

SITE DEVELOPMENT PLANS FOR
COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

CITY OF ROCKWALL

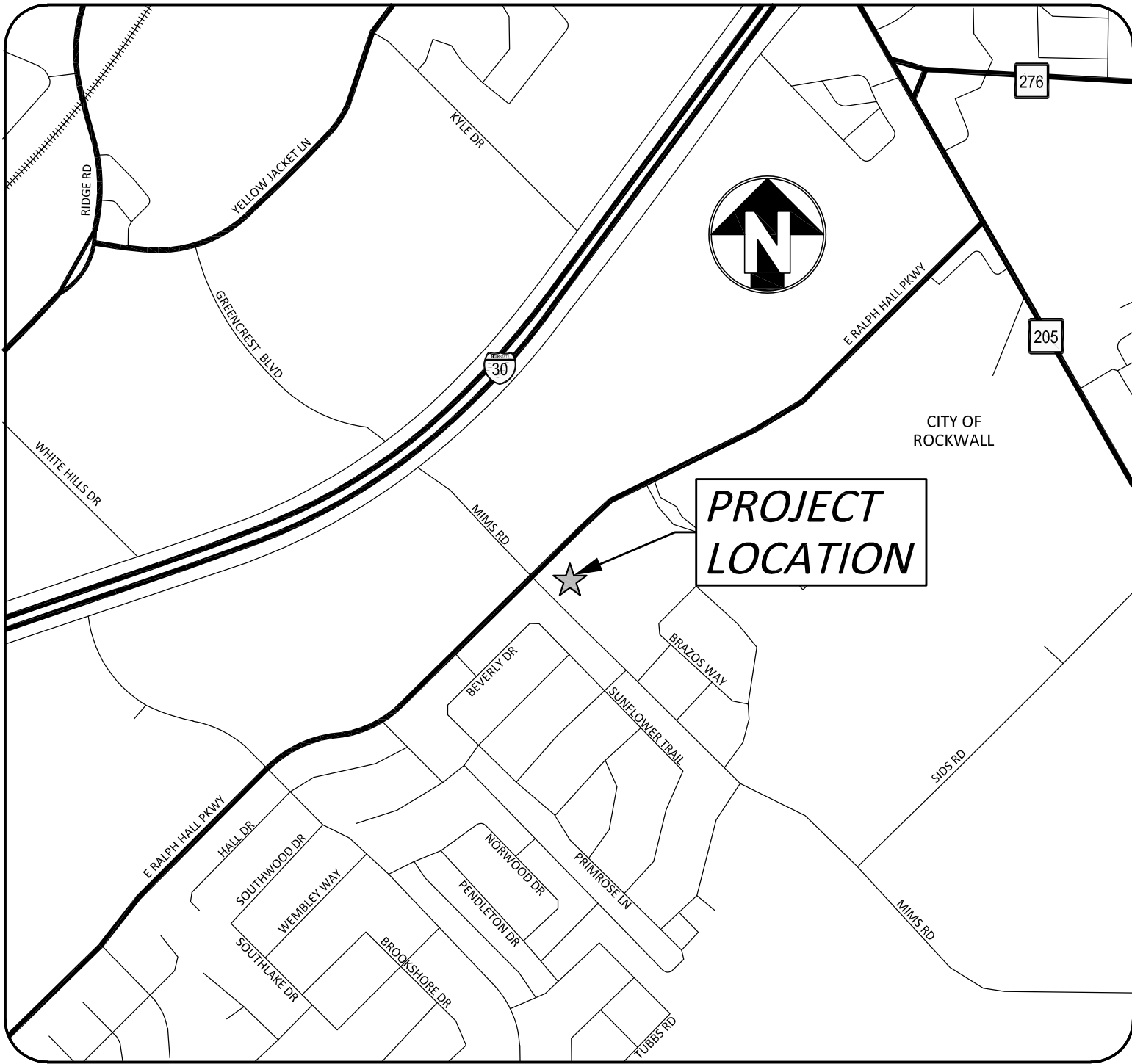
MAYOR
JIM PRUITT

COUNCIL MEMBERS

BENNIE DANIELS
JOHN HOHENSHELT
KEVIN FOWLER
TRACE JOHANNESSEN
DANA MACALIK
ANNA CAMPBELL

CITY MANAGER
RICK CROWLEY

DIRECTOR OF PLANNING
RYAN MILLER, AICP



VICINITY MAP
NOT TO SCALE

UTILITY & GOVERNING AGENCIES CONTACTS

OWNER	CIVIL ENGINEER	SURVEYOR	GEOTECHNICAL ENGINEER
MARY COURTIN 991 INTERSTATE 30 SUITE 103 ROCKWALL, TX 75087 EMAIL: MARYCOURTIN@YAHOO.COM	KSA 6781 OAK HILL BLVD. TYLER, TEXAS 75703 PH: (903) 581-8141 EXT. 1322 CONTACT: DARREL KOTZUR, P.E. EMAIL: DKOTZUR@KSAENG.COM	CBG SURVEYING TEXAS, LLC 12025 SHILOH RD. SUITE 240 DALLAS, TX 75228 PH: (214) 349-9485 CONTACT: JOSH CONNALLY, RPLS	ON TIME GEOTECHNICAL P.O. BOX 4836 LAGO VISTA, TX 78645 PH: (830) 832-3691 CONTACT: JORDAN M. REY, MSCE, PE EMAIL: DRILL@ONTIMEGEO.COM
FIRE DEPARTMENT	CITY OF ROCKWALL ENGINEERING DEPARTMENT (WATER, SEWER & INSPECTION)		
CITY OF ROCKWALL FIRE DEPARTMENT 305 EAST BOYDSTUN ROCKWALL, TEXAS 75087 PH: (972) 771-7770 FAX: (972) 771-7772 CONTACT: ARIANA KISTNER, ASST. CHIEF, FIRE MARSHAL	385 S. GOLIAD STREET ROCKWALL, TEXAS 75087 PH: (972) 771-7746 FAX: (972) 771-7748 CONTACT: SARAH JOHNSTON, P.E.		

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PROJECT ADDRESS:
710 E. RALPH HALL PKWY.
ROCKWALL, TX 75032

**FINAL AS-BUILT
RECORD PLANS**

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES
THAT THIS PLAN IS AS-BUILT. THIS INFORMATION
PROVIDED IS BASED ON SURVEYING AT THE SITE AND
INFORMATION PROVIDED BY THE CONTRACTOR.

RESPONSIBILITY NOTE

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER.
THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION,
ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

5

4

3

2

1

MARK

REVISION

DATE

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

COVER SHEET

DRAWN BY:
TG

DESIGNED BY:
DK

LATEST REVISION:
07/20/2021

KSA JOB NO.:
18-1620-01

6781 Oak Hill Blvd.,
Tyler, Texas 75703
T: 903.581.8141
www.ksaeng.com

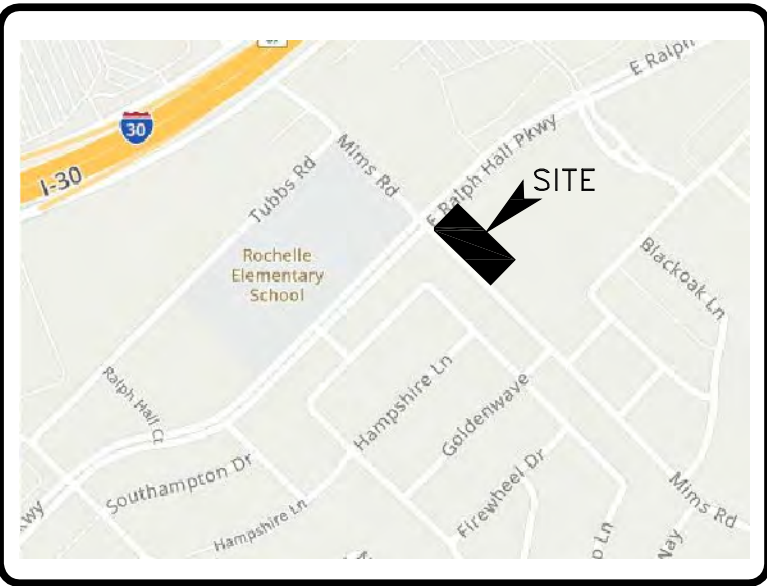
83947

LICENSED
PROFESSIONAL
ENGINEER

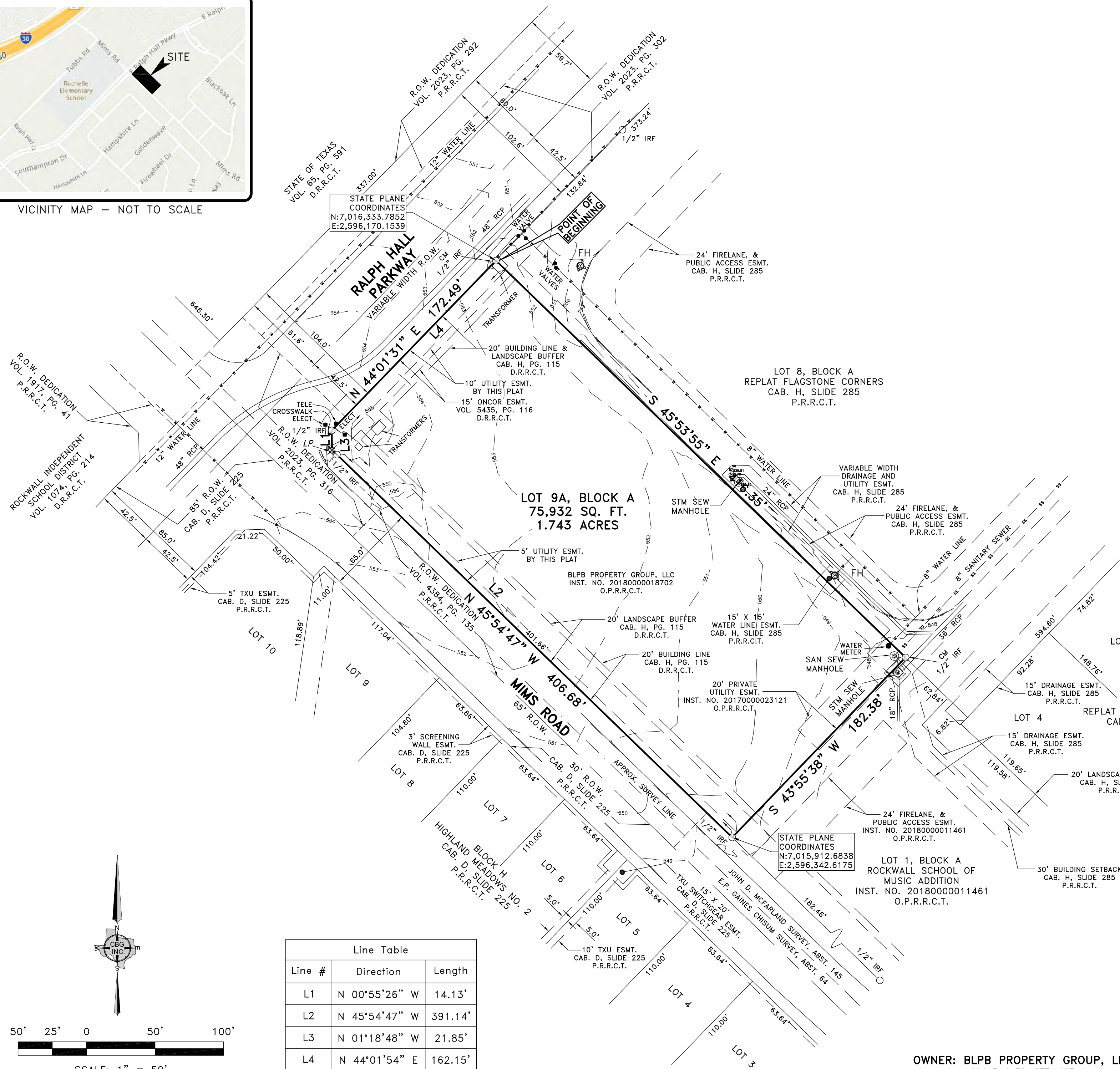
02/22/2022

SEAL:
TBPE Firm Registration No. F-1356
SHEET NO.

C1.0



VICINITY MAP - NOT TO SCALE



LEGEND:

- 1/2 INCH IRON ROD FOUND WITH YELLOW PLASTIC CAP
- CM STAMPED "CBG SURVEYING"
- VOL CONTROLLING MONUMENT
- PG VOLUME
- R.O.W. PAGE
- SQ.FT. RIGHT-OF-WAY
- INST. NO. SQUARE FEET
- SAN. SEW. INSTRUMENT NUMBER
- ESMT. SANITARY SEWER
- APPROX. EASEMENT
- O.P.R.R.C.T. APPROXIMATE
- P.R.R.C.T. OFFICIAL PUBLIC RECORDS, ROCKWALL COUNTY, TEXAS
- D.R.R.C.T. PLAT RECORDS, ROCKWALL COUNTY, TEXAS
- D.R.R.C.T. DEED RECORDS, ROCKWALL COUNTY, TEXAS

GENERAL NOTES:

- 1) THE BASIS OF BEARINGS FOR THIS SURVEY IS THE TEXAS COORDINATE SYSTEM OF 1983, NORTH CENTRAL ZONE, (4202) GEODETIC BEARING ESTABLISHED BY GPS MEASUREMENTS.
- 2) COORDINATES SHOWN HEREON ARE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983 ON GRID COORDINATE VALUES, NO SCALE AND NO PROJECTION.
- 3) THE PURPOSE OF THIS PLAT IS TO REPLAT A PORTION OF LOT 9, BLOCK A, FLAGSTONE CORNERS, CAB. H, SLIDE 285, P.R.R.C.T.
- 4) ACCORDING TO THE F.I.R.M. IN MAP NO. 48397C0040L, THIS PROPERTY DOES LIE IN ZONE X AND DOES NOT LIE WITHIN THE 100 YEAR FLOOD ZONE.
- 5) PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE, REPAIR, AND RECONSTRUCTION OF ALL DRAINAGE AND DETENTION SYSTEMS ON SITE.

(SHEET 1 OF 2)

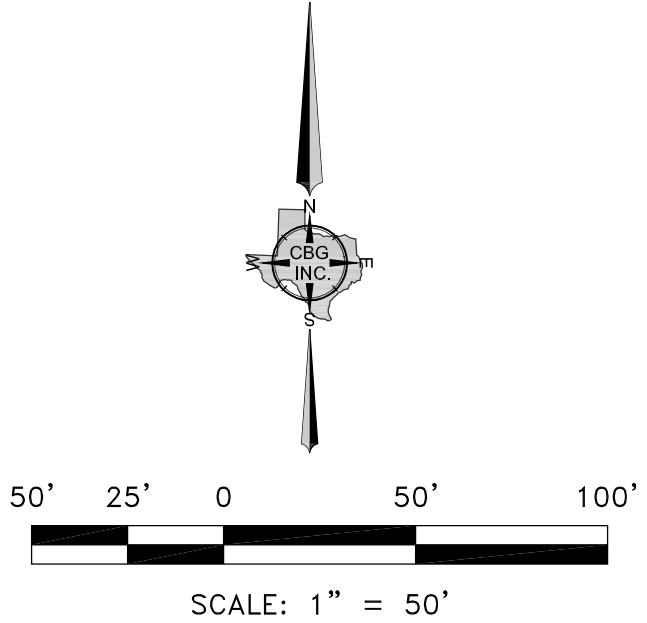
PRELIMINARY PLAT
LOT 9A, BLOCK A
BLPB-MIMS ADDITION
BEING A REPLAT OF LOT 9, BLOCK A, REPLAT FLAGSTONE ADDITION
75,932 SQ.FT. / 1.743 ACRES
JOHN D. MCFARLAND SURVEY, ABSTRACT NO. 145
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

PLANNING & SURVEYING
Main Office
12025 Shiloh Road, Ste. 230
Dallas, TX 75228
P 214.349.9485
F 214.349.2216
Firm No. 10168800
www.cbgtllc.com

OWNER: BLPB PROPERTY GROUP, LLC
991 E. I-30, STE. 103
ROCKWALL, ROCKWALL COUNTY, TEXAS 75032

SCALE: 1"=50' / DATE: 02-10-2021 / JOB NO. 1816813-1 / DRAWN BY: WTH

CASE NO. _____



Line Table		
Line #	Direction	Length
L1	N 00°55'26" W	14.13'
L2	N 45°54'47" W	391.14'
L3	N 01°18'48" W	21.85'
L4	N 44°01'54" E	162.15'

OWNER'S DEDICATION

STATE OF TEXAS
COUNTY OF ROCKWALL

Whereas BLPB Property Group, LLC, BEING THE OWNER OF A TRACT OF LAND in the County of Rockwall, State of Texas, said tract being described as follows:

BEING a tract of land situated in the John D. McFarland Survey, Abstract No. 145, City of Rockwall, Rockwall County, Texas, same being a portion of Lot 9, Block A, Replat Flagstone Corners, an addition to the City of Rockwall, Rockwall County, Texas, according to the Map thereof recorded in Cab. H, Slide 285, Plat Records, Rockwall County, Texas, same being that tract of land conveyed to said BLPB Property Group, LLC, by Special Warranty Deed with Vendor's Lien, recorded in Instrument No. 20180000018702, Official Public Records, Rockwall County, Texas, and being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod found for corner, being the West corner of Lot 8, of said Replat Flagstone Corners, and being in the Southeast Right-of-Way line of Ralph Hall Parkway (a variable width Right-of-Way)

THENCE South 45 degrees 53 minutes 55 seconds East, along the Southwest line of said Lot 8, a distance of 416.35 feet to a 1/2 inch iron rod found for corner, being the North corner of Lot 1, Block A, Rockwall School of Music Addition, an addition to the City of Rockwall, Rockwall County, Texas, according to the Map thereof recorded in Instrument No. 20180000011461, Official Public Records, Rockwall County, Texas;

THENCE South 43 degrees 55 minutes 38 seconds West, along the Northwest line of said Lot 1, a distance of 182.38 feet to a 1/2 inch iron rod found for corner, being the West corner of said Lot 1, and being in the Northeast Right-of-Way line of Mims Road (a 65 foot Right-of-Way);

THENCE North 45 degrees 54 minutes 47 seconds West, along the Northeast Right-of-Way line of said Mims Road, passing a 1/2 inch iron rod found for reference at a distance of 401.66 feet, and continuing a total distance of 406.68 feet to a light pole for corner, being at the intersection of the Northeast Right-of-Way line of said Mims Road, and the Southeast Right-of-Way line of said Ralph Hall Parkway;

THENCE 00 degrees 55 minutes 26 seconds West, a distance of 14.13 feet to a 1/2 inch iron rod found for corner;

THENCE North 44 degrees 01 minutes 31 seconds East, along the Southeast Right-of-Way line of said Ralph Hall Parkway, a distance of 172.49 feet to the POINT OF BEGINNING, and containing 75,932 square feet or 1.743 acres of land.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

STATE OF TEXAS
COUNTY OF ROCKWALL

We the undersigned owner(s) of the land shown on this plat, and designated herein as the LOT 9A, BLOCK A, BLPB-MIMS ADDITION, an addition to the City of Rockwall, Texas, and whose name is subscribed hereto, hereby dedicate to the use of the public forever all streets, alleys, parks, water courses, drains, easements and public places thereon shown on the purpose and consideration therein expressed. We further certify that all other parties who have a mortgage or lien interest in the LOT 9A, BLOCK A, BLPB-MIMS ADDITION, have been notified and signed this plat.

I understand and do hereby reserve the easement strips shown on this plat for the purposes stated and for the mutual use and accommodation of all utilities desiring to use or using same. I (we) also understand the following;

1. No buildings shall be constructed or placed upon, over, or across the utility easements as described herein.
2. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other growths or improvements which in any way endanger or interfere with construction, maintenance or efficiency of their respective system on any of these easement strips; and any public utility shall at all times have the right of ingress or egress to, from and upon the said easement strips for purpose of construction, reconstruction, inspecting, patrolling, maintaining, and either adding to or removing all or part of their respective system without the necessity of, at any time, procuring the permission of anyone.
3. The City of Rockwall will not be responsible for any claims of any nature resulting from or occasioned by the establishment of grade of streets in the subdivision.
4. The developer and subdivision engineer shall bear total responsibility for storm drain improvements.

5. The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area are not adversely affected by storm drainage from the development.

6. No house dwelling unit, or other structure shall be constructed on any lot in this addition by the owner or any other person until the developer and/or owner has complied with all requirements of the Subdivision Regulations of the City of Rockwall regarding improvements with respect to the entire block on the street or streets on which property abuts, including the actual installation of streets with the required base and paving, curb and gutter, water and sewer, drainage structures, storm structures, storm sewers, and alleys, all according to the specifications of the City of Rockwall; or

Until an escrow deposit, sufficient to pay for the cost of such improvements, as determined by the city's engineer and/or city administrator, computed on a private commercial rate basis, has been made with the city secretary, accompanied by an agreement signed by the developer and/or owner, authorizing the city to make such improvements at prevailing private commercial rates, or have the same made by a contractor and pay for the same out of the escrow deposit, should the developer and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, but in no case shall the City be obligated to make such improvements itself. Such deposit may be used by the owner and/or developer as progress payments as the work progresses in making such improvements by making certified requisitions to the city secretary, supported by evidence of work done; or

Until the developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the city council of the City of Rockwall.

We further acknowledge that the dedications and/or exaction's made herein are proportional to the impact of the Subdivision upon the public services required in order that the development will comport with the present and future growth needs of the City; We, our successors and assigns hereby waive any claim, damage, or cause of action that We may have as a result of the dedication of exactions made herein.

BLPB Property Group, LLC (Owner)
a Texas limited liability company

By: _____
Dr. Mary Courtin, Manager

STATE OF TEXAS
COUNTY OF ROCKWALL

Before me, the undersigned authority, on this day personally appeared Dr. Mary Courtin, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated.

Given upon my hand and seal of office this _____day of_____, 2021.

By: _____

printed name: _____
Notary Public in and for the State of Texas

NOTE: It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee that any building within such plat shall be approved, authorized or permit therefore issued, nor shall such approval constitute any representation, assurance or guarantee by the City of the adequacy and availability for water for personal use and fire protection within such plat, as required under Ordinance 83-54.

SURVEYOR'S CERTIFICATE:

NOW, THEREFORE KNOW ALL MEN BY THESE PRESENTS:

THAT I, Bryan Connally, a Registered Professional Land Surveyor, licensed by the State of Texas, do hereby certify that I prepared this plat from an actual and accurate survey of the land, and that the corner monuments shown thereon were properly placed under my personal supervision.

Dated this the_____ day of _____, 2021.
RELEASED FOR REVIEW 02/11/2021 PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSES AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.

Bryan Connally
Texas Registered Professional Land Surveyor No. 5513

RECOMMENDED FOR FINAL APPROVAL

Planning and Zoning Commission _____ Date _____

APPROVED

I hereby certify that the above and foregoing plat of an addition to the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the _____ day of_____, 2021.

This approval shall be invalid unless the approved plat for such addition is recorded in the office of the County Clerk of Rockwall County, Texas within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this _____ day of _____, 2021.

Mayor, City of Rockwall

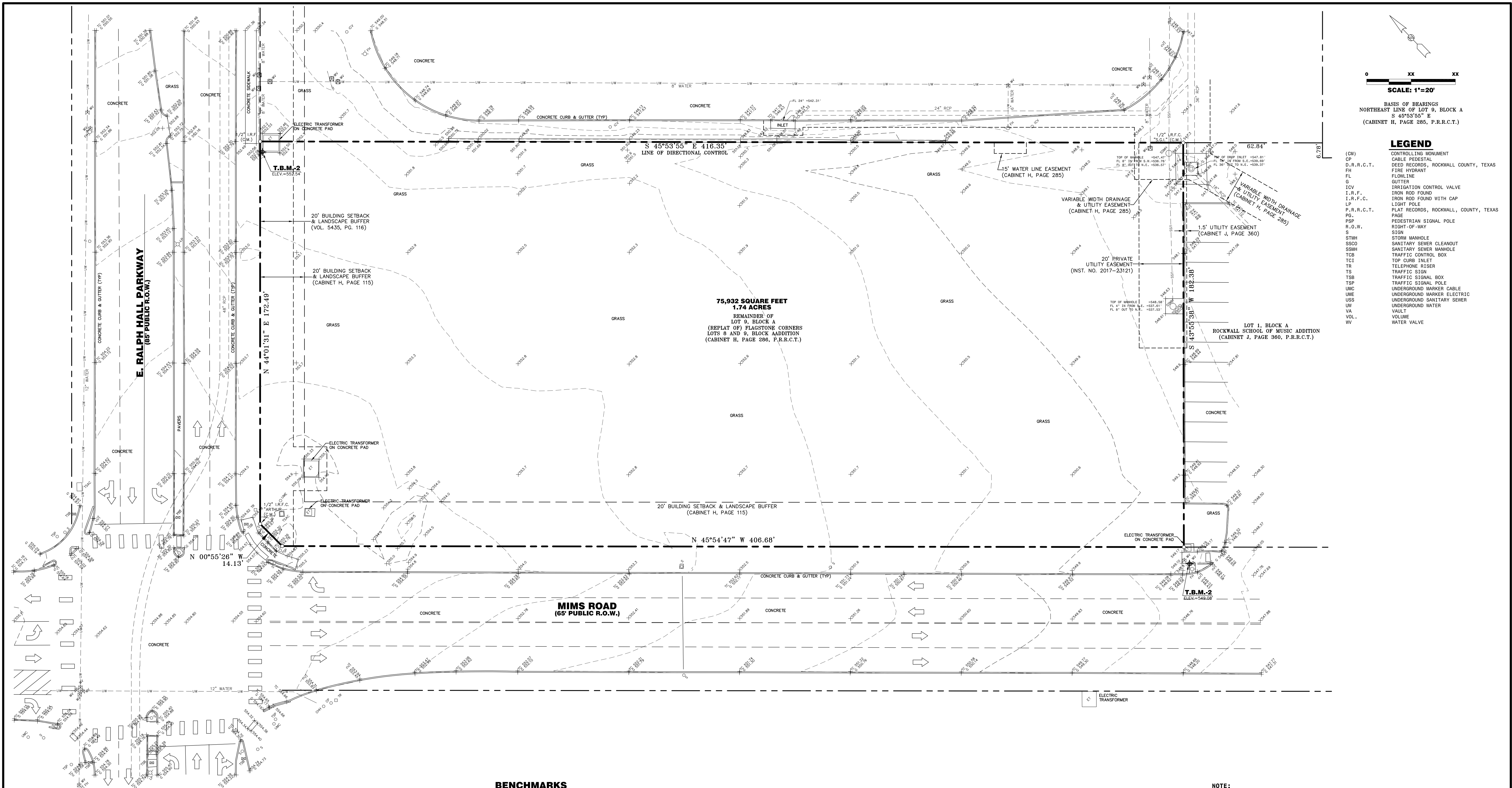
City Secretary

City Engineer

PRELIMINARY PLAT
LOT 9A, BLOCK A
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0 XX XX
SCALE: 1"=20'

BASIS OF BEARINGS
NORTHEAST LINE OF LOT 9, BLOCK A
S 45°53'55" E
(CABINET H, PAGE 285, P.R.R.C.T.)

LEGEND

- | | |
|------------|--------------------------------------|
| (CM) | CONTROLLING MONUMENT |
| CP | CABLE PEDESTAL |
| D.R.R.C.T. | DEED RECORDS, ROCKWALL COUNTY, TEXAS |
| FH | FIRE HYDRANT |
| FL | FLOWLINE |
| G | GUTTER |
| ICV | IRRIGATION CONTROL VALVE |
| I.R.F. | IRON ROD FOUND |
| I.R.F.C. | IRON ROD FOUND WITH CAP |
| LP | LIGHT POLE |
| P.R.R.C.T. | PLAT RECORDS, ROCKWALL COUNTY, TEXAS |
| PG | PAGE |
| PSP | PEDESTRIAN SIGNAL POLE |
| R.O.W. | RIGHT-OF-WAY |
| S | STORM MANHOLE |
| STMH | SANITARY SEWER CLEANOUT |
| SSMH | SANITARY SEWER MANHOLE |
| TCB | TRAFFIC CONTROL BOX |
| TCI | TOP CURB INLET |
| TR | TELEPHONE RISER |
| TS | TRAFFIC SIGN |
| TSB | TRAFFIC SIGNAL BOX |
| TSP | TRAFFIC SIGNAL POLE |
| UMC | UNDERGROUND MARKER CABLE |
| UME | UNDERGROUND MARKER ELECTRIC |
| USS | UNDERGROUND SANITARY SEWER |
| UN | UNDERGROUND WATER |
| VA | VAULT |
| VOL | VOLUME |
| VV | WATER VALVE |

BENCHMARKS

BM-1 City of Rockwall GPS Control Monument No. COR-11, a brass disk stamped "City of Rockwall Survey Monument" located on the N.E. side of Mims Road at the southerly end of a concrete headwall at the intersection of the N.E. line of Mims Road and the S.E. line of I-30.
Elevation=565.98'

BM-2 City of Rockwall GPS Control Monument No. COR-10, a brass disk stamped "City of Rockwall Survey Monument" located on the S.E. side of Laguna Drive at the S.E. corner of a curb inlet, 325' +/- northeast of the intersection of Village Dr. & Laguna Dr.
Elevation=521.61'

TBM-1 Square cut with "X" set on the N.W. corner of a transformer pad located on the southwesterly side of Ralph Hall Parkway, 210' +/- northeast of Mims Road.
Elevation=552.54'

TBM-2 Square cut with "X" set on the N.W. corner of a fire hydrant pad located on the northeasterly side of Mims Road, 430' +/- southeast of Ralph Hall Parkway.
Elevation=549.08'

NOTE:
THIS IS NOT A BOUNDARY OR TITLE SURVEY, AND SHALL NOT BE USED FOR THE TRANSFER OR CONVEYANCE OF REAL PROPERTY. THIS EXHIBIT WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE COMMITMENT OR TITLE REPORT, THEREFORE ALL EASEMENTS OF RECORD MAY NOT BE SHOWN.

TOPOGRAPHIC EXHIBIT
**PART OF LOT 9, BLOCK A
FLAGSTONE CORNERS ADDITION**
(CABINET H, PAGE 285, P.R.R.C.T.)

out of
J.D. McFARLAND SURVEY, ABSTRACT No. 145
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

PREPARED FOR:
CROSSPOINT ENGINEERING
2971 Elkon Trail
Tyler, Texas 75703
(203) 705-4419
Contact: Ms. Katlin Fox, E.I.T.

PROJECT INFORMATION
Date of Survey: 03/28/2019
Job Number: 1920217
Drawn By: W.J.J.
G.F. No.: (Not Provided)
File: 1990217 Topo.Dwg
SHEET 1 OF 1

903 N. Bowser Road, Suite 240
Richardson, Texas 75081
(972) 424-7002 Voice
(972) 633-1702 Fax
WWW.SurveyConsultantsInc.com
Survey Consultants, Inc. TBPLS Firm No. 10139600

1. All construction shall conform to the requirements set forth in the City of Rockwall's Engineering Department's "Standards of Design and Construction" and the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Engineering Departments "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times.
2. Where any conflicting notes, details or specifications occur in the plans the City of Rockwall General Construction Notes, Standards, Details and Specifications shall govern unless detail or specification is more strict.
3. The City of Rockwall Engineering Departments "Standards of Design and Construction" can be found online at: <http://www.rockwall.com/engr.asp>
4. All communication between the City and the CONTRACTOR shall be through the Engineering Construction Inspector and City Engineer or designated representative only. It is the responsibility of the CONTRACTOR to contact the appropriate department for inspections that do not fall under this approved engineering plan set.
5. Prior to construction, CONTRACTOR shall have in their possession all necessary permits, plans, licenses, etc.
6. The CONTRACTOR shall have at least one original stamped and signed set of approved engineering plans and specifications on-site and in their possession at all times. A stop work order will be issued if items are not on-site. Copies of the approved plans will not be substituted for the required original "approved plans to be on-site".
7. All material submittals, concrete batch designs and shop drawings required for City review and approval shall be submitted by the CONTRACTOR to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
8. All site dimensions are referenced to the face of curb or edge of pavement unless otherwise noted.
9. The City requires ten (10%) percent-two (2) year maintenance bond for paving, paving improvements, water systems, wastewater systems, storm sewer systems including detention systems, and associated fixtures and structures which are located within the right-of-ways or defined easements. The two (2) year maintenance bond is to state "from date of City acceptance" as the starting time.
10. A review of the site shall be conducted at twenty (20) months into the two (2) year maintenance period. The design engineer or their designated representative and the CONTRACTOR shall be present to walk the site with the City of Rockwall Engineering Inspection personnel.

1. The CONTRACTOR or developer shall be responsible, as the entity exercising operational control, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees
2. Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
3. All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed and approved by the design engineer and the City of Rockwall prior to implementation.
4. If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
5. All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each inspection.
6. The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplains. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials.
7. CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water or other means as approved by the City Engineer.
8. CONTRACTOR shall establish grass and maintain the seeded area, including watering, until a "Permanent Stand of Grass" is obtained at which time the project will be accepted by the City. A "Stand of Grass" (not winter rye or weeds) shall consist of 75% to 80% coverage of all disturbed areas and a minimum of one-inch (1") in height as determined by the City. No bare spots will be allowed. Re-seeding will be required in all washed areas and areas that don't grow.
9. All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.
10. All adjacent streets/alleys shall be kept clean at all times
11. CONTRACTOR shall keep construction site clean at all times, immediately contain all debris and trash, all debris and trash shall be removed at the end of each work day, and all vegetation on the construction site 10-inches or taller in height must be cut immediately.
12. Suspension of all construction activities for the project will be enforced by the City if any erosion control requirements are not met. Work may commence after deficiency has been rectified.
13. During construction of the project, all soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The CONTRACTOR is responsible for the temporary protection and permanent stabilization of all soil stockpiles on-site as well as borrow areas and soil intentionally transported from the project site.
14. Where construction vehicles access routes intersect paved or public roads/alleys, construction entrances shall be installed to minimize the transport of sediment by vehicular tracking onto paved surfaces. Where sediment is transferred onto paved or public surfaces, the surface shall be immediately cleaned. Sediment shall be

15. All drainage inlets shall be protected from siltation, ineffective or unmaintained protection devices shall be immediately replaced and the inlet and storm system cleaned. Flushing is not an acceptable method of cleaning.
16. During all dewatering operations, water shall be pumped into an approved filtering device prior to discharge into a receiving outlet.

1. All new Detouring or Traffic Control Plans are required to be submitted to the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
2. When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow is an integral element of every traffic control zone.
3. All traffic control plans shall be prepared and submitted to the Engineering Department in accordance with the standards identified in Part VI of the most recent edition of the TMUTCD. Lane closures will not occur on roadways without an approval from the Rockwall Engineering Department and an approved traffic control plan. Traffic control plans shall be required on all roadways as determined by the City Engineer or the designated representative.
4. All traffic control plans must be prepared, signed, and sealed by an individual that is licensed as a professional engineer in the State of Texas. All traffic control plans and copies of work zone certification must be submitted for review and approval a minimum of three (3) weeks prior to the anticipated temporary traffic control.
5. The CONTRACTOR executing the traffic control plan shall notify all affected property owners two (2) weeks prior to any the closures in writing and verbally.
6. Any deviation from an approved traffic control plan must be reviewed by the City Engineer or the designated representative. If an approved traffic control plan is not adhered to, the CONTRACTOR will first receive a verbal warning and be required to correct the problem immediately. If the deviation is not corrected, all construction work will be suspended, the lane closure will be removed, and the roadway opened to traffic.
7. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time at the end of the workday, all temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure.
8. Lane closures on any major or minor arterial will not be permitted between the hours of 6:00 am to 9:00 am and 3:30 pm to 7:00 pm. Where lane closures are needed in a school area, they will not be permitted during peak hours of 7:00 am – 9:00 am and 3:00 pm to 5:00 pm. Closures may be adjusted according to the actual start-finish times of the actual school with approval by the City Engineer. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure of a roadway whether they are working or not.
9. No traffic signs shall be taken down without permission from the City.
10. No street/roadway will be allowed to be fully closed.

1. It is the CONTRACTOR's responsibility to notify utility companies to arrange for utility locates at least 48 hours prior to beginning construction. The completeness and accuracy of the utility data shown on the plans is not guaranteed by the design engineer or the City. The CONTRACTOR is responsible for verifying the depth and location of existing underground utilities proper to excavating, trenching, or drilling and shall be required to take any precautionary measures to protect all lines shown and .or any other underground utilities not on record or not shown on the plans.
2. The CONTRACTOR shall be responsible for damages to utilities
3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
4. All utilities shall be placed underground.
5. CONTRACTOR shall be responsible for the protection of all existing main lines and service lines crossed or exposed by construction operations. Where existing mains or service lines are cut, broken or damaged, the CONTRACTOR shall immediately make repairs to or replace the entire service line with same type of original construction or better. The City of Rockwall can and will intervene to restore service if deemed necessary and charge the CONTRACTOR for labor, equipment, material and loss of water if repairs aren't made in a timely manner by the CONTRACTOR.
6. The City of Rockwall (City utilities) is not part of the Dig Tess or Texas one Call – 811 – line locate system. All City of Rockwall utility line locates are to be scheduled with the City of Rockwall Service Center. 972-771-7730. A 48-hour advance notice is required for all non-emergency line locates.
7. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
 - a. No more than 500 linear feet of trench may be opened at one time.
 - b. Material used for backfilling trenches shall be properly compacted to 95% standard density in order to minimize erosion, settlement, and promote stabilization that the geotechnical engineer recommends.
 - c. Applicable safety regulations shall be complied with.
11. This plan details pipes up to 5 feet from the building. Refer to the building plans for building connections. CONTRACTOR shall supply and install pipe adapters as necessary.
12. All underground lines shall be installed, inspected, and approved prior to backfilling.
13. All concrete encasement shall have a minimum of 28 days compressive strength at 3,000 psi (min. 5.5 sack mix).

1. The CONTRACTOR shall maintain existing water service at all times during construction.
2. Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
3. Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwall's engineering standards of design and construction manual.
4. CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall Engineering Inspector and Water Department. The City shall operate all water valves. Allow 5 business days from the date of notice to allow City personnel time to schedule a shut down. Two additional days are required for the CONTRACTOR to notify residents in writing of the shut down after the impacted area has been identified. Water shut downs impacting businesses during their normal operation hours is not allowed. CONTRACTOR is required to coordinate with the Rockwall Fire Department regarding any fire watch requirements as well as any costs incurred when the loss of fire protection to a structure occurs.
5. CONTRACTOR shall furnish and install gaskets on water lines between all dissimilar metals and at valves (both existing and proposed).
6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall Municipal Service Center.
7. Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
8. All water valve hardware and valve extensions, bolts, nuts and washers shall be 316 stainless steel.
9. All fire hydrants bolts, nuts and washers that are buried shall be 316 stainless steel.
10. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box removed and shall be capped in concrete.
11. All fire hydrants will have a minimum of 5 feet of clearance around the appurtenance including but not limited to parking spaces and landscaping.
12. All joints are to be megalug joints with thrust blocking.
13. Water and sewer mains shall be kept 10 feet apart (parallel) or when crossing 2 feet vertical clearance.
14. CONTRACTOR shall maintain a minimum of 4 feet of cover on all water lines.
15. All domestic and irrigation services are required to have a testable backflow device with a double check valve installed per the City of Rockwall regulations at the property line and shown on plans.

1. The CONTRACTOR shall maintain existing wastewater service at all times during construction.
2. Wastewater line for 4-inch through 15-inch shall be Green PVC – SDR 35 (ASTM D3034) [less 10 ft cover] and SDR 26 (ASTM D3034) [10 ft or more cover]. For 18-inch and larger wastewater line shall be Green PVC – PS 46 (ASTM F679) [less 10 ft cover] and PS 115 (ASTM F679) [10 ft or more cover]. No services will be allowed on a sanitary sewer line deeper than 10 feet.
3. Proposed wastewater line embedment shall be NCTCOG Class 'H' as amended by the City of Rockwall's public works standard design and construction manual.
4. Green EMS pads shall be installed at every 250', manhole, clean out and service lateral on proposed wastewater lines.
5. CONTRACTOR shall CCTV all existing wastewater lines that are to be abandoned to ensure that all laterals are accounted for and transferred to proposed wastewater lines prior to abandonment.
6. All abandoned wastewater and force main lines shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product.
7. Existing manholes and cleanouts not specifically called to be relocated shall be adjusted to match final grades.
8. All wastewater pipes and public services shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.
9. All manholes (public or private) shall be fitted with inflow prevention. The inflow prevention shall conform to the measures called out in standard detail R-5031.
10. All new or existing manholes being modified shall have corrosion protection being Raven Liner 405 epoxy coating, ConShield, or approved equal. Conshield must have terracotta color dye mixed in the precast and cast-in-place concrete. Where connections to existing manholes are made the CONTRACTOR shall rehab manhole as necessary and install a 125 mil thick coating of Raven Liner 405 or approved equal.
11. All new or existing manholes that are to be placed in pavement shall be fitted with a sealed (gasketed) rim and cover to prevent inflow.
12. If an existing wastewater main or trunk line is called out to be replaced in place a wastewater bypassing pump plan shall be required and submitted to the Engineering Construction Inspector and City Engineer for approval prior to implementation. Bypass pump shall be fitted with an auto dialer and conform to the City's Noise Ordinance. Plan shall be to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
13. CONTRACTOR shall maintain a minimum of 4 feet of cover on all wastewater lines.



385 S. Goliad P (972) 771-7746
Rockwall, Texas 75087 F (972) 771-7748

DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

1. All pavements to be removed and replaced shall be saw cut to full depth along neat squared lines shown in the plans.
2. Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement.
3. All public concrete pavement to be removed and replaced shall be full panel replacement, 1-inch thicker and on top of 6-inch thick compacted flexbase.
4. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. No excess excavation shall be deposited in the City Limits without a permit from the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, the CONTRACTOR will be responsible for all damages resulting from such fill and shall remove the material at their own cost.

PAVING AND GRADING

1. All detention systems are to be installed and verified for design compliance along with the associated storm sewer and outflow structures, prior to the start of any paving operations (including building foundations). Erosion protection shall be placed at the pond outflow structures, silt fence along the perimeter of the pond along with any of the associated erosion BMPs noted on the erosion control plan, and the sides and bottom of the detention system shall have either sod or anchored seeded curlex installed prior to any concrete placement.
2. All paving roadway, driveways, fire lanes, drive-isles, parking, dumpster pads, etc. sections shall have a minimum thickness, strength, reinforcement, joint type, joint spacing and subgrade treatment shall at a minimum conform to the City standards of Design and Construction and table below.

Street/Pavement Type	Minimum Thickness (inches)	Streng th 28- Day (psi)	Minimum Cement (sacks / CY)		Steel Reinforcement	
			Machine placed	Hand Placed	Bar #	Spacing (O.C.E.W.)
Arterial	10”	3,600	6.0	6.5	#4 bars	18”
Collector	8”	3,600	6.0	6.5	#4 bars	18”
Residential	6”	3,600	6.0	6.5	#3 bars	24”
Alley	7”-5”-7”	3,600	6.0	6.5	#3 bars	24”
Fire Lane	6”	3,600	6.0	6.5	#3 bars	24”
Driveways	6”	3,600	6.0	6.5	#3 bars	24”
Barrier Free Ramps	6”	3,600	N/A	6.5	#3 bars	24”
Sidewalks	4”	3,000	N/A	5.5	#3 bars	24”
Parking Lot/Drive Aisles	5”	3,000	5.0	5.5	#3 bars	24”
Dumpster Pads	7”	3,600	6.0	6.5	#3 bars	24”

3. Reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps shall be minimum 30 diameters. Sawed transverse dummy joints shall be spaced every 15 feet or 1.25 time longitudinal butt joint spacing whichever is less. Sawing shall occur within 5 to 12 hours after the pour, including sealing. Otherwise, the section shall be removed and longitudinal butt joint constructed.
4. No sand shall be allowed under any paving.
5. All concrete mix design shall be submitted to the City for review and approval prior to placement.
6. Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per C.Y. of concrete. The fly ash replacement shall be 1.25 lbs. per 1.0 lb. cement reduction.
7. All curb and gutter shall be integral (monolithic) with the pavement.
8. All fill shall be compacted by sheep's foot roller to a minimum 95% standard proctor. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory. All laboratory compaction reports shall be submitted to the City Engineering Construction Inspector once results are received. All reports will be required prior to final acceptance.
9. All concrete compression tests and soil compaction/density tests are required to be submitted to the City’s Engineering Inspector immediately upon results.
10. All proposed sidewalks shall include barrier free ramps at intersecting streets, alleys, etc. Barrier free ramps (truncated dome plate in Colonial or brick red color) shall meet current City and ADA requirements and be approved by the Texas Department of Licensing and Regulation (TDLR).
11. All public sidewalks shall be doveled into pavement where it abuts curbs and driveways. Expansion joint material shall be used at these locations.
12. All connection of proposed concrete pavement to existing concrete pavement shall include a longitudinal butt joint as the load transfer device. All longitudinal butt joints shall be clean, straight and smooth (not jagged in appearance)
13. Cracks formed in concrete pavement shall be repaired or removed by the CONTRACTOR at the City's discretion. CONTRACTOR shall replace existing concrete curbs, sidewalk, paving, a gutters as indicated on the plans and as necessary to connect to the existing infrastructure, including any damage caused by the CONTRACTOR.
14. All residential lots will require individual grading plans submitted during the building permit process that correspond with the engineered grading and drainage area plans.
15. Approval of this plan is not an authorization to grade adjacent properties when the plans or field conditions warrant off-site grading. Written permission must be obtained and signed from the affected property owner(s) and temporary construction easements may be required. The written permission shall be provided to the City as verification of approval by the adjacent property owner(s). Violation of this requirement will result in suspension of all work at the job site until issue has been rectified.
16. All cut or fill slopes of non-paved areas shall be a maximum of 4:1 and minimum of 1%.
17. CONTRACTOR agrees to repair any damage to property and the public right-of-way in accordance with the City Standards of Design and Construction.
18. CONTRACTOR shall protect all monuments, iron pins/rods, and property corners during construction.
19. CONTRACTOR shall ensure positive drainage so that runoff will drain by gravity flow to new or existing drainage inlets or sheet flow per these approved plans.

DRAINAGE / STORM SEWER NOTES

1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.
2. All structural concrete shall be 4200 psi compressive strength at 28 days minimum 7.0 sack mix, air entrained, unless noted otherwise. Fly ash shall not be allowed in any structural concrete.
3. Proposed storm sewer embedment shall be NCTCOG Class 'B' as amended by the City of Rockwall's Engineering Department Standards of Design and Construction Manual.
4. All public storm pipe shall be a minimum of 18-inch reinforced concrete pipe (RCP), Class III, unless otherwise noted.
5. All storm pipe entering structures shall be grouted to assure connection at the structure is watertight.
6. All storm structures shall have a smooth uniform poured mortar invert from invert in to invert out.
7. All storm sewer manholes in paved areas shall be flush with the paving grade, and shall have traffic bearing ring and covers.
8. All storm sewer pipes and laterals shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR’s expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.

RETAINING WALLS

1. All retaining walls, regardless of height, will be reviewed and approved by the City Engineering Department
2. All retaining walls (including foundation stem walls), regardless of height, will be constructed of rock/stone/brick or rock/stone/brick faced. No smooth concrete walls are allowed. Wall materials shall be the same for all walls on the project.
3. All portions, including footings, tie-backs, and drainage backfill, of the wall shall be on-site and not encroach into any public easements or right-of-way. The entire wall shall be in one lot and shall not be installed along a lot line.
4. All walls 3 feet and taller will be designed and signed/sealed by a registered professional engineer in the State of Texas. The wall design engineer is required to inspect the wall construction and supply a signed/sealed letter of wall construction compliance to the City of Rockwall along with wall as-builts prior to City Engineering acceptance.
5. No walls are allowed in detention easements. A variance to allow retaining walls in a detention easement will require approval by the Planning and Zoning Commission with appeals being heard by the City Council.

FINAL ACCEPTANCE AND RECORD DRWINGS/AS-BUILTS

1. Final Acceptance shall occur when all the items on the Checklist for Final Acceptance have been completed and signed-off by the City. An example of the checklist for final acceptance has been included in the Appendix of the Standards of Design and Construction. Items on the checklist for final acceptance will vary per project and additional items not shown on the check list may be required.
2. After improvements have been constructed, the developer shall be responsible for providing to the City “As Built” or “Record Drawings”. The Design Engineer shall furnish all digital files of the project formatted in Auto Cad 14, or 2000 format or newer and Adobe Acrobat (.pdf) format with a CD-ROM disk or flash drive. The disk or drive shall include a full set of plans along with any landscaping, wall plans, and details sheets.
3. Submit 1-set of printed drawings of the “Record Drawings” containing copies of all sheets to the Engineering Construction Inspector for the project. The printed sheets will be reviewed by the inspector PRIOR to producing the “Record Drawing” digital files on disk or flash drive. This will allow any revisions to be addressed prior to producing the digital files.
4. Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as “Record Drawings” or “As Built Drawings” on all sheets.
5. The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineer’s surveyor/surveyors did not verify grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.
6. Example of Acceptable Disclaimer: “To the best of our knowledge ABC Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.”

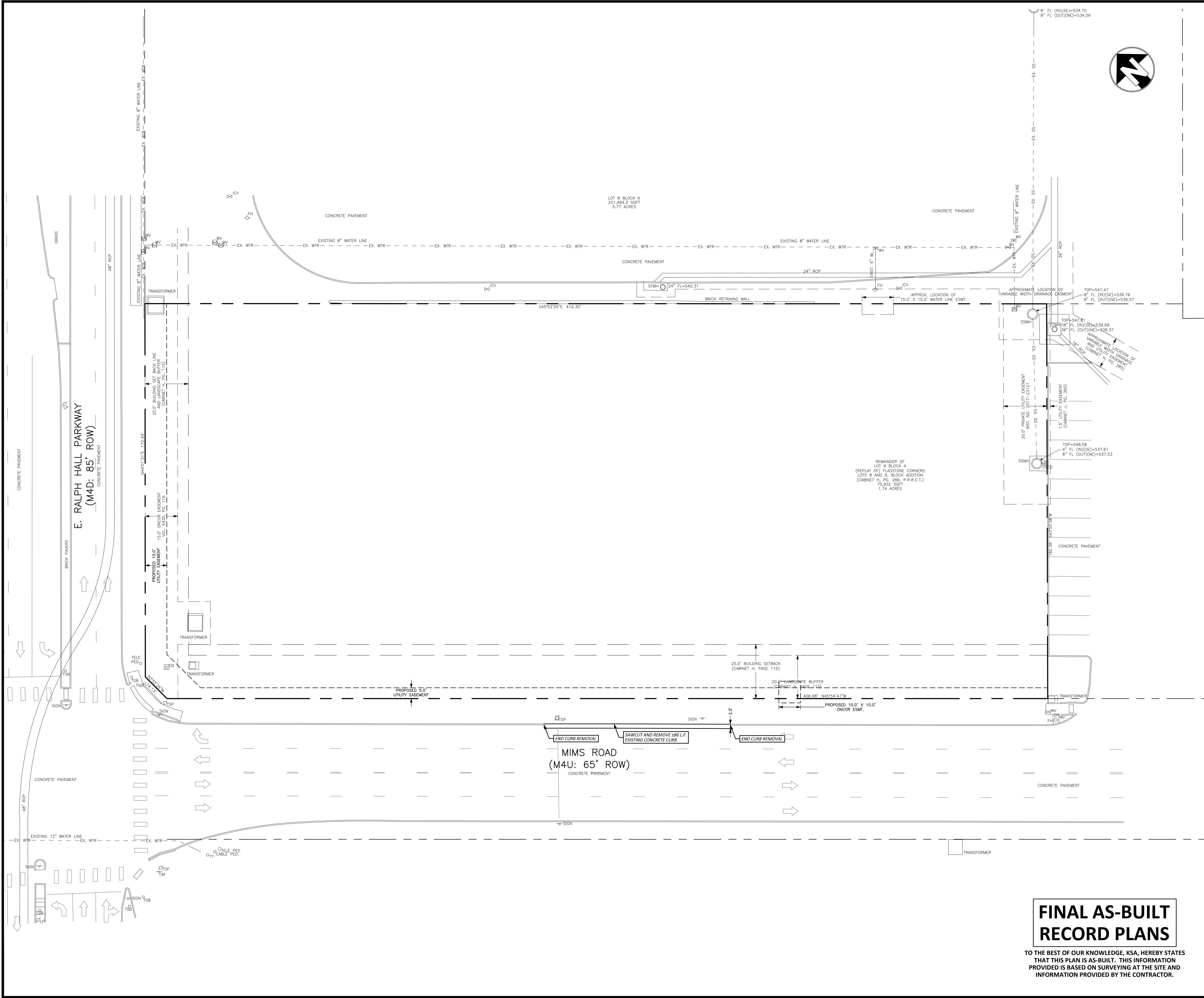


GENERAL CONSTRUCTION NOTES
Sheet 2 of 2
October 2020

CITY OF ROCKWALL
ENGINEERING DEPARTMENT

385 S. Goliad
Rockwall, Texas 75087

P (972) 771-7746
F (972) 771-7748



LEGEND

EXISTING	TO BE REMOVED	
WM	WM	WATER METER
WV	WV	WATER VALVE
FH	FH	FIRE HYDRANT
GM	GM	GAS METER
SSMH	SSMH	SANITARY SEWER MANHOLE
SSCO	SSCO	SANITARY SEWER CLEANOUT
UP	UP	UTILITY POLE
TSP	TSP	SITE LIGHTING POLE
TSB	TSB	TRAFFIC SIGNAL BOX
STMH	STMH	STORM MANHOLE
JB	JB	STORM JUNCTION BOX
CI	CI	CURB INLET
GI	GI	GRATE INLET
—	—	SIGN
---	---	PROPOSED SAWCUT LINE
■	■	ASPHALT PAVEMENT TO BE REMOVED
■	■	CONCRETE PAVEMENT TO BE REMOVED

- GENERAL DEMOLITION NOTES**
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, FEDERAL AND OSHA REGULATION.
 - ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
 - CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENTS/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. NO SEPARATE PAY FOR THIS WORK.
 - CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFY OWNER AND/OR ENGINEER PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OR RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN EXISTING CONDITIONS.
 - EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH LOCAL AND STATE REQUIREMENTS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGHOUT THE SITE DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PREVENT ANY NEGATIVE IMPACTS TO ADJACENT PROPERTIES.
 - CONTRACTOR SHALL CAREFULLY MONITOR WEATHER PATTERNS AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE SITE PRIOR TO WEEKENDS OR ABSENCES FROM THE WORK SITE.
 - NO HAZARDOUS MATERIALS WERE IDENTIFIED DURING PRELIMINARY SITE INVESTIGATIONS. ANY ITEMS FOUND SUSPECT DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

PERMITS NOTE

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

TOPOGRAPHIC SURVEY NOTE

EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS PREPARED BY SCI SURVEY CONSULTANTS, INC. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW. THE ENGINEER'S SEAL ON THESE PLANS DOES NOT APPLY TO THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON.

**FINAL AS-BUILT
RECORD PLANS**

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES
THAT THIS PLAN IS AS-BUILT. THIS INFORMATION
PROVIDED IS BASED ON SURVEYING AT THE SITE AND
INFORMATION PROVIDED BY THE CONTRACTOR.

RESPONSIBILITY NOTE

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

DRAWING PATHNAME [LAYOUT] ISOT DATE, TIME				
PROJECT NAME				
SHEET NAME				
DEMOLITION PLAN				
COURTIN DENTAL OFFICE ROCKWALL, TEXAS 75032				
DATE				
REVISION				
MARK				
5				
4				
3				
2				
1				
MARK				

811

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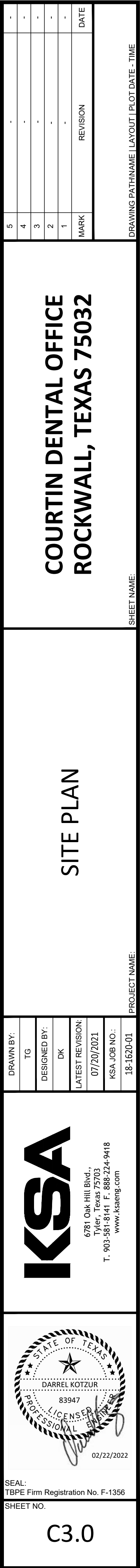
STATE OF TEXAS

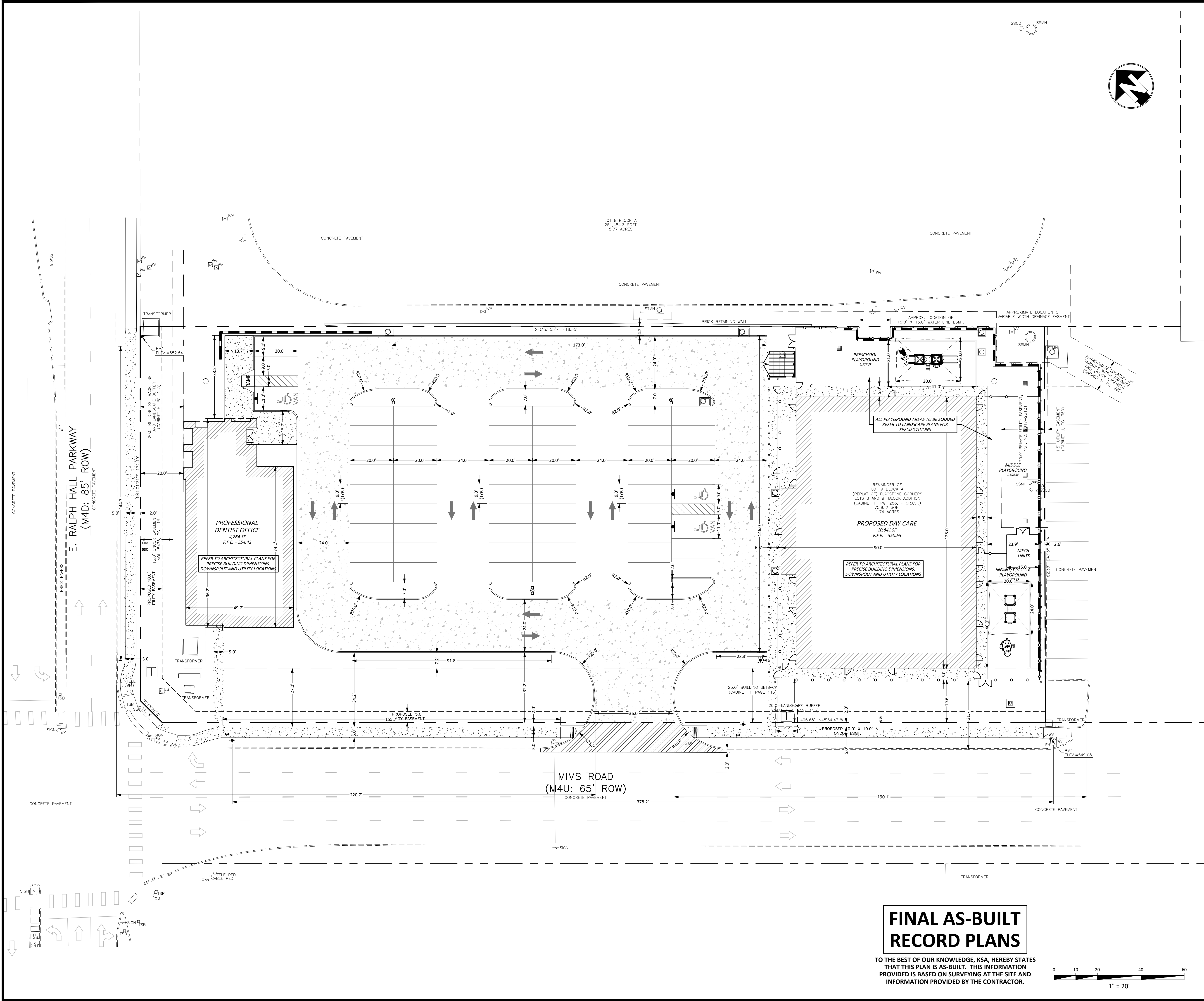
DARRELL KOTZUR
83947
LICENSED PROFESSIONAL ENGINEER
02/22/2022

SEAL:
TBPE Firm Registration No. F-1356

SHEET NO.

C2.0





LEGEND

EXISTING	PROPOSED	
WM	WM	WATER METER
WV	WV	WATER VALVE
FH	+	FIRE HYDRANT
GM	+	GAS METER
SSMH	○	SANITARY SEWER MANHOLE
SSCO	○	SANITARY SEWER CLEANOUT
UP	⚡	UTILITY POLE
LP	⚡	SITE LIGHTING POLE
TSP	⚡	TRAFFIC SIGNAL POLE
TSB	⚡	TRAFFIC SIGNAL BOX
STMH	○	STORM MANHOLE
JB	⊠	STORM JUNCTION BOX
CI	⊠	CURB INLET
GI	⊠	GRATE INLET
+	+	SIGN
---	---	EXISTING OVERHEAD ELECTRIC LINE
---	---	EXISTING CONCRETE CURB
---	---	PROPOSED CONCRETE CURB
---	---	NUMBER OF PARKING SPACES
---	---	PROPOSED FIRE LANE
---	---	PROPOSED CONCRETE SIDEWALK

- SITE NOTES**
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES, OSHA STANDARDS AND PROJECT SITE WORK SPECIFICATIONS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF VESTIBULES, SLOPED PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING ENTRANCE LOCATIONS.
 - CONTRACTOR SHALL REFER TO MEP PLANS FOR TOTAL NUMBER, LOCATIONS, SIZES AND OUTFALLS OF ROOF DOWNSPOUTS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OF RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
 - CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENTS/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH.
 - CONTRACTOR IS RESPONSIBLE FOR PROTECTION & REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT.
 - CONTRACTOR SHALL MATCH EXISTING CURB AND GUTTER IN GRADE, SIZE, TYPE AND ALIGNMENT AT ADJACENT ROADWAYS.
 - ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AS SHOWN IN THE LATEST EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
 - ALL SIGNS PLACED IN AREAS ACCESSIBLE BY VEHICLE TRAFFIC SHALL BE PLACED IN GUARD POST.
 - ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
 - ALL CURB RADII SHALL BE 4' UNLESS OTHERWISE NOTED.
 - FIRE LANES ARE SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO LOCAL CITY REQUIREMENTS FOR EXACT LOCATION.

- ACCESSIBILITY NOTES**
- PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
 - ALL SLOPES ON SIDEWALKS ADJACENT TO BUILDINGS SHALL BE AT 1" PER FOOT MAX. DOWN TO THE TOP OF CONCRETE CURB.
 - ALL SLOPES WITHIN ACCESSIBLE PARKING SPACES AND ADJACENT MANEUVERING AREAS SHALL BE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.
 - ALL SLOPES ON SIDEWALKS SHALL BE A MAXIMUM OF 2% CROSS SLOPE AND 5% IN THE DIRECTION OF TRAVEL.
 - ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN 5.0% (1:20) IS A RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5' X 5' LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12).
 - RAMP RUNS WITH A RISE GREATER THAN 6 INCHES SHALL HAVE HANDRAILS.
 - SURFACE OF CURB RAMPS SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE. SURFACE OF ACCESSIBLE ROUTES AND CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH.
 - THE RISE OF ANY RAMP SHALL BE 30 INCHES MAXIMUM.

INSPECTIONS/CERTIFICATIONS NOTE

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

PERMITS NOTE

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

TOPOGRAPHIC SURVEY NOTE

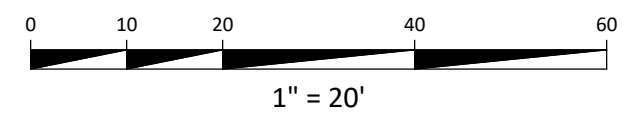
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**FINAL AS-BUILT
RECORD PLANS**

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



**COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032**

SITE DIMENSION PLAN

REVISION	DATE
5	
4	
3	
2	
1	
MARK	

DRAWN BY: TG

DESIGNED BY: DK

LATEST REVISION: 07/20/2021

KSA JOB NO.: 18-1620-01

KSA

6781 Oak Hill Blvd.,
Rockwall, Texas 75087
T. 903.554.8800
www.ksaeng.com

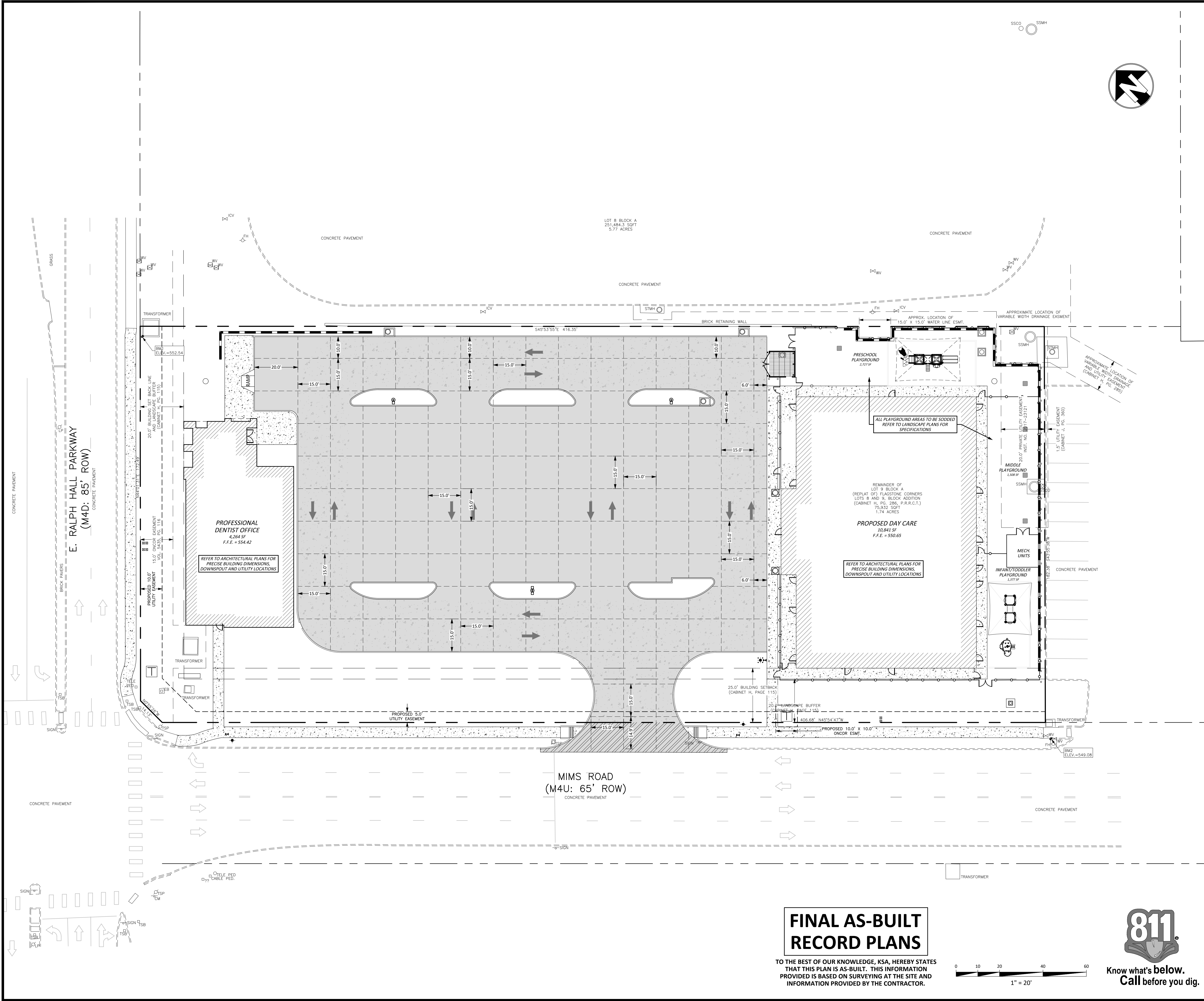
811

Know what's below.
Call before you dig.

SEAL: TBPE Firm Registration No. F-1356

SHEET NO. **C3.1**

PROJECT NAME: COURTIN DENTAL OFFICE
SHEET NAME: SITE DIMENSION PLAN
DRAWING PATHNAME: LAYOUT\BLOT DATE - TIME



LEGEND

EXISTING	PROPOSED	
WM	WM	WATER METER
WV	WV	WATER VALVE
FH	+	FIRE HYDRANT
CM	+	GAS METER
SSMH	○	SANITARY SEWER MANHOLE
SSCO	○	SANITARY SEWER CLEANOUT
UP	⚡	UTILITY POLE
LP	⚡	SITE LIGHTING POLE
TSP	⚡	TRAFFIC SIGNAL POLE
TSB	⚡	TRAFFIC SIGNAL BOX
STMH	○	STORM MANHOLE
JB	⊠	STORM JUNCTION BOX
CI	⊠	CURB INLET
GI	⊠	GRATE INLET
+	+	SIGN
---	---	EXISTING OVERHEAD ELECTRIC LINE
---	---	EXISTING CONCRETE CURB
---	---	PROPOSED CONCRETE CURB
---	---	PROPOSED FIRE LANE
---	---	PROPOSED 3,600 PSI (6.5 SACK) 4" SIDEWALK PAVEMENT WITH #3 BARS AT 18" O.C.E.W.
---	---	PROPOSED 3,600 PSI (6.5 SACK) 5" CONCRETE STANDARD DUTY PAVEMENT WITH #4 BARS AT 24" O.C.E.W.
---	---	PROPOSED 3,600 PSI (6.5 SACK) 6" CONCRETE HEAVY DUTY PAVEMENT WITH #4 BARS AT 18" O.C.E.W.
---	---	PROPOSED 3,600 PSI (6.5 SACK) 8" CONCRETE HEAVY DUTY PAVEMENT WITH #4 BARS AT 18" O.C.E.W.
---	---	PROPOSED 3,600 PSI (6.5 SACK) 7" CONCRETE HEAVY DUTY PAVEMENT TO MATCH MIMS RD. PAVEMENT SECTION
---	---	PROPOSED 3,600 PSI (6.5 SACK) 7" CONCRETE HEAVY DUTY PAVEMENT WITH #3 BARS AT 24" O.C.E.W.
---	---	SAW JOINT (S.J.)
---	---	ISOLATION JOINT W/ THICKENED EDGE

PROVIDE FIXED STRUCTURE ISOLATION JOINTS WHERE CONCRETE PAVEMENT IS ADJACENT TO THE BUILDING, DOCKWELL, COMPACTOR, LIGHT POLE BASES, INLET BOXES, ETC. (REFER TO DETAILS PLAN SHEETS)

PROVIDE LONGITUDINAL BUTT JOINTS AT ALL DRIVEWAY CONNECTIONS.

SCAFFOLD TO MINIMUM DEPTH OF 6". SUBGRADE SHALL BE STABILIZED BY MINIMUM 6" OF 8% HYDRATED LIME.

CHEMICAL STABILIZATION IS REQUIRED. CHEMICAL PRESSURE INJECTION SHOULD BE 10" IN DEPTH AND SHOULD EXTEND HORIZONTALLY A MINIMUM OF 5' BEYOND THE SLAB FOOTPRINT PERIMETER.

REFER TO GEOTECHNICAL REPORT PREPARED BY ON TIME GEOTECHNICAL IN MARCH OF 2019.

- SITE NOTES**
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES, OSHA STANDARDS AND PROJECT SITE WORK SPECIFICATIONS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF VESTIBULES, SLOPED PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING ENTRANCE LOCATIONS.
 - CONTRACTOR SHALL REFER TO MEP PLANS FOR TOTAL NUMBER, LOCATIONS, SIZES AND OUTFALLS OF ROOF DOWNSPOUTS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO ENGINEER OF RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
 - CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENTS/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH.
 - CONTRACTOR IS RESPONSIBLE FOR PROTECTION & REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT.
 - CONTRACTOR SHALL MATCH EXISTING CURB AND GUTTER IN GRADE, SIZE, TYPE AND ALIGNMENT AT ADJACENT ROADWAYS.
 - ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AS SHOWN IN THE LATEST EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
 - ALL SIGNS PLACED IN AREAS ACCESSIBLE BY VEHICLE TRAFFIC SHALL BE PLACED IN GUARD POST.
 - ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
 - ALL CURB RADII SHALL BE 4' UNLESS OTHERWISE NOTED.
 - FIRE LANES ARE SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO LOCAL CITY REQUIREMENTS FOR EXACT LOCATION.

- ACCESSIBILITY NOTES**
- PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
 - ALL SLOPES ON SIDEWALKS ADJACENT TO BUILDINGS SHALL BE AT 1" PER FOOT MAX. DOWN TO THE TOP OF CONCRETE CURB.
 - ALL SLOPES WITHIN ACCESSIBLE PARKING SPACES AND ADJACENT MANEUVERING AREAS SHALL BE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.
 - ALL SLOPES ON SIDEWALKS SHALL BE A MAXIMUM OF 2% CROSS SLOPE AND 5% IN THE DIRECTION OF TRAVEL.
 - ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN 5.0% (1:20) IS A RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5' X 5' LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.3% (1:12).
 - RAMP RUNS WITH A RISE GREATER THAN 6 INCHES SHALL HAVE HANDRAILS.
 - SURFACE OF CURB RAMP SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE. SURFACE OF ACCESSIBLE ROUTES AND CURB RAMP SHALL BE STABLE, FIRM AND SLIP RESISTANT. CURB RAMP SHALL NOT EXCEED 6' IN LENGTH.
 - THE RISE OF ANY RAMP SHALL BE 30 INCHES MAXIMUM.

INSPECTIONS/CERTIFICATIONS NOTE

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TOPOGRAPHIC SURVEY NOTE

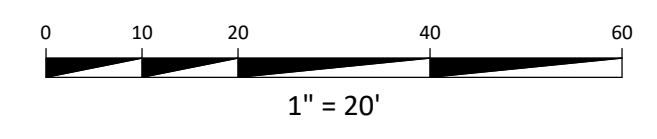
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FINAL AS-BUILT RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



REVISION		DATE
5		
4		
3		
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1		
MARK		

**COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032**

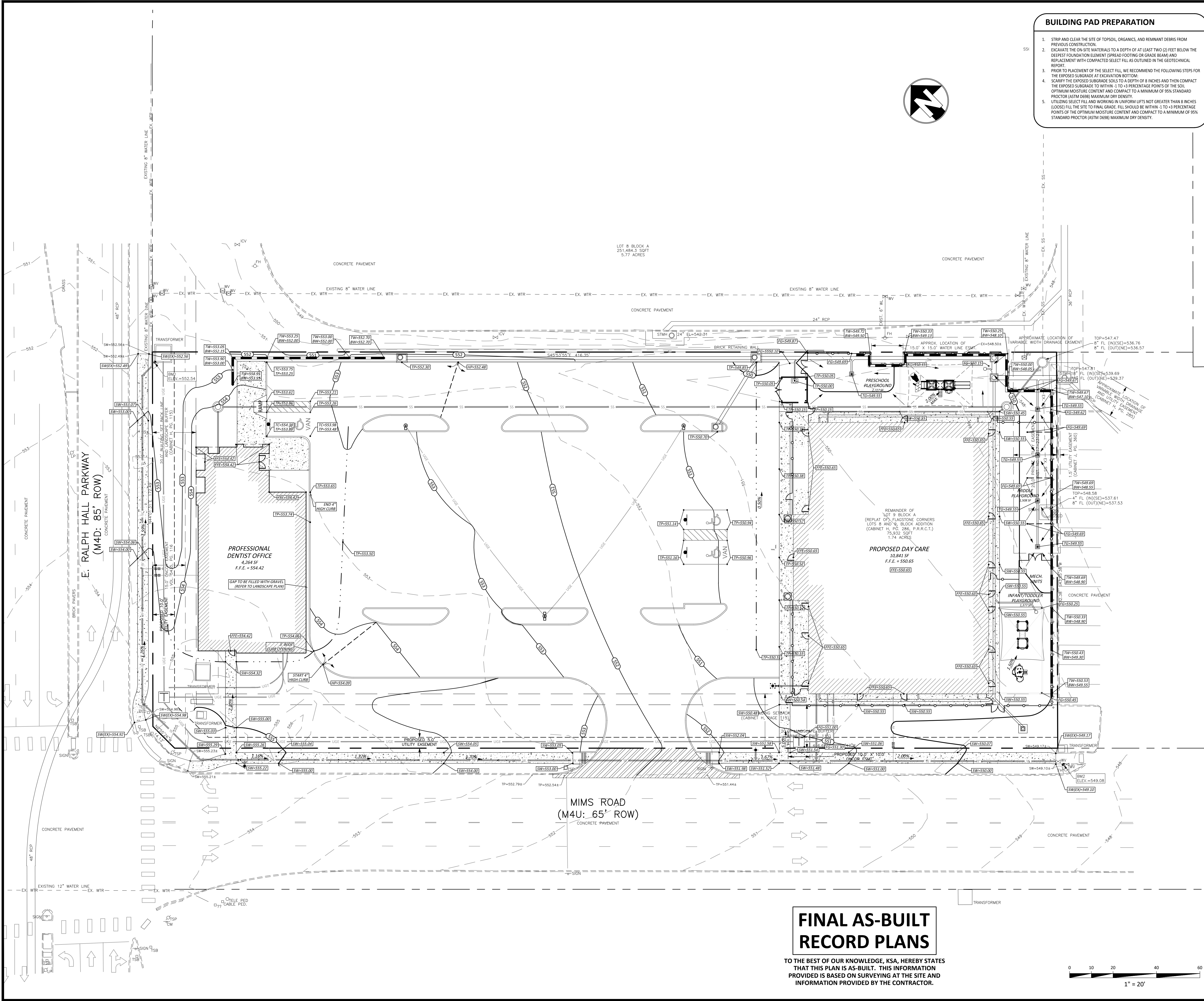
CONCRETE JOINTING PLAN

DRAWN BY: TG
DESIGNED BY: DK
LATEST REVISION: 07/20/2021
KSA JOB NO.: 18-1620-01
PROJECT NAME: PROJECT NAME

KSA
678 Oak Hill Blvd.,
Rockwall, Texas 75087
T. 972.574.1400
www.ksaeng.com

SEAL: TBPE Firm Registration No. F-1356
SHEET NO. C3.2

02/22/2022



BUILDING PAD PREPARATION

1. STRIP AND CLEAR THE SITE OF TOPSOIL, ORGANICS, AND REMNANT DEBRIS FROM PREVIOUS CONSTRUCTION.
2. EXCAVATE THE ON-SITE MATERIALS TO A DEPTH OF AT LEAST TWO (2) FEET BELOW THE DEEPEST FOUNDATION ELEMENT (SPREAD FOOTING OR GRADE BEAM) AND REPLACE WITH COMPACTED SELECT FILL AS OUTLINED IN THE GEOTECHNICAL REPORT.
3. PRIOR TO PLACEMENT OF THE SELECT FILL, WE RECOMMEND THE FOLLOWING STEPS FOR THE EXPOSED SUBGRADE: AT EXCAVATION BOTTOM:
 - a. SCARIFY THE EXPOSED SUBGRADE SOILS TO A DEPTH OF 8 INCHES AND THEN COMPACT THE EXPOSED SUBGRADE TO WITHIN 1 TO +3 PERCENTAGE POINTS OF THE SOIL OPTIMUM MOISTURE CONTENT AND COMPACT TO A MINIMUM OF 95% STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY.
 - b. UTILIZING SELECT FILL AND WORKING IN UNIFORM LIFTS NOT GREATER THAN 8 INCHES (LOOSE) FILL THE SITE TO FINAL GRADE. FILL SHOULD BE WITHIN 1 TO +3 PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT AND COMPACT TO A MINIMUM OF 95% STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY.

LEGEND

TC	TOP OF CURB
TP	TOP OF PAVEMENT
TW	TOP OF WALL
BW	BOTTOM OF WALL
TI	TOP OF INLET
TG	TOP OF GRATE
SW	SIDEWALK
FG	FINISHED GRADE
FPE	FINISHED FLOOR ELEVATION
HP	HIGH POINT
LP	LOW POINT
FL	FLOW LINE
XXXXXX	EXISTING SPOT ELEVATION
TP=XXX.XX	PROPOSED SPOT ELEVATION
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED RIDGE LINE
---	PROPOSED SWALE

GRADING NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES. CSHA STANDARDS AND PROJECT SITEWORK SPECIFICATIONS CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF EXISTING PUBLIC AND PRIVATE UTILITIES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL CALL 811 FOR FIELD LOCATION OF EXISTING UTILITIES. NOTE THAT 811 ONLY LOCATES THOSE UTILITIES REGISTERED WITH THE SERVICE AND DOES NOT LOCATE ALL UTILITIES.
3. THESE DRAWINGS DO NOT IMPLY TO SHOW ALL EXISTING UTILITIES. LOCATIONS AND SIZE OF EXISTING PUBLIC AND PRIVATE UTILITIES ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
4. ALL EXISTING STRUCTURES, FENCING AND TREES WITHIN CONSTRUCTION AREA, UNLESS NOTED OTHERWISE TO REMAIN, SHALL BE REMOVED AND DISPOSED OF OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
5. SITE GRADING ACTIVITIES SHALL NOT COMMENCE UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
6. DUST CONTROL SHALL BE ACCOMPLISHED BY WATERING DRY, EXPOSED AREAS ON A REGULAR BASIS. SPRAYING OF PETROLEUM BASED OR TOXIC LIQUIDS FOR THIS PURPOSE IS PROHIBITED. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
7. ALL CUT OR FILL SLOPES SHALL BE A 4:1 MINIMUM UNLESS OTHERWISE NOTED.
8. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4 INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL AS NEEDED. ALL DISTURBED AREAS SHALL BE VEGETATED EITHER PER THE LANDSCAPE PLAN OR THE STORM WATER POLLUTION PREVENTION PLAN, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS.
9. MATERIAL USED IN FILL AREAS WITH SLOPES 3:1 OR STEEPER SHALL HAVE A LIQUID LIMIT LESS THAN 50.
10. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3:1 OR STEEPER. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
11. EXISTING GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT.
12. PROPOSED GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT.
13. CONTRACTOR SHALL ADJUST GRADES ADJACENT TO EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
14. ALL PROPOSED SPOT ELEVATIONS ALONG CURB AND GUTTER ARE TO BE GUTTER ELEVATIONS UNLESS NOTED OTHERWISE.
15. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
16. ALL SLOPES ON SIDEWALKS ADJACENT TO BUILDINGS SHALL BE AT 1/4" PER FOOT MAX. DOWN TO THE TOP OF CONCRETE CURB.
17. ALL SLOPES WITHIN ACCESSIBLE PARKING SPACES AND ADJACENT MANEUVERING AREAS SHALL BE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS.
18. ALL SLOPES ON SIDEWALKS SHALL BE A MAXIMUM OF 2% CROSS SLOPE AND 5% IN THE DIRECTION OF TRAVEL.
19. ALL CURB RAMP SLOPES SHALL BE A MAXIMUM OF 8.3%.
20. GRADING LIMITS ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION STAKING. ALL GRADING ACTIVITIES SHALL BE CONDUCTED WITHIN THE PROPERTY BOUNDARY UNLESS NOTED OTHERWISE.

CAUTION - NOTICE TO CONTRACTOR

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

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

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

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

SEEDING AND MULCHING NOTE

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

INSPECTIONS/CERTIFICATIONS NOTE

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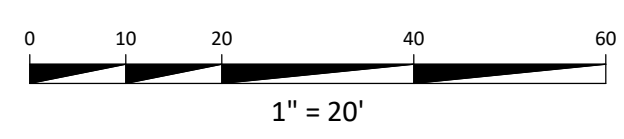
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FINAL AS-BUILT RECORD PLANS

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COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

GRADING PLAN

DRAWN BY:
TG

DESIGNED BY:
DK

LATEST REVISION:
07/20/2021

KSA JOB NO.:
18-1620-01

SEAL:
TBP&E Firm Registration No. F-1356

SHEET NO.
C4.0

DATE

REVISION

MARK

5

4

3

2

1

DRAWING PATHNAME \LAYOUT\ IS DATE - TIME

SHEET NAME

PROJECT NAME

811

Know what's below.
Call before you dig.

83947

DARRYL KOTLYAR

PROFESSIONAL ENGINEER

02/22/2022

811

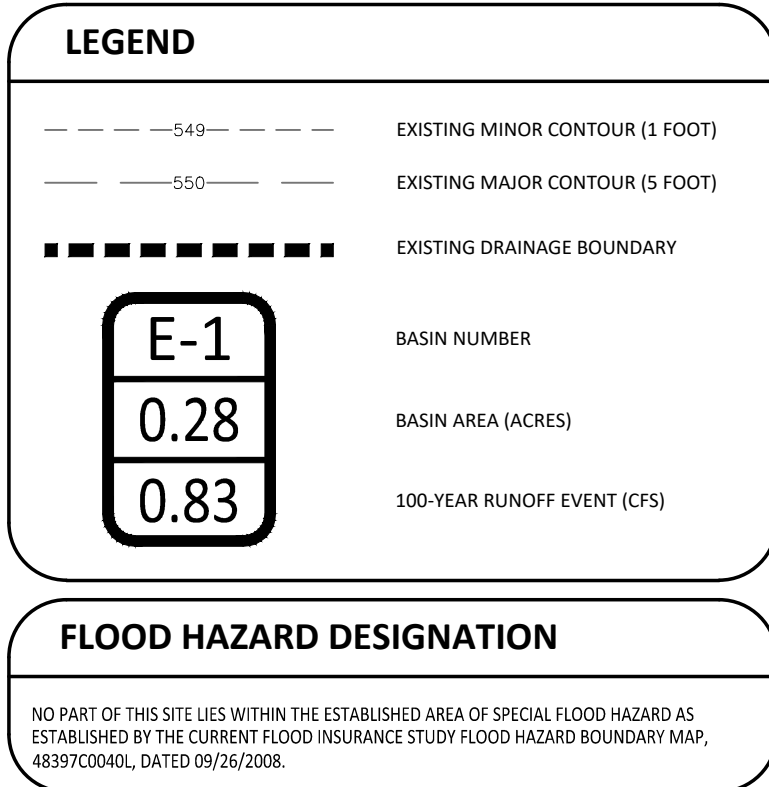
Know what's below.
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83947

DARRYL KOTLYAR

PROFESSIONAL ENGINEER

02/22/2022



Area ID	Drainage Area	Runoff Coeff.	C*A	Tc	Design Storm Frequency	Intensity	Storm Runoff	Drains To / Remarks
						I	Q	
	acres	C		min	yrs	in/hr	cfs	
E-1	0.28	0.35	0.10	20.00	100	8.30	0.82	Drains north to existing curb inlet within Rock Ridge Assisted Living
E-2	0.05	0.35	0.02	20.00			0.14	Drains west to E. Ralph Hall Pkwy. ROW
E-3	1.31	0.35	0.46	20.00			3.79	Drains to existing drop inlet at northeast corner of site
E-4	0.11	0.35	0.04	20.00			0.31	Drains to southeast corner of site, to Mims Rd. ROW
Total	1.74	0.35					5.06	

Calculations based on the City of Rockwall Standards of Design & Construction

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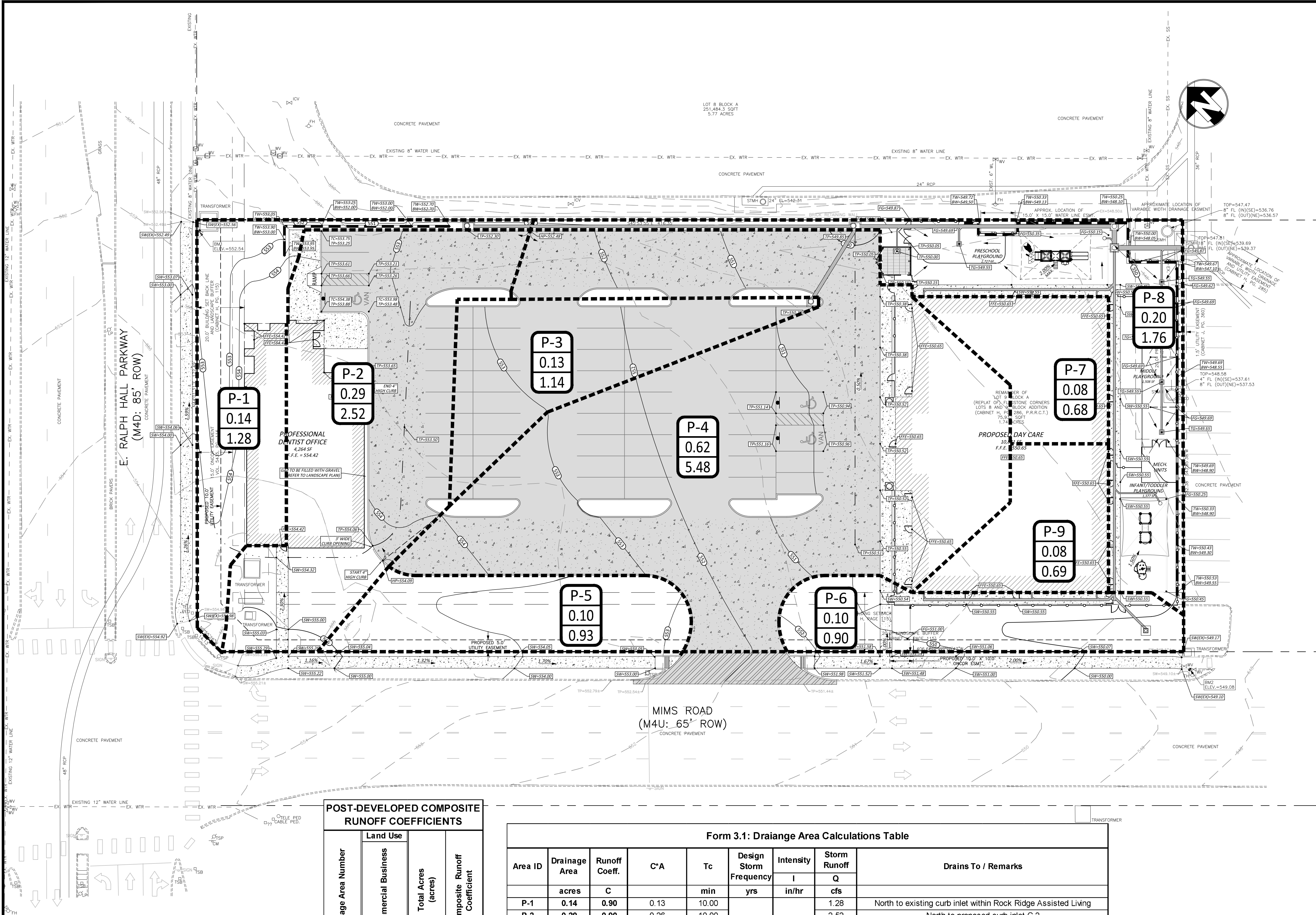


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 6781 Oak Hill Blvd., Rockwall, Texas 75087 T. 903-581-8141 F. 888-224-9418 www.ksaeng.com  02/22/2022 SEAL: T&PE Firm Registration No. F-1356 SHEET NO. C5.0	EXISTING DRAINAGE PLAN	COURTIN DENTAL OFFICE ROCKWALL, TEXAS 75032												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">DRAWN BY:</td><td style="width: 50%;">TG</td></tr> <tr><td>DESIGNED BY:</td><td>DK</td></tr> <tr><td>LATEST REVISION:</td><td>07/20/2021</td></tr> <tr><td>KSA JOB NO.:</td><td>18-1620-01</td></tr> <tr><td>PROJECT NAME:</td><td></td></tr> </table>	DRAWN BY:	TG	DESIGNED BY:	DK	LATEST REVISION:	07/20/2021	KSA JOB NO.:	18-1620-01	PROJECT NAME:		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">SHEET NAME:</td><td style="width: 50%;">DRAWING PATHNAME LAYOUT PLOT DATE - TIME</td></tr> </table>		SHEET NAME:	DRAWING PATHNAME LAYOUT PLOT DATE - TIME
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LATEST REVISION:	07/20/2021													
KSA JOB NO.:	18-1620-01													
PROJECT NAME:														
SHEET NAME:	DRAWING PATHNAME LAYOUT PLOT DATE - TIME													



LEGEND
--- 549 --- EXISTING MINOR CONTOUR (1 FOOT)
--- 550 --- EXISTING MAJOR CONTOUR (5 FOOT)
--- 549 --- PROPOSED MINOR CONTOUR (1 FOOT)
--- 550 --- PROPOSED MAJOR CONTOUR (5 FOOT)
- - - - - PROPOSED RIDGE LINE
- - - - - PROPOSED FLOW LINE
- - - - - PROPOSED DRAINAGE BOUNDARY

P-1
0.14
1.28

FLOOD HAZARD DESIGNATION
NO PART OF THIS SITE LIES WITHIN THE ESTABLISHED AREA OF SPECIAL FLOOD HAZARD AS ESTABLISHED BY THE CURRENT FLOOD INSURANCE STUDY FLOOD HAZARD BOUNDARY MAP, 48397C0040, DATED 09/26/2008.

DATE	REVISION	MARK
5		
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COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

PROPOSED DRAINAGE PLAN

DRAWN BY:	TG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
KSA JOB NO.:	18-1620-01

KSA
6781 Oak Hill Blvd.,
Rockwall, Texas 75087
T: 972.554.8888
www.ksaeng.com

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Know what's below.
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02/22/2022

SEAL: TBPE Firm Registration No. F-1356
SHEET NO.

C5.1

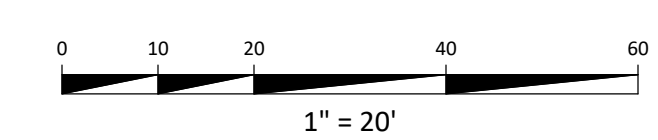
POST-DEVELOPED COMPOSITE RUNOFF COEFFICIENTS			
Drainage Area Number	Land Use	Total Acres (acres)	Composite Runoff Coefficient
	Commercial Business		
P-1	0.14	0.14	0.90
P-2	0.29	0.29	0.90
P-3	0.13	0.13	0.90
P-4	0.62	0.62	0.90
P-5	0.10	0.10	0.90
P-6	0.10	0.10	0.90
P-7	0.08	0.08	0.90
P-8	0.20	0.20	0.90
P-9	0.08	0.08	0.90
Total	1.74	1.74	0.90

Form 3.1: Drainage Area Calculations Table									
Area ID	Drainage Area	Runoff Coeff.	C*A	Tc	Design Storm Frequency	Intensity	Storm Runoff	Drains To / Remarks	
	acres	C		min	hrs	in/hr	cfs		
P-1	0.14	0.90	0.13	10.00	100	9.80	1.28	North to existing curb inlet within Rock Ridge Assisted Living	
P-2	0.29	0.90	0.26	10.00			2.52	North to proposed curb inlet C-2	
P-3	0.13	0.90	0.12	10.00			1.14	East to proposed curb inlet C-3	
P-4	0.62	0.90	0.56	10.00			5.48	Northeast to proposed curb inlet C-1	
P-5	0.10	0.90	0.09	10.00			0.93	Southeast to Mims Rd. ROW	
P-6	0.10	0.90	0.09	10.00			0.90		
P-7	0.08	0.90	0.07	10.00			0.68	Roof drains connect to proposed storm sewer pipe; discharges to existing drop inlet at northeast corner of site	
P-8	0.20	0.90	0.18	10.00			1.76	Two (2) playground drains connect to proposed storm sewer pipe	
P-9	0.08	0.90	0.07	10.00			0.69	Roof drains connect to proposed storm sewer pipe; discharges to existing drop inlet at northeast corner of site	
Total	1.74	0.90					15.37		

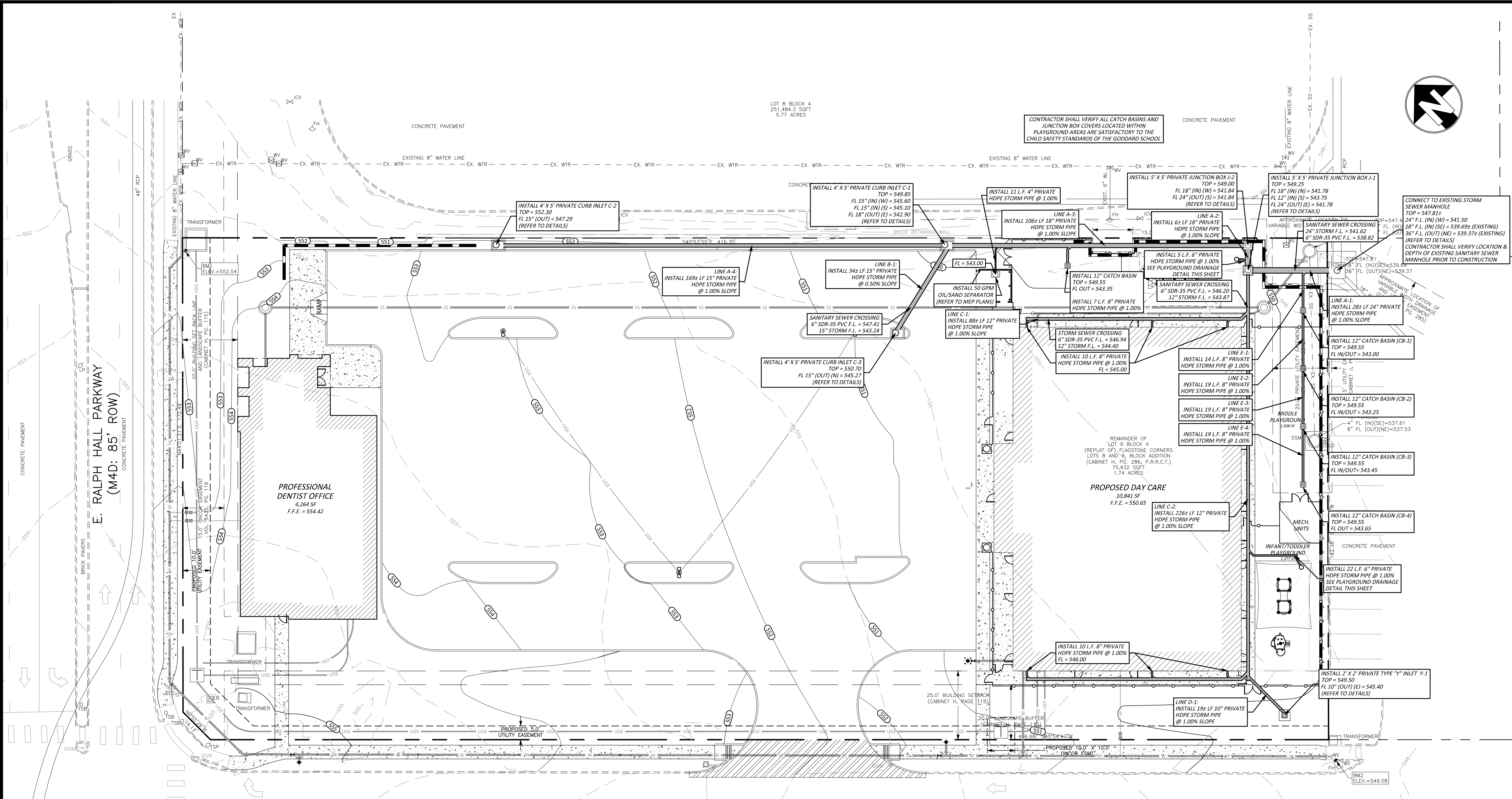
Calculations based on the City of Rockwall Standards of Design & Construction

FINAL AS-BUILT RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



RESPONSIBILITY NOTE
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.



LEGEND

EXISTING	PROPOSED	STORM MANHOLE
Symbol	Symbol	Symbol
Symbol	Symbol	STORM JUNCTION BOX
Symbol	Symbol	CURB INLET
Symbol	Symbol	GRATE INLET
Symbol	Symbol	SAFETY END TREATMENT
Symbol	Symbol	PROPOSED STORM SEWER PIPE
Symbol	Symbol	EXISTING CONTOUR
Symbol	Symbol	PROPOSED MINOR CONTOUR (1 FOOT)
Symbol	Symbol	PROPOSED MAJOR CONTOUR (5 FOOT)

DRAINAGE NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES, OSHA STANDARDS AND PROJECT SITE WORK SPECIFICATIONS. CONTRACTOR SHALL VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL CALL 811 FOR FIELD LOCATION OF EXISTING UTILITIES. NOTE THAT 811 ONLY LOCATES THOSE UTILITIES REGISTERED WITH THE SERVICE AND DOES NOT LOCATE ALL UTILITIES.
3. THESE DRAWINGS DO NOT IMPLY TO SHOW ALL EXISTING UTILITIES, LOCATIONS AND SIZES OF EXISTING PUBLIC AND PRIVATE UTILITIES ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
4. ALL EXISTING STRUCTURES, FENCING AND TREES WITHIN CONSTRUCTION AREA, UNLESS NOTED OTHERWISE TO REMAIN, SHALL BE REMOVED AND DISPOSED OF OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
5. CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE FOR THE DURATION OF THE PROPOSED PROJECT AND SURROUNDING AREAS.
6. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
7. ALL ROOF DRAINS TO THE BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END AND SEQUINTE.

****CAUTION** - NOTICE TO CONTRACTOR**

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

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

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

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

SEEDING AND MULCHING NOTE

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

INSPECTIONS/CERTIFICATIONS NOTE

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

PERMITS NOTE

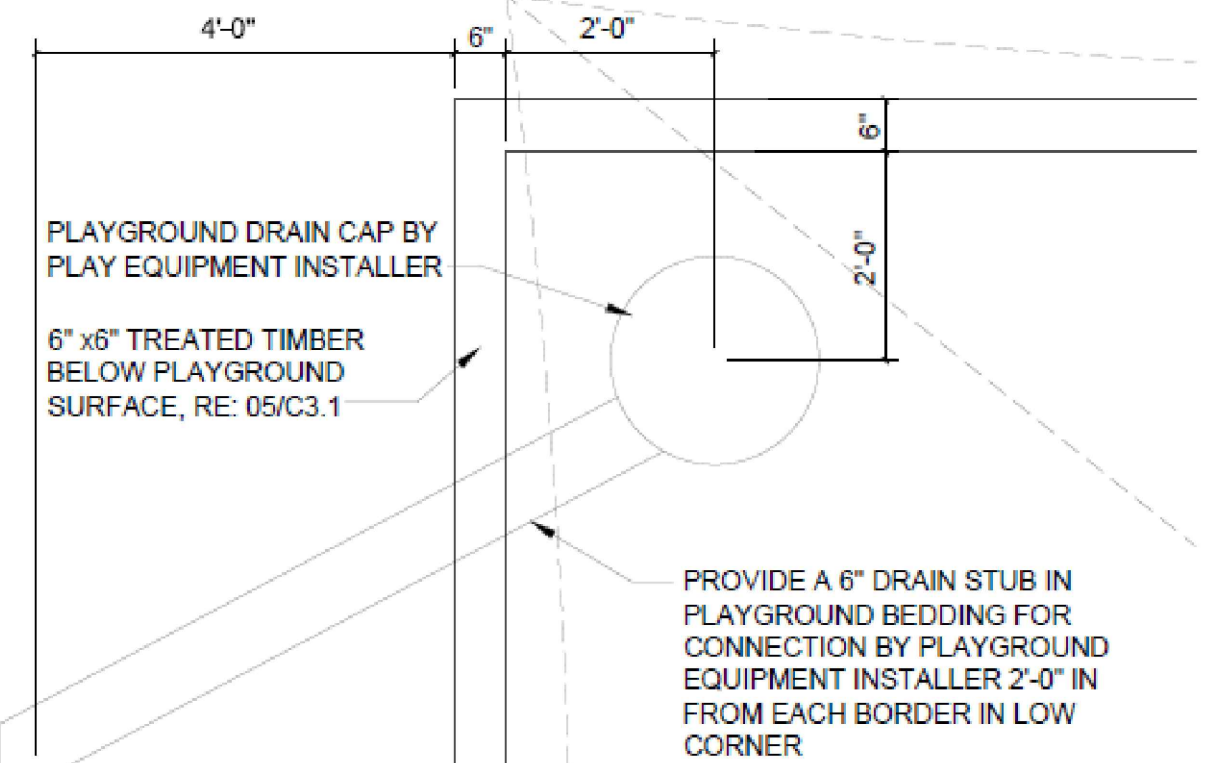
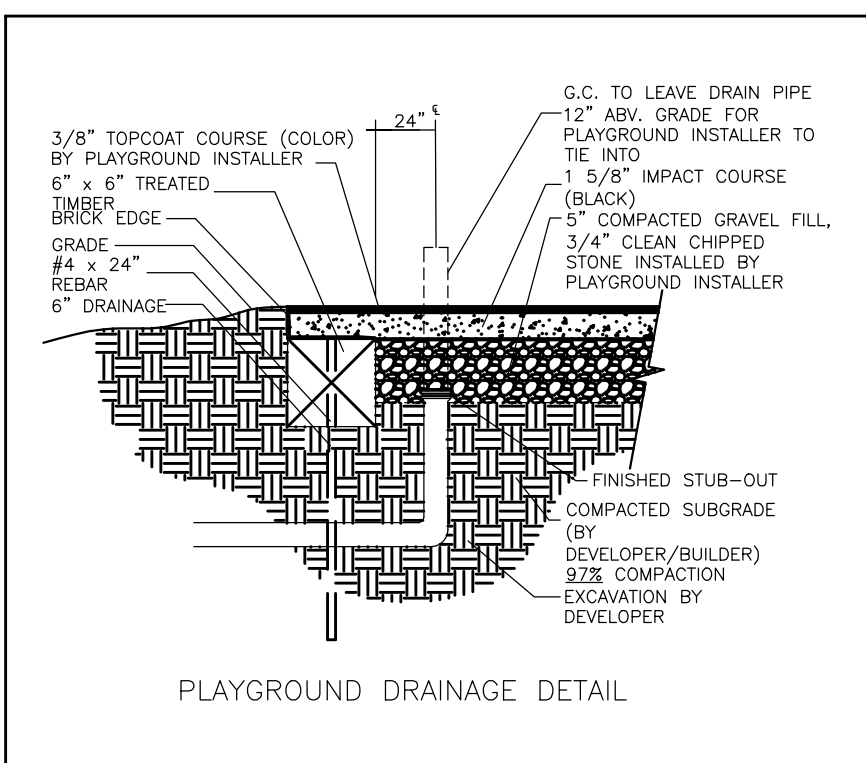
CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

TOPOGRAPHIC SURVEY NOTE

EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS PREPARED BY SCI SURVEY CONSULTANTS, INC. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW. THE ENGINEER'S SEAL ON THESE PLANS DOES NOT APPLY TO THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON.

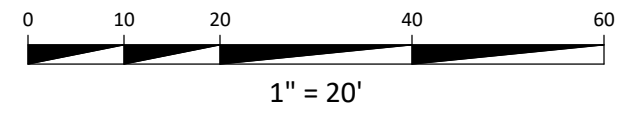
Form 3.3: Storm Sewer Calculations Table																																											
System ID	Length	# of Barrels	Pipe Size	Box		Type	Area	Wetted Perimeter	Hydraulic Radius	Manning's n	Flowline Elevation		Incremental Drainage Area			Accumulated	Upstream	Design Storm Freq.	Intensity	Runoff	Conduit Capacity	Partial Flow	Velocity	Time in Conduit	Friction Slope	Friction Headloss	HGL		Headloss Calculations						Design HGL	Top of Curb Elev.	HGL Depth Below T/C	Remarks					
											Upstream	Downstream	Slope	Inlet Area	Runoff Coeff.												Incremental	C'A	U/S	D/S	V1 ^ 2 / 2g	V2 ^ 2 / 2g	Jct. Type	Coeff.					Headloss				
																																								C	C'A	Kj	Hi
A-4	169	1	15	-	-	HDPE	1.23	3.93	0.31	0.012	547.29	545.60	0.01	P-2	0.29	0.90	0.26	0.26	1.37	100	9.80	2.52	7.02	Yes	2.06	1.37	0.0004	0.073	543.60	543.53	-	0.07	Curb Inlet	1.25	0.08	547.37	552.30	4.93	-				
B-1	34	1	15	-	-		1.23	3.93	0.31		545.27	545.10	0.005	P-3	0.13	0.90	0.12	0.12	0.61			1.14	4.96	Yes	0.93	0.61	0.0002	0.007	545.11	545.10	-	0.01	Curb Inlet	1.25	0.02	545.29	550.70	5.41	-				
A-3	106	1	18	-	-		1.77	4.71	0.38		542.90	541.84	0.01	P-4, P-5	0.73	0.90	0.65	1.03	1.68			10.06	11.41	Yes	5.69	0.31	0.0011	0.112	542.00	541.89	0.07	0.50	Curb Inlet	1.25	0.63	543.53	549.85	6.32	-				
C-2	226	1	12	-	-		0.79	3.14	0.25		546.12	543.75	0.01	P-9	0.10	0.90	0.09	0.18	1.65			1.79	3.96	Yes	2.29	1.65	0.0006	0.126	544.94	544.81	-	0.08	DS	0.25	0.02	546.14	550.60	4.46	-				
D-1	19	1	10	-	-		0.55	2.62	0.21		545.40	545.21	0.01	P-6	0.10	0.90	0.09	0.09	0.19			0.90	2.38	Yes	1.68	0.19	0.0005	0.009	546.15	546.14	-	0.04	"V" Type	1.25	0.05	545.45	549.50	4.05	-				
C-1	88	1	12	-	-		0.79	3.14	0.25		544.81	543.75	0.01	P-7	0.08	0.90	0.07	0.07	3.34			0.68	4.25	Yes	0.86	1.70	0.0002	0.019	543.77	543.75	-	0.01	DS	0.25	0.00	544.81	550.60	5.79	-				
A-2	6	1	24	-	-		3.14	6.28	0.50		541.84	541.78	0.01	P-10	0.08	0.90	0.08	1.10	1.71			10.81	24.57	Yes	3.44	0.03	0.0005	0.003	541.86	541.86	0.50	0.18	Jct. Box	0.25	0.05	541.89	548.50	6.61	-				
E-4	19	1	8	-	-		0.35	2.09	0.17		543.65	543.45	0.01	P-8	0.02	0.90	0.02	0.02	1.10			0.20	1.35	Yes	0.58	0.54	0.0002	0.004	543.45	543.45	0.02	0.01	Catch Basin	1.25	0.01	543.66	549.55	5.89	-				
E-3	19	1	8	-	-		0.35	2.09	0.17		543.45	543.25	0.01		0.02	0.90	0.02	0.04	0.55			0.41	1.35	Yes	1.17	0.27	0.0004	0.007	543.26	543.25	0.05	0.02	Catch Basin	1.25	0.03	543.48	549.55	6.07	-				
E-2	19	1	8	-	-		0.35	2.09	0.17		543.25	543.00	0.01		0.02	0.90	0.02	0.06	0.28			0.61	1.51	Yes	1.75	0.18	0.0006	0.011	543.01	543.00	0.08	0.05	Catch Basin	1.25	0.06	543.31	549.55	6.24	-				
E-1	14	1	8	-	-	0.35	2.09	0.17	543.00	542.85	0.01	0.02	0.90		0.02	0.08	0.10	0.81	1.36	Yes	2.33	0.10	0.0007	0.010	542.86	542.85	-	0.08	Catch Basin	1.25	0.11	543.11	549.55	6.44	-								
A-1	28	1	24	-	-	3.14	6.28	0.50	541.78	541.50	0.01	-	-	-	-	1.44	1.81	14.10	24.57	Yes	4.49	0.10	0.0007	0.019	543.52	543.50	0.18	0.31	Jct. Box	0.25	0.08	541.86	548.75	6.89	-								

Form 3.2: Inlet Design Calculations Table																	
Inlet ID	Design Freq.	C	Area ID	Area Runoff				Inlets Capacity				Inlet By-pass			Remarks		
				Time of Concentration	Intensity	Area	Runoff	Upstream Bypass	Total Gutter Flow	Inlet Length		Inlet Capacity	Flow				
				Tc	I	A	Q	C'A	Qa	Required Lreq'd	Actual Lactual	Qc	Qbypass	C'A		To Inlet ID	
	(min)	(in/hr)	(acres)	(cfs)		(cfs)	(ft)		(cfs)	(cfs)							
C-2	100	0.90	P-2	10.00	9.80	0.29	2.52	-	2.52	5.00	5.00	3.25	-	-	-	-	
C-3		0.90	P-3			0.13	1.14	-	1.14	5.00	5.00	3.25	-	-	-	-	
C-1		0.90	P-4, P-5			0.73	6.40	-	6.40	5.00	5.00	6.99	-	-	-	-	
J-2		0.90	P-2, P-3, P-4, P-5			1.14	10.06	-	-	-	-	-	-	-	-	(5'x5')	
CB-4		0.90	P-8			0.02	0.20	-	-	1.00	1.00	0.35	-	-	-	-	(1'x1')
CB-3		0.90				0.02	0.20	-	-	1.00	1.00	0.35	-	-	-	-	(1'x1')
CB-2		0.90				0.02	0.20	-	-	1.00	1.00	0.35	-	-	-	-	(1'x1')
CB-1		0.90				0.02	0.20	-	-	1.00	1.00	0.35	-	-	-	-	(1'x1')
Y-1		0.90				0.10	0.90	-	0.90	8	8	8.71	-	-	-	-	(2'x2')
J-1		0.90	P-2, P-3, P-4, P-5, P-6, P-7, P-9, P-10			1.51	13.28	-	-	-	-	-	-	-	-	-	-



FINAL AS-BUILT RECORD PLANS

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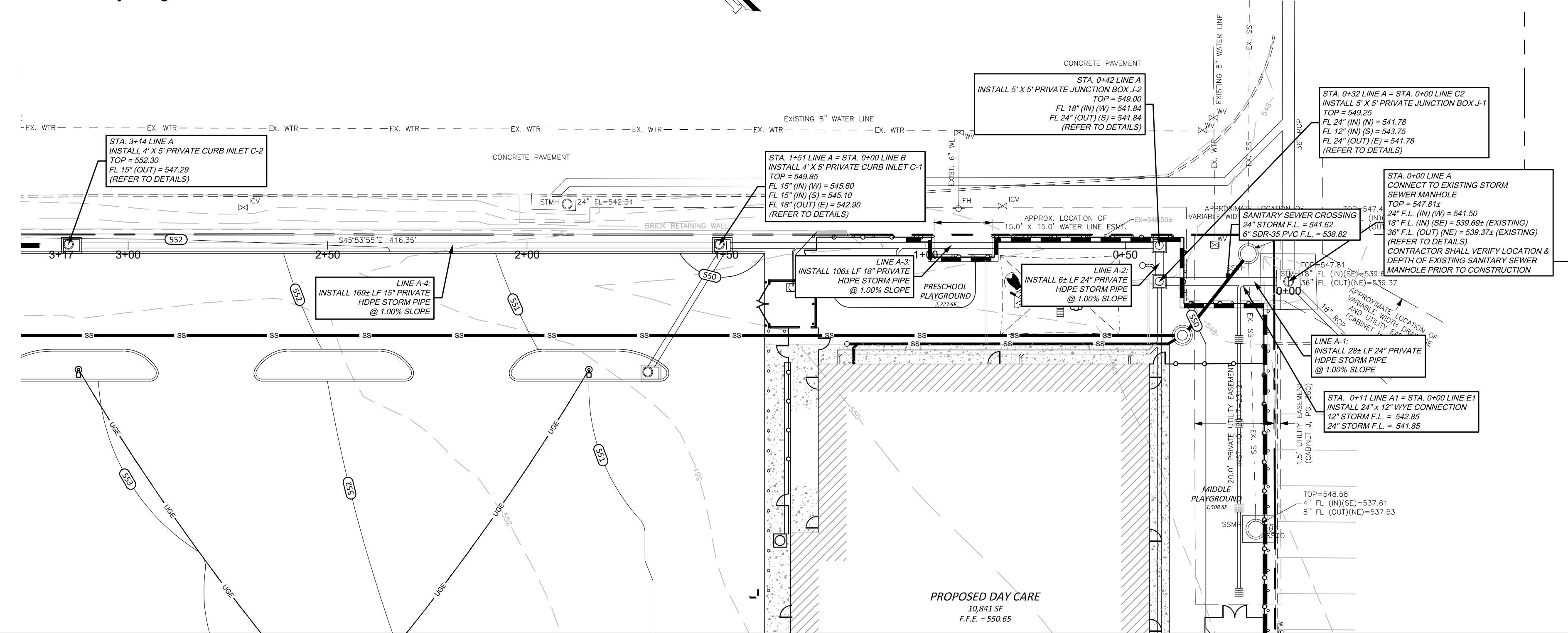
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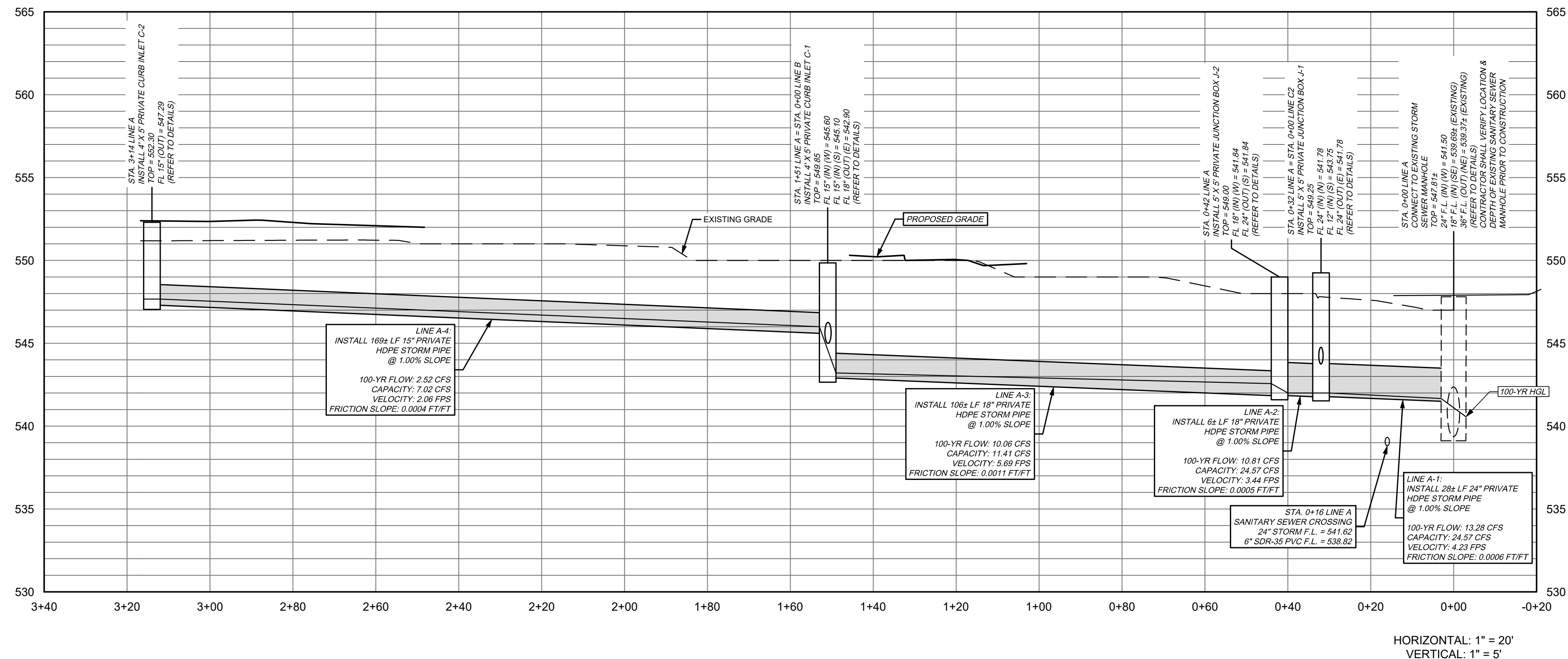
DRAWN BY: TG		DESIGNED BY: DK		LATEST REVISION: 07/20/2021		KSA JOB NO.: 18-1620-01		PROJECT NAME: COURTIN DENTAL OFFICE ROCKWALL, TEXAS 75032	
SEAL: TBPE Firm Registration No. F-1356		SHEET NO. C6.0		DATE: 02/22/2022		MARK: 5, 4, 3, 2, 1		REVISION: 1	



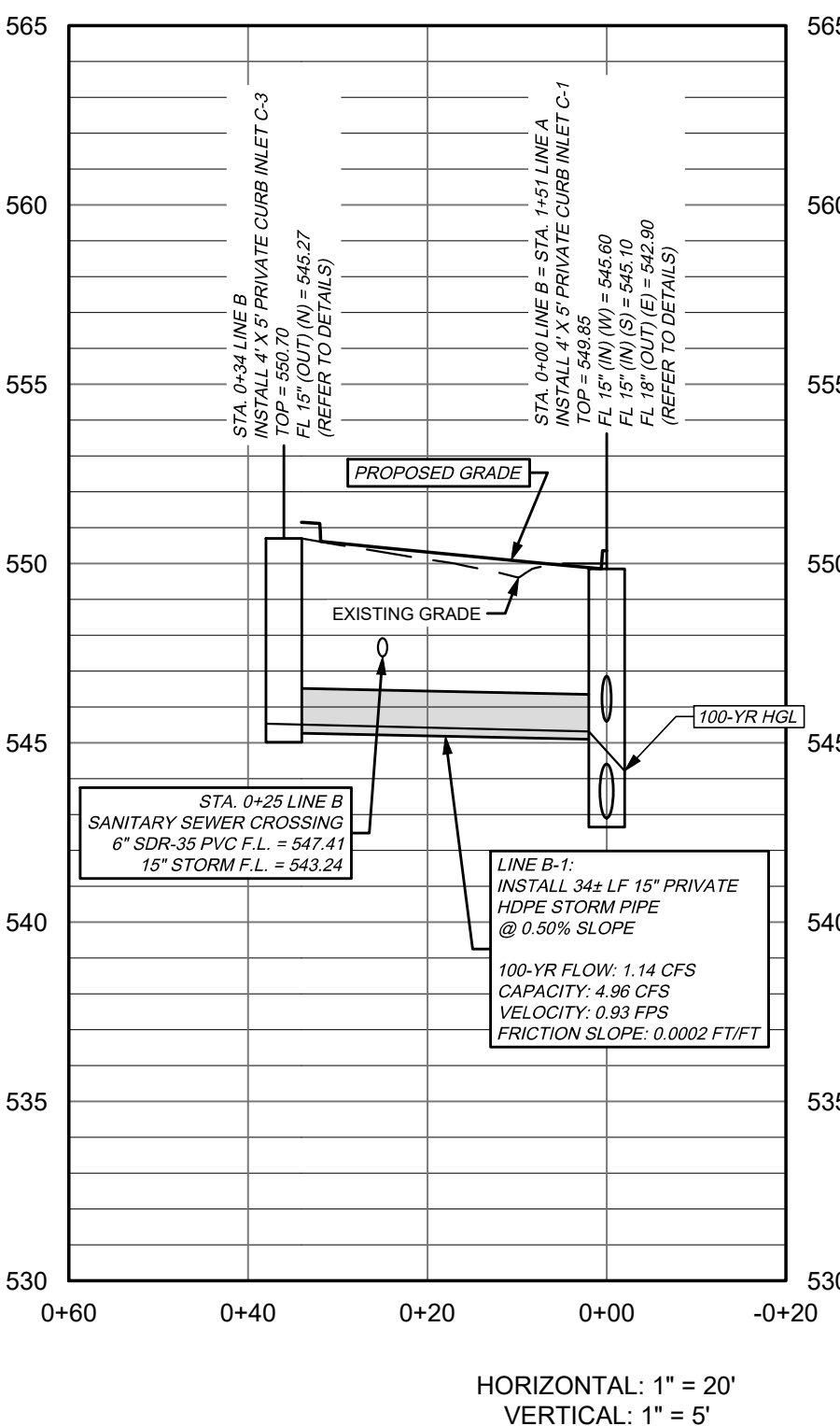
Know what's below.
Call before you dig.



LINE A



LINE B



FINAL AS-BUILT RECORD PLANS

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INFORMATION PROVIDED BY THE CONTRACTOR.

STORM PLAN & PROFILE LINE A & LINE B

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

DRAWN BY:	TG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
KSA JOB NO.:	18-1620-01

KSA
678 Oak Hill Blvd.,
Rockwall, Texas 75087
T. 972.551.1414
www.ksaeng.com



SEAL:
TBPE Firm Registration No. F-1356
SHEET NO.

C6.1

5	4	3	2	1	MARK	REVISION	DATE

DRAWING PATHNAME [LAYOUT] ISOT DATE - TIME

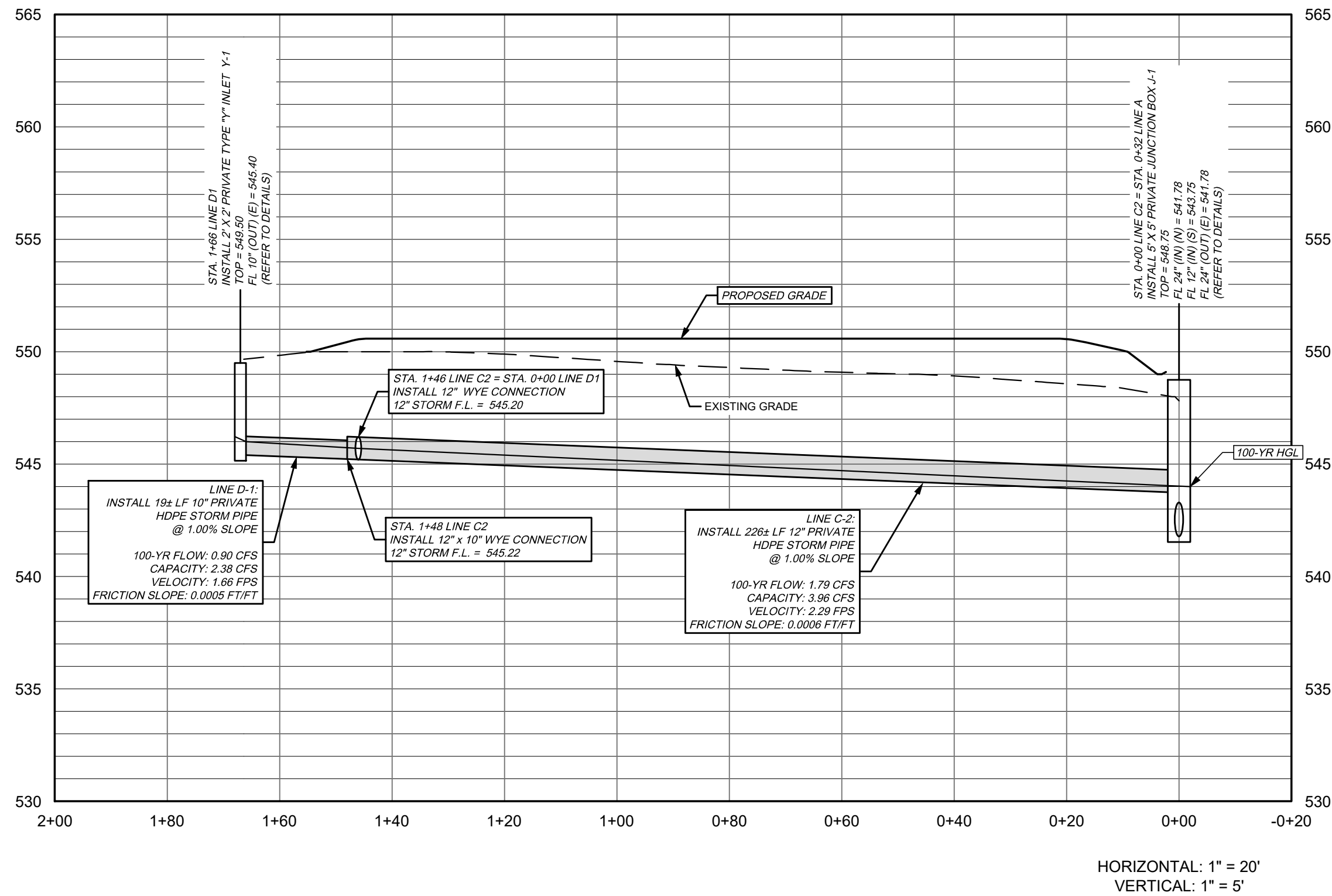
SHEET NAME

PROJECT NAME

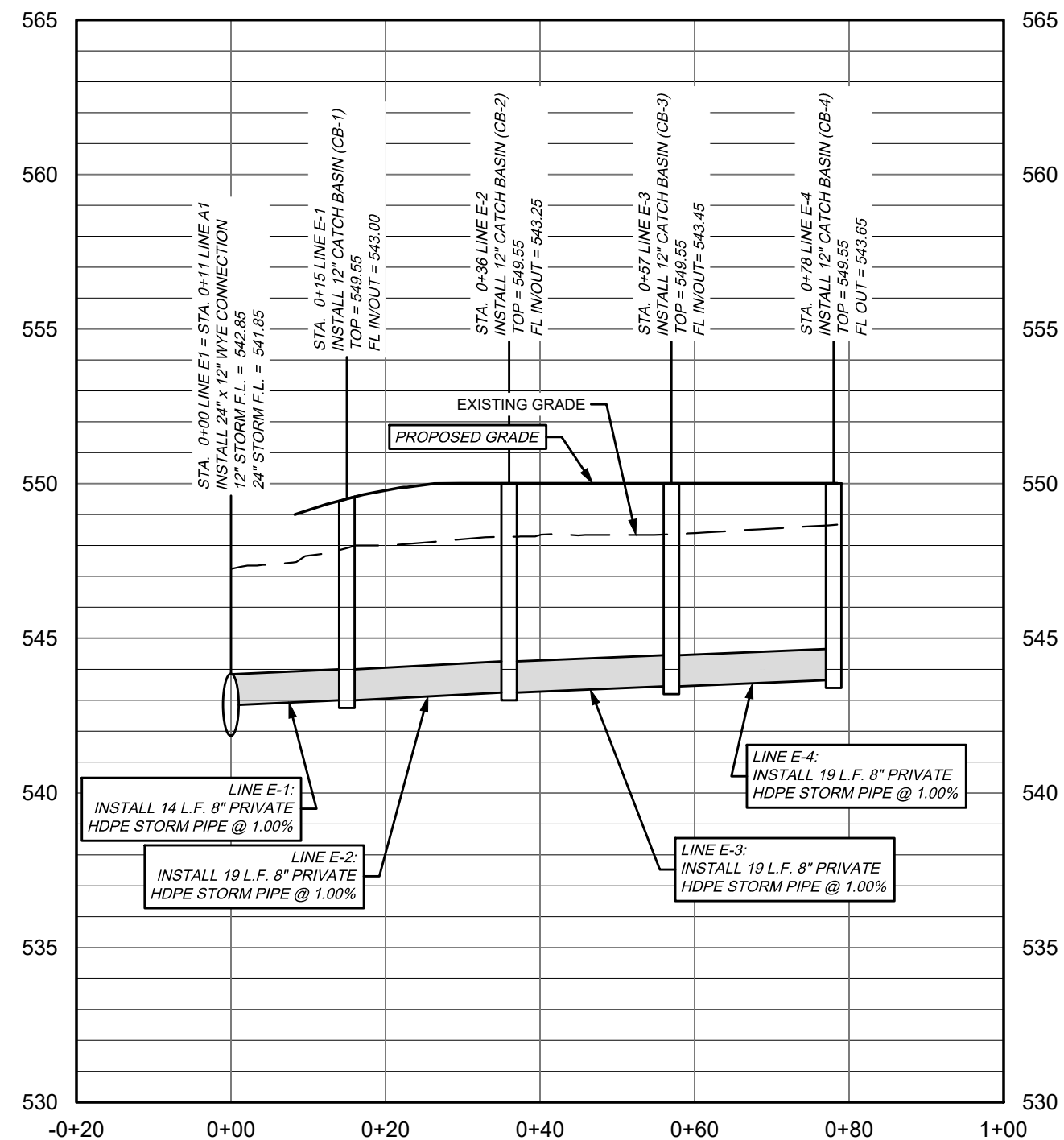
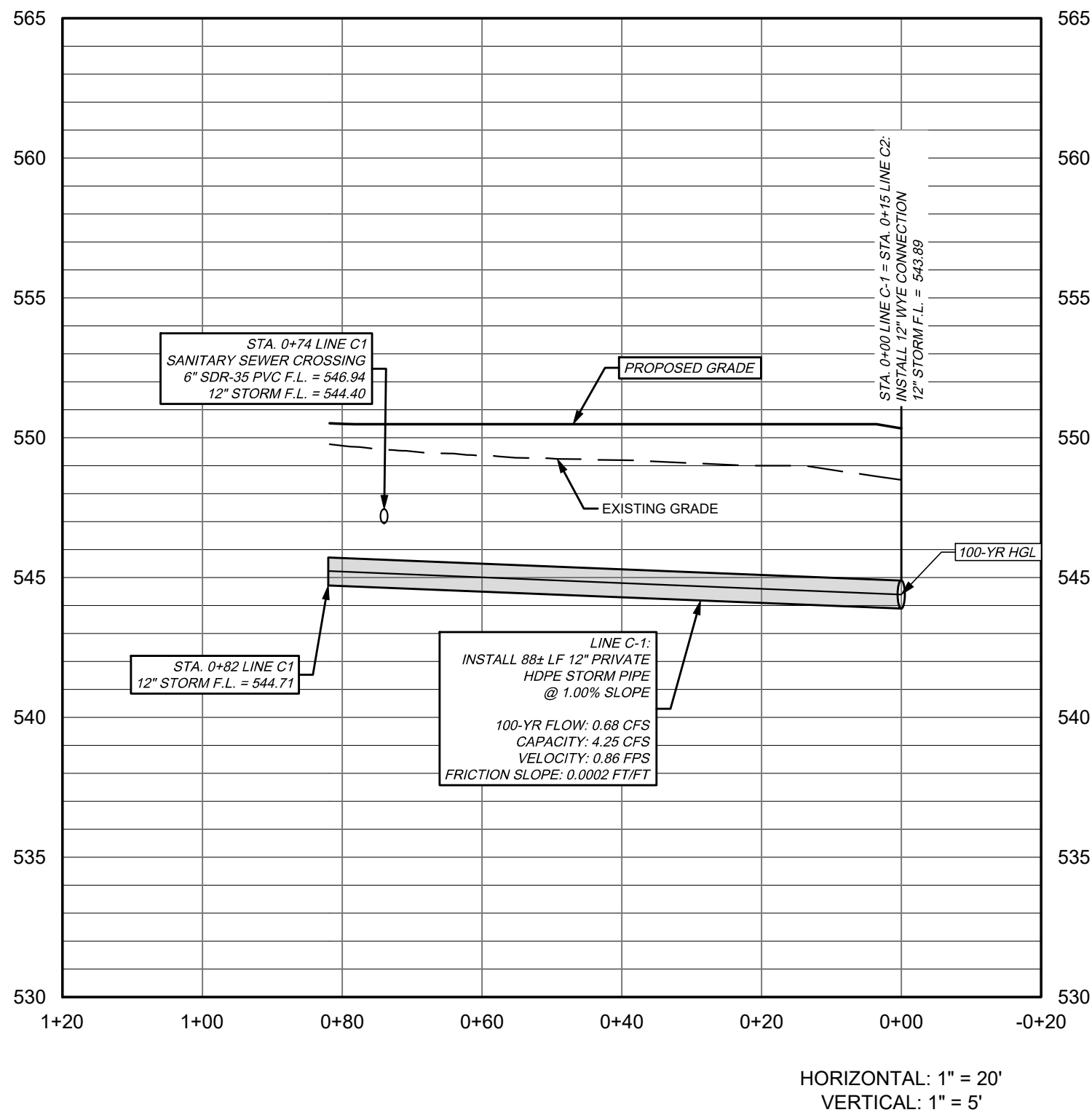


Know what's below.
Call before you dig.

LINE C2 & D1

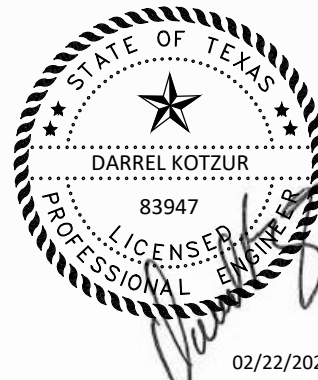


LINE C1



**FINAL AS-BUILT
RECORD PLANS**

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES
THAT THIS PLAN IS AS-BUILT. THIS INFORMATION
PROVIDED IS BASED ON SURVEYING AT THE SITE AND
INFORMATION PROVIDED BY THE CONTRACTOR.



SEAL:
TBPE Firm Registration No. F-1356
SHEET NO.

C6.2

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

STORM PLAN & PROFILE LINE
C & LINE D

MARK	REVISION	DATE
5		
4		
3		
2		
1		

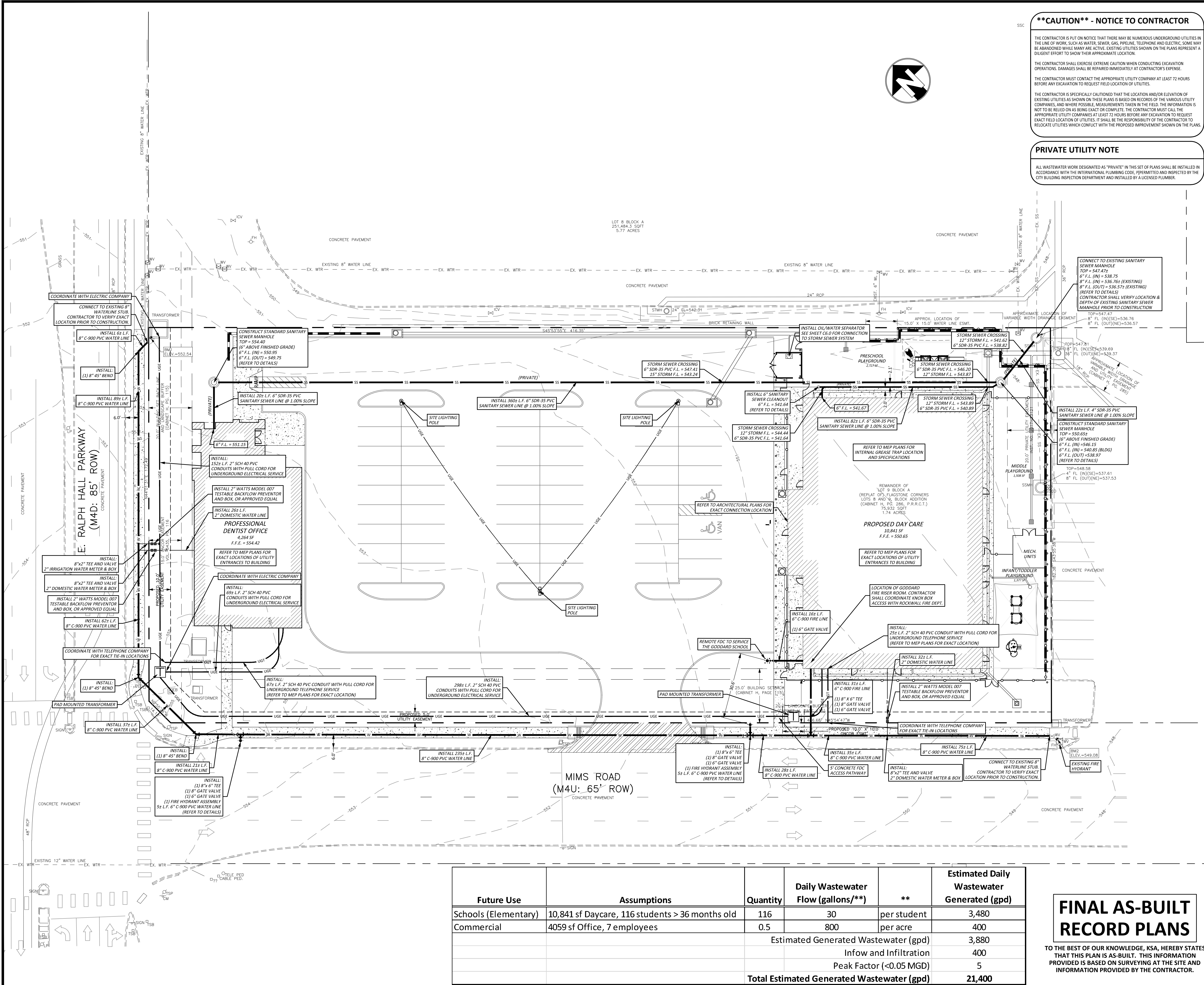
SHEET NAME

PROJECT NAME

DRAWN BY:	KG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
KSA JOB NO.:	18-1620-01

KSA
678 Oak Hill Blvd.,
Rockwall, Texas 75087
T. 972.593.8800
www.ksaeng.com

DRAWING PATHNAME [LAYOUT] IS OT DATE - TIME



LEGEND

EXISTING	PROPOSED	
8" WM	8"	WATER METER
1/4" WV	1/4"	WATER VALVE
1/4" FH	1/4"	FIRE HYDRANT
8" GM	8"	GAS METER
SSMH	SSMH	SANITARY SEWER MANHOLE
SSCO	SSCO	SANITARY SEWER CLEANOUT
UP	UP	UTILITY POLE
TSP	TSP	SITE LIGHTING POLE
TSB	TSB	TRAFFIC SIGNAL POLE
SSMH	SSMH	STORM MANHOLE
JB	JB	STORM JUNCTION BOX
CI	CI	CURB INLET
GI	GI	GRATE INLET
SS	SS	SANITARY SEWER
UG	UG	UNDERGROUND ELECTRIC LINE
UT	UT	UNDERGROUND TELEPHONE LINE
GS	GS	GAS LINE

UTILITY NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES, OSHA STANDARDS AND PROJECT SITE WORK SPECIFICATIONS.
- CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF EXISTING PUBLIC AND PRIVATE UTILITIES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL CALL 811 FOR FIELD LOCATION OF EXISTING UTILITIES. NOTE THAT 811 ONLY LOCATES THOSE UTILITIES REGISTERED WITH THE SERVICE AND DOES NOT LOCATE ALL UTILITIES.
- THESE DRAWINGS DO NOT IMPLY TO SHOW ALL EXISTING UTILITIES, LOCATIONS AND SIZES OF EXISTING PUBLIC AND PRIVATE UTILITIES ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
- CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND STANDARDS.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- ALL LINES INSTALLED UNDERGROUND SHALL BE INSPECTED AND APPROVED BEFORE BACKFILLING.
- ALL WATER AND SANITARY SEWER SERVICES SHALL TERMINATE FIVE FEET (5') OUTSIDE THE BUILDING, UNLESS NOTED OTHERWISE. REFER TO PLUMBING PLANS FOR EXACT TIE-IN LOCATIONS OF ALL UTILITIES.
- MAINTAIN A MINIMUM OF 24" VERTICAL CLEARANCE BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), UNLESS NOTED OTHERWISE.
- DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING, TO CENTER LINE OF MANHOLE, FACE OF BUILDING, OR FACE OF CURB, UNLESS OTHERWISE NOTED.
- THE TOP ELEVATION OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN LANDSCAPED AREAS SHALL BE SIX (6) INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED). CONTRACTOR SHALL REFER TO GRADING PLAN FOR FINAL GRADES IN DETERMINING PROPOSED MANHOLE BFM ELEVATIONS.
- ALL WATER LINES 3" AND LARGER SHALL HAVE MECHANICAL JOINTS WITH THRUST BLOCKING.
- THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OR PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR A FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR, OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7(a), A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.
- REFER TO ARCHITECTURAL/MEP BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE PRIMARY ELECTRICAL LINES TO BE INSTALLED BY ELECTRIC COMPANY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE PRIMARY CONDUIT FROM THE POLE TO THE TRANSFORMER AND THE SECONDARY CONDUIT AND THE SECONDARY LINE FROM THE TRANSFORMER TO THE BUILDING.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL LINES FROM THE TRANSFORMER TO THE BUILDING, WITH THE ELECTRIC COMPANY MAKING CONNECTIONS AT THE TRANSFORMER. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE TRANSFORMER PAD PER ELECTRIC COMPANIES SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE TELEPHONE CONDUIT WITH PULL STRING. ALL BENDS SHALL BE LONG RADIUS SWEEPING BENDS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TELEPHONE INSTALLATION WITH THE TELEPHONE COMPANY.

INSPECTIONS/CERTIFICATIONS NOTE

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

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

TOPOGRAPHIC SURVEY NOTE

EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS PREPARED BY SCI SURVEY CONSULTANTS, INC. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW. THE ENGINEER'S SEAL ON THESE PLANS DOES NOT APPLY TO THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON.

RESPONSIBILITY NOTE

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

UTILITY PLAN

DATE	REVISION	MARK
5	1	
4	2	
3	3	
2	4	
1	5	

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

FINAL AS-BUILT RECORD PLANS
TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

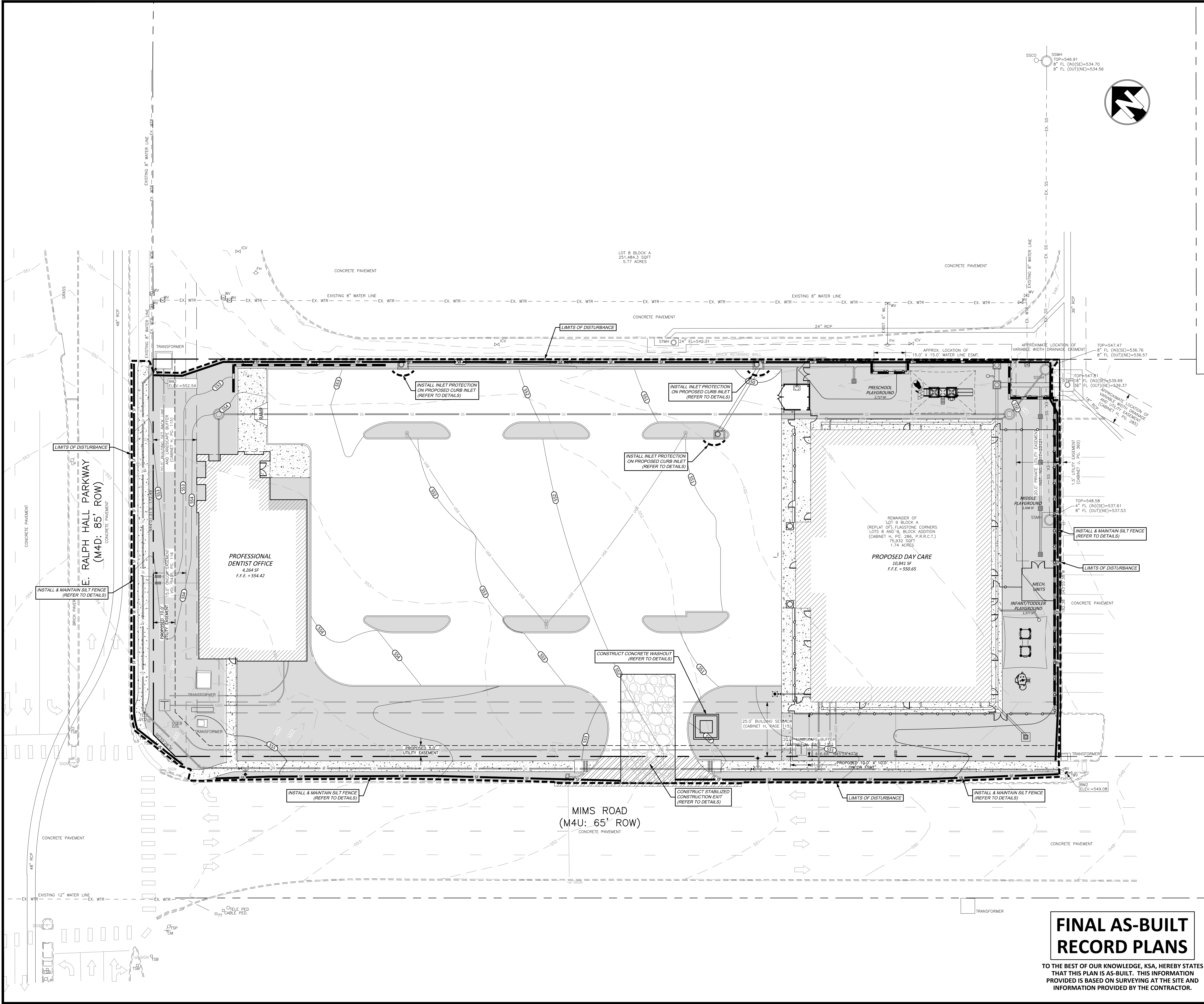
KSA
6781 Oak Hill Blvd.,
Rockwall, Texas 75087
T. 972.550.1414
www.ksaeng.com

STATE OF TEXAS
83947
LICENSED PROFESSIONAL ENGINEER
02/22/2022

SEAL: TBPE Firm Registration No. F-1356
SHEET NO.
C7.0

Future Use	Assumptions	Quantity	Daily Wastewater Flow (gallons/**)	**	Estimated Daily Wastewater Generated (gpd)
Schools (Elementary)	10,841 sf Daycare, 116 students > 36 months old	116	30	per student	3,480
Commercial	4059 sf Office, 7 employees	0.5	800	per acre	400
Estimated Generated Wastewater (gpd)					3,880
Infow and Infiltration					400
Peak Factor (<0.05 MGD)					5
Total Estimated Generated Wastewater (gpd)					21,400

Daily Wastewater Flow based on City of Rockwall, Texas Standards of Design and Construction, Section 5.3.5, Sizing Wastewater Collection Mains



LEGEND

- BOUNDARY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- STORM SEWER
- LIMITS OF DISTURBANCE (OFFSET FOR CLARITY)
- NON-PAVED, STABILIZED (VEGETATIVE OR OTHER PERVIOUS MATERIALS) AREAS
- TEMPORARY SILT FENCE (APPROXIMATE LOCATION, NO MORE THAN 1/4 ACRE OF UPLAND SLOPE AREA PER 100 FEET OF SILT FENCE)
- STABILIZED CONSTRUCTION EXIT
- TREE PROTECTION FENCING

EROSION CONTROL NOTES

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED TPDSS SWPPP DRAWINGS DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL PREVENT ANY SILTATION FROM ENTERING THE STORM SEWER SYSTEM. ALL INLETS & INLET OPENINGS SHALL BE FULLY ENCLOSED WITH SILT FENCE DURING AND AFTER CONSTRUCTION OF INLET.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- INSPECT AND MAINTAIN EROSION CONTROL MEASURES ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
- CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- ALL EXPOSED AREAS SHALL BE SEEDDED AS SPECIFIED WITHIN 7 DAYS OF FINAL GRADING. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDDED AS SPECIFIED.
- CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.

MS4 NOTE

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

SEND TO:
AMY WILLIAMS, P.E.
CITY ENGINEER
385 S. GOLIAD STREET
ROCKWALL, TX 75087
PHONE: 972-771-7746

DISTURBED AREA

TOTAL DISTURBED AREA = 1.88 ACRES
TOTAL ROOFED OR PAVED AREA = 1.27 ACRES
TOTAL LANDSCAPED AREA = 0.65 ACRES
PRE DEVELOPED SITE RUNOFF COEFFICIENT "C" = 0.35
POST DEVELOPED SITE RUNOFF COEFFICIENT "C" = 0.76

ADDING/RELOCATING BMP'S

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

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

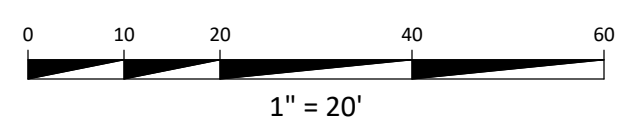
CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE LOCATIONS OF OFF-SITE MATERIAL, WASTE, BORROW, FILL OR EQUIPMENT STORAGE AREAS ON THIS SITE MAP AND ENSURING THAT EACH LOCATION HAS THE NECESSARY PERMITS IF NOT COVERED UNDER THE TPDSS GENERAL PERMIT FOR THIS PROJECT. THE SITE MAP SHALL BE REVISED AND DATED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

CIVIL ENGINEER

KSA
6781 OAK HILL BLVD.
TYLER, TEXAS 75703
PH: (936) 581-8141 EXT. 1322
CONTACT: DARREL KOTZUR, P.E.
EMAIL: DKOTZUR@KSAENG.COM

OWNER/DEVELOPER

MARY COURTIN
991 INTERSTATE 30
SUITE 103
ROCKWALL, TX 75087
EMAIL: MARYCOURTIN@YAHOO.COM



FINAL AS-BUILT RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

RESPONSIBILITY NOTE

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DRAWING PATHNAME: LAYOUT1.PLOT DATE: TIME		
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1		

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

EROSION CONTROL PLAN

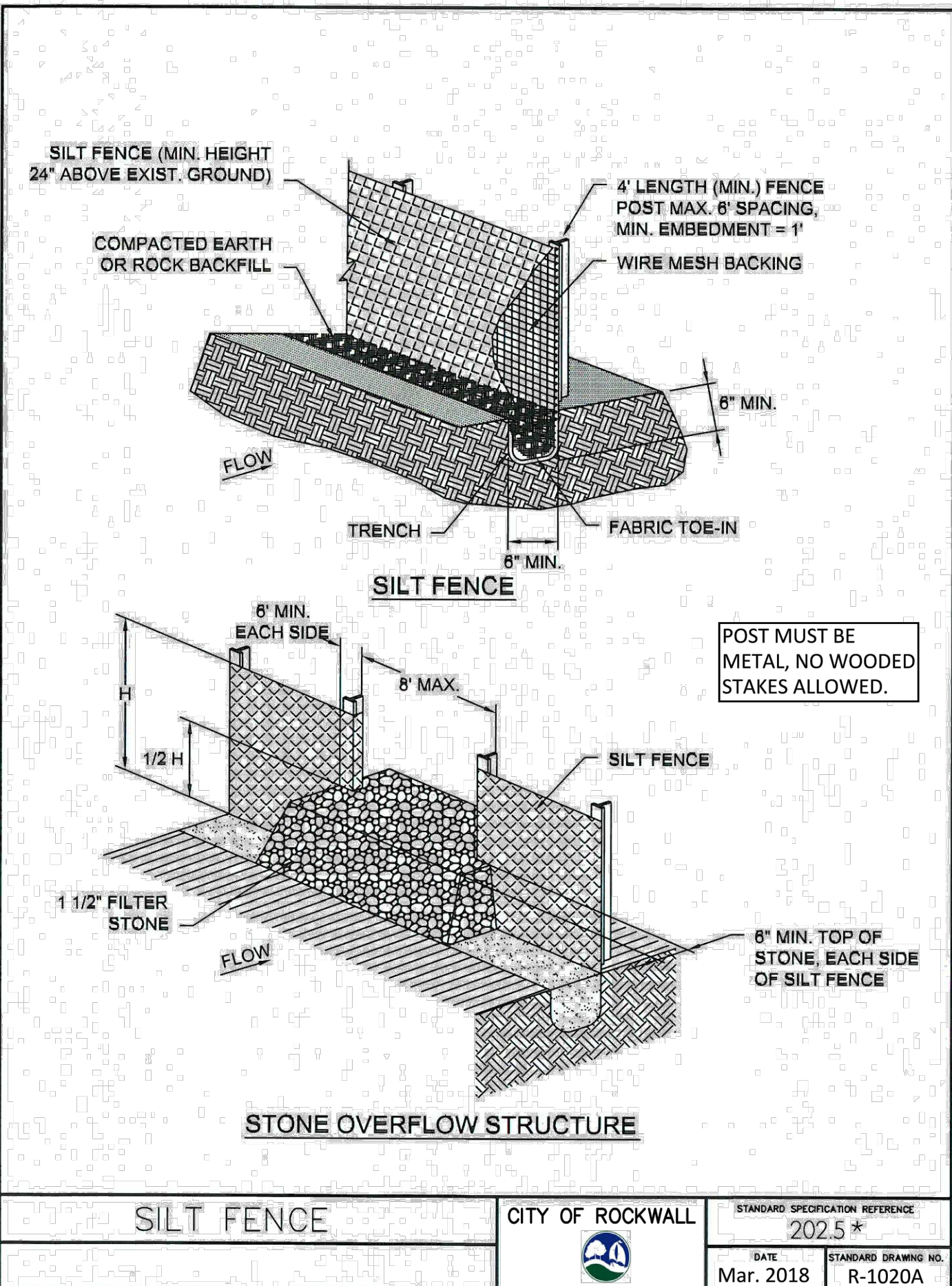
DRAWN BY:	TG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
PROJECT NO.:	18-1620-01

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6781 Oak Hill Blvd.,
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83947
LICENSED PROFESSIONAL ENGINEER
DARREL KOTZUR
02/22/2022

SEAL:
TBP&E Firm Registration No. F-1356
SHEET NO.

C8.0



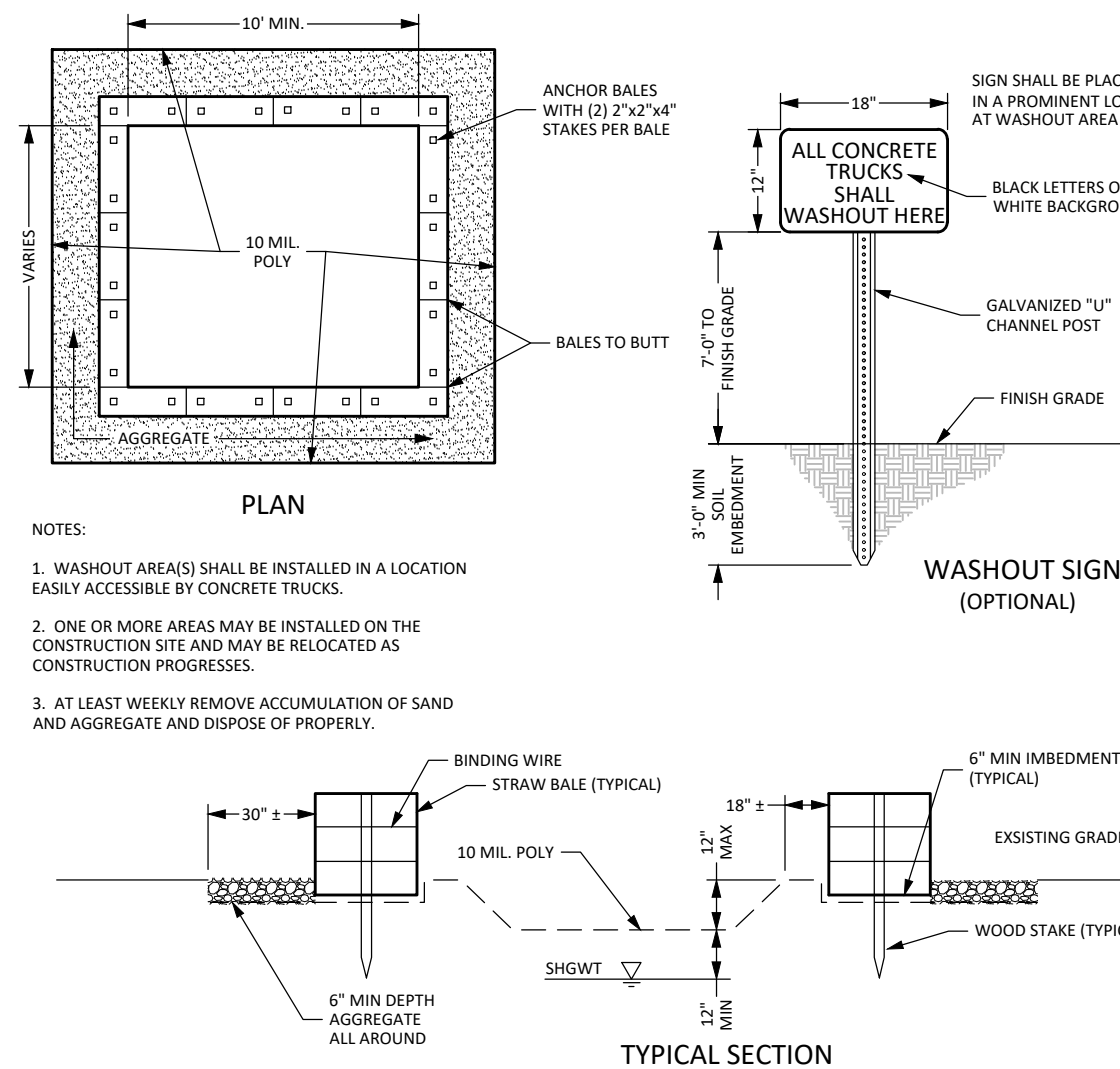
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SILT FENCE GENERAL NOTES:

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. FILTER STONE SHALL BE WRAPPED IN FILTER FABRIC AND BURIED SIX (6") INCHES MINIMUM.

SILT FENCE

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CONCRETE WASHOUT DETAIL

N.T.S.

GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING (SITE MAP), THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (TPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS, AND MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS OR LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 22 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 31 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE AND OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

STORM WATER POLLUTION PREVENTION SYSTEM

INSPECTIONS AND MAINTENANCE

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

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

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

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

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

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

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

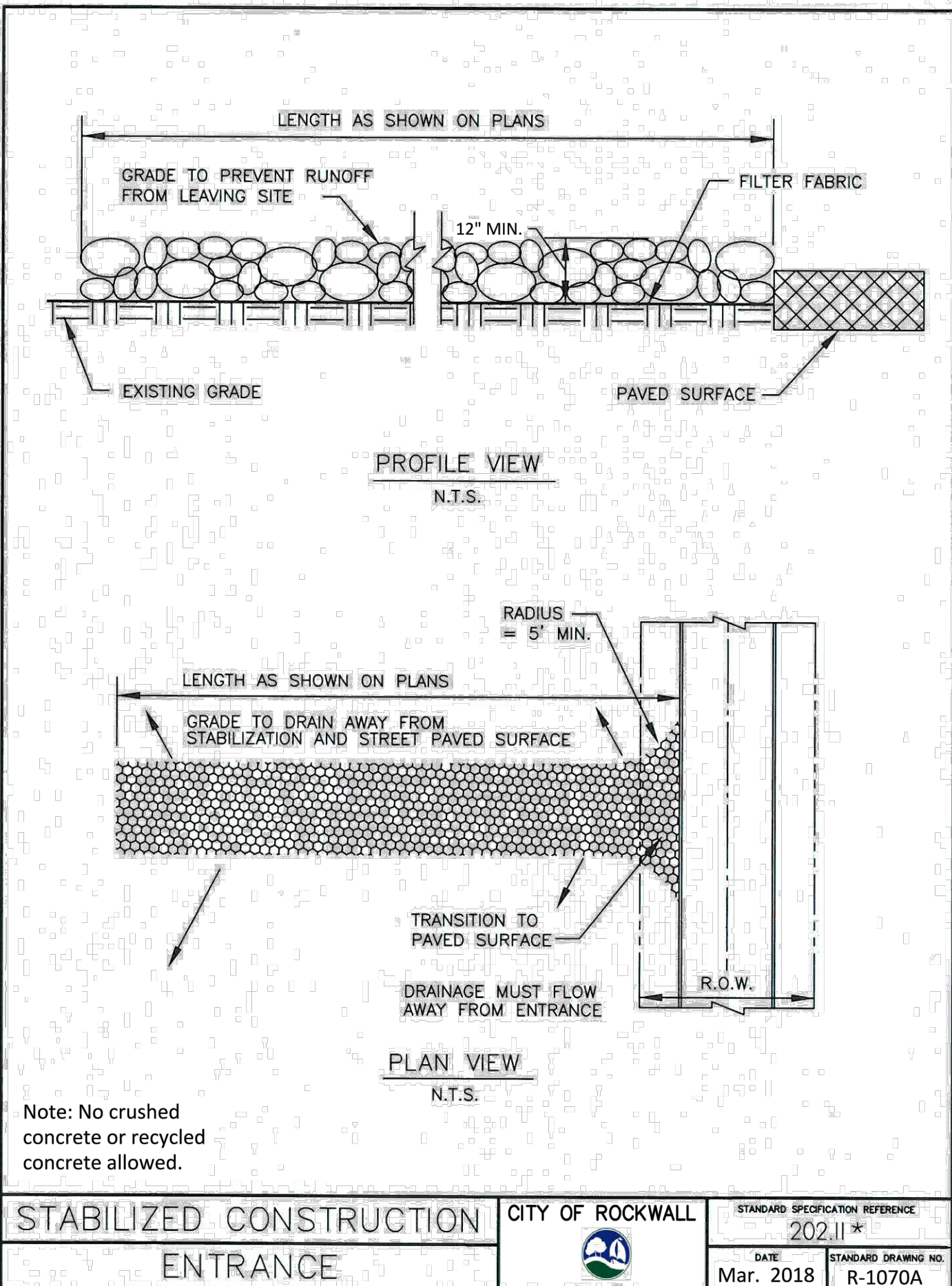
- A. EROSION AND SEDIMENT CONTROL MEASURES THAT HAVE BEEN IMPROPERLY INSTALLED OR HAVE BEEN DISABLED, RUN-OVER, REMOVED OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY. MAINTENANCE AND REPAIRS WILL BE CONDUCTED WITHIN 24 HOURS OF INSPECTION REPORT.
- B. SEDIMENT WILL BE REMOVED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

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

EROSION CONTROL MAINTENANCE

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

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



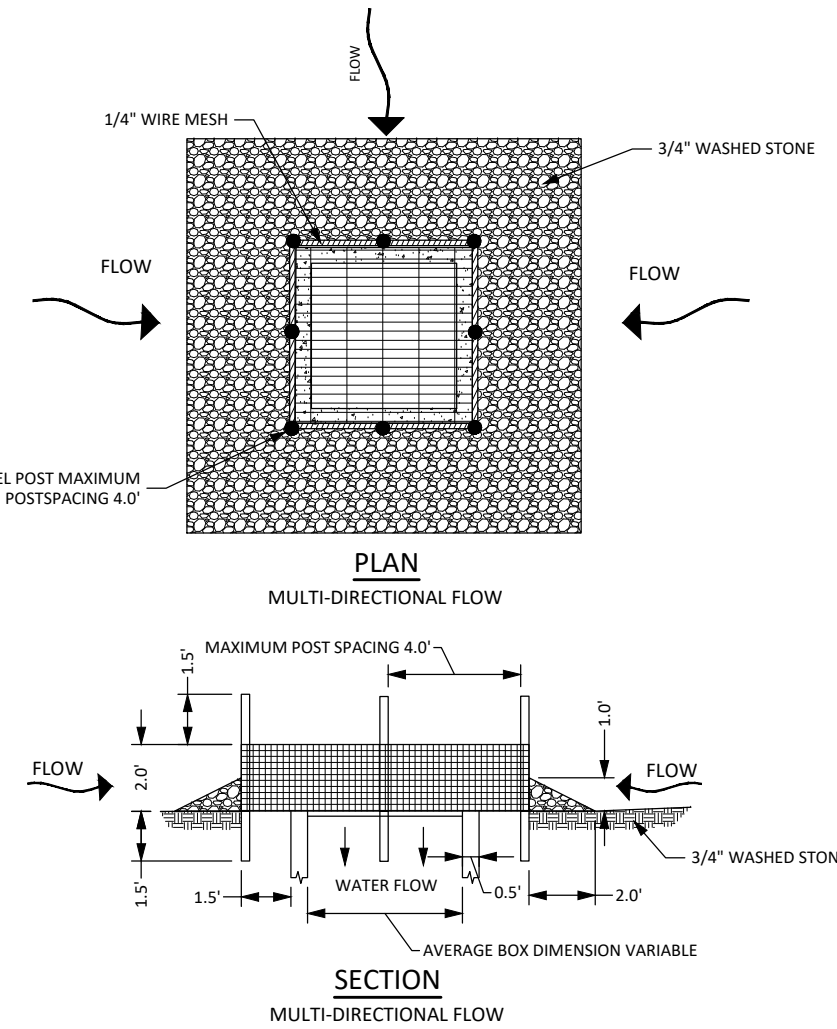
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STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. STONE SHALL BE 4 TO 6 INCH DIAMETER COARSE AGGREGATE.
2. MINIMUM LENGTH SHALL BE 50 FEET AND WIDTH SHALL BE 20 FEET.
3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
8. PREVENT SHORTCUTTING OF THE FULL LENGTH OF THE CONSTRUCTION ENTRANCE BY INSTALLING BARRIERS AS NECESSARY.
9. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.
10. NO CRUSHED OR RECYCLED CONCRETE ALLOWED.

STABILIZED CONSTRUCTION ENTRANCE

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NOTE:

1. SEDIMENT CONTROL STONE SHALL BE 3/4\"/>

HARDWARE CLOTH INLET PROTECTION

N.T.S.

FINAL AS-BUILT RECORD PLANS

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RESPONSIBILITY NOTE

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COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

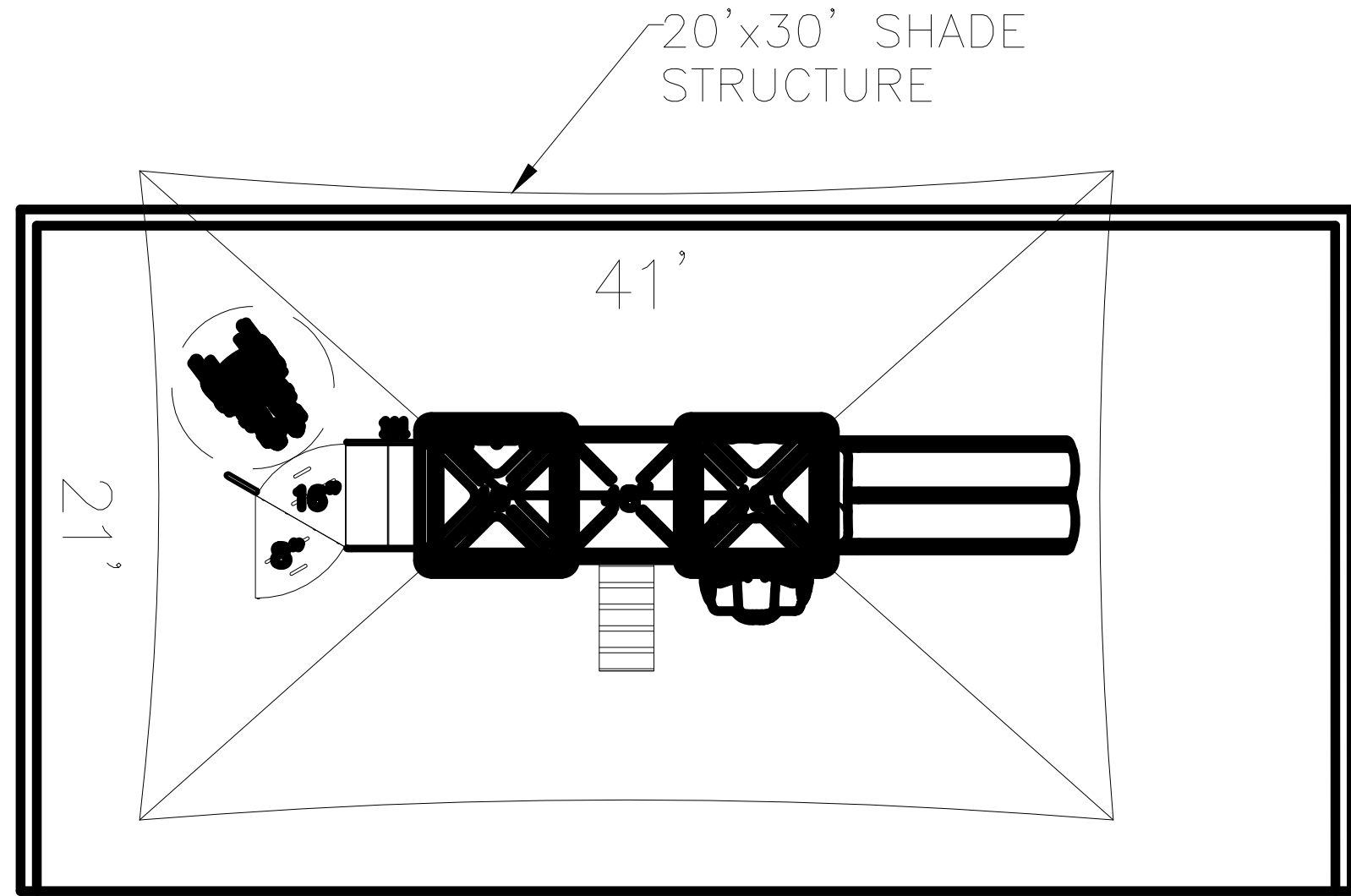
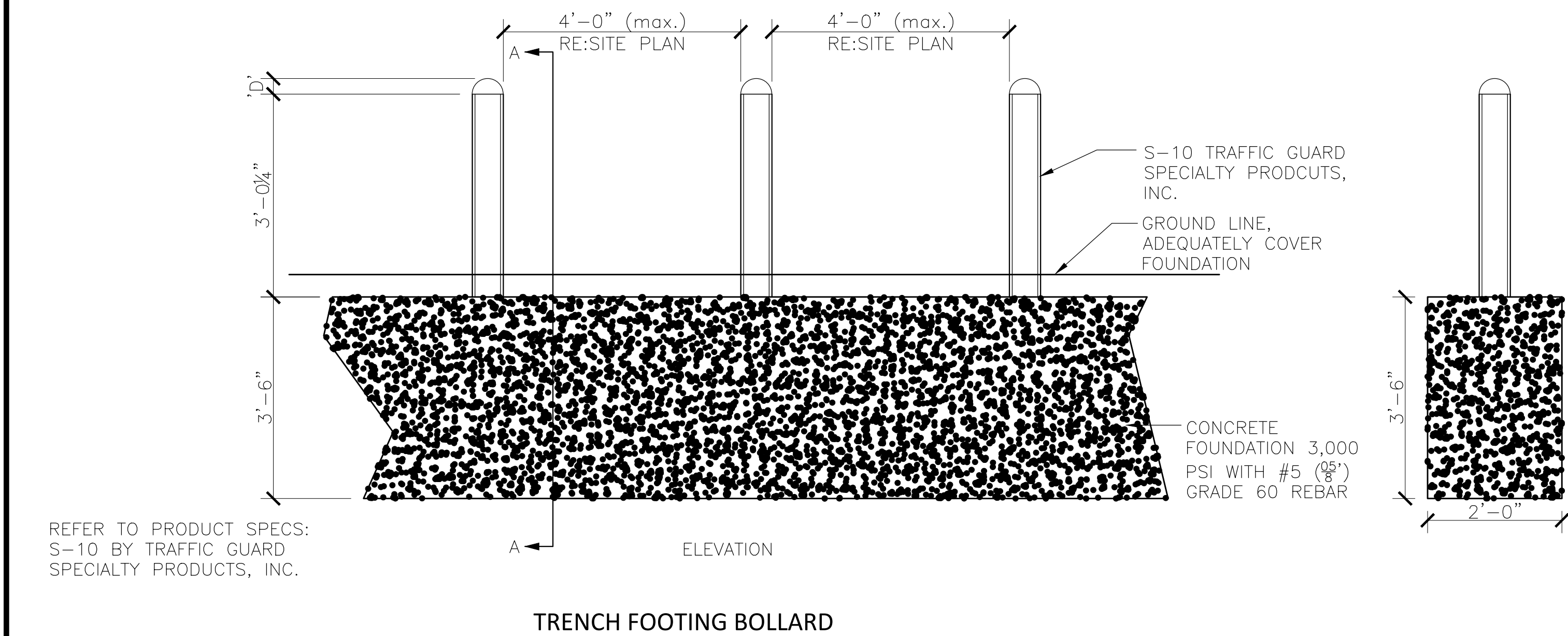
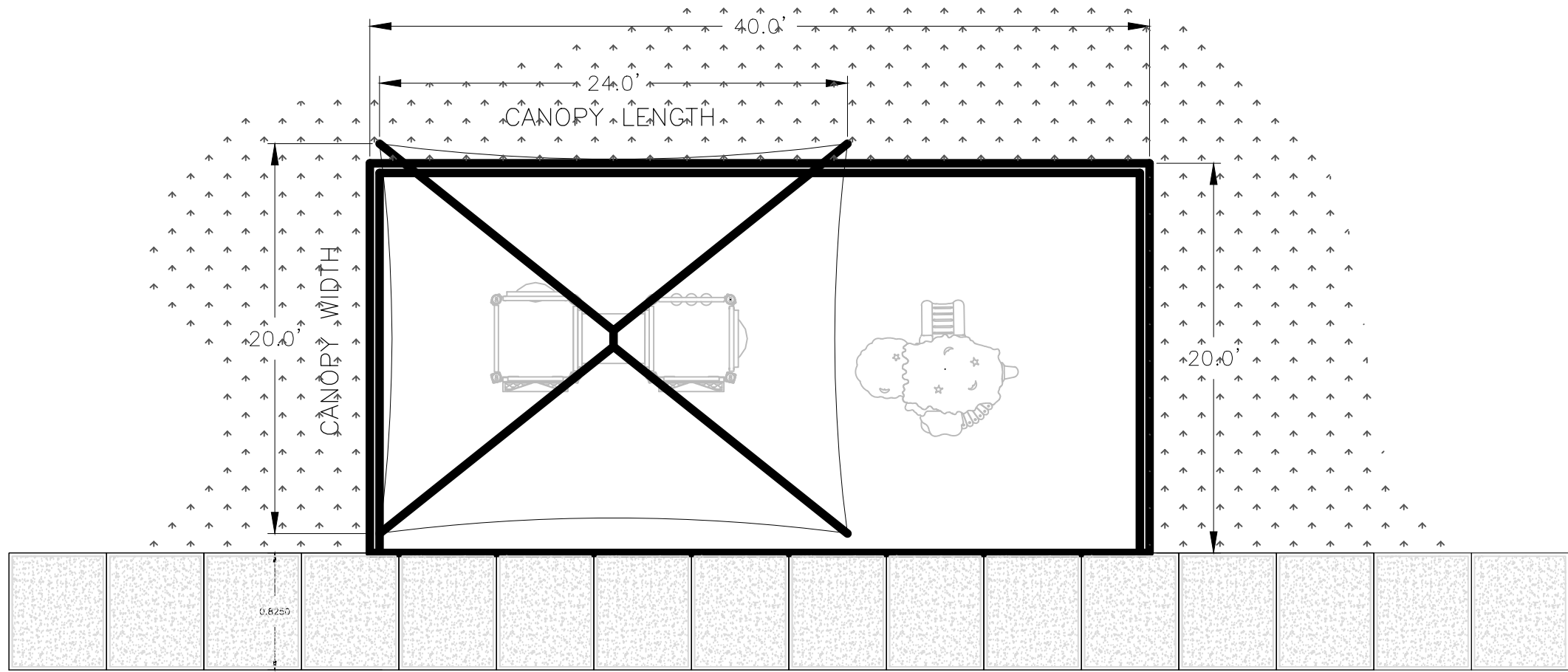
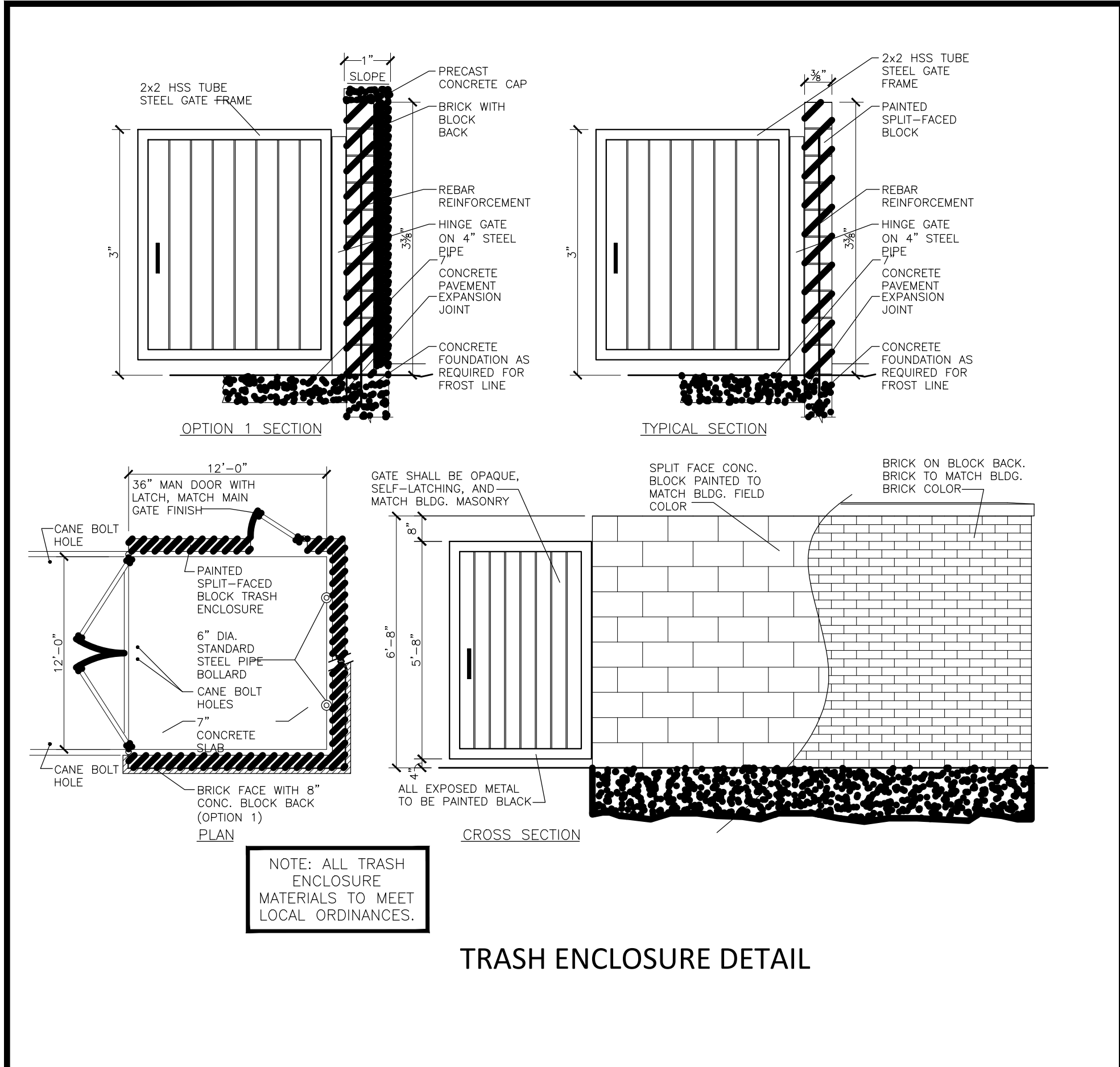
EROSION CONTROL DETAILS

DRAWN BY:	KG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
KSA JOB NO.:	18-1620-01
PROJECT NAME:	



SEAL: TPBE Firm Registration No. F-1356
SHEET NO.

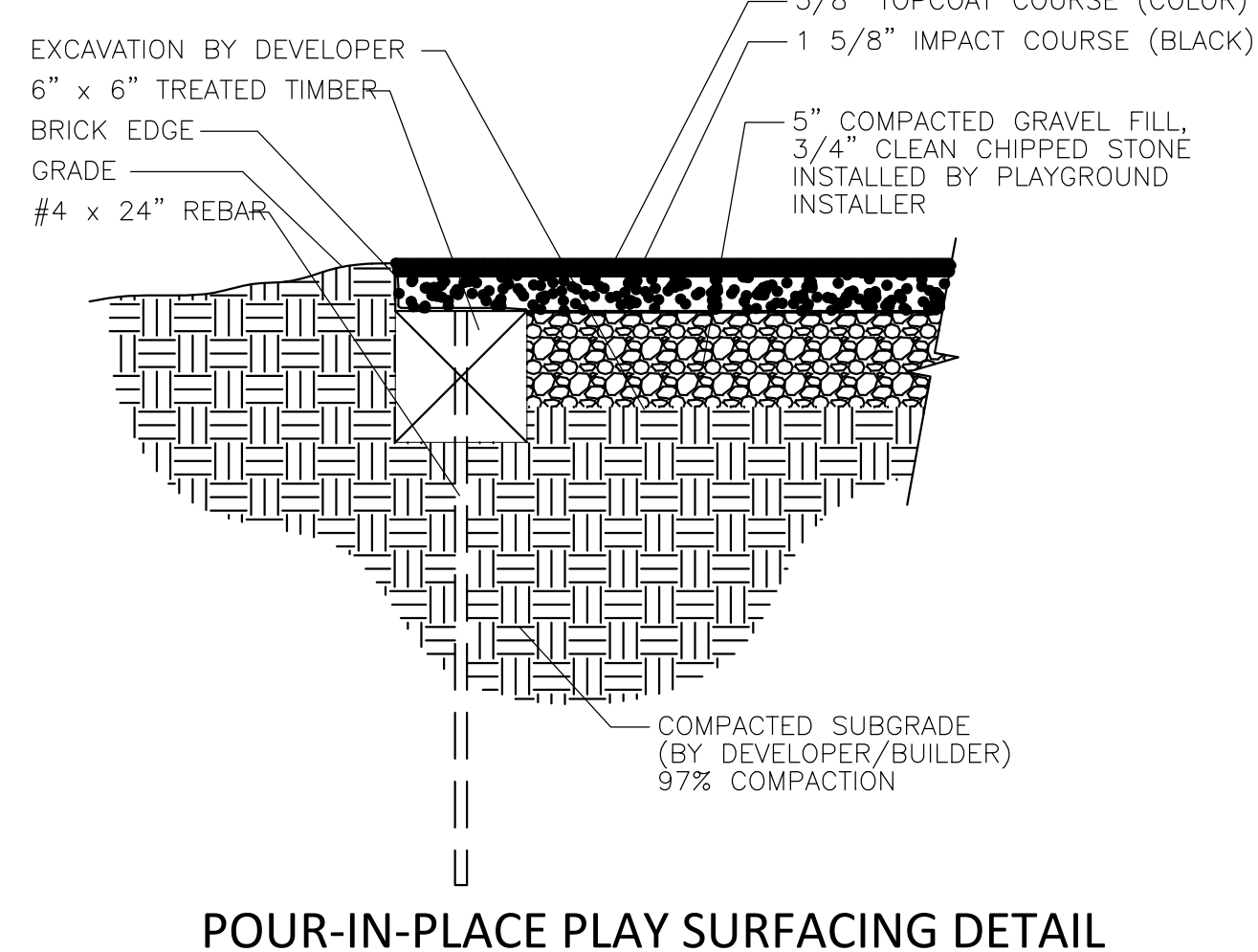
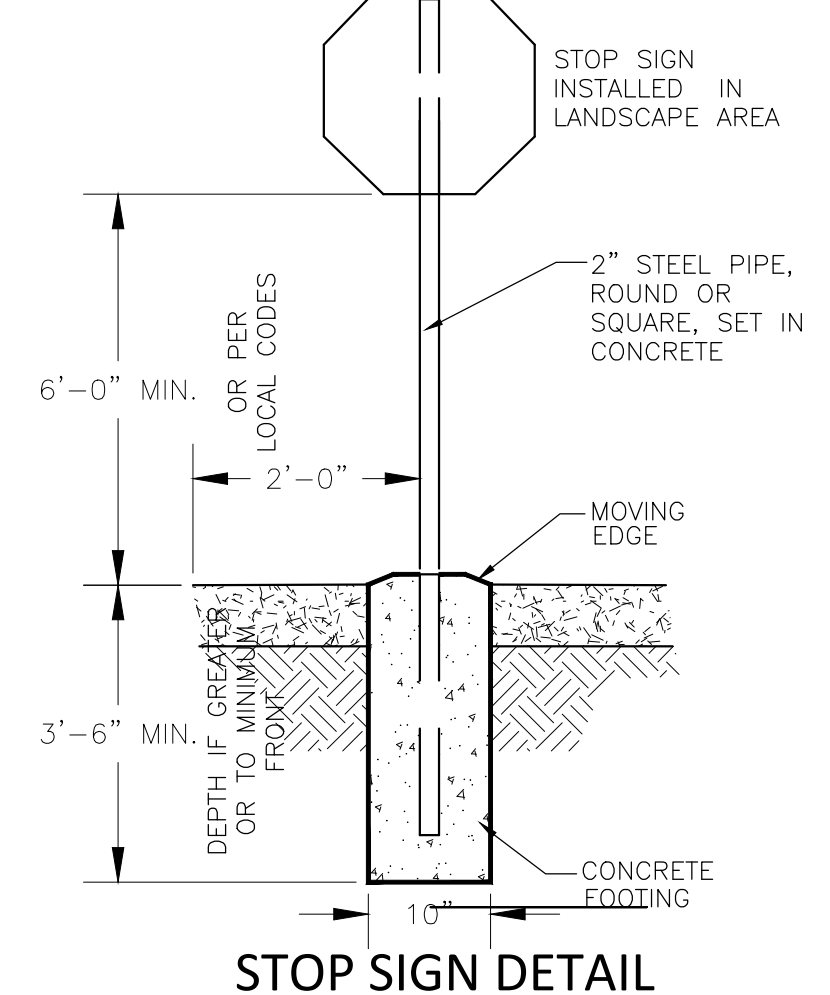
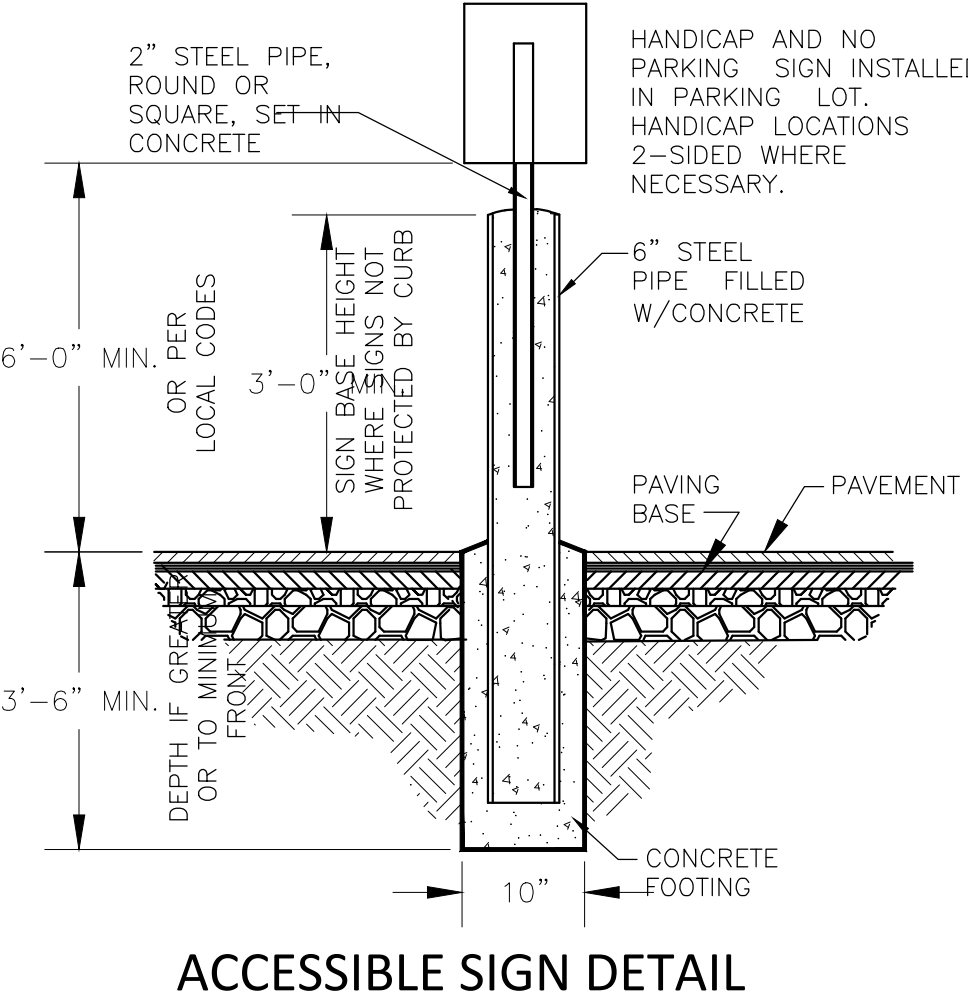
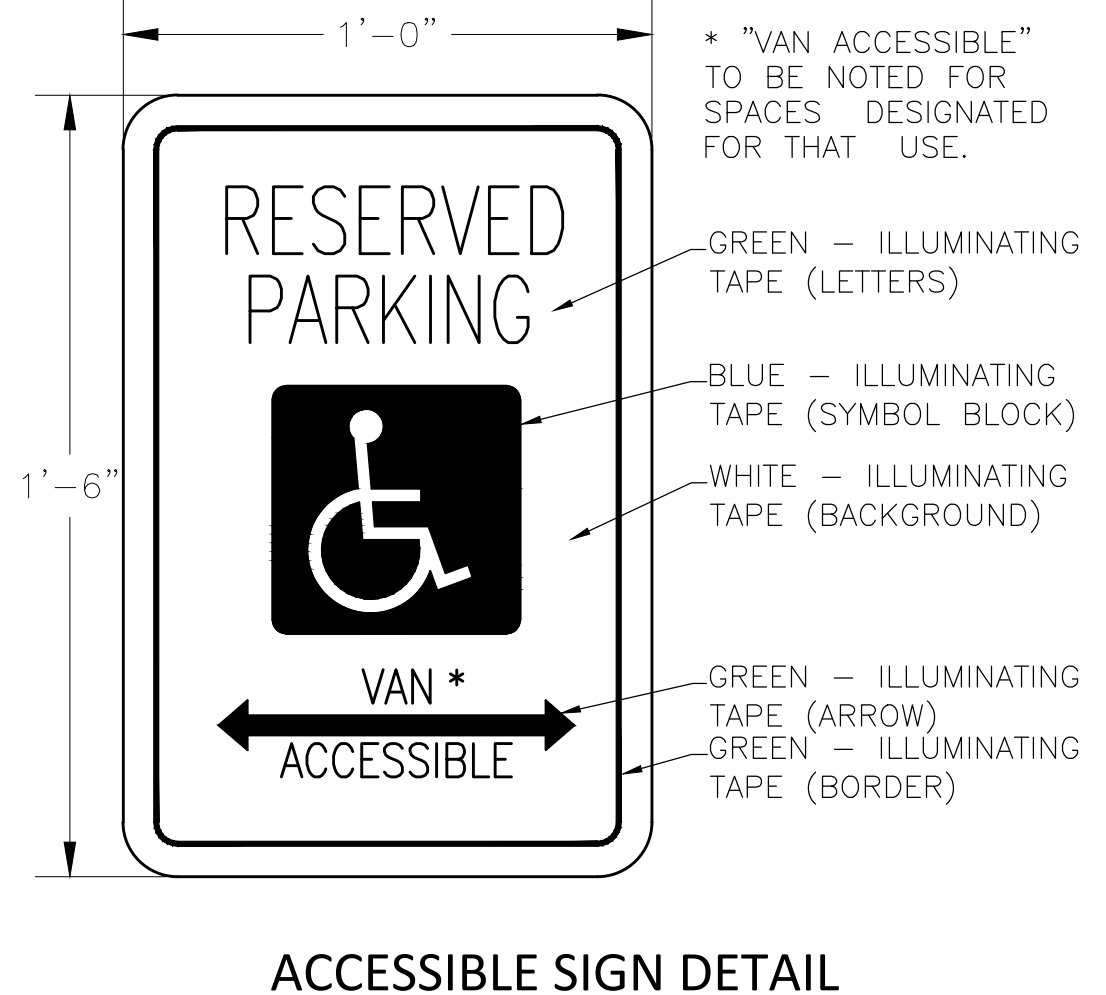
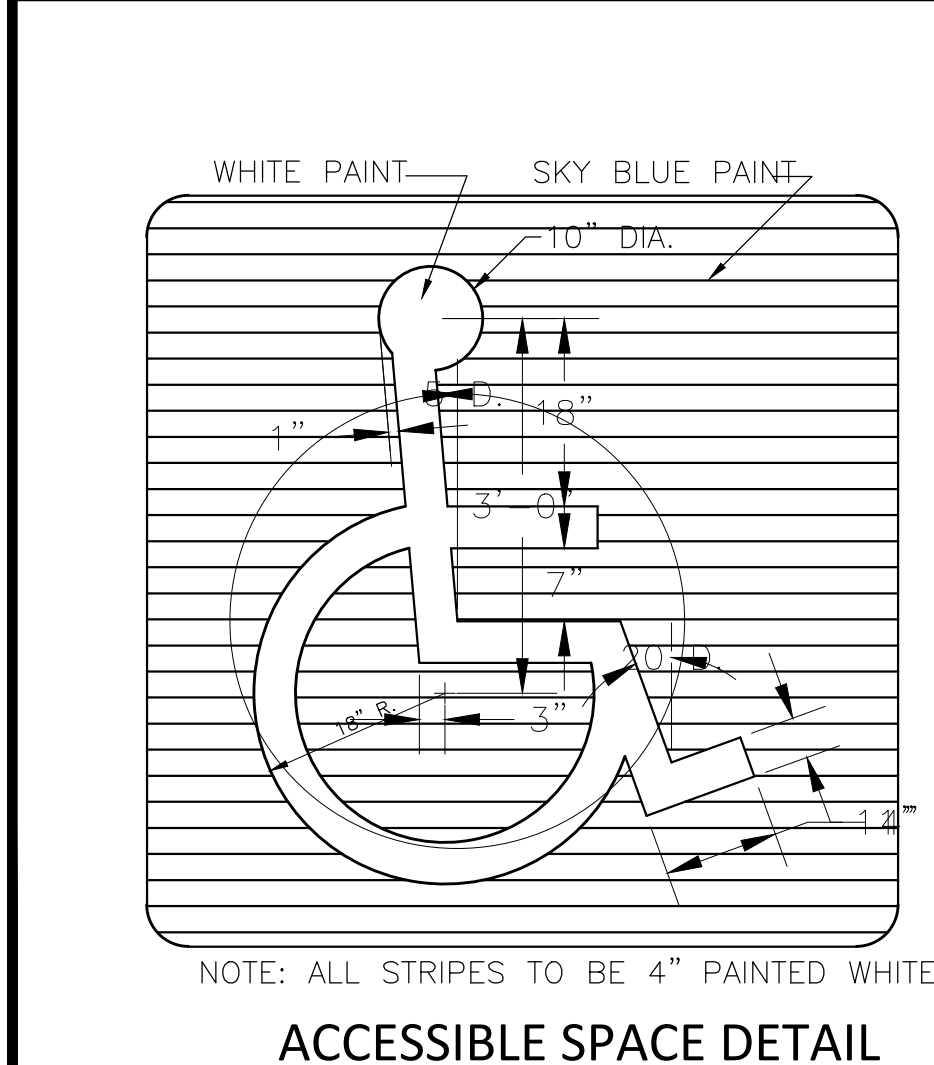
C8.1



- DEVELOPER/GENERAL CONTRACTOR PLAYGROUND RESPONSIBILITIES**
1. PLAYGROUND STRUCTURE AND SHADE STRUCTURE APPROVALS OR PERMITS IF REQUIRED. APPROVALS AND PERMITTING MAY BE REQUIRED FOR COLOR SCHEME, HEIGHT, MANUFACTURER DESIGN METHODS, ETC.
 2. ELECTRIC AND WATER ARE NEEDED ON SITE, FOR THE PLAYGROUND INSTALLERS USE. IF NOT, OTHER PRIOR ARRANGEMENTS SHALL BE MADE.
 3. SOILS WITHIN THE PLAYGROUND BOX DIMENSIONS SHOULD BE SUITABLE FOR SLAB AT GRADE INSTALLATIONS. SOILS SHOULD NOT CONTAIN DEBRIS AND COMPACTED TO 97% IN ACCEPTED INCREMENTS CONTAINING SUITABLE SOIL.
 4. PROVIDE GSDARD SYSTEM INC'S PROJECT MANAGER WITH A TIMELINE FOR PLAYGROUND INSTALLATION. ROUGH GRADE IS REQUIRED AND SIDEWALKS SHALL BE INSTALLED PRIOR TO PLAYGROUND INSTALLATION, SOD, FENCE AND PARKING LOT TOP COAT.
 5. LOCATE PLAYGROUND BOXES PER SITE PLAN, EXCAVATED 7" DEEP. PLAYGROUND BOXES CANNOT EXCEED A MAXIMUM 2% GRADE. (DITL 2/C3.1)
 6. SUB-GRADE BACKFILL MUST BE COMPACTED TO AT LEAST 97% AND SHOULD NOT CONTAIN MATERIALS SUCH AS LARGE ROCKS, SCRAP WOOD, CONCRETE SPILLS, ETC. PLAYGROUND INSTALLERS NEED TO DRILL ACCURATE HOLES FOR PLAYGROUND POLE INSTALLATION.
 7. INSTALL DRAINAGE SYSTEM TO EXCAVATED PLAYGROUND BOXES PER SITE PLAN. (DITL 13/C3.1)
 8. ENSURE ADEQUATE AREA FOR PLAYGROUND INSTALLERS. STAGING AREA NEEDED TO UNLOAD AND PRE-ASSEMBLE APPROX. 1,000 CUBIC FOOT SHIPMENT OF PLAYGROUND EQUIPMENT. HOLDING AREA NEEDED TO RECEIVE DELIVERY OF APPROXIMATELY 40-50 TONS OF CRUSHED STONE. PARKING AREA NEEDED FOR TWO TRUCKS AND ONE 30' TRAILER OF EXCAVATING EQUIPMENT.
 9. IN ORDER TO AVOID POSSIBLE DAMAGE, PARKING LOTS SHOULD NOT HAVE TOPCOAT APPLIED AND FENCING SHOULD NOT BE INSTALLED UNTIL PLAYGROUND IS COMPLETE. IF FENCING IS INSTALLED, LEAVE OUT NECESSARY SECTIONS TO PROVIDE ACCESS TO PLAYGROUND AREA.
 10. ONCE COMPACTED CRUSH STONE BASE, BORDER, AND EQUIPMENT ARE IN PLACE, THEY SHOULD NOT BE DRIVEN OR WALKED ON AND SHOULD NOT BE USED FOR STORAGE AREA.
 11. PLAYGROUND INSTALLATION DESCRIBED ABOVE SHOULD TAKE APPROXIMATELY ONE TO FIVE DAYS, DEPENDING ON SITE CONDITIONS, WEATHER, INSTALLER CREW SIZE, ETC.
 12. INSTALLATION OF POUR-IN-PLACE SURFACING USUALLY TAKES PLACE ONE TO TWO WEEKS AFTER PLAYGROUND IS INSTALLED, DEPENDING MAINLY ON WEATHER CONDITIONS.
 13. GENERALLY ONLY THREE OR FOUR PARKING SPACES ARE NEEDED FOR SURFACING INSTALLERS. (ONE OR TWO VEHICLES AND A MIXER STAGING AREA)
 14. TYPICALLY, TWO MEN MIX THE SURFACING PRODUCT IN THE PARKING LOT AND TRANSPORT BY WHEELBROW TO PLAYGROUNDS WHERE IT IS POURED AND TROWELED. THEREFORE, NO SPECIAL ALLOWANCES ARE NECESSARY (FENCING CAN BE INSTALLED AND FINISH LANDSCAPING CAN BE COMPLETED)
 15. THIS IS USUALLY A TWO-DAY INSTALLATION, DEPENDING MAINLY ON WEATHER CONDITIONS. IMPACT COURSE APPLIED ON DAY ONE, AND TOPCOAT (COLOR) APPLIED ON DAY TWO.
 16. ONCE THE TOPCOAT APPLICATION IS COMPLETE, THE BINDING AGENTS WILL TAKE A MINIMUM 24 HOURS TO CURE. DURING THAT TIME THERE IS TO BE ABSOLUTELY NO WALKING ON, PLACING OBJECTS ON, OR ALLOWING ANY DUST TO ACCUMULATE ON THE TOPCOAT SURFACE.
 17. FINISH GRADING AND LANDSCAPING MUST BE THE SAME ELEVATION AT THE PLAYGROUND BORDERS.
 18. ENSURE THAT THE SITE IS SECURE AND THAT OTHER CONTRACTORS WILL NOT BE STORING, WORKING, WALKING, ETC. ON FINISHED PLAYGROUNDS, SURFACES OR BORDERS.
- GENERAL NOTES:**
DEVELOPER/GENERAL CONTRACTOR SHOULD BE IN CONSTANT COMMUNICATION WITH GSI TO SCHEDULE DELIVERY AND INSTALLATION OF THE PLAYGROUND STRUCTURES. PLAYGROUND INSTALLERS TRAVEL LONG DISTANCES AND IT IS IMPERATIVE THE SITE IS PROPERLY PREPARED AS SPECIFIED TO AVOID COSTLY MOBILIZATION, SHIPPING AND STORAGE FEES.
GSI'S PLAYGROUND INSTALLERS TRAVEL GREAT DISTANCES, INCURRING EXPENSES FOR BOTH TRANSPORTATION AND LODGING. IN ADDITION THEY ARE REQUIRED TO RESERVE RENTAL MACHINERY, IF THEY ARE TURNED AWAY BECAUSE THE SITE IS NOT READY, A TRAVEL CHARGE WILL APPLY. THIS CHARGE COULD BE SIGNIFICANT (\$50.00 PER MAN-HOUR FOR A CREW OF FIVE, LODGING AT \$175 PER ROOM PER NIGHT, AND EQUIPMENT RENTAL DEPOSITS). THEREFORE, FOLLOWING ALL OF THE ABOVE GUIDELINES, ESPECIALLY WITH RESPECT TO DISCLOSING EXCESSIVELY ROCKY CONDITIONS, PROHIBITING THE USE OF LARGE ROCKS, CEMENT, ETC. IN BACKFILL MATERIALS, AND PROVIDING THE PROJECT MANAGER AN ACCURATE TIMELINE, WILL SAVE BOTH MONEY AND TIME.

FINAL AS-BUILT RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

GODDARD SCHOOL
NOTES AND DETAILS

DRAWN BY: TG
DESIGNED BY: DK
LATEST REVISION: 07/20/2021
KSA JOB NO.: 18-1620-01

DRAWN BY: TG
DESIGNED BY: DK
LATEST REVISION: 07/20/2021
KSA JOB NO.: 18-1620-01

SEAL:
TBP/E Firm Registration No. F-1356
SHEET NO.

C9.0

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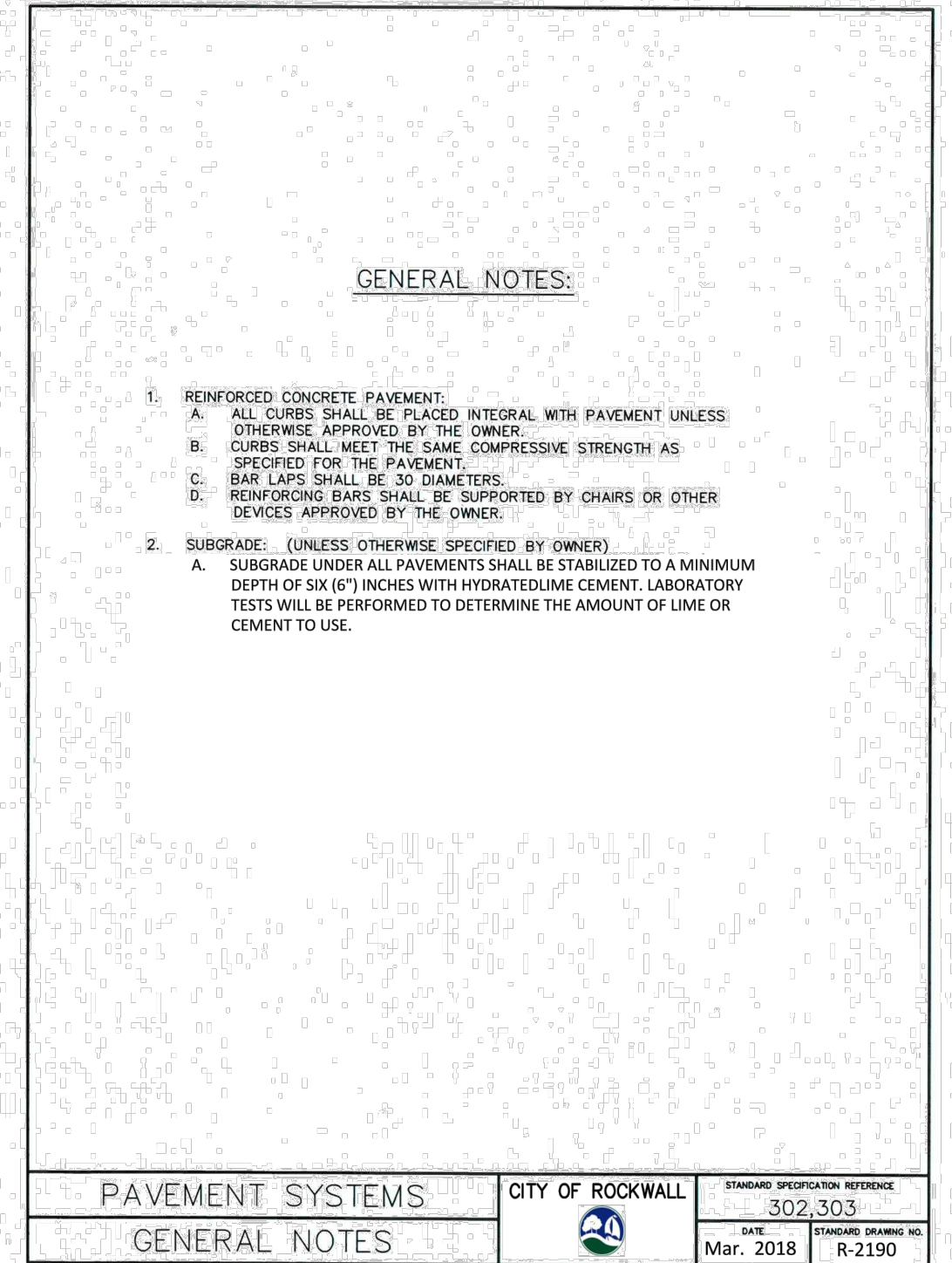
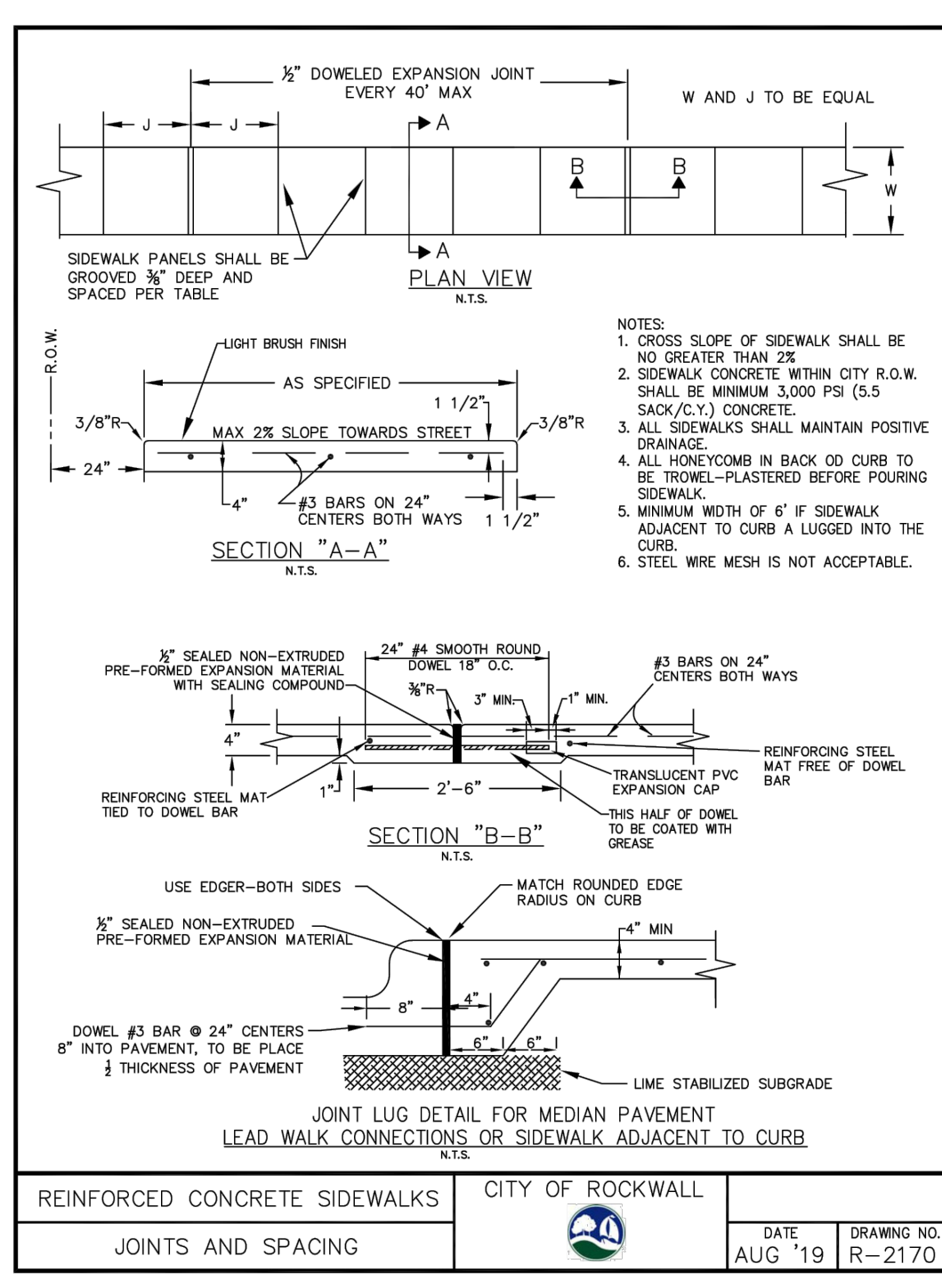
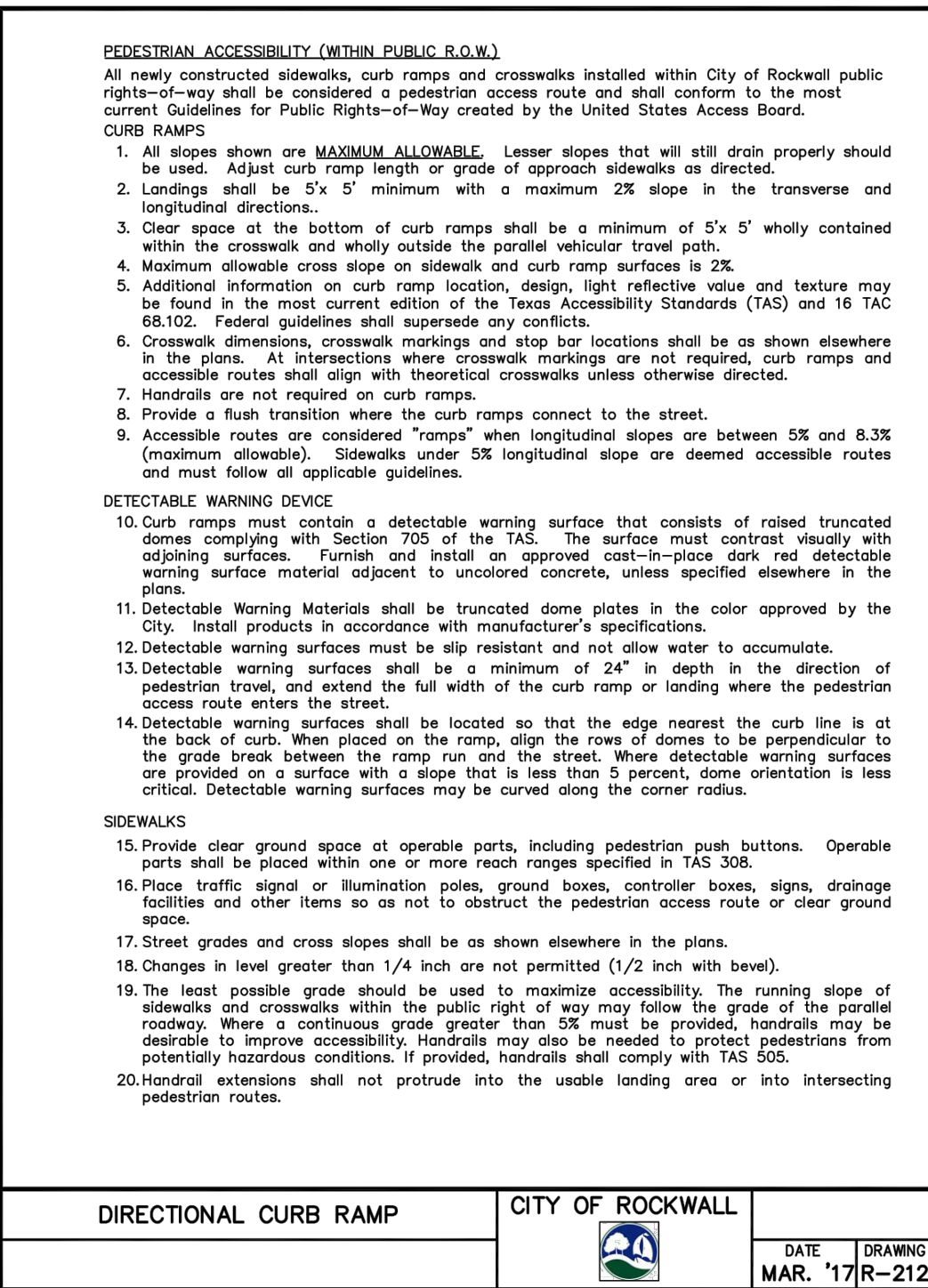
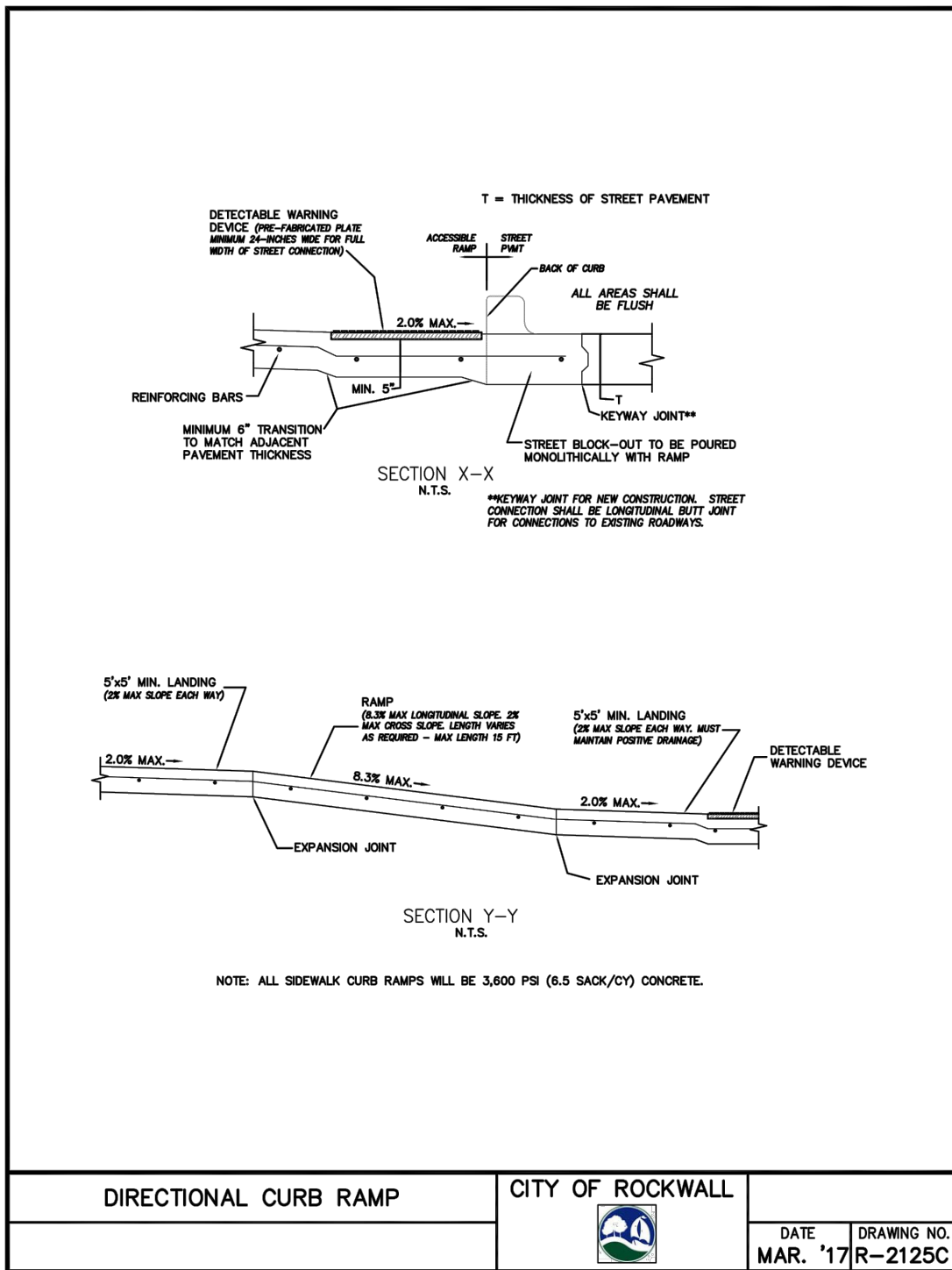
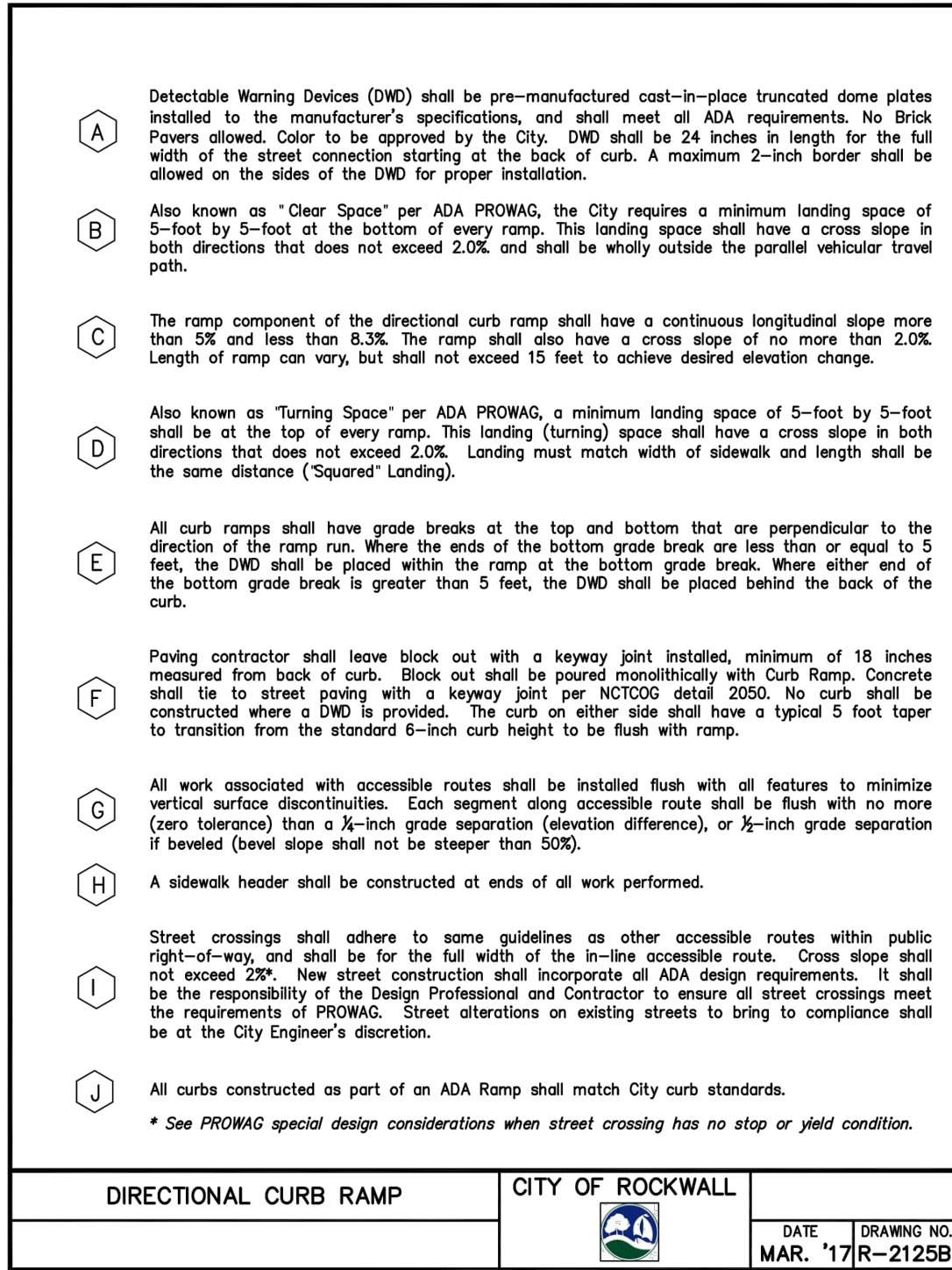
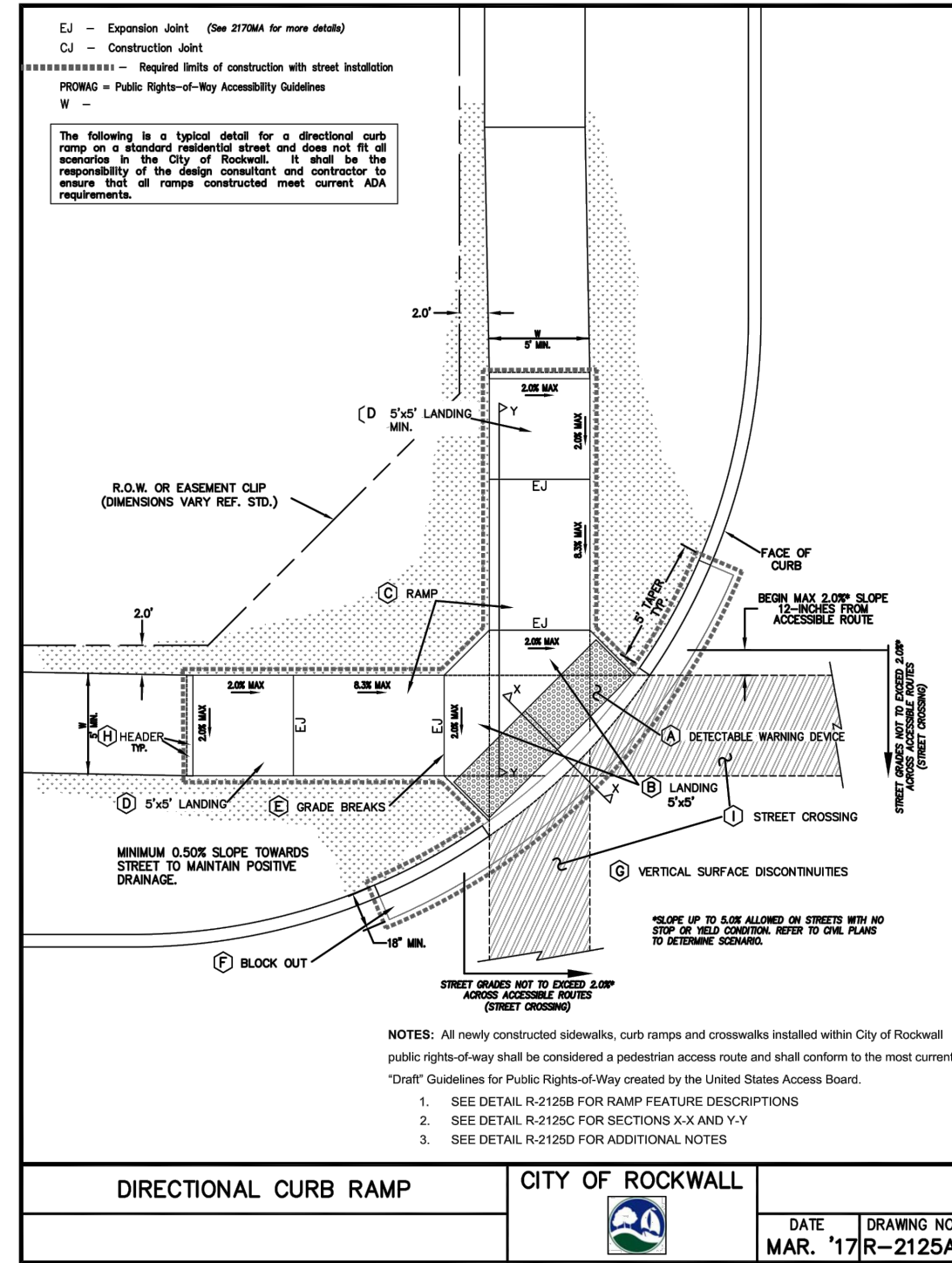
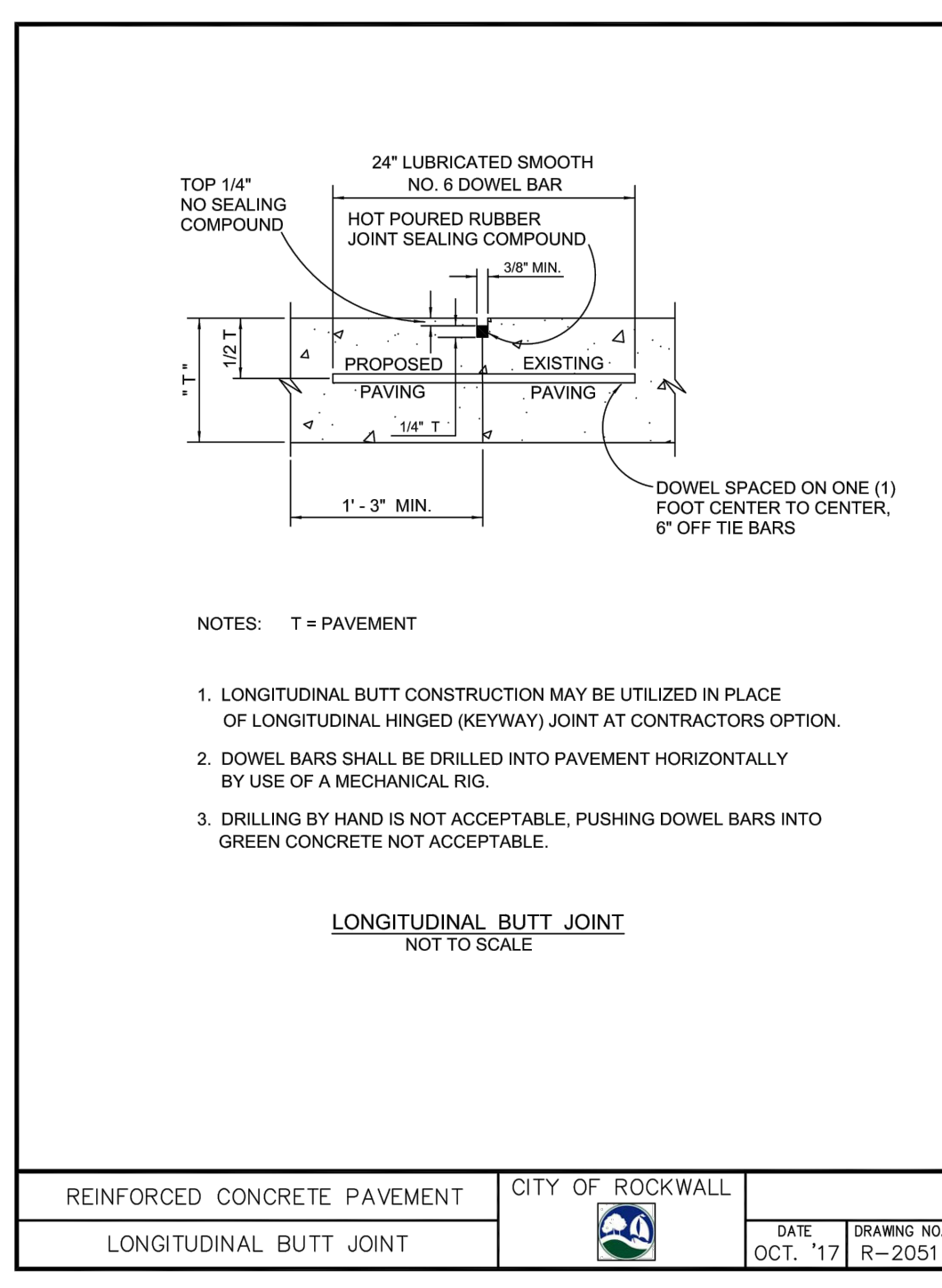
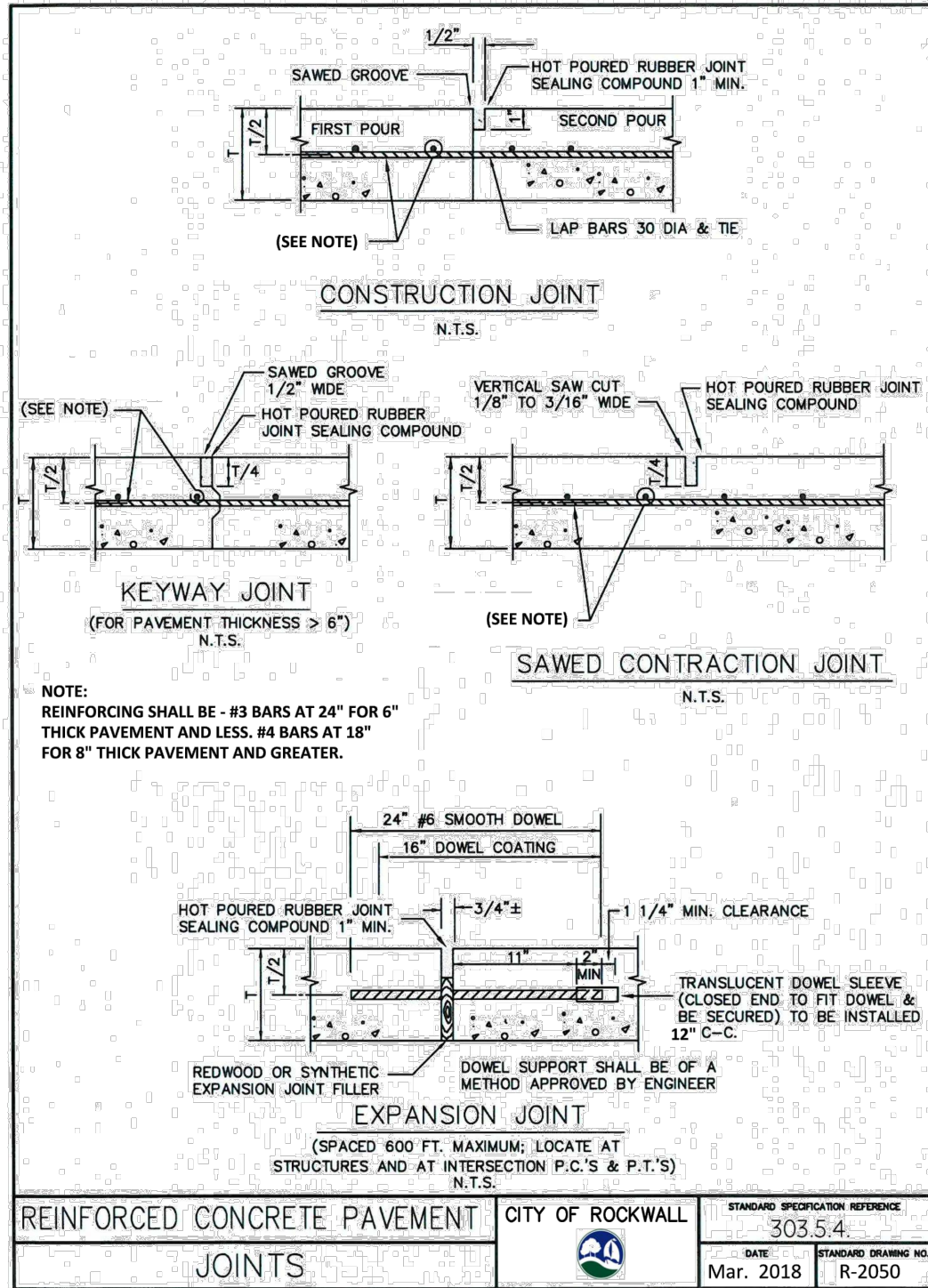
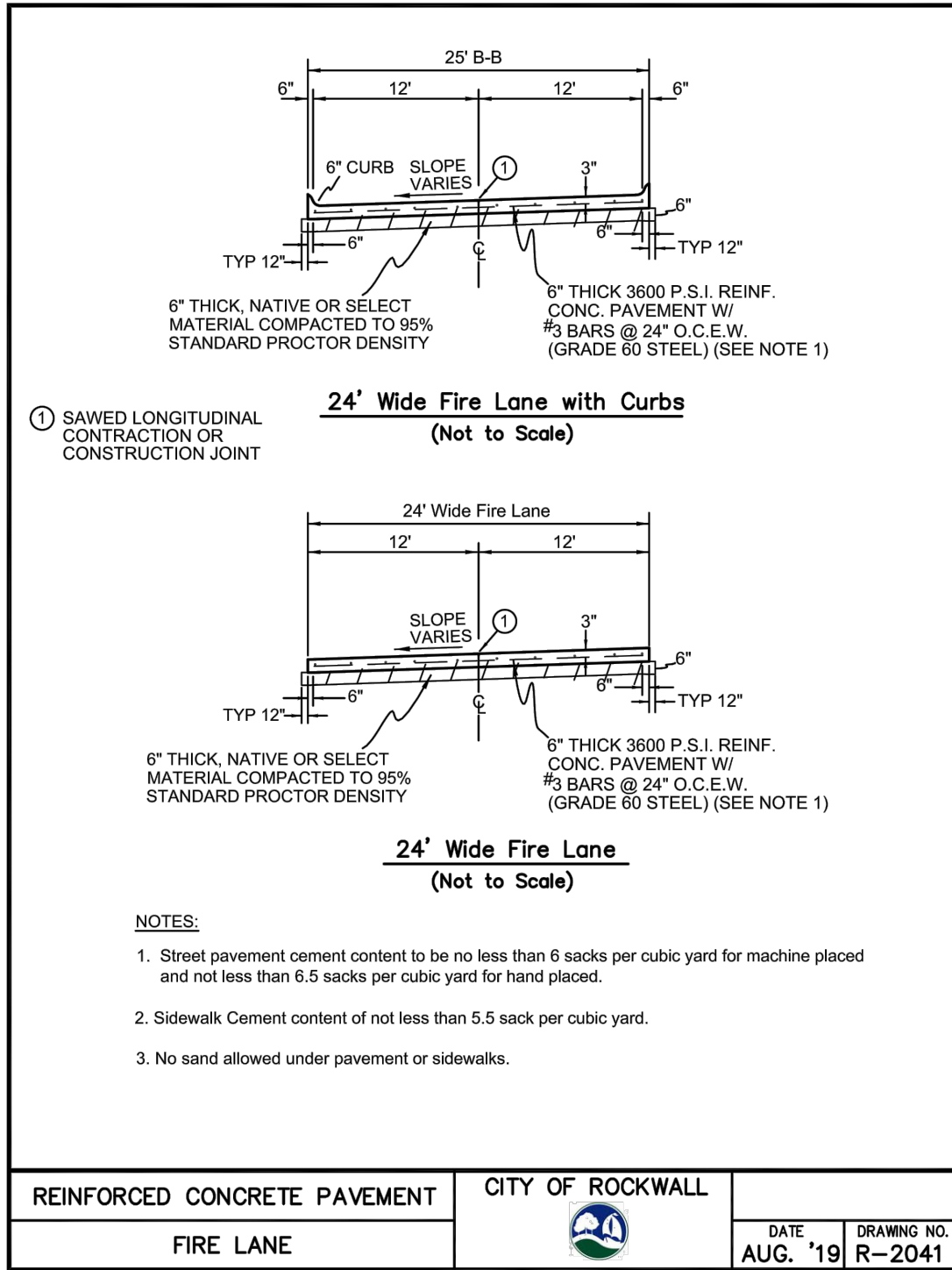
REVISION

DATE

DRAWING PATHNAME | LAYOUT | ISOT DATE - TIME

SHEET NAME

PROJECT NAME



DATE	REVISION	MARK

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

CITY OF ROCKWALL DETAILS

DRAWN BY:	TG
DESIGNED BY:	DK
LATEST REVISION	07/20/2021
KSA JOB NO.:	18-1620-01

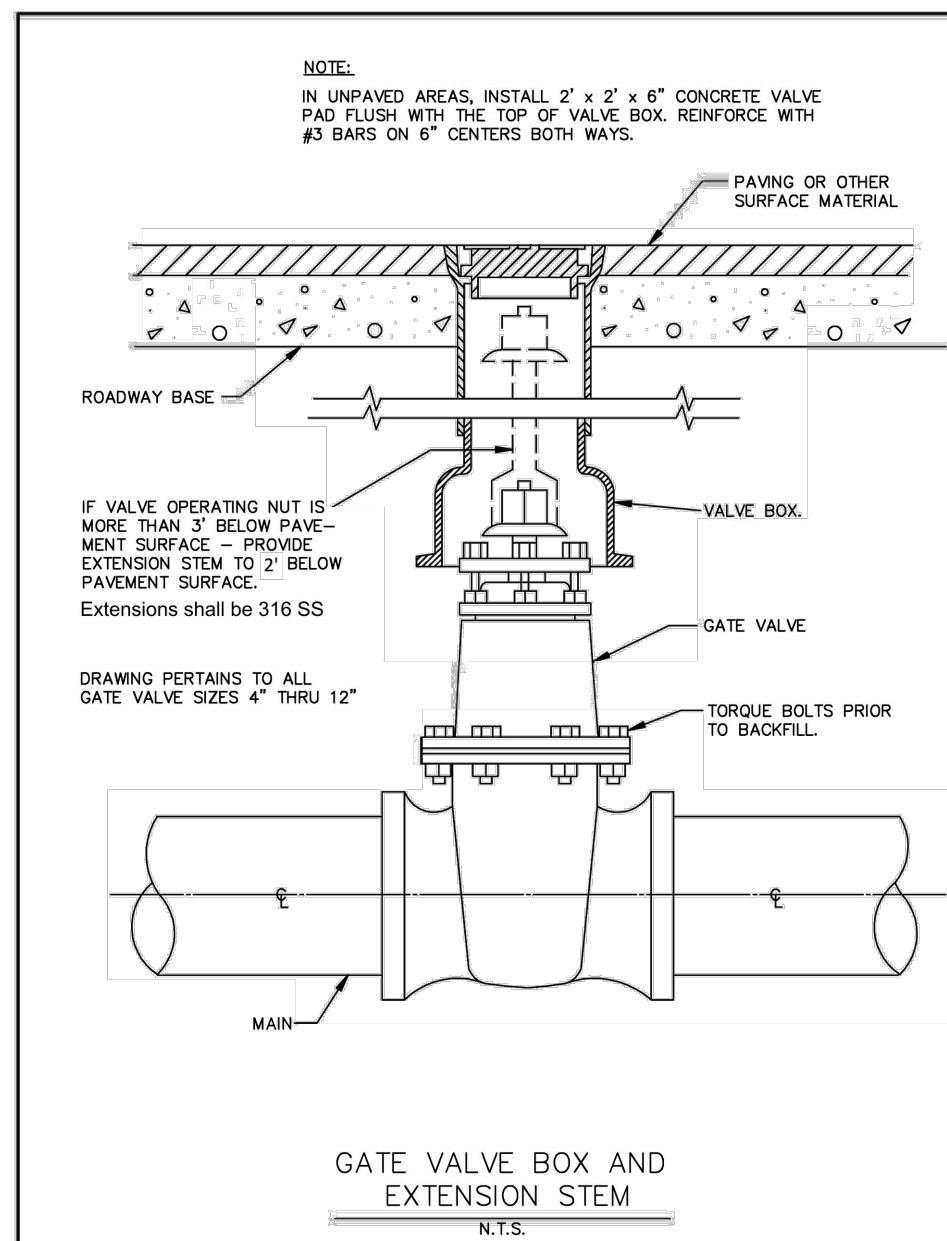
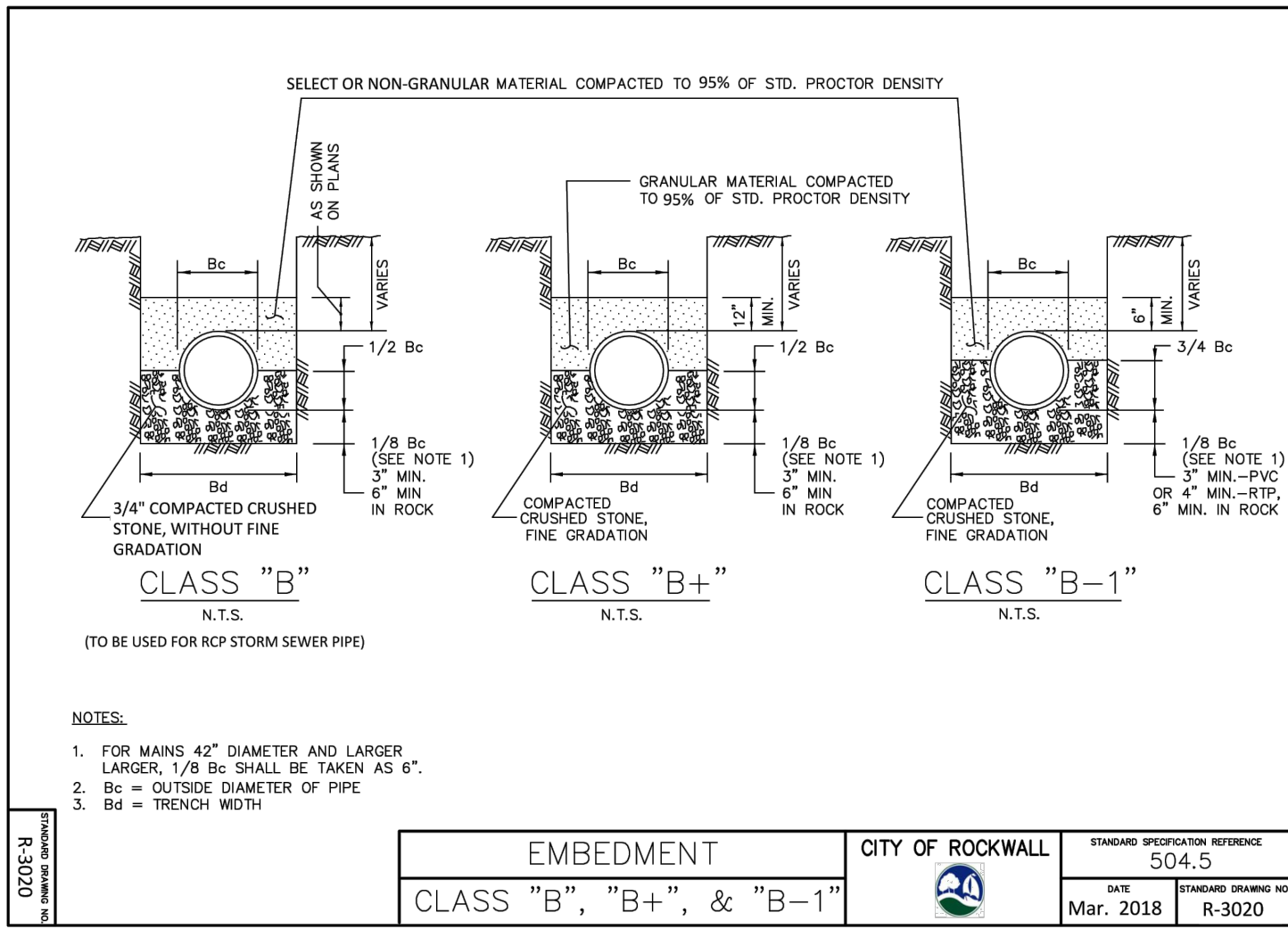
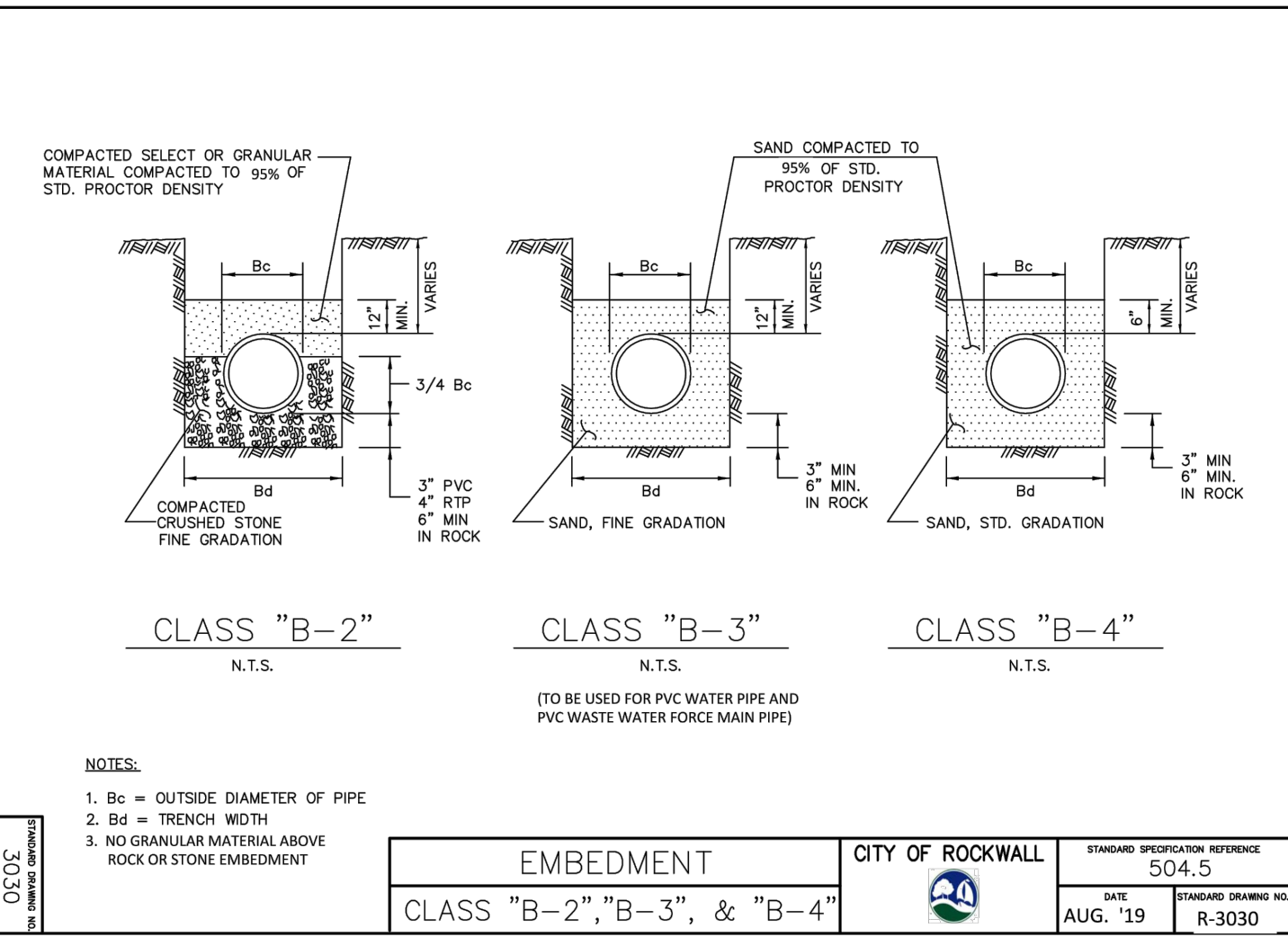


FINAL AS-BUILT
RECORD PLANS

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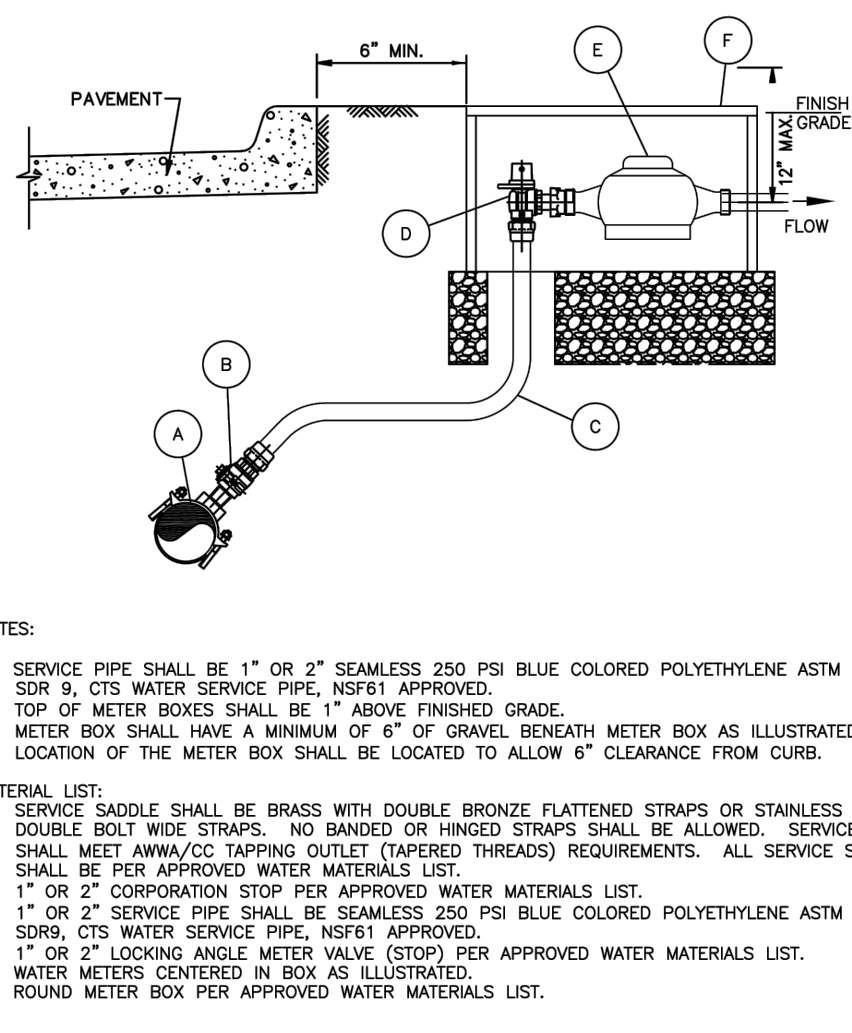
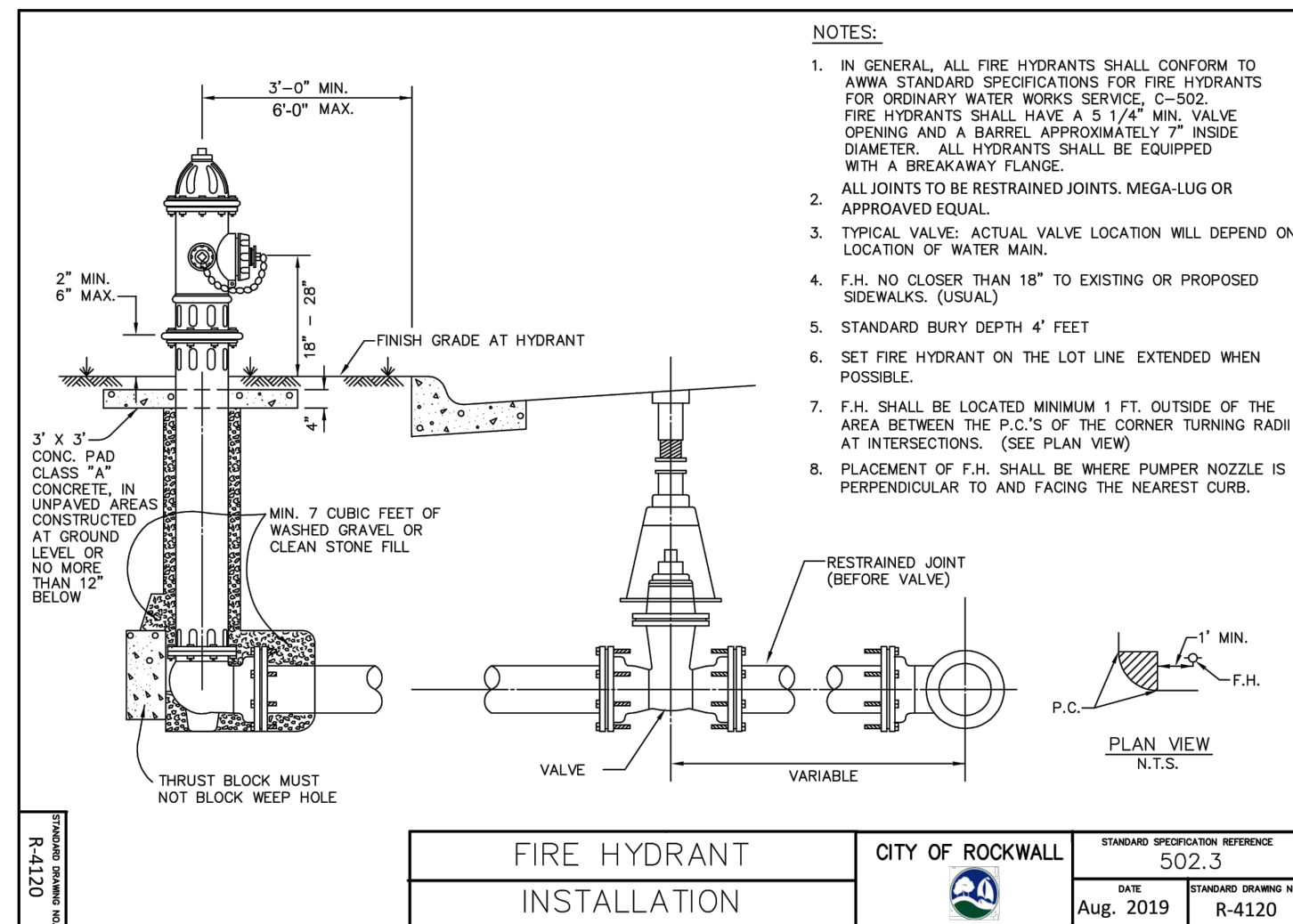
SEAL:
TBPE Firm Registration No. F-1356
SHEET NO.

C9.1



GATE VALVE 4" TO 12"	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE
BOX & EXTENSION STEM		502.6.6"
		DATE: AUG. '19
		STANDARD DRAWING NO. R-4050

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



WATER SERVICE INSTALLATION	CITY OF ROCKWALL	DATE	DRAWING NO.
1" OR 2" LINE		AUG '19	R-4130

**FINAL AS-BUILT
RECORD PLANS**

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REVISION	DATE
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2	
1	
MARK	

**COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032**

CITY OF ROCKWALL DETAILS

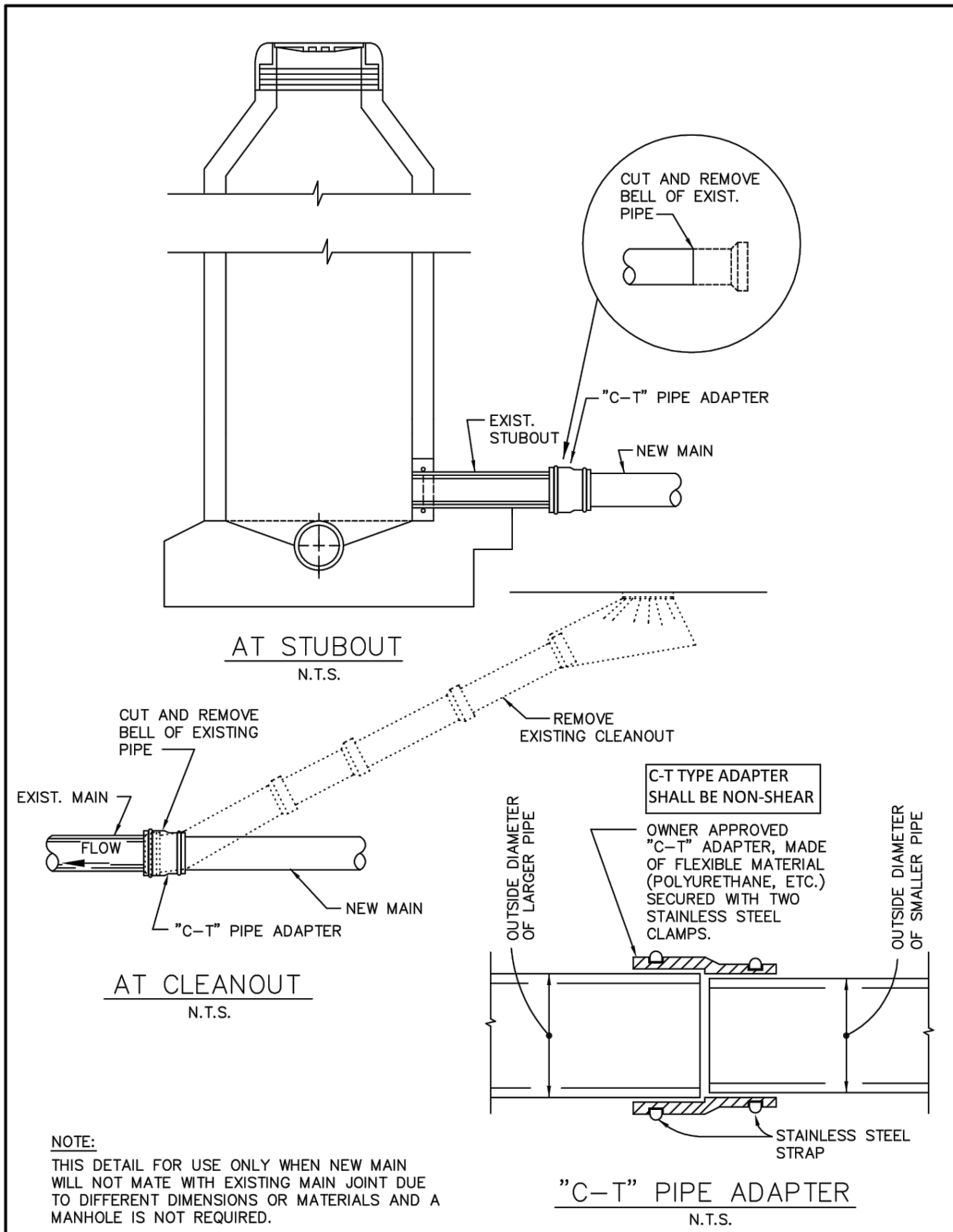
DRAWN BY:	TG
DESIGNED BY:	DK
LATEST REVISION:	07/20/2021
KSA JOB NO.:	18-1620-01

KSA
6781 Oak Hill Blvd.,
Ft. Worth, Texas 76116
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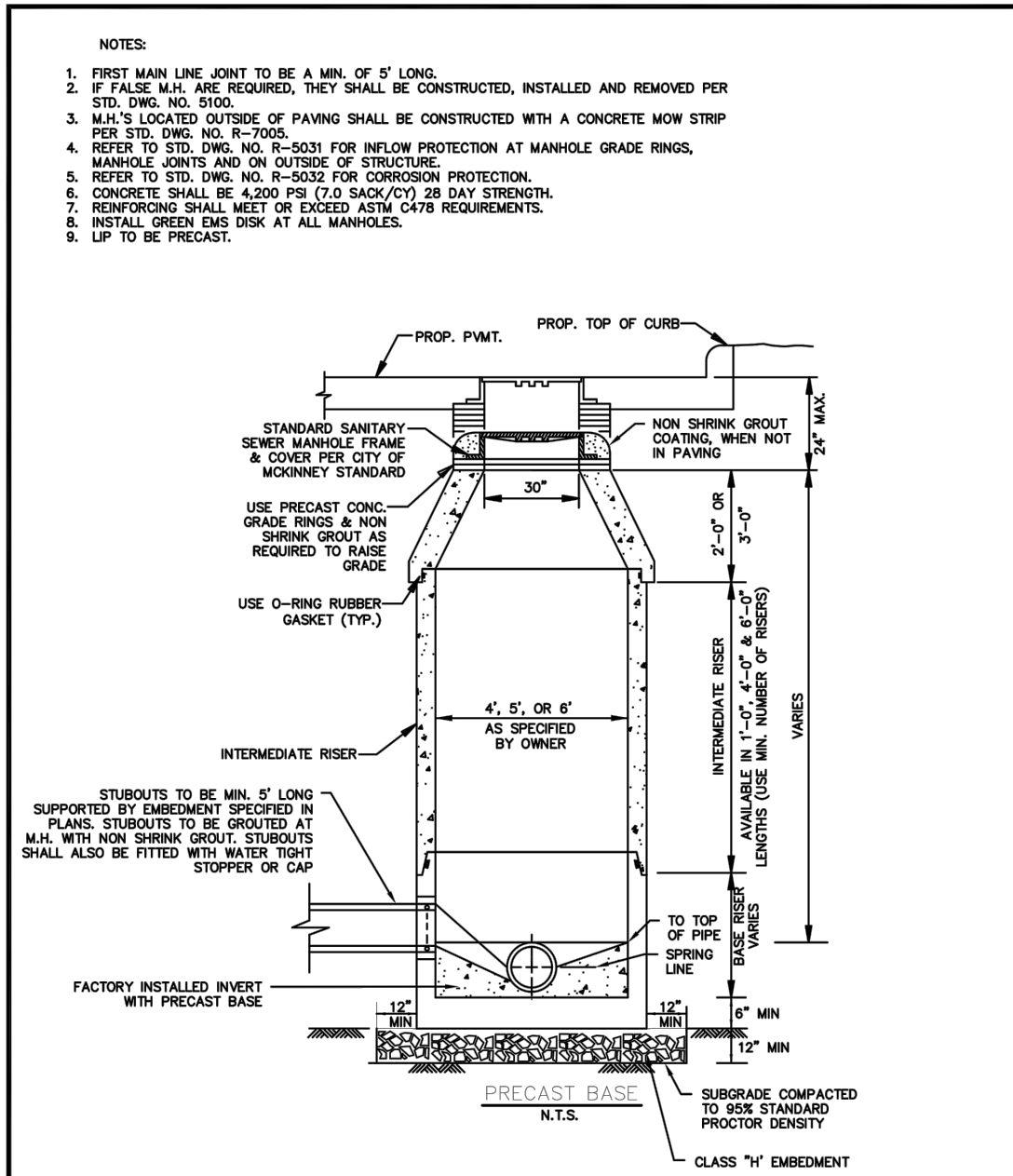


SEAL:
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SHEET NO.

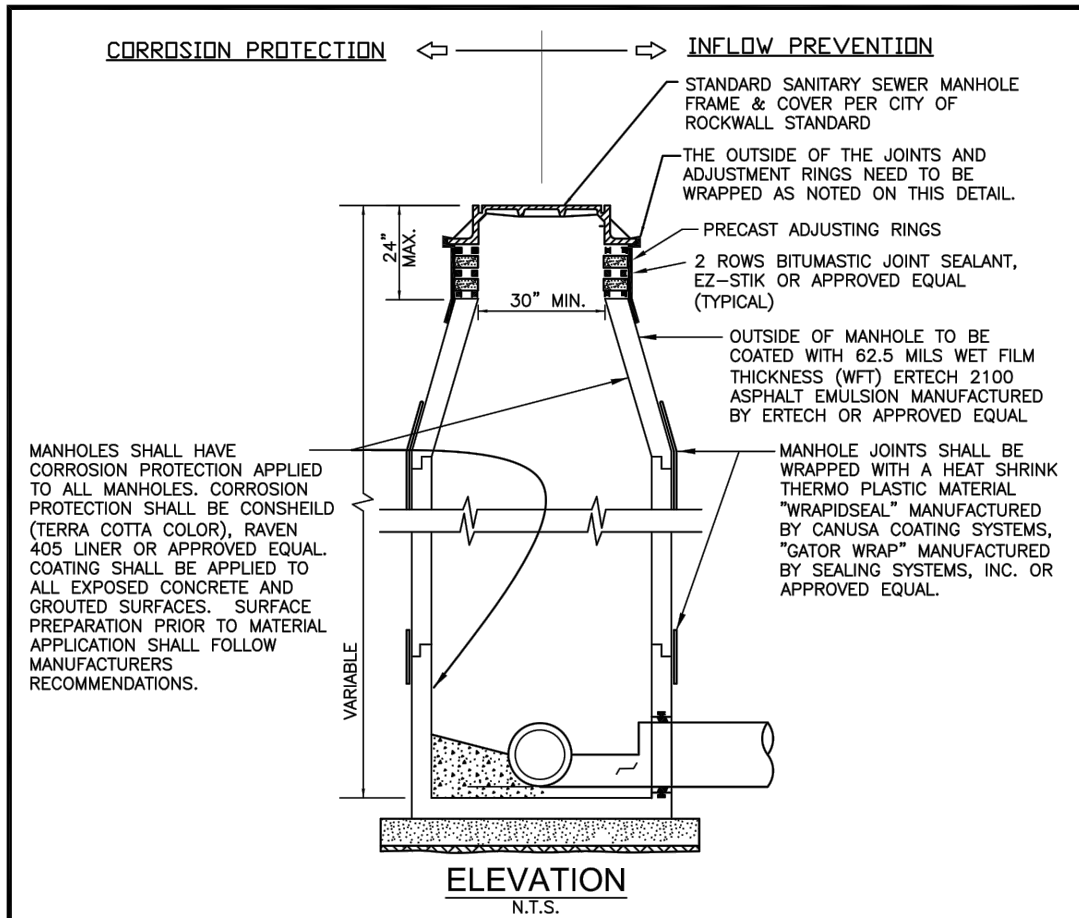
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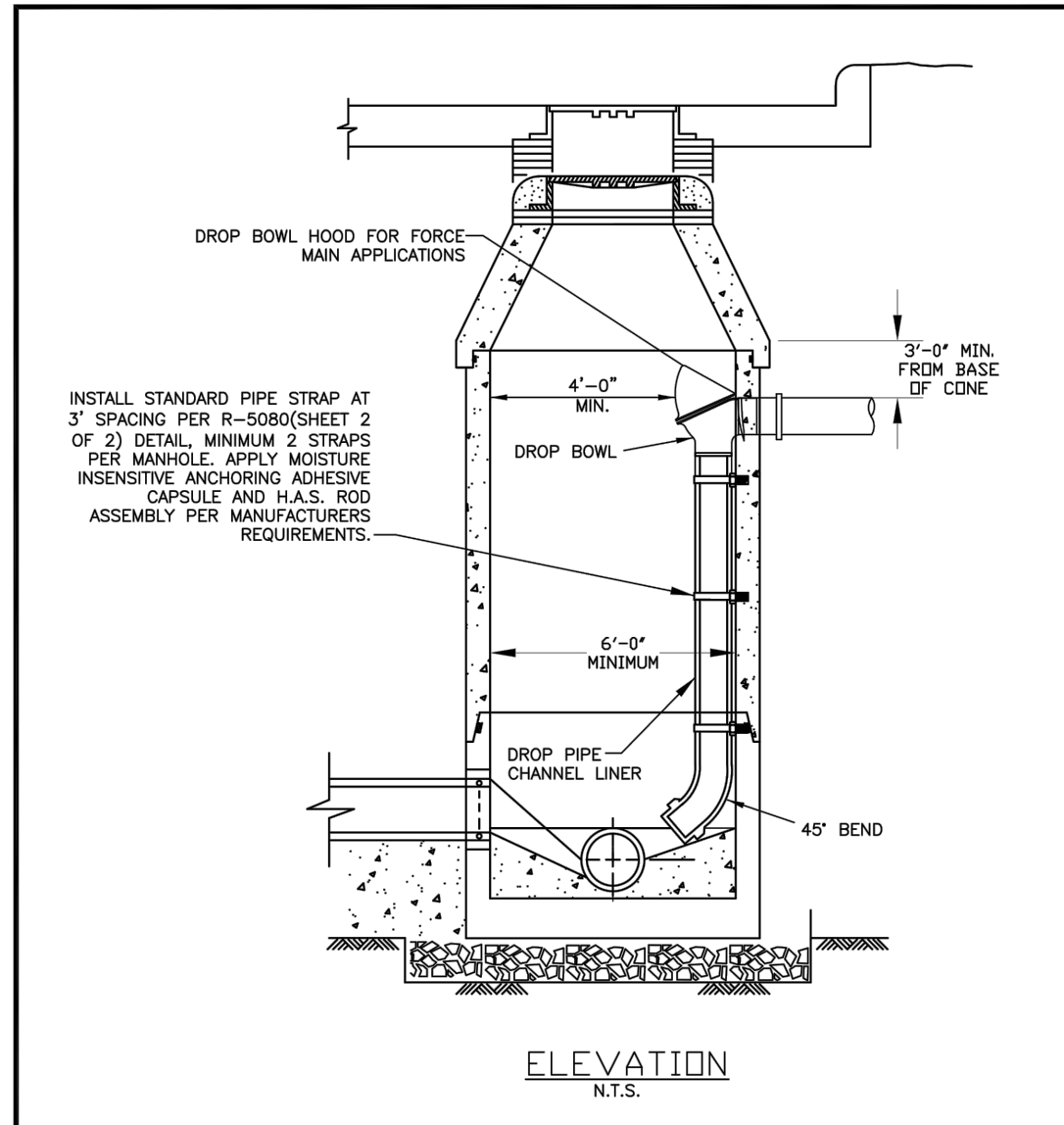
WASTEWATER MAIN TIE-IN AT CLEANOUT OR M.H. STUBOUT	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.10
		DATE: Mar. 2018 DRAWING NO. R-5010



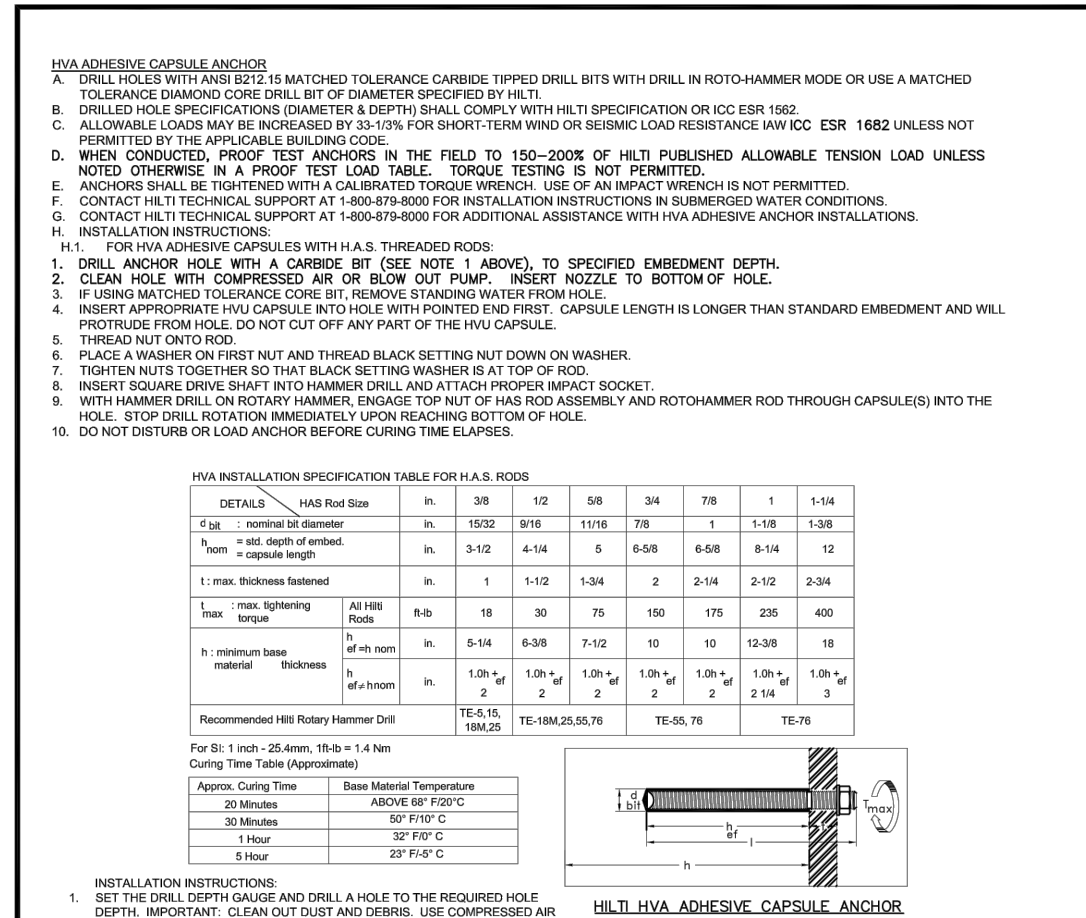
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PRECAST		DATE: AUG '19 DRAWING NO. R-5020



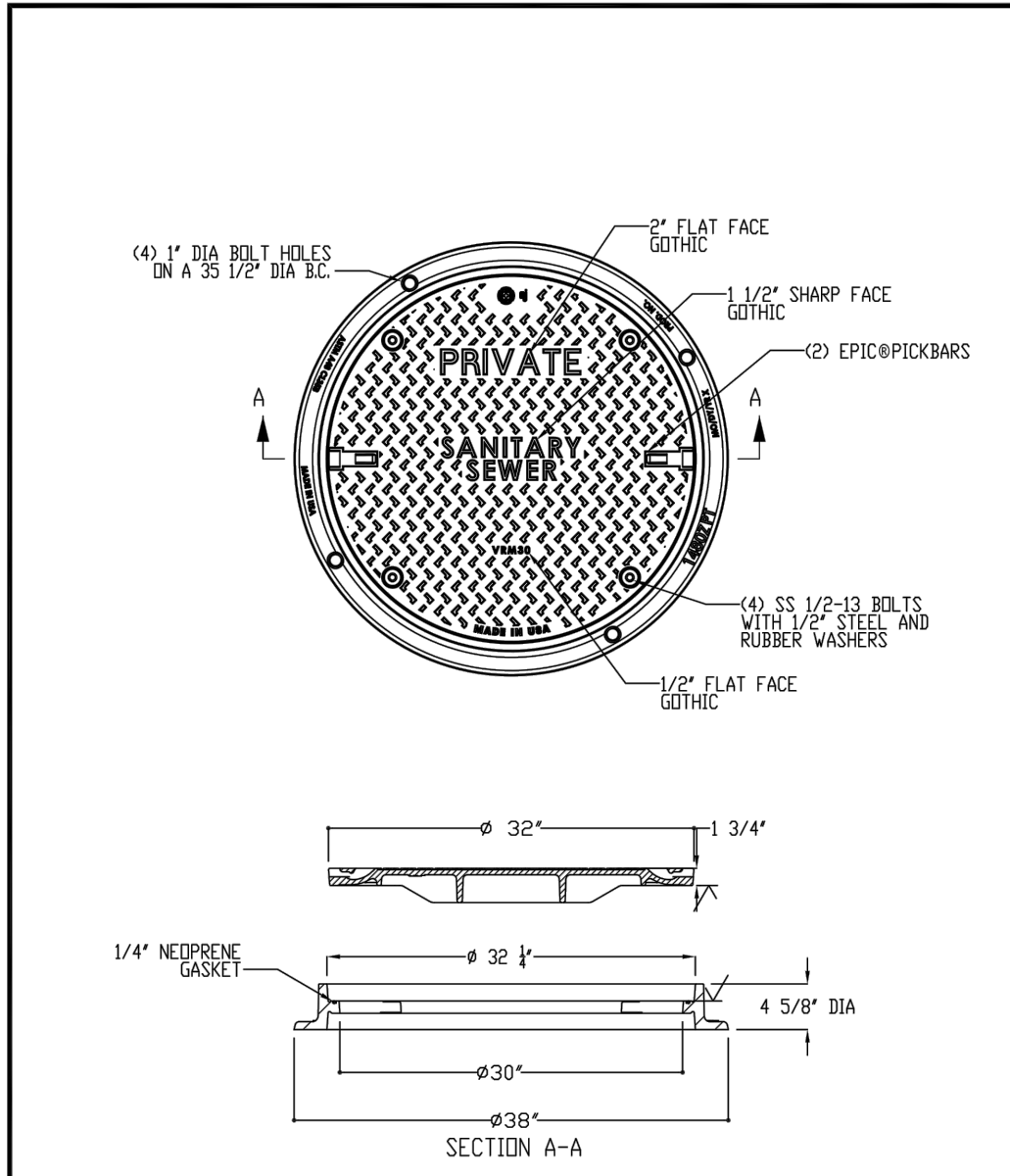
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INFLOW PREVENTION & CORROSION PROTECTION		DATE: AUG '19 DRAWING NO. R-5031



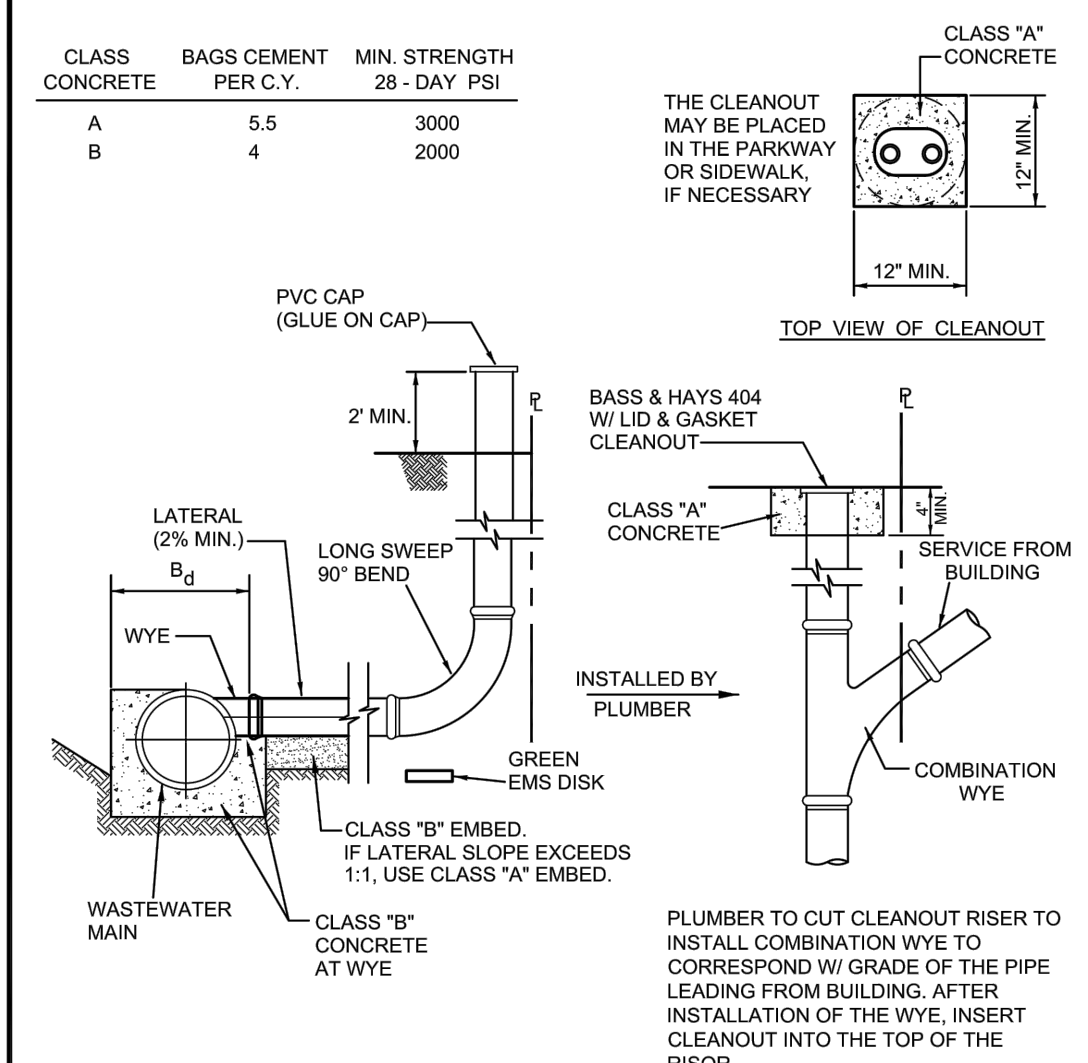
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DROP CONNECTIONS		DATE: AUG '19 DRAWING NO. R-5080



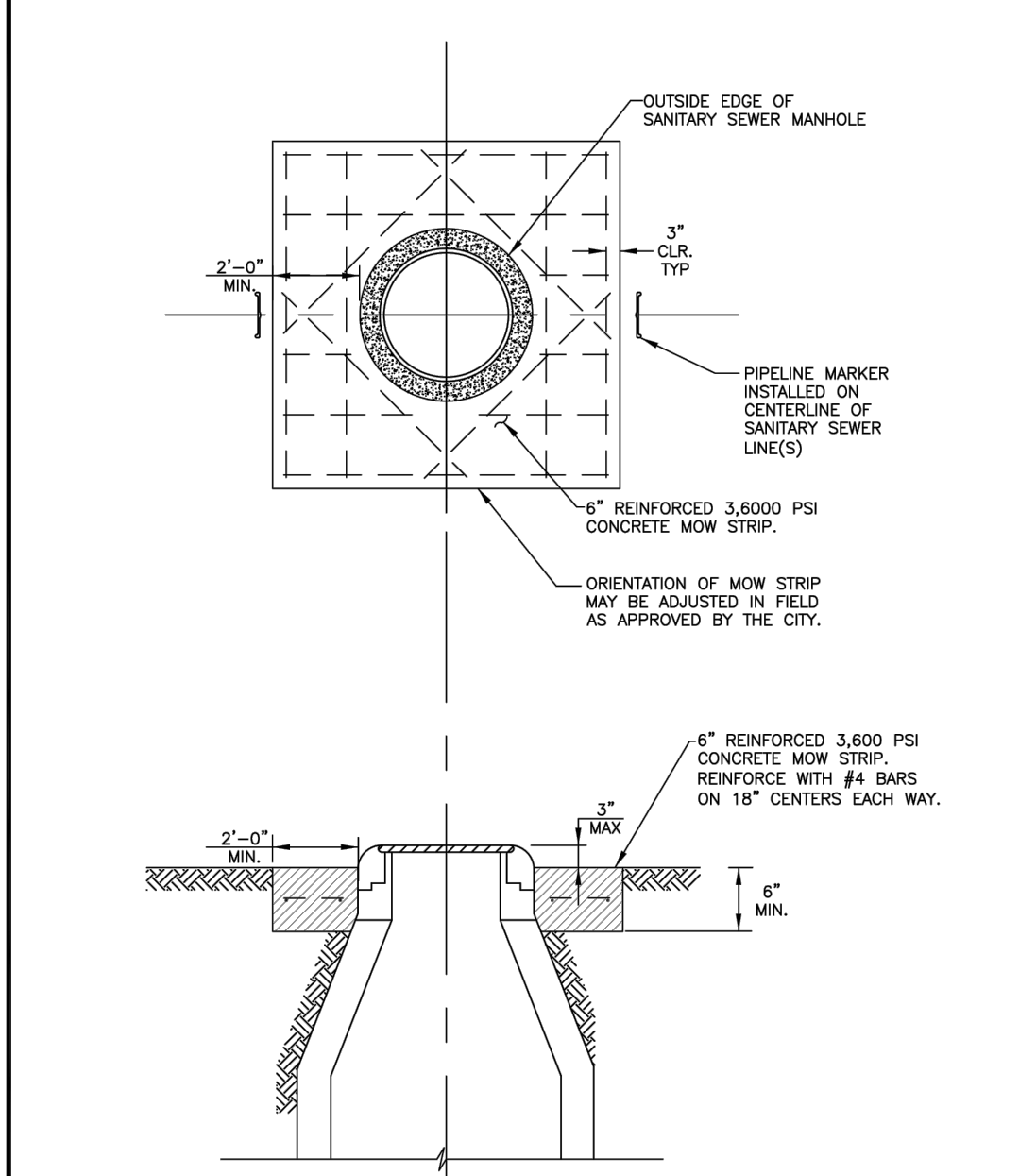
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DROP CONNECTIONS		DATE: AUG '19 DRAWING NO. R-5080



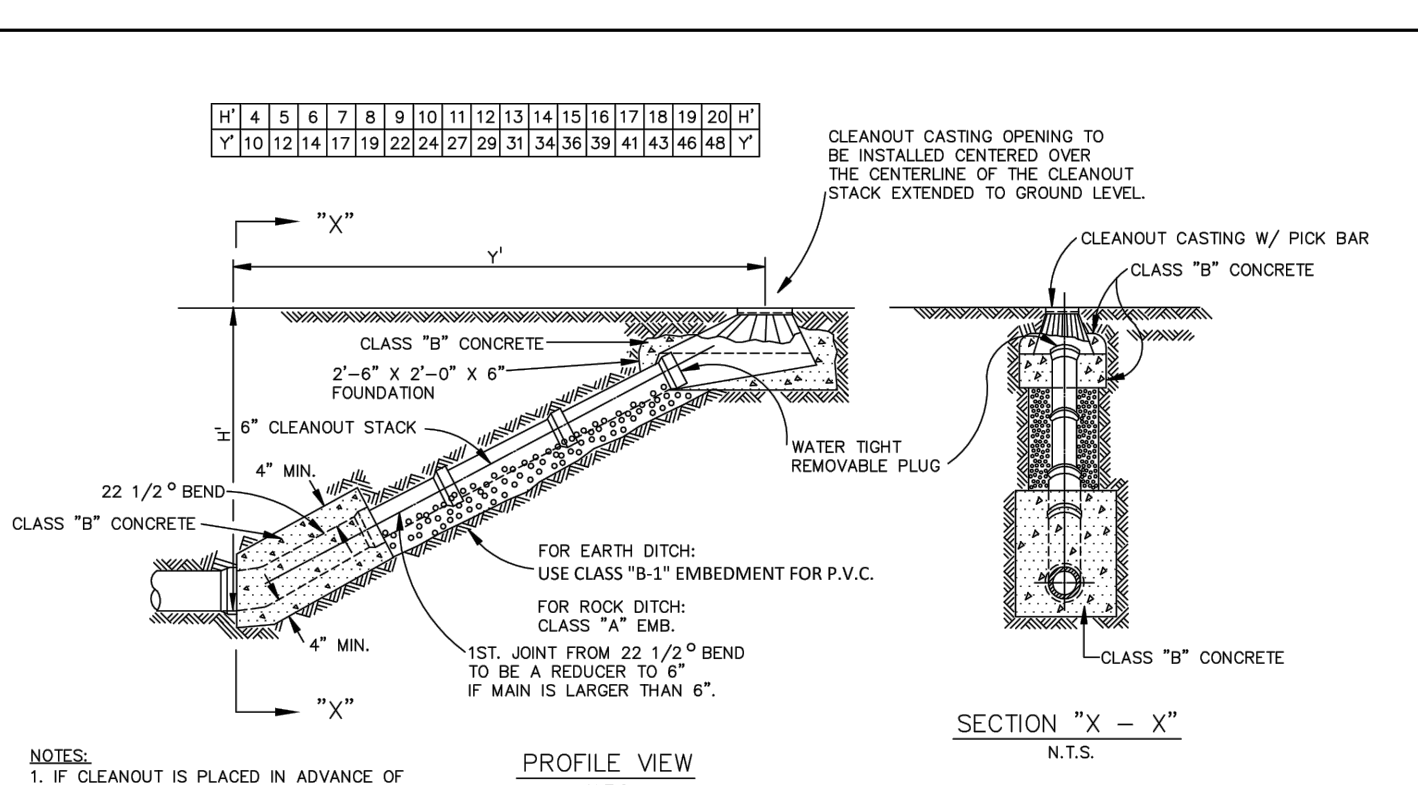
WASTEWATER MANHOLE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.10
PRIVATE RIM AND COVER		DATE: AUG '19 DRAWING NO. R-5103



WASTEWATER LATERAL	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.10
CONNECTIONS - RESIDENTIAL		DATE: AUG '15 DRAWING NO. R-5120



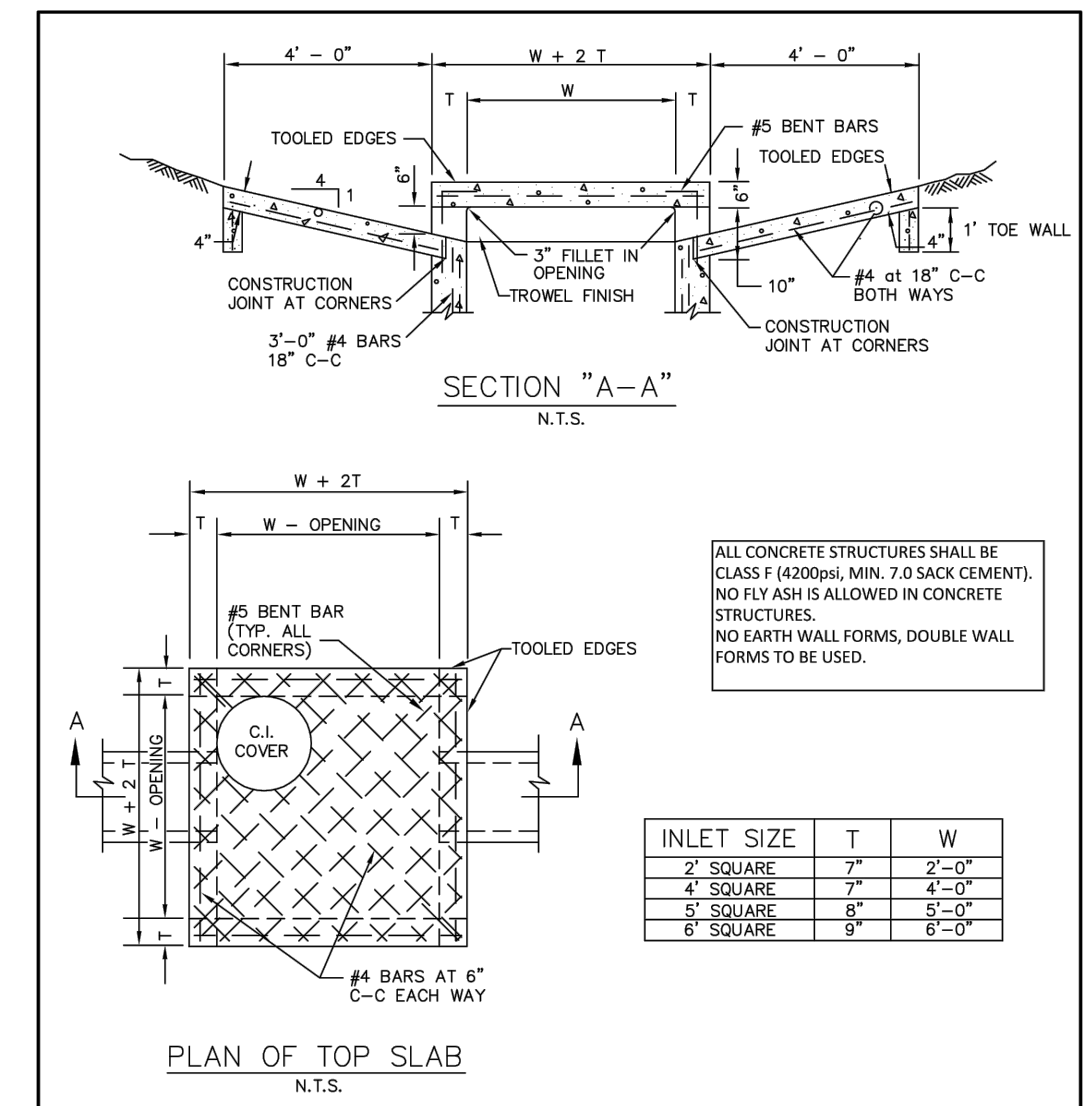
MANHOLE AND VALVE VAULT	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.10
MOW STRIP		DATE: AUG '19 DRAWING NO. R-5180



WASTEWATER MAIN	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.2
CLEANOUT		DATE: Mar. 2018 DRAWING NO. R-5110

FINAL AS-BUILT RECORD PLANS

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WASTEWATER MANHOLE	CITY OF ROCKWALL	STANDARD SPECIFICATION REFERENCE 502.2
DROP INLET		DATE: Mar. 2018 DRAWING NO. R-6040

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

CITY OF ROCKWALL DETAILS

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STATE OF TEXAS
PROFESSIONAL ENGINEER
83947
DARRYL KOTHE
02/21/2022

SEAL:
TBPE Firm Registration No. F-1556
SHEET NO.

C9.3

1.0 GENERAL REQUIREMENTS

- 1.1 CONSTRUCTION AND INSPECTION OF THE SEGMENTAL RETAINING WALL SHALL BE PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS.
- 1.2 RETAINING WALL CONTRACTOR SHALL BE CERTIFIED BY THE NATIONAL CONCRETE MASONRY ASSOCIATION AS A SEGMENTAL RETAINING WALL INSTALLER AT LEAST ONE CERTIFIED WORKER SHALL BE ON SITE DURING ANY RETAINING WALL CONSTRUCTION.
- 1.3 RETAINING WALL CONTRACTOR SHALL DEMONSTRATE SUCCESSFUL CONSTRUCTION OF AT LEAST FIVE SEGMENTAL RETAINING WALLS THAT ARE AT LEAST 12 FEET OR TALLER.
- 1.4 OWNER'S REPRESENTATIVE SHALL INSPECT CONSTRUCTION OF THE WALL FOR CONFORMANCE TO PLANS, SPECIFICATIONS AND THESE CONSTRUCTION REQUIREMENTS.
- 1.5 THE CONTRACTOR SHALL CLEAR AND GRUB THE REINFORCED BACKFILL ZONE AREA, REMOVING TOPSOIL, OR OTHER ORGANIC OR DELETERIOUS MATERIAL. ANY UNSUITABLE MATERIAL SHALL BE OVER EXCAVATED, REPLACED AND COMPACTED WITH BACKFILL MATERIAL TO MEET SPECIFICATIONS, OR AS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE.
- 1.6 OWNER'S REPRESENTATIVE SHALL VERIFY THAT REINFORCED BACKFILL MATERIAL MEETS THE GRADATION AND OTHER REQUIREMENTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 1.7 OWNER'S REPRESENTATIVE SHALL VERIFY THAT FOUNDATION SOIL MEETS THESE CONSTRUCTION REQUIREMENTS.
- 1.8 CONTRACTOR SHALL PLACE FILL, NOT EXCEEDING 8 INCHES FOR HEAVY COMPACTION EQUIPMENT AND NOT EXCEEDING 6 INCHES FOR LIGHT WEIGHT EQUIPMENT, WITHIN FIVE FEET OF THE BACK FACE OF THE WALL, ONLY HAND OPERATED COMPACTION EQUIPMENT MAY BE USED. WALLS TALLER THAN 10 FEET AND HEAVY COMPACTION EQUIPMENT SHALL BE CLOSER THAN 60% OF WALL HEIGHT.
- 1.9 THE COMPACTED DENSITY AND MOISTURE CONTENT OF THE SOIL IN THE REINFORCED ZONE AREA SHALL BE TESTED AT LEAST ONCE PER EVERY 1000 SF PER 8" VERTICAL LIFT OR AT LEAST ONCE PER EVERY 2 FEET OF VERTICAL WALL ERECTION.
- 1.10 ALL VOIDS IN THE BLOCK UNITS SHALL BE FILLED WITH GRAVEL FILL, AND COMPACTED. CORE FILL AGGREGATE SHALL SATISFY ASTM D2487 FOR CLASSIFICATION AS GW OR GP.
- 1.11 DRAINAGE AGGREGATE SHALL EXTEND A MINIMUM OF 12" BEHIND THE ENDS OF THE BLOCK UNITS, ANY OVER EXCAVATED AREAS SHALL BE FILLED WITH GRAVEL AND COMPACTED. DRAINAGE AGGREGATE SHALL SATISFY ASTM C33 FOR CLASSIFICATION FOR SIZE NO. 57 OR 67.
- 1.12 BLOCK CAP UNITS SHALL BE PERMANENTLY SECURED TO THE FULL BLOCK UNITS USING AN APPROVED CONSTRUCTION ADHESIVE, AS PER THE BLOCK MANUFACTURER'S RECOMMENDATIONS.
- 1.13 THE CONTRACTOR SHALL FOLLOW ALL OF THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS.

2.0 MATERIAL

- 2.1 BACKFILL SOIL - BACKFILL MATERIAL SPECIFIED BELOW SHALL BE APPROVED BY OWNER'S REPRESENTATIVE AND SHALL MEET THE STRENGTH PARAMETERS AS PER SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS.
- 2.2 REINFORCED BACKFILL AND RETAINED SOIL/FILL MATERIALS SHALL BE FREE OF EXCESS MOISTURE, ROOTS, MUCK, ORGANIC MATERIAL, OR OTHER DELETERIOUS MATERIALS. ALL ROCK PARTICLES AND HARD EARTH SHALL BE LESS THAN THREE INCHES IN THE LONGEST DIMENSION. REINFORCED BACKFILL MATERIALS THAT DO NOT MEET THESE CRITERIA SHALL BE CONSIDERED UNSUITABLE AND SHALL BE REMOVED.
- 2.3 REINFORCED FILL MATERIAL SHALL BE CLEAN FILL WITH MAXIMUM AGGREGATE SIZE LIMITED TO 3", WITH USCS CLASSIFICATION GW, GP, GC, SW, SP, SM, SC, WITH A PLASTICITY INDEX LESS THAN OR EQUAL TO 15 AND A LIQUID LIMIT LESS THAN OR EQUAL TO 40 PER ASTM D-4318.
- 2.4 FILL IN THE REINFORCED FILL ZONE SHALL BE COMPACTED AS SPECIFIED BY PROJECT SPECIFICATIONS OR TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (AAASHTO 99). AT A MOISTURE CONTENT NO GREATER THAN 2 PERCENTAGE POINTS AND NO LESS THAN 1 PERCENTAGE POINT OF DRY OPTIMUM.
- 2.5 REINFORCED FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION TESTED IN ACCORDANCE WITH ASTM D-422.
- | SIEVE SIZE | PERCENT PASSING |
|------------|-----------------|
| 1" | 100-75 |
| NO. 4 | 100-20 |
| NO. 40 | 0-60 |
| NO. 200 | 0-35 |
- 2.6 DRAINAGE AGGREGATE SHALL BE A CLEAN CRUSHED STONE OR GRANULAR FILL (NO PEA GRAVEL) MEETING THE FOLLOWING GRADATION:
- | SIEVE SIZE | PERCENT PASSING |
|------------|-----------------|
| 1" | 100 |
| 3/4" | 75-100 |
| NO. 4 | 0-60 |
| NO. 40 | 0-50 |
| NO. 200 | 0-5 |
- 2.7 REINFORCED FILL AND DRAINAGE FILL SHALL HAVE PH BETWEEN 3 AND 9 PER ASTM G-51.
- 2.8 SEGMENTAL BLOCK UNITS SHALL BE: CELTIK PRO
- 2.9 SEGMENTAL BLOCK UNITS SHALL MEET THE PUBLISHED MANUFACTURER'S SPECIFICATIONS AND THE MATERIAL SPECIFICATIONS AS SHOWN IN THE ASTM C1372 STANDARD SPECIFICATION FOR DRY-CAST SEGMENTAL RETAINING WALL UNITS.
- 2.10 GEODIG REINFORCEMENT SHALL BE: MIRAFI 3KT - SYNTEEN SF35 - STRATA 200
SYNTEEN S55 WILL BE USED FOR WALL ON RW4
- 2.11 CONNECTORS AND ACCESSORIES SHALL BE AS RECOMMENDED AND SUPPLIED BY THE WALL MANUFACTURER.

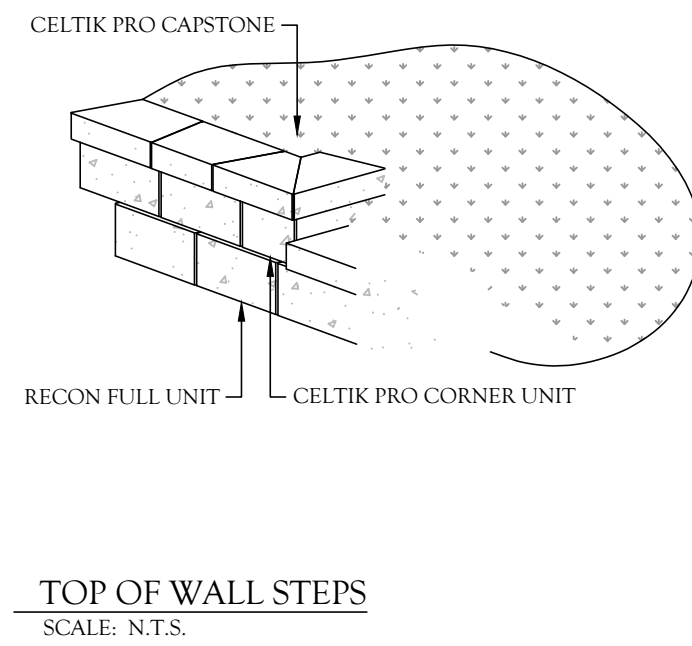
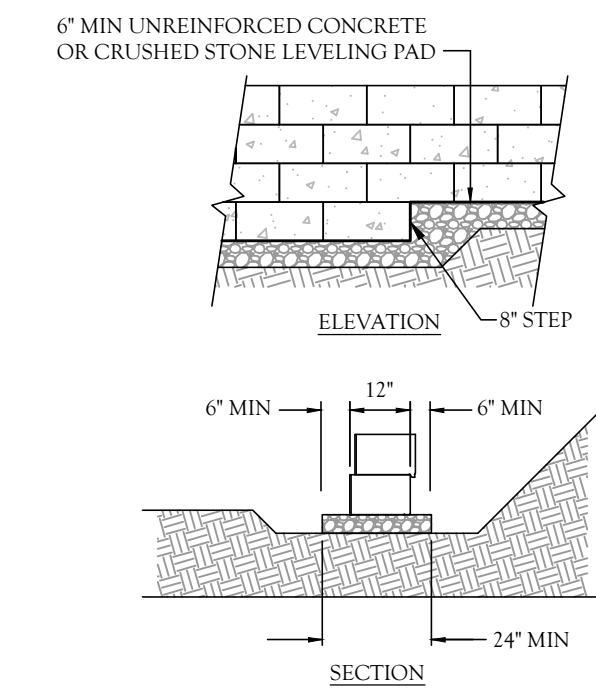
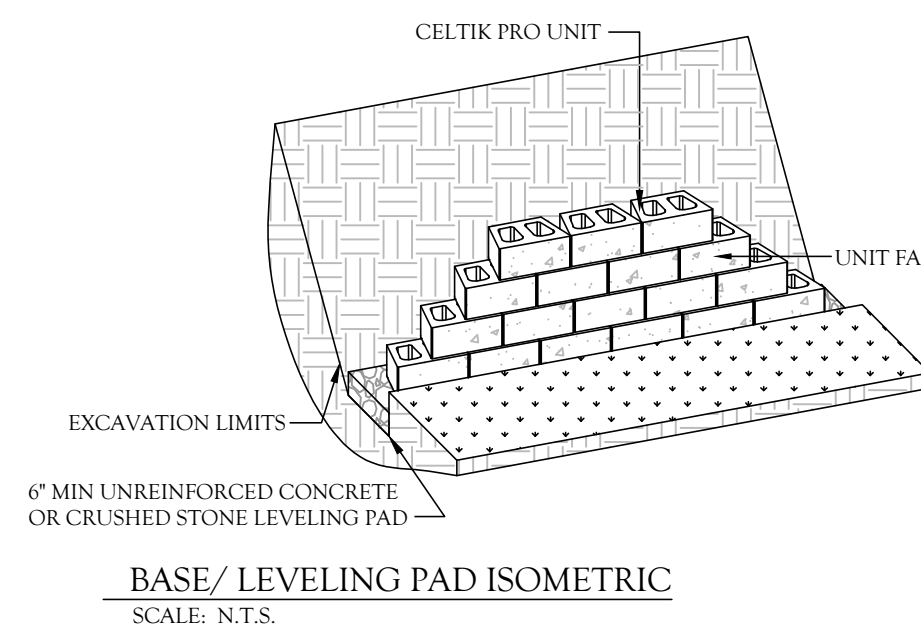
3.0 DRAINAGE

- 3.1 AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL GRADE THE SURFACE OF THE LAST LIFT OF REINFORCED SOIL AWAY FROM THE WALL FACE AND COMPACT.
- 3.2 DURING SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF THE WALL AGAINST SURFACE WATER AT ALL TIMES BY THE USE OF BERMS, DIVERSION DITCHES, TEMPORARY DRAINS AND ALL OTHER MEANS THAT ARE REQUIRED.
- 3.3 WATER SHALL NOT BE PERMITTED TO POND IN THE REINFORCED SOIL ZONE.
- 3.4 ALL SLOPES ABOVE OR BELOW THE WALL SHALL BE VEGETATED AND PROTECTED FROM EROSION AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION OF THE WALL.
- 3.5 THE SEGMENTAL RETAINING WALL HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE REINFORCED BACKFILL MATERIAL SHALL BE FREE OF SUBSURFACE DRAINAGE OF WATER (DEEPAE). PERMANENT SUBSURFACE WATER COLLECTION AND DIVERSION SHALL BE THE RESPONSIBILITY OF THE OWNER'S REPRESENTATIVE.
- 4.0 LEVELING PAD
- 4.1 LEVELING PAD SHALL COMPRISE OF COMPACTED CRUSHED STONE BASE OR UNREINFORCED CONCRETE.
- 4.2 THE LEVELING PAD SHALL BE AT LEAST 24 INCHES AND 6 INCHES THICK.
- 4.3 THE LEVELING PAD SHALL BE CONSTRUCTED AS TO PROVIDE A LEVEL, HARD SURFACE UPON WHICH TO PLACE THE FIRST COURSE OF SEGMENTAL RETAINING WALL UNITS.
- 4.4 IF GRAVEL IS USED TO CONSTRUCT THE LEVELING PAD, IT SHALL BE COMPACTED WITH A MINIMUM OF THREE PASSES OF A VIBRATORY SLEED AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- 4.5 THE LEVELING PAD SHALL BE PREPARED AS TO ENSURE COMPLETE CONTACT BETWEEN THE PAD AND THE FIRST COURSE OF THE SEGMENTAL RETAINING WALL UNITS.
- 5.0 DESIGN PARAMETERS
- 5.1 DESIGN OF THE SEGMENTAL RETAINING WALL IS BASED UPON THE FOLLOWING PARAMETERS:
- | | EFFECTIVE FRICTION ANGLE (DEG) | EFFECTIVE COHESION | MOIST UNIT WEIGHT |
|-----------------|--------------------------------|--------------------|-------------------|
| REINFORCED | 28 | 0 PSF | 120 PCF |
| RETAINED SOIL | 28 | 0 PSF | 120 PCF |
| FOUNDATION SOIL | 28 | 0 PSF | 120 PCF |
- 5.2 FACTORS OF SAFETY (F.S.)
- F.S. FOR SLIDING AT BASE = 1.5
F.S. FOR OVERTURNING = 2.0
F.S. FOR BEARING = 2.0
F.S. FOR PULLOUT = 1.5
F.S. FOR CONNECTION = 1.5
- 5.3 ANALYSIS OF GLOBAL STABILITY IS BEYOND THE SCOPE OF THIS DESIGN. IF GLOBAL STABILITY ANALYSIS IS DEEMED NECESSARY, OWNER SHOULD CONSULT GEOTECHNICAL ENGINEER.
- 5.4 ADDITIONAL LOADINGS:
- BUILDING LOADS: N/A
SURCHARGE: PER PROFILE
SEISMIC LOADING: N/A
- 5.5 HYDROSTATIC DESIGN IS NOT CONSIDERED IN WALL DESIGN. WATER SURFACE ASSUMED TO BE SUFFICIENTLY BELOW THE BOTTOM OF WALL AS NOT TO INFLUENCE INTERNAL AND EXTERNAL STABILITY.
- 6.0 GENERAL ASSUMPTIONS
- 6.1 ALL SEGMENTAL WALL LAYOUTS ARE BASED UPON INFORMATION PROVIDED BY THE OWNER'S REPRESENTATIVE. THE OWNER SHOULD VERIFY THAT THE LAYOUT AND GEOMETRIC INFORMATION SHOWN HEREIN IS ACCURATE. CROSSPOINT ENGINEERING ASSUMES NO LIABILITY FOR THE ACCURACY OF THE GEOMETRIC AND OR LAYOUT INFORMATION.
- 6.2 SEGMENTAL RETAINING WALLS ARE DESIGNED TO SUPPORT STATIC SOIL LOADING AS SHOWN IN PLANS. OWNER'S REPRESENTATIVE SHALL VERIFY THAT THE WALL STRUCTURE IS ISOLATED FROM ALL OTHER STRUCTURAL, VEHICLE AND OTHER LIVE AND DEAD LOADS AND SURCHARGES.
- 6.3 WALL ELEVATIONS AND LOCATIONS, AND GEOMETRY OF EXISTING STRUCTURES MUST BE VERIFIED BY THE OWNER OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- 6.4 CROSSPOINT ENGINEERING ASSUMES NO LIABILITY FOR INTERPRETATION OR VERIFICATION OF SUBSURFACE CONDITIONS, FOR THE SUITABILITY OF SOIL DESIGN PARAMETER, OR FOR INTERPRETATION OF SUBSURFACE GROUNDWATER CONDITIONS.
- 6.5 OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR REVIEWING AND VERIFYING THAT THE ACTUAL SITE CONDITIONS AND PARAMETERS ARE AS DESCRIBED HEREIN, PRIOR TO AND DURING CONSTRUCTION. OWNER'S REPRESENTATIVE SHALL BE ON SITE TO ASSURE CONSTRUCTION IS IN ACCORDANCE WITH THESE NOTES AND DRAWINGS AND THE CONTRACT PLANS AND SPECIFICATIONS.
- 6.6 PROCEEDING WITH CONSTRUCTION WITHOUT FIRST VERIFYING THE CONDITIONS AND PARAMETERS SHALL ABSOLVE CROSSPOINT ENGINEERING FROM ALL LIABILITY FOR THE DESIGN AND CONSTRUCTION OF THIS STRUCTURE AND THE CONTRACTOR SHALL INDICATE AND HOLD HARMLESS CROSSPOINT ENGINEERING FROM ALL RESULTING CLAIMS, DAMAGES, LOSSES, AND EXPENSES.
- 6.7 IF ANY GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, IMMEDIATELY CONTACT CROSSPOINT ENGINEERING AT 903-705-4416 AND THE OWNER'S REPRESENTATIVE.

- 6.8 THIS DESIGN IS ONLY VALID FOR THE PROPOSED SEGMENTAL RETAINING WALL DETAILED AT THIS LOCATION AS PER THESE PLANS. THESE PLANS ARE NOT TRANSFERABLE TO ANY OTHER PROJECT.
- 6.9 DIFFERENTIAL SETTLEMENT, TOTAL SETTLEMENT AND CONSOLIDATION OF SUBGRADE MATERIALS SHALL BE THE RESPONSIBILITY OF THE OWNER'S GEOTECHNICAL ENGINEER OR OWNER'S REPRESENTATIVE. CROSSPOINT ENGINEERING ACCEPTS NO LIABILITY FOR THE EVALUATION OF SETTLEMENTS.
- 6.10 EVALUATION AND MITIGATION OF POTENTIAL EROSION, SCOUR AND HYDRAULIC EFFECTS OF WATER FLOWING IN ANY PROJECT AREA IS THE RESPONSIBILITY OF THE OWNER'S REPRESENTATIVE.
- 6.11 STRUCTURAL DESIGN HEREIN REPRESENTS A FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL INTERIM BRACING, SHORING, INTERIM DRAINAGE PROVISIONS AND EROSION PROTECTION REQUIRED UNTIL FINAL CAPPING, PAVING, CURBING AND COMPLETION OF FINAL STORM DRAIN SYSTEM IS COMPLETE.

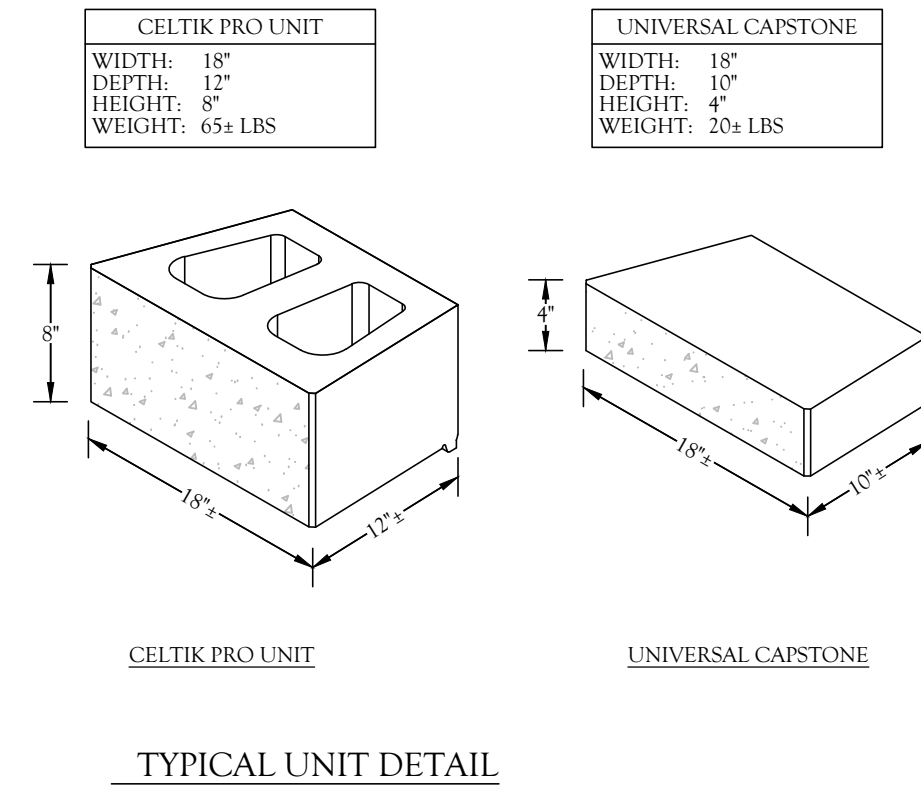
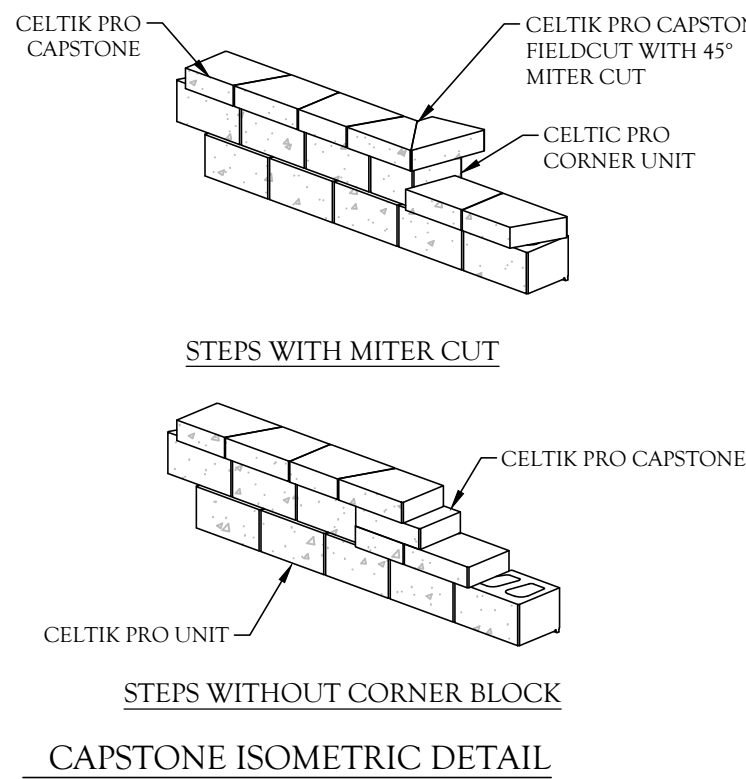
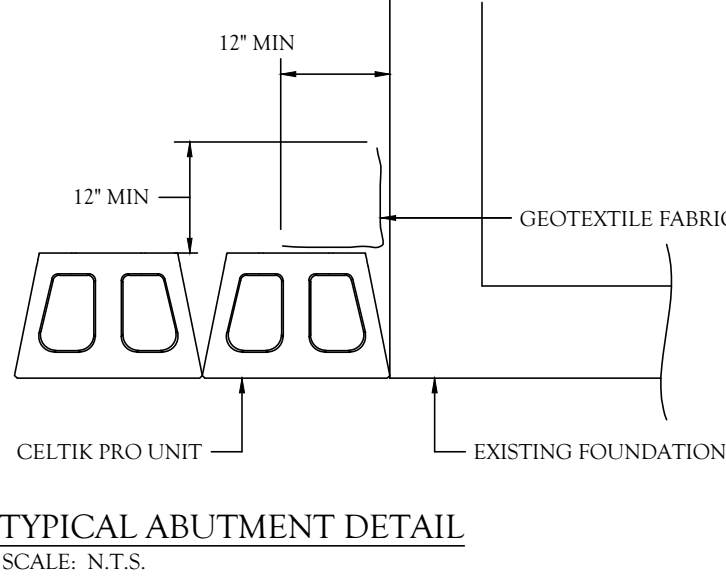
LEVELING PAD NOTES:

1. THE LEVELING PAD SHALL BE CONSTRUCTED OF 2,000 PSI CONCRETE OR CRUSHED STONE. CENTER BLOCKS ON LEVELING PAD.
2. THE BASE FOUNDATION SHALL BE APPROVED BY THE SITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE LEVELING PAD.



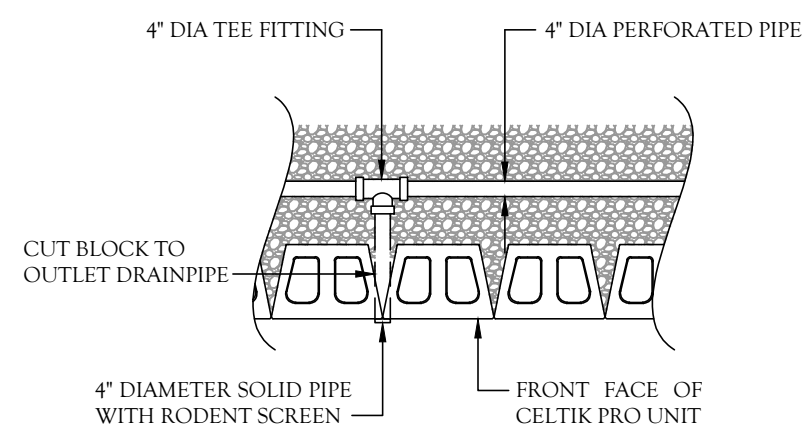
NOTES:

1. GEOTEXTILE FABRIC SHALL BE PLACED WHERE THE RETAINING WALLS ABUT TO EXISTING FOUNDATIONS AS SHOWN ON THE RETAINING WALL SITE PLANS. OVERLAP ALL ABUTMENT JOINTS 12" WITH A MINIMUM 24" WIDE FABRIC.



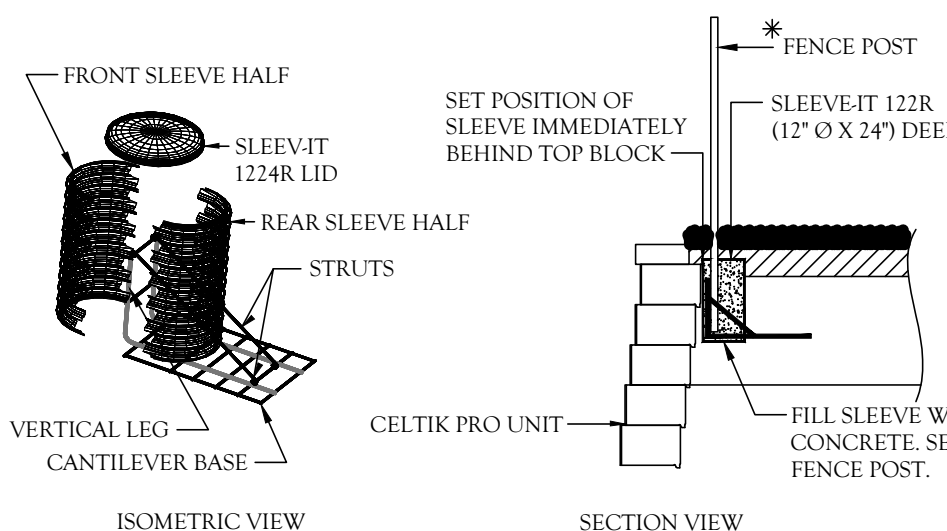
NOTES:

1. THE DRAINAGE SYSTEM SHALL CONSIST OF A 4" DIAMETER PERFORATED PVC PIPE WRAPPED WITH A GEOTEXTILE FABRIC.
2. PROVIDE RODENT SCREENS IN 4" DIAMETER NON-PERFORATED PIPE DAYLIGHTING THROUGH WALL.
3. SEE CONTRACT PLANS FOR ADDITIONAL REQUIREMENTS AND DETAILS.



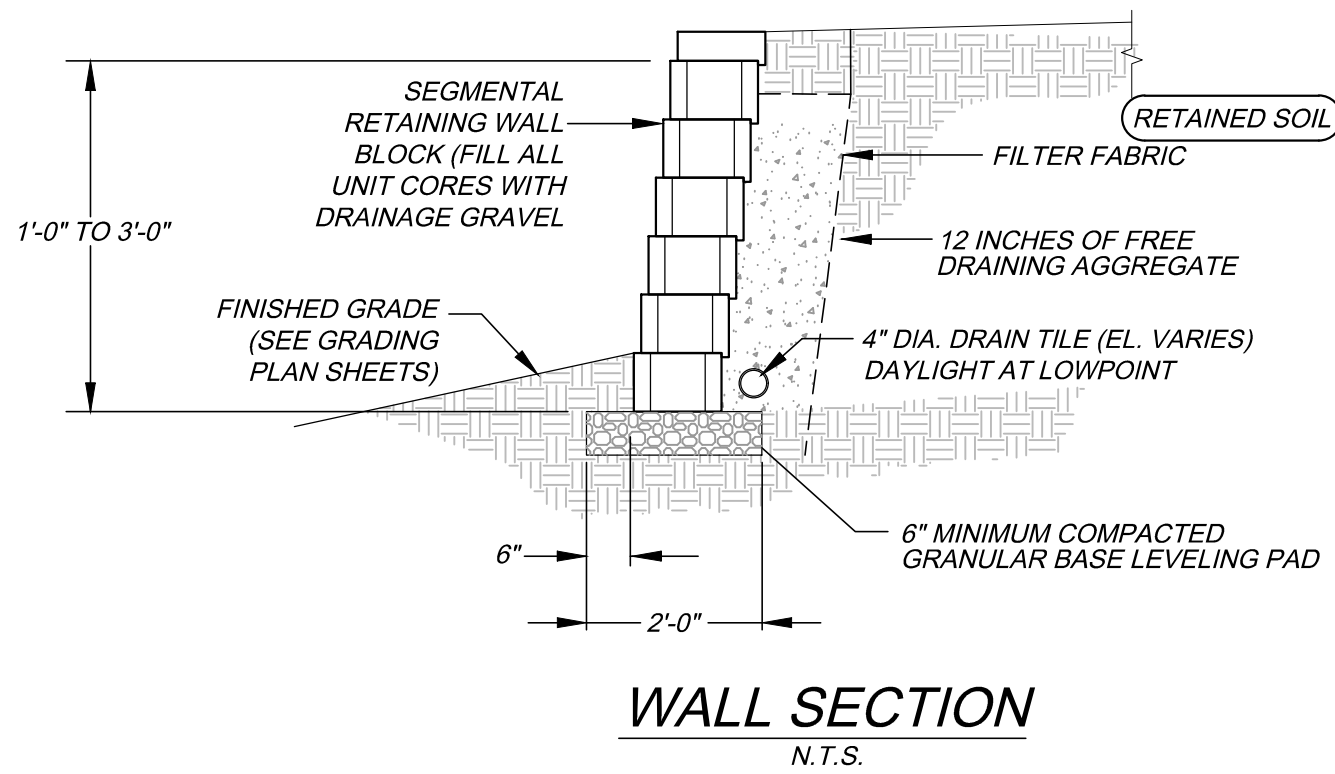
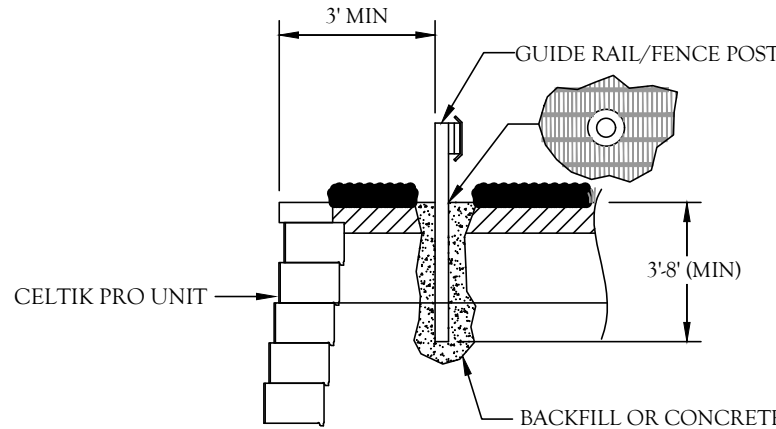
NOTES:

- * FENCING SYSTEMS APPROVED FOR USE WITH THE SLEEVE-IT™ 1224R ARE LIMITED TO THE FOLLOWING HEIGHTS: CHAIN LINK - UP TO 8 FT, PRIVACY UP TO 6 FT (WOODEN, PVC, METAL). POST SIZE 4"X4" MAX.



NOTES:

1. AUGER THROUGH GEOGRID LAYERS.
2. BACKFILL OR CONCRETE GUIDE RAIL/FENCE POST IN PLACE
3. DESIGNED BY OTHERS.



FINAL AS-BUILT RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

5

4

3

2

1

MARK

REVISION

DATE

COURTIN DENTAL OFFICE
ROCKWALL, TEXAS 75032

RETAINING WALL DETAILS

PROJECT NAME:

DRAWN BY: TG

DESIGNED BY: DK

LATEST REVISION: 07/20/2021

KSA JOB NO.: 18-1620-01

KSA

6781 Oak Hill Blvd.,
Rockwall, Texas 75087
T: 903.574.1414
www.ksaeng.com

STATE OF TEXAS

83947

PROFESSIONAL ENGINEER

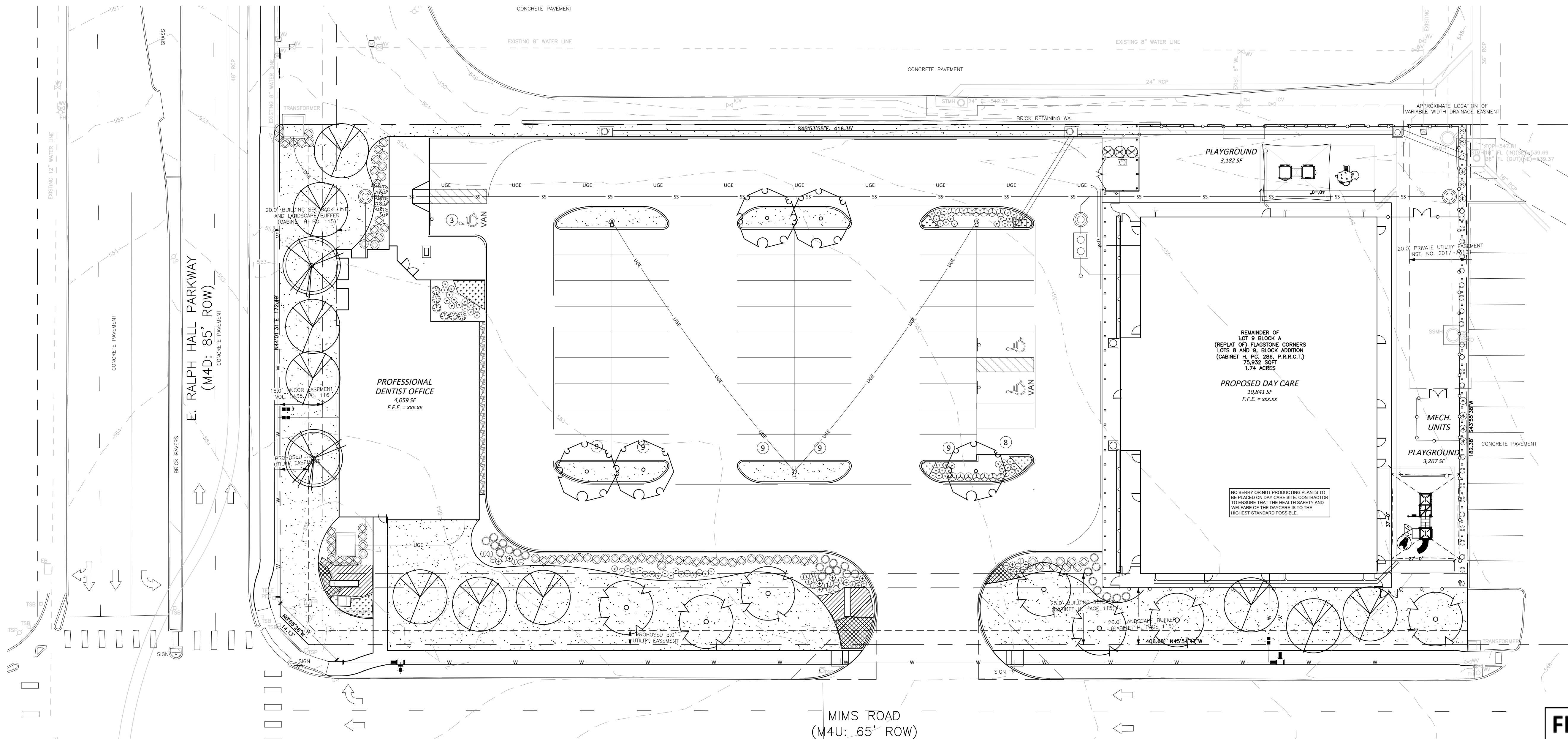
02/22/2022

SEAL:

TBPE Firm Registration No. F-1356

SHEET NO.

C9.5



GENERAL LAWN NOTES

- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER
- LAWN AREAS SHALL BE LEFT 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
- CONTRACTOR TO FIND GRADE AREAS TO ACHIEVE FINAL CONTOURS AS SHOWN ON CIVIL DRAWINGS. POSITIVE DRAINAGE SHALL BE PROVIDED AWAY FROM ALL BUILDINGS, ROUNDING AT TOP AND BOTTOM OF SLOPES SHALL BE PROVIDED AND IN OTHER BREAKS IN GRADE. CORRECT AREAS WHERE STANDING WATER MAY OCCUR.
- ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNERS CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" IN DIAMETER AND LARGER, REMOVE ALL DIRT CLODS, STICKS, CONCRETE SPOILS, TRASH ETC PRIOR TO PLACING TOPSOIL AND GRASS INSTALLATION.
- CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE.
- CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT IF NECESSARY.

SOLID SOD

- SOLID SOD SHALL BE PLACED ALONG ALL IMPERVIOUS EDGES. AT A MINIMUM, THIS SHALL INCLUDE CURBS, WALKS, INLETS, MANHOLES AND PLANTING BED AREAS. SOD SHALL COVER OTHER AREAS COMPLETELY AS FREED BY PLAN.
- SOD SHALL BE STRONGLY ROOTED DROUGHT RESISTANT SOD, NOT LESS THAN 2 YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASS AND MACHINE CUT TO PAD THICKNESS OF 3/4" (+/-1/4"), EXCLUDING TOP GROWTH AND THATCH.
- LAY SOD BY HAND TO COVER INDICATED AREAS COMPLETELY, ENSURING EDGES ARE TOUCHING WITH TIGHTLY FITTING JOINTS, NO OVERLAPS WITH STAGGERED STRIPS TO OFFSET JOINTS.
- TOP DRESS JOINTS IN SOD BY HAND WITH TOPSOIL TO FILL VOIDS IF NECESSARY.
- SOD SHALL BE ROLLED TO CREATE A SMOOTH EVEN SURFACE. SOD SHOULD BE WATERED THOROUGHLY DURING INSTALLATION PROCESS.
- SHOULD INSTALLATION OCCUR BETWEEN OCTOBER 1ST AND MARCH 1ST, OVERSEED BERMUDAGRASS SOD WITH WINTER RYEGRASS AT A RATE OF 4 POUNDS PER 1000 S.F.

LANDSCAPE NOTES

- CONTRACTOR TO VERIFY AND LOCATE ALL PROPOSED AND EXISTING ELEMENTS. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE FOR ANY LAYOUT DISCREPANCIES OR ANY CONDITION THAT WOULD PROHIBIT THE INSTALLATION AS SHOWN. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
- CONTRACTOR SHALL CALL 811 TO VERIFY AND LOCATE ANY AND ALL UTILITIES ON SITE PRIOR TO COMMENCING WORK. LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF ANY CONFLICTS. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING NEAR UNDERGROUND UTILITIES.
- A MINIMUM OF 2% SLOPE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES.
- CONTRACTOR SHALL ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
- LANDSCAPE ISLANDS SHALL BE CROWNED, AND UNIFORM THROUGHOUT THE SITE.
- PLANTING AREAS AND SOD TO BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS OR CURBS. EDGING NOT TO BE MORE THAN 1/2" ABOVE FINISHED GRADE.
- EDGING SHALL BE CUT AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND/OR CURBS.
- MULCH SHALL BE INSTALLED AT 1/2" BELOW THE TOPS OF SIDEWALKS AND CURBING.
- QUANTITIES ON THESE PLANS ARE FOR REFERENCE ONLY. THE SPACING OF PLANTS SHOULD BE AS INDICATED ON PLANS OR OTHERWISE NOTED. ALL TREES AND SHRUBS SHALL BE PLANTED PER DETAILS.
- CONTAINER GROWN PLANT MATERIAL IS PREFERRED HOWEVER BALL AND BURLAP PLANT MATERIAL CAN BE SUBSTITUTED IF NEED BE AND IS APPROPRIATE TO THE SIZE AND QUALITY INDICATED ON THE PLANT MATERIAL LIST.
- TREES SHALL BE PLANTED AT A MINIMUM OF 5' FROM ANY UTILITY LINE, SIDEWALK OR CURB. TREES SHALL ALSO BE 10' CLEAR FROM FIRE HYDRANTS.
- 4" OF SHREDDED HARDWOOD MULCH (2" SETTLED THICKNESS) SHALL BE PLACED OVER WEED BARRIER FABRIC. MULCH SHALL BE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL. FINE STRAW MULCH IS PROHIBITED.
- WEED BARRIER FABRIC SHALL BE USED IN PLANT BEDS AND AROUND ALL TREES AND SHALL BE MIRAFI 1405 WEED BARRIER OR APPROVED EQUAL.
- CONTRACTOR TO PROVIDE UNIT PRICING OF LANDSCAPE MATERIALS AND BE RESPONSIBLE FOR OBTAINING ALL LANDSCAPE AND IRRIGATION PERMITS.

IRRIGATION:

- ALL REQUIRED LANDSCAPE AREAS SHALL HAVE AN AUTOMATIC IRRIGATION SYSTEM WITH A FREEZE/RAIN SENSOR. SYSTEM SHALL ALSO HAVE AN ET WEATHER BASED CONTROLLER AND BE DESIGNED AND INSTALLED BY A LICENSED IRRIGATOR.

MAINTENANCE REQUIREMENTS:

- VEGETATION SHOULD BE INSPECTED REGULARLY TO ENSURE THAT PLANT MATERIAL IS ESTABLISHING PROPERLY AND REMAINS IN A HEALTHY GROWING CONDITION APPROPRIATE FOR THE SEASON. IF DAMAGED OR REMOVED, PLANTS MUST BE REPLACED BY A SIMILAR VARIETY AND SIZE.
- MOWING, TRIMMING, EDGING AND SUPERVISION OF WATER APPLICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE OWNER OR OWNER'S REPRESENTATIVE ACCEPTS AND ASSUMES REGULAR MAINTENANCE.
- ALL LANDSCAPE AREAS SHOULD BE CLEANED AND KEPT FREE OF TRASH, DEBRIS, WEEDS AND OTHER MATERIAL.

MISCELLANEOUS MATERIALS:

- STEEL EDGING SHALL BE 3/16" X 4 X 16" DARK GREEN DURAEDEGE STEEL LANDSCAPE EDGING UNLESS NOTED OTHERWISE ON PLANDDETAILS.

LANDSCAPE TABULATIONS
ROCKWALL, TEXAS

GENERAL

- A 20' street buffer shall be provided the length of the property abutting a ROW.
- One large canopy tree shall be provided for every 30 l.f. of frontage.
- Trash areas shall be screened from public view.
Mims Road = 417 l.f.

REQUIRED	PROVIDED
20' wide buffer	20' wide buffer
13 canopy trees, 4" cal.	13 canopy trees, 4" cal.

East Ralph Hall Parkway = 183 l.f.

REQUIRED	PROVIDED
20' wide buffer	20' wide buffer
6 canopy trees, 4" cal.	6 canopy trees, 4" cal.

trash area screened

trash area screened

Site area: 75,932 s.f.

REQUIRED	PROVIDED
	18,076 s.f. landscaped

PARKING LOT LANDSCAPE

- Surface parking shall be screened from all adjacent public streets and neighboring sites. The screen must extend along all edges and be a min. 3' in height, 80% opaque.

- There shall be a landscape island every 10 parking spaces. One shade tree shall be provided for every 10 cars.

Parking Spaces - 53

REQUIRED	PROVIDED
36" screen	36" screen
5 canopy trees, 4" cal.	5 canopy trees, 4" cal.

PLANT SCHEDULE

QTY	LABEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
SHADE TREES					
10	CE	Cedar Elm	<i>Ulmus crassifolia</i>	4" cal.	14' ht., 4' spread, matching
5	LE	'Bosque' Lacebark Elm	<i>Ulmus parvifolia</i> 'UPMTF'	4" cal.	14' ht., 4' spread, matching
7	MWO	Mexican White Oak	<i>Quercus polymorpha</i>	4" cal.	14' ht., 4' spread, matching
2	SO	Shumard Oak	<i>Quercus shumardii</i>	4" cal.	14' ht., 4' spread, matching
SHRUBS					
14	AB	Abelia 'Twist of Lime'	<i>Abelia x grandiflora</i> 'Hopley's'	5 gal.	full, 24" spread, 36" o.c.
67	AS	Autumn Sage	<i>Salvia greggii</i>	5 gal.	full, 24" o.c.
75	DBH	Dwarf Burford Holly	<i>Ilex cornuta</i> 'Burford Nana'	5 gal.	full, 20" spread, 36" o.c.
39	DY	Dwarf Yaupon Holly	<i>Ilex vomitoria</i> 'Condeaux'	5 gal.	full, 24" sprd, 24" o.c.
11	KO	Double Knock Out Rose (Red)	<i>Rosa hybrida</i> 'Radtko'	5 gal.	full, 24" spread, 36" o.c.
25	MS	Morning Light Miscanthus	<i>Miscanthus sinensis</i> 'Morning Light'	5 gal.	full, 20" spread, 36" o.c.
9	SRJ	Skyrocket Juniper	<i>Juniperus scopulorum</i> 'Skyrocket'	7 gal.	full, 24" sprd, 30" o.c.
3	WM	Wax Myrtle	<i>Myrica pusilla</i>	7 gal.	full, 30" sprd, 40" o.c.
GROUND COVER/VINES/GRASS					
110	BBL	Big Blue Liriope	<i>Liriope muscari</i> 'Big Blue'	1 gal.	full, 18" o.c.
25	FV	Fig Vine	<i>Ficus pumila</i>	1 gal.	full, with 4 runners minimum
90	MFG	Mexican Feather Grass	<i>Nassella tenuissima</i>	1 gal.	full, 18" o.c.
110	SC	Seasonal Color Bermuda Solid Sod	<i>Cynodon dactylon</i>	4" pots	full, 12" o.c.
		2-4" River Rock			

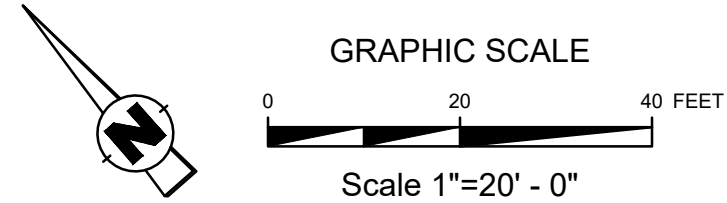
Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. Trees shall have a strong central leader and be of matching specimens. All plant material shall meet or exceed remarks as indicated.

NOTE TO CONTRACTOR:
SOD WILL NEED TO BE INSTALLED IN ALL ROW PRIOR TO CITY ACCEPTANCE OR TCO/CO.

FINAL AS-BUILT
RECORD PLANS

TO THE BEST OF OUR KNOWLEDGE, KSA, HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

IRRIGATION WILL MEET THE REQUIREMENTS OF THE UDC.



AWR Designs, LLC
P.O. Box 1746
Aledo, Texas 76008
amanda@awr-designs.com
c. 512.517.5589



Know what's below.
Call before you dig.

CASE NUMBER: SP2020-031

LANDSCAPE PLAN

COURTIN DENTAL
FLAGSTONE CORNERS
BLOCK A, LOT 9

DRAWN BY:

TG

DESIGNED BY:

DK

LATEST REVISION:

10/16/20

KSA JOB NO.:

M1219



6781 Oak Hill Blvd.,
Aledo, Texas 76008
T. 903.534.4444
www.ksaeng.com



11/13/20

SHEET NO. L1.1

SHEET NAME

DRAWING PATHNAME (LAYOUT) PLOT DATE - TIME

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR

- A. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING

1.2 REFERENCE DOCUMENTS

- A. REFER TO LANDSCAPE PLANS, NOTES, SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS

1.3 SCOPE OF WORK / DESCRIPTION OF WORK

- A. WORK COVERED BY THESE SECTIONS INCLUDES: FURNISH ALL SUPERVISORS, LABOR, MATERIALS, SERVICES, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE THE WORK COVERED IN CONJUNCTION WITH THE LANDSCAPING COVERED IN LANDSCAPE PLANS AND SPECIFICATIONS INCLUDING:

1. PLANTING (TREES, SHRUBS, GRASSES)
2. BED PREP AND FERTILIZATION
3. NOTIFICATION OF SOURCES
4. WATER AND MAINTENANCE UNTIL ACCEPTANCE
5. GUARANTEE

- B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.

- C. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK

1.4 REFERENCES

- A. AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICAN ASSOCIATION OF NURSERYMEN, 27 OCTOBER 1980, EDITION, BY AMERICAN NATIONAL STANDARDS INSTITUTE (200.1) - PLANT MATERIAL
B. AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE: 1942 EDITION OF STANDARDIZED PLANT NAMES
C. TEXAS ASSOCIATION OF NURSERYMEN, GRADES AND STANDARDS

1.5 SUBMITTALS

- A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNERS REPRESENTATIVE BEFORE USE.
B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA.
C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED. FOR ANY PLANT MATERIAL NOT AVAILABLE, SUBMIT REQUEST FOR SUBSTITUTION.

- 1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING

- A. GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE.
B. ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOLID SOD SHALL BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK.
C. STORAGE OF MATERIALS AND EQUIPMENT AT THE JOB SITE WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. THE OWNER CANNOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.

1.7 SEQUENCING

- A. INSTALL TREES, SHRUBS, AND LINER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LAWN/SOLID SOD.
B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERICATED TO MINIMIZE RE-GROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED WITH AMENDED ORGANIC MATTER.

1.8 MAINTENANCE AND GUARANTEE

MAINTENANCE:

- A. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING UNTIL FINAL ACCEPTANCE BY OWNER.
B. NO TREES, GRASS, GROUNDCOVER OR GRASS WILL BE ACCEPTED UNLESS THEY SHOW HEALTHY GROWTH AND SATISFACTORY FOLIAGE CONDITIONS.
C. MAINTENANCE SHALL INCLUDE WATERING OF TREES AND PLANTS, CULTIVATION, WEED SPRAYING, EDGING, PRUNING OF TREES, MOVING OF GRASS, CLEANING UP AND ALL OTHER WORK NECESSARY FOR MAINTENANCE.
D. A WRITTEN NOTICE REQUESTING FINAL INSPECTION AND ACCEPTANCE SHOULD BE SUBMITTED TO THE OWNER AT LEAST 7 DAYS PRIOR TO COMPLETION. AN ON SITE INSPECTION BY THE OWNERS AUTHORIZED

REPRESENTATIVE WILL BE COMPLETED PRIOR TO WRITTEN ACCEPTANCE.

- E. NOTIFY OWNER OR OWNERS REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.
F. REMOVE DEAD, UNHEALTHY AND UNSIGHTLY PLANTS DURING WARRANTY PERIOD
G. REMOVE GUYING AND STAKING MATERIALS AFTER ONE YEAR

- H. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MOVED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER. REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.

- I. REMOVE TRASH, DEBRIS, AND LITTER, WASTE, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES AS REQUIRED.

- J. COORDINATE THE OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAND WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.

- K. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SERVICE TO ENSURE THE SYSTEM IS IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.

- L. REAPPLY MULCH TO BARE AND THIN AREAS.

- M. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.

- N. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:

- a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.

- b. ALL HARDSCAPE SHALL BE CLEARED PRIOR TO FINAL ACCEPTANCE.

- c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING.

- d. HYDROMULCHED AREAS SHALL SHOW HEALTHY, GREEN GRASS. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESEEDD OR RESEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOVED.

- e. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING.

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E. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READILY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN LIEU OF THE SPECIFIED PLANT.

- F. AT THE TIME BIDS ARE SUBMITTED, THE CONTRACTOR IS ASSUMED TO HAVE LOCATED THE MATERIALS NECESSARY TO COMPLETE THE JOB AS SPECIFIED.

- G. OWNERS REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNERS REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS HE/SE FEELS TO BE UNSATISFACTORY OR DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

- H. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

- I. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH THICKNESS OF 3/4" TO 1". EACH Pallet of SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

- J. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.

- K. TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT ROT OR POT BOUND.

- L. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, OR INSECT DAMAGE WILL BE REJECTED.

- M. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.

- N. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL.

- O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

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- AR. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY