PROPOSED

CONSTRUCTION PLANS

FOR THE

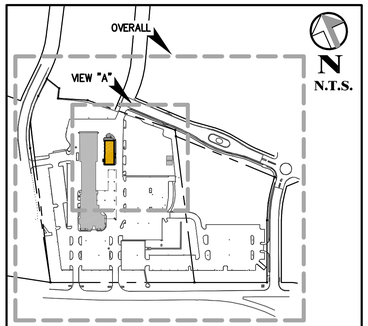
B/CS TOYOTA DEALERSHIP

PHASE ONE - SITE IMPROVEMENTS

728 N. EARL RUDDER FREEWAY
BRYAN, BRAZOS COUNTY, TEXAS
PERMIT & BIDDING - 3/23/22

B/CS TOYOTA DEALERSHIP: PHASE ONE – SITE IMPROVEMENTS
728 N. EARL RUDDER FREEWAY
BRYAN, BRAZOS COUNTY, TX

INDEX OF SHEETS:



SHEET VIEWS

OWNER/DEVELOPER:
PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

CIVIL ENGINEER:
RME CONSULTING ENGINEERS
PO BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: civil@rmengineer.com

VICINITY MAP

APPROVED BY:

RABON A. METCALF, P.E. No. 88583
RME CONSULTING ENGINEERS
TEXAS FIRM REGISTRATION No. F-4695
DATE:

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY STATE AND/OR LOCAL REGULATORY AGENCIES FOR RELATED CONSTRUCTION CONTAINED IN THESE CONSTRUCTION DRAWINGS. PERMITS REQUIRED, BUT NOT LIMITED TO, ARE AS FOLLOWS:

CoB:	PLANNING & DEVELOPMENT SERVICES – SITE PERMIT (SITE DEVELOPMENT, DRAINAGE, & WATER/SEWER INSPECTIONS)
BTU:	ELECTRICAL SERVICES
ATMOS ENERGY:	GAS SERVICE
FRONTIER/SUDDENLINK:	COMMUNICATION SERVICES
TCEQ:	STORMWATER & PRETREATMENT TEAMS – STORMWATER DISCHARGE CONSTRUCTION ACTIVITIES
TAS:	ADA REVIEW & INSPECTIONS

2. A PRE-CONSTRUCTION MEETING WILL BE HELD PRIOR TO CONSTRUCTION. ATTENDEES WILL CONSIST OF THE FOLLOWING:
   - DEVELOPER;
   - CITY ENGINEER;
   - CITY INSPECTOR;
   - GENERAL CONTRACTOR;
   - UTILITY SUBCONTRACTORS;
   - RME CONSULTING ENGINEERS;
3. THE LATEST EDITION OF THE 2020 B/CS UNIFIED TECHNICAL SPECIFICATIONS & DETAILS ARE ISSUED FOR THIS PROJECT'S INFRASTRUCTURE IMPROVEMENTS.
4. THE LATEST EDITION OF THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES ARE ISSUED FOR THIS PROJECT AND SHALL BE UTILIZED FOR ALL CONSTRUCTION NOT COVERED BY THE B/CS UNIFIED TECHNICAL SPECIFICATIONS & DETAILS.

Texas 811 STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

THE STATE OF TEXAS
N.T.S.

SYMBOL & LINE LEGEND

PP	POWER POLE
	DOWN GUY
LP	LIGHT POLE
WV	WATER VALVE
WM	WATER METER
ET	ELECTRICAL TRANSFORMER
PB	ELECTRICAL PULL BOX
EM	ELECTRICAL METER
GM	GAS METER
MH	MANHOLE
C.O.	CLEANOUT
FH	FIRE HYDRANT
TP	TELEPHONE PEDESTAL
AI	AREA INLET
JB	JUNCTION BOX
	CURB INLET
	SIGN or MARKER (TYPE VARIES)
	CHAIN-LINK FENCE
	WOOD or WROUGHT IRON FENCE
	BARBED-WIRE FENCE
W	WATER LINE (SIZE & TYPE VARIES)
SS	SEWER LINE (SIZE & TYPE VARIES)
FM	FORCEMAIN (SIZE & TYPE VARIES)
SD	DRAIN (SIZE & TYPE VARIES)
OHE	OVERHEAD ELECTRIC
OHC	OVERHEAD COMMUNICATIONS
UE	UNDERGROUND ELECTRIC
UC	UNDERGROUND COMMUNICATIONS
FO	UNDERGROUND FIBER OPTICS
GAS	UNDERGROUND GAS MAIN
	PROPERTY LINE
	BUILDING SETBACK
	UTILITY EASEMENT (PUE or PrUE)
	DRAINAGE EASEMENT (PDE or PrDE)
	ACCESS EASEMENT (PAE or PrAE)

MARK	DATE	DESCRIPTION

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

C0.0
SHEET 1 OF 14

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND OTHER CONSTRUCTION DRAWINGS OF DIFFERING DISCIPLINES & SPECIFICATIONS. WHERE SPECIFICATIONS, STANDARDS, AND/OR DETAILS CONFLICT OR DIFFER THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND UNLESS OTHERWISE SPECIFIED THE MORE STRINGENT REQUIREMENT SHALL APPLY.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE CONSTRUCTION PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID ALL EXISTING UTILITIES AND REPAIR ANY DAMAGED LINES, AT HIS OWN EXPENSE, WHETHER THE UTILITY IS SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY 48 HOURS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL ALSO NOTIFY THE ENGINEER IF DESIGN CHANGES NEED TO BE MADE IN THE FIELD.

   CONTACT INFORMATION:
   TEXAS ONE CALL: 800-245-4545
   TEXAS EXCAVATION SAFETY SYSTEM (DIGTESS): (800) 344-8377
   CoB: ENGINEERING DIVISION – (979) 209-5030
   CoB: WATER SERVICES DIVISION – (979) 209-5900
   CoB: SANITATION DIVISION – (979) 209-5934
   CoB: STORMWATER – (979) 209-5881
   CoB: INFORMATION TECHNOLOGY – (979) 209-5478
   FRONTIER: BRIAN VICKERS – (979) 229-4795
   ATMOS ENERGY: KOREY LEMOND – (979) 774-2506
   SUDDENLINK: DAN AUGUSBURGER – (979) 595-2429

3. CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES OR SERVICE LINES THAT ARE CROSSED OR EXPOSED DURING CONSTRUCTION OPERATIONS. WHERE EXISTING UTILITIES OR SERVICE LINES ARE CUT, BROKEN, OR DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE UTILITIES OR SERVICE LINE WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION OR BETTER; THIS MATERIAL AND WORK SHALL BE AT THE CONTRACTOR'S OWN EXPENSE.

5. DURING THE EXECUTION OF THE WORK, THE CONTRACTOR SHALL MAINTAIN THE PROJECT SITE IN AN ORDERLY AND ACCEPTABLE MANNER AS FAR AS PRACTICAL. THE CONTRACTOR SHALL CLEAN AND REMOVE FROM THE PROJECT AREA ALL SURPLUS AND DISCARDED MATERIALS, TEMPORARY STRUCTURES, AND DEBRIS OF ANY KIND AND SHALL LEAVE THE PROJECT SITE IN A NEAT AND ORDERLY CONDITION. ALL CLEAN UP WILL BE DONE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

6. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRENCH SAFETY PLAN FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. THIS PLAN MUST BE PREPARED AND SIGNED BY A PROFESSIONAL ENGINEER (LICENSED IN THE STATE OF TEXAS). THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH TEXAS STATE LAW AND OSHA STANDARDS FOR ALL EXCAVATION FIVE FEET OR GREATER. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY.

7. A COPY OF THE APPROVED CONSTRUCTION DRAWINGS MUST BE KEPT ON SITE AT ALL TIMES THROUGH OUT THE ENTIRE DURATION OF CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS, RECORDING AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE REDLINE MARKED UP DRAWINGS WILL BE SUBMITTED TO THE THE OWNER'S REPRESENTATIVE FOR VERIFICATION. AND FINALIZING THE "RECORD DRAWINGS".

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING AND PROTECTING ALL MATERIAL AND EQUIPMENT STORED ON THE JOBSITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STORAGE OF MATERIALS IN A SAFE AND WORKMANLIKE MANNER TO PREVENT INJURIES, DURING AND AFTER WORKING HOURS, UNTIL PROJECT COMPLETION.

9. CONTRACTOR SHALL SAW CUT REMOVE AND REPLACE CONCRETE PAVEMENT, CURB AND GUTTER AS REQUIRED TO CONSTRUCT PROPOSED IMPROVEMENT(S).

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR AND OBTAIN ALL REQUIRED PERMITS AND INSPECTION APPROVALS FOR ALL WORK SHOWN.

11. ANY ADJACENT PROPERTY AND RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION WILL BE RETURNED TO THEIR EXISTING CONDITIONS OR BETTER.

12. ALL WORK WITHIN THE TxDOT, COUNTY OR CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS AS TO THE INSTALLATION AND EROSION CONTROL PROTECTION.

13. ALL EXPOSED DIRT SURFACES SHALL BE SEEDED/HYDROMULCHED. YARDS WITH SODD SHALL BE RESODDED TO THE SAME CONDITIONS OR BETTER.

14. PROPOSED SIGNS, OR THOSE WHICH REQUIRE RELOCATION, SHALL BE INSTALLED IN ACCORDANCE TO THE FOLLOWING STANDARDS: SMD (GEN)-02 & SMD (SLIP-1)-02 THRU SMD (SLIP-3)-02.

15. EITHER THE TEXAS UNIVERSAL TRIANGULAR SLIP BASE OR WEDGE TYPE SIGN SUPPORTS WILL BE REQUIRED FOR ALL SIGNAGE WITHIN RIGHT-OF-WAY.

16. THE CONTRACTOR SHALL NOT CREATE A DIRT NUISANCE OR SAFETY HAZARD IN ANY STREET. THE PAVEMENT SHALL BE CLEANED DAILY.

17. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.

18. THE CONTRACTOR SHALL COORDINATE ALL FENCE REMOVAL AND REPLACEMENT WITH THE OWNER'S REPRESENTATIVE.

19. THE CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF THE APPLICABLE REGULATORY AGENCY.

20. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.

21. ALL SIDEWALK PROJECTIONS, FROM SIDEWALK RAMP TO SIDEWALK RAMP, ARE TO BE PERPENDICULAR TO TRAFFIC LANES.

GAS COMPANY NOTES:

1. A MINIMUM OF 48 HOURS (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES RELATING TO THE ENCROACHMENT WITHIN FIFTEEN FEET (15') OF THE GAS COMPANY'S PIPELINE, THE CONTRACTOR SHALL NOTIFY LOCAL ONE-CALL AND GAS COMPANIES REPRESENTATIVE.

2. THE CONTRACTOR SHALL CROSS THE PIPELINE AS CLOSE TO NINETY (90) DEGREES AS POSSIBLE, BUT NOT LESS THAN FORTY-FIVE (45) DEGREES. APPROVED OPEN CUTS WITHIN TEN FEET (10') OF THE GAS COMPANY'S PIPELINE AND FACILITIES REQUIRE PHYSICAL VERIFICATION OF PIPELINE LOCATION PRIOR TO COMMENCEMENT OF ANY WORK.

3. CONTRACTOR SHALL INSTALL ALL ROAD CROSSING(S) IN SUCH A WAY THAT A MINIMUM VERTICAL SEPARATION OF FIVE FEET (5') IS MAINTAINED BETWEEN THE TOP OF THE GAS COMPANY'S PIPELINE AND THE TOP OF THE PAVED SURFACE(S). THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF FOUR FEET (4') BETWEEN THE TOP OF THE GAS COMPANY'S PIPELINE AND THE BOTTOM OF ANY DITCHES.

4. THE CONTRACTOR SHALL NOT MOVE ANY CONSTRUCTION EQUIPMENT ACROSS THE GAS COMPANY'S PIPELINE AND/OR RIGHT-OF-WAY WITHOUT THE CONSENT OF THE GAS COMPANY'S REPRESENTATIVE. WHENEVER THE CONTRACTOR IS APPROVED TO CROSS THE GAS COMPANY'S PIPELINE AND/OR RIGHT-OF-WAY WITH HEAVY EQUIPMENT, THE CONTRACTOR SHALL PLACE MATTING OR OTHER SUITABLE MATERIAL OVER THE PIPELINE AS DETERMINED BY THE GAS COMPANY'S FIELD REPRESENTATIVE. NO LARGE VIBRATORY COMPACTION EQUIPMENT IS ALLOWED WITHIN THE GAS COMPANY'S RIGHT-OF-WAY, ONLY WALK-BEHIND VIBRATORY ROLLER/COMPACTOR IS ALLOWED WHEN WORKING OVER THE PIPELINE. THE CONTRACTOR WILL MAINTAIN A MINIMUM OF FOUR FEET (4') OF COVER OVER THE THE PIPELINE AT LOCATIONS WHERE CONSTRUCTION OR MAINTENANCE ACTIVITIES WILL TAKE PLACE OVER THE PIPELINE.

5. THE CONTRACTOR MAY PLACE EXCAVATED MATERIAL INSIDE THE GAS COMPANY'S RIGHT-OF-WAY, BUT MAY NOT PLACE SUCH MATERIAL OVER THE PIPELINE UNLESS APPROVED BY THE GAS COMPANY'S REPRESENTATIVE. NO EQUIPMENT WILL BE ALLOWED TO WORK OVER THE PIPELINE UNLESS APPROVED. ANY EXCAVATION WITHIN TWO FEET (2') OF THE PIPELINE WILL BE DONE BY HAND. ALL MECHANICAL DIGGING EQUIPMENT MUST HAVE THE TEETH REMOVED OR BARRED WITH A PLATE WELDED ACROSS THE TEETH.

6. ANY AND ALL USE OF THE GAS COMPANY RIGHT-OF-WAY FOR TEMPORARY WORKSPACE AND ANY AND ALL CROSSINGS OF THE SUBJECT PIPELINE MUST BE APPROVED. THE CONTRACTOR SHALL CLEAN UP AND REPAIR ALL DAMAGES TO THE RIGHT-OF-WAY RESULTING FROM THE WORK. ALL REPAIRS AND CLEANUP IN THE RIGHT-OF-WAY IS SUBJECT TO THE GAS COMPANY'S ACCEPTANCE.

STRIPING NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC STRIPING AND MARKERS IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, MOST RECENT EDITION WITH REVISIONS).

2. REFLECTORIZED PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH TxDOT SPECIFICATIONS ITEM NO. 666 AND 672 RESPECTIVELY.

3. THE CONTRACTOR SHALL REFER TO THE TxDOT STANDARD DETAIL SHEETS FOR PAVEMENT MARKERS AND SIGNS.

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL DEVELOP HIS OWN SWPP PLAN AND MAY USE THE INFORMATION CONTAINED IN THESE PLANS. EROSION CONTROL MEASURES SHOWN SHALL BE CONSIDERED THE VERY MINIMAL REQUIRED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT ALL OTHER EROSION CONTROL MEASURES (DIVERSION BERMS, DRAINAGE STRUCTURES, SWALES, ADDITIONAL FENCING, ETC...) NECESSARY TO KEEP THE EXISTING IMPROVEMENTS AND DEVELOPMENTS FROM DAMAGE OF ANY KIND, DURING ALL PHASES OF DEMOLITION AND CONSTRUCTION.

2. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TPDES GENERAL PERMIT No. TXR150000 REQUIREMENTS FOR CONSTRUCTION SITES, OBTAIN A SITE SPECIFIC PERMIT, AND PREPARE A SWPPP IN ACCORDANCE WITH B/CS UNIFIED SPECIFICATION No. 31 25 13.

3. THE CONTRACTOR IS RESPONSIBLE FOR FILING A NOTICE OF INTENT PRIOR TO COMMENCEMENT OF WORK AND A NOTICE OF TERMINATION AT THE COMPLETION OF THE PROJECT TO THE TCEQ. A LAMINATED COPY OF THE CONSTRUCTION SITE NOTICE, NOI AND SWPPP, VISIBLE FROM THE PUBLIC RIGHT-OF-WAY, SHALL BE POSTED AT THE SITE.

4. APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE WHAT EVER MEANS NECESSARY TO MINIMIZE EROSION AND PREVENT SEDIMENT FROM LEAVING THE PROJECT SITE.

6. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING, INSPECTING, AND MAINTAINING THE EROSION AND SEDIMENT CONTROL DEVICES.

7. THE CONTRACTOR, OR HIS REPRESENTATIVE ESTABLISHED BY A LETTER OF DELEGATION, SHALL MAKE A VISUAL INSPECTION OF ALL SILTATION CONTROLS AND NEWLY STABILIZED AREAS ON A DAILY BASIS. AT A MINIMUM INSPECTIONS SHALL BE PERFORMED EVERY 14 DAYS AND AFTER EVERY RAINFALL EVENT OF 1/2" OR MORE. THE INSPECTION REPORTS AND RECORDS SHALL BE KEPT WITH THE SWPPP AND MONTHLY COPIES SENT TO THE OWNER'S REPRESENTATIVE.

8. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AND CLEANED OF SILT (AS NEEDED) AFTER EVERY RAIN.

9. DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN BEST MANAGEMENT PRACTICE (BMP). SEDIMENT FENCE, CONSTRUCTION ENTRANCE, WASH-DOWN AREAS, OR OTHER SEDIMENT TRAPPING DEVICES SHALL CONTROL ALL STORM WATER LEAVING THE SITE. UNDER NO CIRCUMSTANCE WILL SAND BAGS BE ALLOWED.

10. CONSTRUCTION EXIT IS TO BE DRESSED WITH ADDITIONAL ROCK AS NEEDED AND MAINTAINED SO AS TO PREVENT CONSTRUCTION TRAFFIC FROM TRACKING MUD ONTO ADJACENT PUBLIC STREETS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING TEMPORARY EROSION CONTROL MEASURES AS REQUIRED FOR DIFFERENT PHASES OF CONSTRUCTION. EROSION CONTROL MEASURES SHOWN MAY NEED TO BE ADJUSTED TO HANDLE INCREASED OR CONCENTRATED FLOWS CREATED BY VARIOUS STAGES OF THE CONSTRUCTION. TEMPORARY EROSION CONTROL MEASURES MODIFIED OR DEEMED INEFFECTIVE, DURING INSPECTIONS, SHOULD BE REPLACED IMMEDIATELY. ALL CHANGES AND/OR ADJUSTMENTS TO TEMPORARY EROSION CONTROL MEASURES SHALL BE NOTED/CHANGED IN THE SWPPP.

12. PHASE TWO EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY AFTER CONSTRUCTION OF THEIR ASSOCIATED IMPROVEMENTS. INLET PROTECTION BARRIERS SHALL BE CONSTRUCTED WITH SILT FENCING (GRATE INLETS) AND CURLEX SOCKS (CURB INLETS). EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE UNTIL UPSTREAM DRAINAGE AREAS ARE FULLY STABILIZED (70%, OR MORE, ESTABLISHED).

13. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE THAT ALL DISTURBED AREAS ARE STABILIZED. DESIGNATED AREAS SHALL BE BLOCK SODDED, AND ALL OTHER AREAS DISTURBED DUE TO CONSTRUCTION SHALL BE HYDRO-MULCHED (HULLED) SEEDED. THESE STABILIZED AREAS SHALL BE SODDED OR SEEDED, FERTILIZED, AND WATERED (BY MEANS OF A TEMPORARY ABOVE GROUND IRRIGATION SYSTEM) TO ESTABLISH A SOLID GROUND COVER WITHIN 30 DAYS OF COMPLETION, OR IF ACTIVITY CEASES FOR MORE THAN 14 DAYS.

14. WHEN HYDROMULCH IS REQUIRED, CONTRACTOR SHALL KEEP MULCH MOIST AFTER INSTALLATION AND UNTIL AREA SHOWS GROWTH.

    GENERAL SCHEDULE OF EVENTS:
    1. INSTALL SILT FENCING & STABILIZED CONSTRUCTION EXIT (WHERE NECESSARY).
    2. CLEAR, GRUB & PERFORM DEMOLITION AND ROUGH SITE GRADING.
    3. CONSTRUCT DETENTION FACILITY WITH OUTFALL (AS APPLICABLE).
    4. INSTALL UTILITIES AND/OR DRAINAGE IMPROVEMENTS.
    5. GRADING AND/OR PAVEMENT IMPROVEMENTS (AS APPLICABLE).
    6. COMPLETE FINISH GRADING AND INSTALL PERMANENT SEEDING, GROUND COVER & LANDSCAPING.
    7. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETED THE SITE IS STABILIZED. REMOVE SILT FENCE AND RE-SEED ANY AREA DISTURBED DURING CONSTRUCTION AND ASSURE A HEALTHY GROUND COVER.

DIMENSIONAL CONTROL NOTES:

1. THE CONTRACTOR MAY OBTAIN AN ELECTRONIC COPY OF THE SITE PLAN FOR CONSTRUCTION PURPOSES. THE ELECTRONIC FILE AND INFORMATION GENERATED, BY RME CONSULTING ENGINEERS (RME), FOR THIS PROJECT IS CONSIDERED BY RME TO BE CONFIDENTIAL. WHEN ISSUED, IT'S USE IS INTEND SOLELY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. THIS MATERIAL IS INTENDED FOR USE BY THE RECIPIENT NAMED, ONLY, AND PERMISSION IS NOT GRANTED TO THE RECIPIENT FOR DISTRIBUTION OF THESE DOCUMENTS IN ANY FORM OR FASHION. THE RECIPIENT UNDERSTANDS THAT THIS DATA IS AUTHORIZED "AS IS" WITHOUT ANY WARRANTY AS TO ITS PERFORMANCE, ACCURACY, FREEDOM FROM ERROR, OR AS TO ANY RESULTS GENERATED THROUGH ITS USE. THE RECIPIENT ALSO UNDERSTANDS AND AGREES THAT RME, UPON RELEASE OF SUCH DATA, IS NO LONGER RESPONSIBLE FOR THEIR USE OR MODIFICATION. THE USER AND RECIPIENT OF THE ELECTRONIC DATA ACCEPTS FULL RESPONSIBILITY AND LIABILITY FOR ANY CONSEQUENCES ARISING OUT OF THEIR USE.

2. ALL DIMENSIONS SHOWN ARE TO BE USED IN CONJUNCTION WITH THESE PLANS FOR LOCATING ALL IMPROVEMENTS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR FOR WORKABILITY PRIOR TO CONSTRUCTION OF IMPROVEMENTS.

3. UNLESS OTHERWISE SHOWN, ALL DIMENSIONING IS TO THE BACK OF CURB OR EDGE OF PAVEMENT, WHICHEVER IS APPLICABLE. UNLESS OTHERWISE LABELED ALL BACK OF CURB RADIUS ARE 4'-0" AND SIDEWALKS WITH AN INSIDE RADIUS OF 2'-0".

4. THE TOPOGRAPHICAL AND BOUNDARY SURVEY WAS PERFORMED BY KERR SURVEYING – BRYAN, TX (TBPLS No. 10018500).

   BEARING SYSTEM SHOWN HEREON IS BASED ON THE TEXAS STATE PLANE CENTRAL ZONE 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 1.00011239867728 (CALCULATED USING GEOID12B).

   PROJECT BENCHMARK:
   ELEVATIONS ARE BASED ON AN AVERAGE OF THE TBM ELEVATIONS SHOWN ON THE TOPOGRAPHIC SURVEY PLAT CREATED BY MCCLURE & BROWNE ENGINEERING/SURVEYING, INC. DATED NOVEMBER 11, 2019.

   TBM #1:
   5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED 'KERR SURV. CONTROL POINT' SET AT THE WEST CORNER OF THE INTERSECTION OF HIGHPOINT DRIVE AND HILLPOINT DRIVE, ~4.5' WEST OF THE SIDEWALK AND ~7' EAST OF THE END OF THE CHAINLINK FENCE
   N: 10229090.38, E: 3555461.83, ELEV: 315.53'

   TBM #2:
   5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED 'KERR SURV. CONTROL POINT' SET AT THE NORTH CORNER OF THE INTERSECTION OF HILLPOINT DRIVE AND THE EARL RUDDER FREEWAY, ~22' NORTHWEST OF A STORM SEWER INLET MANHOLE AND ~41' NORTH OF A GRATE INLET
   N: 10228715.12, E: 3555258.79, ELEV: 303.45'

   TBM #3:
   5/8 INCH IRON ROD WITH RED PLASTIC CAP STAMPED 'KERR SURV. CONTROL POINT' SET ON THE NORTHEAST SIDE OF THE EARL RUDDER FREEWAY, ~17.51' SOUTH OF A CHAINLINK FENCE CORNER AND ~55' NORTHWEST OF THE MOST WESTERLY DRIVE/ENTRANCE SHOWN HEREON
   N: 10229068.70, E: 3554474.18, ELEV: 316.08'

   COORDINATES SHOWN HEREON ARE TEXAS STATE PLANE CENTRAL ZONE GRID COORDINATES

TRAFFIC CONTROL NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, MOST RECENT EDITION WITH REVISIONS) DURING CONSTRUCTION. THE TRAFFIC CONTROL PLAN MUST BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS. ALL TCPs WILL REQUIRE APPROVAL FROM THE CITY, AND WHERE APPLICABLE, APPROVAL FROM TxDOT OR THE COUNTY.

2. LANE CLOSURE WILL NOT BE ALLOWED UNLESS APPROVED BY TxDOT, THE COUNTY OR CITY ENGINEER, WHICHEVER IS APPLICABLE.

3. PLASTIC DRUMS SHALL BE USED FOR OVERNIGHT DELINEATION OF OFF ROADWAY WORK AREAS.

4. CONTRACTOR SHALL PROVIDE AND INSTALL ALL TEMPORARY MARKINGS IN CONFORMANCE WITH TxDOT SPECIFICATION 662 "WORK ZONE PAVEMENT MARKINGS".

EARTHWORK & PAVING NOTES:

1. THE PAVEMENT SYSTEM SHOWN WAS DESIGNED WITHOUT THE AID OF A GEOTECHNICAL INVESTIGATION AND RECOMMENDATIONS. DUE TO THE PLASTIC SOILS WITHIN THIS AREA, SOME MINOR DIFFERENTIAL MOVEMENT MAY STILL OCCUR DUE TO SEASONAL SOIL MOISTURE VARIATIONS.

2. THE CONTRACTOR SHALL REFER TO THE B/CS UNIFIED SPECIFICATIONS & STANDARDS FOR ALL PAVING AND DRAINAGE CONSTRUCTION. TESTING REQUIREMENTS ARE MINIMAL REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL TESTING OUTLINED IN THE APPLICABLE UNIFIED SPECIFICATIONS ILLUSTRATING THAT THE IMPROVEMENTS MEET OR EXCEED THE MINIMAL REQUIREMENTS.

3. ROADWAY EMBANKMENT SHALL BE IN ACCORDANCE WITH ALL B/CS TECHNICAL SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO, SPECIFICATIONS SECTION 31 23 00. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY CONFLICTS EXIST BETWEEN THE B/CS SPECIFICATIONS AND THE GENERAL NOTES FOLLOWING IN THIS SECTION OF NOTES. THE STRICTER OF THE TWO SHALL APPLY.

4. THE CONTRACTOR SHALL REFER TO THE STRUCTURAL ENGINEER'S PLANS FOR SPECIFICATIONS, PROCEDURES, AND REQUIREMENTS FOR ALL BUILDING PADS. **THE FOLLOWING SPECIFICATIONS AND STANDARDS ARE FOR THE SITE AND PAVEMENT ONLY.**

A. SUBGRADE:

1. EXISTING TREES, STUMPS, AND LARGE TREE ROOT SYSTEMS, SHALL BE GRUBBED AND REMOVED. VEGETATION SHALL BE REMOVED AND THE TOP 6" OF TOP SOIL AND SUBGRADE SHALL BE STRIPPED FROM THE AREAS COVERED BY THE PROPOSED IMPROVEMENTS. ADDITIONAL STRIPPING DEPTH MAY BE REQUIRED IN LOW LYING AREAS OR FOR THE REMOVAL OF EXCESSIVE ORGANIC MATERIAL OR "MUCK" AREAS WITHIN FORMER DRAINAGE SWALES, PONDS AND/OR DEPRESSIONS.

2. EXISTING DRAINAGE WAYS THAT ARE TO BE FILLED SHALL HAVE BENCHES EXCAVATED INTO THE SIDE WALLS OF THE CHANNEL SIDESLOPES PRIOR TO PLACEMENT OF FILL. BENCHES SHOULD BE AT LEAST SIX FEET IN WIDTH WITH ONE BENCH BEING PLACED VERTICALLY FOR EVERY TWO FEET OF CHANNEL HEIGHT.

3. ALL FILL AREAS & OTHER DESIGNATED AREAS SHALL BE PROOF-ROLLED WITH A MINIMUM OF TWO (2) PASSES (SCRAPER OR TANDEM AXLE DUMP TRUCK WITH A MINIMUM WEIGHT OF 20 TONS EXERTING A TIRE PRESSURE BETWEEN 50 AND 150 PSI). EACH SUCCEEDING PASS OF THE PROOF ROLLER SHALL BE OFFSET BY NO MORE THAN ONE TIRE WIDTH AT AN OPERATING SPEED BETWEEN 2 & 6 MPH. IF REQUIRED AT THE TIME OF CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE WEAK AREAS AS DIRECTED BY THE ENGINEER. MITIGATION OF WEAK AREAS MAY INCLUDE OVER EXCAVATION (MAXIMUM OF 2' WITH CONSULTING THE GEOTECHNICAL ENGINEER) AND BACKFILLING (SELECT FILL), REPROCESSING TO REMOVE MOISTURE, MODIFICATION WITH LIME OR CEMENT ADMIXTURE, OR USING GEOTEXTILES AND/OR GEOGRID. PROOF-ROLLING WILL BE PERFORMED UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE OR GEOTECHNICAL ENGINEER PERFORMING THE MATERIALS TESTING.

4. PAVING AREAS RECEIVING 8" OF FILL, OR MORE, SHALL BE SCARIFIED TO A DEPTH OF 6" AND COMPACTED TO A UNIFORM DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 WITH A MOISTURE CONTENT RANGE OF 0% TO +4% OF THE OPTIMUM MOISTURE CONTENT. COMPACTION TESTS, FOR THESE AREAS, SHALL BE VERIFIED BY IN-PLACE DENSITY TESTS FOR EACH LIFT (1 TEST PER 200 L.F. OF ROADWAY OR 5,000 SQ.FT. OF FILL AREA) WITH A MINIMUM OF THREE (3) TEST BEING PERFORMED PER LIFT.

5. FILL MATERIAL EXCAVATED ON-SITE, EXCLUDING THE TOP 6" AND DESIGNATED AS "CLEAN", AND PLACED IN PAVEMENT AREAS MAY BE USED AS GENERAL FILL AS LONG AS THE PI IS BETWEEN 19 AND 32, WITH A LIQUID LIMIT LESS THAN 49, AND A CLASSIFICATION OF SC OR CL. THE MATERIAL MUST BE FREE FROM TRASH, LUMPS, CLODS, ORGANIC SUBSTANCE & OTHER FOREIGN MATTER. THIS MATERIAL IS TO BE STOCK-PILED ON-SITE AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

6. FILL MATERIAL SHALL BE PLACED IN EIGHT INCH (8") MAXIMUM LOOSE LIFTS, WITH EACH LIFT WETTED OR DRIED TO A MOISTURE CONTENT RANGE OF 0% TO +4% OF THE OPTIMUM MOISTURE CONTENT AND COMPACTED TO A UNIFORM DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. COMPACTION TESTS, FOR THESE AREAS, SHALL BE VERIFIED BY IN-PLACE DENSITY TESTS FOR EACH LIFT (1 TEST PER 250 L.F. OF ROADWAY OR 5,000 SQ.FT. OF FILL AREA) WITH A MINIMUM OF THREE (3) TEST BEING PERFORMED PER LIFT.

B. STABILIZED SUBGRADE:

1. LOW PLASTICITY: SUBGRADE MATERIAL, UNDER PAVEMENT STRUCTURES, CONSISTING OF SANDS AND SILTS WITH A (PI<15) SHALL BE STABILIZED, TO A DEPTH OF 6" UNDER THE PROPOSED PAVEMENT, WITH TYPE 1 PORTLAND CEMENT (APPROXIMATELY 5% BY DRY WEIGHT or 22.5 POUNDS/SY) IN ACCORDANCE WITH TxDOT SPECIFICATION No. 265 OR 275.

2. INTERMEDIATE PLASTICITY: SUBGRADE MATERIAL, UNDER PAVEMENT STRUCTURES, CONSISTING OF GRANULAR SOILS WITH A (15<PI<25) SHALL BE STABILIZED, TO A DEPTH OF 6" UNDER THE PROPOSED PAVEMENT, WITH TYPE "A" HYDRATED LIME OR TYPE "C" QUICK LIME & CLASS "C" FLY ASH (APPROXIMATELY 3% AND 8% BY DRY WEIGHT or 18 & 48 POUNDS/SY RESPECTIVELY) IN ACCORDANCE WITH TxDOT SPECIFICATION No. 265 OR 275.

3. HIGH PLASTICITY: SUBGRADE MATERIAL, UNDER PAVEMENT STRUCTURES, CONSISTING OF (PI>25) SHALL BE STABILIZED, TO A DEPTH OF 6" UNDER THE PROPOSED PAVEMENT, WITH TYPE "A" HYDRATED LIME (APPROXIMATELY 6% BY DRY WEIGHT or >27 POUNDS/SY) IN ACCORDANCE WITH TxDOT SPECIFICATION No. 260.

4. STABILIZED MATERIAL SHOULD BE ROTARY TILLED TO PROVIDE A HOMOGENEOUS MIXTURE THAT MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE TxDOT, (LATEST EDITION) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS & BRIDGES. ALL CHEMICALLY STABILIZED MATERIAL SHALL BE COMPACTED TO 95% ASTM D698 WITH AN O.M.C. BETWEEN 0% AND +4%. ALL COMPACTION EFFORTS MUST BE COMPLETED WITHIN TWO (2) HOURS OF MIXING AND CURED FOR AT LEAST THREE (3) DAYS AND WATERED AS NECESSARY.

5. THE SUBGRADE SHALL BE STABILIZED TWO FOOT (2') BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT, WHICHEVER IS GREATER, UNLESS OTHERWISE SPECIFIED BY STRICTER REQUIREMENTS.

6. COMPACTION TEST, FOR STABILIZED MATERIAL, SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT (1 TEST PER 200 L.F. OF ROADWAY OR 5,000 SQ.FT. OF SUBGRADE AREA) WITH A MINIMUM OF THREE (3) TEST BEING PERFORMED PER LIFT.

C. PORTLAND CEMENT CONCRETE:

1. ALL CONCRETE, UNLESS OTHERWISE SPECIFIED, SHALL BE 4.0 SACK MIX (MAXIMUM WATER/CEMENT RATIO OF 0.55) WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH TxDOT SPECIFICATION ITEM No. 360 (LATEST EDITION).

2. ALL CONCRETE SHALL BE PROPERLY VIBRATED WHEN PLACED AND NOT RAKED A DISTANCE GREATER THAN TEN (10) FEET.

3. THE CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE PAVING PLANS SHOWN. JOINT SPACING SHALL NOT EXCEED 15' IN ANY DIRECTION TO ANOTHER JOINT OR EDGE OF PAVEMENT.

4. CONTROL JOINTS SHALL BE CUT BETWEEN 4 AND 12 HOURS AFTER PLACEMENT OF CONCRETE AND MAY BE SUBSTITUTED WITH CONSTRUCTION JOINTS. CONTROL JOINTS SHALL BE CUT TO A DEPTH EQUAL TO 25% OF THE PAVEMENT THICKNESS.

5. EXPANSION JOINTS SHALL NOT EXCEED A MAXIMUM SPACING OF 60' AND SHOULD NOT BE PLACED THROUGH THE MIDDLE OF AREA INLET OR JUNCTION BOXES LOCATED IN THE PAVEMENT. ALL AREA INLETS OR JUNCTION BOXES, LOCATED IN PAVEMENT AREAS, AND RETAINING WALLS ADJACENT TO PAVEMENT AREAS, SHALL BE INSTALLED WITH ISOLATION JOINTS BETWEEN THE STRUCTURE AND THE PAVEMENT.

6. ALL JOINTS SHALL BE SEALED WITH SONOBORN SONOLASTIC SL1, OR APPROVED EQUIVALENT.

7. AS FAR AS PRACTICAL, THE CONTRACTOR SHALL ALIGN ALL SIDEWALK JOINTS WITH CURB AND PAVEMENT JOINTS.

8. CONCRETE SHALL NOT BE PLACED IF THE AIR TEMPERATURE IS 50°F AND FALLING OR 95°F OR HIGHER. CONCRETE MAY BE PLACED IF THE AIR TEMPERATURE IS 40°F AND RISING OR LESS THAN 95°F.

9. IF FLY ASH IS USED IN THE CONCRETE, THE REPLACEMENT PERCENTAGE SHOULD NOT EXCEED 20% OF THE TOTAL CEMENTITIOUS MATERIAL.

D. STEEL:

1. INSTALLATION, CLEARANCES, AND TOLERANCES OF REINFORCING STEEL SHALL BE IN CONFORMANCE WITH THE ACI MANUAL (LATEST EDITION).

2. ALL REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL BAR HAVING A MINIMUM YIELD STRENGTH OF NOT LESS THAN 60 KSI CONFORMING TO ASTM A615, GRADE 60.

3. ALL REINFORCING STEEL SHALL BE FREE FROM RUST OR OTHER BOND REDUCING AGENTS.

4. ALL SPLICES IN PAVEMENT AND CURBING STEEL SHALL BE STAGGERED AND LAPPED 30xBAR DIAMETER OR 12", WHICHEVER IS GREATER.

5. CONCRETE COVERAGE FOR THE REINFORCING STEEL SHALL COMPLY WITH THE A.C.I. CODE, LATEST EDITION. THE STEEL SHALL HAVE A MINIMUM 2" CLEARANCE WITH THE SOIL AND 2" OF COVER FROM THE TOP OF THE PAVEMENT. IDEALLY, THE REINFORCEMENT SHOULD BE PLACED 2" BELOW THE TOP OF PAVEMENT.

E. CRUSHED LIMESTONE BASE:

1. CRUSHED LIMESTONE SHALL CONFORM TO STANDARDS SPECIFIED IN TxDOT ITEM 247, TYPE A, GRADE 1 OR 2.

2. COMPACTION SHALL BE AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557, METHOD C AT A MOISTURE CONTENT BETWEEN -2% AND +2% OF OPTIMUM.

3. THICKNESS AND COMPACTION TEST, FOR CRUSHED LIMESTONE BASE MATERIAL, SHALL BE VERIFIED BY IN-PLACE DENSITY TEST FOR EACH LIFT (1 TEST PER 200 L.F. OR 5,000 SQ.FT. OF BASE AREA) WITH A MINIMUM OF THREE (3) TEST BEING PERFORMED PER LIFT.

4. THE BASE SHALL BE BLADED SMOOTH, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE , BEFORE PRIMING.

EARTHWORK & PAVING NOTES (CONT'D):

F. HOT-MIX ASPHALTIC CONCRETE:

1. HMAC SHALL CONFORM TO STANDARDS SPECIFIED IN TxDOT ITEM 340, TYPE D.

2. BASE PREPARATION: APPLY ASPHALT ONLY WHEN TEMPERATURE IS ABOVE 55° F AND IS RISING. TEMPERATURE SHALL BE TAKEN IN THE SHADE AND AWAY FROM ARTIFICIAL HEAT. NO ASPHALT SHALL BE PLACED WHEN GENERAL WEATHER CONDITIONS, IN THE OPINION OF THE ENGINEER, ARE NOT SUITABLE. CLEAN BASE SURFACE OF DIRT, DUST, OR OTHER DELETERIOUS MATTER BY SWEEPING WITH ROTARY BROOM OR OTHER ACCEPTABLE MEANS. IF NECESSARY, SPRINKLE LIGHTLY WITH WATER JUST PRIOR TO APPLICATION OF ASPHALT.

3. HOT-MIX ASPHALTIC CONCRETE SHALL CONFORM TO STANDARDS SPECIFIED IN TxDOT ITEM 340, TYPE D & ASPHALT CEMENT SHOULD BE GRADE AC-20.

4. COMPACTION SHALL BE TESTED IN ACCORDANCE WITH TxDOT TEST METHOD TEX-227-F FOR DENSITY AND TEX-208-F FOR STABILITY. THE HMAC SHALL HAVE A LABORATORY DENSITY BETWEEN 94% AND 98%. AND A STABILITY RANGE BETWEEN 35 – 56 AND 42 – 56 FOR THE BASE/BINDER COURSE AND SURFACE COURSE RESPECTIVELY.

5. THICKNESS AND COMPACTION TEST, FOR THE HOT-MIX ASPHALT MATERIAL, SHALL BE VERIFIED BY CORING AND IN-PLACE DENSITY TEST FOR EACH LIFT 1 TEST PER 200 L.F. OR 5,000 SQ.FT. OF PAVEMENT AREA) WITH A MINIMUM OF THREE (3) TEST BEING PERFORMED PER LIFT.

DEMOLITION NOTES:

1. DEMOLITION OF EXISTING STRUCTURES AND IMPROVEMENTS SHALL INCLUDE ALL WORK CONTAINED ON THESE PLANS, BUT SHALL NOT BE LIMITED TO THE ITEMS SPECIFICALLY IDENTIFIED. ANY MATERIALS TO BE DEMOLISHED OR CLEARED SHALL BE COMPLETELY REMOVED AND DISPOSED OF PER THE CONSTRUCTION PLANS & DETAILS. THIS WORK WILL NOT ONLY CONSIST OF ABOVE GROUND ITEMS, BUT UNDERGROUND ELEMENTS AS WELL, INCLUDING BUT NOT LIMITED TO: TREE ROOTS, FOUNDATION SYSTEMS, OLD PIPES, ETC... THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY ADDITIONAL ITEMS THAT REQUIRE DEMOLITION, NOT IDENTIFIED ON THIS PLAN, PRIOR TO REMOVAL.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO STAGE AND SEQUENCE ALL DEMOLITION WORK WITH THE OWNER'S REPRESENTATIVE & UTILITY COMPANIES TO PROVIDE MINIMAL INTERRUPTION AND INCONVENIENCE OF UTILITY SERVICES AND SUCH SEQUENCE AND STAGING OF WORK SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

3. DEMOLISHED SURPLUS MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE.
   3.1. "CLEAN" – UTILIZED ON-SITE OR DISPOSED BY THE CONTRACTOR OFF-SITE;
   3.2. "CLASS 3" – DISPOSED BY THE CONTRACTOR OFF-SITE;
   3.3. "CLASS 2" – DISPOSED BY THE CONTRACTOR AT THE TWIN OAKS LANDFILL;
   3.4. "CLASS 1" – DISPOSED BY THE CONTRACTOR AT A CLASS 1 APPROVED LANDFILL (TWIN OAKS IS NOT QUALIFIED);

4. ALL RIGID PAVEMENT EDGES (INCLUDING SIDEWALKS), BOUNDING THE CONSTRUCTION AREA AND ABUTTING WITH NEW CONSTRUCTION, SHALL BE NEATLY SAW CUT AT AN EXISTING JOINT. FLEXIBLE PAVEMENT SHALL BE SAW CUT A MINIMUM OF 24" BEYOND ANY PROPOSED STRUCTURES.

5. THE CONTRACTOR SHALL CLEAR ALL RIGHT-OF-WAYS AND EASEMENTS CONTAINED IN THESE CONSTRUCTION DRAWINGS.

6. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL EXISTING UTILITIES ON SITE PRIOR TO DEMOLITION.

7. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PERMITS AND PAY ANY FEES REQUIRED FOR DEMOLITION AND DISPOSAL FROM THE APPROPRIATE AUTHORITIES.

9. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES, AS SHOWN ON THE SWPPP, PRIOR TO COMMENCING DEMOLITION WORK.

10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT ARE TO REMAIN IN PLACE.

11. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO ANY EXISTING ROAD SURFACE.

12. ALL EXISTING ITEMS THAT ARE TO REMAIN IN PLACE WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION, OR BETTER, AT THE SOLE EXPENSE OF THE CONTRACTOR.

13. SHOULD ANY EXITING UTILITIES NOT SHOWN OR SHOWN INCORRECTLY ON THIS PLAN BE FOUND ON-SITE, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY TO DISCUSS ANY POSSIBLE CONFLICTS BEFORE PROCEEDING WITH ANY WORK IN THAT AREA.

14. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE UTILITY SERVICE INSTALLATIONS, REQUIRE REPLACEMENT (AS NECESSARY) WITH THE APPROPRIATE UTILITY COMPANY. THIS WORK WILL BE PERFORMED BY ATMOS ENERGY (OR APPROVED CONTRACTOR). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REIMBURSEMENT OF ALL WORK, SERVICES, AND MATERIALS REQUIRED BY ATMOS COMPANY TO REPAIR/REPLACE FACILITIES AND IMPROVEMENTS DAMAGED BY THE CONTRACTOR.

15. DURING ALL PHASES OF CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN FIRE ACCESS AND FIRE FLOWS, TO ALL EXISTING AND PROPOSED BUILDINGS, IN A MANNER THAT IS ACCEPTABLE TO THE FIRE MARSHALL. FIRE ACCESSIBILITY SHALL MEET THE MINIMUM REQUIREMENTS:
    A. DURING CONSTRUCTION ALL PROPOSED BUILDINGS SHALL BE ACCESSIBLE BY THE PROPOSED FIRE LANES AND A CLEAR PATH TO ALL EXISTING/PROPOSED FIRE HYDRANTS, SHALL BE MAINTAINED;
    B. PRIOR TO CONSTRUCTION OF ALL PROPOSED BUILDINGS, THE PROPOSED PUBLIC WATER SYSTEM IMPROVEMENTS, AND AN ALL-WEATHER ROAD/ACCESS WAY, SHALL BE INSTALLED AND ACCEPTED BY THE CITY.

16. EXISTING WATER AND SANITARY SEWER LINES IDENTIFIED TO BE ABANDONED SHALL BE REMOVED AND/OR GROUT FILLED IN ACCORDANCE WITH B/CS UNIFIED SPECIFICATION No. 03 34 00. ABOVE GROUND FEATURES (I.E. MANHOLES, CLEANOUTS, WATER VALVES, FIR HYDRANTS, ETC...) SHALL BE REMOVED AND UTILITY CAPPED. WATER LINES SHALL BE CAPPED WITH THE APPROPRIATE SIZED MJ PLUG (INCLUDING ALL ENDS OF THE ABANDONED WATER LINE). MANHOLE CONES SHALL BE REMOVED AND THE MANHOLE BACKFILLED WITH CEMNT STABILIZED SAND.

GRADING NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL AREAS SHALL BE ADEQUATELY GRADED TO DRAIN AT THE DESCRIBED BELOW MINIMUMS:
   A. EARTHWORK: 1.00%
   B. HMAC or BASE MATERIAL: 1.00%
   C. PORTLAND CONCRETE: 0.75%

2. UNLESS OTHERWISE SPECIFIED, UNPAVED AREAS SHALL DRAIN AWAY FROM BUILDINGS AT A MINIMUM SLOPE OF 5.00% (FOR A MINIMUM OF 10' AWAY FROM THE STRUCTURE) OR SO THAT THE PERIMETER CURB IS 8" LOWER THAN THE FINISH FLOOR. WHERE AT ALL POSSIBLE PROVIDE A MINIMUM OF EIGHT INCHES (8") OF EXPOSED GRADE BEAM FOR ALL STRUCTURES.

3. FINISH GRADE ADJACENT TO CURBING OR SIDEWALKS SHALL BE 1/2" BELOW THE TOP OF CONCRETE AND IN LANDSCAPING AREAS, 2" BELOW.

4. WHEN GRADES FOR TOP OF CURB AND GUTTER FLOWLINE DIFFER, THE SLOPES SHOWN ARE FOR THE GUTTER FLOWLINE.

5. WHEN ONLY THE TOP OF CURB ELEVATIONS ARE SHOWN (T/C=000.00'), THE CURB HEIGHT IS 6" UNLESS OTHERWISE SPECIFIED.

6. THE CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS & STRUCTURES.

7. SLOPES BETWEEN PROPOSED CONTOURS SHALL BE 4H:1V (MAXIMUM) UNLESS OTHERWISE SPECIFIED (DO NOT SCALE).

8. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.

9. THE APPROVAL OF THESE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS. ANY ADJACENT PROPERTY AND RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION WILL BE RETURNED TO THEIR EXISTING CONDITIONS OR BETTER.

10. IN AREAS WITH PAVEMENT OR SIDEWALKS ADJACENT TO NEW STRUCTURES, A POSITIVE SEAL MUST BE PROVIDED AND MAINTAINED BETWEEN THE STRUCTURES AND THE PAVEMENT AND/OR SIDEWALKS TO MINIMIZE SEEPAGE OF WATER.

11. ROOF DRAINS SYSTEMS (DOWNSPOUT & GUTTER) SHOULD DISCHARGE ONTO PAVEMENT OR SPLASH BLOCKS.

TOYOTA
PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

STATE OF TEXAS
RABON A. METCALF
88583
LICENSED PROFESSIONAL ENGINEER
3/23/22

GENERAL NOTES
FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0757CV1A | SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22
DRAWN BY: RAM | CHECKED BY: RLP
KERR JOB No. #21-1085

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

C0.1

UTILITY CONNECTIONS NOTES:

1. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS AND SCHEDULE ALL OUTAGES WITH THE CITY.
2. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED PROPERTY OWNERS A MINIMUM OF FORTY-EIGHT (48) HOURS (NOT INCLUDING WEEKENDS) IN ADVANCE OF A UTILITY OUTAGE. THIS NOTICE SHALL BE ACCOMPLISHED BY MEANS OF DOOR HANGERS. THE NOTICE SHALL INCLUDE CONTRACTOR CONTACT INFORMATION AND DAY/TIME OF EXPECTED OUTAGE.
3. OUTAGES SHALL BE SCHEDULED TO OCCUR DURING NON-PEAK TIMES AND NOT COINCIDE WITH LOCAL SPECIAL EVENTS (CONTACT CITY PLANNING DEPARTMENT FOR CALENDAR OF SPECIAL EVENTS).

GENERAL UTILITY NOTES (PRIVATE & PUBLIC):

1. THE CONTRACTOR SHALL INSTALL THE PROPOSED PRIVATE UTILITY LINES IN ACCORDANCE WITH LOCAL CODES, LATEST NATIONAL PLUMBING CODE AND ALL APPLICABLE STATE AND LOCAL LAWS. OTHER PRIVATE OR PUBLIC UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY COMPANY'S SPECIFICATIONS. SHOULD THESE DRAWINGS AND SPECIFICATIONS DIFFER WITH OTHER UTILITY COMPANY'S SPECIFICATIONS, THE STRICTER OF THE TWO SHALL APPLY.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR AND OBTAIN ALL REQUIRED PERMITS AND INSPECTION APPROVALS FOR ALL WORK SHOWN.
3. THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS OF SERVICES LINES, CONDUIT, METERS, ETC... WITH THE APPROPRIATE UTILITY COMPANY.
4. ALL EXCAVATION FOR UNDERGROUND UTILITIES SHALL BE MADE TRUE TO GRADE. EXCAVATION SHALL BE MADE A MINIMUM OF SIX INCHES BELOW THE REQUIRED GRADE AND PROVIDE A SAND BED FOR THE PIPING. BACKFILL OVER PIPING SHALL BE MADE WITH EARTH OR FILL SAND, FREE OF DEBRIS, AND SHALL BE TAMPED BY HAND OR MECHANICAL MEANS TO THE DENSITY OF THE ADJACENT UNDISTURBED EARTH OR TO 95% STANDARD PROCTOR DENSITY (ASTM D698), WHICHEVER IS GREATER. ALL TRENCHING AND EXCAVATION SHALL BE DONE IN STRICT ACCORDANCE WITH CURRENT OSHA REQUIREMENTS AND ALL OTHER APPLICABLE SAFETY CODES AND STANDARDS.
5. MINIMUM BURY OR COVER SPECIFIED IS TO BE MEASURED FROM FINISHED GRADES. WHERE UTILITY LINES EXTEND UNDER PAVEMENT, THE BURY OR COVER SHALL BE MEASURED FROM THE BOTTOM OF THE STRUCTURE.
6. UTILITY INSTALLATIONS IN NON-STRUCTURAL AREAS SHALL BE BEDDED AND INITIAL BACKFILL CONSISTENT WITH NON-STRUCTURAL REQUIREMENTS. IN STRUCTURAL AREAS (UNDER FOUNDATIONS, PAVEMENTS, WALKS, ETC...) THE UTILITIES SHALL BE BEDDED AND INITIAL BACKFILLED WITH CEMENT STABILIZED SAND. FINAL BACKFILL IN THESE AREAS SHALL BE COMPACTED BY MECHANICAL TAMPING TO STRUCTURAL COMPACTION REQUIREMENTS.
7. REGARDLESS OF ELEVATIONS SHOWN FOR MANHOLE RIMS, CLEAN-OUT COVERS, OR GRATES, THESE ITEMS SHALL BE PLACED FLUSH WITH THE PROPOSED PAVEMENT ELEVATION AND SLOPE. MANHOLES NOT IN PAVEMENT AREAS SHALL BE SET 3" ABOVE THE FINISHED GRADE (EXCLUDING FLOODPLAIN AREAS).
8. CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT ALL "POINTS OF CROSSING" TO DETERMINE IF CONFLICTS EXIST BEFORE COMMENCING ANY CONSTRUCTION. NOTIFY THE ENGINEER AT ONCE OF ANY CONFLICT.
9. THE CONTRACTOR SHALL COORDINATE ALL UTILITY INSTALLATION SO THAT GRADE CRITICAL ELEMENTS (I.E. STORM DRAIN, SANITARY SEWER, ETC...) DO NOT CONFLICT WITH NON-GRADE CRITICAL ELEMENTS (I.E. ELECTRICAL CONDUIT, WATER SERVICES, ETC...).
10. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR FOR EXCAVATION, BORING, INSTALLATION, BACKFILLING OF UTILITY LINES AND RELATED APPURTENANCES AS SHOWN ON THE PLANS.
11. THE LOADING AND UNLOADING OF ALL PIPE AND OTHER ACCESSORIES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PRACTICES AND SHALL, AT ALL TIMES, BE PERFORMED WITH CARE TO AVOID ANY DAMAGE TO THE MATERIAL. THE CONTRACTOR SHALL LOCATE AND PROVIDE THE NECESSARY STORAGE AREAS FOR MATERIALS AND EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL CONNECTIONS TO PUBLIC SYSTEMS AND INSTALLATIONS WITH THE REGULATORY INSPECTOR.
13. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED PROPERTY OWNERS A MINIMUM OF FORTY-EIGHT (48) HOURS (NOT INCLUDING WEEKENDS) IN ADVANCE OF A UTILITY OUTAGE. THIS NOTICE SHALL BE ACCOMPLISHED BY MEANS OF DOOR HANGERS. THE NOTICE SHALL INCLUDE CONTRACTOR CONTACT INFORMATION AND DAY/TIME OF EXPECTED OUTAGE.
14. OUTAGES SHALL BE SCHEDULED TO OCCUR DURING NON-PEAK TIMES AND NOT COINCIDE WITH LOCAL SPECIAL EVENTS (CONTACT PUBLIC UTILITY COMPANY FOR CALENDAR OF SPECIAL EVENTS).
15. THIS PROJECT SHALL BE BUILT BY MEANS OF OPEN CUT EXCEPT AS NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF BORE PITS IN FIELD SUBJECT TO THE REGULATORY INSPECTOR'S APPROVAL.
16. ALL BORES SHOWN, UNLESS OTHERWISE NOTED, SHALL BE "DRY".
17. STRUCTURAL BACKFILL WILL BE REQUIRED FOR ALL EXCAVATION WITHIN FIVE (5) FEET OF PUBLIC ROADWAY PAVEMENTS OR WALKS.
18. THE CONTRACTOR SHALL COORDINATE ALL SLEEVING REQUIRED FOR ON-SITE UTILITIES AND IRRIGATION SYSTEMS.
19. PRIVATE IRRIGATION SYSTEMS ARE NOT SHOWN. DAMAGE, REPLACEMENT, OR REPAIR OF IRRIGATION LINES OR HEADS, WITHIN THE PROJECT'S CONSTRUCTION LIMITS, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
20. CONTRACTOR SHALL MARK ALL SERVICE LEADS IN ACCORDANCE WITH SANITARY SEWER SERVICE DETAILS S6-00 AND S6-01 PER THE LATEST B/CS SEWER DETAILS.
21. ALL LIDS FOR PRIVATE SANITARY SEWER MANHOLES, GREASE TRAPS, SAMPLING WELLS, AND OIL/SAND SEPARATORS SHALL NOT HAVE LABELING SAYING "CITY".

PUBLIC UTILITY NOTES:

A. GENERAL:

1. THE 2012 B/CS UNIFIED TECHNICAL SPECIFICATIONS FOR WATER & SEWER CONSTRUCTION SHALL GOVERN ON THIS PROJECT FOR ALL PUBLIC UTILITY IMPROVEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL TESTS CONTAINED THEREIN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY CONFLICTS OR DISCREPANCIES OCCUR WITH THE CONSTRUCTION PLANS AND SPECIFICATIONS.
2. THE CITY WILL REQUIRE THE TESTING OF COMPACTION FOR ALL BACKFILL IN TRENCHES FOR PUBLIC WATER, SEWER AND DRAINAGE LINES. IF THE COMPACTION TEST SHOW THAT THE SPECIFICATIONS ARE NOT MET, THE CONTRACTOR WILL BE REQUIRED TO RECOMPACT THE TRENCH AND PAY FOR EACH SUBSEQUENT TEST UNTIL IT MEETS OR EXCEEDS THE SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING ON THIS PROJECT IN ACCORDANCE WITH B/CS UNIFIED SPECIFICATION SECTION 01 71 23.
4. TRENCH BEDDING AND BACKFILL, FOR ALL PUBLIC UTILITIES (WATER, SANITARY SEWER, & FORCEMAINS) SHALL CONFORM WITH B/CS STANDARD CONSTRUCTION DETAIL W4-02 UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR SHALL INSTALL 14 GAUGE SOLID COPPER TRACING WIRE DIRECTLY ABOVE ALL PVC PUBLIC UTILITY LINES (WATER & SEWER FORCEMAINS), TAPED EVERY 10', AND METAL DETECTOR TAPE SHALL BE PLACED ABOVE THE LINE NO DEEPER THAN 24", PER B/CS STANDARD CONSTRUCTION DETAIL W1-03.

B: WATER:

1. ALL WATER LINE FITTINGS AND SPECIALS SHALL BE MECHANICAL JOINT, DUCTILE IRON, CLASS 350, WITH STAINLESS STEEL NUTS AND BOLTS, UNLESS OTHERWISE SPECIFIED.
2. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR MAY DEFLECT WATER LINES A MAXIMUM OF 1 DEGREE PER JOINT. THIS DEFLECTION SHALL OCCUR ALONG THE BARREL OF THE PIPE AND NOT AT THE JOINT.

C. SANITARY SEWER:

1. MANHOLES SHALL BE VACUUM TESTED AND SEWER LINES SHALL BE AIR TESTED, MANDREL TEST, AND TV CAMERA INSPECTED ACCORDING TO B/CS UNIFIED SPECIFICATION SECTION 33 01 30.13 PRIOR TO ACCEPTANCE.

STORM SEWER NOTES (PUBLIC & PRIVATE):

1. ALL PUBLIC STORM SEWER PIPE (SIZES 18" – 36"), EXCEPT AS NOTED, IS TO BE CONSTRUCTED OUT OF HDPE (DR 21) PIPE CONFORMING TO ASTM F-714 AND HAVING A MINIMUM PIPE STIFFNESS OF 46. PRIVATE STORM SEWER PIPE (ALL SIZES), EXCEPT AS NOTED IS TO BE CONSTRUCTED OUT OF ADS (N-12) PIPE.
2. ALL PUBLIC STORM SEWER PIPE, EXCEPT AS NOTED, IS TO BE CONSTRUCTED OUT OF REINFORCED CONCRETE PIPE (RCP), ASTM C76, CLASS III WITH RUBBER GASKETED PROFILE CONFORMING TO ASTM C443.
3. CONTRACTOR SHALL PROVIDE A MINIMUM OF 12" (TWELVE INCHES) CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS, AND A MINIMUM OF 6" (SIX INCHES) AT STORM SEWER AND SANITARY SEWER CROSSINGS.
4. NO PRE-CAST INLETS OR BOXES ARE ALLOWED. STORM SEWER CURB AND GRATE INLETS AND JUNCTION BOXES SHALL BE CAST-IN-PLACE. PRE-CAST INLET OR BOX TOPS ARE ALLOWED. ALL CURB INLETS, AT GRADES, SHALL BE INSTALLED PARALLEL WITH THE ADJACENT STREET SLOPE.
5. THIS PROJECT SHALL BE BUILT BY MEANS OF OPEN CUT EXCEPT AS NOTED ON THE DRAWINGS. BACKFILL FOR ALL STORM SEWER LINES, UNLESS OTHERWISE SPECIFIED, SHALL BE NON-STRUCTURAL BACKFILL.
6. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL INSTALL ALL STORM SEWER DRAIN PIPE IN ACCORDANCE WITH THE TRENCH DETAIL CONTAINED IN THESE CONSTRUCTION DRAWINGS. GENERALLY THE BEDDING AND BACKFILLING SHALL CONFORM TO THE FOLLOWING STANDARDS:

   REINFORCED CONCRETE PIPE:

   (A) STRUCTURAL AREAS – UNDER PROPOSED STREETS AND STRUCTURES, INITIAL BEDDING & BACKFILL SHALL BE CEMENT STABILIZED SAND AND SHALL BE COMPACTED IN LIFTS NOT GREATER THAN 6". FINAL BACKFILL SHALL CONSIST OF CLASS III MATERIAL AND SHALL BE COMPACTED IN MAXIMUM 8" LIFTS TO A DENSITY OF NOT LESS THAN 98% OF STANDARD MAXIMUM DENSITY AS DETERMINED USING ASTM D-698 AT A MOISTURE CONTENT OF 0% TO 4% OF OPTIMUM MOISTURE. DENSITY TESTS SHOULD BE PERFORMED AT LEAST EVERY 200 LINEAR FEET FOR EVERY TWO (2) FEET OF FILL AT LOCATIONS SPECIFIED BY THE ENGINEERING INSPECTOR. TESTS SHOULD BE PERFORMED IN THE INSPECTOR'S PRESENCE UNLESS DIRECTED OTHERWISE BY THE INSPECTOR.

   (B) NON-STRUCTURAL AREAS – IN AREAS NOT UNDER STRUCTURES, INITIAL BEDDING & BACKFILL SHALL BE BEDDING TYPE "C". FINAL BACKFILL SHALL CONSIST OF CLASS IV B MATERIAL AND SHALL BE COMPACTED IN MAXIMUM 8" LIFTS TO A DENSITY OF NOT LESS THAN 90% OF STANDARD MAXIMUM DENSITY AS DETERMINED USING ASTM D-698 AT A MOISTURE CONTENT OF 0% TO 4% OF OPTIMUM MOISTURE. DENSITY TESTS SHOULD BE PERFORMED AT LEAST EVERY 200 LINEAR FEET FOR EVERY TWO (2) FEET OF FILL AT LOCATIONS SPECIFIED BY THE ENGINEERING INSPECTOR. TEST SHOULD BE PERFORMED IN THE INSPECTOR'S PRESENCE UNLESS DIRECTED OTHERWISE BY THE INSPECTOR.

   HDPE (ADS) PIPE:

   (A) STRUCTURAL AREAS – UNDER PROPOSED PARKING AND SIDEWALKS, INITIAL BEDDING & BACKFILL SHALL BE CEMENT STABILIZED SAND AND SHALL BE COMPACTED IN LIFTS NOT GREATER THAN 6". FINAL BACKFILL SHALL CONSIST OF CLASS III MATERIAL AND SHALL BE COMPACTED IN MAXIMUM 8" LIFTS TO A DENSITY OF NOT LESS THAN 98% OF STANDARD MAXIMUM DENSITY AS DETERMINED USING ASTM D-698 AT A MOISTURE CONTENT OF 0% TO 4% OF OPTIMUM MOISTURE. DENSITY TESTS SHOULD BE PERFORMED AT LEAST EVERY 200 LINEAR FEET FOR EVERY TWO (2) FEET OF FILL AT LOCATIONS SPECIFIED BY THE ENGINEERING INSPECTOR. TESTS SHOULD BE PERFORMED IN THE INSPECTOR'S PRESENCE UNLESS DIRECTED OTHERWISE BY THE INSPECTOR.

   (B) NON-STRUCTURAL AREAS – IN AREAS NOT UNDER STRUCTURES, INITIAL BEDDING & BACKFILL SHALL BE CEMENT STABILIZED SAND AND SHALL BE COMPACTED IN LIFTS NOT GREATER THAN 6". FINAL BACKFILL SHALL CONSIST OF CLASS IV B MATERIAL AND SHALL BE COMPACTED IN MAXIMUM 8" LIFTS TO A DENSITY OF NOT LESS THAN 90% OF STANDARD MAXIMUM DENSITY AS DETERMINED USING ASTM D-698 AT A MOISTURE CONTENT OF 0% TO 4% OF OPTIMUM MOISTURE. DENSITY TESTS SHOULD BE PERFORMED AT LEAST EVERY 200 LINEAR FEET FOR EVERY TWO (2) FEET OF FILL AT LOCATIONS SPECIFIED BY THE ENGINEERING INSPECTOR. TEST SHOULD BE PERFORMED IN THE INSPECTOR'S PRESENCE UNLESS DIRECTED OTHERWISE BY THE INSPECTOR.
7. ROCK RIP-RAP SPECIFIED AT STORM SEWER HEADWALLS SHALL BE FLUSH WITH EXISTING OR PROPOSED GRADE SO THAT THE RIP-RAP DOES NOT CREATE A PONDING EFFECT RELATIVE TO THE FLOWLINE OF THE DITCH.

WATER LINE NOTES (PUBLIC & PRIVATE):

1. ALL PUBLIC WATER LINE PIPE SHALL BE CONSTRUCTED OUT OF C900 (DR14) PIPE UNLESS THEY ARE LESS THAN 4" IN LINE SIZE. PUBLIC WATER LINE PIPE LESS THAN 4" IN SIZE SHALL BE PVC (D2241).
2. THIS PROJECT SHALL BE BUILT BY MEANS OF OPEN CUT EXCEPT AS NOTED ON THE DRAWINGS. CONTRACTOR TO DETERMINE THE LOCATIONS OF BORE PITS IN FIELD SUBJECT TO THE REGULATORY INSPECTOR'S APPROVAL.
3. PRIVATE WATER SERVICES SHALL BE SLEEVED UNDER THE PAVEMENT, AND 2' BEYOND THE BACK OF CURB WITH 4" PVC (SCH 40).
4. ALL WATER LINE FITTINGS AND SPECIALS SHALL BE DUCTILE IRON MECHANICAL JOINT (CLASS 350) WITH HIGH STRENGTH, CORROSION RESISTANT LOW ALLOY STEEL NUTS AND BOLTS (PER B/CS SPEC. NO. 33 05 02).
5. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR MAY DEFLECT WATER LINES A MAXIMUM OF 1 DEGREE PER JOINT. THIS DEFLECTION SHALL OCCUR ALONG THE BARREL OF THE PIPE AND NOT AT THE JOINT.
6. FIRE HYDRANT RISERS SHALL BE MANUFACTURED AND PROVIDED FOR THE VERTICAL RISE REQUIRED FOR FINAL INSTALLATION. EXTENSIONS ARE NOT ALLOWED.
7. THE CONTRACTOR WILL FOLLOW THE PIPE MANUFACTURER'S SPECIFICATIONS FOR SPACING BETWEEN SERVICE TAPS AND OTHER APPURTENANCES (I.E. OTHER SERVICE TAPS, GATE VALVES, FITTINGS, ETC...).

SANITARY SEWER NOTES (PUBLIC & PRIVATE):

1. WHEN MAKING A CONNECTION TO AN EXISTING SANITARY SEWER MANHOLE, CONTRACTOR SHALL PLUG DOWNSTREAM END OF PROPOSED SANITARY SEWER. THE SEWER SHALL REMAIN PLUGGED UNTIL FINAL ACCEPTANCE BY THE REGULATORY INSPECTOR.
2. UNLESS MANHOLES CAN BE MADE WATERTIGHT AND TESTED FOR NO LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE. IF THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE WATERLINE MUST BE ENCASED IN ACCORDANCE WITH B/CS DETAIL W2-03. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.
3. NO CAST-IN-PLACE MANHOLES SHALL BE USED.
4. THIS PROJECT SHALL BE BUILT BY MEANS OF OPEN CUT EXCEPT AS NOTED ON THE DRAWINGS. BACKFILL FOR ALL SANITARY SEWER LINES, UNLESS OTHERWISE SPECIFIED, SHALL BE NON-STRUCTURAL BACKFILL.
5. ALL PUBLIC SANITARY SEWER PIPE 6" TO 15" SHALL BE SDR 26 PVC SEWER PIPE MEETING ASTM SPECIFICATION D-3034 HAVING A MINIMUM PIPE STIFFNESS OF 115, UNLESS OTHERWISE NOTED. ALL PRIVATE SEWER SERVICES, 4" AND 6" SIZES, SHALL BE PVC (SCH 40, D1765). PRIVATE SEWER SERVICES, 8" SIZE AND GREATER, SHALL BE PVC (SDR-26, D3034). PRIVATE SEWER SERVICE FITTINGS SHALL BE COMPLIANT WITH THE PIPE MATERIAL.
6. ALL MANHOLES AND SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH TCEQ CHAPTER 217 AND B/CS UNIFIED SPECIFICATIONS (LATEST EDITION).
7. ANY AND ALL D.I.P. TO BE USED WILL HAVE BOTH EXTERNAL AND INTERNAL PROTECTION (IN ACCORDANCE WITH B/CS SPEC. NO. 33 05 02). EXTERNAL PROTECTION WILL CONSIST OF POLYETHYLENE TUBING OR DOUBLE WRAP WILL BE 8 MILS THICK PER LAYER AND TIED TO PIPE AT 3' MAXIMUM INTERVAL (IF LAID), OR BANDED TO PIPE AT 1' MAXIMUM INTERVALS (w/SCREW-TIGHTENED STEEL BANDS) (IF JACKED). INTERNAL PROTECTION WILL CONSIST OF PROTECTO 401 CERAMIC EPOXY BY VULCAN GROUP, OR APPROVED EQUAL.

TCEQ RULES & REGULATIONS (§217.53 (d). – SEPARATION DISTANCES):

(D) SEPARATION DISTANCES.

1. COLLECTION SYSTEM PIPES MUST BE INSTALLED IN TRENCHES SEPARATE FROM WATER SUPPLY TRENCHES.
2. WHEREVER POSSIBLE, A COLLECTION SYSTEM PIPE MUST BE LOCATED BELOW A WATER SUPPLY PIPE. IF A COLLECTION SYSTEM PIPE CANNOT BE LOCATED BELOW A WATER SUPPLY PIPE, THE OWNER MUST JUSTIFY IN THE ENGINEERING REPORT WHY IT IS NOT POSSIBLE TO LOCATE THE COLLECTION SYSTEM PIPE BELOW THE PUBLIC WATER SUPPLY PIPE.
3. WHEREVER POSSIBLE, COLLECTION SYSTEM PIPES AND MANHOLES MUST BE LOCATED AT LEAST NINE FEET FROM ALL WATER SUPPLY PIPES. IF A COLLECTION SYSTEM PIPE OR MANHOLE CANNOT BE LOCATED AT LEAST NINE FEET AWAY FROM A WATER SUPPLY PIPE, THE OWNER MUST JUSTIFY IN THE ENGINEERING REPORT WHY IT IS NOT POSSIBLE TO PROVIDE AT LEAST NINE FEET OF SEPARATION. TABLE C.1. IN FIGURE: 30 TAC §217.53(D)(3) PROVIDES A REFERENCE TO PARAGRAPHS IN THIS SUBSECTION THAT APPLY IF A COLLECTION SYSTEM PIPE OR MANHOLE CANNOT BE LOCATED AT LEAST NINE FEET AWAY FROM A WATER SUPPLY PIPE.

CASE	PROTECTION REQUIREMENT
PARALLEL PIPES WITHIN NINE FEET, WHERE THE COLLECTION SYSTEM PIPE IS ABOVE THE WATER SUPPLY PIPE	ENCASED IN A CASING PIPE ACCORDING TO PARAGRAPH (4) OF THIS SUBSECTION
CROSSING PIPES WITHIN NINE FEET, WHERE THE COLLECTION SYSTEM PIPE IS ABOVE THE WATER SUPPLY PIPE	ENCASED IN A CASING PIPE ACCORDING TO PARAGRAPH (5)(A) OF THIS SUBSECTION – OR – CONSTRUCTED USING 150 PER SQUARE INCH (PSI) PRESSURE CLASS PIPE ACCORDING TO PARAGRAPH (5)(B) OF THIS SUBSECTION
PARALLEL PIPES WITHIN NINE FEET, WHERE THE COLLECTION SYSTEM PIPE IS BELOW THE WATER SUPPLY PIPE	CONSTRUCTED USING 150 PSI PRESSURE CLASS PIPE ACCORDING TO PARAGRAPH (6)(A) OF THIS SUBSECTION – OR – ENCASED IN A CASING PIPE ACCORDING TO PARAGRAPH (6)(B) OF THIS SUBSECTION
CROSSING PIPES WITHIN NINE FEET, WHERE THE COLLECTION SYSTEM PIPE IS BELOW THE WATER SUPPLY PIPE	CONSTRUCTED USING 150 PSI PRESSURE CLASS PIPE ACCORDING TO PARAGRAPH (7)(A) OF THIS SUBSECTION – OR – ENCASED IN CEMENT-STABILIZED SAND ACCORDING TO PARAGRAPH (7)(B) OF THIS SUBSECTION – OR – ENCASED IN A CASING PIPE ACCORDING TO PARAGRAPH (7)(C) OF THIS SUBSECTION
MANHOLE WITHIN NINE FEET OF A WATER SUPPLY PIPE	NO MEASURABLE LEAKAGE ACCORDING TO PARAGRAPH (8)(A) OF THIS SUBSECTION – OR – ENCASED IN CEMENT-STABILIZED SAND ACCORDING TO PARAGRAPH (8)(B) OF THIS SUBSECTION

4. IF A COLLECTION SYSTEM PIPE IS LOCATED ABOVE A WATER SUPPLY PIPE AND RUNS PARALLEL TO THE WATER SUPPLY PIPE, EACH PORTION OF THE COLLECTION SYSTEM PIPE WITHIN NINE FEET OF THE WATER SUPPLY PIPE MUST BE ENCASED. THE CASING PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PER SQUARE INCH (PSI) PRESSURE CLASS PIPE THAT:
   a. IN CASES THE ENTIRE LENGTH OF COLLECTION SYSTEM PIPE THAT IS WITHIN NINE FEET OF THE WATER SUPPLY PIPE;
   b. IS SEALED AT BOTH ENDS WITH CEMENT GROUT OR A MANUFACTURED SEAL;
   c. IS AT LEAST TWO NOMINAL SIZES LARGER THAN THE WASTEWATER COLLECTION PIPE; AND
   d. IS SUPPORTED BY SPACERS BETWEEN THE COLLECTION SYSTEM PIPE AND THE ENCASING PIPE AT A MAXIMUM OF FIVE-FOOT INTERVALS.
5. IF A COLLECTION SYSTEM PIPE CROSSES ABOVE A WATER SUPPLY PIPE, EACH PORTION OF THE COLLECTION SYSTEM PIPE WITHIN NINE FEET OF THE WATER SUPPLY PIPE MUST EITHER BE ENCASED IN A CASING PIPE ACCORDING TO SUBPARAGRAPH (A) OF THIS PARAGRAPH, OR MUST BE CONSTRUCTED USING AT LEAST 150 PSI PRESSURE CLASS PIPE ACCORDING TO SUBPARAGRAPH (B) OF THIS PARAGRAPH.
   a. A CASING PIPE FOR A COLLECTION SYSTEM PIPE THAT CROSSES ABOVE A WATER SUPPLY PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS PIPE THAT IS:
   i. SEALED AT BOTH ENDS WITH CEMENT GROUT OR A MANUFACTURED SEAL;
   ii. AT LEAST TWO NOMINAL SIZES LARGER THAN THE WASTEWATER COLLECTION PIPE; AND
   iii. SUPPORTED BY SPACERS BETWEEN THE COLLECTION SYSTEM PIPE AND THE ENCASING PIPE AT A MAXIMUM OF FIVE-FOOT INTERVALS.
   b. A COLLECTION SYSTEM PIPE THAT CROSSES ABOVE A WATER SUPPLY PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS, CORROSION-RESISTANT, NON-BRITTLE PIPE AND MUST USE MANUFACTURER-APPROVED ADAPTERS. GASKETED JOINTS, COMPRESSION JOINTS, AND OTHER NON-BONDED JOINTS MUST BE DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE.
6. IF A COLLECTION SYSTEM PIPE IS LOCATED BELOW A WATER SUPPLY PIPE AND RUNS PARALLEL TO THE WATER SUPPLY PIPE, EACH PORTION OF THE COLLECTION SYSTEM PIPE WITHIN NINE FEET OF THE WATER SUPPLY PIPE MUST EITHER BE CONSTRUCTED USING AT LEAST 150 PSI PRESSURE CLASS PIPE ACCORDING TO SUBPARAGRAPH (A) OF THIS PARAGRAPH, OR MUST BE ENCASED IN A CASING PIPE ACCORDING TO SUBPARAGRAPH (B) OF THIS PARAGRAPH.
   a. A COLLECTION SYSTEM PIPE THAT RUNS PARALLEL TO AND BELOW A WATER SUPPLY PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS, CORROSION-RESISTANT, NON-BRITTLE PIPE THAT:
   i. IS LOCATED AT LEAST TWO VERTICAL FEET BELOW THE WATER SUPPLY PIPE;
   i. IS LOCATED AT LEAST FOUR HORIZONTAL FEET AWAY FROM THE WATER SUPPLY PIPE; AND
   iii. INCLUDES JOINTS THAT ARE DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE.
   b. A CASING PIPE FOR A COLLECTION SYSTEM PIPE THAT RUNS PARALLEL BELOW A WATER SUPPLY PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS PIPE THAT:
   i. IS SEALED AT BOTH ENDS WITH CEMENT GROUT OR A MANUFACTURED SEAL;
   ii. IS AT LEAST TWO NOMINAL SIZES LARGER THAN THE WASTEWATER COLLECTION PIPE; AND
   iii. IS SUPPORTED BY SPACERS BETWEEN THE COLLECTION SYSTEM PIPE AND THE ENCASING PIPE AT A MAXIMUM OF FIVE-FOOT INTERVALS.
7. IF A COLLECTION SYSTEM PIPE CROSSES BELOW A WATER SUPPLY PIPE, EACH PORTION OF THE COLLECTION SYSTEM PIPE WITHIN NINE FEET OF THE WATER SUPPLY PIPE MUST EITHER BE CONSTRUCTED USING AT LEAST 150 PSI PRESSURE CLASS PIPE ACCORDING TO SUBPARAGRAPH (A) OF THIS PARAGRAPH, OR MUST BE ENCASED IN CEMENT-STABILIZED SAND ACCORDING TO SUBPARAGRAPH (B) OF THIS PARAGRAPH, OR MUST BE ENCASED IN A CASING PIPE ACCORDING TO SUBPARAGRAPH (C) OF THIS PARAGRAPH.
   a. A COLLECTION SYSTEM THAT CROSSES BELOW A WATER SUPPLY PIPE AND IS CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS, CORROSION-RESISTANT, NON-BRITTLE PIPE MUST:
   i. HAVE AT LEAST SIX INCHES OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES;
   ii. BE CENTERED ON THE CROSSING;
   iii. BE AT LEAST 18 FEET LONG; AND
   iv. TERMINATE AT JOINTS THAT ARE DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE.
   b. A COLLECTION SYSTEM PIPE THAT CROSSES BELOW A WATER SUPPLY PIPE AND IS CONSTRUCTED OF ANY MATERIAL OTHER THAN AT LEAST 150 PSI PRESSURE CLASS, CORROSION-RESISTANT, NON-BRITTLE PIPE MUST:
   i. HAVE AT LEAST TWO FEET OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES; AND
   ii. BE ENCASED IN CEMENT-STABILIZED SAND BACKFILL THAT MEETS THE REQUIREMENTS OF SUBPARAGRAPH (D) OF THIS PARAGRAPH.
   c. A CASING PIPE FOR A COLLECTION SYSTEM PIPE THAT CROSSES BELOW A WATER SUPPLY PIPE MUST BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE CLASS PIPE THAT IS:
   i. SEALED AT BOTH ENDS WITH CEMENT GROUT OR A MANUFACTURED SEAL;
   ii. AT LEAST TWO NOMINAL SIZES LARGER THAN THE WASTEWATER COLLECTION PIPE; AND
   iii. SUPPORTED BY SPACERS BETWEEN THE COLLECTION SYSTEM PIPE AND THE ENCASING PIPE AT A MAXIMUM OF FIVE-FOOT INTERVALS.
   d. CEMENT-STABILIZED SAND FOR ENCASING COLLECTION SYSTEM PIPES MUST:
   i. INCLUDE AT LEAST 160 POUNDS OF CEMENT FOR EVERY CUBIC YARD OF SAND;
   ii. BE INSTALLED ENDING BEGINNING ONE-QUARTER PIPE DIAMETER BELOW THE CENTERLINE OF THE COLLECTION SYSTEM PIPE;
   iii. BE INSTALLED ENDING ONE FULL PIPE DIAMETER ABOVE THE TOP OF THE COLLECTION SYSTEM PIPE, OR 12 INCHES ABOVE THE TOP OF THE COLLECTION SYSTEM PIPE, WHICHEVER IS GREATER.
8. IF NINE-FOOT SEPARATION DISTANCE BETWEEN A MANHOLE AND A WATER SUPPLY PIPE CANNOT BE ACHIEVED, THE MANHOLE MUST EITHER:
   a. HAVE NO MEASURABLE LEAKAGE DURING A LEAKAGE TEST CONDUCTED ACCORDING TO REQUIREMENTS IN §217.58 OF THIS TITLE (RELATING TO TESTING REQUIREMENTS FOR MANHOLES) ;OR
   b. HAVE ALL PORTION OF THE MANHOLE WITHIN NINE FEET OF A WATER SUPPLY PIPE ENCASED IN AT LEAST ONE FOOT OF CEMENT STABILIZED SAND THAT MEETS THE REQUIREMENTS OF PARAGRAPH (7)(D)(I) AND (II) OF THIS SUBSECTION.

TCEQ RULES & REGULATIONS (§290.44. WATER DISTRIBUTION):

(e) LOCATION OF WATERLINES. THE FOLLOWING RULES APPLY TO INSTALLATIONS OF WATERLINES, WASTEWATER MAINS OR LATERALS, AND OTHER CONVEYANCES/ APPURTENANCES IDENTIFIED AS POTENTIAL SOURCES OF CONTAMINATION. FURTHERMORE, ALL RATINGS SPECIFIED SHALL BE DEFINED BY ASTM OR AWWA STANDARDS UNLESS STATED OTHERWISE. NEW MAINS, SERVICE LINES, OR LATERALS ARE THOSE THAT ARE INSTALLED WHERE NO MAIN, SERVICE LINE, OR LATERAL PREVIOUSLY EXISTED, OR WHERE EXISTING MAINS, SERVICE LINES, OR LATERALS ARE REPLACED WITH PIPES OF DIFFERENT SIZE OR MATERIAL.

1) WHEN NEW POTABLE WATER DISTRIBUTION LINES ARE CONSTRUCTED, THEY SHALL BE INSTALLED NO CLOSER THAN NINE FEET IN ALL DIRECTIONS TO WASTEWATER COLLECTION FACILITIES. ALL SEPARATION DISTANCES SHALL BE MEASURED FROM THE OUTSIDE SURFACE OF EACH OF THE RESPECTIVE PIECES.
2) POTABLE WATER DISTRIBUTION LINES AND WASTEWATER MAINS OR LATERALS THAT FORM PARALLEL UTILITY LINES SHALL BE INSTALLED IN SEPARATE TRENCHES.
3) NO PHYSICAL CONNECTION SHALL BE MADE BETWEEN A DRINKING WATER SUPPLY AND A SEWER LINE. ANY APPURTENANCE SHALL BE DESIGNED AND CONSTRUCTED SO AS TO PREVENT ANY POSSIBILITY OF SEWAGE ENTERING THE DRINKING WATER SYSTEM.
4) WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING CRITERIA SHALL APPLY.

   (A) NEW WATERLINE INSTALLATION– PARALLEL LINES.

   i. WHERE A NEW POTABLE WATERLINE PARALLELS AN EXISTING, NON-PRESSURE OR PRESSURE RATED WASTEWATER MAIN OR LATERAL AND THE LICENSED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS IS ABLE TO DETERMINE THAT THE EXISTING WASTEWATER MAIN OR LATERAL IS NOT LEAKING, THE NEW POTABLE WATERLINE SHALL BE LOCATED AT LEAST TWO FEET ABOVE THE EXISTING WASTEWATER MAIN OR LATERAL, MEASURED VERTICALLY, AND AT LEAST FOUR FEET AWAY, MEASURED HORIZONTALLY, FROM THE EXISTING WASTEWATER MAIN OR LATERAL. EVERY EFFORT SHALL BE EXERTED NOT TO DISTURB THE BEDDING AND BACKFILL OF THE EXISTING WASTEWATER MAIN OR LATERAL.

   ii. WHERE A NEW POTABLE WATERLINE PARALLELS AN EXISTING PRESSURE-RATED WASTEWATER MAIN OR LATERAL AND IT CANNOT BE DETERMINED BY THE LICENSED PROFESSIONAL ENGINEER IF THE EXISTING LINE IS LEAKING, THE EXISTING WASTEWATER MAIN OR LATERAL SHALL BE REPLACED WITH AT LEAST 150 PSI PRESSURE-RATED PIPE. THE NEW POTABLE WATERLINE SHALL BE LOCATED AT LEAST TWO FEET ABOVE THE NEW WASTEWATER LINE, MEASURED VERTICALLY, AND AT LEAST FOUR FEET AWAY, MEASURE HORIZONTALLY, FROM THE REPLACED WASTEWATER MAIN OR LATERAL.

   iii. WHERE NEW POTABLE WATERLINE PARALLELS A NEW WASTEWATER MAIN, THE WASTEWATER MAIN OR LATERAL SHALL BE CONSTRUCTED OF AT LEAST 150 PSI PRESSURE-RATED PIPE. THE NEW POTABLE WATERLINE SHALL BE LOCATED AT LEAST TWO FEET ABOVE THE WASTEWATER MAIN OR LATERAL, MEASURED VERTICALLY, AND AT LEAST FOUR FEET AWAY, MEASURED HORIZONTALLY, FROM THE WASTEWATER MAIN OR LATERAL.

   (A) NEW WATERLINE INSTALLATION – CROSSING LINES.

   i. WHERE A NEW POTABLE WATERLINE CROSSES ABOVE A WASTEWATER MAIN OR LATERAL, THE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND MUST BE PERPENDICULAR TO THE WASTEWATER MAIN OR LATERAL SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. WHEN CROSSING AN EXISTING WASTEWATER MAIN OR LATERAL AND IT IS DISTURBED OR SHOWS SIGNS OF LEAKING, THE WASTEWATER MAIN OR LATERAL SHALL BE REPLACED FOR AT LEAST NINE FEET IN BOTH DIRECTIONS (18 FEET TOTAL) WITH AT LEAST 150 PSI PRESSURE-RATED PIPE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.

      I THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE AN EXISTING, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL.

      II THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE AN EXISTING, PRESSURE-RATED WASTEWATER MAIN OR LATERAL.

   ii. WHERE A NEW POTABLE WATERLINE CROSSES A NEW, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL, THE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND SHALL BE PERPENDICULAR TO THE WASTEWATER MAIN OR LATERAL SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE THE WASTEWATER MAIN OR LATERAL. WHENEVER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM PIPE STIFFNESS OF 115 PSI AT 5.0% DEFLECTION. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE MATERIALS AND METHOD OF INSTALLATION SHALL CONFORM TO ONE OF THE FOLLOWING OPTIONS:

      I WITHIN NINE FEET HORIZONTALLY OF EITHER SIDE OF THE WATERLINE, THE WASTEWATER PIPE AND JOINTS SHALL BE CONSTRUCTED WITH PIPE MATERIAL HAVING A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. AN ABSOLUTE MINIMUM VERTICAL SEPARATION DISTANCE OF TWO FEET SHALL BE PROVIDED. THE WASTEWATER MAIN OR LATERAL SHALL BE LOCATED BELOW THE WATERLINE.

      II ALL SECTIONS OF WASTEWATER MAIN OR LATERAL WITHIN NINE FEET HORIZONTALLY OF THE WATERLINE SHALL BE ENCASED IN AN 18-FOOT (OR LONGER) SECTION OF PIPE. FLEXIBLE ENCASING PIPE SHALL HAVE A MINIMUM PIPE STIFFNESS OF 115 PSI AT 5.0% DEFLECTION. THE ENCASING PIPE SHALL BE CENTERED ON THE WATERLINE AND SHALL BE AT LEAST TWO NOMINAL PIPE DIAMETERS LARGER THAN THE WASTEWATER MAIN OR LATERAL. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT (OR LESS) INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. EACH END OF THE CASING SHALL BE SEALED WITH WATERTIGHT NON-SHRINK CEMENT GROUT OR A MANUFACTURED WATERTIGHT SEAL. AN ABSOLUTE MINIMUM SEPARATION DISTANCE OF SIX INCHES BETWEEN THE ENCASEMENT PIPE AND THE WATERLINE SHALL BE PROVIDED. THE WASTEWATER LINE SHALL BE LOCATED BELOW THE WATERLINE.

   iii. WHEN A NEW WATERLINE CROSSES UNDER A WASTEWATER MAIN OR LATERAL, THE WATERLINE SHALL BE ENCASED AS DESCRIBED FOR WASTEWATER MAINS OR LATERAL IN CLAUSE (II) OF THIS SUBPARAGRAPH OR CONSTRUCTED OF DUCTILE IRON OR STEEL PIPE WITH MECHANICAL OR WELDED JOINTS AS APPROPRIATE. AN ABSOLUTE MINIMUM SEPARATION DISTANCE OF ONE FOOT BETWEEN THE WATERLINE AND THE WASTEWATER MAIN OR LATERAL SHALL BE PROVIDED. WHEN A NEW WATERLINE CROSSES UNDER A WASTEWATER MAIN, THE PROCEDURES IN §217.53(D) OF THIS TITLE (RELATED TO PIPE DESIGN) MUST BE FOLLOWED.

   iv. WHERE A NEW POTABLE WATERLINE CROSSES A NEW, PRESSURE RATED WASTEWATER MAIN OR LATERAL, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND SHALL BE PERPENDICULAR TO THE WASTEWATER LINE SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTER LINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE THE WASTEWATER MAIN OR LATERAL. WHENEVER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. THE WASTEWATER MAIN OR LATERAL SHALL BE IN EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.

   v. WHERE CEMENT STABILIZED SAND BEDDING IS REQUIRED, THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON THE LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER MAIN OR LATERAL. THE USE OF BROWN COLORING IN CEMENT STABILIZED SAND FOR WASTEWATER MAIN OR LATERAL BEDDING IS RECOMMENDED FOR THE IDENTIFICATION OF PRESSURE RATED WASTE WATER MAINS DURING FUTURE CONSTRUCTION.

5) WATERLINE AND WASTEWATER MAIN MANHOLE OR LATERAL MANHOLE OR CLEANOUT SEPARATION. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN MANHOLE OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT.
6) LOCATION OF FIRE HYDRANTS. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION.
7) LOCATION OF POTABLE OR RAW WATER SUPPLY OR SUCTION LINES. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE.

TOYOTA
PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

STATE OF TEXAS
RABON A. METCALF
88583
LICENSED PROFESSIONAL ENGINEER
3/23/22

GENERAL NOTES

FOR THE

PHASE ONE – SITE IMPROVEMENTS

LOCATED AT

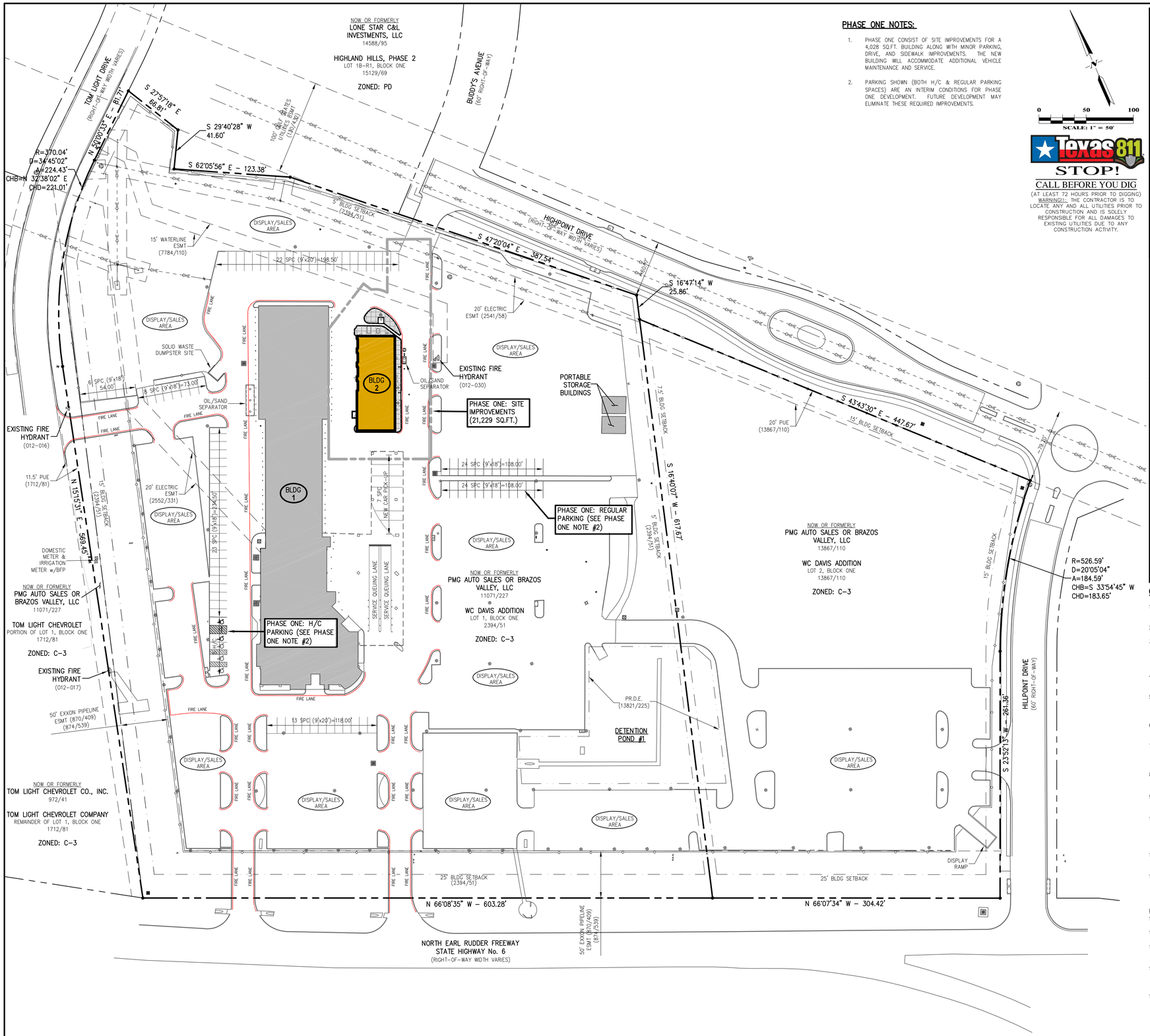
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY

BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION & A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0757CV1A | SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22
DRAWN BY: RAM | CHECKED BY: RLP
KERR JOB No. #21-1085

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

C0.2



PHASE ONE NOTES:

1. PHASE ONE CONSIST OF SITE IMPROVEMENTS FOR A 4,028 SQ.FT. BUILDING ALONG WITH MINOR PARKING, DRIVE, AND SIDEWALK IMPROVEMENTS. THE NEW BUILDING WILL ACCOMMODATE ADDITIONAL VEHICLE MAINTENANCE AND SERVICE.
2. PARKING SHOWN (BOTH H/C & REGULAR PARKING SPACES) ARE AN INTERIM CONDITIONS FOR PHASE ONE DEVELOPMENT. FUTURE DEVELOPMENT MAY ELIMINATE THESE REQUIRED IMPROVEMENTS.

0 50 100
SCALE: 1" = 50'

Texas 811
STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

BUILDING SUMMARY:

BUILDING No. 1:
1-STORY (N/A)
GROSS AREA = 29,919 SQ.FT.
FIRE CODE: TYPE 2B
SPRINKLER: UNKNOWN
HYDRANT: 3 HYDRANTS @ 3,750 GPM (TOTAL) AT 400' SPACING (MAX)

BUILDING No. 2:
1-STORY (19'-9" MAX)
GROSS AREA = 4,028 SQ.FT.
FIRE CODE: TYPE 2B
SPRINKLER: NOT REQUIRED
HYDRANT: 1 HYDRANT @ 1,500 GPM (TOTAL) AT 500' SPACING (MAX)

FLOW TEST:

FLOW DATA PROVIDED BY THE CITY OF BRYAN (9/30/05).

HYDRANT: 012-016 — STATIC = 80 PSI, FLOW = 1,300 GPM
HYDRANT: 012-017 — STATIC = 74 PSI, FLOW = 1,250 GPM

FIRE CODE: BUILDINGS No. 1 & No. 2 WILL NOT BE PROTECTED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM. FIRE PROTECTION PER BUILDING IS AS NOTED ABOVE PER THE 2015 IFC. FIRE FLOW PER BUILDING IS BASED ON SQUARE-FOOTAGES AND FIRE CONSTRUCTION TYPE.

UTILITY DEMAND SUMMARY:

USE	BUILDING No. 1 AVG. (gpd)	BUILDING No. 1 PEAK (x4.0)	BUILDING No. 2 AVG. (gpd)	BUILDING No. 2 PEAK (x4.0)	SITE TOTAL AVG. (gpd)	SITE TOTAL PEAK (x4.0)
SEWER (cfs)	9,000	0.11	8,460	0.04	17,460	0.15
WATER (gpm)	18.25	73	16.25	65	34.5	138
IRRIGATION (gpm)					30	30

UTILITY DEMAND NOTES:
1. PEAK WATER WAS DETERMINED BY THE BUILDING CODE – FIXTURE COUNT METHOD AND SUPPLIED BY THE MEP.
2. SANITARY SEWER FLOWS WERE DETERMINED BY DRAINAGE FIXTURE UNITS PROVIDED BY THE MEP (ADF UTILIZED A 12 HOUR USAGE PERIOD).
3. IRRIGATION DEMAND IS THE PEAK DEMAND AT THE LARGEST ZONE. VERIFY WITH IRRIGATOR.

PLAN NOTES:

1. REFER TO SHEETS C0.1 & C0.2 FOR SITE, PARKING & MISCELLANEOUS CONSTRUCTION NOTES.
2. REFER TO SHEETS C1.0A AND C1.3A FOR ADDITIONAL SITE PLAN DATA.
3. REFER TO SHEETS C2.0 thru C2.4 FOR SITE, PARKING & MISCELLANEOUS DETAILS.

PARKING SUMMARY:

ORDINANCE:
AUTO SALES = 1 SPC / 400 SF
OUTSIDE DISPLAY = 1 SPC / 2,000 SF

REQUIRED:
SALES: (33,947 / 400) = 84.9 SPACES
DISPLAY: (104,328 / 2,000) = 52.2 SPACES
REQUIRED = 137 SPACES
* (5 TOTAL REQUIRED TO BE H/C ACCESSIBLE)

PROVIDED:
REGULAR = 103 SPACES
BUILDING No. 1 SERVICE BAYS = 25 SPACES
BUILDING No. 2 SERVICE BAYS = 4 SPACES
H/C = 5 SPACES
TOTAL PROVIDED = 137 SPACES

CIVIL SITE NOTES:

1. THIS PROPERTY DOES NOT LIE WITHIN THE 100-YEAR FLOODPLAIN PER F.E.M.A.- FIRM COMMUNITY PANEL NO. 48041C 0215F, APRIL 2, 2014.
2. DESIGNATED HANDICAP PARKING SPACES, WALKS & RAMPS SHALL MEET ALL TAS & ANSI STANDARDS.
3. ALL ROOF & 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 FEET OF THE SUBJECT LOT, MEASURED FROM A POINT FIVE FEET ABOVE THE GRADE. THIS SCREENING SHALL BE COORDINATED WITH THE BUILDING ARCHITECTURE AND SCALE TO MAINTAIN A UNIFIED APPEARANCE.
4. WHEN BUILDING SETBACKS AND EASEMENT LINES OVERLAP ONLY THE EASEMENT LINE IS SHOWN. ALL MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN CODE OF ORDINANCES.
5. GROUND COVERAGE OF 100% COVERAGE IS REQUIRED IN PARKING LOT ISLANDS, SWALES AND DRAINAGE AREAS, THE PARKING LOT SET BACK, RIGHT-OF-WAY, AND ADJACENT PROPERTY DISTURBED DURING CONSTRUCTION. GROUND COVER SHALL CONSIST OF BLOCK SOD, HYDRO-SEED, PAVEMENT (VARIOUS TYPES) & RIVER ROCK.
6. THE IMPROVEMENTS SHOWN SHALL CONSTITUTE APPROXIMATELY 62.6% IMPERVIOUS COVER ON THE SUBJECT PROPERTY. TYPE 1 DETENTION IS CURRENTLY PROVIDED FOR THIS DEVELOPMENT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE.
8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE CONTAINMENT FOR WASTE PRIOR TO, AND DURING, DEMOLITION/CONSTRUCTION. SOLID WASTE ROLL-OFF BOXES/METAL DUMPSTER SHALL BE SUPPLIED BY CITY OR CITY PERMITTED CONTRACTOR(S) ONLY.
9. ALL CURBING ILLUSTRATED ON THIS SITE PLAN SHALL BE 6" RAISED CONCRETE CURBS (SEE DETAIL ON SHEET C2.2). ALL PAVEMENT ON THIS PROJECT WILL BE CONCRETE AND 7" THICK IN DRIVELANES & PARKING BAYS (UNLESS OTHERWISE SPECIFIED ON SHEET C1.1).
10. IF APPLICABLE, CONTACT MR. JARED BIRKHEAD (979) 209-5931 FOR VERIFICATION OF LOCATION AND ANGLE OF DUMPSTER PAD PRIOR TO PLACEMENT OF CONCRETE. THE DUMPSTER PAD SHALL BE A MINIMUM OF 12'x 12' WITH A MINIMUM OF 10' OF APRON EXTENDING IN FRONT OF THE PAD. CONCRETE SHALL BE A MINIMUM OF 8" THICK AND REINFORCED WITH #5 BARS @ 12" O.C.E.W. REFER TO SHEET 2.2 FOR ADDITIONAL INFORMATION AND DETAILS.
11. ALL SIGNS ARE PERMITTED SEPARATELY. SITE LIGHTING, DIRECTIONAL SIGNS, GATE DETECTORS & OTHER SITE APPURTENANCES ARE SHOWN FOR REFERENCE AND ILLUSTRATION ONLY. THE CONTRACTOR SHALL COORDINATE THESE ITEM'S INSTALLATIONS WITH THE ARCHITECT.
12. ALL UTILITY EASEMENTS MUST BE KEPT CLEAR OF ALL BRUSH, TREES, LANDSCAPING OR PERMANENT STRUCTURES. WHERE ELECTRIC FACILITIES ARE INSTALLED, BTU HAS THE RIGHT TO INSTALL, OPERATE, RELOCATE, CONSTRUCT, RECONSTRUCT, ADD TO, MAINTAIN, INSPECT, PATROL, ENLARGE, REPAIR, REMOVE AND REPLACE SAID FACILITIES UPON, OVER, UNDER, AND ACROSS THE PROPERTY INCLUDED IN THE PUE, AND THE RIGHT OF INGRESS AND EGRESS ON PROPERTY ADJACENT TO THE PUE TO ACCESS ELECTRIC FACILITIES.

FIRE DEPARTMENT NOTES:
13. FIRE LANE WORDING AND SPACING SHALL CONFORM TO CITY OF BRYAN ORDINANCE, SECTION 42-6(3)A AND 42-6(3)A(2).
14. NO COMBUSTIBLES WILL BE ALLOWED ON SITE UNTIL ALL-WEATHER ROADS AND FIRE HYDRANTS HAVE BEEN ACCEPTED BY THE CITY.
15. THE BUILDINGS SHALL BE EQUIPPED WITH A "KNOX BOX" SECURITY KEY SYSTEM, LOCATED IN THE FIRE RISER CLOSET, AND A ELECTRICAL SHUTOFF SHALL BE BY MEANS OF A "KNOX SWITCH" OR A MANUAL DISCONNECT.
16. THE FIRE SUPPRESSION LINE SHALL HAVE A LOCKABLE LID ON THE ISOLATION VALVE. THE LOCKABLE LID SHALL BE OF TYPE AMP OR USA, LL562 LOCKING LID. FDC CAPS SHALL BE EQUIPPED WITH KNOX LOCKING DEVICES. FIRE RISER, LOCATED IN THE FIRE ROOM, WILL HAVE A DOUBLE CHECK VALVE ASSEMBLY.
17. VEHICULAR GATES SHALL BE EQUIPPED WITH A KNOX SWITCH AT THE GATE ITSELF. THIS SWITCH SHALL BE WIRED SO THAT ALL GATES WILL OPEN DURING A FIRE, POWER LOSS, OR OPERATION OF ANY ONE GATE. EACH PEDESTRIAN GATE(S) WILL BE EQUIPPED WITH A KNOX SWITCH. THE MINIMUM CLEAR SPACE, WHEN FULLY OPEN, SHALL BE TWENTY FEET (20') FOR ALL VEHICULAR SECURITY GATES. GATES WILL EITHER ROLL AND "COLLAPSE" INTO THE FENCE OR SWING INTO THE YARD. THE MAXIMUM VERTICAL CLEARANCE, BETWEEN THE BOTTOM OF THE GATE AND THE PAVEMENT/GRADE, THAT SHALL EXISTING WHEN THE GATE IS FULLY CLOSED SHALL BE LIMITED TO SIX (6) INCHES. GATE EQUIPMENT OR FENCE COLUMNS CAN NOT BE INSTALLED WITHIN THE P.U.E.

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

BRIAN A. METCALF 88583 LICENSED PROFESSIONAL ENGINEER

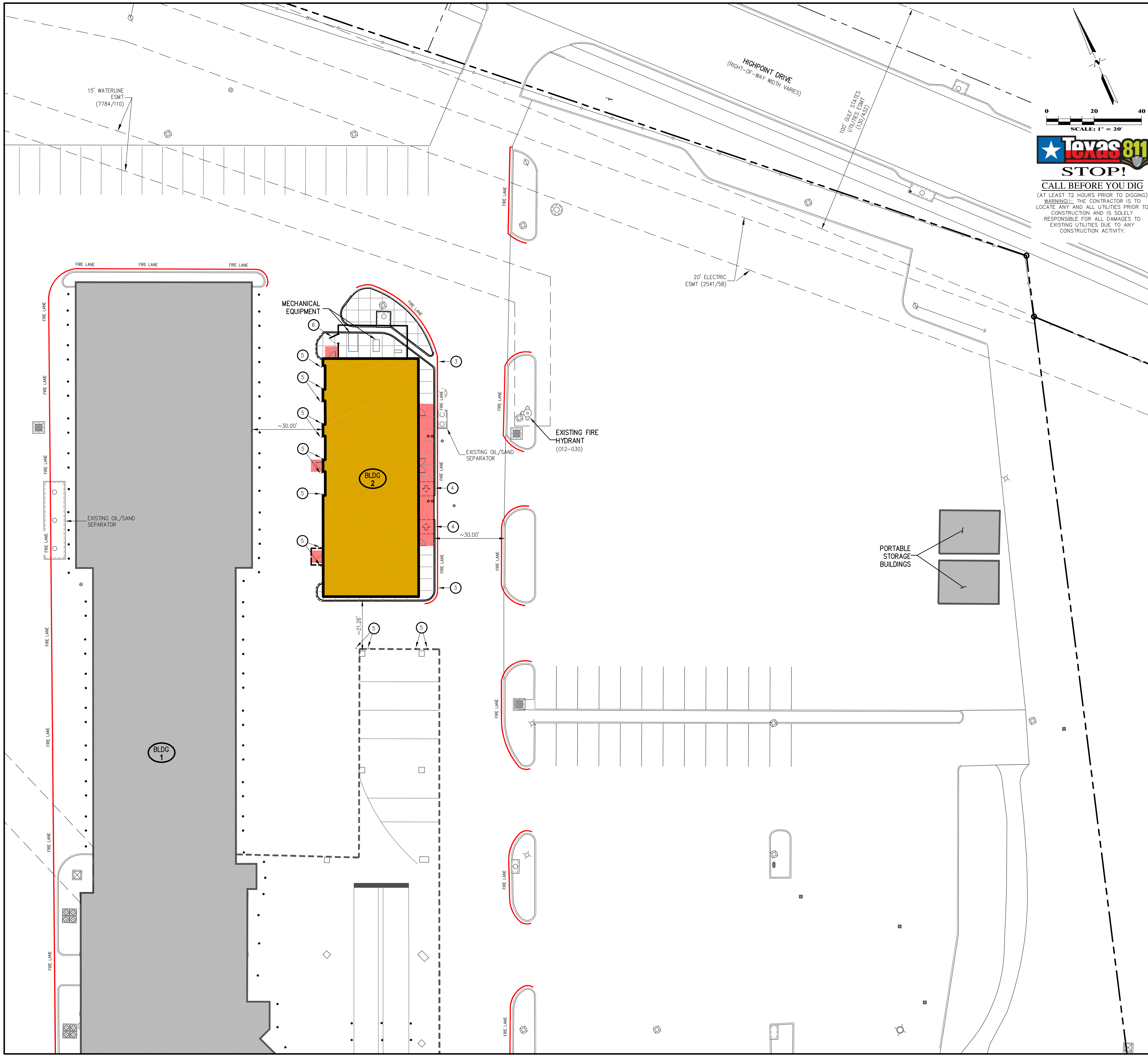
OVERALL CIVIL SITE PLAN

FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGHT CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775SP1A | SCALE: 1"=50'
SUBMITTED DATE: 3/9/22, 3/23/22
DRAWN BY: RAM | CHECKED BY: RLP
KERR JOB No. #21-1085

RME CONSULTING ENGINEERS
CLIENT NO. 355 – PROJECT NO. 0775

C1.0
SHEET 4 OF 14

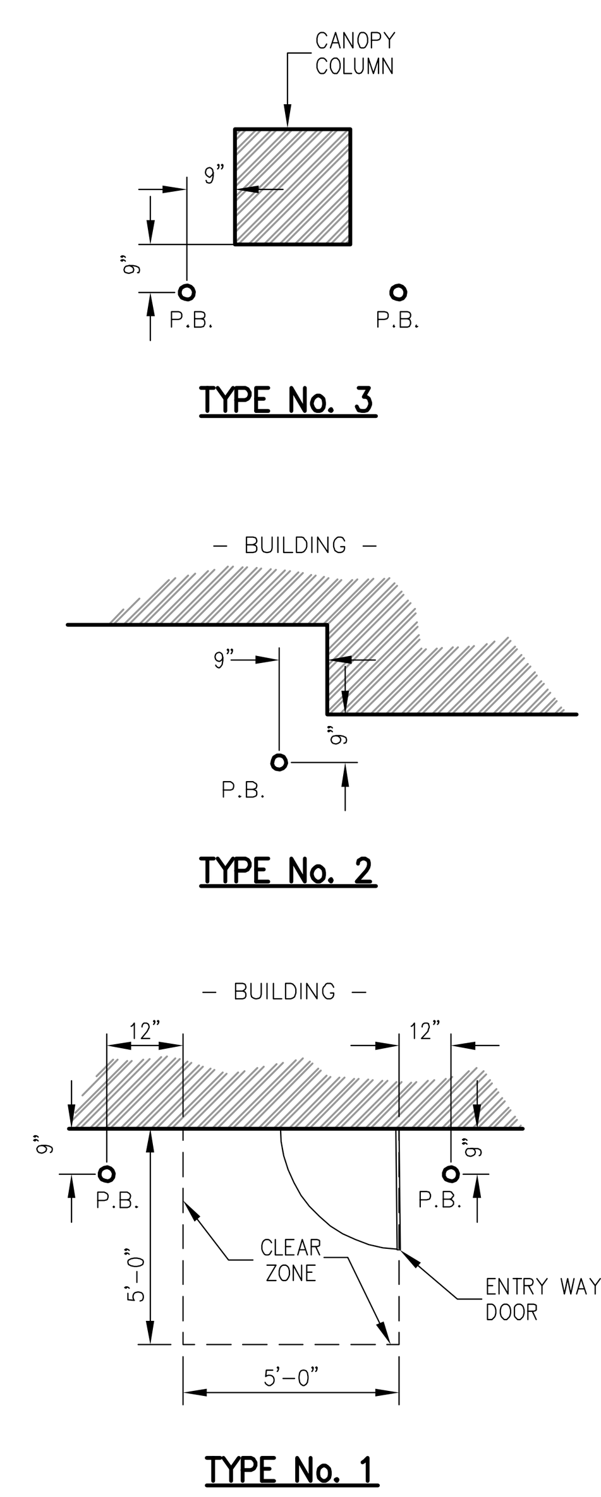

15' WATERLINE ESMT (7784/110)
HIGHPOINT DRIVE
(RIGHT-OF-WAY WIDTH VARIES)
100' GULF STATES UTILITIES ESMT (130/432)
20' ELECTRIC ESMT (2541/58)
FIRE LANE
MECHANICAL EQUIPMENT
EXISTING OIL/SAND SEPARATOR
EXISTING FIRE HYDRANT (012-030)
~30.00'
~21.26'
BLDG 1
BLDG 2
PORTABLE STORAGE BUILDINGS
N
0 20 40
SCALE: 1" = 20'
Texas811
STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

PLAN NOTES:

1. SEE SHEETS C0.1 thru C0.2 FOR SITE, PARKING & MISCELLANEOUS CONSTRUCTION NOTES.
2. SEE SHEET C1.3A FOR ADDITIONAL SITE & UTILITY PLAN DATA.
3. SEE SHEETS C2.0 thru C2.4 FOR SITE, PARKING & MISCELLANEOUS DETAILS.
4. ALL BACK-OF-CURB (BOC) ARE 4' RADIUS UNLESS OTHERWISE SPECIFIED.
5. 🟥 ILLUSTRATES ADA ACCESSIBLE PATH.

SITE # LEGEND

1. H/C PARKING ROW AND/OR AMBULATORY RAMP
2. TYPICAL 4" WHITE PARKING STRIPE
3. TYPICAL FIRE LANE STRIPING
4. AMBULATORY or DRIVEWAY RAMP (ALL TYPES)
5. FIXED PIPE BOLLARD
6. 8' HIGH CHAIN-LINK FENCE w/4' WIDE GATE w/LOCK



PIPE BOLLARD DIAGRAM

N.T.S.

TOYOTA
PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

STATE OF TEXAS
RABON A. METCALF
88583
LICENSED
PROFESSIONAL ENGINEER

[illegible]

CIVIL SITE PLAN – VIEW "A"

FOR THE

PHASE ONE – SITE IMPROVEMENTS

LOCATED AT

B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY

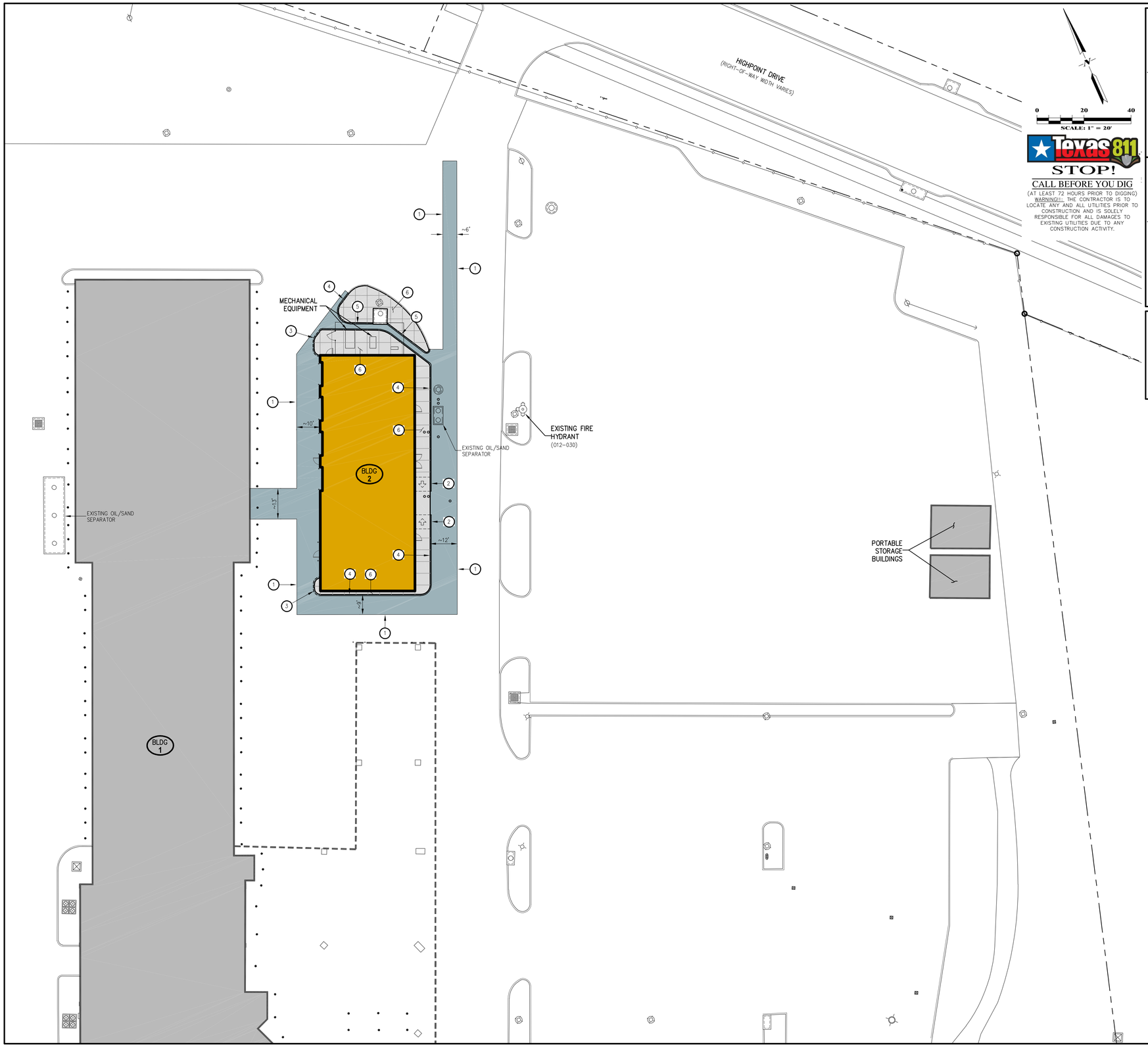
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775SP2A	SCALE: 1"=20'
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

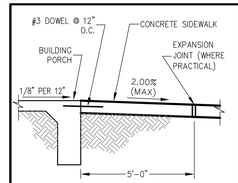
C1.0A

SHEET 5 OF 14

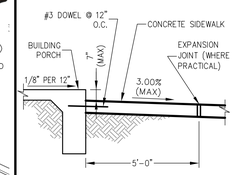


0 20 40
SCALE: 1" = 20'

Texas 811
STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.



TYPE 1
N.T.S.



TYPE 2
N.T.S.

PLAN NOTES:

1. SEE SHEETS C0.1 & C0.2 FOR PAVING & MISCELLANEOUS CONSTRUCTION NOTES.
2. SEE SHEETS C1.2A FOR ADDITIONAL PAVING DATA.
3. SEE SHEETS C2.0 THRU C2.4 FOR PAVING & MISCELLANEOUS DETAILS.
4. ALL ENTRIES ARE "TYPE 1" UNLESS OTHERWISE SPECIFIED.

PAVEMENT LEGEND

- CONTROL JOINT
- C — CONSTRUCTION JOINT
- E — EXPANSION JOINT
- 8" CONCRETE PAVING & 6" SCARIFIED & COMPACTED SUBGRADE
- 7" CONCRETE PAVING & 6" SCARIFIED & COMPACTED SUBGRADE
- 6" CONCRETE PAVING & 6" SCARIFIED & COMPACTED SUBGRADE
- FLATWORK (THICKNESS VARIES)
- CAUTION AREA OF CHEMICAL STABILIZATION
- PERMANENT ROCK RIP-RAP (SEE SHEET C1.4A)

PAVING # LEGEND

1. CONNECT TO EXISTING PAVEMENT w/THICKENED EDGE & #6 DOWEL @ 18" O.C.E.W.
2. ON-SITE AMBULATORY & S/W RAMP (SEE DETAIL SHEET C2.1)
3. TAPERED CURB HEIGHT (LENGTH VARIES)
4. TYPICAL 6" RAISED MONOLITHIC CURB (ALL PERIMETER & ISLANDS UNLESS SPECIFIED)
5. 3' WIDE CONCRETE PILOT CHANNEL
6. CONCRETE SIDEWALK or FLATWORK (ADJACENT TO STRUCTURE - WHERE APPLICABLE)

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

STATE OF TEXAS
ROBIN A. METCALF
88583
LICENSED
PROFESSIONAL ENGINEER
3/23/22

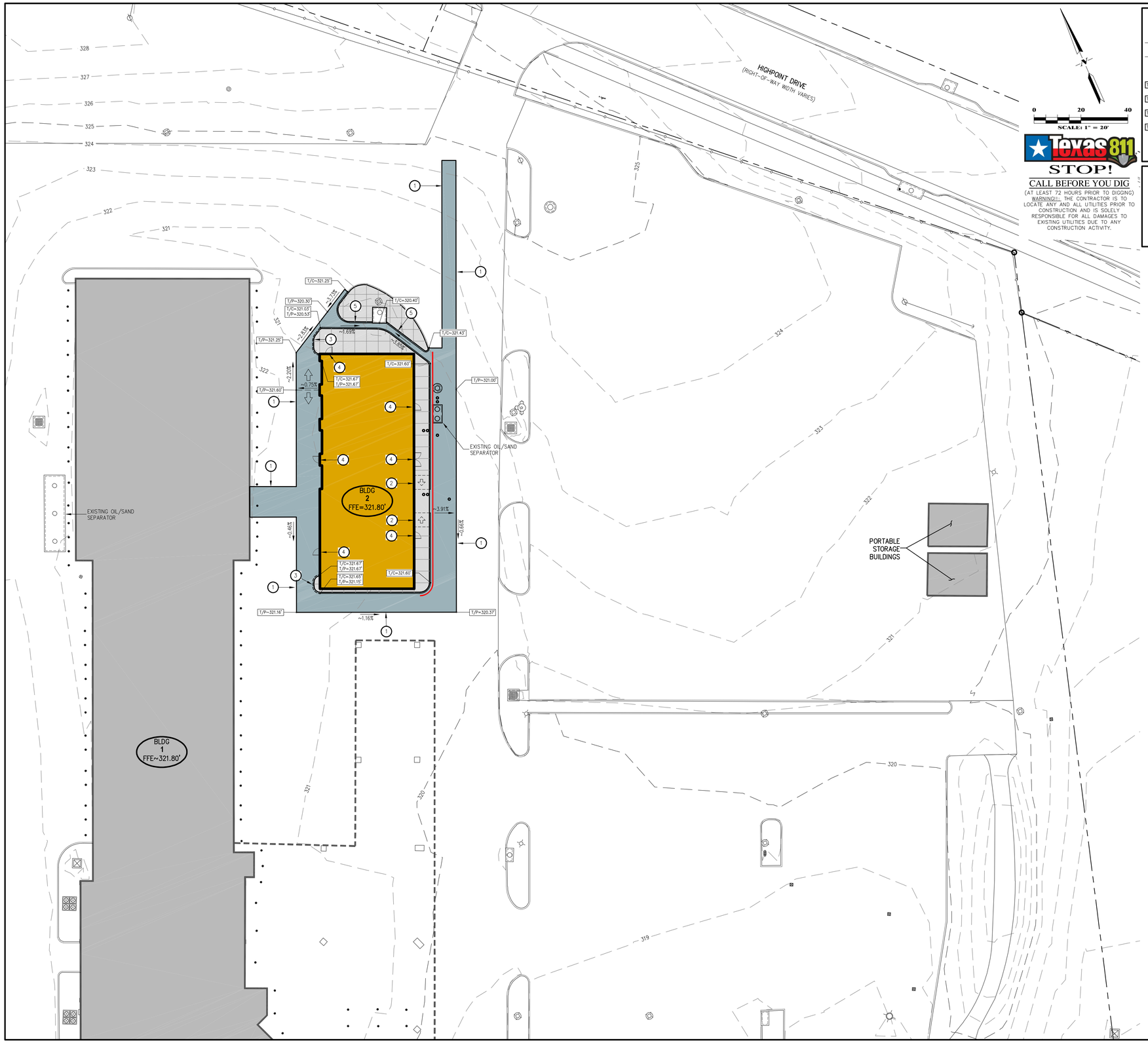
PAVING PLAN - VIEW "A"

FOR THE
PHASE ONE - SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 - W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 - TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775PV1A	SCALE: 1"=20'
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. 355 - PROJECT NO. 0775

C1.1A



Texas 811
STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

GRADING LEGEND

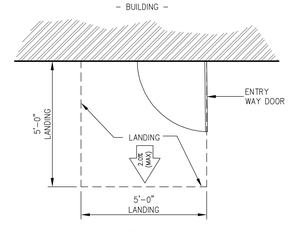
- DRAINAGE DIRECTIONAL ARROW
- GRADE BREAK
- VALLEY DRAIN
- PAVING AREA w/<2.0% SLOPE
- T/P=100.00 TOP OF PAVEMENT
- T/C=100.00 TOP OF CURB
- T/W=100.00 TOP OF WALL
- T/G=100.00 TOP OF GROUND OR GRATE
- SIDEWALK LEAVE-OUT (WIDTH VARIES)

PLAN NOTES:

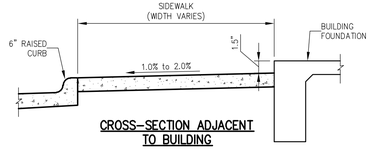
1. REFER TO SHEET C0.1 & C0.2 FOR GRADING, DRAINAGE, AND MISCELLANEOUS CONSTRUCTION NOTES.
2. REFER TO SHEETS C2.0 thru C2.5 FOR GRADING AND DRAINAGE CONSTRUCTION DESIGN & DETAILS.
3. FINAL GRADING SHALL PROVIDE FOR A MINIMUM OF SIX INCHES (6") OF EXPOSED GRADE BEAM (EXCLUDING FOUNDATION ADJACENT TO SIDEWALKS).
4. ALL SIDEWALKS APPROACHING THE BUILDING, EXCLUDING THOSE w/STEPS, SHALL BE ADA ACCESSIBLE WITH CROSS-SLOPES LESS THAN 2.00% AND LONGITUDINAL SLOPES LESS THAN 5.00%. ALSO REFER TO SHEET C1.0 FOR ALL REQUIRED ACCESSIBLE PATHS.

GRADING & DRAINAGE # LEGEND

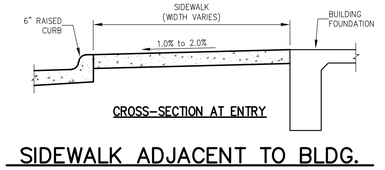
1. MATCH EXISTING PAVEMENT ELEVATION & GRADE FLUSH
2. AMBULATORY & S/W RAMP (ALL TYPES)
3. TAPER CURB HEIGHT (LENGTH OF TAPER VARIES)
4. WARP CONCRETE FLUSH w/ENTRY POINT (FULL WIDTH OF DOOR)
5. 3' WIDE CONCRETE PILOT CHANNEL (TYPE 1) (SLOPE VARIES)



I.D. #4
ENTRY POINT LANDING
N.T.S.



CROSS-SECTION ADJACENT TO BUILDING



CROSS-SECTION AT ENTRY

SIDEWALK ADJACENT TO BLDG.
N.T.S.

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

STATE OF TEXAS
ROBIN A. METCALF
88583
LICENSED PROFESSIONAL ENGINEER
3/23/22

GRADING PLAN – VIEW "A"

FOR THE

PHASE ONE – SITE IMPROVEMENTS

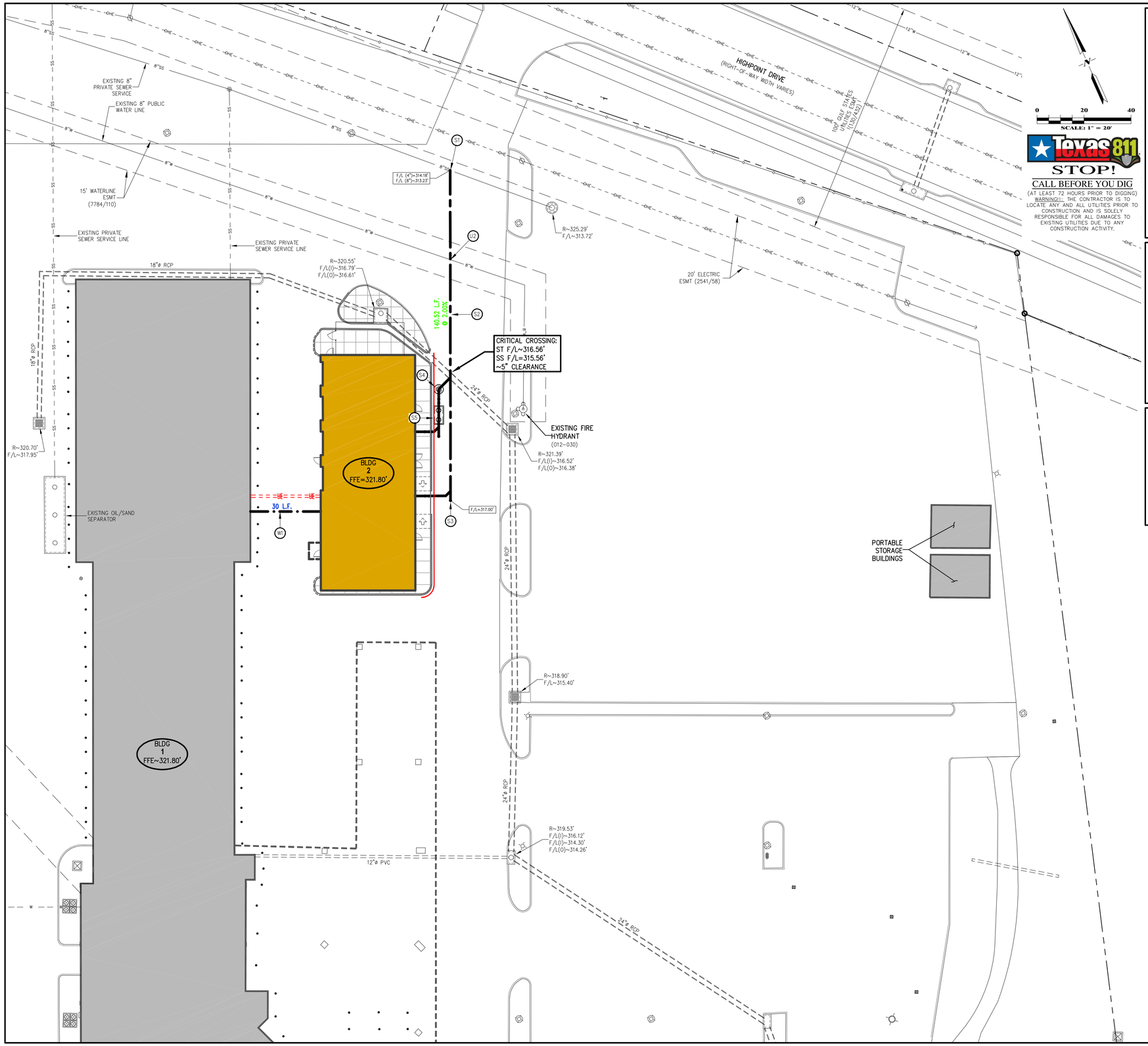
LOCATED AT

B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY

BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775GP1A | SCALE: 1"=20'
SUBMITTED DATE: 3/9/22, 3/23/22
DRAWN BY: RAM | CHECKED BY: RLP
KERR JOB No. #21-1085
RME CONSULTING ENGINEERS CLIENT NO. | PROJECT NO. 355 – 0775

C1.2A
SHEET 7 OF 14



Texas 811 STOP!

CALL BEFORE YOU DIG

(AT LEAST 72 HOURS PRIOR TO DIGGING)

WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

PLAN NOTES:

1. REFER TO SHEET C0.1 & C0.2 FOR UTILITY AND MISCELLANEOUS CONSTRUCTION NOTES.
2. REFER TO SHEETS C2.0 thru C2.4 FOR UTILITY & MISCELLANEOUS CONSTRUCTION DESIGN & DETAILS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL EXISTING IMPROVEMENTS (MANHOLE LIDS, VAULTS, TRAFFIC BOXES, ETC...) ARE ADJUSTED SO THAT THEY ARE FLUSH WITH THE NEW SIDEWALKS AND PAVEMENT.
4. PVC SLEEVING SHALL BE COORDINATED ON-SITE WITH THE GENERAL CONTRACTOR.
5. UNLESS OTHERWISE SPECIFIED, ALL SANITARY SEWER PIPE WILL BE 4" or 6" PVC (SCH 40 – ASTM D1765). SANITARY SEWER LINES 8" AND LARGER SHALL BE PVC (SDR 26, D3034). FITTINGS SHALL BE COMPLIANT TO THE PIPE MATERIAL.
6. CLEANOUT SPACING, ALONG PRIVATE SEWER SERVICES 6" LINE SIZE OR SMALLER, SHALL NOT EXCEED 100'.
7. UNLESS SPECIFICALLY IDENTIFIED ALL SEWER SERVICES SHALL BE 4" LINE SIZE AT A MINIMUM OF 2.00% SLOPE. ALL TWO-WAY CLEANOUTS, AT BUILDING ENTRY POINTS, SHALL BE A MINIMUM OF 42" BELOW THE FINISH FLOOR ELEVATION.
8. THE PROPOSED TELECOMMUNICATION AND UNDERGROUND ELECTRIC ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHOULD REFERENCE DRAWINGS BY THE VARIOUS PRIVATE UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
9. ALL FLOOR DRAINS, WITHIN THE PROPOSED BUILDING, SHALL BE PLUMBED TO THE OIL/SAND SEPARATOR.
10. ANY WASH SYSTEM SHALL BE PROTECTED BY AN RPZ. THE REQUIRED RPZ MUST BE TESTED UNPON INSTALLATION BY A CITY PERMITTED TESTER. CONTACT AMANDA ROOP (979-209-5917) FOR APPROVED LIST OF INSTALLERS.

ELECTRICAL NOTES:

1. THE CONTRACTOR SHALL INSTALL THE PRIMARY AND SECONDARY ELECTRICAL CONDUIT PER ENERGY COMPANY'S SPECIFICATIONS AND DESIGN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXTEND ALL NEW CONDUIT FROM EXISTING STUBS OR DESIGNATED TRANSFORMERS (OR OTHER EXISTING DEVICES).
3. THE CONTRACTOR SHALL INSTALL ALL ELECTRIC DEVICE PADS AND/OR FOOTINGS (I.E. TRANSFORMERS, PULL BOXES, ETC...) IN ACCORDANCE WITH THE ENERGY COMPANY'S SPECIFICATIONS AND DESIGN DATA.
4. THE CONTRACTOR SHALL INSTALL PULL BOXES IN ACCORDANCE WITH THE ENERGY COMPANY'S SPECIFICATIONS AND DESIGN.
5. SHARED TRENCHING WITH BOTH THE PRIMARY & SECONDARY ELECTRIC CONDUIT IS NOT ALLOWED. THE CONTRACTOR SHALL PROVIDE A MINIMUM 24" HORIZONTAL SEPARATION w/ALL OTHER UTILITIES.
6. ALL BENDS OF THE PRIMARY ELECTRIC CONDUIT SHALL BE 36" SWEEPING ELBOWS.
7. SITE ELECTRICAL & LIGHT POLES ARE FOR ILLUSTRATION PURPOSES ONLY. THESE IMPROVEMENTS WILL BE INSTALLED PER THE MEP DRAWINGS.

UTILITY # LEGEND

- (W1) 2" PVC (SCH 40) PRIVATE DOMESTIC SERVICE LINE (36" MIN. COVER)
- (S1) TIE INTO EXISTING SEWER SERVICE w/SERVICE WYE & CLEANOUT
- (S2) 4" PVC (SDR-26, D3034) PRIVATE SEWER SERVICE @ 2.00% SLOPE (MIN)
- (S3) IN-LINE OR TWO-WAY CLEANOUT
- (S4) SAMPLING WELL (REF. MEP DRAWINGS)
- (S5) OIL/SAND SEPARATOR (REF. MEP DRAWINGS)
- (U1) INSTALL "DRY" UTILITY WITH EXTRA DEPTH TO CROSS UNDER UTILITY WITH A MINIMUM OF 24" CLEARANCE
- (U2) PROVIDE A MINIMUM OF 24" SEPARATION BETWEEN WATER & SANITARY SEWER SERVICE – CENTER FULL JOINTS OF PIPE AT CROSSING

PMG AUTO SALES OF BRAZOS VALLEY, LLC

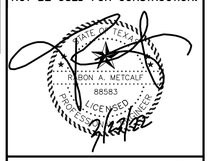
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.



UTILITY PLAN – VIEW "A"

PHASE ONE – SITE IMPROVEMENTS

FOR THE

LOCATED AT

B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY

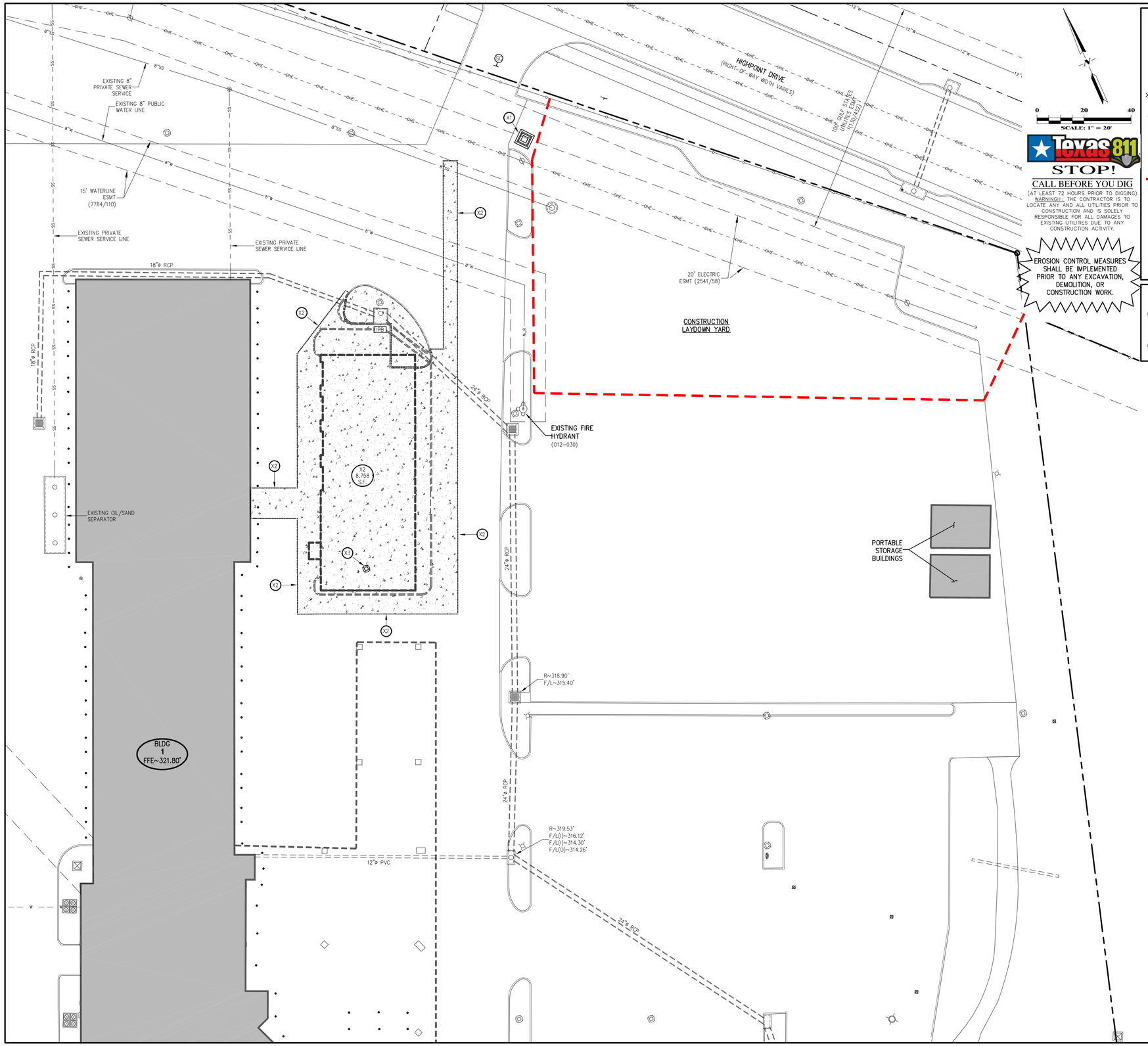
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775UP1A	SCALE: 1"=20'
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. 355 – PROJECT NO. 0775

C1.3A

SHEET 8 OF 14



Texas 811
STOP!
CALL BEFORE YOU DIG
(AT LEAST 72 HOURS PRIOR TO DIGGING)
WARNING!!: THE CONTRACTOR IS TO LOCATE ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION AND IS SOLELY RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES DUE TO ANY CONSTRUCTION ACTIVITY.

EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY EXCAVATION, DEMOLITION, OR CONSTRUCTION WORK.

DEMO & EROSION CONTROL LEGEND

- CONSTRUCTION ENTRANCE w/CULVERT (AS REQUIRED)
- SB — CURLEX – FILTER LOG (PHASE 2)
- FF — FILTER FABRIC FENCE (LIMITS APPROX. ADJUST AS REQUIRED)
- RFB — REINFORCED FILTER FABRIC FENCE (LIMITS APPROX. ADJUST AS REQUIRED)
- RFD# — ROCK FILTER DAM (TY #) SEE TxDOT STANDARD EC(2)-93)
- IPB — INLET PROTECTION BARRIER (PHASE 2)
- TP — TREE PROTECTION (PLACE OUTSIDE OF DRIP LINE – AS FAR AS PRACTICAL)
- CHAIN-LINK CYCLONE CONSTRUCTION FENCE (LIMITS APPROX. ADJUST AS REQUIRED)
- SAW-CUT & REMOVE EXISTING CONCRETE PAVING (AS REQUIRED)
- SAW-CUT & REMOVE EXISTING HMAC PAVING (AS REQUIRED)
- REMOVE EXISTING GRAVEL PAVING (AS REQUIRED)
- SIDESLOPE EROSION CONTROL FABRIC

PLAN NOTES:

1. REFER TO SHEET C0.1 & C0.2 FOR DEMOLITION AND EROSION CONTROL NOTES.
2. REFER TO SHEET C1.2A FOR ADDITIONAL GRADING, DRAINAGE DESIGN.
3. REFER TO SHEETS C2.0 thru C2.4 FOR ADDITIONAL GRADING, DRAINAGE & EROSION CONTROL DETAILS.
4. ALL DISTURBED AREAS, UNLESS OTHERWISE SPECIFIED, SHALL HYDRO-MULCH SEEDED HYDRO-MULCHED AREAS SHALL BE SEEDED WITH EITHER BERMUDA (2 LBS/1,000 SQ.FT.) FROM MARCH 15 TO SEPTEMBER 15 OR BERMUDA/RYE GRASS MIX (2 LBS/5 LBS. PER 1,000 SQ.FT.) FROM SEPTEMBER 16 TO MARCH 14. REFERENCE LANDSCAPE DRAWINGS FOR TEMPORARY AND PERMANENT IRRIGATION REQUIREMENTS w/APPROPRIATE WATERING EFFORTS.
5. AS FAR AS PRACTICAL ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION WORK.
6. ALL UTILITIES, YARD PIPING & ABANDONED UTILITIES & STRUCTURES ARE SHOWN IN AN APPROXIMATE WAY ONLY! THE CONTRACTOR SHALL VERIFY THE LOCATIONS & LIMITS ILLUSTRATED FOR REMOVAL. THE SIZE & TYPE OF THESE UTILITIES VARY AND ARE UNKNOWN.

DEMOLITION & E.C. # LEGEND

- X1 — CONCRETE WASH-OUT AREA (PLACE AS DIRECTED BY CONTRACTOR)
- X2 — SAW-CUT & REMOVE EXISTING CONCRETE CURB & GUTTER, PAVEMENT OR SIDEWALK
- X5 — CAP & ABANDON EXISTING UTILITY (AS REQUIRED) – COORDINATE WITH APPROPRIATE UTILITY COMPANY (SEE DEMOLITION NOTE #14)

GENERAL CONSTRUCTION SEQUENCING NOTES:

1. INSTALL ALL PHASE ONE EROSION CONTROL MEASURES (CONSTRUCTION ENTRANCE, SILT FENCING, ETC...).
2. INSTALL TEMPORARY CONSTRUCTION FENCING AND SECURE LIMITS OF CONSTRUCTION SITE. COORDINATE (REMOVE, REPLACE, RELOCATE) PHASING OF FENCING WITH OWNER.
3. CLEAR & GRUB FULL LIMITS OF PROJECT.
4. PERFORM ROUGH SITE GRADING AND EXCAVATE DETENTION FACILITY AND INSTALL OUTFALL STRUCTURE. INSTALL EROSION CONTROL MEASURES AT OUTFALL OF DETENTION FACILITY.
5. CONSTRUCT ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, ELECTRIC, ETC...).
6. INSTALL ALL PHASE TWO EROSION CONTROL MEASURES (CONCRETE WASH-OUT, INLET PROTECTION, ROCK RIP-RAP, ETC...).
7. "CAPTURE" PROJECT SITE (ALL PROPOSED PARKING/DRIVES) AND UTILIZE "NORTH" PARKING AREA FOR STORAGE & LAY-DOWN YARD.
8. COMMENCE VERTICAL CONSTRUCTION ONCE FIRE FLOW IS CONFIRMED. PROVIDE "CLEAR PATH" FOR FIRE PROTECTION (SEE DEMOLITION NOTE #14).
9. PROVIDE FINAL GRADING AND INSTALL PERMANENT EROSION CONTROL MEASURES, GROUND COVER & LANDSCAPING.

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

RAMIE A. METCALF 88583 LICENSED PROFESSIONAL ENGINEER 2/23/22

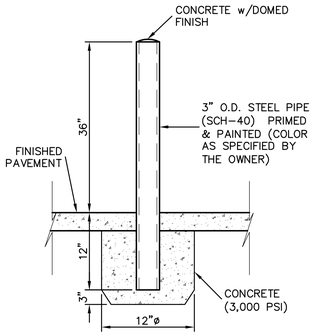
DEMOLITION & EROSION CONTROL PLAN

FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775EC1A	SCALE: 1"=20'
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

C1.4A
SHEET 9 OF 14



FIXED PIPE BOLLARD
N.T.S.

FENCE & GATE NOTES:

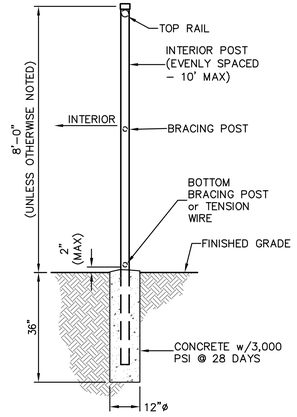
1. FENCE FABRIC SHALL BE 2" WOVEN MESH w/NO. 9 GAUGE WIRE.

2. ALL POST SHALL BE GALVANIZED STEEL (SCHEDULE 40) WITH THE FOLLOWING O.D.
   - LINE POST = 2.375"
   - CORNER POST = 2.875"
   - TERMINAL POST = 4.00"
   - TOP & BOTTOM RAIL = 1.66"
   - BRACE RAIL = 1.66"

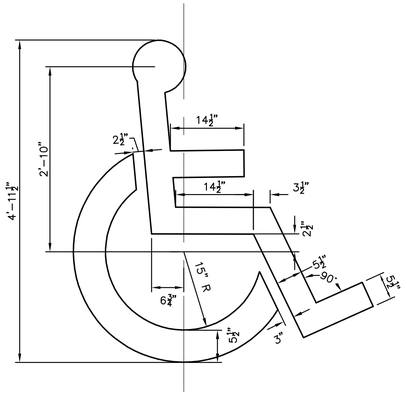
3. PROVIDE LOCKING MECHANISM FOR CONTRACTOR LOCK, OWNER LOCK & KNOX BOX FOR FIRE DEPARTMENT (ALL GATES).

4. FENCING TIES SHALL BE AT THE FOLLOWING SPACING:
   - VERTICAL POST = 14" SPACING
   - TOP BAR = 18" SPACING
   - BRACING BARS = 18" SPACING
   - TENSION WIRE = 24" SPACING

5. PROVIDE "H" BRACING ALONG FENCE RUNS THAT EXCEED 250 FEET AT THE APPROXIMATE MIDDLE POINT.



CHAIN-LINK FENCE
N.T.S.



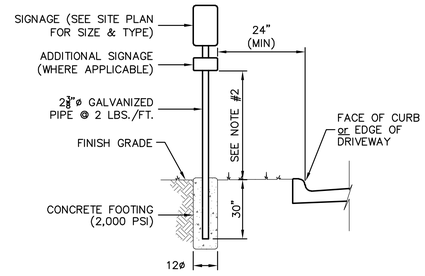
HANDICAP PARKING SYMBOL
N.T.S.

H/C PARKING SIGN NOTES:

1. ALL SIGN HARDWARE SHALL BE GALVANIZED.

2. MOUNTING HEIGHT SHALL BE A MINIMUM OF 60" ABOVE THE GROUND, FLOOR, OR PAVING SURFACE AS MEASURED TO THE BOTTOM OF THE LOWEST SIGN.

3. ALL SIGN LOCATIONS SHALL BE MARKED BY THE CONTRACTOR FOR OWNER & OWNER'S REPRESENTATIVE APPROVAL PRIOR TO INSTALLATION.



TYPICAL SIGN MOUNTING
N.T.S.

RESERVED SIGN NOTES:

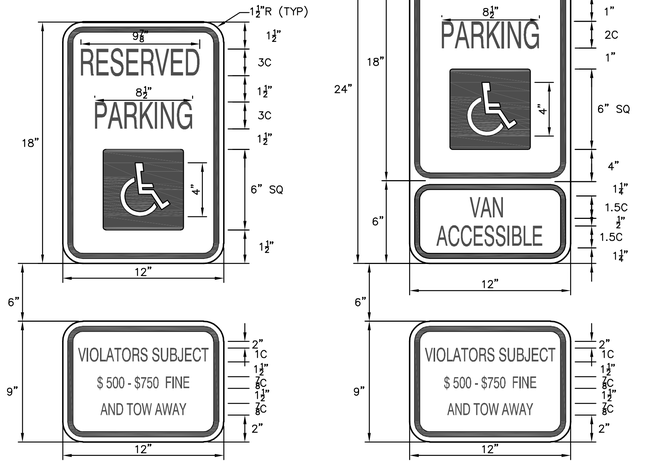
1. SIGN SHALL BE TYPE R7-8 AS IDENTIFIED IN THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. SIGN COLORS SHALL BE AS FOLLOWS:
   - TEXT – GREEN
   - LEGEND & BORDER – GREEN
   - BACKGROUND – WHITE
   - SYMBOL – WHITE ON BLUE BACKGROUND

PENALTY SIGN NOTES:

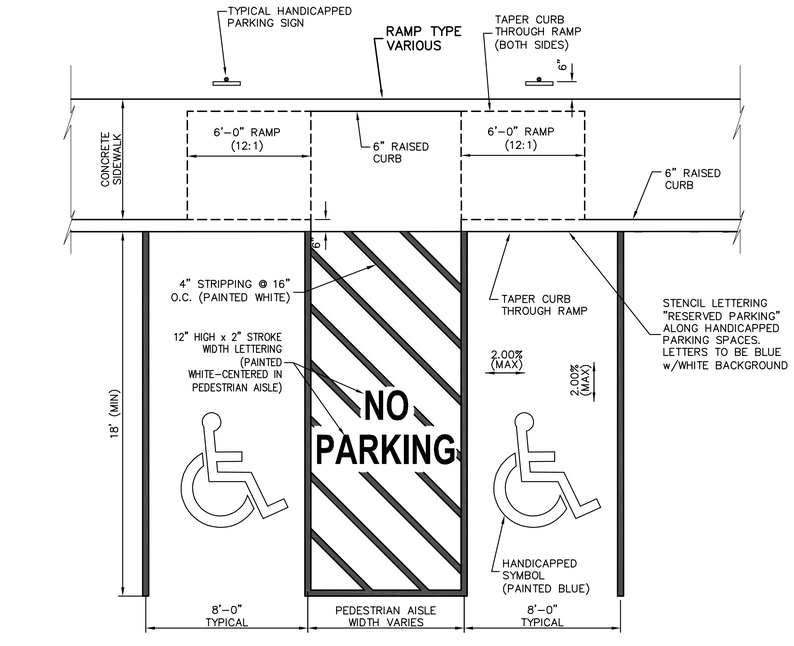
3. SIGN SHALL BE TYPE R7-8A AS IDENTIFIED IN THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

4. SIGN COLORS SHALL BE AS FOLLOWS:
   - TEXT – GREEN
   - LEGEND & BORDER – GREEN
   - BACKGROUND – WHITE

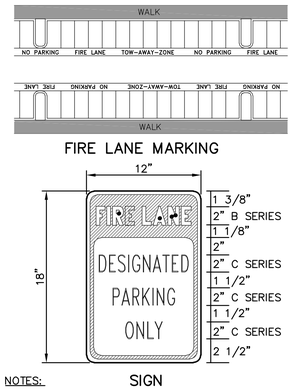


REGULAR VAN ACCESSIBLE

TYPICAL RESERVED PARKING SIGN
N.T.S.



HANDICAPPED PARKING ROW & RAMP
N.T.S.



NOTES:

1. THE FIRE LANE SIGN MUST BE MOUNTED IN A CONSPICUOUS LOCATION AT EACH ENTRANCE OF THE PROPERTY.

2. FIRE LANE STRIPING WILL CONSIST OF AN 8" RED STRIPE PAINTED ON DRIVE, AND CURBS ADJACENT TO THE FIRE LANE, WITH 4" WHITE LETTERS STATING "NO PARKING...FIRE LANE...TOW-AWAY ZONE".

3. SPACING BETWEEN PHRASES SHALL NOT EXCEED FIFTEEN FEET (15').

FIRE LANE DETAILS
N.T.S.

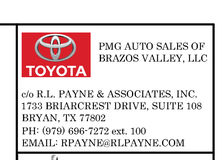
PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.



SITE & PARKING DETAILS

FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

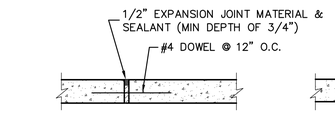
FILENAME: 0775D1A	SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

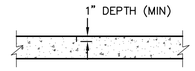
C2.0
SHEET 10 OF 14

SIDEWALK NOTES:

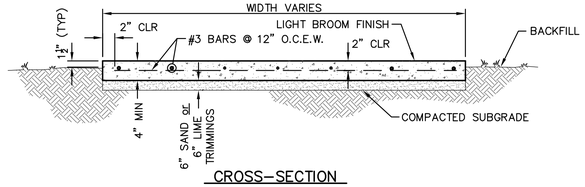
1. CROSS-SLOPE OF SIDEWALK SHALL NOT EXCEED 2.00%.
2. EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 30' SPACING AND AT ALL OTHER LOCATIONS WHERE SIDEWALK ADJOINS TO OTHER CONCRETE STRUCTURES.
3. CONTRACTION JOINTS SHALL BE PLACED AT A 5' MAXIMUM SPACING. SPACING SHALL BE UNIFORM.
4. AS FAR AS PRACTICAL SIDEWALK JOINTS SHALL ALIGN WITH ADJACENT JOINTS IN CURBING.
5. CONCRETE FOR PRIVATE SIDEWALKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS.



EXPANSION JOINT



CONTRACTION JOINT



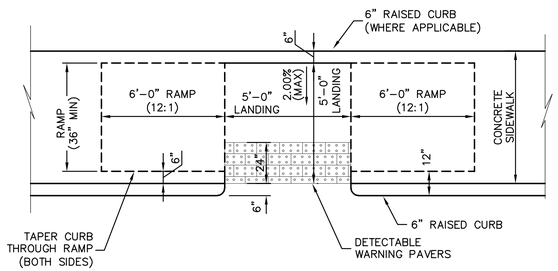
CROSS-SECTION

TYPICAL CONCRETE SIDEWALK

N.T.S.

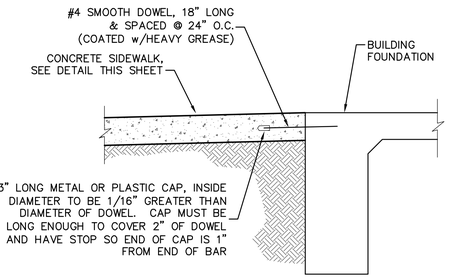
H/C RAMP NOTES (ALL TYPES):

1. MAXIMUM CROSS-SLOPE OF 2.00%.
2. DETECTABLE WARNING PAVERS SHALL BE PLACED AT THE LOWER END OF THE RAMP 24" DEEP x RAMP WIDTH.
3. APPLY LIGHT BROOM FINISH TO ALL NEW CONCRETE.
4. RAMPS SHALL BE ACCENTED WITH COLOR AS SPECIFIED BY THE OWNER.

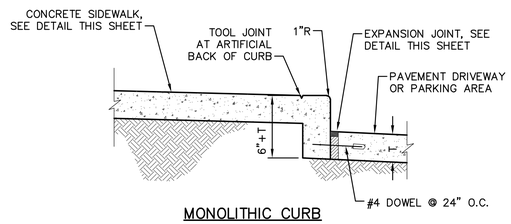


AMBULATORY RAMP

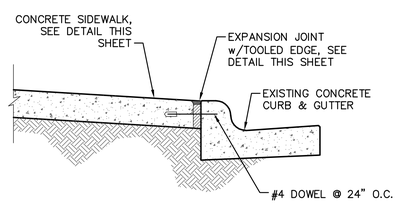
N.T.S.



BUILDING



MONOLITHIC CURB



EXISTING CURB

CONCRETE SIDEWALK ADJACENT TO STRUCTURE

N.T.S.

PMG AUTO SALES OF BRAZOS VALLEY, LLC

c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

SIDEWALK DETAILS

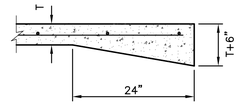
PHASE ONE - SITE IMPROVEMENTS
FOR THE
B/CS TOYOTA DEALERSHIP
LOCATED AT
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 - W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 - TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775D1A	SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

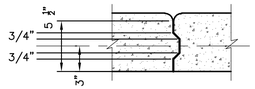
RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 - 0775

C2.1

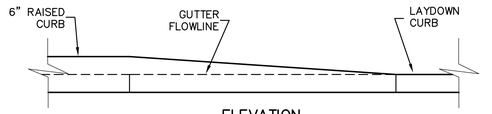
SHEET 11 OF 14



THICKENED EDGE
N.T.S.



METAL KEYWAY PLATE
N.T.S.

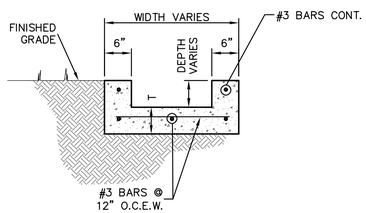


CURB TAPER
N.T.S.

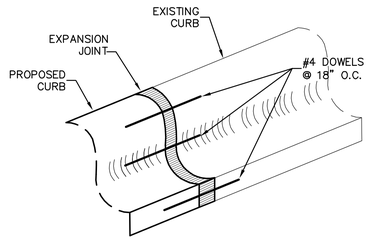
PILOT CHANNEL NOTES:

1. CONCRETE SHALL BE 3,000 PSI @ 28 DAY STRENGTH.

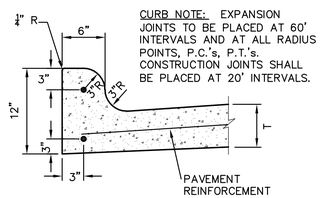
2. PILOT CHANNELS SHALL HAVE CONSTRUCTION JOINTS EVERY 15' WITH EVERY THIRD JOINT BEING AN EXPANSION JOINT.



CONCRETE PILOT CHANNEL
N.T.S.



TIE TO CURB DETAIL
N.T.S.

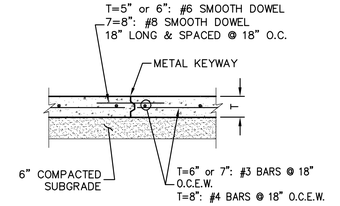


CURB NOTE: EXPANSION JOINTS TO BE PLACED AT 60' INTERVALS AND AT ALL RADIUS POINTS, P.C.'s, P.T.'s. CONSTRUCTION JOINTS SHALL BE PLACED AT 20' INTERVALS.

• = #4 BARS

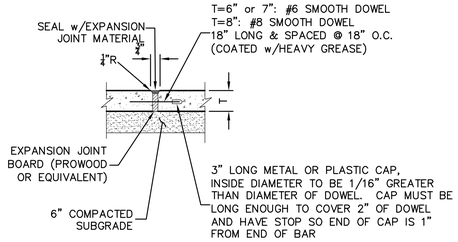
MONOLITHIC CURB

CONCRETE CURB & GUTTER
N.T.S.



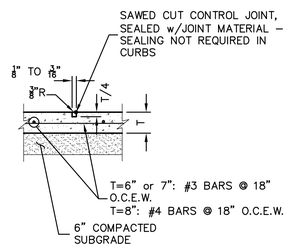
CONSTRUCTION JOINTS SHALL BE PLACED AT DESIGNATED LOCATIONS AND MAY REPLACE CONTROL JOINTS AS REQUIRED. CONSTRUCTION JOINTS SHALL NOT BE PLACED WITHIN THE VALLEY OF A LOW-POINT OR DRAINAGE SWALE.

CONSTRUCTION JOINT
N.T.S.



EXPANSION JOINT SHALL BE PLACED AT DESIGNATED LOCATIONS WITH A MAXIMUM SPACING OF 60'. EXPANSION JOINTS SHALL ALSO BE PLACED AS ISOLATION JOINTS BETWEEN PAVEMENT AND INLETS (CURB OR GRATES) AND BETWEEN PAVEMENT AND BUILDINGS. EXPANSION JOINTS SHALL NOT BE PLACED WITHIN THE VALLEY OF A LOW-POINT OR DRAINAGE SWALE.

EXPANSION JOINT
N.T.S.



CONTROL JOINTS SHALL BE PLACED AT MAXIMUM 15' CENTER TO CENTER. CONTROL JOINTS SHALL BE SOFT SAWED AFTER PLACEMENT OF CONCRETE AS SOON AS THE FRESH CONCRETE WILL SUPPORT THE WEIGHT OF THE SAW AND OPERATOR AND WILL NOT RAVEL.

CONTROL JOINT
N.T.S.

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

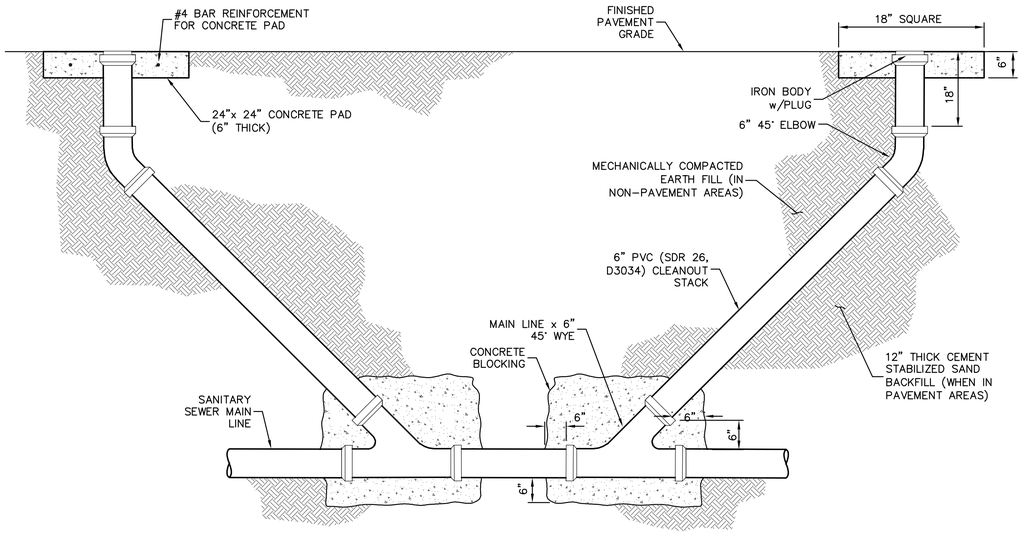
CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

PAVING DETAILS

PHASE ONE – SITE IMPROVEMENTS
FOR THE
B/CS TOYOTA DEALERSHIP
LOCATED AT
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775D1A | SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22
DRAWN BY: RAM | CHECKED BY: RLP
KERR JOB No. #21-1085
RME CONSULTING ENGINEERS
CLIENT NO. 355 – PROJECT NO. 0775

C2.2
SHEET 12 OF 14



TWO-WAY CLEANOUT

N.T.S.

TRENCH SHORING – MINIMUM REQUIREMENTS

DEPTH OF TRENCH (ft)	KIND OR CONDITION OF EARTH	SIZE & SPACING OF MEMBERS										
		UPRIGHTS		STRINGERS		CROSS BRACES,[1] WIDTH OF TRENCH					MAXIMUM SPACING	
		MINIMUM DIMENSION (in)	MAXIMUM SPACING (ft)	MINIMUM DIMENSION (in)	MAXIMUM SPACING (ft)	UP TO 3 FEET (in)	3 TO 6 FEET (in)	6 TO 9 FEET (in)	9 TO 12 FEET (in)	12 TO 15 FEET (in)	VERTICAL (ft)	HORIZONTAL (ft)
5 TO 10	HARD, COMPACT	3 x 4 OR 2 x 6	6			2 x 6	4 x 4	4 x 6	6 x 6	6 x 8	4	6
	LIKELY TO CRACK	3 x 4 OR 2 x 6	3	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 8	4	6
	SOFT, SANDY, OR FILLED	3 x 4 OR 2 x 6	CLOSE SHEETING	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6
	HYDROSTATIC PRESSURE	3 x 4 OR 2 x 6	CLOSE SHEETING	6 x 8	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6
10 TO 15	HARD	3 x 4 OR 2 x 6	4	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6
	LIKELY TO CRACK	3 x 4 OR 2 x 6	2	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8		6
	SOFT, SANDY, OR FILLED	3 x 4 OR 2 x 6	CLOSE SHEETING	4 x 6	4	4 x 6	6 x 6	6 x 8	8 x 8	8 x 10	4	6
	HYDROSTATIC PRESSURE	3 x 6	CLOSE SHEETING	8 x 10	4	4 x 6	6 x 6	6 x 8	8 x 8	8 x 10	4	6
15 TO 20	ALL KINDS OR CONDITIONS	3 x 6	CLOSE SHEETING	4 x 12	4	4 x 12	6 x 8	8 x 8	8 x 10	10 x 10	4	6
OVER 20	ALL KINDS OR CONDITIONS	3 x 6	CLOSE SHEETING	6 x 8	4	4 x 12	8 x 8	8 x 10	10 x 10	10 x 12	4	6

1 TRENCH JACKS MAY BE USED IN LIEU OF, OR IN COMBINATION WITH, CROSS BRACES. SHORING IS NOT REQUIRED IN SOLID ROCK, HARD SHALE, OR HARD SLAG. WHERE POSSIBLE, STEEL SHEET PILING AND BRACING OF EQUAL STRENGTH MAY BE SUBSTITUTED FOR WOOD.

BEDDING TABLE

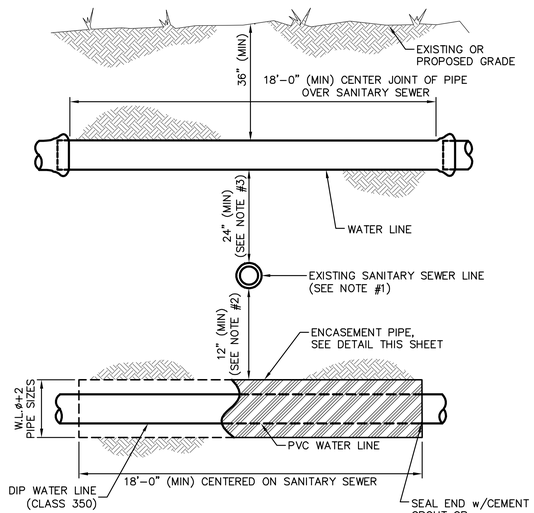
	IDENTIFIER TYPE	BEDDING TYPE	INITIAL BACKFILL	INTERMEDIATE BACKFILL	FINAL BACKFILL
ALL UTILITIES (EXCEPT ADS STORM SEWER)	NON-STRUCTURAL AREAS	CLASS III – COMPACT IN 6" (MAX) LIFTS TO 90% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT – LEVEL FINAL GRADE BY HAND	CLASS II – COMPACT IN 6" (MAX) LIFTS TO 90% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT – WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT UP TO SPRING LINE	CLASS IV B – COMPACT IN 8" (MAX) LIFTS TO 90% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT	
ALL UTILITIES (EXCEPT ANY STORM SEWER)	STRUCTURAL AREAS	BANK RIVER SAND – GRANULAR MATERIAL FREE OF DETRIMENTAL QUANTITIES OF CLAY, DEBRIS, OR ORGANIC MATERIAL MEETING THE FOLLOWING REQUIREMENTS: MAX. LIQUID LIMIT.....45 MAX. PI.....15 MAX. PERCENT PASSING No. 200 SIEVE...35 MAX. PERCENT PASSING 3/4" SIEVE.....100	CEMENT STABILIZED SAND – 1.5 SACKS OF CEMENT PER CUBIC YARD (PUGMILL) SPADE BY LIFTS INTO PLACE TO FILL ALL VOIDS AROUND PIPE. MANUALLY CONSOLIDATE AT OPTIMUM MOISTURE.	CLASS IV B – COMPACT IN 8" (MAX) LIFTS TO 98% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT – COMPACTION ACCOMPLISHED BY MECHANICAL TAMPING
ADS STORM SEWER	NON-STRUCTURAL AREAS	CEMENT STABILIZED SAND – 1.5 SACKS OF CEMENT PER CUBIC YARD (PUGMILL) SPADE BY LIFTS INTO PLACE TO FILL ALL VOIDS AROUND PIPE. MANUALLY CONSOLIDATE AT OPTIMUM MOISTURE.	CLASS IV B – COMPACT IN 8" (MAX) LIFTS TO 90% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT	
ALL STORM SEWER	STRUCTURAL AREAS	CEMENT STABILIZED SAND – 1.5 SACKS OF CEMENT PER CUBIC YARD (PUGMILL) SPADE BY LIFTS INTO PLACE TO FILL ALL VOIDS AROUND PIPE. MANUALLY CONSOLIDATE AT OPTIMUM MOISTURE.	CLASS IV B – COMPACT IN 8" (MAX) LIFTS TO 98% STANDARD PROCTOR DENSITY @ 0 TO +4% OF OPTIMUM MOISTURE CONTENT – COMPACTION ACCOMPLISHED BY MECHANICAL TAMPING	

WATER/SEWER CROSSING NOTES:

1. REPLACE SANITARY SEWER, A MINIMUM OF 18' CENTERED ON THE WATER LINE, WITH SDR-26, CLASS 160, IF SEWER IS DISTURBED OR SHOWS EVIDENCE OF LEAKING. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

2. BOTH THE WATER LINE AND EXISTING SANITARY SEWER SHALL PASS A PRESSURE TEST IN ACCORDANCE WITH THE SPECIFICATIONS.

3. THIS MINIMUM DISTANCE MAY BE REDUCED TO 6" IF THE SANITARY LINE IS REPLACED WITH A 18' JOINT OF SDR-26 CLASS 160 PIPE AND CENTERED ON THE WATER LINE. BACKFILL NEW SANITARY SEWER LINE w/CEMENT STABILIZED SAND BEDDING A MINIMUM OF 20' CENTERED ON THE WATER LINE.



WATER LINE–SANITARY SEWER CROSSING(S)

N.T.S.

ASTM D2321–89
CLASSES OF EMBEDMENT & BACKFILL MATERIALS
GIVEN IN TABLE 1 1 OF ASTM D2323 & SUMMARIZED AS:

CLASS IA: ANGULAR, CRUSHED ROCK, NO FINES (3/8" SIZE)

CLASS IB: ANGULAR, CRUSHED ROCK AND SAND, WELL GRADED TO MINIMIZE MIGRATION OF ADJACENT SOILS. LITTLE OR NO FINES.

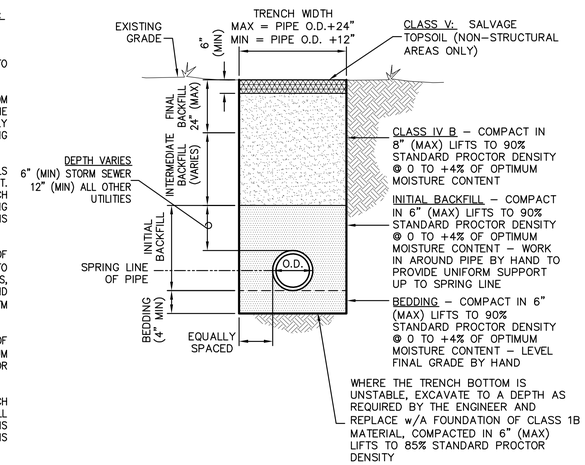
CLASS II: COARSE GRAINED SOILS, CLEAN. NATIVE SOILS FROM THE TRENCH GENERAL DO MEET THIS REQUIREMENT. THE CONTRACTOR MAY USE NATIVE MATERIALS FROM THE TRENCH ONLY AFTER PROVIDING SOILS LABORATORY TEST DEMONSTRATING COMPLIANCE.

CLASS III: COARSE GRAINED SOILS WITH FINES. NATIVE SOILS FROM THE TRENCH GENERALLY DO NOT MEET THIS REQUIREMENT. THE CONTRACTOR MAY USE NATIVE MATERIALS FROM THE TRENCH ONLY AFTER PROVIDING SOILS LABORATORY TEST DEMONSTRATING COMPLIANCE. BANK RUN SAND GENERALLY MEETS THIS REQUIREMENT.

CLASS IV A: SELECT MATERIAL FROM THE TRENCH CONSISTING OF FINE-GRAINED SOILS (INORGANIC). INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS. THIS MATERIAL MUST HAVE A LIQUID LIMIT <50 AND A PLASTICITY INDEX >7 AND >"A" LIME. SEE SPECIFICATION ASTM D2321-89 FOR DETAILS.

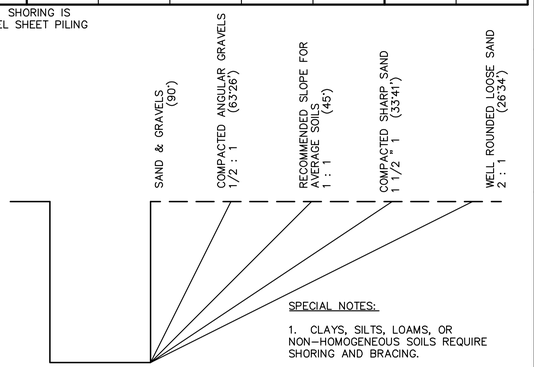
CLASS IV B: SELECT MATERIAL FROM TRENCH CONSISTING OF FINE-GRAINED SOILS (INORGANIC). INORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, FAT CLAYS, INORGANIC SILTS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS.

CLASS V: ORGANIC SOILS. MATERIAL FROM THE TRENCH WHICH DOES NOT MEET THE REQUIREMENTS OF THE ABOVE CLASSES. ALL ROCKS, LUMPS, AND CLODS MUST BE REMOVED FROM THIS MATERIAL PRIOR TO PLACEMENT IN THE TRENCH. THIS MATERIAL IS ONLY APPROPRIATE FOR TOPSOIL IN NON-STRUCTUAL AREAS.



TRENCH BEDDING (PRIVATE UTILITIES & RCP/ADS PIPE)

N.T.S.



SPECIAL NOTES:

1. CLAYS, SILTS, LOAMS, OR NON-HOMOGENEOUS SOILS REQUIRE SHORING AND BRACING.

2. THE PRESENCE OF GROUND WATER REQUIRES SPECIAL TREATMENT.

APPROXIMATE ANGLE OF REPOSE FOR SLOPING OF SIDES OF EXCAVATIONS

TRENCH SAFETY NOTES:

1. O.S.H.A. STANDARD 29 C.F.R. 1926.650 SHALL BE USED FOR THE DESIGN OF TRENCH SAFETY REQUIREMENTS. SHOULD THERE BE ANY CONFLICT BETWEEN THIS DRAWING AND C.F.R. 1926.650, THE O.S.H.A. STANDARD SHALL PREVAIL.

2. WHEN CONDITIONS ARE SATURATED OR SUBMERGED, USE THIGH SHEETING. THIGH SHEETING REFERS TO THE USE OF SPECIAL TIMBER PLANKS AT LEAST THREE INCHES THICK, STEEL SHEET PILING, OR SIMILAR CONSTRUCTION, THAT WHEN DRIVEN OR PLACED IN POSITION PROVIDE A TIGHT WALL TO RESIST THE LATERAL PRESSURE OF WATER. CLOSE SHEETING REFERS TO THE PLACEMENT OF PLANKS SIDE-BY-SIDE ALLOWING AS LITTLE SPACE AS POSSIBLE BETWEEN THEM.

3. ALL SPACING INDICATED IS MEASURED CENTER TO CENTER.

4. WALLS ARE TO BE INSTALLED WITH THE GREATER DIMENSION HORIZONTAL.

5. IF THE VERTICAL DISTANCE FROM THE CENTER OF THE LOWEST CROSS BRACE TO THE BOTTOM OF THE TRENCH EXCEEDS TWO AND ONE-HALF FEET, UPRIGHTS SHALL BE FIRMLY EMBEDDED OR A MUD SILL SHALL BE USED. WHERE UPRIGHTS ARE EMBEDDED, THE VERTICAL DISTANCE FROM THE CENTER OF THE LOWEST CROSS BRACE TO THE BOTTOM OF THE TRENCH SHALL NOT EXCEED 36 INCHES. WHEN MUD SILLS ARE USED, THE VERTICAL DISTANCE SHALL NOT EXCEED 42 INCHES. (NOTE: MUD SILLS ARE VALES THAT ARE INSTALLED AT THE TOE OF THE TRENCH SIDE.)

6. TRENCH JACKS MAY BE USED IN LIEU OF OR IN COMBINATION WITH TIMBER CROSS BRACES.

7. IF SHORING IS THE CHOSEN SUPPORT SYSTEM, THE INSTALLATION IS TO START FROM THE TOP OF THE TRENCH OR EXCAVATION AND WORK DOWNWARD.

8. SPOIL MUST BE STORED TWO FEET OR MORE FROM THE EDGE OF THE EXCAVATION, AND BE RETAINED IN AN EFFECTIVE MANNER.

9. WHEN HEAVY LOADS MUST BE LOCATED NEAR AN EXCAVATION, THE WALLS MUST BE BRACED, SHEET PILED OR SHORED TO SAFELY SUPPORT THE EXTRA WEIGHT.

10. DIVERSION DIKES AND DITCHES OR OTHER SUITABLE MEANS MUST BE USED TO PREVENT SURFACE WATER FROM ENTERING AN EXCAVATION AND TO PROVIDE ADEQUATE DRAINAGE OF THE AREA ADJACENT TO THE EXCAVATION. WATER IS NOT ALLOWED TO ACCUMULATE IN A TRENCH OR EXCAVATION.

11. AN ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS MUST BE PROVIDED AN LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.

PMG AUTO SALES OF BRAZOS VALLEY, LLC
c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

RAMON A. METCALF 88583 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS

UTILITY DETAILS

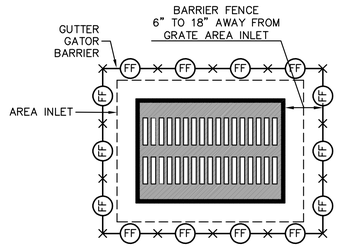
FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

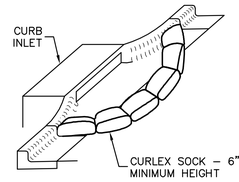
FILENAME: 0775D1A	SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21-1085	

RME CONSULTING ENGINEERS
CLIENT NO. 355 – PROJECT NO. 0775

C2.3

SHEET 13 OF 14



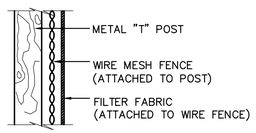


NOTE:
DURING CONSTRUCTION, THE CONTRACTOR SHALL PLACE SILT PROTECTION COMPLETELY AROUND CURB INLET OPENING.

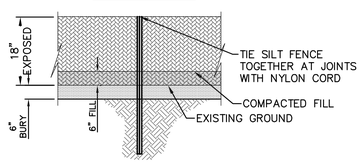
CURB INLET

INLET SILTATION CONTROL

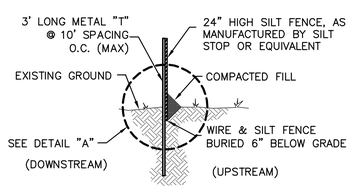
N.T.S.



DETAIL "A"



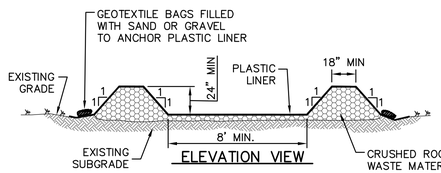
FRONT VIEW



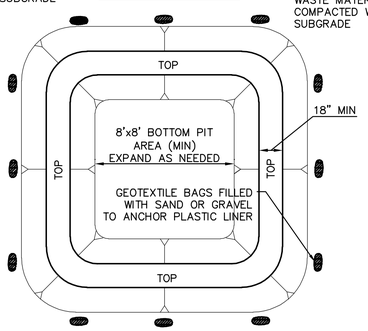
SIDE VIEW

SILT FENCING

N.T.S.



ELEVATION VIEW



PLAN VIEW

CONCRETE WASHOUT

N.T.S.

PMG AUTO SALES OF
BRAZOS VALLEY, LLC

c/o R.L. PAYNE & ASSOCIATES, INC.
1733 BRIARCREST DRIVE, SUITE 108
BRYAN, TX 77802
PH: (979) 696-7272 ext. 100
EMAIL: RPAYNE@RLPAYNE.COM

RME Consulting Engineers
P.O. BOX 9253
COLLEGE STATION, TX 77842
PH: (979) 764-0704
EMAIL: Civil@rmengineer.com
TEXAS FIRM REGISTRATION No. F-4695

MARK	DATE	DESCRIPTION

ISSUED FOR PERMIT & BIDDING 3/23/22

CONSTRUCTION DRAWINGS ISSUED PRIOR TO THIS DATE ARE REPLACED BY THIS SET & SHOULD NOT BE USED FOR CONSTRUCTION.

EROSION CONTROL & MISCELLANEOUS DETAILS
FOR THE
PHASE ONE – SITE IMPROVEMENTS
LOCATED AT
B/CS TOYOTA DEALERSHIP
728 N. EARL RUDDER FREEWAY
BLOCK ONE, LOT 1 & 2 – W.C. DAVIS ADDITION SUBDIVISION
& A PORTION OF BLOCK ONE, LOT 1 – TOM LIGH CHEVROLET COMPANY SUBDIVISION
BRYAN, BRAZOS COUNTY, TEXAS

FILENAME: 0775D1A	SCALE: N/A
SUBMITTED DATE: 3/9/22, 3/23/22	
DRAWN BY: RAM	CHECKED BY: RLP
KERR JOB No. #21–1085	

RME CONSULTING ENGINEERS
CLIENT NO. PROJECT NO.
355 – 0775

C2.4

SHEET 14 OF 14