3,000 P.S.I.



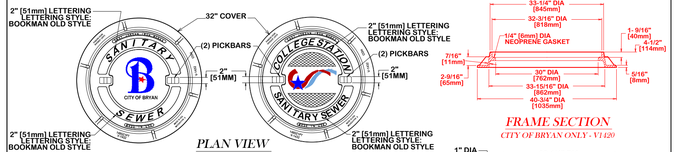






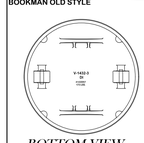
STANDARD MANHOLE TIE-IN

S3-01

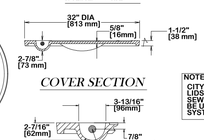


PLAN VIEW

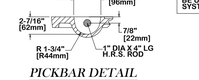
FRAME SECTION
CITY OF BRYAN ONLY - V1420



BOTTOM VIEW OF COVER

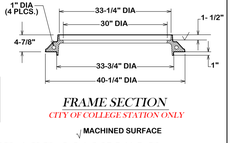


COVER SECTION



PICKBAR DETAIL

NOTE:
CITY SPECIFIC SANITARY SEWER LIDS TO BE USED FOR PUBLIC SEWER SYSTEMS ONLY. NOT TO BE USED ON PRIVATE SEWER SYSTEMS.



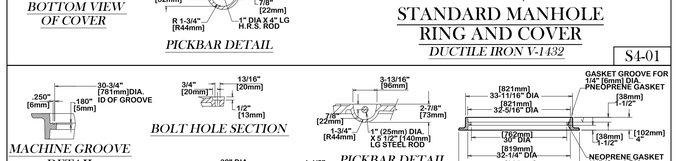
FRAME SECTION
CITY OF COLLEGE STATION ONLY

√ MACHINED SURFACE

STANDARD MANHOLE RING AND COVER

DUCTILE IRON V-1432

S4-01



NOTE:
CITY SPECIFIC SANITARY SEWER LIDS TO BE USED FOR PUBLIC SEWER SYSTEMS ONLY. NOT TO BE USED ON PRIVATE SEWER SYSTEMS.

WATER TIGHT MANHOLE RING AND COVER

DUCTILE IRON V-2432-3

S4-02

REVISIONS:
7/26/2022 - S4-01 FRAME

BRYAN - COLLEGE STATION
STANDARD SEWER DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

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

FIGURE:
S1

SHEET 1 OF 3

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. 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.

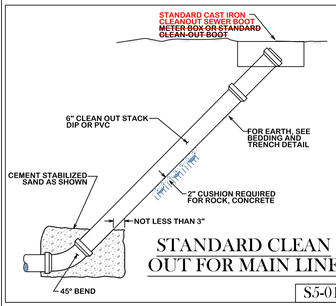
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM.

STRUCTURAL BACKFILL AREA INCLUDES ALL PAVED AREAS (SIDEWALKS, STREETS, ALLEYS, DRIVEWAYS AND PARKING AREAS) AND SHALL EXTEND 5' BEYOND THE CURB LINE. STRUCTURAL BACKFILL SHALL BE CEMENT STABILIZED. (CEMENT NO. 2 IN S1-01) OR EXCAVATED SOIL COMPACTED TO MAXIMUM DRY DENSITY AS PER ASTM D-698 WITHIN OPTIMUM TO + 4% WET OF OPTIMUM (OPTION NO. 1 IN S1-01)

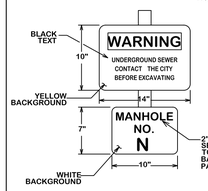
STRUCTURAL BACKFILL AREA

S5-00



STANDARD CLEAN OUT FOR MAIN LINE

S5-01



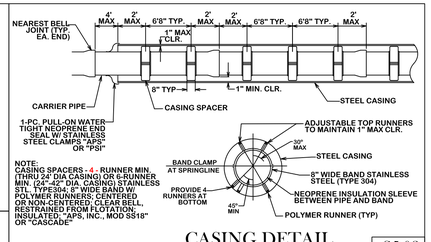
NOTES:

1. FURNISH AS SHOWN ON PLANS AND/OR AT EACH MANHOLE WHERE SEWER LINE CROSSES OPEN FIELDS.
2. SIGNS TO BE CONSTRUCTED FROM 20 GA. STEEL BAKED ON ENAMEL FINISH. FURNISH ONE SIGN AND ONE POST FOR EACH OPEN FIELD AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS. FURNISH SAME NUMBER OF REPLACEMENT SIGNS AS FOR EACH INSTALLED (OMITTING MANHOLE NUMBER ON MANHOLE SIGN). (NOT A SEPARATE PAY ITEM)

2" BLACK PRESSURE SENSITIVE NUMBERS TO BE ADDED AFTER BASIC SIGN HAS BEEN PAINTED

SEWER WARNING AND MANHOLE IDENTIFICATION SIGN

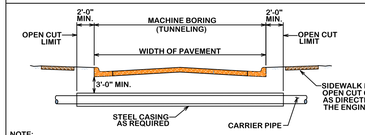
S5-02



NOTE:
CASING SPACERS - 4 - RUNNER MIN. (THRU 24' DIA CASING) OR 6-RUNNER MIN. (24"-42" DIA. CASING) STAINLESS STL. TYPE304; 8" WIDE BAND W/ POLYMER RUNNERS; CENTERED, OR NON-CENTERED; CLEAR BELL, RESTRAINED FROM FLOTATION; INSULATED; "APS, INC., MOD SS18" OR "CASCADE"

CASING DETAIL

S5-03

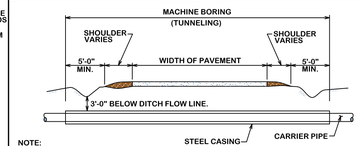


NOTE:

1. FOR MORE INFORMATION ON WATER AND SEWER LINE CROSSING SEE CITY STANDARD SPECIFICATION FOR WATER AND SEWER LINE CONSTRUCTION.
2. STEEL CASING SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. DRY BORING PREFERRED. WET BORING ALLOWED ONLY WHEN APPROVED BY THE CITY ENGINEER.

TYPICAL URBAN CITY STREET CROSSING

S5-04



NOTE:

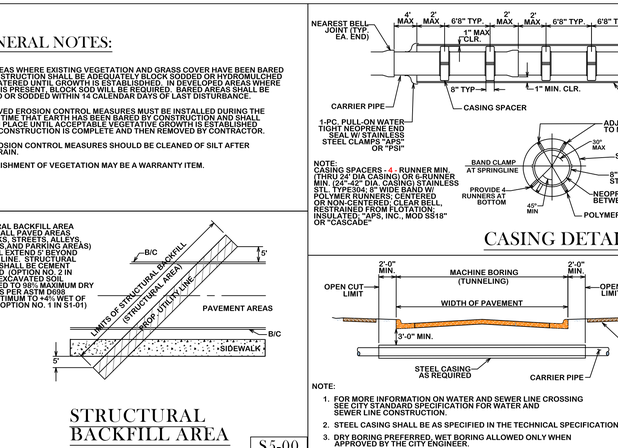
1. FOR MORE INFORMATION ON WATER AND SEWER LINE CROSSING SEE CITY STANDARD SPECIFICATION FOR WATER AND SEWER LINE CONSTRUCTION.
2. STEEL CASING SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. DRY BORING IS REQUIRED.

TYPICAL RURAL STREET CROSSING

S5-05

NOTE:

1. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS
2. ALL SERVICE CONNECTIONS & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
3. A CLEAN OUT IS REQUIRED AND WILL BE INSTALLED BY THE CONTRACTOR AT THE ROW FOR EACH LONG AND SHORT SIDE SERVICE. CLEANOUT SHALL INCLUDE A BRASS PLUG.
4. CLEANOUTS SHALL BE EXTENDED 4 FEET ABOVE NATURAL GROUND. CLEANOUT CAP FITTING SHALL BE PLACED ON TOP.



ELEVATION VIEW

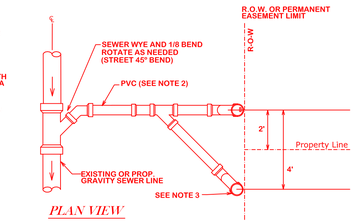
CITY OF BRYAN
SEWER DEEP SERVICE CONNECTION

NEW CONSTRUCTION ONLY

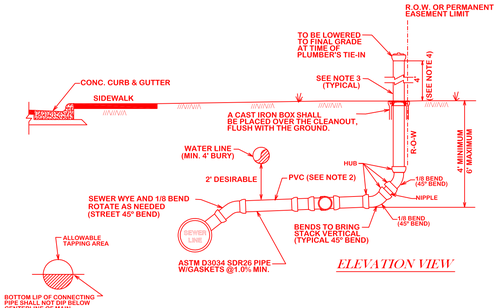
S8-00

NOTE:

1. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS
2. ALL SERVICE CONNECTIONS & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
3. A CLEAN OUT IS REQUIRED AND WILL BE INSTALLED BY THE CONTRACTOR AT THE ROW FOR EACH LONG AND SHORT SIDE SERVICE. CLEANOUT SHALL INCLUDE A BRASS PLUG. CLEANOUTS SHALL BE EXTENDED 4 FEET ABOVE NATURAL GROUND. CLEANOUT CAP FITTING SHALL BE PLACED ON TOP.
4. LOT CORNERS SHALL BE MARKED WITH A LATH UNDER THE SUPERVISION OF A RPLS UPON COMPLETION OF CONSTRUCTION
5. "STANDARD" SERVICE CONNECTIONS APPLY WHEN TRENCH IS LESS THAN 7' DEEP.
6. "DEEP" SERVICE CONNECTIONS APPLY WHEN TRENCH IS MORE THAN 7' DEEP.
7. SERVICE SHALL BE AS SHALLOW AS POSSIBLE AND STILL SERVICE LOT
8. WHERE A SINGLE SERVICE THAT SERVES A SINGLE RESIDENCE TAPS INTO A MANHOLE NEAR THE PROPERTY LINE OF THAT LOT A SEWER STACK SHALL NOT BE REQUIRED.
9. WHERE A CLEANOUT WILL BE IN A TRAFFIC AREA, A CAST IRON TOP HAT WILL BE REQUIRED.



PLAN VIEW



ELEVATION VIEW

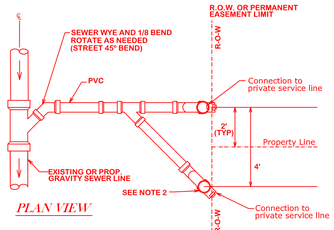
CITY OF BRYAN
STANDARD SEWER SERVICE CONNECTION

NEW CONSTRUCTION ONLY

S6-00

NOTE:

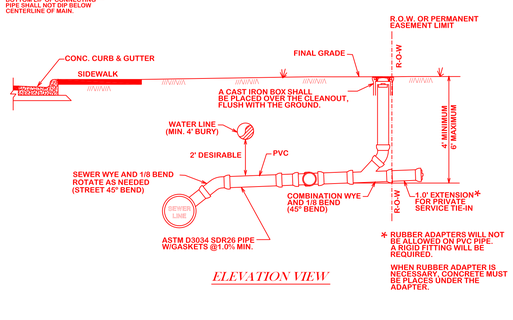
1. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS
2. SERVICE SHALL BE AS SHALLOW AS POSSIBLE AND STILL SERVICE LOT
3. WHERE A SINGLE SERVICE THAT SERVES A SINGLE RESIDENCE TAPS INTO A MANHOLE NEAR THE PROPERTY LINE OF THAT LOT A SEWER STACK SHALL NOT BE REQUIRED.
4. WHERE A CLEANOUT WILL BE IN A TRAFFIC AREA, A CAST IRON TOP HAT WILL BE REQUIRED.
4. A CLEANOUT MUST BE INSTALLED ON EACH SERVICE RE-CONNECTION AT THE ROW LINE.



PLAN VIEW

ALLOWABLE TAPPING AREA

BOTTOM LIP OF CONNECTING PIPE SHALL NOT DIP BELOW CENTERLINE OF MAIN.



ELEVATION VIEW

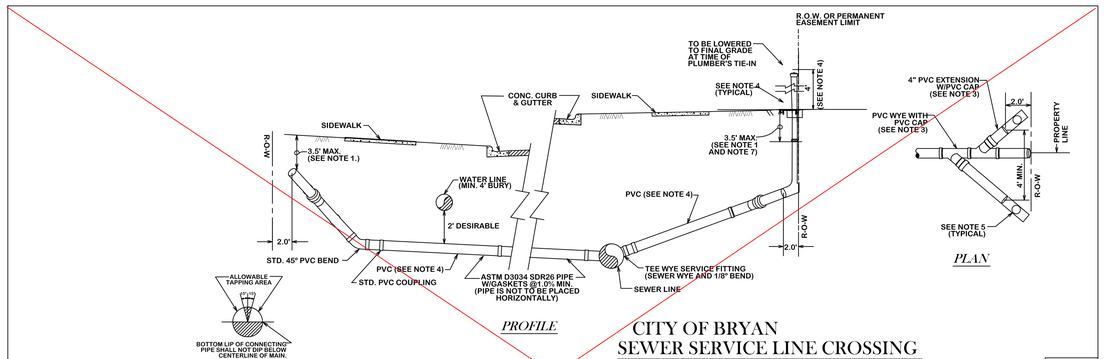
* RUBBER ADAPTERS WILL NOT BE ALLOWED ON PVC PIPE. A RIGID FITTING WILL BE REQUIRED.

WHEN RUBBER ADAPTER IS NECESSARY, CONCRETE MUST BE PLACED UNDER THE ADAPTER.

CITY OF BRYAN
STANDARD SEWER SERVICE RE-CONNECTION

PLUMBER CONNECTION OR CIP RECONSTRUCTION

S6-01



PROFILE

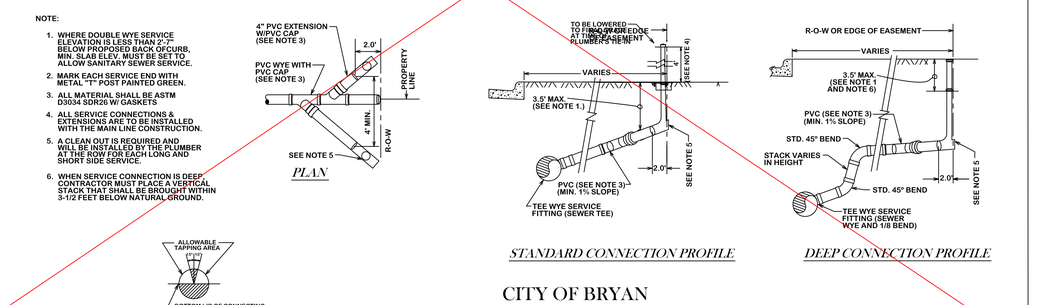
PLAN

CITY OF BRYAN
SEWER SERVICE LINE CROSSING

S6-00

NOTE:

1. WHERE DOUBLE WYE SERVICE ELEVATION IS LESS THAN 2'-7" BELOW PROPOSED BACK OF CURB, MIN. SLAB ELEV. MUST BE SET TO ALLOW SANITARY SEWER SERVICE.
2. MARK EACH SERVICE END WITH METAL "T" POST PAINTED GREEN.
3. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS
4. ALL SERVICE CONNECTIONS & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
5. A CLEAN OUT IS REQUIRED AND WILL BE INSTALLED BY THE PLUMBER AT THE ROW FOR EACH LONG AND SHORT SIDE SERVICE.
6. WHEN SERVICE CONNECTION IS DEEP CONTRACTOR MUST PLACE A VERTICAL STACK THAT SHALL BE BROUGHT WITHIN 3-1/2 FEET BELOW NATURAL GROUND.



CITY OF BRYAN
SANITARY SEWER SERVICE CONNECTION

S6-01

REVISIONS:
S6-00 & S6-01 revised 10/26/2012.

BRYAN - COLLEGE STATION STANDARD SEWER DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: B.I.
DATE: 02-24-21
SCALE: N T S
APPROVED: W. P. K.

FIGURE:
S2

NOTE:

1. WHERE DOUBLE WYE SERVICE ELEVATION IS LESS THAN 2'-7" BELOW PROPOSED BACK OFCURB, MIN. SLAB ELEV. MUST BE SET TO ALLOW SANITARY SEWER SERVICE.
2. MARK EACH SERVICE END WITH METAL "T" POST PAINTED GREEN.
3. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS.
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5. A CLEAN OUT IS REQUIRED AND WILL BE INSTALLED BY THE PLUMBER AT THE ROW FOR EACH LONG AND SHORT SIDE SERVICE.
6. LOT CORNERS SHALL BE MARKED WITH A LATH UNDER THE SUPERVISION OF A RPLS UPON COMPLETION OF CONSTRUCTION.
7. WHEN SERVICE CONNECTION IS DEEP, CONTRACTOR MUST PLACE A VERTICAL STACK THAT SHALL BE BROUGHT WITHIN 3-1/2 FEET BELOW NATURAL GROUND.

PROFILE

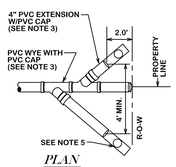
PLAN

CITY OF COLLEGE STATION
SEWER SERVICE LINE CROSSING

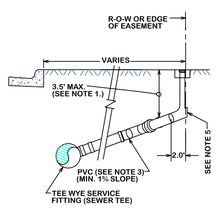
S7-00

NOTE:

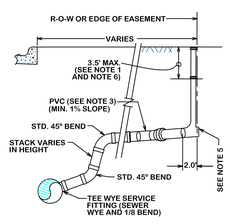
1. WHERE DOUBLE WYE SERVICE ELEVATION IS LESS THAN 2'-7" BELOW PROPOSED BACK OFCURB, MIN. SLAB ELEV. MUST BE SET TO ALLOW SANITARY SEWER SERVICE.
2. MARK EACH SERVICE END WITH METAL "T" POST PAINTED GREEN.
3. ALL MATERIAL SHALL BE ASTM D3034 SDR26 W/ GASKETS
4. ALL SERVICE CONNECTIONS & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
5. A CLEAN OUT IS REQUIRED AND WILL BE INSTALLED BY THE PLUMBER AT THE ROW FOR EACH LONG AND SHORT SIDE SERVICE.
6. WHEN SERVICE CONNECTION IS DEEP, CONTRACTOR MUST PLACE A VERTICAL STACK THAT SHALL BE BROUGHT WITHIN 3-1/2 FEET BELOW NATURAL GROUND.



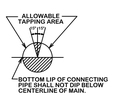
PLAN



STANDARD CONNECTION PROFILE



DEEP CONNECTION PROFILE



CITY OF COLLEGE STATION
SANITARY SEWER SERVICE CONNECTION

S7-01

REVISIONS:
S6-00 & S6-01 revised 10/26/2012.

BRYAN - COLLEGE STATION
STANDARD SEWER DETAILS

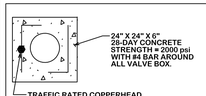
CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: B.I.
DATE: 02-24-21
SCALE: NTS
APPROVED: W. P. K.

FIGURE:
S3

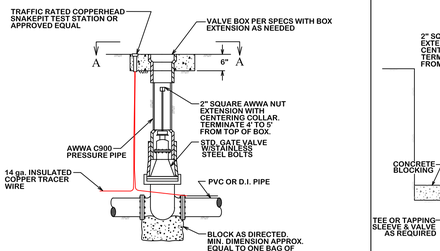
SHEET 3 OF 3



NOTE:

1. VALVE EXTENSION TO BE USED ONLY WHEN TOP OF GATE VALVE IS DEEPER THAN 5 FEET FROM FINISHED GRADE.
2. ALL VALVE OPERATING NUT EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH TWO (2) COATS OF METAL PAINT.
3. EXTENSIONS SHALL BE A MINIMUM OF ONE (1) FOOT LONG.
4. VALVE BOX LIDS LOCATED ON VALVES TO ISOLATE FIRE SUPPRESSION LINES FROM PUBLIC WATER LINES SHALL BE EJ 8500, PRODUCT 06800044 LOCKABLE LID.

VIEW A - A

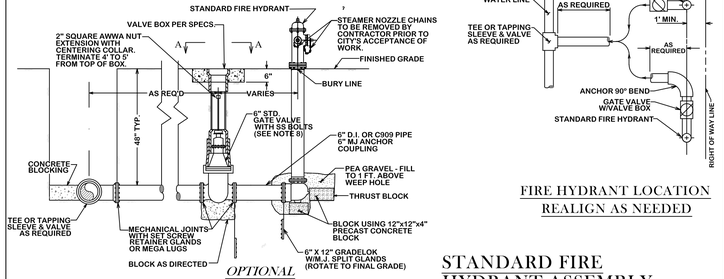


GATE VALVE & BOX

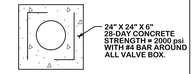
W1-00

GENERAL NOTES:

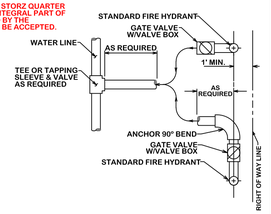
1. FINELY DIVIDED EARTH FREE OF ROCK, LUMPS AND CLODS EXCEEDING 6" SHALL BE PLACED BY HAND, AND COMPACTED AROUND THE CAST IRON PIPE TO A DEPTH OF 12" OVER THE TOP OF THE PIPE BEFORE BACKFILL IS BEGUN BY ANY MECHANICAL EQUIPMENT.
2. ALL CONCRETE BLOCKING SHALL BE - 28 DAY CONCRETE STRENGTH = 2000psi.
3. ALL THRUST BLOCKING SHALL PROVIDE A MINIMUM OF 2 SQUARE FEET OF BEARING AREA OF CONCRETE ON UNDISTURBED SOIL, OR AS DIRECTED BY THE ENGINEER.
4. WATER MAINS WILL NOT BE FULLY PRESSURIZED UNTIL CONCRETE HAS REACHED 7 DAY STRENGTH.
5. ALL PIPE WILL BE LAID SO AS THE ENTIRE BARRELL WILL HAVE FULL BEARING ON THE FINE GRADED TRENCH BOTTOM. BELL HOLES SHALL BE CUT FOR EACH BELL AND FIRE HYDRANT.
6. ALL FITTING SHALL BE MECHANICL JOINTS UNLESS OTHERWISE DIRECTED.
7. HYDRANTS SHALL BE LOCATED NO CLOSER THAN 3 FEET MEASURED FROM THE BACK OF CURB TO THE FACE OF THE STEAMER ON THE FIRE HYDRANT AND NO FURTHER THAN 15 FEET FROM BACK OF CURB
8. IF MAIN VALVE IS WITHIN 50 FEET OF FIRE HYDRANT THEN ASSEMBLY VALVE MAY BE OMITTED ON A DEAD END HYDRANT LEAD WITH NO ADDITIONAL CONNECTIONS.
9. HEIGHT OF FIRE HYDRANT MEASURED FROM THE STEAMER NOZZLE SHALL BE 18 TO 24 INCHES ABOVE NEAREST FINAL GRADE.
10. FIRE HYDRANTS SHALL COME EQUIPPED WITH STORZ QUARTER TURN PUMPER CONNECTIONS THAT ARE AN INTEGRAL PART OF THE FIRE HYDRANT, AND MUST BE FURNISHED BY THE MANUFACTURER, STORZ ADAPTERS WILL NOT BE ACCEPTED.



OPTIONAL



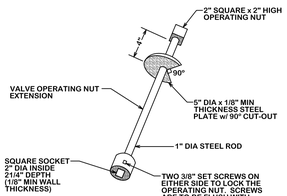
VIEW A - A



FIRE HYDRANT LOCATION
REALIGN AS NEEDED

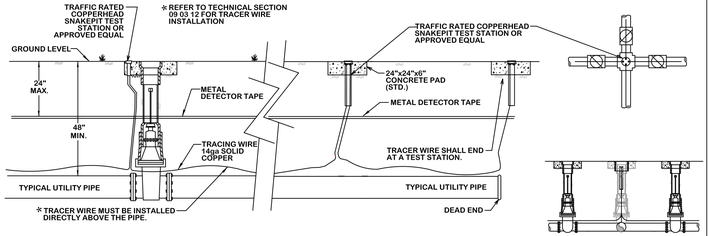
STANDARD FIRE HYDRANT ASSEMBLY

W1-02



GATE VALVE EXTENSION

W1-01



UTILITY PIPE LOCATION MATERIALS

W1-03

THRUST BLOCK NOTES:

1. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 psi FOR 24" AND SMALLER INNER DIAMETER PIPE.
2. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED EARTH OR ROCK.
3. CONCRETE FOR BLOCKING SHALL BE 2000 psi.
4. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
5. WATER MAIN SHALL NOT BE PRESSURIZED UNTIL ALL CONCRETE BLOCKING HAS REACHED 1500 psi.

HORIZONTAL THRUST BLOCK SCHEDULE

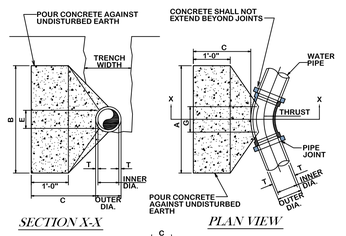
BEND	SIZE	A (ft)	B (ft)	C (ft)	E (ft)	G (ft)	VOLUME (c.y.)
90°	6,8"	5.0	1.5	1.5	0.9	2.7	0.4
	10,12"	6.5	2.5	1.5	1.2	4.0	1.0
45°	6,8"	2.0	2.0	1.5	0.9	1.5	0.2
	10,12"	3.5	2.5	1.5	1.2	2.2	0.5
22.5°	6,8"	1.5	1.5	1.5	0.9	0.8	0.1
	10,12"	2.0	2.5	1.5	1.2	1.1	0.3
11.25°	6,8"	1.0	1.5	1.5	0.9	0.4	0.1
	10,12"	1.5	1.5	1.5	1.2	0.6	0.1

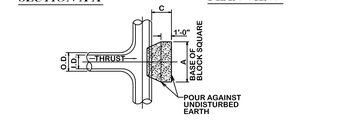
TEE SCHEDULE

ID (in)	THRUST (tons)	C (ft)	A (ft)	VOLUME (c.y.)
4,6,8	5.1	1.5	2.5	0.3
10,12	11.3	1.5	3.5	0.6

NOTE:
USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE & PLUG TO PREVENT CONCRETE FROM STICKING TO PLUG.

THRUST BLOCK DETAILS





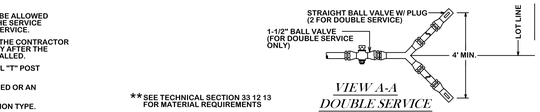
TEE THRUST BLOCK

TYPICAL HORIZONTAL THRUST BLOCK

W2-00

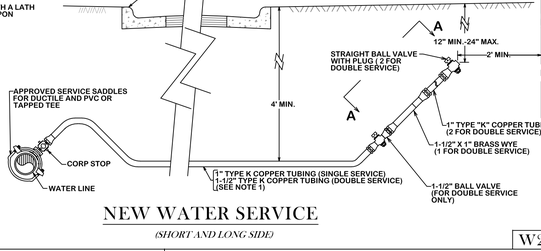
NOTES:

1. NO SPLICES IN COPPER TUBING WILL BE ALLOWED FOR SINGLE SERVICE OR BETWEEN THE SERVICE SADDLE AND THE WYE FOR DOUBLE SERVICE.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESSURE TEST LINE IMMEDIATELY AFTER THE STREET CROSSINGS HAVE BEEN INSTALLED.
3. MARK EACH SERVICE END WITH METAL "T" POST PAINTED BLUE.
4. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
5. ALL CONNECTIONS TO BE COMPRESSION TYPE.
6. ALL SERVICE WYES & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
7. METERS AND VALVE BOXES SHALL BE PLACED BY THE CITY UPON PAYMENT OF FEE.
8. LOT CORNERS SHALL BE MARKED WITH A LATH UNDER THE SUPERVISION F A RPLS UPON COMPLETION OF CONSTRUCTION.



VIEW A-A
DOUBLE SERVICE

** SEE TECHNICAL SECTION 33 12 13 FOR MATERIAL REQUIREMENTS

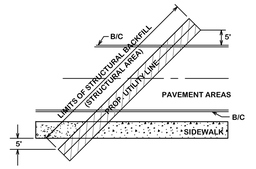


NEW WATER SERVICE

(SHORT AND LONG SIDE)

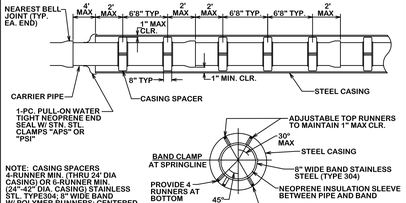
W2-01

STRUCTURAL BACKFILL AREA INCLUDES ALL PAVED AREAS (SIDEWALKS, STREETS, ALLEYS, DRIVEWAYS AND PARKING AREAS) AND SHALL EXTEND 5' BEYOND THE CURB LINE. STRUCTURAL BACKFILL SHALL BE CEMENT STABILIZED (SEE DETAIL W4-02 - AREASTO BE PAVED) OR EXCAVATED SOIL COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 WITHIN OPTIMUM TO +4% WET OF OPTIMUM (SEE DETAIL W4-02 - NON-STRUCTURAL AREAS)



STRUCTURAL BACKFILL AREA

W2-02

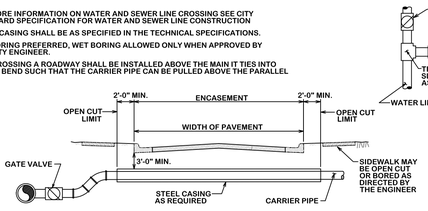


CASING DETAIL

W2-03

NOTE:

1. FOR MORE INFORMATION ON WATER AND SEWER LINE CROSSING SEE CITY STANDARD SPECIFICATION FOR WATER AND SEWER LINE CONSTRUCTION
2. STEEL CASING SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. DRY BORING PREFERRED, WET BORING ALLOWED ONLY WHEN APPROVED BY THE CITY ENGINEER.
4. PIPE CROSSING A ROADWAY SHALL BE INSTALLED ABOVE THE MAIN IT TIES INTO WITH A BEND SUCH THAT THE CARRIER PIPE CAN BE PULLED ABOVE THE PARALLEL MAIN.

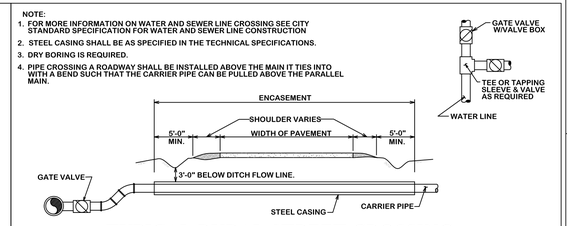


TYPICAL URBAN CITY STREET CROSSING

W4-00

NOTE:

1. FOR MORE INFORMATION ON WATER AND SEWER LINE CROSSING SEE CITY STANDARD SPECIFICATION FOR WATER AND SEWER LINE CONSTRUCTION
2. STEEL CASING SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
3. DRY BORING IS REQUIRED.
4. PIPE CROSSING A ROADWAY SHALL BE INSTALLED ABOVE THE MAIN IT TIES INTO WITH A BEND SUCH THAT THE CARRIER PIPE CAN BE PULLED ABOVE THE PARALLEL MAIN.



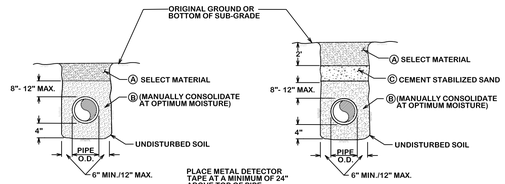
TYPICAL RURAL STREET CROSSING

W4-01

Ⓐ SELECT MATERIAL
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAN TWO (2) INCHES IN THE LARGEST DIMENSION), COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (ie., YARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NEW STREET AREAS AND STREETS TO BE RECONSTRUCTED.

Ⓑ GRANULAR MATERIAL
MATERIAL SHALL BE BANK RUN RIVER SAND WHICH IS FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL AND WHICH, WHEN TESTED BY STANDARD LABORATORY METHODS, MEET THE FOLLOWING REQUIREMENTS:
MAXIMUM LIQUID LIMIT _____ 45
MAXIMUM PLASTICITY INDEX _____ 15
MAXIMUM PERCENT PASSING NO. 200 SIEVE _____ 35
MINIMUM PERCENT PASSING 3/4" SIEVE _____ 100
THE MATERIAL SHALL BE FREE FLOWING AND WHEN WET, SHALL NOT ADHERE TO FORM A BALL WHEN PRESSED IN THE HAND.

Ⓒ CEMENT STABILIZED SAND



NOTES:

1. *FOR BEDDING AND TRENCHING WITHIN ALL EXISTING PAVED AREAS, SEE DETAILS FOR OPEN CUT STREETS. (Details ST4-00, ST4-01, ST4-02). THIS NOTE DOES NOT APPLY TO STREETS BEING RECONSTRUCTED.*
2. *EVERY 100 FEET PROVIDE A WATER STOP BLOCK COMPOSED OF CEMENT SAND OR NATIVE MATERIAL DEPENDING ON EMBEDMENT. BLOCK SHALL BE 6 FEET IN LENGTH. NO BEDDING SAND IN THIS AREA.*
3. ALL BEDDING & INSTALLATION OF PVC PIPE SHALL BE IN ACCORDANCE WITH ANSI/AWWA STANDARDS FOR PVC PIPE.
4. ALL BEDDING & INSTALLATION OF DUCTILE IRON PIPE SHALL BE IN ACCORDANCE WITH ANSI/AWWA C150/A21.50
5. COMPACTION SHALL BE ATTAINED BY MECHANICAL TAMPING.
6. RELATIVE COMPACTION SHALL BE TESTED IN THE PRESENCE OF THE CITY ENGINEER.
7. DUST RESULTING FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK, EITHER INSIDE OR OUTSIDE THE RIGHT-OF-WAY, SHALL BE CONTROLLED BY THE CONTRACTOR.
8. ALL TRENCHES SHALL BE BACK FILLED AND TEMPORARY PAVING PLATING PLACED AT THE END OF EACH WORKING DAY.

BEDDING AND TRENCH FOR DI PIPE & PVC PIPE

W4-02

GENERAL NOTES:

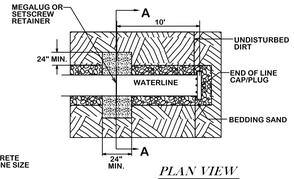
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR 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.

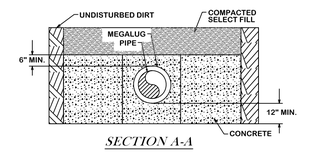
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ESTABLISHMENT OF VEGETATION MAY BE A WARRANTY ITEM.

NOTE:
DIMENSION FOR CONCRETE
VARIES WITH WATERLINE SIZE



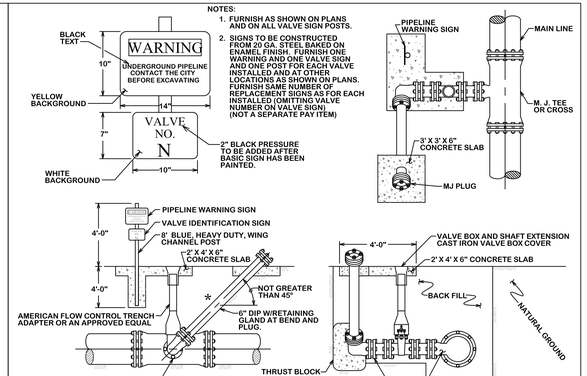
PLAN VIEW



SECTION A-A

END OF LINE BLOCKING

W3-00

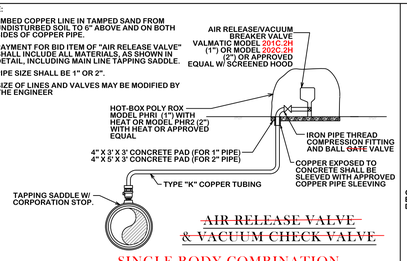


IN-LINE BLOW OFF ASSEMBLY

W3-01

NOTE:

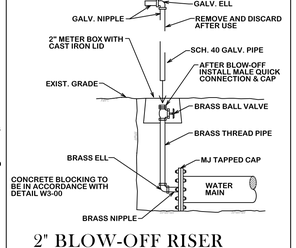
1. EMBED COPPER LINE IN TAMPED SAND FROM UNDISTURBED SOIL TO 6" ABOVE AND ON BOTH SIDES OF COPPER PIPE.
2. PAYMENT FOR BID ITEM OF "AIR RELEASE VALVE" SHALL INCLUDE ALL MATERIALS, AS SHOWN IN DETAIL, INCLUDING MAIN LINE TAPPING SADDLE.
3. PIPE SIZE SHALL BE 1" OR 2".
4. SIZE OF LINES AND VALVES MAY BE MODIFIED BY THE ENGINEER



~~AIR RELEASE VALVE & VACUUM CHECK VALVE~~

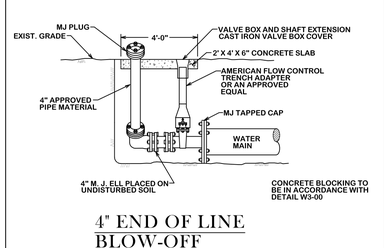
SINGLE BODY COMBINATION AIR RELEASE VALVE

W3-02



2" BLOW-OFF RISER

W3-03



4" END OF LINE BLOW-OFF

W3-04

REVISIONS:

BRYAN - COLLEGE STATION STANDARD WATER DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: B.I.
DATE: 12/2020
SCALE: NTS
APPROVED: W. P. K.

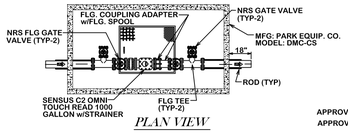
FIGURE:
W1

SHEET 1 OF 2

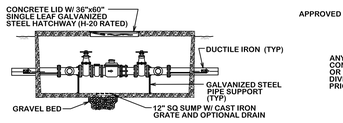
SPECIAL CONDITIONS

1. METER REGISTER SHALL BE NO DEEPER THAN 12 INCHES BELOW FINISHED GRADE.
2. FLOOR OF VAULT WILL BE A MINIMUM OF 6 INCHES FROM BOTTOM OF ANY PIPING APPARATUS OR METER WITHIN THE VAULT.
3. REINFORCED CONCRETE VAULT BASE (FLOOR) SHALL BE CONSTRUCTED USING A STANDARD FIVE SACK CONCRETE MIX AND REINFORCING COMPRISED OF #3 REBAR ON 12 INCH CENTERS WITH A MINIMUM BASE THICKNESS OF 6 INCHES.
4. SET SCREW RETAINER GLANDS SHALL BE INSTALLED AT EACH FITTING ON MECHANICAL JOINT PIPE.
5. VALVES SHALL MEET THE CITY SPECIFICATIONS FOR VALVES.
6. THERE SHALL BE NO PIPING UNDER THE FLOOR OF THE VAULT.

MODEL	SIZE	L1	W1	H1	WEIGHT LBS
DMC-CS3	3"	8'-8"	5'-0"	4'-6"	12,000
DMC-CS4	4"	8'-8"	5'-0"	4'-6"	12,000
DMC-CS6	6"	11'-0"	6'-0"	4'-9"	12,000



PLAN VIEW



ELEVATION VIEW

APPROVED 3" OR LARGER COMPOUND METERS, VAULTS & MATERIALS

APPROVED METERS - SENSUS SRH (U. S. GALLONS)

APPROVED VAULTS - PARK DMC-SD, PRECAST CONCRETE VAULT W/ ADEQUATE ACCESS AND VAULT DIMENSIONS FOR METER SELECTED

APPROVED MATERIALS - DUCTILE IRON PIPE WITH MECHANICAL JOINT. SET SCREW RETAINER GLANDS WILL BE BASED ON ALL M.J. FITTINGS.

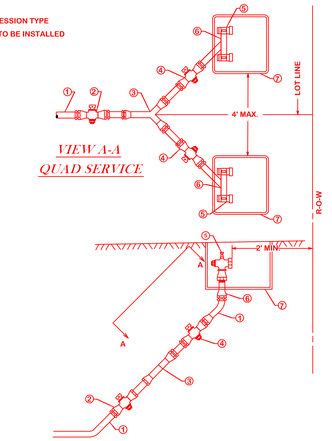
ANY DEVIATIONS FROM THE ABOVE SPECIAL CONDITIONS OR APPROVED METERS, VAULTS OR MATERIALS MUST BE SUBMITTED TO THE DIVISION MANAGER, WATER SERVICES, 72 HOURS PRIOR TO ANTICIPATED DEVIATION.

CITY OF COLLEGE STATION
METER VAULT ASSEMBLY

W5-00

SPECIAL CONDITIONS

1. ALL CONNECTIONS SHALL BE PACK-JOINT COMPRESSION TYPE.
2. ALL SERVICE EXTENSIONS/APPURTENANCES ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION
3. A MAXIMUM OF FOUR – 0.75" WATER METERS ARE ALLOWED FOR THIS CONFIGURATION
4. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL



VIEW A-A
QUAD SERVICE

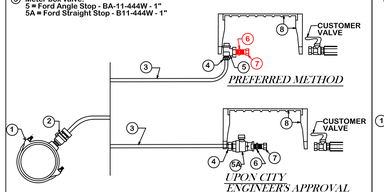
1. Service tubing: Type K copper - soft - 2"
2. Ford Ball Valve - B44-777-NL- 2"
3. Ford "Y" Branch - Y44-274-NL- 2" x 1" x 1"
4. Ford Ball Valve - B44-444-NL- 1"
5. Ford Angle Stop KV13-332W-NL - .75" x .75" Meter Nut Swivel
6. Ford 'U' Branch - U48-43-NL
7. Dual Concrete Meter Box - Provided by COCS

CITY OF COLLEGE STATION
QUAD SERVICE CONNECTION

W5-01

NOTES:

1. Service saddle, SS straps, CC threads Installed per manufacturer's recommendations. All main types: Smith Blair 317
2. Corporation Stop: Ford FB 1000-4-Q - 1"
3. Service tubing: Type K copper - soft - 1"
4. Ford male adapter - C84-44-Q - 1"
5. Meter box valve: 5 = Ford Angle Stop - BA-11-444W - 1" 5A = Ford Straight Stop - B11-444W - 1"
6. Brass bushing IPS - 1" x 3/4"
7. Meter nipple - C38-23-2-5 - 3/4"
8. Meter box and lid: Old Castle/Christy meter box and lid: - 809 Utility Box - N09R Concrete Lid Marked "Water" with Flex-Net Sensus Probe Hole

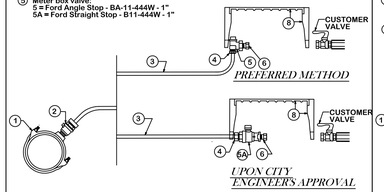


CITY OF BRYAN
STRAIGHT OR ANGLE TAP-3/4"

W6-00

NOTES:

1. Service saddle, SS straps, CC threads Installed per manufacturer's recommendations. All main types: Smith Blair 317
2. Corporation Stop: Ford FB 1000-4-Q - 1"
3. Service tubing: Type K copper - soft - 1"
4. Ford male adapter - C84-44-Q - 1"
5. Meter box valve: 5 = Ford Angle Stop - BA-11-444W - 1" 5A = Ford Straight Stop - B11-444W - 1"
6. Meter nipple - C38-44-2-625 - 1"
8. Meter box and lid: Old Castle/Christy meter box and lid: - 809 Utility Box - N09R Concrete Lid Marked "Water" with Flex-Net Sensus Probe Hole

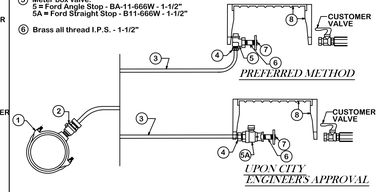


CITY OF BRYAN
STRAIGHT OR ANGLE TAP - 1"

W6-01

NOTES:

1. Service saddle, SS straps, CC threads Installed per manufacturer's recommendations. All main types: Smith Blair 317
2. Corporation Stop: Ford FB 1000-6-Q - 1-1/2"
3. Service tubing: Type K copper - soft - 1-1/2"
4. Ford male adapter - C84-66-Q - 1-1/2"
5. Meter box valve: 5 = Ford Angle Stop - BA-11-666W - 1-1/2" 5A = Ford Straight Stop - B11-666W - 1-1/2"
6. Brass all thread I.P.S. - 1-1/2"
7. Meter Flange - CF31-66 - 1-1/2"
8. Meter box and lid: Old Castle/Christy meter box and lid: - B65 Concrete Box - B69P001-F Concrete Lid Marked with Flex-Net Probe Hole provision

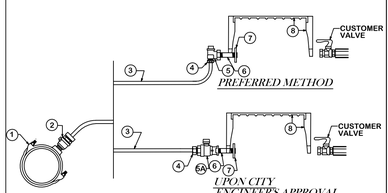


CITY OF BRYAN
STRAIGHT OR ANGLE TAP-1-1/2"

W6-02

NOTES:

1. Service saddle, SS straps, CC threads Installed per manufacturer's recommendations. All main types: Smith Blair 317
2. Corporation Stop: Ford FB 1000-7-Q (cc thread) - 2"
3. Service tubing: Type K copper - soft - 2"
4. Ford male adapter - C84-77-Q - 2"
5. Meter box valve: 5 = Ford Angle Stop - BA-11-777W - 2" 5A = Ford Straight Stop - B11-777W - 2"
6. Brass nipple I.P.S. - 2" x 3"
7. Meter Flange - CF31-77 - 2"
8. Meter box and lid: Old Castle/Christy meter box and lid: - 809 Utility Box - N09R Concrete Lid Marked "Water" with Flex-Net Sensus Probe Hole



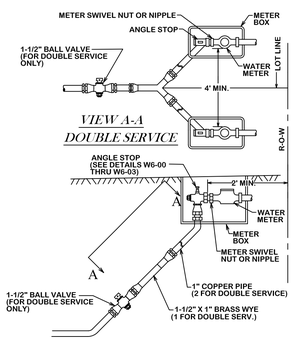
CITY OF BRYAN
STRAIGHT OR ANGLE TAP - 2"

W6-03

NOTES:

1. ALL CONNECTIONS TO BE COMPRESSION TYPE.
2. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
3. ALL SERVICE WYES & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.
4. EXISTING METER BOXES ARE TO BE REMOVED. THE NEW METER BOXES SHALL BE OLD CASTLE.
5. ANGLE STOPS MAY BE USED FOR NEW CONSTRUCTION IF FINISHED ELEVATION IS KNOWN. THE STOP MUS BE INSTALLED 10"-12" BELOW THE FINISHED ELEVATION.

METER NUT SIZE	FORD PART NO.
3/4" x 2.5" Long	C38-23-2-5
3/4" x 3" Long	C38-23-3
3/4" x 12" Long	C38-23-12
1" x 2.625" Long	C38-44-2-625
1" x 8.5" Long	C38-44-8-5
1-1/2" Meter Nipple	C38-66-2-875
1-1/2" Meter Bushing	BBIM-66
2" Meter Nipple	C38-77
2" Meter Bushing	BBIM-77



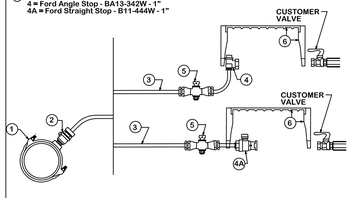
VIEW A-A
DOUBLE SERVICE

CITY OF BRYAN
WATER SERVICE RECONNECTION

W6-04

NOTES:

1. Service saddle and CC threads installed per manufacturer's recommendations. All main types: Ford S70/S90
2. Corporation Stop: Ford FB 1000-4- 1"
3. Service tubing: Type K copper - soft - 1"
4. Meter box valve: 4 = Ford Angle Stop - BA13-342W - 1" 4A = Ford Straight Stop - B11-444W - 1"
5. Ball valve
6. Meter box and lid: Old Castle meter box, CI lid with Reader #36

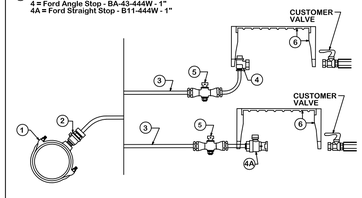


CITY OF COLLEGE STATION
STRAIGHT OR ANGLE TAP - 3/4"

W7-00

NOTES:

1. Service saddle and CC threads installed per manufacturer's recommendations. All main types: Ford S70/S90
2. Corporation Stop: Ford FB 1000-4- 1"
3. Service tubing: Type K copper - soft - 1"
4. Meter box valve: 4 = Ford Angle Stop - BA-43-444W - 1" 4A = Ford Straight Stop - B11-444W - 1"
5. Ball valve
6. Meter box and lid: Old Castle meter box, CI lid with Reader #36

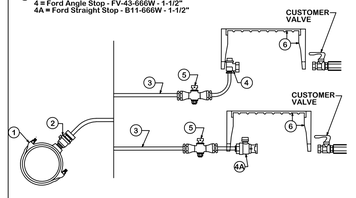


CITY OF COLLEGE STATION
STRAIGHT OR ANGLE TAP - 1"

W7-01

NOTES:

1. Service saddle and CC threads installed per manufacturer's recommendations. All main types: Ford S70/S90
2. Corporation Stop: Ford FB 1000-6- 1-1/2"
3. Service tubing: Type K copper - soft - 1-1/2"
4. Meter box valve: 4 = Ford Angle Stop - FV-43-666W - 1-1/2" 4A = Ford Straight Stop - B11-666W - 1-1/2"
5. Ball valve
6. Meter box and lid: Old Castle meter box, CI lid with Reader #65

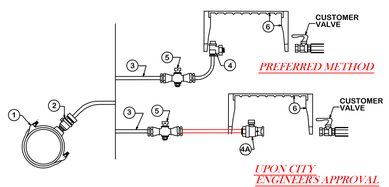


CITY OF COLLEGE STATION
STRAIGHT OR ANGLE TAP - 1-1/2"

W7-02

NOTES:

1. Service saddle and CC threads installed per manufacturer's recommendations. All main types: Ford S70/S90
2. Corporation Stop: Ford FB 1000-7 (cc thread) - 2"
3. Service tubing: Type K copper - soft - 2"
4. Meter box valve: 4 = Ford Angle Stop - FV-43-777W - 2" 4A = Ford Straight Stop - B11-777W - 2"
5. Ball valve
6. Meter box and lid: Old Castle meter box, CI lid with Reader #65



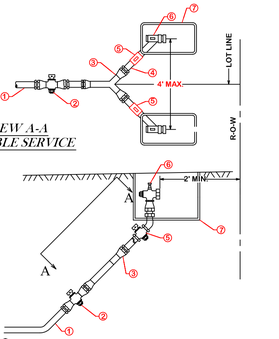
CITY OF COLLEGE STATION
STRAIGHT OR ANGLE TAP - 2"

W7-03

NOTES:

1. ALL CONNECTIONS TO BE COMPRESSION TYPE.
2. MATERIAL USED SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
3. ALL SERVICE WYES & EXTENSIONS ARE TO BE INSTALLED WITH THE MAIN LINE CONSTRUCTION.

1. Service Tubing: Type K Copper - cu - soft - 1.50"
2. Ford Ball Valve - B44-666-NL- 1.50"
3. Ford "Y" Branch - Y44-264-NL- 1.50" x 1" x 1"
4. Service Tubing: Type K Copper - soft - 1"
5. Ford Ball Valve - B44-444-NL - 1"
6. Ford Angle Stop KV43-332W-NL - 1" x 0.75 Meter Nut Swivel
7. Concrete Meter Box - Provided by COCS



VIEW A-A
DOUBLE SERVICE

CITY OF COLLEGE STATION
DOUBLE WATER SERVICE RECONNECTION

W7-04

REVISIONS:
7/1/2016 - Details W6-00 thru W6-04 Accepted for use by COB

BRYAN - COLLEGE STATION STANDARD WATER DETAILS

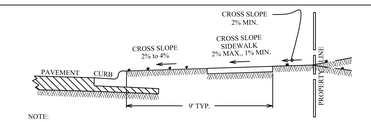
CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

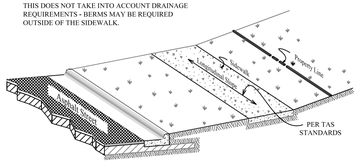
DRAWN BY: B.I.
DATE: 12/2020
SCALE: N T S
APPROVED: W. P. K.

FIGURE:
W2

SHEET 2 OF 2

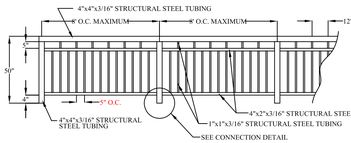


NOTE:
THIS DOES NOT TAKE INTO ACCOUNT DRAINAGE REQUIREMENTS - BERMS MAY BE REQUIRED OUTSIDE OF THE SIDEWALK.

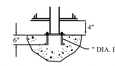


SIDEWALK SLOPE REQUIREMENTS

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 SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

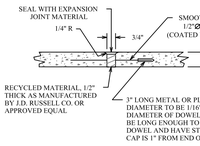
APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

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

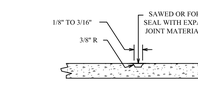
ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TXDOT STANDARDS

REFER TO SPEC 31 17 23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.

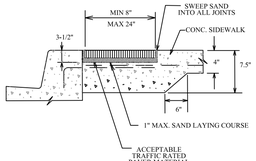
NOTES:
1. SIDEWALK PLACEMENT SHALL BE IN ACCORDANCE WITH B/CS UNIFIED DESIGN GUIDELINES.
2. FINISH: LIGHT BROOM FINISH. JOINTS TO BE TOOLED 1" DEEP AT AN INTERVAL EQUAL TO THE SIDEWALK WIDTH. EXPANSION JOINTS @ 40' O.C., CONTRACTION JOINTS @ 4' O.C.
3. DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT 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 0-4% 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

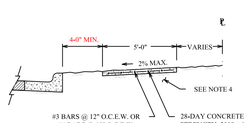


SIDEWALK CONTRACTION JOINT

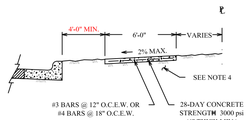


SIDEWALK PAVER SECTION

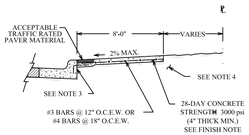
CONCRETE SIDEWALK



ALONG LOCAL STREETS

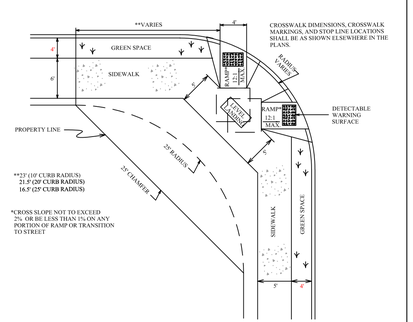


ALONG MINOR COLLECTORS AND LARGER



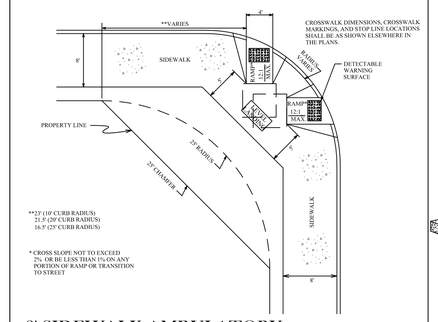
ALONG MINOR COLLECTORS AND LARGER

SW1-02



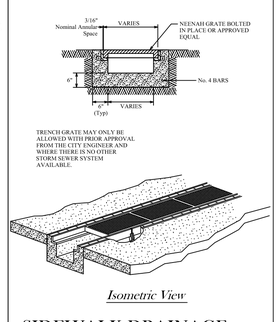
5'/6' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION

SW3-00



8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION

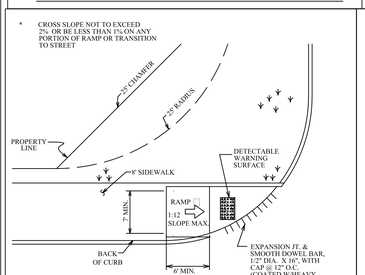
SW3-01



Isometric View

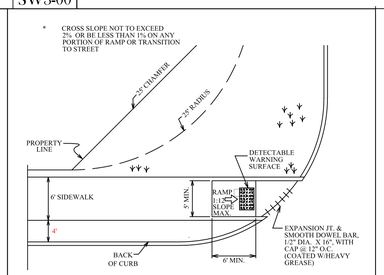
SIDEWALK DRAINAGE TRENCH GRATE

SW3-02



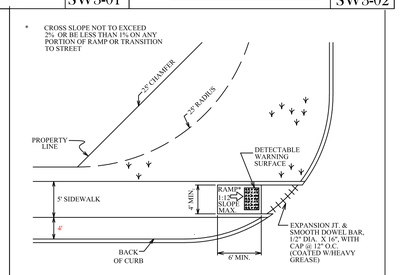
8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-03



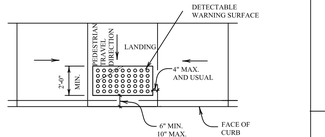
6' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-04



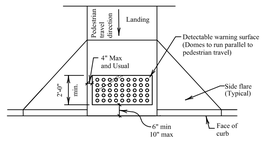
5' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-05



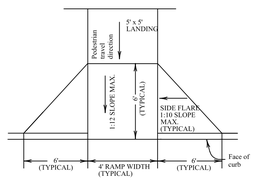
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE

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 ADJOINING SURFACES, INCLUDING SIDE FLARES. FURNISH 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 DETECABLE WARNING SURFACE FOR EACH CURB RAMP TYPE.
5. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH 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 RADIUS.
7. ACCEPTABLE PAVER MATERIAL SHALL BE CLAY, VITRIFIED POLYMER 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 MAYBE PRESENT. NOT ALL LOCATIONS NEED THE CROSSWALKS MARKED; HOWEVER, TYPICALLY COLLECTOR AND ARTERIAL STREETS DO. AS STATED IN THE TMUTCD, 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 STATION'S PREFERENCE IS THE TYPICAL "TRANSVERSE" STYLE; HOWEVER, IN THE NORTHGATE 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 12-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 6 FEET OF UNMARKED PAVEMENT. ALL CROSSWALK PAVEMENT MARKINGS SHALL ALWAYS MEET TxDoT'S SPECIFICATION FOR TYPE I 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 TMUTCD.
5. CROSSWALKS WITH BRICK PAVERS, STAMPED ASPHALT, STAMPED CONCRETE, ETC., SHALL ALSO REQUIRE RETRO-REFLECTIVE, THERMOPLASTIC TRANSVERSE STRIPING.

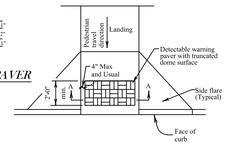
SW2-GN01

PEDESTRIAN FACILITIES GENERAL NOTES

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALK 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 VEHICULAR 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 RELECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC 68.102.
7. TO SERVE AS A PEDESTRIAN REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 5' 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

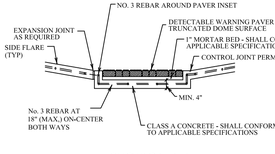


TRUNCATED DOME PATTERN CURB RAMP

GENERAL NOTES (PAVERS)

FURNISH DETECTABLE WARNING PAVER UNITS MEETING ALL REQUIREMENTS OF ASTM C-936, C-33. LAY IN A TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.

LAY FULL-SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING PAVER UNITS USING A POWER SAW.



DETECTABLE WARNING PAVER

SECTION A-A

SW2-03

REVISIONS:

BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS

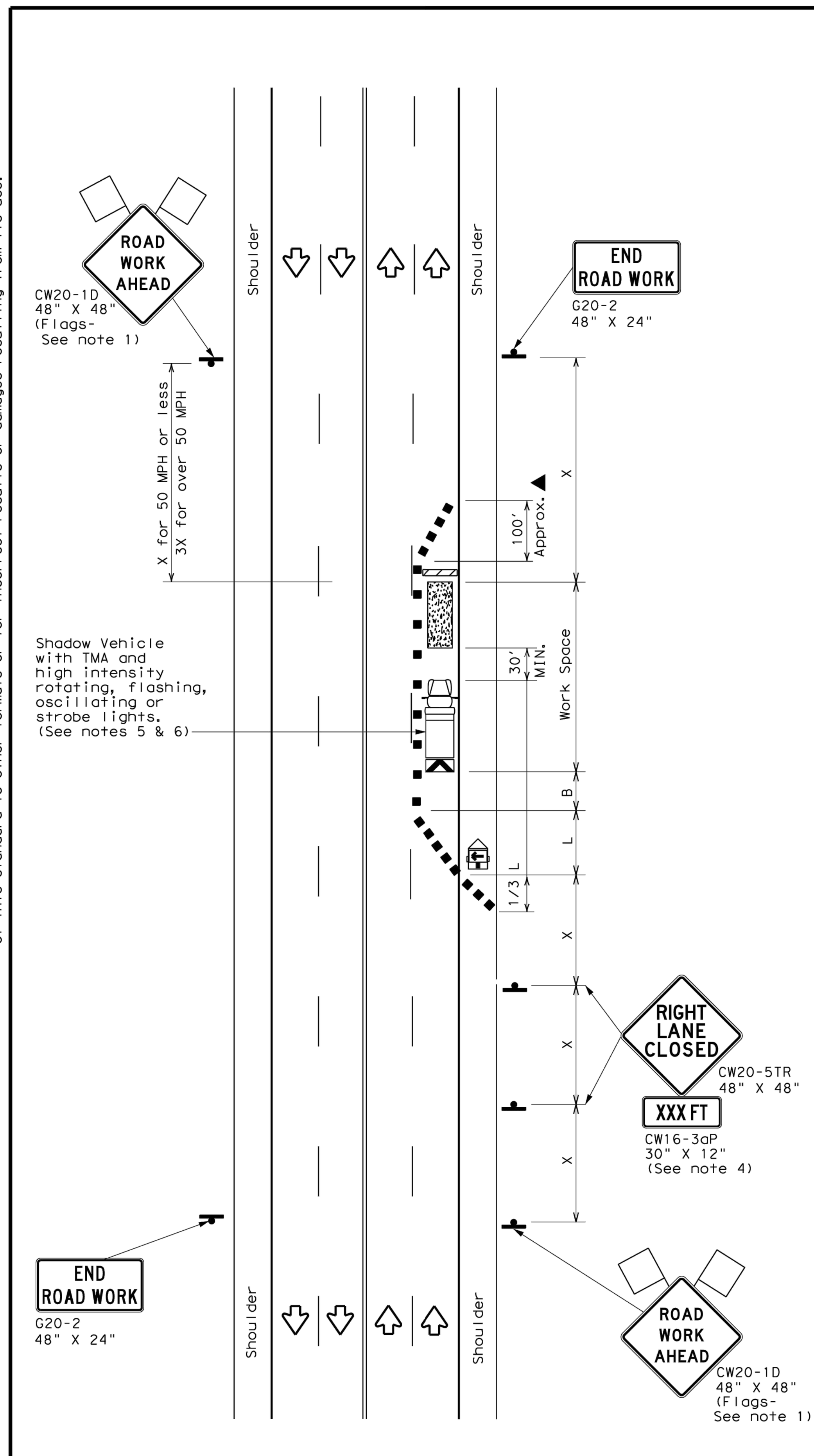
CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY:	B.I.
DATE:	12/2020
SCALE:	NTS
APPROVED:	W. P. K.

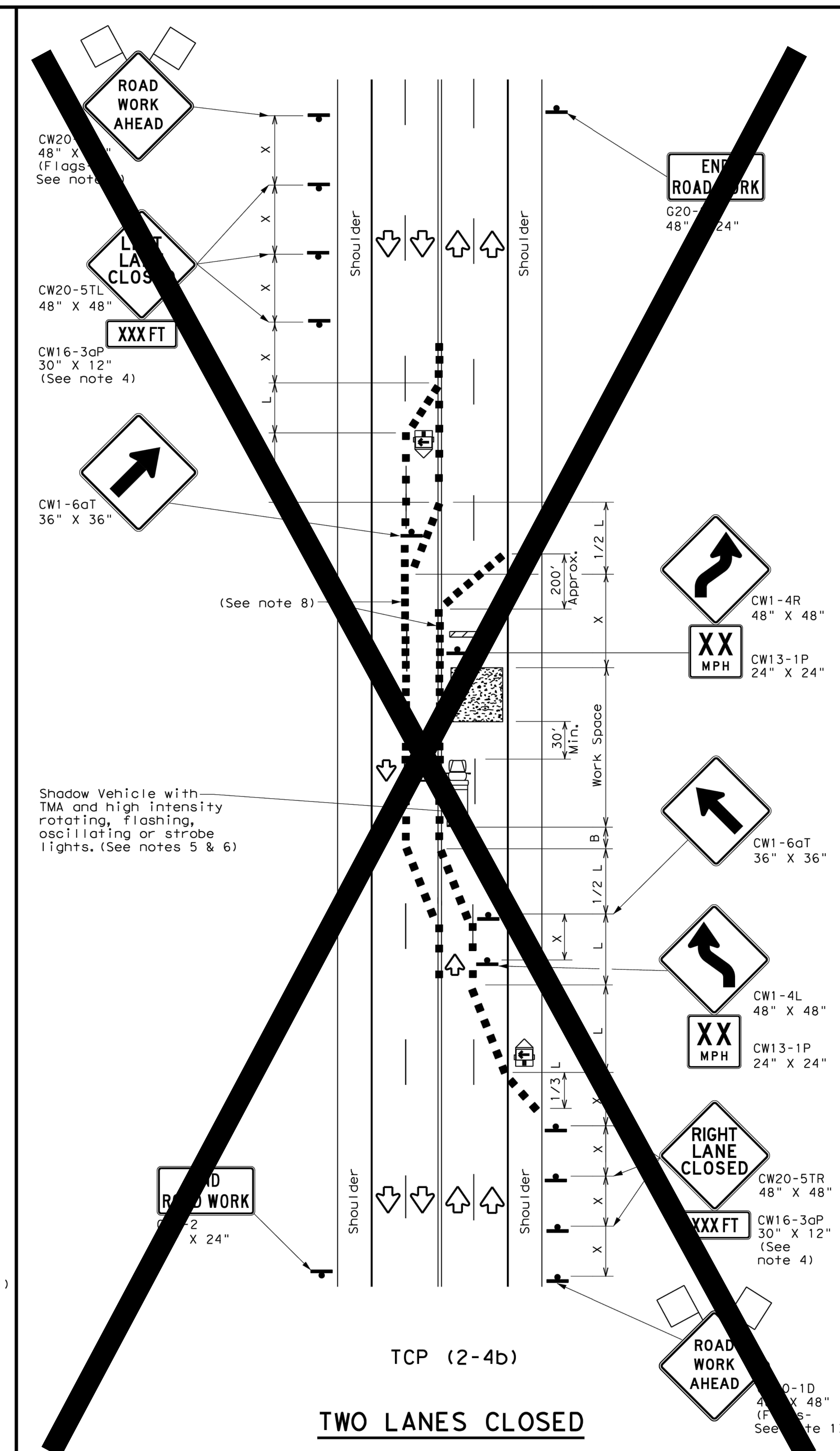
FIGURE:
SW1
SHEET 1 OF 1

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



TCP (2-4a)

ONE LANE CLOSED



TCP (2-4b)

TWO LANES CLOSED

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-4a)

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED"signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

Texas Department of Transportation | Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP(2-4)-18

FILE: tcp2-4-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03 1-97 2-12 4-98 2-18	DIST	COUNTY		SHEET NO.

164

BEAMON ENGINEERING
TBPE FIRM NO. F-21588 16172
BENCH LANE, BRYAN, TEXAS 77807
PH. (979) 571-2407

STATE OF TEXAS
DANIEL P. BEAMON
105876
LICENSED PROFESSIONAL ENGINEER
NOVEMBER 15, 2024

BRYAN FOOD EXCHANGE
LOTS 16, BLOCK 5
HANUS ADDITION
2009 SH-21 BRYAN, TEXAS

REVISIONS

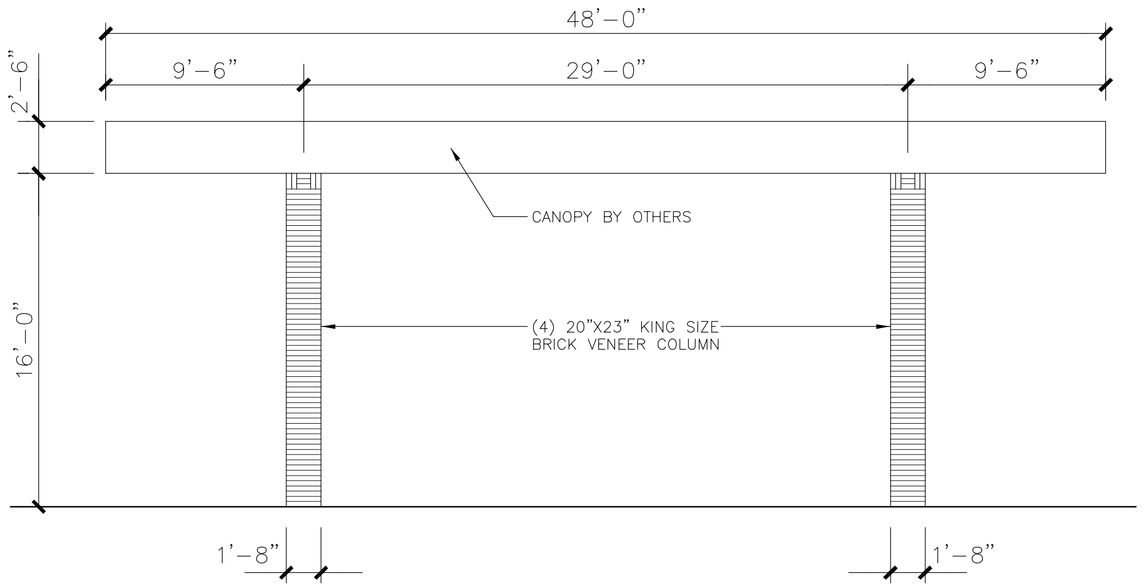
NO.	DESCRIPTION	BY	DATE

TRAFFIC CONTROL DETAILS

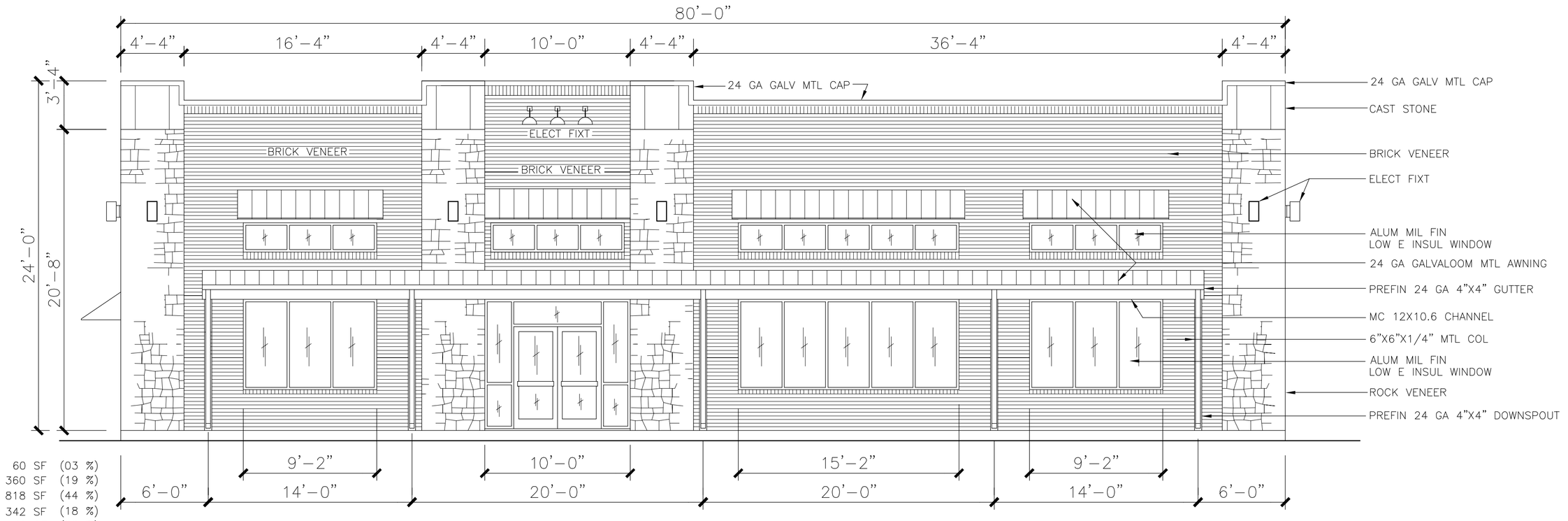
DATE: NOV. 15, 2024
SCALE:
SHEET NO.: TCP

JOE'S FOOD MARKET

2009 HWY 21 WEST BRYAN, TEXAS

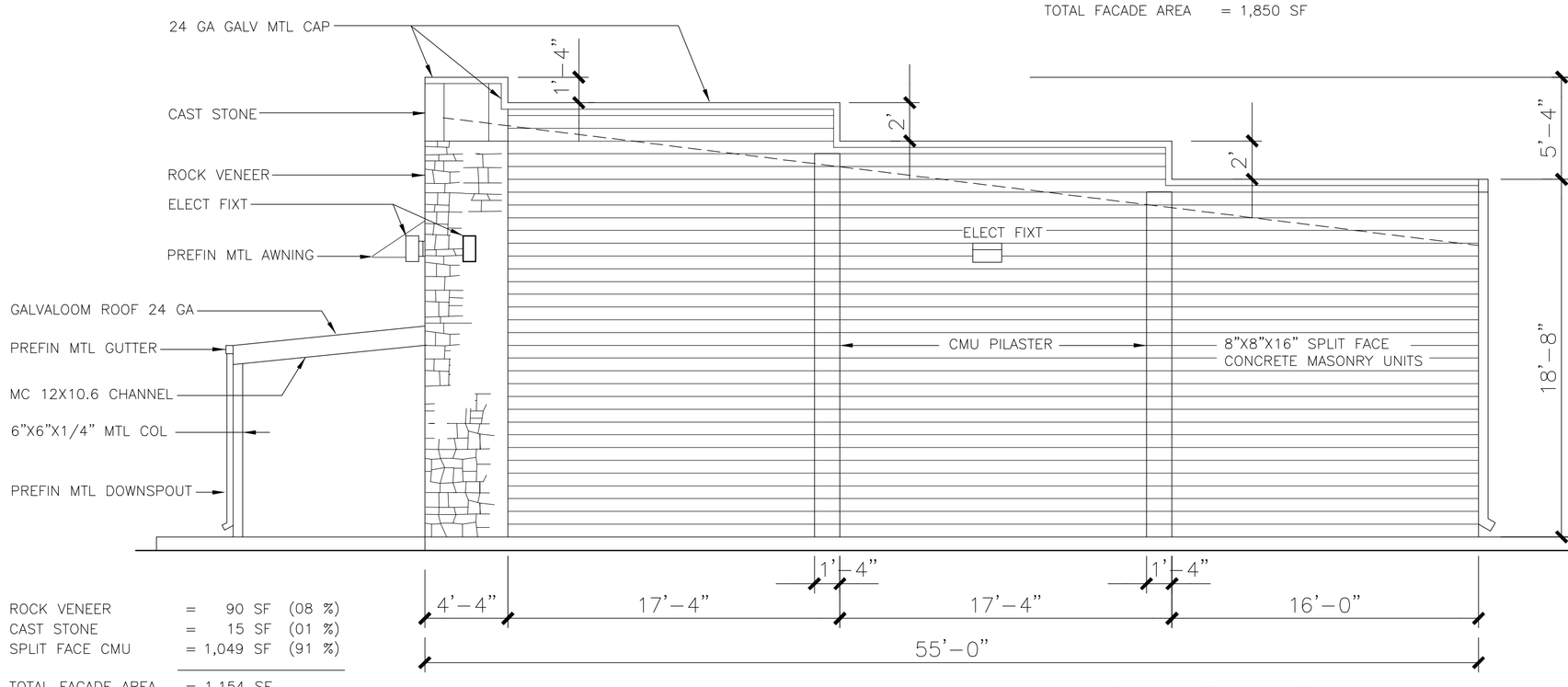


5 CANOPY FRONT ELEVATION – NORTH 0 1 5 10



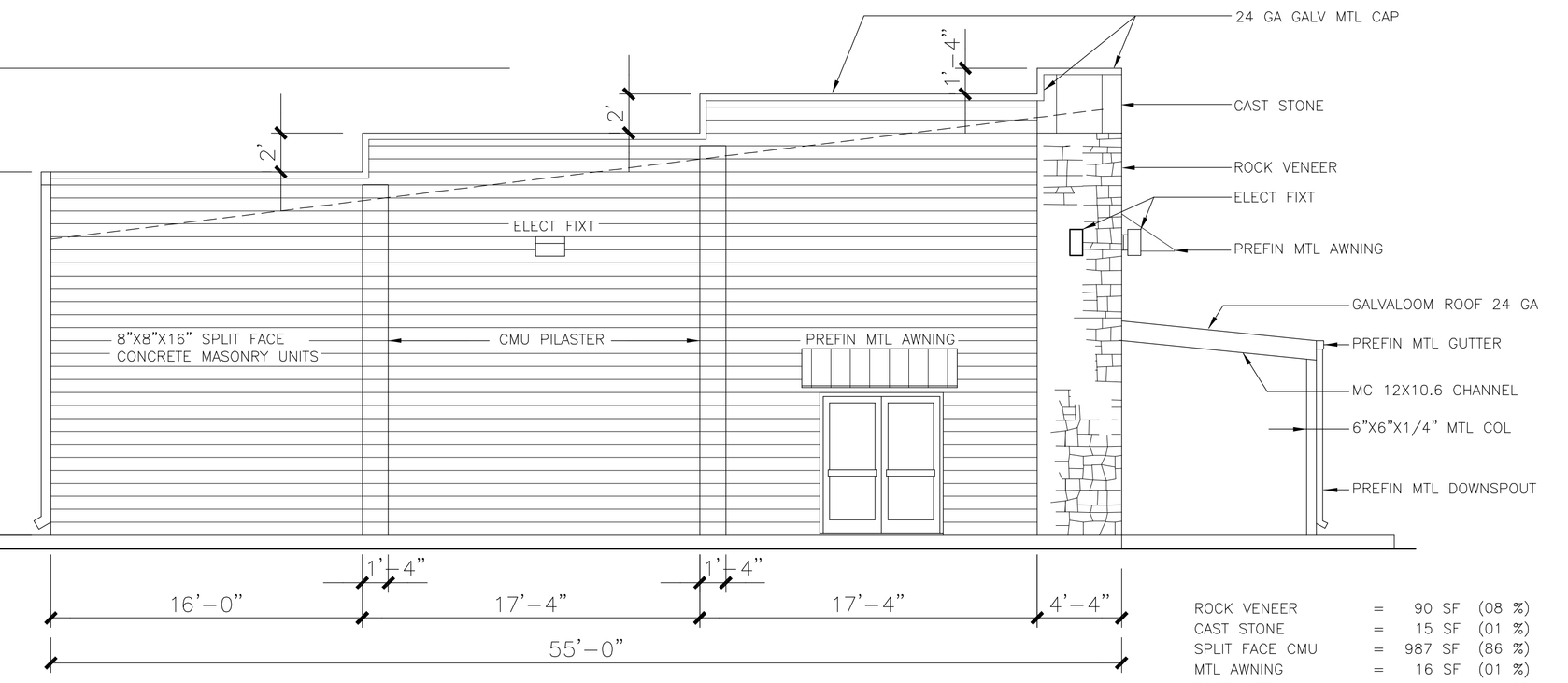
CAST STONE	=	60 SF	(03 %)
ROCK VENEER	=	360 SF	(19 %)
BRICK VENEER	=	818 SF	(44 %)
WINDOW AREA	=	342 SF	(18 %)
DOOR AREA	=	42 SF	(02 %)
MTL AWNING	=	228 SF	(12 %)
TOTAL FACADE AREA	=	1,850 SF	

1 BUILDING FRONT ELEVATION – NORTH 0 1 5 10



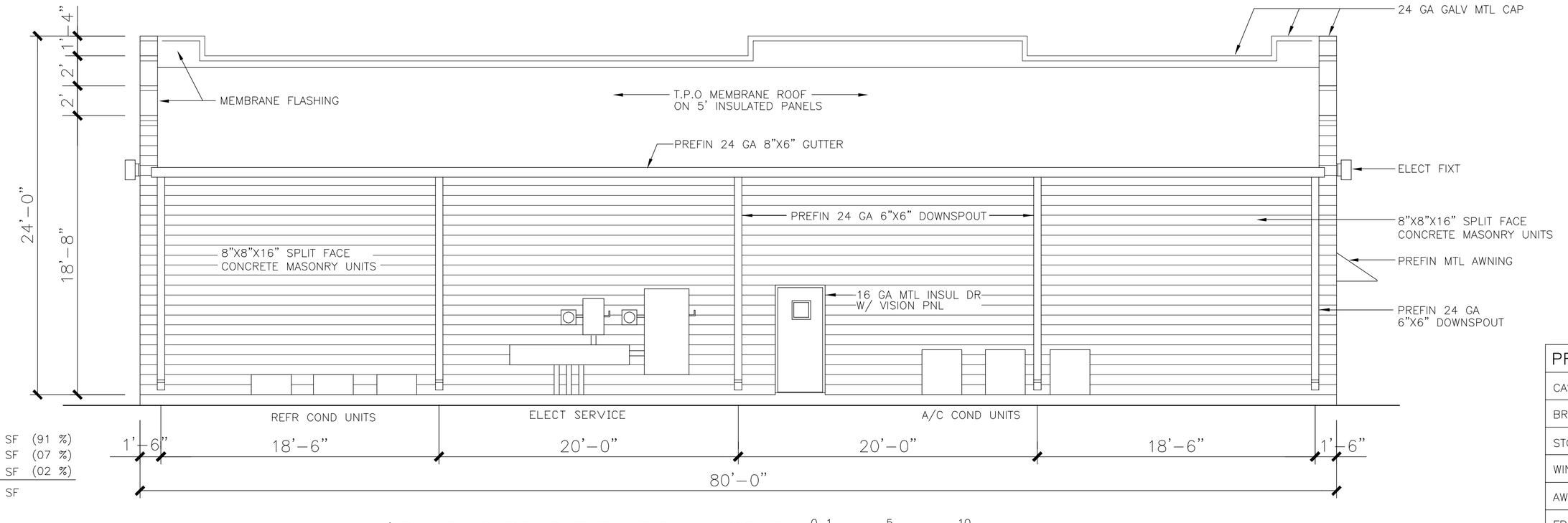
ROCK VENEER	=	90 SF	(08 %)
CAST STONE	=	15 SF	(01 %)
SPLIT FACE CMU	=	1,049 SF	(91 %)
TOTAL FACADE AREA	=	1,154 SF	

3 BUILDING SIDE ELEVATION – WEST 0 1 5 10



ROCK VENEER	=	90 SF	(08 %)
CAST STONE	=	15 SF	(01 %)
SPLIT FACE CMU	=	987 SF	(86 %)
MTL AWNING	=	16 SF	(01 %)
DOOR AREA	=	46 SF	(04 %)
TOTAL FACADE AREA	=	1,154 SF	

2 BUILDING SIDE ELEVATION – EAST 0 1 5 10



SPLIT FACE CMU	=	1,118 SF	(91 %)
GUTTER/DOWNSPOUT	=	88 SF	(07 %)
DOOR AREA	=	24 SF	(02 %)
TOTAL FACADE AREA	=	1,230 SF	

4 BUILDING REAR ELEVATION – SOUTH 0 1 5 10

PROPOSED COLOR SCHEME	
CAST STONE	– BUFF COLOR
BRICK VENEER	– BORAL BRICK, SPANISH OAK, KING SIZE
STONE VENEER	– COOPER STONE, SLAG STONE, AUTUMN BLEND
WINDOWS	– 4 1/2" MIL FIN ALUM, LOW E INSUL WINDOW
AWNINGS, PARRAPET WALLS	– 24 GA GALVALUUM METAL FINISH
FRONT ROOF	– 24 GA GALVALUUM METAL FINISH
BEAMS, COLUMNS	– SHERWIN WILLIAMS 6459 "JADITE" ENAMEL

OWNER
RAHMAN KHAWAJA
2617 TEXAS AVE
BRYAN, TX 77802
979 – 255-0393

LEGAL DESCRIPTION
LOT 16, BLOCK 5
HANUS ADDITION
VOL 116, PAGE 409
STEVEN F AUSTIN LEAGUE NO 9
ABSTRACT 62
BRAZOS COUNTY, BRYAN, TX

EXPIRATION DATE 7/31/25
REGISTERED ARCHITECT CONSTANTIN BARBU 13260 STATE OF TEXAS
09-30-24

CONSTANTIN BARBU – ARCHITECT
(979) 575-7310

JOE'S FOOD MARKET
2009 HWY 21 WEST BRYAN, TEXAS