PAVING, STORM DRAIN, WATER AND SANITARY SEWER CONSTRUCTION PLANS

for

ST. TERESA OF CALCUTTA CATHOLIC CHURCH

FORT WORTH, TEXAS

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CONTACT: SCOTT MARTSOLF, AIA.

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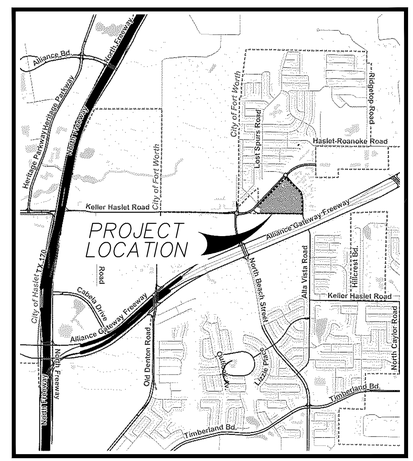

VICINITY MAP

NO SCALE

SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY, ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

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L1.04	LANDSCAPE PLAN
L1.05	LANDSCAPE DETAILS

8/20/2024

STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED
PROFESSIONAL ENGINEER

FOR BID ONLY

ST. TERESA OF CALCUTTA CATHOLIC CHURCH

ISSUE DATE: AUGUST 2024

FS-24-081

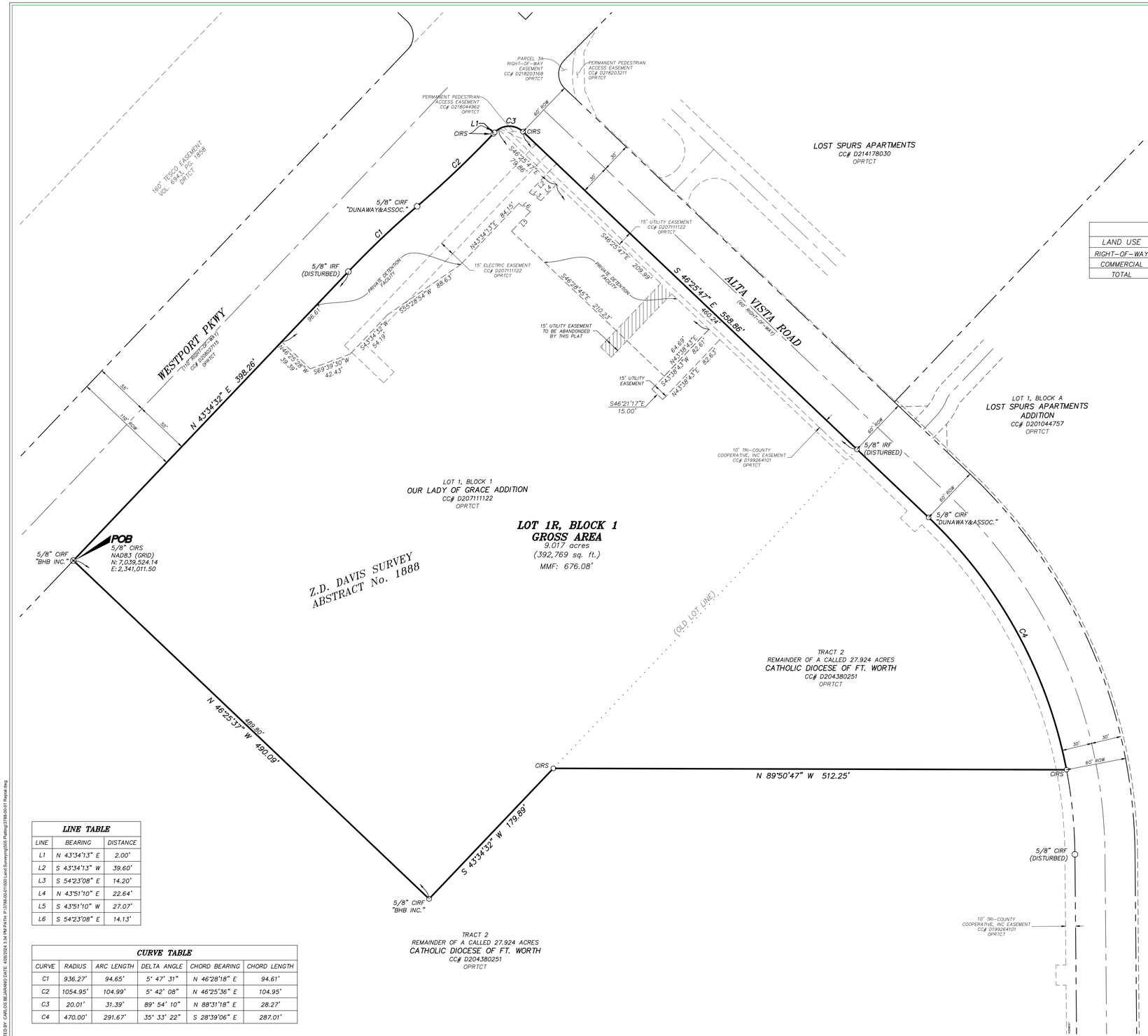
FORT WORTH

CITY PLAN COMMISSION
CITY OF FORT WORTH, TEXAS
THIS PLAT IS VALID ONLY IF RECORDED WITHIN NINETY (90) DAYS AFTER DATE OF APPROVAL.

Plat Approval Date:

BY: _____ Chairman

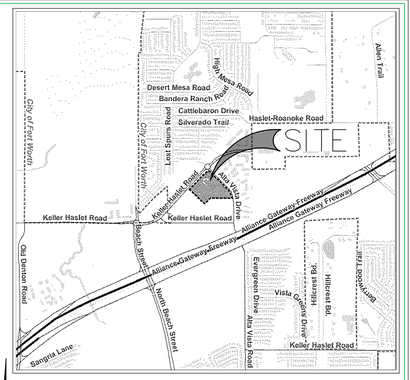
BY: _____ Secretary



LAND USE TABLE			
LAND USE	LOTS	ACREAGE	SQUARE FEET
RIGHT-OF-WAY	N/A	--	--
COMMERCIAL	1	9.017	392,769
TOTAL	1	9.017	392,769

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 43°34'13" E	2.00'
L2	S 43°34'13" W	39.60'
L3	S 54°23'08" E	14.20'
L4	N 43°51'10" E	22.64'
L5	S 43°51'10" W	27.07'
L6	S 54°23'08" E	14.13'

CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	936.27'	94.65'	5° 47' 31"	N 46°28'18" E	94.61'
C2	1054.95'	104.99'	5° 42' 08"	N 46°25'36" E	104.95'
C3	20.01'	31.39'	89° 54' 10"	N 88°31'18" E	28.27'
C4	470.00'	291.67'	35° 33' 22"	S 28°39'06" E	287.01'



VICINITY MAP

NO SCALE

50 0 25 50 100

1 inch = 50 ft.

LEGEND/ABBREVIATIONS

CIRS	5/8" CAPPED IRON ROD SET STAMPED "MMA" (UNLESS OTHERWISE NOTED)
CIRF	CAPPED IRON ROD FOUND
DRTCT	DEED RECORDS TARRANT COUNTY, TEXAS
PRTCT	PLAT RECORDS TARRANT COUNTY, TEXAS
OPRTCT	OFFICIAL PUBLIC RECORDS TARRANT COUNTY, TEXAS
VOL.	VOLUME
PG.	PAGE
UE	UTILITY EASEMENT
BL	BUILDING LINE
DE	DRAINAGE EASEMENT
SSE	SANITARY SEWER EASEMENT
POC	POINT OF COMMENCING
POB	POINT OF BEGINNING
FND.	FOUND
IRF	IRON ROD FOUND
MFF	MINIMUM FINISHED FLOOR ELEVATION
*	FEMA ELEVATION CERTIFICATE NOT REQUIRED
CC#	COUNTY CLERK'S INSTRUMENT NUMBER

FINAL PLAT OF

LOT 1R, BLOCK 1 OUR LADY OF GRACE ADDITION

BEING 9.017 ACRES OF LAND SITUATED IN THE Z.D. DAVIS SURVEY, ABSTRACT NO. 1888 CITY OF FORT WORTH, TARRANT COUNTY, TEXAS AND BEING A REPLAT OF LOT 1, BLOCK 1 OF OUR LADY OF GRACE ADDITION, AN ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS

1 COMMERCIAL LOT

APRIL 2024

PRELIMINARY
This document shall not be recorded for any purpose and shall not be used or viewed or relied upon as a final survey document.

OWNER:

CATHOLIC DIOCESE OF FT. WORTH
800 WEST LOOP 820 SOUTH
FORT WORTH, TX 76108

SURVEYOR/ENGINEER:

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f - 2759
tbpels registration/license number: 10088000
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arlington, texas 76010
817-469-1671
fax: 817-274-8757
www.mmatexas.com

SHEET 1 OF 2

MMA PROJECT NO. 3788-00-01

THIS PLAT IS FILED IN DOCUMENT #_____, OPRTCT DATE:_____.

PLOTTED BY: CARLOS BEJARANO DATE: 4/26/2024 3:34 PM PATH: P:\3788-00-01\00 Land Surveying\00 Plating\3788-00-01 Replat.dwg

PLAT NOTES

1. WATER/WASTEWATER IMPACT FEES
THE CITY OF FORT WORTH HAS AN ORDINANCE IMPLEMENTING THE ASSESSMENT AND COLLECTION OF WATER AND WASTEWATER IMPACT FEES. THE TOTAL AMOUNT ASSESSED IS ESTABLISHED ON THE RECORDATION DATE OF THIS PLAT APPLICATION, BASED UPON SCHEDULE I OF THE CURRENT IMPACT FEE ORDINANCE. THE AMOUNT TO BE COLLECTED IS DETERMINED UNDER SCHEDULE II THEN IN EFFECT ON THE DATE A BUILDING PERMIT IS ISSUED, OR THE CONNECTION DATE TO THE MUNICIPAL WATER AND/OR WASTEWATER SYSTEM.

2. UTILITY EASEMENTS
ANY PUBLIC UTILITY, INCLUDING THE CITY OF FORT WORTH, SHALL HAVE THE RIGHT TO MOVE AND KEEP MOVED ALL OR PART OF ANY BUILDING, FENCE, TREE, SHRUB, OTHER GROWTH OR IMPROVEMENT WHICH IN ANY WAY ENDANGERS OR INTERFERES WITH THE CONSTRUCTION, MAINTENANCE, OR EFFICIENCY OF ITS RESPECTIVE SYSTEMS ON ANY OF THE EASEMENTS SHOWN ON THE PLAT; AND THEY SHALL HAVE THE RIGHT AT ALL TIMES TO INGRESS AND EGRESS UPON SAID EASEMENTS FOR THE PURPOSE OF CONSTRUCTION, RECONSTRUCTION, INSPECTION, PATROLLING, MAINTAINING, AND ADDING TO OR REMOVING ALL OR PART OF ITS RESPECTIVE SYSTEMS WITHOUT THE NECESSITY AT ANY TIME OF PROCURING THE PERMISSION OF ANYONE.

3. TRANSPORTATION IMPACT FEES
THE CITY OF FORT WORTH HAS AN ORDINANCE IMPLEMENTING THE ASSESSMENT AND COLLECTION OF TRANSPORTATION IMPACT FEES. THE TOTAL AMOUNT ASSESSED IS ESTABLISHED ON THE APPROVAL DATE OF THIS PLAT APPLICATION, BASED UPON SCHEDULE 1 OF THE IMPACT FEE ORDINANCE IN EFFECT AS OF THE DATE OF THE PLAT. THE AMOUNT TO BE COLLECTED IS DETERMINED UNDER SCHEDULE 2 OF SAID ORDINANCE, AND IS DUE ON THE DATE A BUILDING PERMIT IS ISSUED.

4. SITE DRAINAGE STUDY
A SITE DRAINAGE STUDY, SHOWING CONFORMANCE WITH THE APPROVED ROADWAY DRAINAGE PLAN, MAY BE REQUIRED BEFORE ANY BUILDING PERMIT WILL BE ISSUED ON THIS SITE (A GRADING PLAN IN SOME INSTANCES MAY BE ADEQUATE.) IF THE SITE DOES NOT CONFORM, THEN A DRAINAGE STUDY MAY BE REQUIRED ALONG WITH A CFA FOR ANY REQUIRED DRAINAGE IMPROVEMENTS AND THE CURRENT OWNER SHALL SUBMIT A LETTER TO THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STATING AWARENESS THAT A SITE DRAINAGE STUDY WILL BE REQUIRED BEFORE ANY PERMIT IS ISSUED. THE CURRENT OWNER WILL INFORM EACH BUYER OF THE SAME.

5. FLOODPLAIN RESTRICTION
NO CONSTRUCTION SHALL BE ALLOWED WITHIN THE FLOODPLAIN EASEMENT, WITHOUT THE WRITTEN APPROVAL OF THE DIRECTOR OF TRANSPORTATION AND PUBLIC WORKS. IN ORDER TO SECURE APPROVAL, DETAILED ENGINEERING PLANS AND/OR STUDIES FOR THE IMPROVEMENTS, SATISFACTORY TO THE DIRECTOR, SHALL BE PREPARED AND SUBMITTED BY THE PARTY(S) WISHING TO CONSTRUCT WITHIN THE FLOODPLAIN. WHERE CONSTRUCTION IS PERMITTED, ALL FINISHED FLOOR ELEVATIONS SHALL BE A MINIMUM OF TWO (2) FEET ABOVE THE FLOODPLAIN BASE FLOOD ELEVATION RESULTING FROM ULTIMATE DEVELOPMENT OF THE WATERSHED.

6. PRIVATE COMMON AREAS AND FACILITIES
THE CITY OF FORT WORTH SHALL NOT BE HELD RESPONSIBLE FOR THE CONSTRUCTION, MAINTENANCE OR OPERATION OF ANY LOTS CONTAINING PRIVATE COMMON AREAS OR FACILITIES IDENTIFIED AS SUCH ON THIS PLAT. SAID AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO: PRIVATE STREETS, EMERGENCY ACCESS EASEMENTS, AND GATED SECURITY ENTRANCES; RECREATION AREAS, LANDSCAPED AREAS AND OPEN SPACES; WATER AND WASTEWATER DISTRIBUTION SYSTEMS AND TREATMENT FACILITIES; AND RECREATION/ CLUBHOUSE/EXERCISE/ BUILDINGS AND FACILITIES.

THE LAND OWNERS AND SUBSEQUENT OWNERS OF THE LOTS AND PARCELS IN THIS SUBDIVISION, ACTING JOINTLY AND SEVERALLY AS A LAND OWNERS ASSOCIATION, SHALL BE RESPONSIBLE FOR SUCH CONSTRUCTION, RECONSTRUCTION, MAINTENANCE AND OPERATION OF THE SUBDIVISION'S PRIVATE COMMON AREAS AND FACILITIES, AND SHALL AGREE TO INDEMNIFY AND HOLD HARMLESS THE CITY OF FORT WORTH, TEXAS, FROM ALL CLAIMS, DAMAGES AND LOSSES ARISING OUT OF, OR RESULTING FROM THE PERFORMANCE OF THE OBLIGATIONS OF SAID OWNERS ASSOCIATION, AS SET FORTH HEREIN.

7. BUILDING PERMITS
NO BUILDING PERMITS SHALL BE ISSUED FOR ANY LOT IN THIS SUBDIVISION UNTIL AN APPROPRIATE CFA OR OTHER ACCEPTABLE PROVISIONS ARE MADE FOR THE CONSTRUCTION OF ANY APPLICABLE WATER, SEWER, STORM DRAIN, STREET LIGHTS, SIDEWALKS, OR PAVING IMPROVEMENTS; AND APPROVAL IS FIRST OBTAINED FROM THE CITY OF FORT WORTH.

8. CONSTRUCTION PROHIBITED OVER EASEMENTS
NO PERMANENT BUILDINGS OR STRUCTURES SHALL BE CONSTRUCTED OVER ANY EXISTING OR PLATTED WATER, SANITARY SEWER, DRAINAGE, GAS, ELECTRIC, CABLE OR OTHER UTILITY EASEMENT OF ANY TYPE.

9. SIDEWALKS
SIDEWALKS ARE REQUIRED ADJACENT TO BOTH SIDES OF ALL PUBLIC AND PRIVATE STREETS, IN CONFORMANCE WITH THE SIDEWALK POLICY PER "CITY DEVELOPMENT DESIGN STANDARDS".

10. PARKWAY IMPROVEMENTS SUCH AS CURB AND GUTTER, PAVEMENT TIE-IN, DRIVE APPROACHES, SIDEWALKS AND DRAINAGE INLETS MAY BE REQUIRED AT THE TIME OF BUILDING PERMIT ISSUANCE VIA A PARKWAY PERMIT.

11. BUILDING CONSTRUCTION DISTANCE LIMITATION TO AN OIL OR GAS WELL BORE
PURSUANT TO THE FORT WORTH CITY CODE, NO BUILDING(S) NOT NECESSARY TO THE OPERATION OF AN OIL OR GAS WELL SHALL BE CONSTRUCTED WITHIN THE SETBACKS REQUIRED BY THE CURRENT GAS WELL ORDINANCE AND ADOPTED FIRE CODE FROM ANY EXISTING OR PERMITTED OIL OR GAS WELL BORE. THE DISTANCE SHALL BE MEASURED IN A STRAIGHT LINE FROM THE WELL BORE TO THE CLOSEST EXTERIOR POINT OF THE BUILDING, WITHOUT REGARDS TO INTERVENING STRUCTURES OR OBJECTS.

12. PUBLIC OPEN SPACE EASEMENT
NO STRUCTURE, OBJECT, OR PLANT OF ANY TYPE MAY OBSTRUCT VISION FROM A HEIGHT OF 24-INCHES TO A HEIGHT OF 11-FEET ABOVE THE TOP OF THE CURB, INCLUDING, BUT NOT LIMITED TO BUILDINGS, FENCES, WALKS, SIGNS, TREES, SHRUBS, CARS, TRUCKS,ETC., IN THE PUBLIC OPEN SPACE EASEMENT AS SHOWN ON THIS PLAT.

13. PRIVATE P.R.V.'S WILL BE REQUIRED. WATER PRESSURE EXCEEDS 80 P.S.I.

14. THE SUBJECT PROPERTY IS LOCATED IN ZONE "X", AREAS DETERMINED TO BE OUTSIDE OF THE 100-YEAR FLOOD PLAIN. ACCORDING TO THE FLOOD INSURANCE RATE MAP, MAP NO. 48439C0060K, MAP EFFECTIVE SEPTEMBER 25, 2009.

15. CORNER MONUMENTATION:
UPON COMPLETION OF STREET AND UTILITY CONSTRUCTION AND GRADING WORK, 5/8" IRON RODS WITH CAPS STAMPED "MMA" SHALL BE SET AT ALL LOT CORNERS AND POINTS OF CURVATURE.

16. BEARINGS AND COORDINATES ARE GRID BASED ON THE "TEXAS COORDINATE SYSTEM OF 1983, NORTH CENTRAL ZONE" (2011) AS DETERMINED BY GPS OBSERVATIONS. THE CONVERGENCE ANGLE AT THE POINT OF BEGINNING IS 0°39'45". ALL DISTANCES HAVE BEEN ADJUSTED TO SURFACE USING A COMBINED SCALE FACTOR OF 1.000154642983.

OWNER'S CERTIFICATE

STATE OF TEXAS)(
COUNTY OF TARRANT)(

WHEREAS **CATHOLIC DIOCESE OF FT. WORTH,** ACTING BY AND THROUGH THE UNDERSIGNED, IT'S DULY AUTHORIZED AGENT, IS THE SOLE OWNER OF A 9.017 ACRE TRACT OF LAND.

BEING A TRACT OF LAND SITUATED IN THE Z.D. DAVIS SURVEY, ABSTRACT NO. 1888, TARRANT COUNTY, TEXAS, BEING ALL OF LOT 1, BLOCK 1, OF OUR LADY OF GRACE ADDITION, AN ADDITION TO THE CITY OF FORT WORTH, AS RECORDED IN COUNTY CLERK'S FILE NO. D207111122, OFFICIAL PUBLIC RECORDS, TARRANT COUNTY, TEXAS (OPRTCT) AND BEING A PORTION OF A CALLED 27.924 ACRE TRACT OF LAND DESCRIBED AS TRACT 2 IN THE DEED TO JOSEPH P. DELANEY, BISHOP OF THE CATHOLIC DIOCESE OF FT. WORTH, AS RECORDED IN COUNTY CLERK'S INSTRUMENT NO. D204380251, OPRTCT, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS;

BEGINNING AT 5/8" CAPPED IRON ROD SET (GRID N:7,039,524.14, E:2,341,011.50) FOR THE WEST CORNER OF SAID LOT 1, IN THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF WESTPORT PARKWAY, A 110.00 FOOT WIDE RIGHT-OF-WAY, AS DESCRIBED IN COUNTY CLERK'S FILE NO. D208027115, OPRTCT;

THENCE WITH THE NORTHWESTERLY LINE OF SAID LOT 1 AND THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF SAID WESTPORT PARKWAY, THE FOLLOWING COURSES AND DISTANCES:

NORTH 43°34'32" EAST, A DISTANCE OF 398.26 FEET TO A 5/8" IRON ROD (DISTURBED) FOUND FOR THE BEGINNING OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 936.27 FEET AND A CHORD WHICH BEARS NORTH 46°28'18" EAST, A DISTANCE OF 94.61 FEET;

IN A NORTHEASTERLY DIRECTION WITH SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 05°47'31", AN ARC LENGTH OF 94.65 FEET TO A 5/8" CAPPED IRON ROD STAMPED "DUNAWAY&ASSOC." FOUND FOR THE BEGINNING OF REVERSE CURVE TO THE LEFT, HAVING A RADIUS OF 1,054.95 FEET AND A CHORD WHICH BEARS NORTH 46°25'36" EAST, A DISTANCE OF 104.95 FEET;

IN A NORTHEASTERLY DIRECTION WITH SAID REVERSE CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 05°42'08", AN ARC LENGTH OF 104.99 FEET TO A 5/8" CAPPED IRON ROD STAMPED "MMA" SET FOR THE END OF SAID REVERSE CURVE TO THE LEFT;

NORTH 43°34'13" EAST, A DISTANCE OF 2.00 FEET TO A 5/8" CAPPED IRON ROD STAMPED "MMA" SET FOR THE BEGINNING OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 20.01 FEET AND A CHORD WHICH BEARS NORTH 88°31'18" EAST, A DISTANCE OF 28.27 FEET;

IN AN NORTHEASTERLY DIRECTION WITH SAID CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 89°54'10", AN ARC LENGTH OF 31.39 FEET TO A 5/8" CAPPED IRON ROD STAMPED "MMA" SET FOR THE END OF SAID CURVE TO THE RIGHT, IN THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF ALTA VISTA DRIVE, A 60 FOOT WIDE RIGHT-OF-WAY;

THENCE SOUTH 46°25'47" EAST, WITH THE NORTHEASTERLY LINE OF SAID LOT 1, SAID CALLED 27.924 ACRE TRACT, AND THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF SAID ALTA VISTA DRIVE, PASSING A 5/8" IRON ROD FOUND (DISTURBED) FOR THE EAST CORNER OF SAID LOT 1, AT A DISTANCE OF 460.24 FEET AND CONTINUE FOR A TOTAL DISTANCE OF 558.86 FEET TO A 5/8" CAPPED IRON ROD STAMPED "DUNAWAY&ASSOC." FOUND FOR THE BEGINNING OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 470.00 FEET AND A CHORD WHICH BEARS SOUTH 28°39'06" EAST, A DISTANCE OF 287.01 FEET;

THENCE IN A SOUTHEASTERLY DIRECTION WITH THE NORTHEASTERLY LINE OF SAID CALLED 27.924 ACRE TRACT, THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF SAID ALTA VISTA DRIVE AND SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 35°33'22", AN ARC LENGTH OF 291.67 FEET TO A 5/8" CAPPED IRON ROD STAMPED "MMA" SET FOR THE END OF SAID CURVE TO THE RIGHT;

THENCE NORTH 89°50'47" WEST, OVER AND ACROSS SAID CALLED 27.924 ACRE TRACT, A DISTANCE OF 512.25 FEET TO A 5/8" CAPPED IRON ROD STAMPED "MMA" SET FOR CORNER IN THE SOUTHEASTERLY LINE OF SAID LOT 1;

THENCE SOUTH 43°34'32" WEST, WITH THE SOUTHEASTERLY LINE OF SAID LOT 1, A DISTANCE OF 179.89 FEET TO 5/8" CAPPED IRON ROD STAMPED "BHB INC" FOUND FOR THE SOUTH CORNER OF SAID LOT 1;

THENCE NORTH 46°25'37" WEST, WITH THE SOUTHWESTERLY LINE OF SAID LOT 1, PASSING A 5/8" CAPPED IRON ROD STAMPED "BHB INC" FOUND AT A DISTANCE OF 489.80 FEET AND CONTINUE FOR A TOTAL DISTANCE OF 490.09 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 392,769 SQUARE FEET OR 9.017 ACRES OF LAND, MORE OR LESS.

SURVEYOR'S CERTIFICATE

THAT I, LON E. WHITTEN, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY DECLARE THAT I PREPARED THIS PLAT FROM AN ACTUAL AND ACCURATE SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN HEREON AS SET WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF FORT WORTH, TEXAS.

PRELIMINARY
This document shall not be recorded for any purpose and shall not be used or viewed or relied upon as a final survey document. Released for review by

_____
LON E. WHITTEN DATE: APRIL 26, 2024
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 5893

STATE OF TEXAS)(
COUNTY OF TARRANT)(

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED LON E. WHITTEN, 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 PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS _____ DAY OF _____ , 2024.

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES: _____

OWNER'S DEDICATION

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, **CATHOLIC DIOCESE OF FT. WORTH,** ACTING BY AND THROUGH THE UNDERSIGNED, DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREIN ABOVE DESCRIBED REAL PROPERTY AS **LOT 1R, BLOCK 1, OUR LADY OF GRACE ADDITION,** AN ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS, AND DO HEREBY DEDICATED TO THE PUBLIC'S USE THE STREETS AND EASEMENTS SHOWN THEREON, EXCEPT THE PRIVATE EASEMENTS SHOWN THEREON. THIS PLAT DOES NOT ALTER OR REMOVE EXISTING DEED RESTRICTION OR COVENANTS, IF ANY, ON THIS PROPERTY.

PURSUANT TO SECTION 12.002 OF THE TEXAS PROPERTY CODE, I HAVE OBTAINED ORIGINAL TAX CERTIFICATES FROM EACH TAXING UNIT WITH JURISDICTION OVER EACH PARCEL OF REAL PROPERTY IN SAID SUBDIVISION INDICATING THAT NO DELINQUENT AD VALOREM TAXES ARE OWED ON THE REAL PROPERTY WHICH IS THE SUBJECT OF THE PLAT OR REPLAT I HAVE SUBMITTED TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS FOR FILING AND RECORDING WITH THE TARRANT COUNTY CLERK'S OFFICE.

WITNESS MY HAND THIS THE _____ DAY OF _____, 2024.

GRANTOR:

_____
BISHOP MICHAEL OLSON

STATE OF TEXAS §
§
COUNTY OF TARRANT §

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS _____ DAY OF _____, 2024,

BY _____ (NAME), _____ (TITLE OF SIGNATOR)
OF CATHOLIC DIOCESE OF FT. WORTH.

_____
NOTARY PUBLIC, STATE OF TEXAS

PRINTED NAME: _____

COMMISSION EXPIRES: _____

FINAL PLAT OF

LOT 1R, BLOCK 1
OUR LADY OF GRACE ADDITION

BEING 9.017 ACRES OF LAND SITUATED IN THE
Z.D. DAVIS SURVEY, ABSTRACT NO. 1888
CITY OF FORT WORTH, TARRANT COUNTY, TEXAS
AND BEING A REPLAT OF LOT 1, BLOCK 1 OF OUR
LADY OF GRACE ADDITION, AN ADDITION TO THE CITY
OF FORT WORTH, TARRANT COUNTY, TEXAS

1 COMMERCIAL LOT

APRIL 2024

OWNER:

CATHOLIC DIOCESE OF FT. WORTH
800 WEST LOOP 820 SOUTH
FORT WORTH, TX 76108

SURVEYOR/ENGINEER:

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f - 2759
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SHEET 1 OF 2

MMA PROJECT NO. 3788-00-01

THIS PLAT IS FILED IN DOCUMENT #_____, OPRTCT DATE: _____.

PLOTTED BY: CARLOS BEJARANO DATE: 4/26/2024 3:34 PM PATH: O:\3788-00-01\000 Land Surveying\05 Plotting\3788-00-01 Replat.dwg

GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF FORT WORTH STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
2. THE LOCATIONS OF ALL EXISTING UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS OR PROVIDED BY VARIOUS OWNERS OF THE FACILITIES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF VERTICAL AND HORIZONTAL LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. SUCH VERIFICATION SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS. NOTIFY THE PROJECT INSPECTOR PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING UTILITIES.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES WITH FACILITIES IN PROJECT AREA 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY COMPANIES TO RELOCATE, BRACE, AND SUPPORT ANY UTILITY IN CONFLICT WITH THE PROPOSED STRUCTURE OR CONSTRUCTION. ALL ASSOCIATED WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS. ANY REPAIR TO THE DAMAGED EXISTING UTILITIES SHALL BE THE COST OF CONTRACTOR.
4. PUBLIC OR PRIVATE UTILITY LINES MAY EXIST THAT ARE NOT SHOWN ON THE CONSTRUCTION PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE INTEGRITY OF THESE LINES. SUCH WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS.
5. A TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) PERMIT WILL BE REQUIRED WHEN ENTERING/CROSSING RIGHT-OF-WAY OF TXDOT. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING TXDOT 48 HOURS PRIOR TO CONSTRUCTION.
6. TRENCH SAFETY PLAN SHALL BE STAMPED, SIGNED, AND DATED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE PROJECT ENGINEER BEFORE OR DURING PRE-CONSTRUCTION MEETING.
7. THREE COPIES OF "STORM WATER POLLUTION PREVENTION PLAN (SWPPP)" SEALED BY A LICENSED PROFESSIONAL ENGINEER SHALL BE SUBMITTED TO THE PROJECT ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO CONSTRUCTION. A "NOTICE OF INTENT" (NOI) SHALL BE INCLUDED IN THE SUBMITTAL IF THE PROJECT IS 5 ACRES IN SIZE OR LARGER. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS OF THE PROJECT COMPLETION.
8. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO PUBLIC WORKS/TRANSPORTATION DEPARTMENT – TRANSPORTATION DIVISION FOR APPROVAL FOR ANY UTILITY AND STREET WORK THAT WILL CAUSE LANE CLOSURES. AT LEAST ONE LANE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN APPROVED TRAFFIC CONTROL PLAN TO THE PROJECT INSPECTOR.
9. THE CONTRACTOR SHALL NOTIFY THE PROJECT INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION IN ORDER TO COORDINATE CONSTRUCTION, ADMINISTRATION, AND INSPECTION ACTIVITIES.
10. ALL WATER AND SANITARY SEWER WORK REQUIRED WITHIN THE PRIVATE PROPERTY SHALL BE PERFORMED BY A LICENSED PLUMBER. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER AND IMMEDIATELY COMMENCE SURFACE RESTORATION TO AN EQUAL OR BETTER CONDITION AFTER THE WATER AND SEWER WORK IS COMPLETE.
11. THE CONTRACTOR SHALL AVOID DAMAGING ANY EXISTING SPRINKLER SYSTEM THAT MAY BE IN THE CONSTRUCTION AREA. REMOVED OR DAMAGED SPRINKLER SYSTEM SHALL BE REPAIRED BY A LICENSED IRRIGATOR. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS.
12. THE CONTRACTOR SHALL AVOID DAMAGING ANY LANDSCAPING THAT MAY BE IN THE CONSTRUCTION AREA. REPLACING DAMAGED LANDSCAPING SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
13. REMOVAL OF TREES AND OTHER EXISTING STRUCTURES SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL OR APPROVED BY THE PROJECT INSPECTOR.
14. ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY. THE CONTRACTOR SHALL PROVIDE ALL FENCING AND/OR BARRICADES TO MAINTAIN PUBLIC SAFETY AROUND THE CONSTRUCTION AREA.
15. THE CONTRACTOR SHALL CLEAN UP DIRT AND DEBRIS IN THE PAVED AREAS TO ENSURE THE STREET IS IN DRIVABLE CONDITION AT THE END OF EACH WORKING DAY.
16. EXISTING MAIL BOXES SHALL BE PROTECTED AND MAIL SERVICE SHALL NOT BE INTERRUPTED.
17. ALL WATER AND SANITARY SEWER LINES USING DUCTILE IRON PIPE SHALL BE CLASS 350 UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS OR BID ITEMS. ALL DUCTILE IRON PIPES SHALL BE WRAPPED BY POLYETHYLENE ENCASEMENT TO MEET ANSI/AWWA C105/A21.5 SPECIFICATIONS WITH A MINIMUM 8MIL THICKNESS.
18. ALL PIPE FITTINGS SHALL BE DUCTILE IRON AND RESTRAINED WITH BOTH CONCRETE BLOCKING AND MEGALUGS. ALL PIPE FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PIPE PRICES.
19. REMOVAL, SALVAGE, AND ABANDONMENT OF THE EXISTING WATER AND SEWER LINES SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS.
20. REMOVAL AND HAUL-OFF EXCESS CONSTRUCTION MATERIALS FROM THE CONSTRUCTION SITE SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS.
21. ALL EXISTING FENCES REMOVED OR DAMAGED BY CONSTRUCTION SHALL BE REPLACED OR RESTORED WITH SAME TYPE, STYLE, AND MATERIAL TO AN EQUAL OR BETTER CONDITION. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
22. ALL TEMPORARY FENCES SHALL BE INSTALLED TO PROTECT PRIVATE PROPERTIES WHEN THE CONSTRUCTION WORK IS PERFORMED WITHIN THE EASEMENTS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.

WATER NOTES:

1. ALL WATER MAINS USING PVC PIPE SHALL BE IN COMPLIANCE WITH AWWA C900 OR C905.
2. CLASS "C" EMBEDMENT SHALL BE USED FOR ALL WATER MAINS.
3. THERE SHALL BE A MINIMUM COVER OF FORTY-TWO INCHES (42") OVER THE WATER PIPE AS MEASURED FROM THE TOP OF THE PIPE TO THE EXISTING GROUND, OR THE PROPOSED FINISHED GRADES, WHICHEVER IS GREATER.
4. FIRE HYDRANTS SHALL BE LOCATED THREE TO FIVE FEET (3'-5') FROM BACK OF THE CURB, AND SHALL NOT EXCEED EIGHT FEET (8') FROM BACK OF THE CURB UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN.
5. WHEN REPLACING WATER SERVICES, ALL EXISTING WATER METER BOXES SHALL BE REPLACED AND THE METERS SHALL BE RELOCATED TO THREE FEET (3') BACK OF THE CURB OR AS SHOWN ON THE CONSTRUCTION PLANS.
6. ALL VALVE BOXES SHALL BE ADJUSTED UP TO THE FINISHED PAVEMENT GRADE. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
7. NO WELDED OUTLET IS ALLOWED FOR THE DUCTILE IRON WATER LINE.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER MAINS USING PVC PIPE SHALL BE SDR-26, HEAVY WALL, IN COMPLIANCE WITH ASTM D-3034 LATEST REVISION.
2. CLASS "B" EMBEDMENT SHALL BE USED FOR ALL SANITARY SEWER MAINS.
3. THE CONTRACTOR SHALL ENSURE ALL THE EXISTING SEWER SERVICES THAT CAN BE RECONNECTED OR REROUTED TO THE NEW MAINS. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER ANY POTENTIAL CONFLICTS PRIOR TO CONSTRUCTION SO THE MODIFICATION CAN BE MADE IF NECESSARY.
4. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION TELEVISION INSPECTION OF ALL THE EXISTING SEWER LINES TO BE ABANDONED OR REHABILITATED BY OTHER THAN OPEN CUT TO VERIFY THE SERVICE LOCATIONS AND LINE CONDITIONS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
5. ALL SEWER SERVICES SHALL BE REPLACED WITH 4" PVC FROM THE NEW MAIN TO THE PROPERTY LINE OR EASEMENT LINE UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
6. THE CONTRACTOR SHALL VERIFY THE EXISTING SANITARY SEWER SLOPE PRIOR TO MAKING CONNECTION. SLOPE OF THE NEW MAIN AND THE EXISTING MAIN SHALL MATCH UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN. A REDUCER SHALL BE USED WHEN A LARGER SIZE LINE CONNECTS TO A SMALLER SIZE LINE.
7. THE CONTRACTOR SHALL VERIFY THE SIZE, ELEVATION, AND MATERIAL OF THE EXISTING LINE PRIOR TO ORDERING PREFABRICATED MANHOLE.
8. REWORK THE INVERT WHERE TYING INTO AN EXISTING MANHOLE.
9. BYPASS PUMP REQUIRED FOR PERFORMING CONSTRUCTION WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.
10. ALL MANHOLE AND CLEANOUT SHALL BE ADJUSTED UP TO THE FINISHED PAVEMENT GRADE. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER BID ITEMS UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLAN OR BID PROPOSAL.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

GENERAL NOTES

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8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED
PROFESSIONAL ENGINEER
FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

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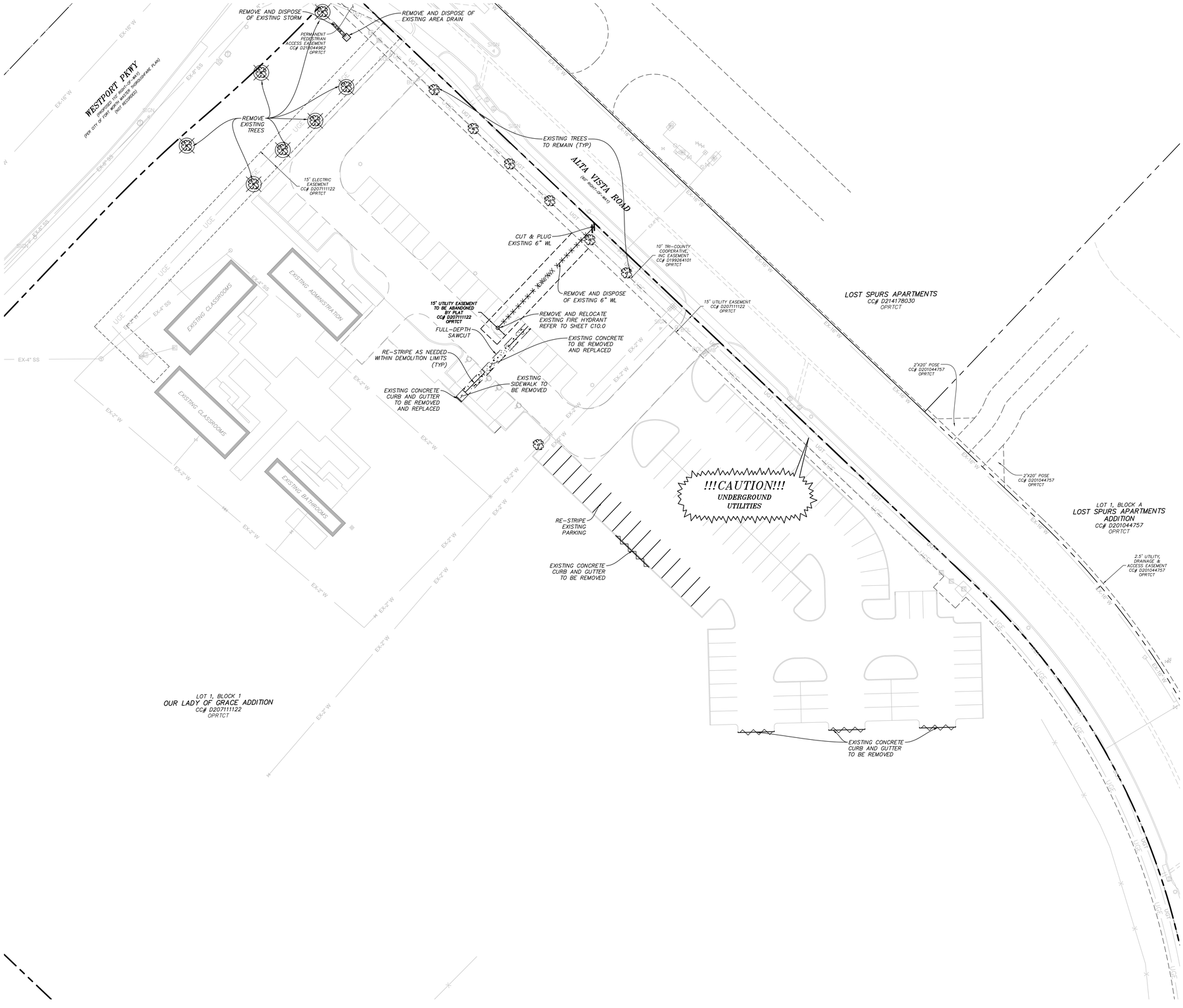

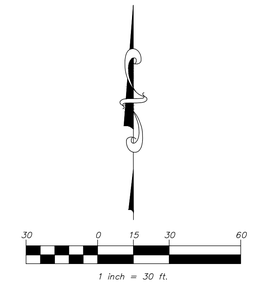

LEGEND:

- SAWCUT & REMOVE EXISTING CURB & GUTTER
- REMOVE EXISTING CONCRETE PAVEMENT
- REMOVE EXISTING SIDEWALK
- REMOVE EXISTING WATER LINE
- REMOVE EXISTING TREE

NOTES:

1. CONTRACTOR TO DISPOSE OF ALL DEMOLITION DEBRIS AT AN APPROVED DISPOSAL FACILITY.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES AND PROTECTING THEM THROUGHOUT CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR SITE DEMOLITION.
4. ALL WASTE WATER AND SANITARY SEWER SERVICES TO BE ABANDONED SHALL BE DISCONNECTED AND CAPPED IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.
5. REFER TO SITE AND GRADING PLAN FOR CONSTRUCTION LIMITS.
6. CONTRACTOR TO MAINTAIN EXISTING DRAINAGE PATTERNS.

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SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
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NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
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ST. TERESA OF CALCUTTA CATHOLIC CHURCH
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DEMOLITION PLAN

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8/20/2024
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LICENSED PROFESSIONAL ENGINEER

FOR BID ONLY

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DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
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REV.	DATE	DESCRIP.	BY

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DEMOLITION PLAN

SHEET NO:

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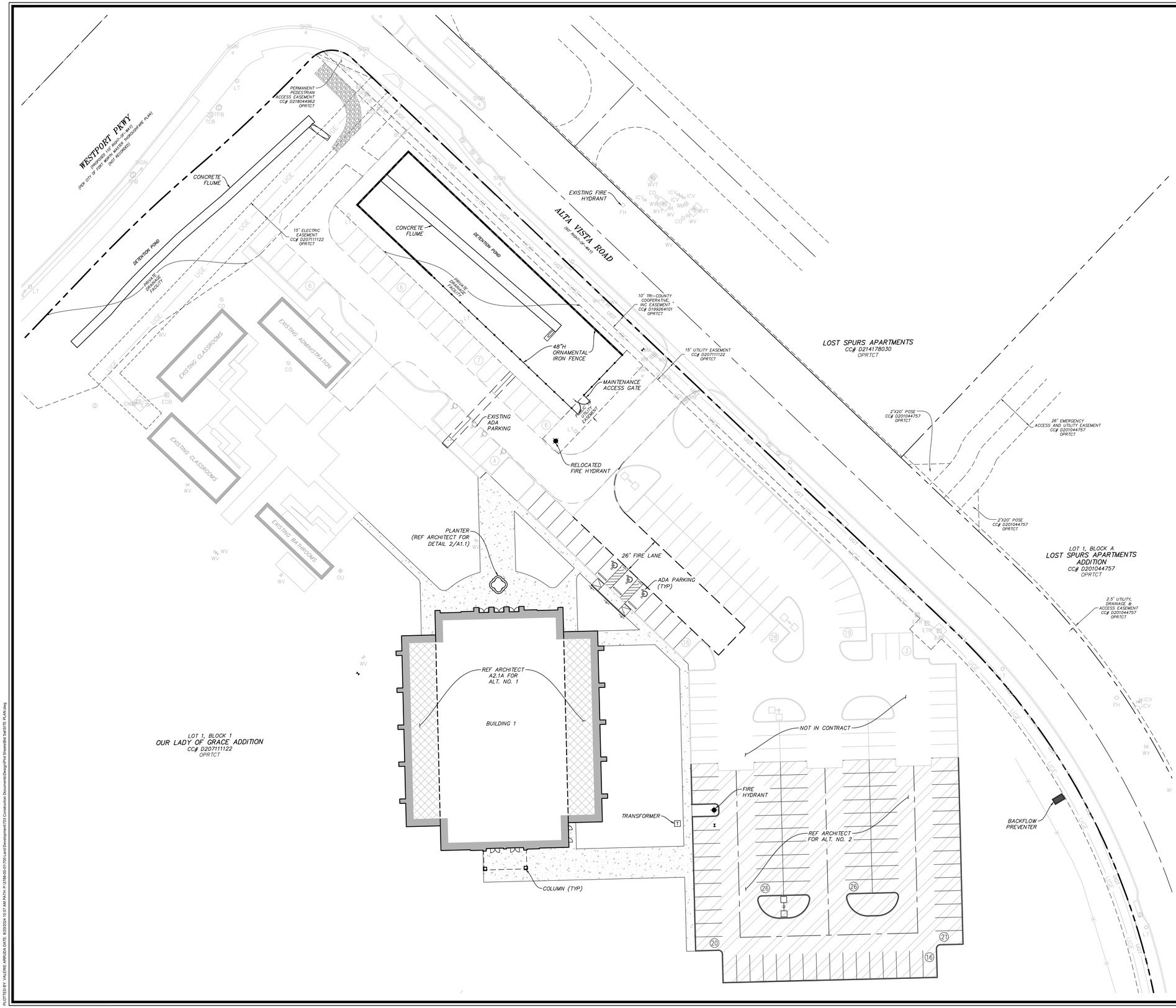

30 0 15 30 60

1 inch = 30 ft.

LEGEND:

FIRE LANE	
ACCESSIBLE PARKING SPACE	
SIGN	
EXISTING SANITARY SEWER	EX-SS
EXISTING SEWER MANHOLE	
EXISTING WATER LINE	EX-W
EXISTING WATER VALVE	
EXISTING FIRE HYDRANT	
EXISTING UNDERGROUND ELECTRIC	UGE
EXISTING UNDERGROUND TELEPHONE	UGT
EXISTING BURIED FIBER OPTICS	FO
EXISTING BURIED GAS	GAS
EXISTING POWER POLE	
EXISTING PEDESTRIAN LIGHT	
PARKING COUNT	5

NOTES:

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3. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
4. REFER TO SHEET C1.0 FOR GENERAL NOTES.
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SITE PLAN

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8/20/2024

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151600
LICENSED
PROFESSIONAL ENGINEER

FOR BID ONLY

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PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
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REV.	DATE	DESCRIP.	BY

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SITE PLAN

SHEET NO:

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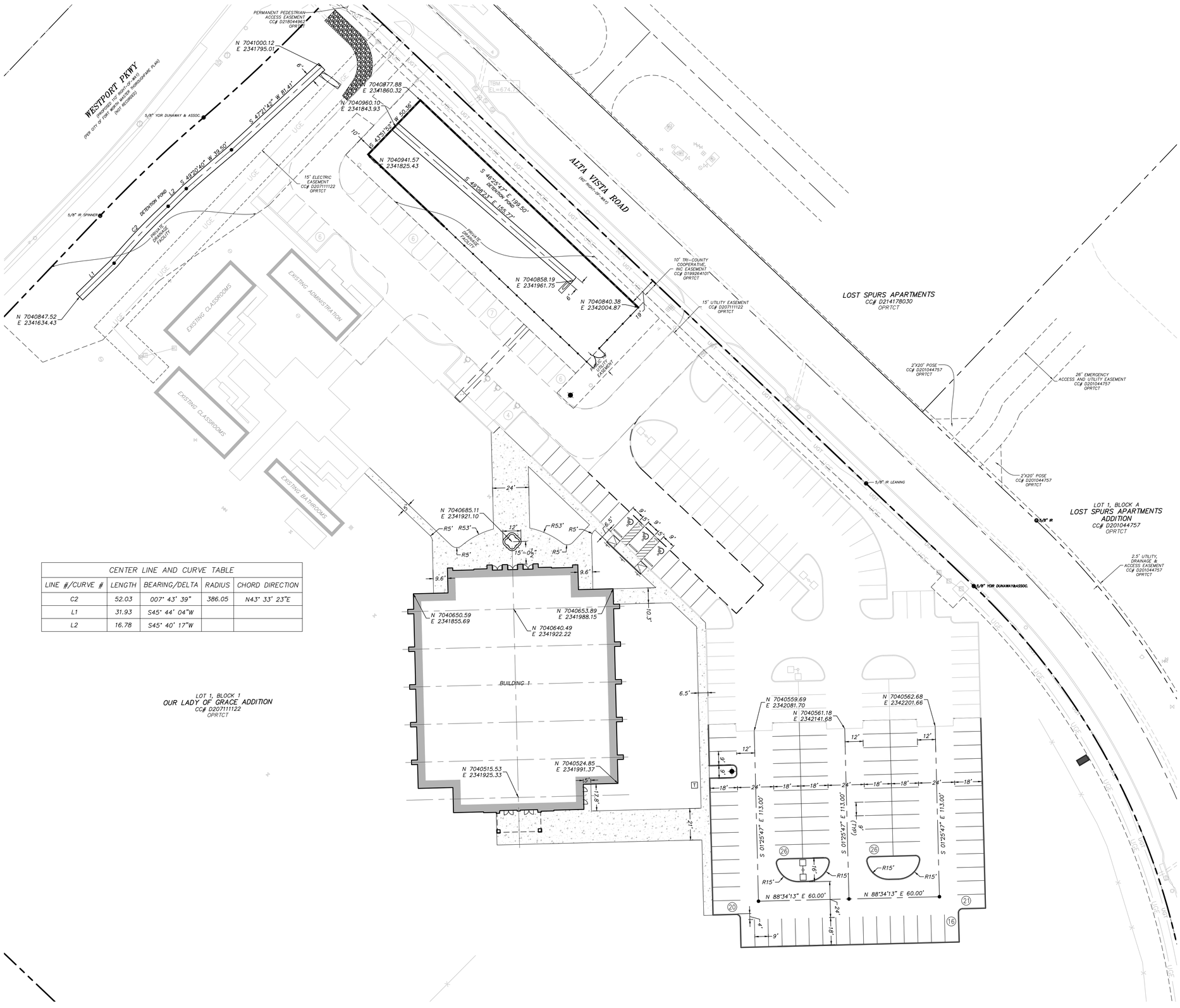

CENTER LINE AND CURVE TABLE				
LINE #/CURVE #	LENGTH	BEARING/DELTA	RADIUS	CHORD DIRECTION
C2	52.03	007° 43' 39"	386.05	N43° 33' 23"E
L1	31.93	S45° 44' 04"W		
L2	16.78	S45° 40' 17"W		

30 0 15 30 60

1 inch = 30 ft.

LEGEND:

- FIRE LANE
- ACCESSIBLE PARKING SPACE
- SIGN
- WHEEL STOP
- EXISTING SANITARY SEWER — EX-SS
- EXISTING SEWER MANHOLE
- EXISTING WATER LINE — EX-W
- EXISTING WATER VALVE — WV
- EXISTING FIRE HYDRANT — FH
- PROPOSED FIRE HYDRANT
- EXISTING UNDERGROUND ELECTRIC — UGE
- EXISTING UNDERGROUND TELEPHONE — UGT
- EXISTING PEDESTRIAN LIGHT
- PROPOSED PEDESTRIAN LIGHT
- PROPOSED LIGHT POLE
- PARKING COUNT — 5

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7. REFER TO PHOTOMETRIC PLAN FOR LIGHTING TYPE AND INTENSITY INFORMATION.

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DIMENSIONAL CONTROL PLAN

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DIMENSIONAL CONTROL PLAN

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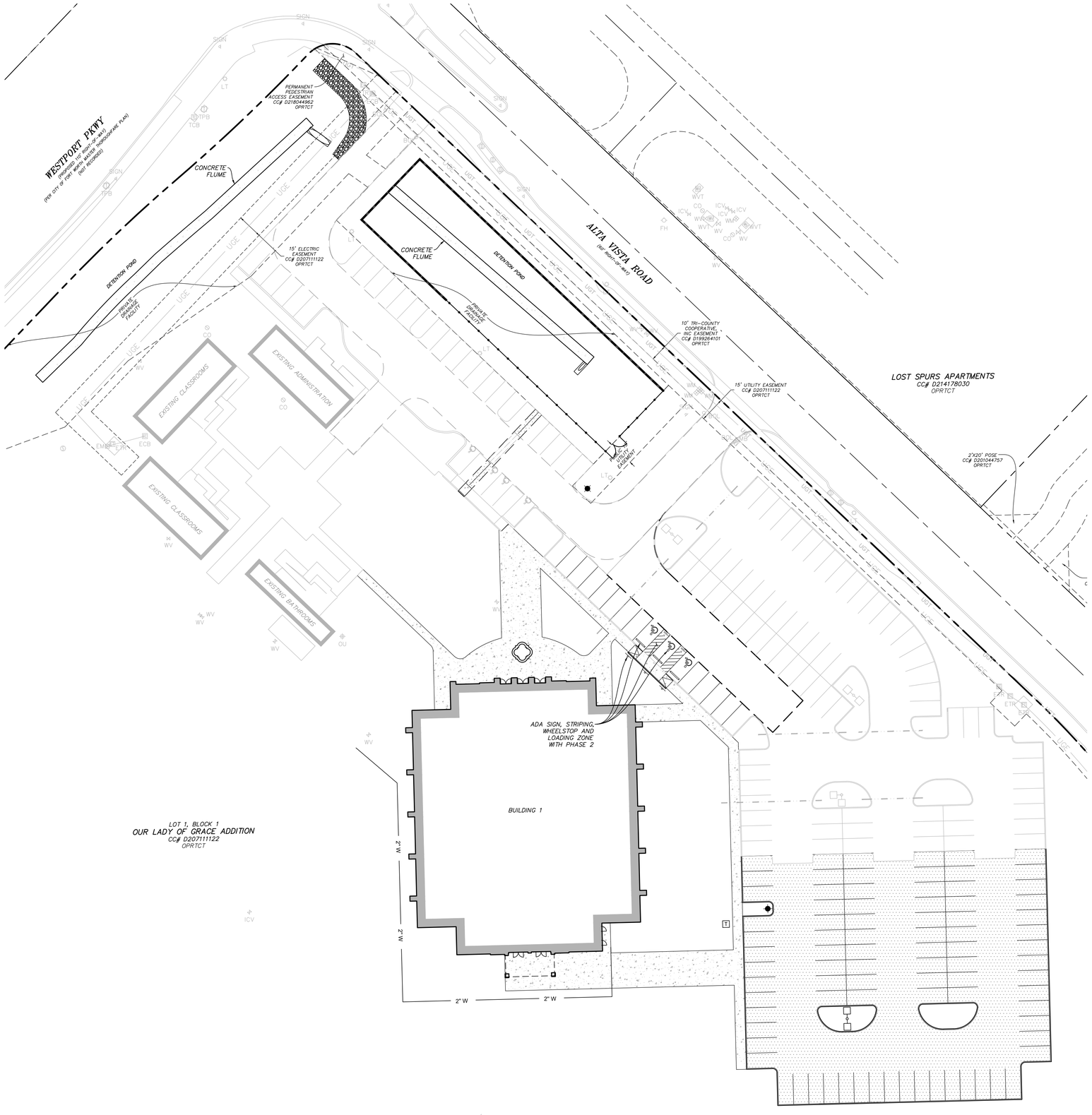

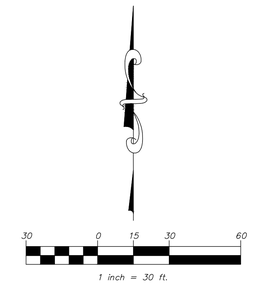

LEGEND:

4" – 3000 PSI CONCRETE SIDEWALK WITH #3 BARS @ 18" O.C.E.W. OVER 6" COMPACTED SUBGRADE TO 95% STANDARD PROCTOR DENSITY AT A MOISTURE CONTENT OF OPTIMUM MOISTURE UP TO 0% TO +4%

5" – 3600 PSI CONCRETE PAVEMENT WITH #3 BARS 18" O.C.E.W. OVER 6" COMPACTED SUBGRADE TO 95% STANDARD PROCTOR DENSITY (ASTM 698) WITH 0% TO +4% POINTS OF OPTIMUM MOISTURE CONTENT

7" – 4000 PSI CONCRETE PAVEMENT WITH #3 BARS 18" O.C.E.W. OVER 6" LIME COMPACTED SUBGRADE TO 95% STANDARD PROCTOR DENSITY (ASTM 698) WITH 0% TO +4% POINTS OF OPTIMUM MOISTURE CONTENT

FIRE LANE (PER CITY OF FORT WORTH)

PAVING NOTES:

1. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADJUSTMENT OF WATER AND SANITARY SEWER APPURTENANCES IN ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF FORT WORTH.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCING ANY CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
3. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED.
4. CONCRETE SURFACE FINISHING SHALL BE SKID RESISTANT, A WHITE PIGMENTED LIQUID CURING COMPOUND SHALL BE UNIFORMLY SPRAYED ON THE CONCRETE IMMEDIATELY AFTER THE FINISHED OPERATION.
5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TRAFFIC CONTROL PLAN FOR ALL WORK IN THE PUBLIC RIGHT-OF-WAY.
6. CONTRACTOR SHALL PROVIDE ALL SAFETY DEVICES FOR THE PROTECTION OF THE PUBLIC.
7. CONCRETE PAVEMENT AND STRUCTURES SHALL BE BACKFILLED AS SOON AS POSSIBLE AFTER FORMS ARE REMOVED.
8. CONTRACTOR RESPONSIBLE FOR IRRIGATION AND FRANCHISE UTILITY SLEEVING. REFERENCE IRRIGATION PLAN FOR IRRIGATION SLEEVING DETAILS.
9. CONTRACTOR TO PROVIDE JOINTING PLAN FOR REVIEW & APPROVAL BY ENGINEER.
10. CONTRACTOR IS RESPONSIBLE FOR ENSURING GRADES ON ALL WALKS DO NOT EXCEED 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE. ADJUST GRADES AS NECESSARY.

NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF FORT WORTH STANDARDS AND SPECIFICATIONS, AND TO THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG).
2. TYPICAL PARKING STALL IS 18' LONG X 9' WIDE.
3. PARKING STALL LINE SHALL BE A 4" SOLID WHITE STRIPE.
4. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
6. ALL CURBS TO BE 6" HIGH UNLESS OTHERWISE NOTED.
7. REFER TO SHEET C1.0 FOR GENERAL NOTES.
8. REFER TO SHEET C11.0–C11.2 FOR PAVING DETAILS.
9. REFER TO SHEET C4.0 FOR ALL SITE DIMENSIONS.
10. REFER TO ARCHITECTURAL PLANS FOR ACTUAL BUILDING DIMENSIONS.
11. REFER TO ARCHITECTURE PLANS FOR ALL FENCING AND GATE SPECIFICATIONS.
12. FIRE LANES SHALL BE PROPERLY MARKED WITH A SIX INCH RED STRIPE WITH FOUR INCH WHITE LETTERS STATING "FIRE LANE NO PARKING" EVERY TWENTY-FIVE FEET ALONG THE ENTIRE LENGTH OF THE FIRE LANE. FIRE LANE MARKINGS SHALL BE ON THE VERTICAL SURFACE OF THE CURB WHEN A CURB IS PRESENT.
13. FIRE LANE ACCESS MUST BE COMPLETE AND FIRE HYDRANTS MUST BE APPROVED BY THE FIRE DEPARTMENT AND MUST BE IN-SERVICE PRIOR TO CONSTRUCTION PROGRESSING ABOVE FOUNDATION.
14. REFER TO PHOTOMETRIC PLAN FOR LIGHTING TYPE AND INTENSITY INFORMATION.
15. ALL UTILITIES, INCLUDING BUT NOT LIMITED TO ELECTRICAL, GAS, AND TELEPHONE SHALL BE PLACED UNDERGROUND.

CONSTRUCTION JOINT NOTES:

DUMMY JOINTS SHALL BE ONE OF THE FOLLOWING METHODS: SAWED, HAND-FORMED OR FORMED BY PREMOLDED FILLER. JOINT DEPTH SHOULD BE EQUAL TO ONE-FOUTH (1/4) OF THE SLAB THICKNESS. HAND FORMED JOINTS SHOULD HAVE A MAXIMUM EDGE RADIUS OF ONE-FOURTH (1/4)INCH. SAWING OF JOINTS SHOULD BEGIN AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT SAWING AND AVOID RAVELING. ALL JOINTS SHOULD BE COMPLETED BEFORE UNCONTROLLED SHRINKAGE CRACKING OCCURS. JOINTS SHALL BE CONTINUOUS ACROSS THE SLAB UNLESS INTERRUPTED BY FULL-DEPTH PREMOLDED JOINT FILLER AND EXTENDED COMPLETELY THROUGH THE CURB. ALL JOINT OPENINGS SHALL BE CLEANED AND SEALED BEFORE OPENING PAVED AREA TO TRAFFIC.

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SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE IN REFERENCE TO THE NAD83 TEXAS COORDINATE SYSTEM – NORTH CENTRAL ZONE, 4202, BASED ON GPS OBSERVATIONS UTILIZING THE LEICA GPS REFERENCE NETWORK. THE PROJECT SCALE FACTOR IS 1.00015464298 3 (0.999845380927), BASE POINT OF 0,0,0.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

PAVING PLAN

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
tbpels registration/license number: 10088000
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arlington, texas 76010
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fax: 817-274-8757
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8/20/2024
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PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:
PAVING PLAN

SHEET NO:
C5.0

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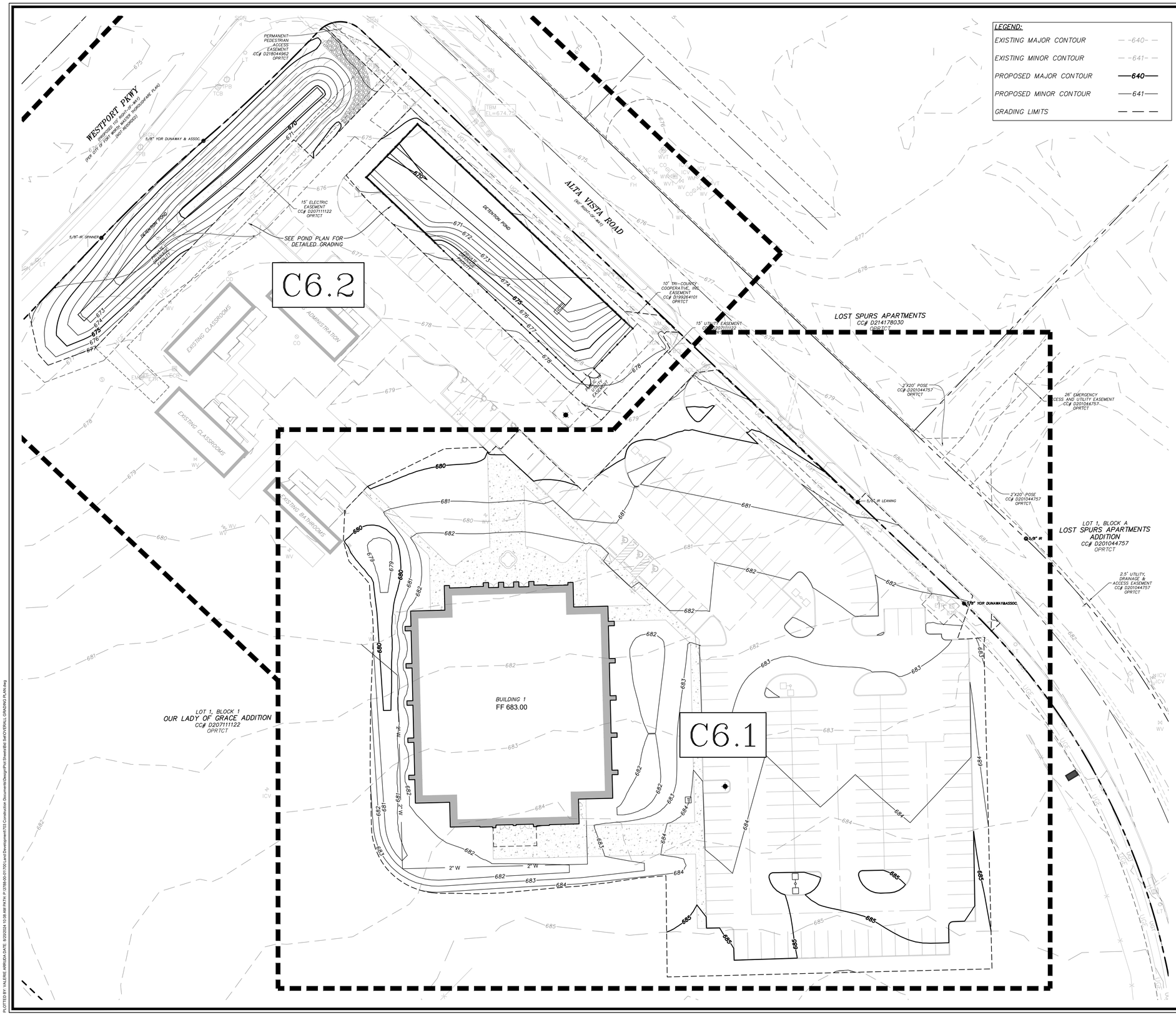

LEGEND:	
EXISTING MAJOR CONTOUR	— -640- —
EXISTING MINOR CONTOUR	— -641- —
PROPOSED MAJOR CONTOUR	—640—
PROPOSED MINOR CONTOUR	—641—
GRADING LIMITS	— — —

30 0 15 30 60

1 inch = 30 ft.

GRADING NOTES

1. CLEARING AND GRUBBING SHALL CONSIST OF REMOVING ALL NATURAL AND ARTIFICIAL OBJECTIONABLE MATERIALS FROM THE PROJECT SITE.
2. ALL TREES, SHRUBS AND ALL SCRUB GROWTH SHALL BE CLEARED. ALL DEAD TREES, LOGS, STUMPS, RUBBISH OF ANY NATURE, AND OTHER SURFACE DEBRIS SHALL ALSO BE CLEARED.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION. THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE OF THE WORK AND THE ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE AND SHALL REMOVE SAME FROM ANY PORTION OF THE SITE.
4. UNSUITABLE MATERIAL, INCLUDING ALL ROCKS MEASURING LARGER THAN 6" IN THE LARGEST DIMENSION, REFUSE AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR. CONTRACTOR SHALL, ALSO, COMPLY WITH ALL APPLICABLE LAWS GOVERNING THE SPILLING OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE.
5. SIX (6") INCHES OF TOP SOIL SHALL BE PLACED ON ALL LANDSCAPE AREAS AND PARKING ISLANDS.
6. POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATION MUST BE PROVIDED. CONTRACTOR TO ENSURE THERE IS NO PONDING AROUND FOUNDATION.
7. THE GRADES SHOWN ON THIS PLAN ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
8. SHOULD THE CONTRACTOR ENCOUNTER ANY UNUSUAL GEOLOGICAL CONDITIONS DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING GEOTECHNICAL ENGINEER AND REQUESTING SUPPLEMENTAL RECOMMENDATIONS.
9. TESTING IS REQUIRED AND SHALL BE PERFORMED BY A LABORATORY APPROVED BY THE ENGINEER/OWNER AND PAID FOR BY THE OWNER.
10. LIMIT CONSTRUCTION ACTIVITY TO IMPROVEMENT AREAS ONLY.
11. REFERENCE LANDSCAPE PLANS FOR TREE PROTECTION METHODS.
12. CONTRACTOR IS RESPONSIBLE FOR ENSURING GRADES ON ALL WALKS DO NOT EXCEED 2% CROSS SLOPE AND 5% LONGITUDINAL SLOPE. ADJUST GRADES AS NECESSARY.
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ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

OVERALL GRADING PLAN

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
tbpels registration/license number: 10088000
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arlington, texas 76010
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8/20/2024

STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED
PROFESSIONAL ENGINEER

FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

OVERALL GRADING PLAN

SHEET NO:

C6.0

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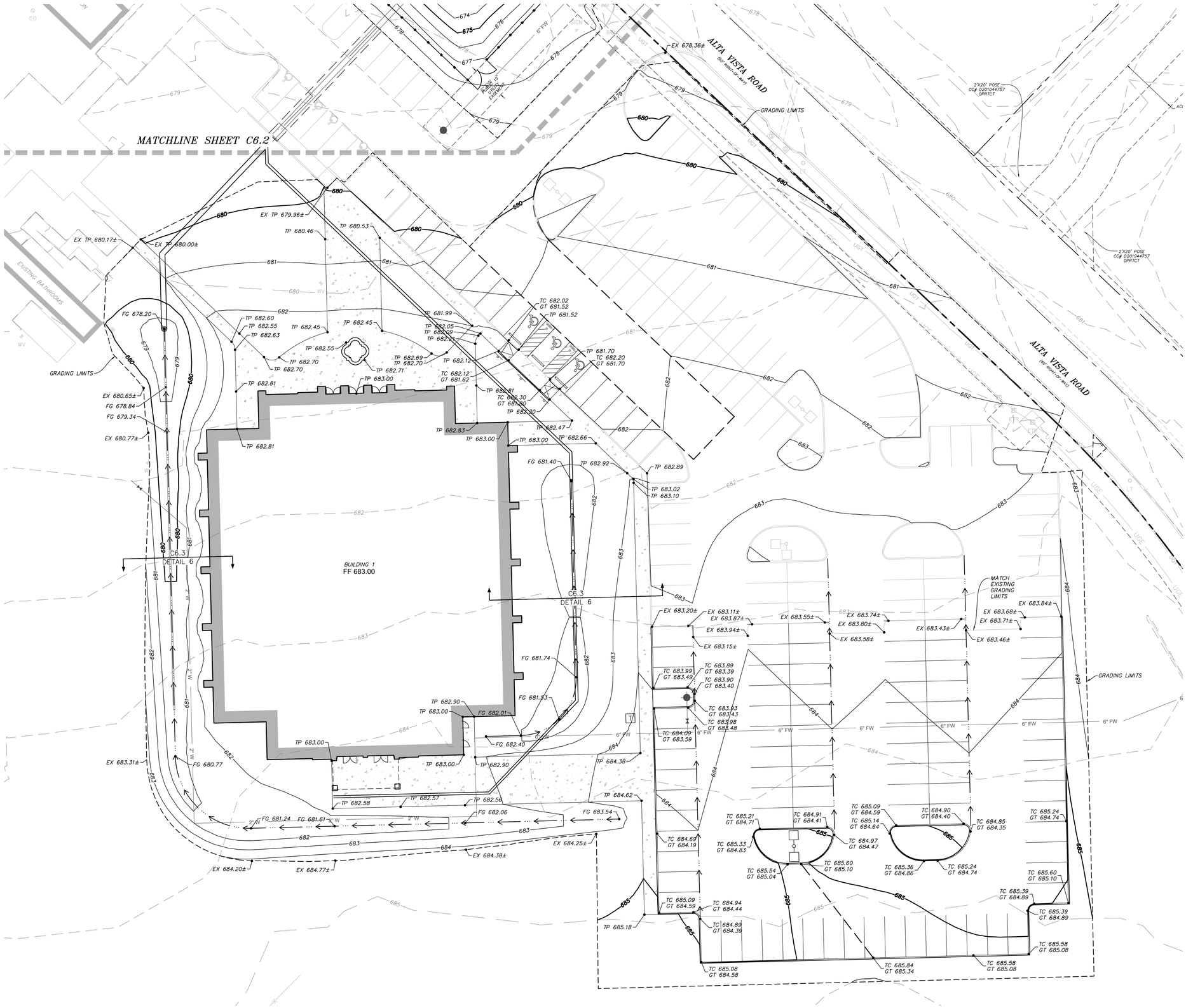

20 0 10 20 40

1 inch = 20 ft.

LEGEND:

EXISTING MAJOR CONTOUR	— -640- —
EXISTING MINOR CONTOUR	— -641- —
PROPOSED MAJOR CONTOUR	—640—
PROPOSED MINOR CONTOUR	—641—
FINISHED GRADE	• FG 630.00
FINISHED FLOOR ELEVATION	FF 630.0
MINIMUM FINISHED FLOOR	MFF 630.0
PROPOSED TOP OF PAVEMENT	• TP 630.00
PROPOSED TOP OF CURB	• TC 630.00
PROPOSED GUTTER	• GT 630.00
PROPOSED TOP OF WALL	• TW 630.00
PROPOSED BOTTOM OF WALL	• BW 630.00
MATCH EXISTING	• EX 630.00±
PROPOSED RETAINING WALL	

REFER TO SHEET C6.0 FOR GRADING NOTES

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ST. TERESA OF CALCUTTA CATHOLIC CHURCH
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LICENSED PROFESSIONAL ENGINEER

FOR BID ONLY

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PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

GRADING PLAN

SHEET NO:

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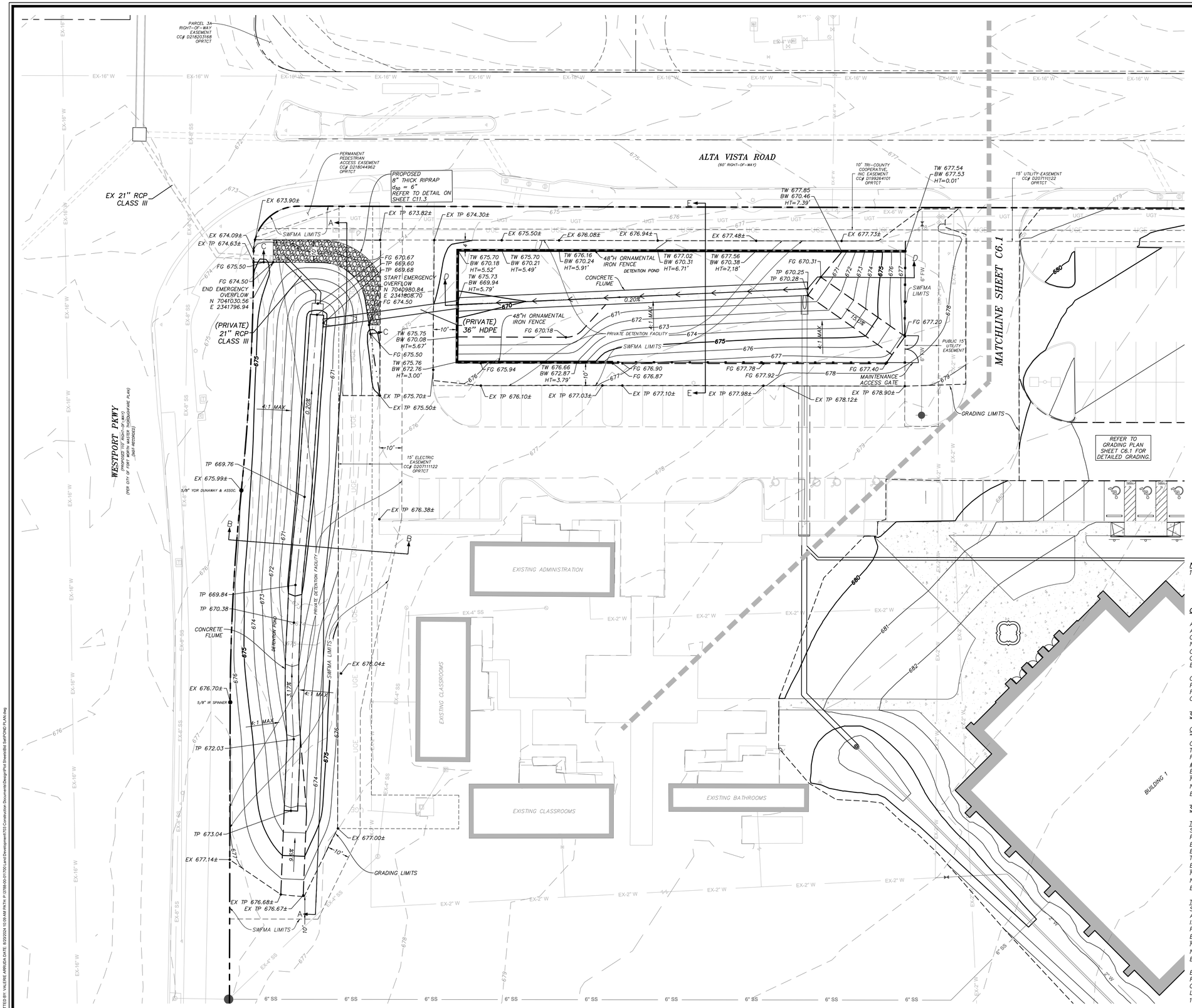

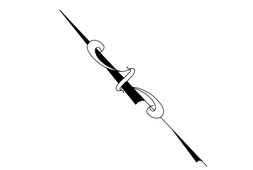

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MATCH EXISTING	• EX 630.00±
PROPOSED RETAINING WALL	

REFER TO SHEET C6.0 FOR GRADING NOTES

NOTES:

1. POND DESIGNED USING SCS METHOD IN HEC–HMS AND AUTODESK HYDROGRAPHS. REFER TO ST. TERESA OF CALCUTTA CATHOLIC CHURCH DRAINAGE STUDY FOR DETAILED POND ANALYSIS.

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SHEET CONTENT:

GRADING PLAN

SHEET NO:

C6.2

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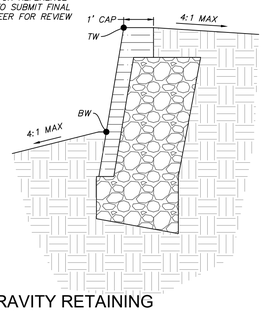
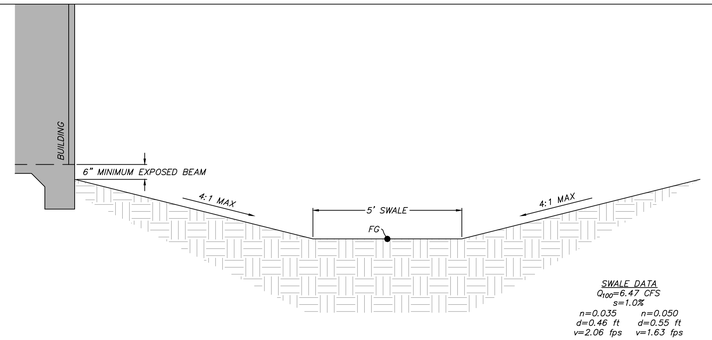
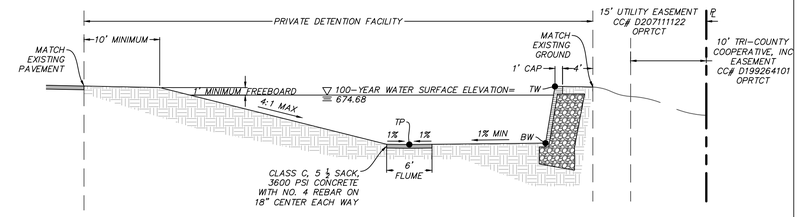
NOTES:
1. 1' CAP IS DEPICTED AND DIMENSIONED ON PLAN SHEETS
2. DETAIL IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO SUBMIT FINAL WALL PLAN TO ENGINEER FOR REVIEW AND COORDINATION



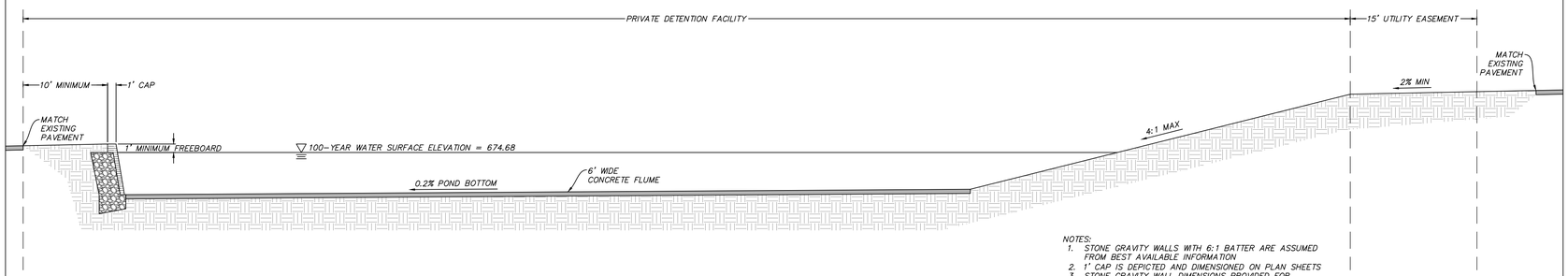
7 STONE GRAVITY RETAINING WALL W/ 6:1 BATTER
NOT TO SCALE



6 5' SWALE SECTION
NOT TO SCALE



5 POND SECTION E-E
NOT TO SCALE

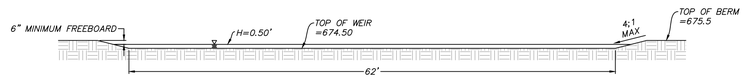


NOTES:
1. STONE GRAVITY WALLS WITH 6:1 BATTER ARE ASSUMED FROM BEST AVAILABLE INFORMATION
2. 1' CAP IS DEPICTED AND DIMENSIONED ON PLAN SHEETS
3. STONE GRAVITY WALL DIMENSIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO SUBMIT FINAL WALL PLAN TO ENGINEER FOR REVIEW AND COORDINATION

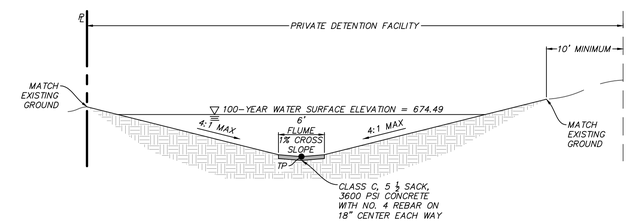
4 POND SECTION D-D
NOT TO SCALE

EMERGENCY OVERFLOW CALCULATIONS

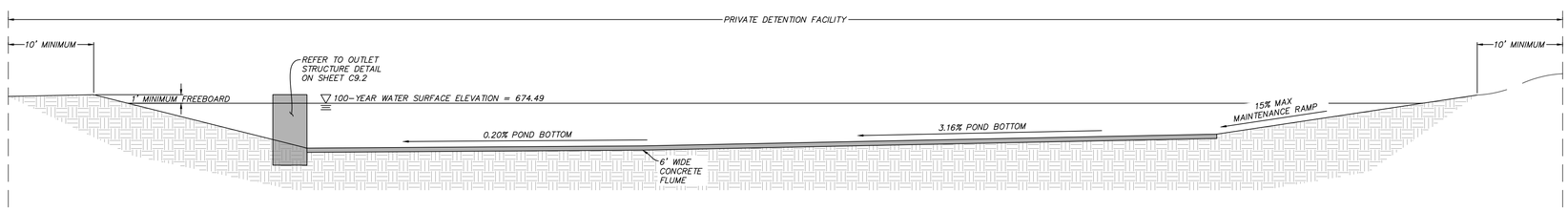
$Q = C*L*H^{1.5}$
$51.9\ CFS = 2.6 * L * (0.5)^{1.5}$
MINIMUM LENGTH = 56.45 FT
PROVIDED LENGTH = 62 FT



3 EMERGENCY OVERFLOW SECTION C-C
NOT TO SCALE



2 POND SECTION B-B
NOT TO SCALE



1 POND SECTION A-A
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

GRADING SECTIONS

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f - 2759
tbpels registration/license number: 10088000
519 east border
arlington, texas 76010
817-469-1671
fax: 817-274-8757
www.mmatexas.com

8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED PROFESSIONAL ENGINEER
FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:
GRADING SECTIONS

SHEET NO:
C6.3

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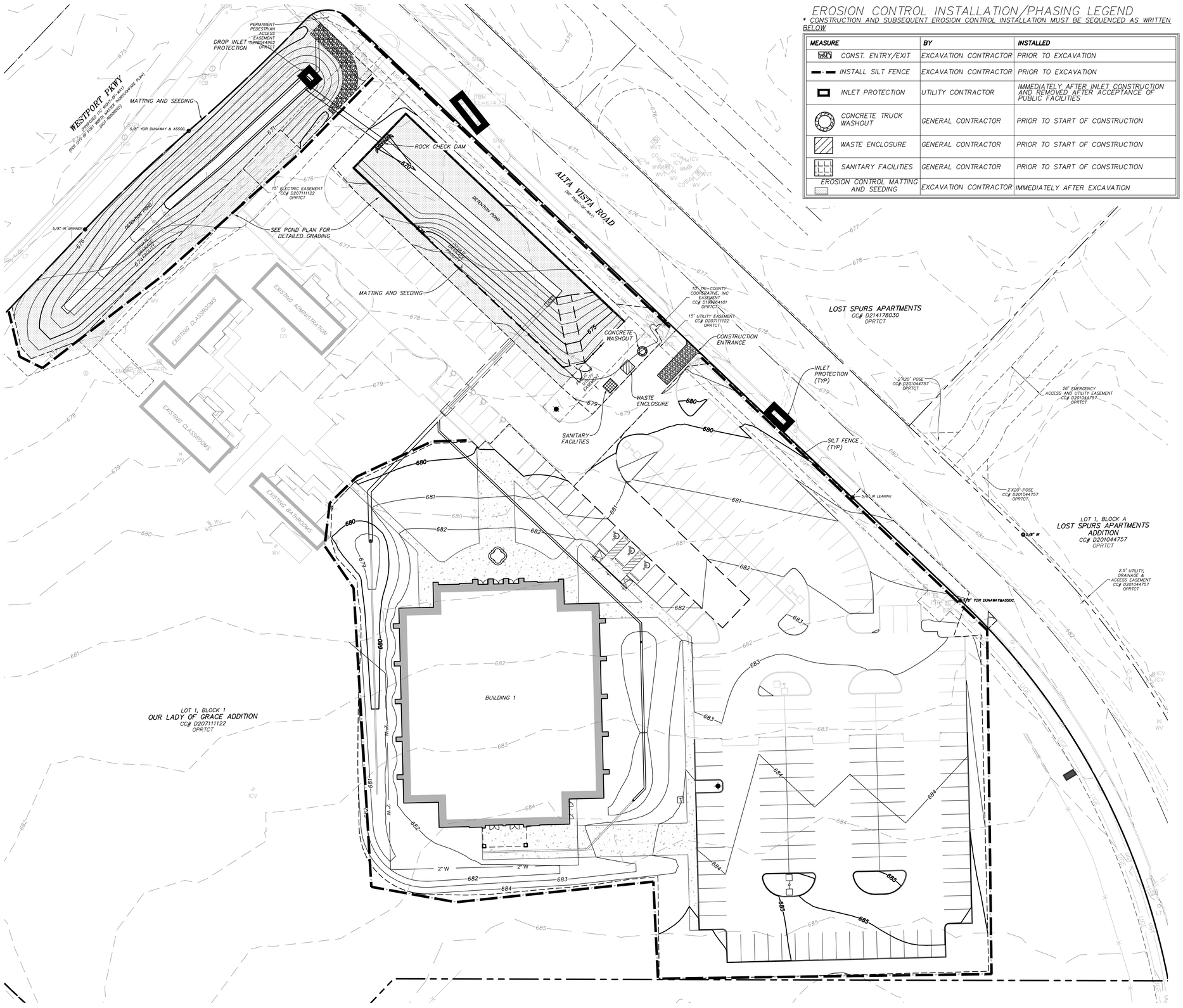
PLOTTED BY: VALERIE ARRUDA DATE: 8/20/2024 10:09 AM PATH: P:\3788-00-01\700 Land Development\703 Construction Documents\Design\Plot Sheets\Bid Set\GRADING PLAN.dwg



EROSION CONTROL INSTALLATION/PHASING LEGEND

* CONSTRUCTION AND SUBSEQUENT EROSION CONTROL INSTALLATION MUST BE SEQUENCED AS WRITTEN BELOW

MEASURE	BY	INSTALLED
CONST. ENTRY/EXIT	EXCAVATION CONTRACTOR	PRIOR TO EXCAVATION
INSTALL SILT FENCE	EXCAVATION CONTRACTOR	PRIOR TO EXCAVATION
INLET PROTECTION	UTILITY CONTRACTOR	IMMEDIATELY AFTER INLET CONSTRUCTION AND REMOVED AFTER ACCEPTANCE OF PUBLIC FACILITIES
CONCRETE TRUCK WASHOUT	GENERAL CONTRACTOR	PRIOR TO START OF CONSTRUCTION
WASTE ENCLOSURE	GENERAL CONTRACTOR	PRIOR TO START OF CONSTRUCTION
SANITARY FACILITIES	GENERAL CONTRACTOR	PRIOR TO START OF CONSTRUCTION
EROSION CONTROL MATTING AND SEEDING	EXCAVATION CONTRACTOR	IMMEDIATELY AFTER EXCAVATION

30 0 15 30 60

1 inch = 30 ft.

EROSION CONTROL NOTES

1. OWNER: MARTSOLF ARCHITECTURE
   815 WEST BAGGET AVENUE
   FORT WORTH, TX 76104
   CONTACT: SCOTT MARTSOLF, AIA
   EMAIL: SCOTT@MARTSOLFARCH.COM
2. PERIMETER EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE STARTING ANY SOIL DISTURBING ACTIVITIES.
3. STREET EXCAVATION TO BE PERFORMED AND EROSION CONTROL MEASURES IN PLACE BEFORE GRUBBING/LOT GRADING.
4. SEDIMENT DISCHARGED OR TRACKED ON TO EXISTING PAVEMENT SHALL BE REMOVED DAILY.
5. CONTRACTOR IS TO CONTAIN ALL RUNOFF FROM MATERIALS USED IN THE SUBGRADE STABILIZATION PROCESS.
6. RETAIN FLOATABLE AND WIND BLOWN MATERIALS ON SITE BY STORING ALL TRASH AND BUILDING MATERIAL WASTE IN ENCLOSURES UNTIL PROPER DISPOSAL AT OFF-SITE FACILITIES. CHECK ADJACENT AREAS DAILY AND PICK UP CONSTRUCTION WASTE MATERIALS AND DEBRIS THAT HAVE BLOWN OR WASHED OFF SITE.
7. PAVING CONTRACTOR TO INSTALL A PIT FOR TEMPORARY ON-SITE DISPOSAL OF CONCRETE WASTE FROM MIXING DRUMS AND CHUTES.
8. INSPECT POLLUTION CONTROL MEASURES EVERY TWO WEEKS AND WITHIN 24 HOURS AFTER A STORM EVENT OF 1/2" OR MORE. REPAIR OR REPLACE DAMAGED MEASURES TO RETAIN SEDIMENT AND OTHER POLLUTANTS ON SITE. REPEATED FAILURE OF A CONTROL MEASURE REQUIRES INSTALLATION OF A MORE SUITABLE DEVICE TO PREVENT DISCHARGE OF POLLUTANTS.
9. PERMANENTLY STABILIZE EXPOSED SOIL WITHIN AND ADJACENT TO THE SITE THAT IS DISTURBED BY VEHICLES, GRADING AND OTHER CONSTRUCTION ACTIVITIES. STABILIZATION IS OBTAINED WHEN THE SOIL IS COVERED BY A COMBINATION OF STRUCTURES, PAVING, AND PERENNIAL VEGETATION.
10. INSTALL A LIQUID TIGHT BERMED AREA (LINER REQUIRED), OR OTHER SPILL PROTECTION MEASURE PER THE FIRE CODE, FOR ANY TEMPORARY FUEL TANKS PLACED ON SITE DURING CONSTRUCTION.
11. ALL CONTRACTORS TO MAINTAIN EXISTING EROSION CONTROL MEASURES IN PLACE.
12. CONSTRUCTION ENTRANCE/EXIT TO BE LOCATED BY GRADING CONTRACTOR AND APPROVED BY OWNER.
13. ALL GRADING TO CONFORM TO THE APPROVED GRADING PLAN FOR ST. TERESA OF CALCUTTA CATHOLIC CHURCH.
14. EROSION CONTROL MEASURES MAY ONLY BE PLACED IN FRONT OF INLETS OR IN CHANNELS, DRAINAGEWAYS OR BORROW DITCHES AT RISK OF CONTRACTOR. CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE, WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. AT THE CONCLUSION OF ANY PROJECT, ALL CHANNELS, DRAINAGEWAYS AND BORROW DITCHES IN THE WORK ZONE SHALL BE DREDGED OF ANY SEDIMENT GENERATED BY THE PROJECT OR DEPOSITED AS A RESULT OF EROSION CONTROL MEASURES.
15. SEE LANDSCAPE PLAN FOR SOD LOCATIONS.
16. **TOTAL DISTURBED AREA = 3.740 AC.**

GENERAL UTILITY NOTES:

ALL EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE OWNER AND THE ENGINEER NEITHER ASSUME NOR IMPLY ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY AFFECTED AND VERIFY THESE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

CALL TEXAS 811 OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. MMA INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE IN REFERENCE TO THE NAD83 TEXAS COORDINATE SYSTEM – NORTH CENTRAL ZONE, 4202, BASED ON GPS OBSERVATIONS UTILIZING THE LEICA GPS REFERENCE NETWORK. THE PROJECT SCALE FACTOR IS 1.00015464298 3 (0.999845380927), BASE POINT OF 0,0,0.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

EROSION CONTROL PLAN

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
tbpels registration/license number: 10088000
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8/20/2024

STATE OF TEXAS
VALERIE ARRUDA
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LICENSED PROFESSIONAL ENGINEER

FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

EROSION CONTROL PLAN

SHEET NO:

C7.0

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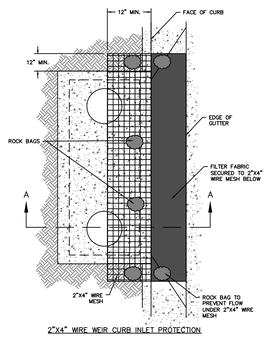
PLOTTED BY: VALERIE ARRUDA DATE: 8/20/2024 10:10 AM PATH: P:\3788-00-01\00 Land Development\703 Construction Documents\Design\Plot Sheets\Bid Set\EROSION CONTROL PLAN.dwg



2"X4" WIRE WEIR CURB INLET PROTECTION

NOTES:

GENERAL:

- DRAINAGE PATTERNS SHALL BE EVALUATED TO ENSURE INLET PROTECTION WILL NOT DIVERT FLOW OR FLOOD THE ROADWAY OR ADJACENT PROPERTIES AND STRUCTURES.
- INLET PROTECTION MEASURES OR DEVICES THAT COMPLETELY BLOCK THE INLET ARE PROHIBITED. THEY MUST ALSO INCLUDE A BYPASS CAPABILITY IN CASE THE PROTECTION MEASURES ARE CLOGGED.
- A POSITIVE OVERLOW PATH SHALL BE CONSIDERED IN THE DESIGN OF INLET PROTECTION CONTROL MEASURED AT SUMP INLETS.

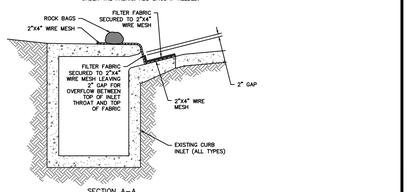
CURB INLET PROTECTION

- MUNICIPALITY APPROVAL IS REQUIRED BEFORE INSTALLING INLET PROTECTION ON PUBLIC STREETS.
- SPECIAL CAUTION MUST BE EXERCISED WHEN INSTALLING CURB INLET PROTECTION ON PUBLICLY TRAVELED STREETS OR IN DEVELOPED AREAS. ENSURE THAT INLET PROTECTION IS PROPERLY DESIGNED, INSTALLED AND MAINTAINED TO AVOID FLOODING OF THE ROADWAY OR ADJACENT PROPERTIES AND STRUCTURES.
- A TWO INCH OVERFLOW GAP OR WEIR IS REQUIRED ON ALL CURB INLET PROTECTION DEVICES.
- TRAFFIC CONES, WARNING SIGNS, OR OTHER MEASURES SHALL BE INSTALLED TO WARN MOTORISTS WHEN THE INLET PROTECTION MEASURES EXTEND BEYOND THE GUTTER LINE.
- 2"x4" WEIR PROTECTION:
  BEND WIRE MESH AROUND THE 2" X4" BOARD AND STAPLE TO THE BOARD. BEND WIRE MESH AROUND THE BOTTOM OF THE BOARD, THE CURB OPENING, AND ALONG THE PAVEMENT TO FORM A CAGE FOR THE ROCK.

  ROCK BAGS SHALL BE PLACED PERPENDICULAR TO THE CURB. AT BOTH ENDS OF THE WOODEN FRAME, TO DISRUPT THE FLOW AND DIRECT WATER INTO THE ROCK FILTER. STACK THE BAGS TWO HIGH IF NEEDED.
- 2"x4" WIRE (HOG WIRE) WEIR PROTECTION
  THE FILTER FABRIC AND WIRE MESH SHALL EXTEND A MINIMUM OF 12 INCHES PAST THE CURB OPENING ON EACH SIDE OF THE INLET.

  FILTER FABRIC SHALL BE PLACED ON 2" X 4" WIRE MESH TO PREVENT THE TUBE FROM SAGGING INTO THE INLET.

  ROCK BAGS ARE USED TO HOLD THE WIRE MESH AND FILTER FABRIC IN CONTACT WITH THE PAVEMENT. AT LEAST ONE BAG SHALL BE PLACED ON EITHER SIDE OF THE OPENING, PARALLEL, TO AND UP AGAINST THE CONCRETE CURB. THE BAGS ARE INTENDED TO DISRUPT AND SLOW THE FLOW AND ENSURE IT DOES NOT GO UNDER THE FABRIC. ADD BAGS IF NEEDED.

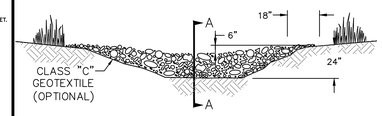


SECTION A–A

FORT WORTH	CITY OF FORT WORTH, TEXAS 2"X4" WIRE WEIR CURB INLET PROTECTION	REVISED 04-30-2021 01 57 13-D430

SECTION A – A

'L' = THE DISTANCE SUCH THAT POINTS 'A' AND 'B' ARE OF EQUAL ELEVATION



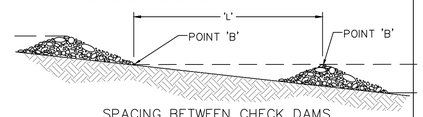
VIEW LOOKING UPSTREAM

NOTE:
KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW AROUND DAM.

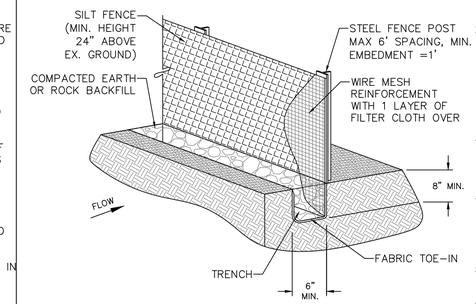
6 ROCK CHECK DAM
NOT TO SCALE

ROCK BERM GENERAL NOTES:

1. STONE SHALL BE WELL GRADED WITH SIZE RANGING FROM 12 TO 36 INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS. GEOTEXTILE CLASS "C" OR BETTER UNDER THE BOTTOM AND SIDES OF THE DAM PRIOR TO PLACEMENT OF STONE IS OPTIONAL.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
3. THE ROCK BERM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE–THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
5. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
6. ROCK BERM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.



SPACING BETWEEN CHECK DAMS
NOT TO SCALE

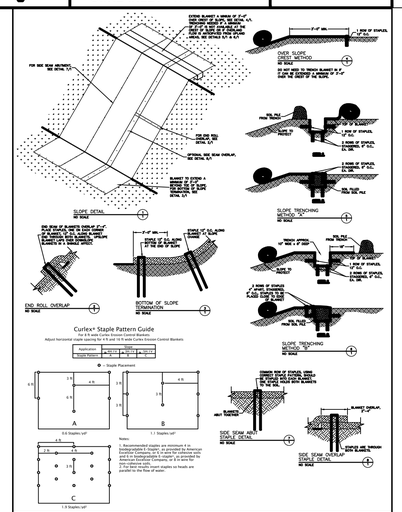


ISOMETRIC PLAN VIEW

3 SILT FENCE
NOT TO SCALE

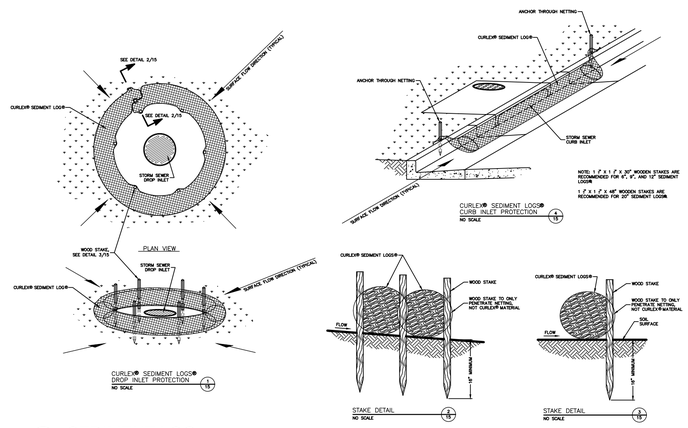
GENERAL NOTES:

1. STEEL 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 8 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 STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE AS 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.



AMERICAN EXCELSIOR COMPANY ARLINGTON, TEXAS	SHEET DESCRIPTION CURLEX® SLOPE APPLICATION DETAIL	DATE 03/01/18 SCALE NONE	DRAWN BY PROJECT NO.	SHEET NO. 1

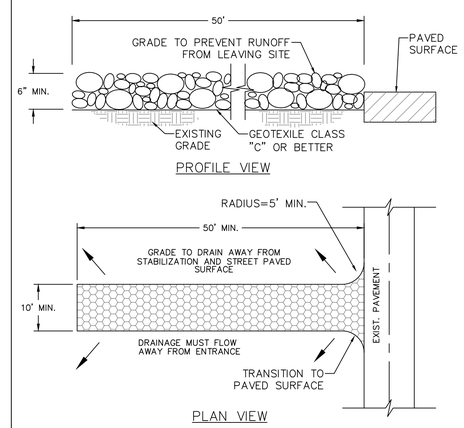
ALL LOGS TO BE AMERICAN EXCELSIOR COMPANY CURLEX SEDIMENT LOGS OR APPROVED EQUAL



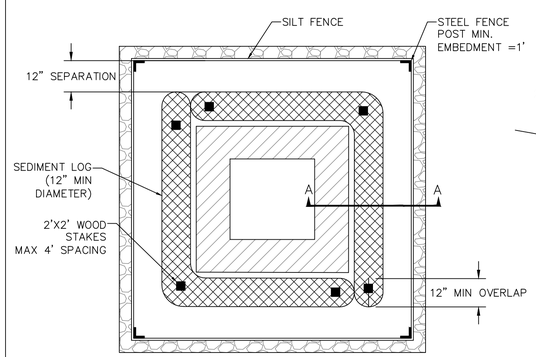
4 SEDIMENT LOG
NOT TO SCALE

GENERAL NOTES:

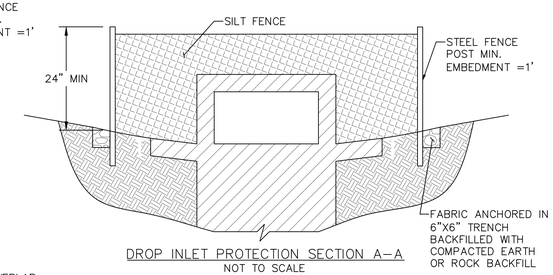
1. STONE SHALL BE 3 TO 5 INCH DIAMETER COARSE AGGREGATE.
2. LENGTH SHALL BE AS SPECIFIED IN THE SWPPP.
3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT 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.



2 CONSTRUCTION ENTRANCE
NOT TO SCALE



DROP INLET PROTECTION PLAN VIEW
NOT TO SCALE

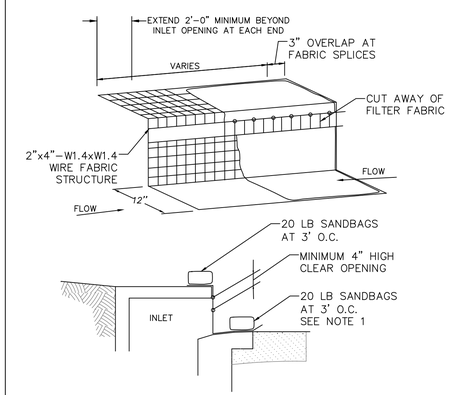


DROP INLET PROTECTION SECTION A–A
NOT TO SCALE

GENERAL NOTES:

1. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDE TOWARDS THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET (SEE SILT FENCE STONE OVERFLOW STRUCTURE DETAIL).
2. POSTS SHALL BE INSTALLED AT EACH CORNER AND BETWEEN CORNERS IF THE DISTANCE IS GREATER THAN 6' BETWEEN THE CORNERS.
3. REFER TO SILT FENCE DETAIL FOR FILTER FABRIC MATERIAL AND CONSTRUCTION METHODS.

1 DROP INLET PROTECTION
NOT TO SCALE



GENERAL NOTES:

1. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSITITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON–SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM–WATER BEGINS TO OVERTOP THE CURB.
5. INLET PROTECTIONS SHALL BE REMOVED AFTER ACCEPTANCE OF PUBLIC FACILITIES.

1 CURB INLET PROTECTION
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

EROSION CONTROL DETAILS

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
tbpels registration/license number: 10088000
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8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED PROFESSIONAL ENGINEER
FOR BID ONLY

PROJECT NUMBER:	3788–00–01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

EROSION CONTROL DETAILS

SHEET NO:
C7.1

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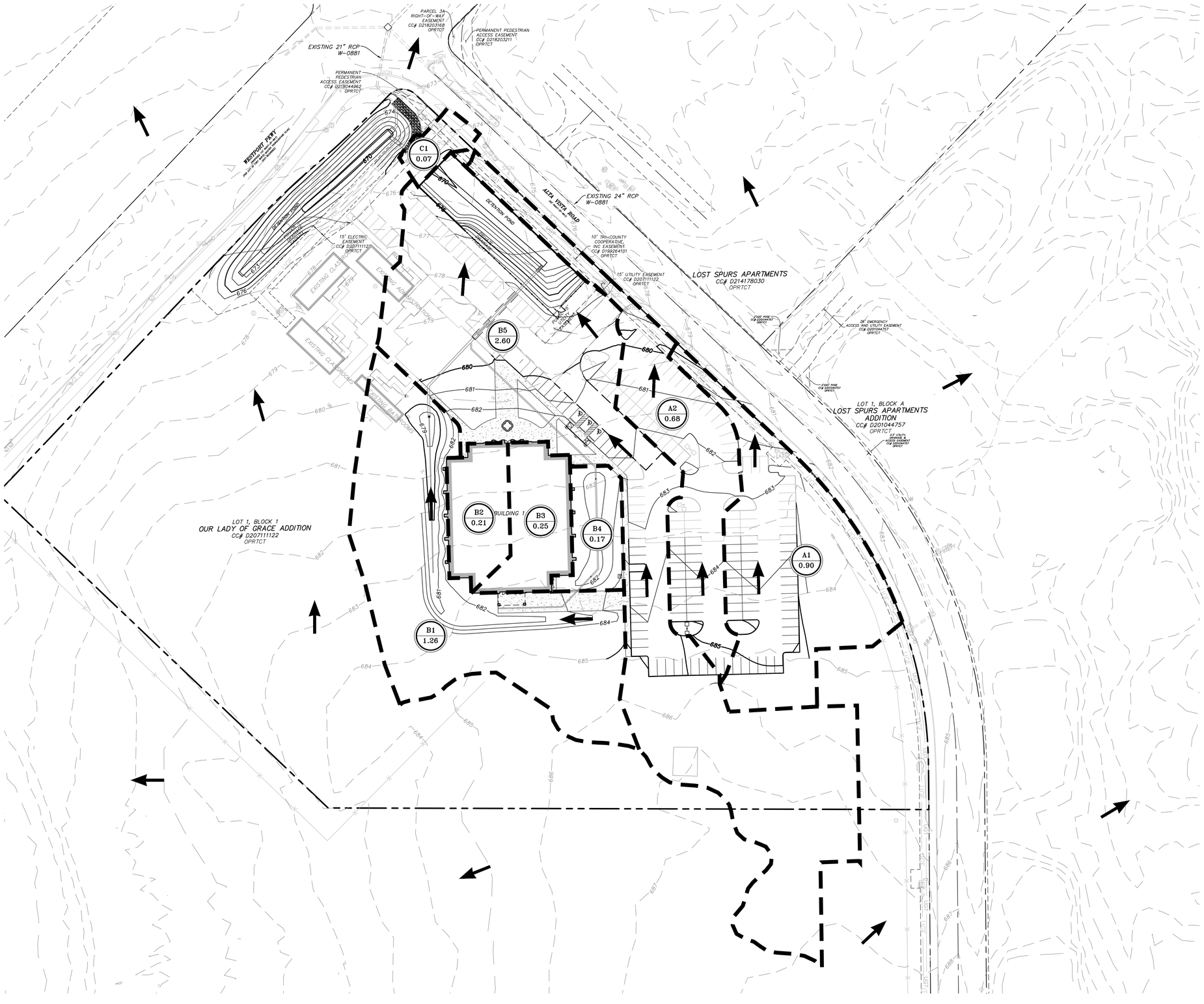

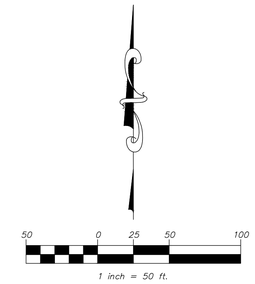

LEGEND:

EXISTING MAJOR CONTOUR	— 640 —
EXISTING MINOR CONTOUR	— 641 —
PROPOSED MINOR CONTOUR	640
PROPOSED MAJOR CONTOUR	641
PROPOSED STORM DRAIN	//
DRAINAGE AREA BOUNDARY	
DRAINAGE AREA LABEL	A1 / 2.6
NAME	
AREA (ACRES)	
INLET DESIGNATION	XX' C.I. / XX
FLOW AREA	
DESIGN POINT	1

NOTES:

1. PROPERTY IS CURRENTLY ZONED MULTIFAMILY (C) BUT WILL BE REZONED TO NEIGHBORHOOD COMMERCIAL (E).
2. DESIGN CRITERIA IS BASED ON CITY OF FORT WORTH DESIGN CRITERIA MANUAL DATED NOVEMBER 2015.
3. EXISTING CONTOURS ARE BASED ON TOPOGRAPHIC SURVEY PREPARED BY MMA, DATED NOVEMEBER, 2023 AND LIDAR COMPLETED IN 2019 DOWNLOADED FROM TNRIS.
4. DRAINAGE AREAS ARE BASED FROM ST. TERESA OF CALCUTTA CATHOLIC CHURCH DRAINAGE STUDY. REFER TO STUDY FOR MORE DETAIL.
5. RATIONAL METHOD USED TO MODEL PROPOSED STORM PIPE IMPROVEMENTS ONLY. SCS METHODOLOGY USED IN DRAINAGE STUDY ANALYSIS, REFER TO DRAINAGE STUDY FOR MORE DETAIL.

GENERAL UTILITY NOTES:

ALL EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE OWNER AND THE ENGINEER NEITHER ASSUME NOR IMPLY ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY AFFECTED AND VERIFY THESE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

CALL TEXAS 811 OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. MMA INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE IN REFERENCE TO THE NAD83 TEXAS COORDINATE SYSTEM – NORTH CENTRAL ZONE, 4202, BASED ON GPS OBSERVATIONS UTILIZING THE LEICA GPS REFERENCE NETWORK. THE PROJECT SCALE FACTOR IS 1.000154642983 (0.999845380927), BASE POINT OF 0,0,0.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

DRAINAGE AREA MAP

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DRAINAGE AREA MAP

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THE STORM CALCULATIONS ON THIS SHEET ARE UTILIZED FOR STORM SYSTEM CALCULATIONS ONLY. REFER TO STUDY SUBMITTED FOR ST. TERESA OF CALCUTTA CATHOLIC CHURCH FOR ANALYSIS POINT COMPARISON AND POND SIZING

St. Teresa of Calcutta
INTERIM WEIGHTED C VALUE COMPUTATIONS

AREA NAME	DESCRIPTION	AREA - A (AC.)	"C"	C*A	WEIGHTED "C"
Area No.	B1				
	Open Space	1.1900	0.35	0.4165	
	House of Worship	0.0700	0.88	0.0616	
	TOTALS	**1.2600**		**0.4781**	**0.379**
Area No.	B5				
	Open Space	0.9200	0.35	0.3220	
	House of Worship	1.6800	0.88	1.4784	
	TOTALS	**2.6000**		**1.8004**	**0.692**

St. Teresa of Calcutta
INTERIM CONDITIONS DRAINAGE AREA COMPUTATIONS

Area Name	Runoff Coef. "C"	AREA "A" (ac.)	Total "CA"	Time of Concentration (min)	Ca 1	C*Ca 1	I1 (in/hr)	Q1 (cfs)	Ca 5	C*Ca 5	I5 (in/hr)	Q5 (cfs)	Ca 100	C*Ca 100	I100 (in/hr)	Q100 (cfs)	COMMENTS
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1	0.88	0.90	0.79	10.00	1.00	0.88	3.87	3.06	1.00	0.88	5.46	4.32	1.00	0.88	9.63	7.62	TO ALTA VISTA ROAD
A2	0.88	0.68	0.60	10.00	1.00	0.88	3.87	2.31	1.00	0.88	5.46	3.27	1.00	0.88	9.63	5.76	TO ALTA VISTA ROAD
B1	0.38	1.26	0.48	10.00	1.00	0.38	3.87	1.85	1.00	0.38	5.46	2.61	1.00	0.38	9.63	4.60	TO LANDSCAPE DRAIN
B2	0.88	0.21	0.18	10.00	1.00	0.88	3.87	0.71	1.00	0.88	5.46	1.01	1.00	0.88	9.63	1.78	ROOF DOWNSPOUTS
B3	0.88	0.25	0.22	10.00	1.00	0.88	3.87	0.85	1.00	0.88	5.46	1.20	1.00	0.88	9.63	2.12	ROOF DOWNSPOUTS
B4	0.35	0.17	0.06	10.00	1.00	0.35	3.87	0.23	1.00	0.35	5.46	0.32	1.00	0.35	9.63	0.57	TO LANDSCAPE DRAIN
B5	0.69	2.60	1.80	10.00	1.00	0.69	3.87	6.96	1.00	0.69	5.46	9.82	1.00	0.69	9.63	17.33	TO DETENTION POND
C1	0.88	0.07	0.06	10.00	1.00	0.88	3.87	0.24	1.00	0.88	5.46	0.34	1.00	0.88	9.63	0.59	TO DRIVEWAY

NOTES:
1. *INTERIM CONDITIONS ARE PROVIDED ONLY TO SIZE THE INTERIM SWALE, TO BE MODIFIED WITH FUTURE EXPANSION OF THE ST TERESA OF CALCUTTA CATHOLIC CHURCH MASTER PLAN.*

St. Teresa of Calcutta
PROPOSED CONDITIONS DRAINAGE AREA COMPUTATIONS

Area Name	Runoff Coef. "C"	AREA "A" (ac.)	Total "CA"	Time of Concentration (min)	Ca 1	C*Ca 1	I1 (in/hr)	Q1 (cfs)	Ca 5	C*Ca 5	I5 (in/hr)	Q5 (cfs)	Ca 100	C*Ca 100	I100 (in/hr)	Q100 (cfs)	COMMENTS
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1	0.88	0.90	0.79	10.00	1.00	0.88	3.87	3.06	1.00	0.88	5.46	4.32	1.00	0.88	9.63	7.62	TO ALTA VISTA ROAD
A2	0.88	0.68	0.60	10.00	1.00	0.88	3.87	2.31	1.00	0.88	5.46	3.27	1.00	0.88	9.63	5.76	TO ALTA VISTA ROAD
B1	0.88	1.26	1.11	10.00	1.00	0.88	3.87	4.29	1.00	0.88	5.46	6.05	1.00	0.88	9.63	10.67	TO LANDSCAPE DRAIN
B2	0.88	0.21	0.18	10.00	1.00	0.88	3.87	0.71	1.00	0.88	5.46	1.01	1.00	0.88	9.63	1.78	ROOF DOWNSPOUTS
B3	0.88	0.25	0.22	10.00	1.00	0.88	3.87	0.85	1.00	0.88	5.46	1.20	1.00	0.88	9.63	2.12	ROOF DOWNSPOUTS
B4	0.88	0.17	0.15	10.00	1.00	0.88	3.87	0.58	1.00	0.88	5.46	0.82	1.00	0.88	9.63	1.44	TO LANDSCAPE DRAIN
B5	0.88	2.60	2.29	10.00	1.00	0.88	3.87	8.84	1.00	0.88	5.46	12.48	1.00	0.88	9.63	22.03	TO DETENTION POND
C1	0.88	0.07	0.06	10.00	1.00	0.88	3.87	0.24	1.00	0.88	5.46	0.34	1.00	0.88	9.63	0.59	TO DRIVEWAY

NOTES:
1. *RUNOFF COEFFICIENT FOR COMMERCIAL/INDUSTRIAL/HOUSE OF WORSHIP/SCHOOL FROM CITY OF FORT WORTH DESIGN CRITERIA MANUAL TABLE 3.5*
2. *THE PROPOSED CONDITIONS DISCHARGE WAS USED TO SIZE THE PROPOSED STORM DRAIN AND INLETS. THIS ACCOUNTS FOR FULLY DEVELOPED CONDITIONS, IN ACCORDANCE WITH THE DRAINAGE STUDY SUBMITTED FOR THE ST TERESA OF CALCUTTA CATHOLIC CHURCH*

Landscape Drain Sizing

Area No.	No. of Inlets	Design Flow (cfs)	Design Head (ft.)	Inlet Size (in.)	Max Capacity (cfs)	Notes
B1	1	10.67	2.10	24	12.76	DOME GRATE INLET
B2	2	1.44	1.37	12	2.74	DOME GRATE INLET
NOTE:	1. INLETS SIZED USING 2012 NYLOPLAST GRATE INLET CAPACITY CHARTS					
	2. AREAS WITH MULTIPLE INLETS HAVE BEEN SIZED FOR THE SAME DESIGN HEAD AND FLOW					

St. Teresa of Calcutta Storm Hydraulic Calculations

Line No.	Station From	Station To	Pipe Length	Drainage Area No.	Area	Total Area	C	C_a/C_f	Increment $C*C_f*A$	Total CA	Time of Concentration Inlet	Travel	Increment	Design	I5
	ft	ft			acres	acres					min	min	min	min	in/hr
	1	2	3	4	5	6	7a	7b	8	9	10	11	12	13	14
SD-A															
1	4+78.57	3+10.89	167.68	B2	0.21	0.21	0.88	1.00	0.18	0.18	10.00	0.55	10.00	10.00	5.46
2	3+10.89	2+77.81	33.08	B1	1.26	1.47	0.88	1.00	1.11	1.29	10.00	0.14	10.55	10.55	5.34
3	2+77.81	2+11.30	66.51			1.47				1.29	10.00	0.29	10.69	10.55	5.34
4	2+11.30	1+00.00	111.30	B3,B4	0.42	1.89	0.88	1.00	0.37	1.66	10.00	0.38	10.98	10.98	5.25
SD-A1															
1	5+26.50	4+58.05	68.45	B3	0.25	0.25	0.88	1.00	0.22	0.22	10.00	0.29	10.00	10.00	5.46
2	4+58.05	4+13.37	44.68			0.25				0.22	10.00	0.19	10.29	10.00	5.46
3	4+13.37	4+02.09	11.28	B4	0.17	0.42	0.88	1.00	0.15	0.37	10.00	0.04	10.48	10.48	5.35
4	4+02.09	3+05.30	96.79			0.42				0.37	10.00	0.36	10.52	10.48	5.35
5	3+05.30	2+92.79	12.51			0.42				0.37	10.00	0.05	10.88	10.48	5.35
6	2+92.79	1+08.49	184.30												
7	1+08.49	1+00.00	8.49												
SD-C															
1	1+28.80	1+21.67	7.13	Lower Pond											
2	1+21.67	1+00.00	21.67												
3	1+00.00	0+70.16	29.84												
4	0+70.16	0+6.00	64.16												

Line No.	I (Design Below)	Q5	Q (Design Below)	Crown Overtop	Inlet Bypass	Q_{Pipe}	Pipe Size No.	Span	Dia/Height	Manning's 'n'	Pipe Capacity	S_f	HGL D/S	HGL U/S
	in/hr	cfs	cfs	cfs	cfs	cfs		ft	in/ft		cfs	%	ft	ft
	15	16	17	18a	18b	19	20a	20b	20c	21	22	23	24	25
SD-A	100		100											
1	9.63	1.01	1.78			1.78	1		8	0.012	0.93	1.85%	675.95	679.05
2	9.42	6.91	12.18			12.18	1		24	0.012	27.73	0.25%	675.58	675.66
3	9.42	6.91	12.18			12.18	1		24	0.012	27.73	0.25%	675.32	675.48
4	9.26	8.73	15.40			15.40	1		24	0.012	27.73	0.39%	674.68	675.12
SD-A1	100		100											
1	9.63	1.20	2.12			2.12	1		10	0.012	2.37	0.80%	679.43	679.98
2	9.63	1.20	2.12			2.12	1		10	0.012	2.37	0.80%	678.97	679.33
3	9.44	1.98	3.49			3.49	1		12	0.012	4.79	0.82%	678.28	678.37
4	9.44	1.98	3.49			3.49	1		12	0.012	4.79	0.82%	677.38	678.17
5	9.44	1.98	3.49			3.49	1		12	0.012	4.79	0.82%	677.12	677.22
6						3.49	1		12	0.012	4.79	0.82%	675.50	677.01
7						3.49	1		12	0.012	4.79	0.82%	675.32	675.39
SD-C														
1						20.40	1		21	0.013	11.20	1.66%	672.96	673.08
2						20.40	1		21	0.013	11.20	1.66%	672.21	672.57
3						20.40	1		21	0.013	7.26	1.66%	671.33	671.82
4						20.40	1		21	0.013	7.26	1.66%	669.79	670.85

Line No.	Head Loss Calculations V_1	V_2	$V_1^2/2g$	$V_2^2/2g$	K_j	$K_jV_1^2/2g$	H_k	Entrance Control Hwic	Control	Design HGL	Invert From	Invert To	Pipe Slope	T/C	Comments
	ft/s	ft/s	ft	ft		ft	ft	ft	True/False	ft	ft	ft	%	ft	
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
SD-A															
1	0.00	5.10	0.00	0.40	0.00	0.00	0.00	0.00	FALSE	679.05	675.15	674.31	0.50%	680.57	Continuation From Another Line
2	5.10	3.88	0.40	0.23	1.25	0.50	0.29	1.93	FALSE	675.95	672.98	672.56	1.28%	678.20	Inlet or Manhole at Beginning of Line
3	3.88	3.88	0.23	0.23	0.35	0.08	0.10	0.00	FALSE	675.58	672.56	671.70	1.28%	680.48	Bend 45°
4	3.88	4.90	0.23	0.37	0.75	0.17	0.20	0.00	FALSE	675.32	671.70	670.28	1.28%	679.35	45° Wye Connection or Cut-in
SD-A1															
1	0.00	3.89	0.00	0.24	0.00	0.00	0.00	0.00	FALSE	679.98	678.83	678.14	1.00%	682.68	Continuation From Another Line
2	3.89	3.89	0.24	0.24	0.35	0.08	0.10	0.00	FALSE	679.43	678.14	677.70	1.00%	682.90	Bend 45°
3	3.89	4.44	0.24	0.31	1.25	0.30	0.39	1.44	TRUE	678.97	677.53	677.36	1.54%	681.53	Inlet or Manhole at Beginning of Line, Entrance Control
4	4.44	4.44	0.31	0.31	0.35	0.11	0.11	0.00	FALSE	678.28	677.36	675.86	1.54%	681.64	Bend 45°
5	4.44	4.44	0.31	0.31	0.50	0.16	0.16	1.44	FALSE	677.38	675.86	675.67	1.54%	681.40	Inlet on Main Line
6	4.44	4.44	0.31	0.31	0.35	0.11	0.11	0.00	FALSE	677.12	675.67	673.32	1.54%	682.50	Bend 45°
7	4.44	4.44	0.31	0.31	0.35	0.11	0.11	0.00	FALSE	675.50	672.83	672.70	1.54%	679.35	Bend 45°
SD-C															
1	0.00	8.48	0.00	1.12	1.25	0.00	1.40	4.01	FALSE	674.48	667.67	667.64	0.50%	675.17	Inlet or Manhole at Beginning of Line
2	8.48	8.48	1.12	1.12	0.35	0.39	0.39	0.00	FALSE	672.96	667.64	667.53	0.50%	671.78	Bend 45°
3	8.48	8.48	1.12	1.12	0.35	0.39	0.39	0.00	FALSE	672.21	667.53	667.47	0.21%	674.10	Bend 45°
4	8.48	8.48	1.12	1.12	0.43	0.48	0.48	0.00	FALSE	671.33	667.74	667.34	0.21%	673.74	Bend 60°

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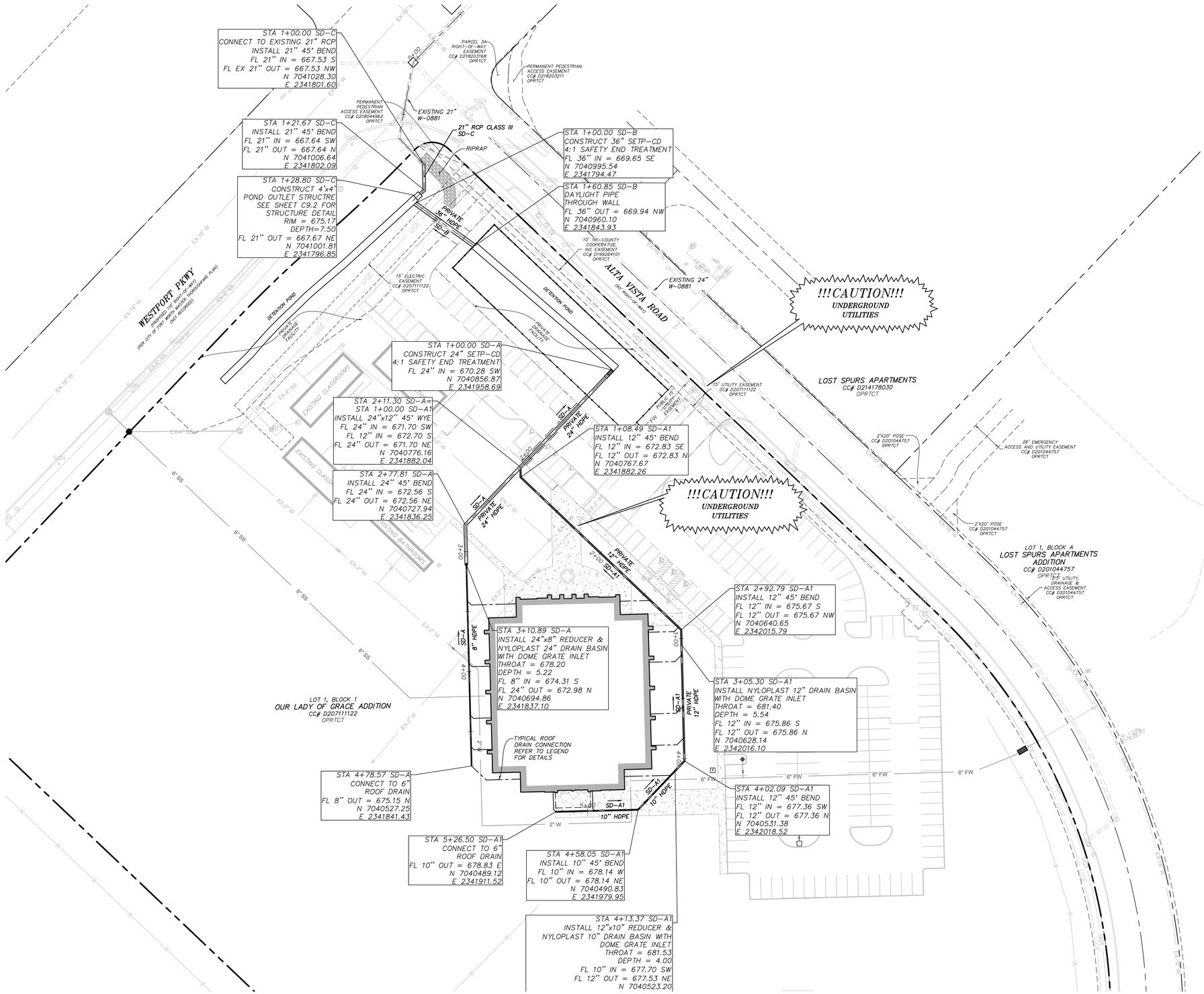

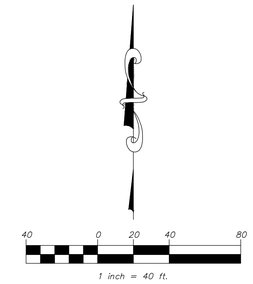

LEGEND:

- PROPOSED STORM DRAIN
- PROPOSED CURB INLET
- PROPOSED DROP INLET
- PROPOSED LANDSCAPE DRAIN
- 6" HDPE ROOF DRAIN CONNECTION AT 2% MINIMUM. IN CASES WHERE 2% CANNOT BE ACHIEVED, 8" @ 1% MUST BE INSTALLED

NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF FORT WORTH STANDARD DETAILS AND SPECIFICATIONS.
2. REFER TO SHEETS C11.3 FOR DETAILS.
3. ALL PIPE SHALL BE HDPE ADS-N12 OR APPROVED EQUAL.
4. ALL WYE, BENDS, REDUCERS AND PIPE TO BE PREFABRICATED.
5. REFER TO SHEET C1.0 FOR GENERAL NOTES.
6. REFER TO SHEET C9.1 FOR PROFILES.

GENERAL UTILITY NOTES:

ALL EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE OWNER AND THE ENGINEER NEITHER ASSUME NOR IMPLY ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY AFFECTED AND VERIFY THESE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

CALL TEXAS 811 OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. MMA INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE IN REFERENCE TO THE NAD83 TEXAS COORDINATE SYSTEM – NORTH CENTRAL ZONE, 4202, BASED ON GPS OBSERVATIONS UTILIZING THE LEICA GPS REFERENCE NETWORK. THE PROJECT SCALE FACTOR IS 1.000154642983 (0.999845380927), BASE POINT OF 0,0,0.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

STORM DRAIN PLAN

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
tbpels registration/license number: 10088000
519 east border
arlington, texas 76010
817-469-1671
fax: 817-274-8757
www.mmatexas.com

8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED PROFESSIONAL ENGINEER
FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

STORM DRAIN PLAN

SHEET NO:

C9.0

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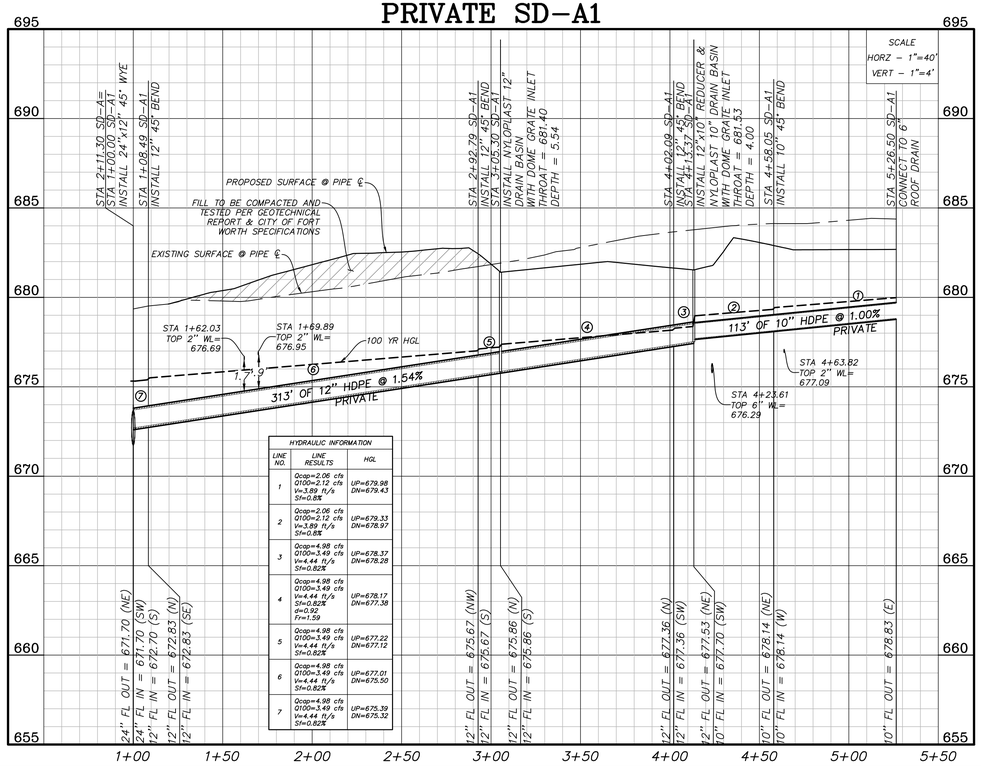

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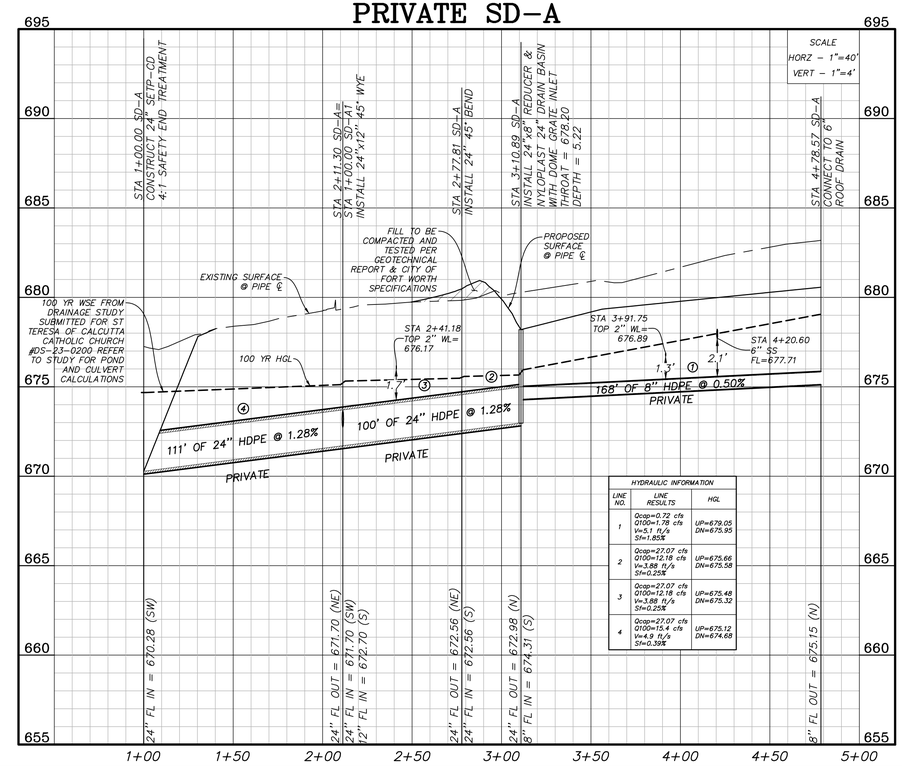

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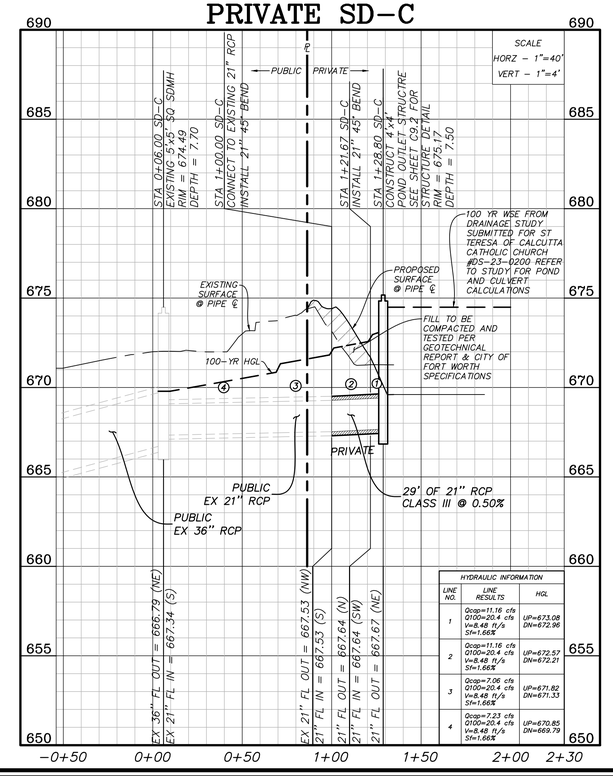

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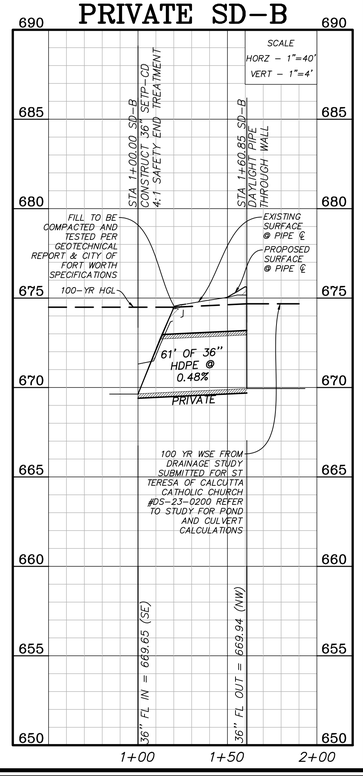

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

STORM DRAIN PROFILES

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REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

STORM DRAIN PROFILES

SHEET NO:

C9.1

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Upper Pond Results

Storm (year)	Peak inflow (cfs)	Peak Outflow (cfs)	WSEL	Storage (ac-ft)	Freeboard
1	11.08	3.98	672.17	0.242	3.53
5	16.90	7.71	672.97	0.359	2.73
100	32.36	18.2	674.68	0.644	1.02
Outfall Structure	36" HDPE culvert @ 699.94 @ 0.48%				
Top of Bank	675.70				

Stage-Storage Table

Stage	Elevation	Area (sq. ft.)	Area (acres)	Storage (ac-ft)
0.00	669.94	159.71	0.0037	0
0.16	670.10	1316.47	0.0302	0.003
0.26	670.20	2830.51	0.0650	0.007
0.36	670.30	4018.70	0.0923	0.015
0.46	670.40	4592.23	0.1054	0.025
0.56	670.50	4717.58	0.1083	0.036
0.66	670.60	4796.54	0.1101	0.047
0.76	670.70	4875.47	0.1119	0.058
0.86	670.80	4954.31	0.1137	0.069
0.96	670.90	5033.06	0.1155	0.081
1.06	671.00	5111.73	0.1173	0.092
1.16	671.10	5190.35	0.1192	0.104
1.26	671.20	5269.12	0.1210	0.116
1.36	671.30	5348.19	0.1228	0.128
1.46	671.40	5427.77	0.1246	0.141
1.56	671.50	5507.93	0.1264	0.153
1.66	671.60	5588.72	0.1283	0.166
1.76	671.70	5669.93	0.1302	0.179
1.86	671.80	5751.48	0.1320	0.192
1.96	671.90	5833.34	0.1339	0.205
2.06	672.00	5915.51	0.1358	0.219
2.16	672.10	5997.98	0.1377	0.232
2.26	672.20	6080.76	0.1396	0.246
2.36	672.30	6163.84	0.1415	0.260
2.46	672.40	6247.18	0.1434	0.275
2.56	672.50	6330.78	0.1453	0.289
2.66	672.60	6414.62	0.1473	0.304
2.76	672.70	6498.69	0.1492	0.319
2.86	672.80	6581.50	0.1511	0.334
2.96	672.90	6649.63	0.1527	0.349
3.06	673.00	6713.73	0.1541	0.364
3.16	673.10	6778.05	0.1556	0.380
3.26	673.20	6842.63	0.1571	0.395
3.36	673.30	6907.49	0.1586	0.411
3.46	673.40	6972.51	0.1601	0.427
3.56	673.50	7037.65	0.1616	0.443
3.66	673.60	7102.93	0.1631	0.459
3.76	673.70	7168.40	0.1646	0.476
3.86	673.80	7234.07	0.1661	0.492
3.96	673.90	7299.94	0.1676	0.509
4.06	674.00	7366.03	0.1691	0.526
4.16	674.10	7432.32	0.1706	0.543
4.26	674.20	7498.83	0.1721	0.560
4.36	674.30	7565.55	0.1737	0.577
4.46	674.40	7632.47	0.1752	0.595
4.56	674.50	7699.65	0.1768	0.612
4.66	674.60	7767.11	0.1783	0.630
4.76	674.70	7834.82	0.1799	0.648
4.86	674.80	7902.69	0.1814	0.666
4.96	674.90	7970.72	0.1830	0.684
5.06	675.00	8038.93	0.1845	0.702
5.16	675.10	8107.42	0.1861	0.721
5.26	675.20	8176.24	0.1877	0.740
5.36	675.30	8245.41	0.1893	0.759
5.46	675.40	8314.91	0.1909	0.778
5.56	675.50	8384.78	0.1925	0.797

Lower Pond Results

Storm (year)	Peak inflow (cfs)	Peak Outflow (cfs)	WSEL	Storage (ac-ft)	Freeboard
1	8.40	6.05	672.16	0.141	3.34
5	13.08	9.64	672.93	0.238	2.57
100	30.81	20.40	674.49	0.529	1.01
Outfall Structure	Structure A	8" circular orifice		FL=	669.60
	Structure B	24" x 8" orifice opening		FL=	671.50
	Structure C	12' rectangular weir (4'x4' inlet)		FL=	673.15
	Outfall Pipe	21" RCP outlet pipe at 0.50%		FL=	667.67
	Overflow	62' broad crested weir		FL=	674.50
Top of Bank	675.50				

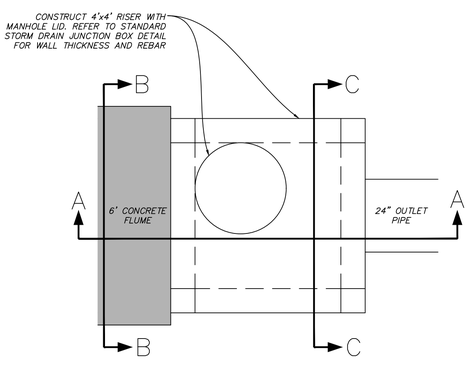
Stage-Storage-Discharge Table

Stage	Elevation	Area (sq. ft.)	Area (acres)	Storage (ac-ft)	Total Discharge (cfs)	8" Orifice Discharge (cfs)	24" x 8" Orifice Discharge (cfs)	12' Weir Discharge (cfs)	Downstream 21" RCP Discharge (cfs)	62' Overflow Weir Discharge (cfs)
0.00	669.60	266.23	0.0061	0.000	0.00	0.00	0.00	0.00	0.00	0.00
0.20	669.80	618.76	0.0142	0.002	0.11	0.11	0.00	0.00	0.19	0.00
0.30	669.90	899.38	0.0206	0.004	0.23	0.23	0.00	0.00	2.10	0.00
0.40	670.00	1031.84	0.0237	0.006	0.39	0.39	0.00	0.00	4.20	0.00
0.50	670.10	1167.12	0.0268	0.009	0.58	0.58	0.00	0.00	4.89	0.00
0.60	670.20	1305.23	0.0300	0.011	0.80	0.80	0.00	0.00	5.60	0.00
0.70	670.30	1446.17	0.0332	0.015	1.02	1.02	0.00	0.00	6.42	0.00
0.80	670.40	1589.93	0.0365	0.018	1.15	1.15	0.00	0.00	7.18	0.00
0.90	670.50	1736.87	0.0399	0.022	1.26	1.26	0.00	0.00	7.95	0.00
1.00	670.60	1887.21	0.0433	0.026	1.37	1.37	0.00	0.00	8.44	0.00
1.10	670.70	2040.94	0.0469	0.030	1.47	1.47	0.00	0.00	8.93	0.00
1.20	670.80	2197.67	0.0505	0.035	1.56	1.56	0.00	0.00	9.42	0.00
1.30	670.90	2357.38	0.0541	0.041	1.65	1.65	0.00	0.00	9.93	0.00
1.40	671.00	2519.88	0.0578	0.046	1.73	1.73	0.00	0.00	10.46	0.00
1.50	671.10	2685.5	0.0617	0.052	1.81	1.81	0.00	0.00	10.78	0.00
1.60	671.20	2854.51	0.0655	0.059	1.89	1.89	0.00	0.00	11.18	0.00
1.70	671.30	3026.92	0.0695	0.065	1.96	1.96	0.00	0.00	11.54	0.00
1.80	671.40	3202.77	0.0735	0.072	2.03	2.03	0.00	0.00	11.92	0.00
1.90	671.50	3382.08	0.0776	0.080	2.10	2.10	0.00	0.00	12.30	0.00
2.00	671.60	3564.76	0.0818	0.088	2.29	2.17	0.12	0.00	12.63	0.00
2.10	671.70	3750.62	0.0861	0.096	2.66	2.23	0.42	0.00	12.95	0.00
2.20	671.80	3940.08	0.0905	0.105	3.17	2.29	0.88	0.00	13.28	0.00
2.30	671.90	4137.03	0.0950	0.114	3.83	2.36	1.48	0.00	13.60	0.00
2.40	672.00	4353	0.0999	0.124	4.62	2.41	2.21	0.00	13.99	0.00
2.50	672.10	4551.91	0.1045	0.134	5.54	2.47	3.06	0.00	14.25	0.00
2.60	672.20	4753.11	0.1091	0.145	6.41	2.53	3.89	0.00	14.57	0.00
2.70	672.30	4958.66	0.1138	0.156	6.97	2.58	4.38	0.00	14.89	0.00
2.80	672.40	5168	0.1186	0.168	7.47	2.64	4.83	0.00	15.21	0.00
2.90	672.50	5381.37	0.1235	0.180	7.93	2.69	5.24	0.00	15.50	0.00
3.00	672.60	5599.51	0.1285	0.193	8.36	2.74	5.62	0.00	15.79	0.00
3.10	672.70	5822.77	0.1337	0.206	8.77	2.79	5.97	0.00	16.05	0.00
3.20	672.80	6051.42	0.1389	0.219	9.15	2.84	6.31	0.00	16.30	0.00
3.30	672.90	6285.03	0.1443	0.233	9.52	2.89	6.63	0.00	16.56	0.00
3.40	673.00	6523.06	0.1497	0.248	9.87	2.94	6.93	0.00	16.85	0.00
3.50	673.10	6757.46	0.1551	0.263	10.21	2.99	7.22	0.00	17.08	0.00
3.60	673.20	6980.51	0.1603	0.279	10.98	3.04	7.50	0.45	17.34	0.00
3.70	673.30	7204.98	0.1654	0.295	13.17	3.08	7.77	2.32	17.61	0.00
3.80	673.40	7431.53	0.1706	0.312	16.15	3.13	8.03	5.00	17.87	0.00
3.90	673.50	7660.03	0.1758	0.330	18.10	3.17	8.28	8.27	18.10	0.00
4.00	673.60	7890.31	0.1811	0.347	18.36	3.22	8.53	12.06	18.36	0.00
4.10	673.70	8123.62	0.1865	0.366	18.60	3.26	8.77	16.30	18.60	0.00
4.20	673.80	8359.76	0.1919	0.385	18.84	3.30	9.00	20.94	18.84	0.00
4.30	673.90	8598.57	0.1974	0.404	19.08	3.35	9.22	25.95	19.08	0.00
4.40	674.00	8840.01	0.2029	0.424	19.30	3.39	9.44	31.32	19.30	0.00
4.50	674.10	9083.72	0.2085	0.445	19.54	3.43	9.66	37.00	19.54	0.00
4.60	674.20	9329.33	0.2142	0.466	19.77	3.47	9.87	42.99	19.77	0.00
4.70	674.30	9576.9	0.2199	0.488	19.99	3.51	10.08	49.28	19.99	0.00
4.80	674.40	9830.12	0.2257	0.510	20.21	3.55	10.28	55.85	20.21	0.00
4.90	674.50	10082.21	0.2315	0.533	20.43	3.59	10.48	62.68	20.43	0.00
5.00	674.60	10328.17	0.2371	0.556	25.76	3.63	10.67	69.77	20.66	5.10
5.10	674.70	10585.52	0.2430	0.580	35.30	3.67	10.86	77.11	20.88	14.42
5.20	674.80	10843.36	0.2489	0.605	47.59	3.71	11.05	84.69	21.10	26.49
5.30	674.90	11099.42	0.2548	0.630	62.11	3.74	11.24	92.51	21.33	40.78
5.40	675.00	11364.14	0.2609	0.656	78.52	3.78	11.42	100.55	21.53	56.99
5.50	675.10	11637.62	0.2672	0.682	96.66	3.82	11.60	108.81	21.74	74.92
5.60	675.20	11914.14	0.2735	0.709	116.34	3.85	11.77	117.29	21.93	94.41
5.70	675.30	12189.36	0.2798	0.737	137.46	3.89	11.95	125.97	22.12	115.35
5.80	675.40	12463.43	0.2861	0.765	159.94	3.93	12.12	134.87	22.31	137.63
5.90	675.50	12737.88	0.2924	0.795	183.70	3.96	12.29	143.96	22.50	161.20

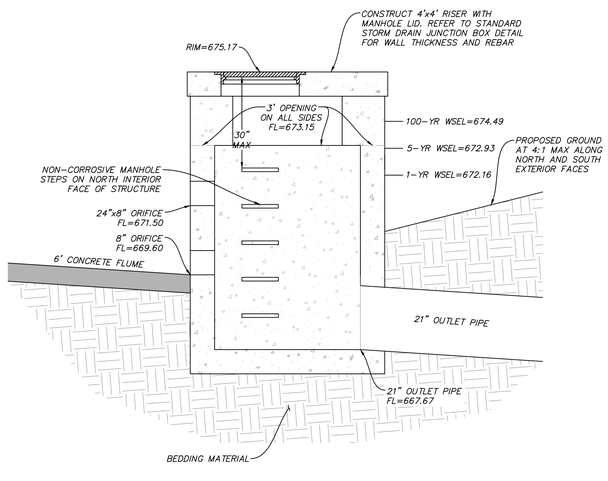
The downstream pipe restricts the outflow from the pond. The total discharge is the lower discharge from either the outfall pipe by itself or the sum of the individual structures. At elevation 673.50 the downstream pipe controls the outflow from the pond

Shaded values are linearly interpolated from nonshaded values

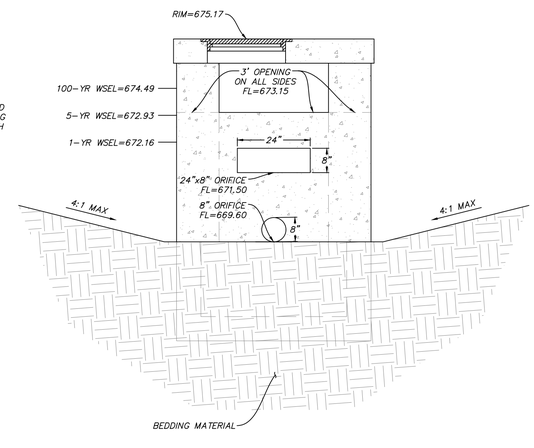
POND RESULTS SHOWN FOR REFERENCE. REFER TO THE STUDY SUBMITTED FOR ST. TERESA OF CALCUTTA CATHOLIC CHURCH FOR ANALYSIS POINT COMPARISON AND POND SIZING



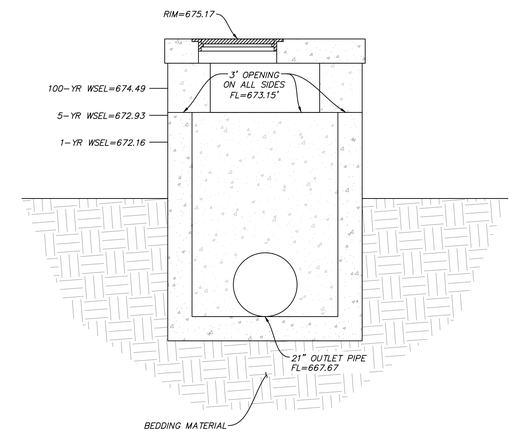
OUTLET STRUCTURE TOP VIEW
NTS



SECTION A-A
NTS



SECTION B-B
NTS



SECTION C-C
NTS

1 POND OUTFALL STRUCTURE DETAIL
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

POND DETAILS

mma
civil engineering surveying landscape architecture planning
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8/20/2024
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PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

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SHEET CONTENT:
POND DETAILS

SHEET NO:
C9.2

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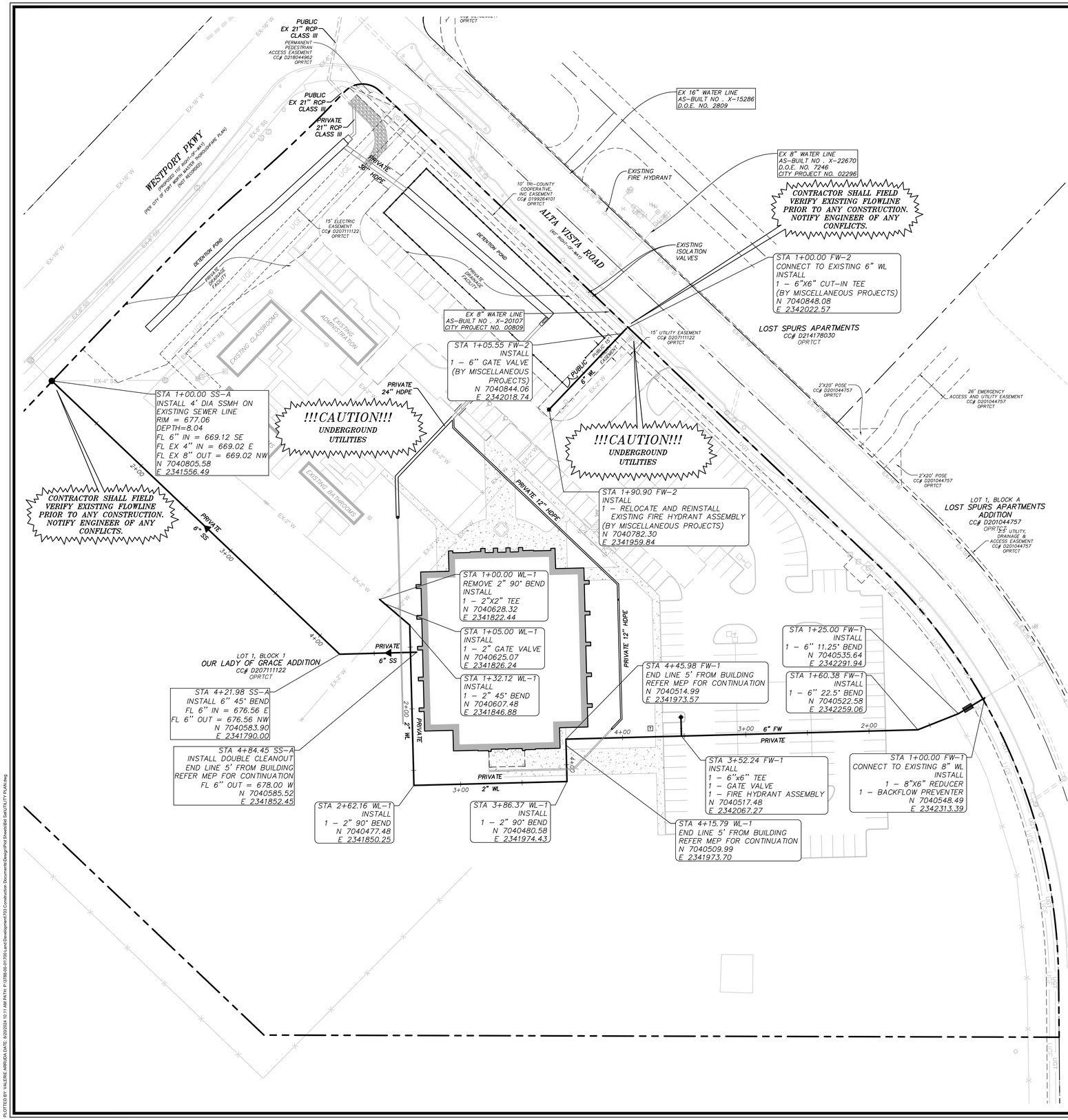

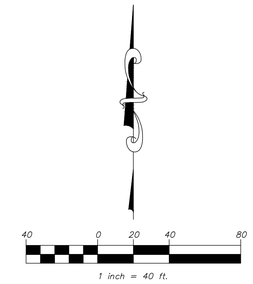

LEGEND:

EXISTING SANITARY SEWER	EX-SS
EXISTING SEWER MANHOLE	
EXISTING WATER LINE	EX-W
EXISTING WATER VALVE	
EXISTING FIRE HYDRANT	
EXISTING UNDERGROUND ELECTRIC	UGE
EXISTING UNDERGROUND TELEPHONE	UGT
EXISTING POWER POLE	
EXISTING LIGHT POLE	
EXISTING STORM LINE	
EXISTING STORM INLET	
PROPOSED FIRE WATER LINE	FW
PROPOSED WATER LINE	W
PROPOSED SEWER LINE	SS
PROPOSED SEWER MANHOLE	SS

NOTES:

1. MINIMUM COVER ON WATER PIPE SHALL BE 48" OVER THE WATER PIPE AS MEASURED FROM THE TOP OF THE PIPE TO THE EXISTING GROUND OR PROPOSED FINISHED GRADE, WHICHEVER IS GREATER.
2. FIRE HYDRANT ASSEMBLY SHALL INCLUDE HYDRANT, FITTINGS, AND 6" LEAD PIPE.
3. ALL FIRE LINES, SHALL BE SIZED AND INSTALLED BY A STATE OF TEXAS LICENSED FIRE SPRINKLER CONTRACTOR.
4. GENERAL CONTRACTOR SHALL PURCHASE AND INSTALL WATER METERS. METERS TO BE PURCHASED FROM CITY OF FORT WORTH WATER DEPARTMENT.
5. MAINTAIN A MINIMUM SEPARATION OF 9 FEET BETWEEN WATER AND SEWER LINES.
6. SEE SHEET C11.4–C11.5 FOR WATER AND SANITARY SEWER DETAILS.
7. ALL PROPOSED CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ARLINGTON STANDARDS AND SPECIFICATIONS. A COPY OF THE CITY STANDARDS AND SPECIFICATIONS FOR USE ON THIS PROJECT MAY BE OBTAINED FROM THE CITY OF FORT WORTH.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND DOCUMENTS APPROVED BY THE PERMITTING AGENCIES.
9. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON CITY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
10. TRENCH EXCAVATION FOR TRENCHES 5 FEET OR MORE IN DEPTH SHALL BE IN ACCORDANCE WITH ALL PROVISIONS OF PART 1926, SUBPART B – "EXCAVATIONS, TRENCHING AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH'S STANDARDS AND INTERPRETATIONS". IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM TO THE ABOVE PROVISIONS AND PROVIDE NECESSARY TRENCH SAFETY PLANS TO THE CITY PRIOR TO RELEASE OF PLANS FOR CONSTRUCTION.
11. A TRENCH SAFETY PLAN AND A TRAFFIC SAFETY PLAN BOTH SEALED BY AN ENGINEER LICENSED IN THE STATE OF TEXAS WILL BE PROVIDED BY THE CONTRACTOR.
12. STATE LAW REQUIRES THE PRIVATE FIRE SERVICE UTILITIES AND UNDERGROUND SPRINKLER SYSTEM PIPING BE INSTALLED BY A CONTRACTOR LICENSED BY THE TEXAS COMMISSION OF FIRE PROTECTION TO INSTALL PRIVATE FIRE SERVICE UTILITIES. FLUSHING OF THE PIPING AND A HYDROSTATIC TEST IS TO BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO COVERING THE PIPING OR MAKING CONNECTION TO ANY ABOVEGROUND PIPING. A PERMIT ISSUED BY THE FIRE DEPARTMENT IS REQUIRED PRIOR TO STARTING WORK ON THE UTILITIES.
13. THE FIRE DEPARTMENT CONNECTION FOR THE SPRINKLER SYSTEM IS A 4" STORZ CONNECTION.
14. INSTALL CLEANOUTS REQUIRED BY PLUMBING CODE.

GENERAL UTILITY NOTES:

ALL EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE OWNER AND THE ENGINEER NEITHER ASSUME NOR IMPLY ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY AFFECTED AND VERIFY THESE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

CALL TEXAS 811 OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. MMA INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

SOURCE BENCHMARK:

CITY OF FORT WORTH MONUMENT #8963 – BRASS DISC STAMPED "8963" ON THE SOUTH CURB OF WESTPORT PARKWAY 660 FEET WEST OF THE WEST ENTRANCE RAMP TO I-35-W AND 160 FEET EAST OF THE CENTERLINE OF THE HERITAGE PARKWAY IN THE CENTER OF A 10 FOOT RECESSED INLET 1 FOOT OFF THE FACE OF CURB A CITY MON #8963 SET IN THE TOP OF THE INLET.
ELEV: 654.31'
NAD83 TXNC (GRID)
N: 7038654.13'
E: 2332805.78'

SITE BENCHMARK:

TBM #1 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 150' SOUTHEAST OF THE SOUTHEAST INTERSECTION OF WESTPORT PARKWAY AND SOUTHEAST BOUND LANE OF ALTA VISTA DRIVE. BENCHMARK IS APPROXIMATELY 40' SOUTHEAST OF THE NORTH ENTRANCE TO THE SUBJECT PROPERTY. ON TOP OF A CURB INLET IN THE SOUTH RIGHT OF WAY OF ALTA VISTA DRIVE.
ELEV: 674.75'
NAD83 TXNC (GRID)
N: 7039891.09'
E: 2341537.55'

TBM #2 – "X" CUT IN SQUARE LOCATED APPROXIMATELY 555' SOUTHWEST OF THE SOUTHEAST INTERSECTION OF ALTA VISTA DRIVE AND NORTHEAST BOUND LANE OF WESTPORT PARKWAY. BENCHMARK IS ON A CURB INLET IN THE EAST RIGHT OF WAY OF WESTPORT PARKWAY.
ELEV: 675.54'
NAD83 TXNC (GRID)
N: 7039572.76'
E: 2341024.54'

BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE IN REFERENCE TO THE NAD83 TEXAS COORDINATE SYSTEM – NORTH CENTRAL ZONE, 4202, BASED ON GPS OBSERVATIONS UTILIZING THE LEICA GPS REFERENCE NETWORK. THE PROJECT SCALE FACTOR IS 1.00015464298 3 (0.999845380927), BASE POINT OF 0,0,0.

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

UTILITY PLAN

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8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED
PROFESSIONAL ENGINEER
FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

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SHEET CONTENT:
UTILITY PLAN

SHEET NO:
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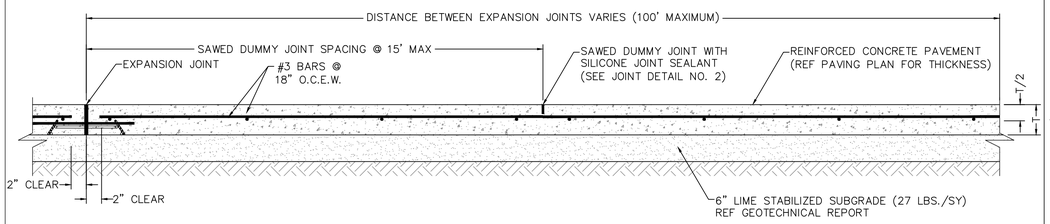
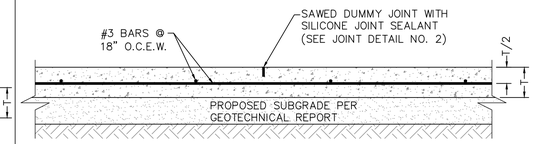
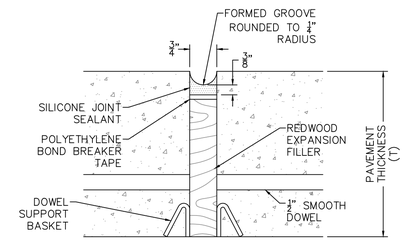


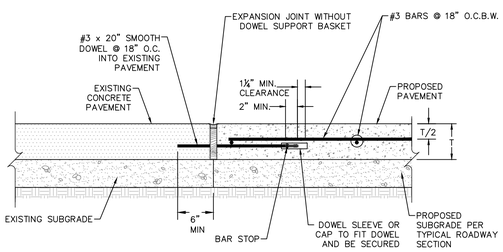
9 TYPICAL PAVING SECTION
NOT TO SCALE



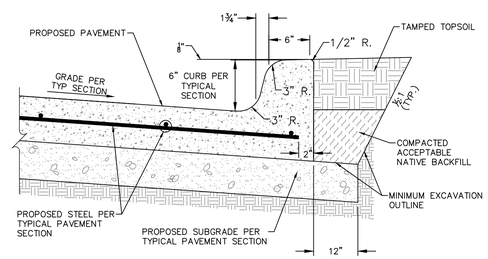
6 SAWED DUMMY JOINT
NOT TO SCALE



3 JOINT DETAIL NO. 1
NOT TO SCALE



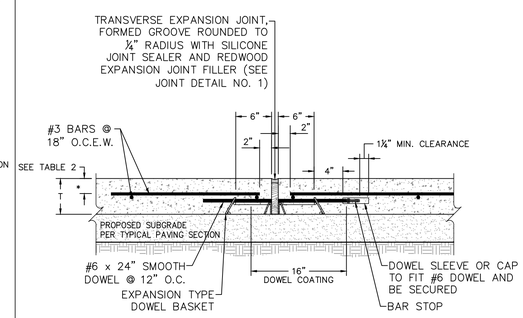
11 EXPANSION CONSTRUCTION JOINT (BETWEEN EXISTING AND PROPOSED PAVEMENT)
NOT TO SCALE



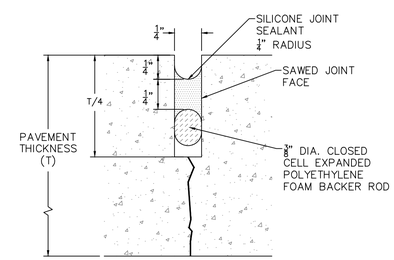
NOTES:

1. MATCH STREET SAWED JOINTS FOR SAWED JOINTS IN CURB.

8 STANDARD MONOLITHIC CURB
NOT TO SCALE



5 EXPANSION JOINT
NOT TO SCALE



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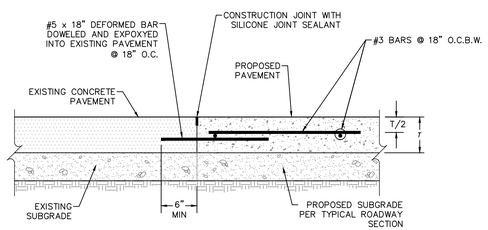
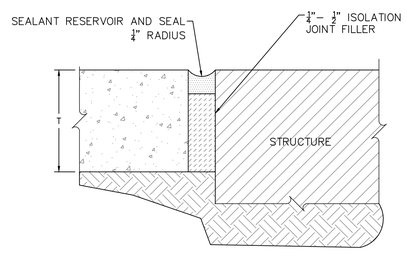
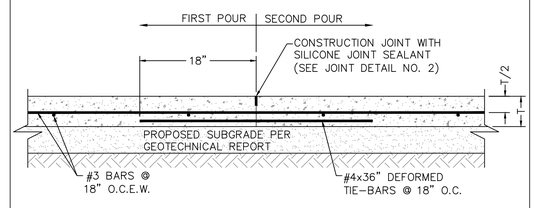


10 CONSTRUCTION JOINT (BETWEEN EXISTING AND PROPOSED PAVEMENT)
NOT TO SCALE



7 ISOLATION JOINT
NOT TO SCALE



4 CONSTRUCTION JOINT
NOT TO SCALE

CONSTRUCTION NOTES

1. FOR DEFORMED BAR SPLICES, LAP BARS 40 DIAMETERS AND TIE.
2. FOR PAVEMENT THICKNESS "T" REFER TO PAVING PLAN.

TABLE 1 (SAWED DUMMY JOINT DEPTH)

DIM T = PAVEMENT THICKNESS	DIM T/4 = JOINT DEPTH
5"	1¼"
6"	1½"
7"	1¾"
8"	2"
9"	2¼"

TABLE 2 (PAVEMENT REINFORCING STEEL PLACEMENT)

DIM T = PAVEMENT THICKNESS	* (CLEARANCE FROM FACE OF CONCRETE)
5"	2"
6"	2"
7"	2½"
8"	2¾"
9"	3"

NOTE: ALL DOWELS TO BE PLACED AT T/2.

1 PAVING NOTES & TABLES
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

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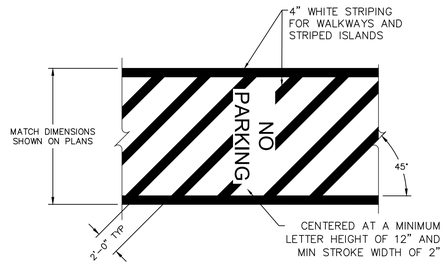
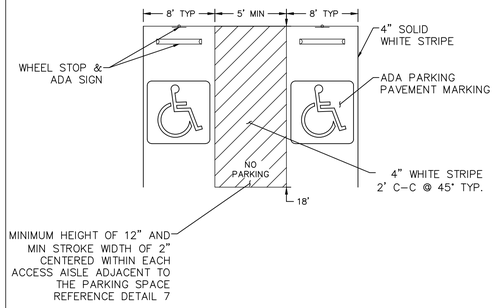


8 LOADING ZONE STRIPING DETAIL
NOT TO SCALE

NOTE:

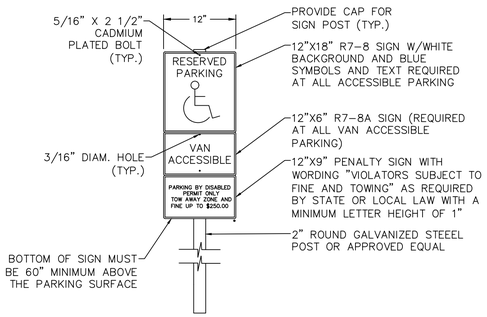
1. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE PAINTED CONSPICUOUSLY ON THE SURFACE IN A COLOR THAT CONTRASTS THE PAVEMENT.
2. THE WORDS "NO PARKING" PAINTED AND CENTERED WITHIN ANY ACCESS AISLE ADJACENT TO THE PARKING SPACE.



5 TYPICAL ACCESSIBLE PARKING DETAIL
NOT TO SCALE

NOTE:

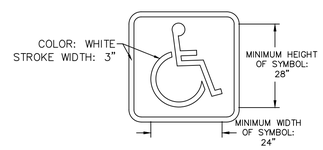
1. SIGN AND INSTALLATION TO BE IN ACCORDANCE W/ALL ADA, STATE AND CITY CODES. CONTRACTOR SHALL VERITY COMPLIANCE WITH ALL CODES BEFORE FABRICATION.
2. THE HEIGHT OF THE PARKING SIGN REQUIRED BY TAS SECTION 502.6 IS 60" MINIMUM ABOVE THE PARKING SURFACE.



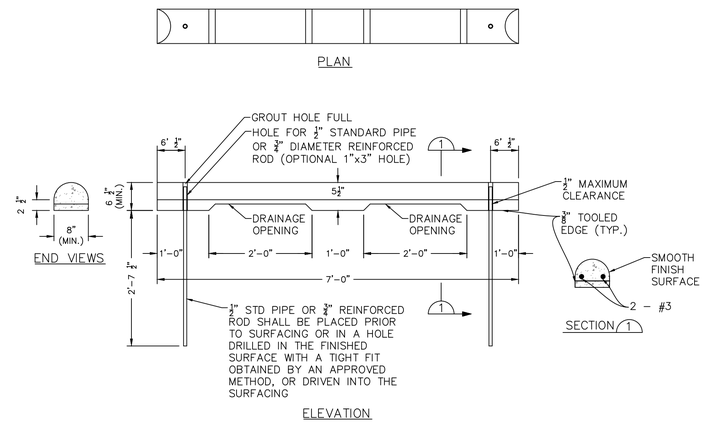
7 TYPICAL ACCESSIBLE PARKING SIGNAL DETAIL
NOT TO SCALE

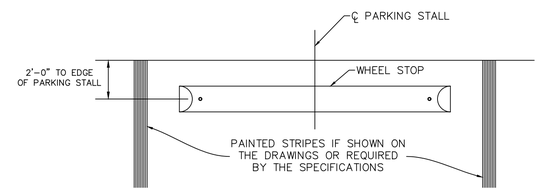
NOTE:

1. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE PAINTED CONSPICUOUSLY ON THE SURFACE IN A COLOR THAT CONTRASTS THE PAVEMENT.



4 ADA PARKING PAVEMENT MARKING DETAIL
NOT TO SCALE

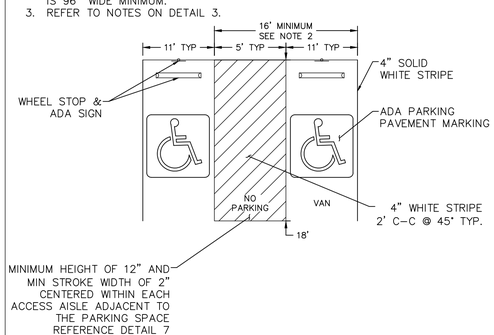




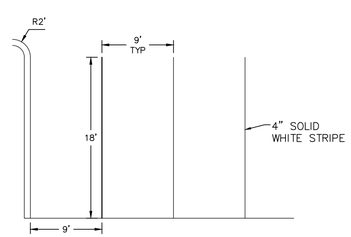
2 PRECAST CONCRETE WHEEL STOP DETAILS
NOT TO SCALE

NOTE:

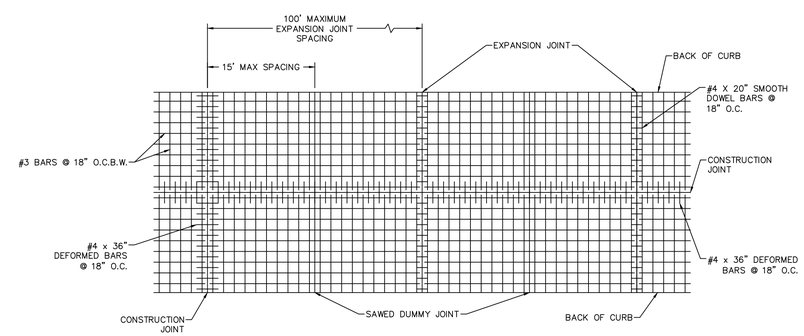
1. TYPICALLY VAN SPACES SHALL BE 132" MINIMUM.
2. EXCEPTION: VAN SPACES SHALL BE PERMITTED TO BE 96" WIDE MINIMUM WHERE THE ACCESS AISLE IS 96" WIDE MINIMUM.
3. REFER TO NOTES ON DETAIL 3.



6 TYPICAL VAN ACCESSIBLE PARKING DETAIL
NOT TO SCALE



3 TYPICAL PARKING DETAIL
NOT TO SCALE



1 PAVEMENT STEEL REINFORCING GENERAL LAYOUT
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

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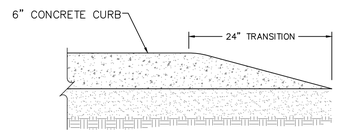
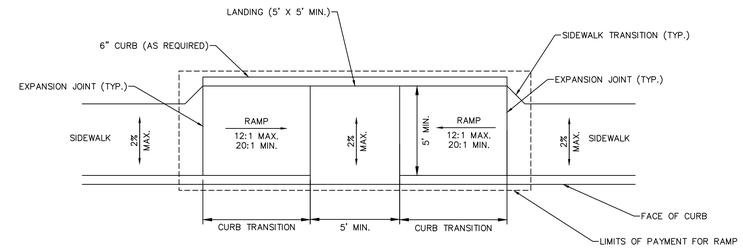
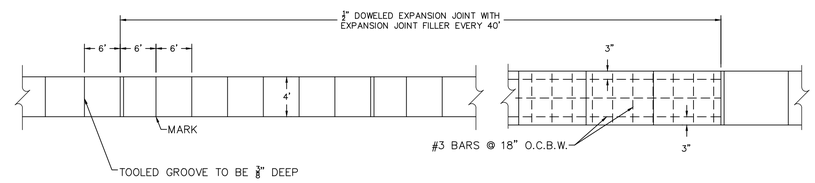


3 CURB TAPER
NOT TO SCALE

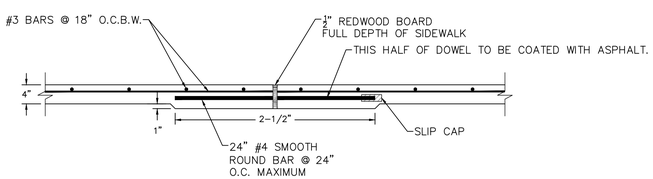


2 MID-BLOCK RAMP
(SIDEWALK ADJACENT TO CURB)
NOT TO SCALE

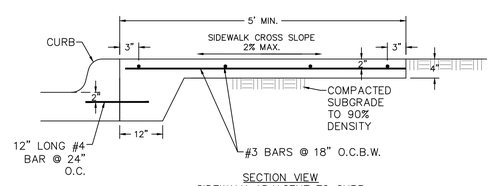


NOTES:
1. 'W'=SIDEWALK WIDTH 4' MIN. 5' IF SIDEWALK IS ADJACENT TO CURB, OR GREATER AS INDICATED ON THE PLANS.

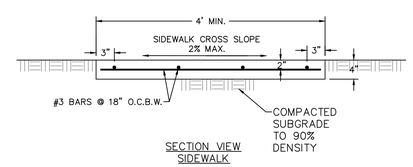
PLAN
REINFORCED CONCRETE SIDEWALK



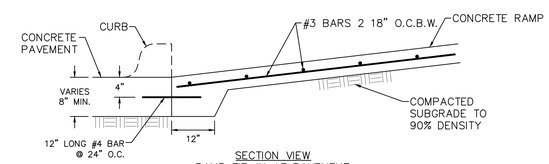
EXPANSION JOINT DETAIL



SECTION VIEW
SIDEWALK ADJACENT TO CURB



SECTION VIEW
SIDEWALK



SECTION VIEW
RAMP TIE-IN AT PAVEMENT

1 SIDEWALK DETAILS
NOT TO SCALE

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8/20/2024
STATE OF TEXAS
VALERIE ARRUDA
151600
LICENSED
PROFESSIONAL ENGINEER

FOR BID ONLY

PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	G. SANCHEZ
CHECKED BY:	V. ARRUDA
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

PAVING DETAILS

SHEET NO:
C11.2

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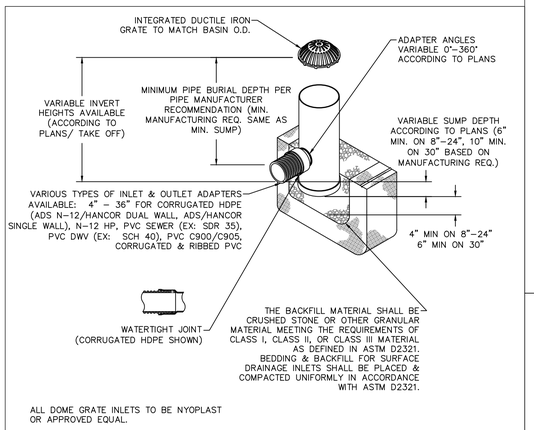
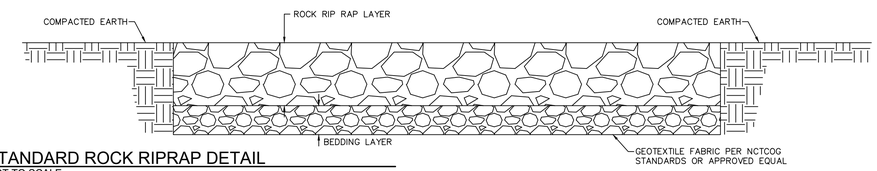


ALL DOME GRATE INLETS TO BE NYOPLAST OR APPROVED EQUAL.

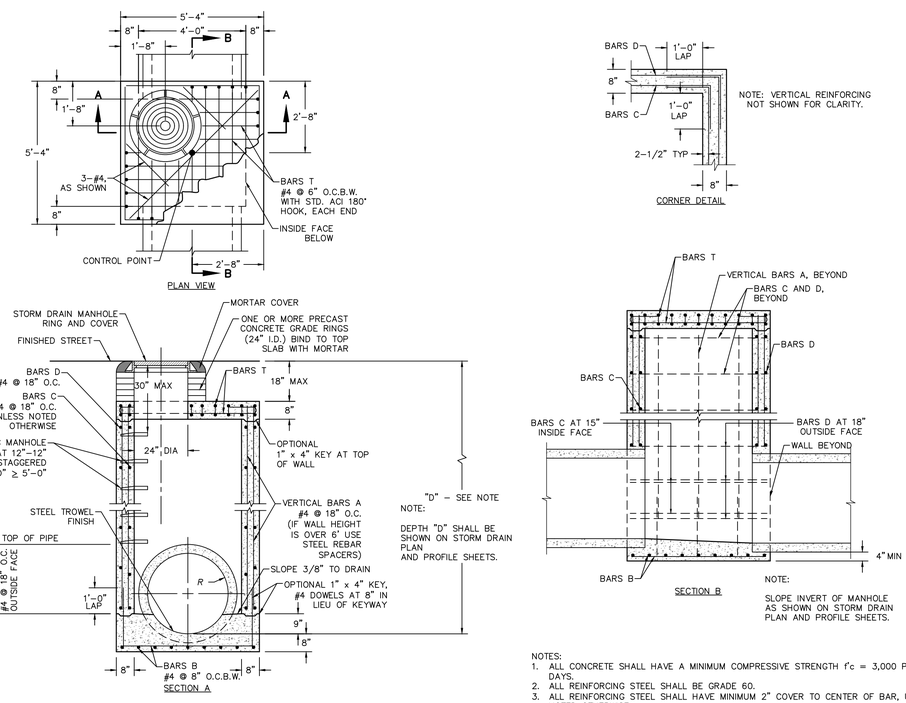
4 DRAIN BASIN WITH DOME GRATE
NOT TO SCALE

RIPRAP GRADATIONS	
12" THICKNESS OF RIPRAP	
SIEVE SIZE SQUARE MESH	PERCENT PASSING
15 INCH	100
12 INCH	70–100
8 INCH	45–75
6 INCH	30–55
3 INCH	10–30
1–½ INCH	0–10

BEDDING GRADATIONS	
6" THICKNESS OF BEDDING	
SIEVE SIZE SQUARE MESH	PERCENT PASSING
3 INCH	100
1–½ INCH	55–100
¾ INCH	25–60
⅜ INCH	5–30
NO.4	0–10



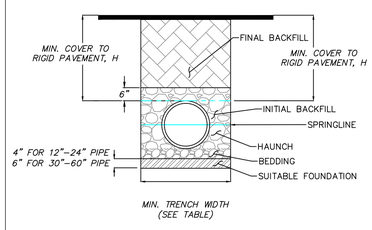
2 STANDARD ROCK RIPRAP DETAIL
NOT TO SCALE



NOTES:
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f'c = 3,000 PSI AT 28 DAYS.
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. ALL REINFORCING STEEL SHALL HAVE MINIMUM 2" COVER TO CENTER OF BAR, UNLESS NOTED OTHERWISE.
4. ALL DIMENSIONS RELATING TO REINFORCING ARE TO CENTER OF BARS.
5. LOCATION OF STRUCTURE AS SHOWN IN PLANS REFERS TO CONTROL POINT SHOWN ON THIS DETAIL.
6. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMMODATE STORM DRAIN PIPE PER TYPICAL MANHOLE / PIPE PENETRATION DETAIL.
7. MAXIMUM PIPE INSIDE DIAMETER FOR WALL PENETRATIONS.

JUNCTION BOX SIZE	DIAMETER
4' SQUARE	36"
5' SQUARE	48"
6' SQUARE	60"

1 STANDARD 4' SQUARE JUNCTION BOX
NOT TO SCALE



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80'
60"	96"

MAXIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PROP	CLASS I		CLASS II	
	COMPACTED	DUMPED	95%	90%
4"	34	16	23	16
6"	40	19	27	19
8"	30	14	21	14
10"	34	16	23	16
12"	35	17	24	17
15"	37	18	25	18
18"	32	15	22	15
24"	27	13	19	13
30"	22	11	16	11
36"	26	12	18	12
42"	24	11	17	11
48"	23	11	16	11
60"	26	12	18	12

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (YS) = 120 PCF

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H–25	HEAVY CONSTRUCTION (75T AXLE LOAD)*
12" – 48"	12"	48"
60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
** SEE BACKFILL REQUIREMENTS IN NOTE 6

NOTES:
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"–24"; 6" FOR 30"–60".
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOTE LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER:MINIMUM COVER, H, IN NON–TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

3 STORM HDPE DRAINAGE STANDARD EMBEDMENT
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

STORM DRAIN DETAILS

mma
civil engineering surveying landscape architecture planning
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STORM DRAIN DETAILS

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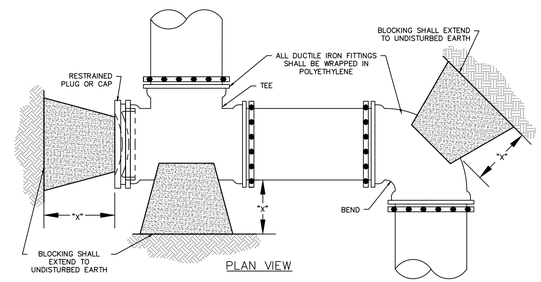


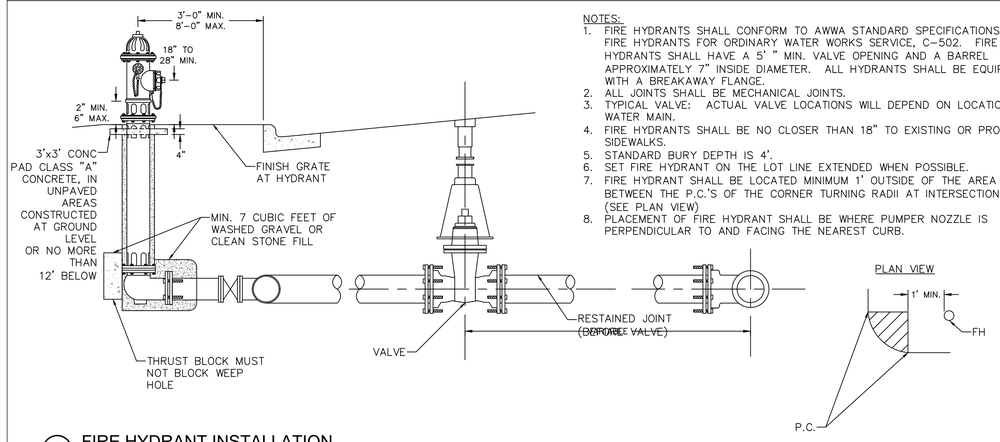
NOTES:
1. THRUST BLOCKING AREAS SHOWN ARE BASED ON:
   1.1. 225 PSI TEST PRESSURE
   1.2. 3,000 PSF HORIZONTAL OR LATERAL BEARING PRESSURE FOR ACCEPTABLE SOILS
   1.3. MINIMUM COVER OF 42"
   1.4. A SAFETY FACTOR OF 1.5.
2. THE ENGINEER SHALL PROVIDE A SEPARATE BLOCKING TABLE WHEN THE CONDITIONS DO NOT MEET THE ABOVE ASSUMPTIONS.
3. THE CONTRACTOR IS REQUIRED TO PROVIDE THRUST RESTRAINT BY MEANS OF THRUST BLOCKING FOR ALL PIPES. THIS ITEM SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS ITEMS BID.
4. ALL MJ FITTINGS SHALL BE ADDITIONALLY RESTRAINED WITH RETAINER GLANDS.
5. BLOCKING FOR WATER LINES LARGER THAN 24" SHALL BE DESIGNED FOR THE SPECIFIC LOCATION AND SHOWN ON THE DRAWINGS.
6. ALL DUCTILE IRON FITTINGS SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT PRIOR TO PLACING OF BLOCKING.

HORIZONTAL THRUST BLOCKING TABLE

PIPE SIZE	"X" DIM.**	PLUGS, TEES, DEAD-ENDS	90° BENDS	45° BENDS	22.5° BENDS	11.25° BENDS
		MIN. AREA (SF)	MIN. AREA (SF)	MIN. AREA (SF)	MIN. AREA (SF)	MIN. AREA (SF)
6"	1'-6"	4.00*	4.50	4.00*	4.00*	4.00*
8"	1'-6"	5.65	8.00	4.33	4.00*	4.00*
10"	1'-6"	8.84	12.50	6.76	4.00*	4.00*
12"	1'-6"	12.72	17.99	9.74	4.96	4.00*
16"	2'-0"	22.62	31.99	17.31	8.83	4.43
20"	2'-0"	35.34	49.98	27.05	13.79	6.93
24"	2'-0"	50.89	71.97	38.95	19.86	9.98

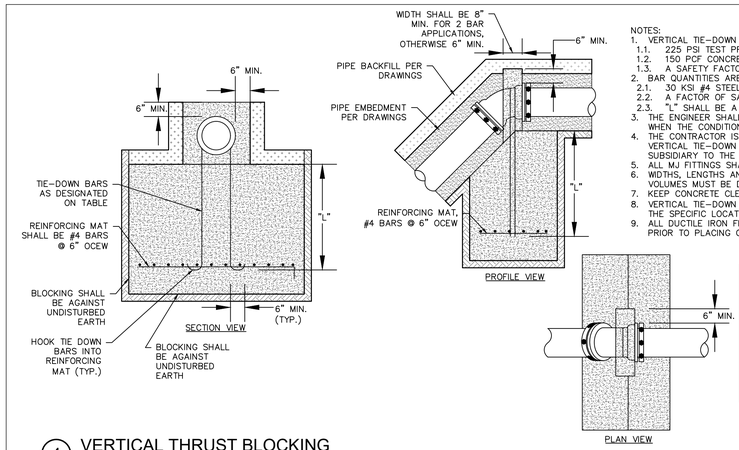
*MINIMUM THRUST BLOCKING SURFACE AREA SHALL BE 4 SQUARE FEET.
**DIMENSION "X" TO BE A MINIMUM OF ONE FOOT AND SIX INCHES, BUT IS TO BE INCREASED WHERE NECESSARY TO PROVIDE BEARING AGAINST UNDISTURBED TRENCH WALL.

3 HORIZONTAL THRUST BLOCKING
NOT TO SCALE



NOTES:
1. FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502. FIRE HYDRANTS SHALL HAVE A 5' " MIN. VALVE OPENING AND A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS SHALL BE MECHANICAL JOINTS.
3. TYPICAL VALVE: ACTUAL VALVE LOCATIONS WILL DEPEND ON LOCATION OF WATER MAIN.
4. FIRE HYDRANTS SHALL BE NO CLOSER THAN 18" TO EXISTING OR PROPOSED SIDEWALKS.
5. STANDARD BURY DEPTH IS 4'.
6. SET FIRE HYDRANT ON THE LOT LINE EXTENDED WHEN POSSIBLE.
7. FIRE HYDRANT SHALL BE LOCATED MINIMUM 1' OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADII AT INTERSECTIONS. (SEE PLAN VIEW)
8. PLACEMENT OF FIRE HYDRANT SHALL BE WHERE PUMPER NOZZLE IS PERPENDICULAR TO AND FACING THE NEAREST CURB.

2 FIRE HYDRANT INSTALLATION
NOT TO SCALE

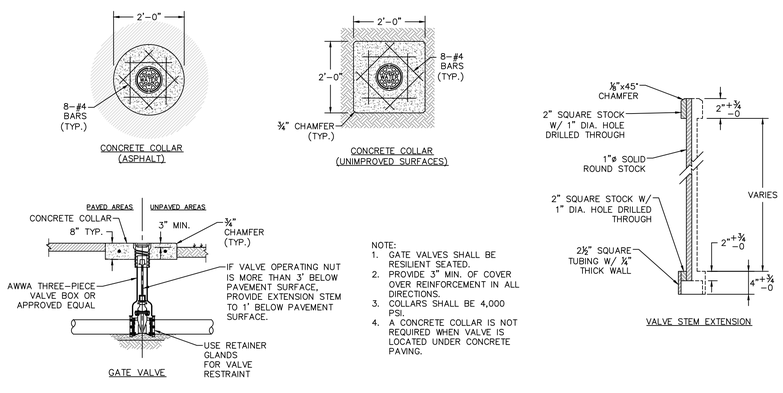


NOTES:
1. VERTICAL TIE-DOWN BLOCKING VOLUMES SHOWN ARE BASED ON:
   1.1. 225 PSI TEST PRESSURE
   1.2. 150 PCF CONCRETE DENSITY
   1.3. A SAFETY FACTOR OF 1.5.
2. BAR QUANTITIES ARE BASED ON:
   2.1. 30 KSI #4 STEEL REINFORCEMENT BAR
   2.2. A FACTOR OF SAFETY OF 1.5
   2.3. "L" SHALL BE A MINIMUM OF 18".
3. THE ENGINEER SHALL PROVIDE A SEPARATE VERTICAL TIE-DOWN BLOCKING TABLE WHEN THE CONDITIONS DO NOT MEET THE ABOVE ASSUMPTIONS.
4. THE CONTRACTOR IS REQUIRED TO PROVIDE THRUST RESTRAINT BY MEANS OF VERTICAL TIE-DOWN BLOCKING FOR ALL PIPES. THIS ITEM SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS ITEMS BID.
5. ALL MJ FITTINGS SHALL BE ADDITIONALLY RESTRAINED WITH RETAINER GLANDS.
6. WIDTHS, LENGTHS AND DEPTHS MAY VARY BUT SATISFACTION OF ABOVE MINIMUM VOLUMES MUST BE DEMONSTRATED.
7. KEEP CONCRETE CLEAR OF PIPE JOINTS AND BOLTS.
8. VERTICAL TIE-DOWN BLOCKING FOR LINES 16" AND LARGER SHALL BE DESIGNED FOR THE SPECIFIC LOCATION AND SHOWN ON THE DRAWINGS.
9. ALL DUCTILE IRON FITTINGS SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT PRIOR TO PLACING OF BLOCKING.

VERTICAL TIE-DOWN BLOCKING TABLE

PIPE SIZE	90° BENDS	45° BENDS		22.5° BENDS		11.25° BENDS	
		MIN. VOLUME (CF)	MIN. #4 BARS	MIN. VOLUME (CF)	MIN. #4 BARS	MIN. VOLUME (CF)	MIN. #4 BARS
6"	ALL 90° BENDS SHALL BE RESTRAINED	48.69	1	24.82	1	12.47	1
8"		86.56	2	44.13	1	22.17	1
10"		135.25	3	68.95	2	34.64	1
12"		194.76	4	99.29	2	49.88	1

4 VERTICAL THRUST BLOCKING
NOT TO SCALE



NOTE:
1. GATE VALVES SHALL BE RESILIENT SEATED.
2. PROVIDE 3" MIN. OF COVER OVER REINFORCEMENT IN ALL DIRECTIONS.
3. COLLARS SHALL BE 4,000 PSI.
4. A CONCRETE COLLAR IS NOT REQUIRED WHEN VALVE IS LOCATED UNDER CONCRETE PAVING.

NOTE:
1. 1" ROUND SOLID BAR & 2" SQUARE PER ASTM A-108-81. SAE 1020, COLD DRAWN OR BETTER.
2. 2-½" SQUARE TUBING PER ASTM A-512-79, SAE 1020, COLD DRAWN OR BETTER.
3. ALL WELDS SHALL COMPLY WITH A.W.S. CODE FOR PROCEDURE, APPEARANCE AND QUALITY OF WELDS.

1 STANDARD WATER DISTRIBUTION GATE VALVE & BOX
NOT TO SCALE

TERESA OF CALCUTTA CATHOLIC CHURCH
ST. TEL FORT WORTH, TEXAS

WATER DETAILS

mma
civil engineering surveying landscape architecture planning
tbpels registration number: f - 2759
tbpels registration/license number: 10088000
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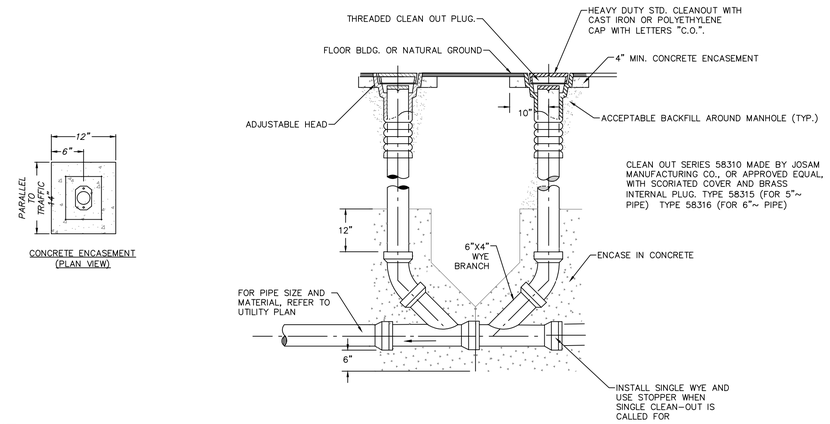
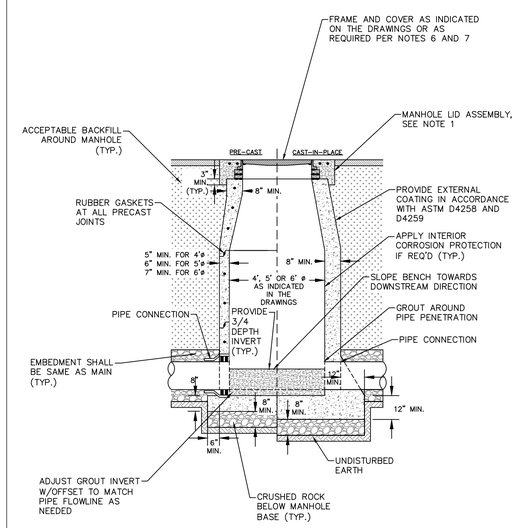
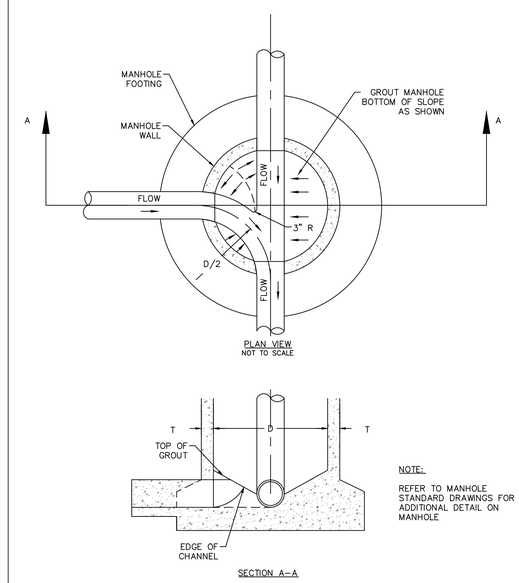


3 CLEAN OUT
NOT TO SCALE



NOTES:
1. MANHOLE TOP SHALL BE PER MANHOLE LID ASSEMBLY DETAILS AS INDICATED IN THE DRAWINGS.
2. FOR CAST-IN-PLACE MANHOLES, CURE FOR THREE DAYS BEFORE BACKFILLING AROUND STRUCTURE
3. IF SOIL CONDITIONS OR GROUND WATER PREVENT USE OF COARSE AGGREGATE BASE A 2-INCH MUD SLAB MAY BE SUBSTITUTED.
4. PRE-CAST JOINTS SHALL CONFORM TO ASTM C478.
5. UNLESS OTHERWISE INDICATED IN THE DRAWINGS, 4'ø MANHOLES SHALL BE USED FOR 21" AND SMALLER SANITARY SEWER LINES AND 5'ø MANHOLES SHALL BE USED 24" UP TO 36" SANITARY SEWER LINES.
6. HINGED LIDS SHALL BE REQUIRED FOR ALL SANITARY SEWER MANHOLES WITH CONNECTING LINES OF 24-INCHES AND GREATER.
7. HINGED LIDS SHALL BE REQUIRED FOR ALL SANITARY SEWER MANHOLES WITH A RIM ELEVATION GREATER THAN 12-INCHES ABOVE NATURAL GROUND.

2 STANDARD MANHOLE
NOT TO SCALE



NOTE:

REFER TO MANHOLE STANDARD DRAWINGS FOR ADDITIONAL DETAIL ON MANHOLE

1 WASTEWATER MANHOLE LINE INTERSECTION
NOT TO SCALE

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

SEWER DETAILS

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PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CALIPER	CONTAINER	HEIGHT	SPREAD
EXISTING TREE							
	EX	9	EXISTING TREE TO REMAIN	–			MIN. 8' SPREAD
LARGE CANOPY TREE							
	CE	6	CEDAR ELM ULMUS CRASSIFOLIA 2,000 S.F. CANOPY COVERAGE CREDIT	2–1/2" CAL.	B&B OR CONTAINER	11'–12' HT.	MIN. 8' SPREAD
	CO	6	CHINQUAPIN OAK QUERCUS MUEHLENBERGII 2,000 S.F. CANOPY COVERAGE CREDIT	2–1/2" CAL.	B&B OR CONTAINER	11'–12' HT.	MIN. 8' SPREAD
	LO	1	LIVE OAK QUERCUS VIRGINIANA 2,000 S.F. CANOPY COVERAGE CREDIT	2–1/2" CAL.	B&B OR CONTAINER	11'–12' HT.	MIN. 8' SPREAD
	RO	4	SHUMARD RED OAK QUERCUS SHUMARDII 2,000 S.F. CANOPY COVERAGE CREDIT	2–1/2" CAL.	B&B OR CONTAINER	11'–12' HT.	MIN. 8' SPREAD
SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CONTAINER			
SHRUBS							
	AS	111	AUTUMN SAGE 'RASPBERRY' SALVIA GREGGII	5 GAL.			
	BLG	24	BLUE GRAMA BOUTELOUA GRACILIS 'BLONDE AMBITION'	5 GAL.			
	CH	64	CARISSA HOLLY ILEX CORNUTA 'CARISSA'	5 GAL.			
	AA	13	CENTURY PLANT AGAVE AMERICANA	5 GAL.			
	DBH	120	DWARF BURFORD HOLLY ILEX CORNUTA 'BUFORDII NANA'	5 GAL.			
	GL	12	GIANT LIRIOPE LIRIOPE GIGANTEA	2 GAL.			
	LM	66	LINDHEIMER'S MUHLY MUHLENBERGIA LINDHEIMERI	5 GAL.			
SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CONTAINER			
GROUND COVERS							
	ETA	2,751 SF	EXISTING TURF AREA	–			
	DMSA	14,204 SF	DEL MAR ST. AUGUSTINE GRASS STENOTAPHRUM SECUNDATUM 'DEL MAR'	SOLID SOD			
	TIF	101,646 SF	TIF 419 BERMUDAGRASS CYNODON DACTYLON 'TIF 419'	SOLID SOD OR HYDROMULCH			
MATERIALS							
	SHM	1,721 SF	SHREDDED HARDWOOD MULCH	SQ. FT.			

PLANT MATERIAL NOTES AND SPECIFICATION

ALL TREES TO BE UNIFORM BY SPECIES WITH STRAIGHT TRUNKS, MATCHING CHARACTER, AND FULL BRANCHING STRUCTURE.

ALL SHRUBS TO BE FULL AND UNIFORM BY SPECIES WITH MATCHING CHARACTER AND BRANCHING STRUCTURE.

EACH PLANT VARIETY MUST COME FROM A SINGLE SOURCE SUPPLIER IN ORDER TO MAINTAIN A CONSISTENT APPEARANCE.

ALL TREES, B&B AND CONTAINER TO BE NURSERY GROWN STOCK, WITH A WELL ESTABLISHED ROOT SYSTEM. COLLECTED SPECIMENS WILL BE REJECTED. CONTAINER GROWN PLANT MATERIAL MUST HAVE A WELL–ESTABLISHED ROOT SYSTEM REACHING THE SIDES OF THE CONTAINER, ABLE TO MAINTAIN A FIRM BALL WHEN THE CONTAINER IS REMOVED, BUT SHALL NOT HAVE EXCESSIVE ROOT GROWTH ENCIRCLING THE INSIDE OF THE CONTAINER.

ALL PLANT MATERIAL SHALL COMPLY WITH THE MINIMUM REQUIREMENTS AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN, TEXAS ASSOCIATION OF NURSERYMEN STANDARDS AND/OR AS STATED IN THE PLANT SCHEDULE, WHICHEVER IS MORE STRINGENT. ALL TREES MUST MEET ALL THREE SPECIFICATIONS IN THE PLANT LEGEND: CALIPER, HEIGHT AND SPREAD.

GENERAL UTILITY NOTES:

1. ALL EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE OWNER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY AFFECTED AND VERIFY THESE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

2. CALL 811 OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. MMA, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

IRRIGATION NOTES:

1. ALL LANDSCAPE PLANTINGS PROPOSED IN THIS PLAN WILL BE IRRIGATED WITH AN AUTOMATIC, UNDERGROUND IRRIGATION SYSTEM.
2. IRRIGATION SYSTEM WILL BE EQUIPPED WITH A RAIN AND FREEZE SENSOR CAPABLE OF SHUTTING DOWN THE SYSTEM WHEN DICTATED BY RAINFALL OR FREEZING CONDITIONS.
3. IRRIGATION SYSTEM DESIGN WILL MEET ALL REQUIREMENTS OF THE CITY OF ARLINGTON, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, AND ALL APPLICABLE PLUMBING CODES.
4. IRRIGATION DESIGN DRAWINGS WILL BE SUBMITTED UNDER A SEPARATE COVER AT A LATER DATE FOR IRRIGATION PERMITTING.

LANDSCAPE DATA

PROPOSED USE	RELIGIOUS FACILITY
PROPOSED ZONING	'E' COMMERCIAL
GROSS SITE AREA	466,219.80 SQ. FT.
ARTIFICIAL LOT AREA	225,152 SQ. FT.
BUILDING FOOTPRINT	20,001 SQ. FT.
NET SITE AREA	205,151 SQ. FT.

ELEMENT	REQUIREMENT	REQUIRED	PROVIDED
REQUIRED LANDSCAPE AREA	10% OF NET SITE AREA	205,151 @ 10% = 20,515 SQ. FT.	118,601 SQ. FT.
5 GALLON SHRUBS	1 PER 50 SQ. FT. OR REQUIRED LANDSCAPE AREA	20,515 / 50 = 410 (5) GALLON SHRUBS REQUIRED	410 (5) GALLON SHRUBS
LOCATION OF REQUIRED LANDSCAPE AREA	75% OF REQUIRED LANDSCAPE AREA MUST BE LOCATED IN THE FRONT YARD BETWEEN THE BUILDING AND THE R.O.W.	20,513 SQ. FT. @ 75% = 15,385 SQ. FT. OF LANDSCAPE REQUIRED IN FRONT YARD	MINIMUM OF 15,385 SQ. FT. OF LANDSCAPE IN FRONT YARD
LOCATION OF REQUIRED 5 GALLON SHRUBS	75% OF 746 REQUIRED (5) GALLON SHRUBS MUST BE LOCATED IN FRONT YARD	410 @ 75% = 308 (5) GALLON SHRUBS MUST BE LOCATED IN THE FRONT YARD	410, (5) GALLON SHRUBS IN FRONT YARD

HYDROMULCH PROCEDURE:

1. REMOVE FOREIGN MATERIALS, WEEDS, AND UNDESIRABLE PLANTS AND THEIR ROOTS.

2. WOOD FIBER: SUITABLE FOR USE WITH THE HYDRAULIC APPLICATION OF GRASS SEED AND FERTILIZER, SHALL CONSIST OF SPECIALLY PREPARED WOOD CELLULOSE FIBER, PROCESSED TO CONTAIN NO GROWTH – OR GERMINATION – INHIBITING FACTORS AND DYED AN APPROPRIATE COLOR TO FACILITATE VISUAL METERING OF APPLICATION OF THE MATERIALS. THE WOOD CELLULOSE SHALL BE PLACED IN THE SLURRY TANK WITH FERTILIZERS, GRASS SEEDS, WATER AND ANY OTHER APPROVED ADDITIVES. THE FIBERS IN THE MATERIAL SHALL BECOME UNIFORMLY SUSPENDED TO FORM A HOMOGENEOUS SLURRY. THIS COMBINATION SHALL BE ADEQUATELY BLENDED SO THAT WHEN HYDRAULICALLY SPRAYED ON THE GROUND, THE MATERIAL WILL FORM A BLOTTER–LIKE GROUND COVER IMPREGNATED UNIFORMLY WITH GRASS SEED AND WHICH, AFTER APPLICATION, WILL ALLOW THE ABSORPTION OF MOISTURE FROM RAINFALL OR MECHANICAL WATERING TO PERCOLATE TO THE UNDERLYING SOIL. SUPPLIERS SHALL BE PREPARED TO CERTIFY THAT LABORATORY AND FIELD TESTING OF THEIR PRODUCT HAS BEEN ACCOMPLISHED, AND THAT THEIR PRODUCT MEETS ALL THE FOREGOING REQUIREMENTS BASED UPON SUCH TESTING.

3. SPECIAL MULCHING EQUIPMENT AND PROCEDURES: HYDRAULIC EQUIPMENT USED FOR THE APPLICATION OF FERTILIZER, SEED AND SLURRY OF PREPARED WOOD FIBER MULCH SHALL HAVE A BUILT–IN AGITATION SYSTEM WITH AN OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND, AND HOMOGENEOUSLY MIX A SLURRY CONTAINING UP TO FORTY (40) POUNDS OF FIBER PLUS A COMBINED TOTAL OF SEVENTY (70) POUNDS OF FERTILIZER SOLIDS FOR EACH ONE HUNDRED (100) GALLONS OF WATER. THE SLURRY DISTRIBUTION LINES SHALL BE LARGE ENOUGH TO PREVENT STOPPAGE. THE DISCHARGE LINE SHALL BE EQUIPPED WITH A SET OF HYDRAULIC–SPRAY NOZZLES, WHICH PROVIDE EVEN DISTRIBUTION OF THE SLURRY. THE TANK SHALL HAVE A MINIMUM CAPACITY OF ONE THOUSAND (1,000) GALLONS AND SHALL BE MOUNTED ON A TRAVELING UNIT WHICH MAY BE EITHER SELF–PROPELLED OR DRAWN WITH A SEPARATE UNIT WHICH WILL PLACE THE SLURRY TANK AND SPRAY NOZZLES WITHIN SUFFICIENT PROXIMITY TO THE AREAS TO BE SEEDED SO AS TO PROVIDE UNIFORM DISTRIBUTION WITHOUT WASTE. THE OWNER'S REPRESENTATIVE MAY AUTHORIZE EQUIPMENT WITH SMALLER TANK CAPACITY PROVIDED THAT THE EQUIPMENT HAS THE NECESSARY AGITATION SYSTEM AND SUFFICIENT PUMP CAPACITY TO SPRAY THE SLURRY IN A UNIFORM COAT.

4. MULCH: THE APPLICATION OF THE WOOD CELLULOSE FIBER MULCH SLURRY SHALL BE MADE WITH THE HYDRAULIC EQUIPMENT SPECIFIED IN POINT "6" AND SHALL BE ACCOMPLISHED IMMEDIATELY UPON COMPLETION OF THE FINAL TILLAGE. THE WOOD CELLULOSE FIBER MULCH SHALL BE APPLIED AT THE RATE OF TWO THOUSAND (2,000) POUNDS PER ACRE (45 LB./1,000 S.F.) IN COMBINATION WITH WATER, FERTILIZER AND SEED AND SHALL BE SPRAYED OVER THE SOIL IN A UNIFORM COAT. THE MULCH SHALL BE KEPT MOIST, BY DAILY APPLICATION OF WATER IF NECESSARY, FOR A MINIMUM OF TEN (10) DAYS OR UNTIL THE SEEDS IN THE MULCH HAVE GERMINATED AND ROOTED IN THE SOIL.

5. FERTILIZER: FERTILIZER SHALL BE 10–5–5 AND SHALL BE DISTRIBUTED UNIFORMLY AT THE RATE OF ONE THOUSAND (1,000) POUNDS PER ACRE (25 LB./1,000 S.F.) OVER THE AREAS INDICATED TO BE SEEDED. FERTILIZER SHALL BE APPLIED SIMULTANEOUSLY WITH SEED AND MULCH IN THE HYDRAULIC EQUIPMENT USING THE SPECIFIED RATE OF APPLICATION.

6. MAINTAIN SEEDED AREAS UNTIL GRASS IS WELL ESTABLISHED AND EXHIBITS A VIGOROUS GROWING CONDITION FOR TWO CUTTINGS.

7. RE–APPLICATION: THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE WILL DESIGNATE AREAS TO BE REPLANTED. AREAS ON WHICH A STAND OF GROWING GRASS IS NOT PRESENT IN A REASONABLE LENGTH OF TIME SHALL BE PREPARED, RESEEDED AND REMULCHED, AS SPECIFIED FOR ORIGINAL PLANTING AT NO COST TO OWNER. A STAND SHALL BE DEFINED AS LIVE GRASS PLANTS FROM SEED OCCURRING AT THE RATE OF NOT LESS THAN 1,000 GROWING PLANTS PER SQUARE FOOT. REPLANTING REQUIRED BECAUSE OF FAULTY OPERATIONS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR SHALL BE PERFORMED WITHOUT COST TO THE OWNER.

LANDSCAPE NOTES

1. THE PROPERTY OWNER IS RESPONSIBLE FOR REGULAR WEEDING, MOWING, IRRIGATION, FERTILIZING, PRUNING AND OTHER MAINTENANCE OF ALL PLANTINGS. THE REQUIRED LANDSCAPING MUST BE MAINTAINED IN HEALTHY GROWING CONDITION AT ALL TIMES.

2. ALL PROPOSED LANDSCAPING AND IRRIGATION SHALL BE INSTALLED PER LOCAL CITY ORDINANCES AND STATE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. NOTIFY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

3. NO SPECIFIED PLANT MATERIAL SHALL BE PLANTED UNTIL THE LANDSCAPE IRRIGATION SYSTEM HAS BEEN INSTALLED AND IS OPERATING WITH 100% COVERAGE OF PROPOSED LANDSCAPE AREAS.

4. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES AND LINE RUNS.

5. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL QUANTITIES BASED ON THE DRAWING(S) AND ACTUAL FIELD DIMENSIONS. PLANT QUANTITIES HAVE BEEN PROVIDED AS A CONVENIENCE ONLY TO THE OWNER(S) AND SHALL NOT BE CONSIDERED ABSOLUTE. CONTRACTOR SHALL FOLLOW DESIGN INTENT.

6. ALL PROPOSED SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

7. NOTIFY LANDSCAPE ARCHITECT IF LAYOUT OF TREES, BEDS AND/OR PLANTS REQUIRE ALTERATION FROM LANDSCAPE PLAN. NOTIFICATION WILL BE REQUIRED PRIOR TO ALTERING LAYOUT.

8. TREES SHALL BE HANDLED BY ROOT BALLS ONLY. DO NOT DAMAGE BALL, TRUNK, OR LOOSEN TRUNK FROM BALL.

9. TREE ARE TO BE PLANTED WITH TRUNKS STRAIGHT AND MAY BE REQUIRED BY THE OWNER AND/OR LANDSCAPE ARCHITECT TO BE STAKED. ALL TREES REQUIRED TO BE STAKED AND GUYED SHALL CONTINUE TO BE SO THROUGH THE WARRANTY PERIOD AT WHICH TIME THE OWNER AND/OR LANDSCAPE ARCHITECT SHALL DETERMINE IF REMOVAL IS APPROPRIATE.

10. AT NO TIME WILL ANY PLANT MATERIAL BE ALLOWED TO SETTLE BEYOND TOP OF ROOT BALL OR POTTED SOIL LINE. SHOULD PLANT MATERIAL SETTLE, THE PLANT(S) WILL BE REPLANTED AT THE PROPER HEIGHT AND/OR REPLACED IF NECESSARY AT THE CONTRACTOR'S COST.

11. ALL PROPOSED BED AREAS SHALL BE TILLED TO A DEPTH OF 6", ADDING A 3" MIN. LAYER OF LIVING EARTH COMPOST BY LIVING EARTH, 972–869–4332, OR APPROVED EQUAL.

12. ALL LANDSCAPE BEDS SHALL RECEIVE A 2" TOP DRESS LAYER AND THE TREE PLANTING PITS A 1" LAYER OF NATIVE HARDWOOD MULCH, BY LIVING EARTH, 972–869–4332 EQUAL.

13. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ANY LANDSCAPE MATERIAL ON SITE.

14. APPLICABLE REFERENCES / STANDARDS / SPECIFICATIONS:AMERICAN JOINT COMMITTEE OF HORTICULTURAL NOMENCLATURE – STANDARDIZED PLANT NAMES, SECOND EDITION, 1942. AMERICAN ASSOCIATION OF NURSERYMEN: AMERICAN STANDARD OF NURSERY STOCK, 1973.

15. SHOULD EXISTING UTILITIES BE DAMAGED OR DISTURBED DURING CONSTRUCTION, NOTIFY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE AND PROPER AUTHORITIES FOR RESTORATION.

16. CONTRACTOR IS REQUIRED TO PERFORM A PERCOLATION TEST FOR EACH TREE PIT PRIOR TO INSTALLATION. IF DRAINAGE DOES NOT OCCUR WITHING 24 HOURS THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A GRAVEL SUMP, FILTER FABRIC AND STANDPIPE. ALL SUMPS SHOULD BE INCLUDED IN THE BASE BID AND PROVIDED AS A DEDUCT ALTERNATE IF NOT REQUIRED AFTER THE PERCOLATION TEST IS PERFORMED.

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ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

LANDSCAPE PLANS

mlmla
civil engineering surveying landscape architecture planning
tbpels registration number: f – 2759
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PROJECT NUMBER:	3788–00–01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	D. JOINER
CHECKED BY:	R. CRONIN
ISSUE DATE:	8/20/2024

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SHEET CONTENT:

LANDSCAPE NOTES AND LEGENDS

SHEET NO:

L1.01

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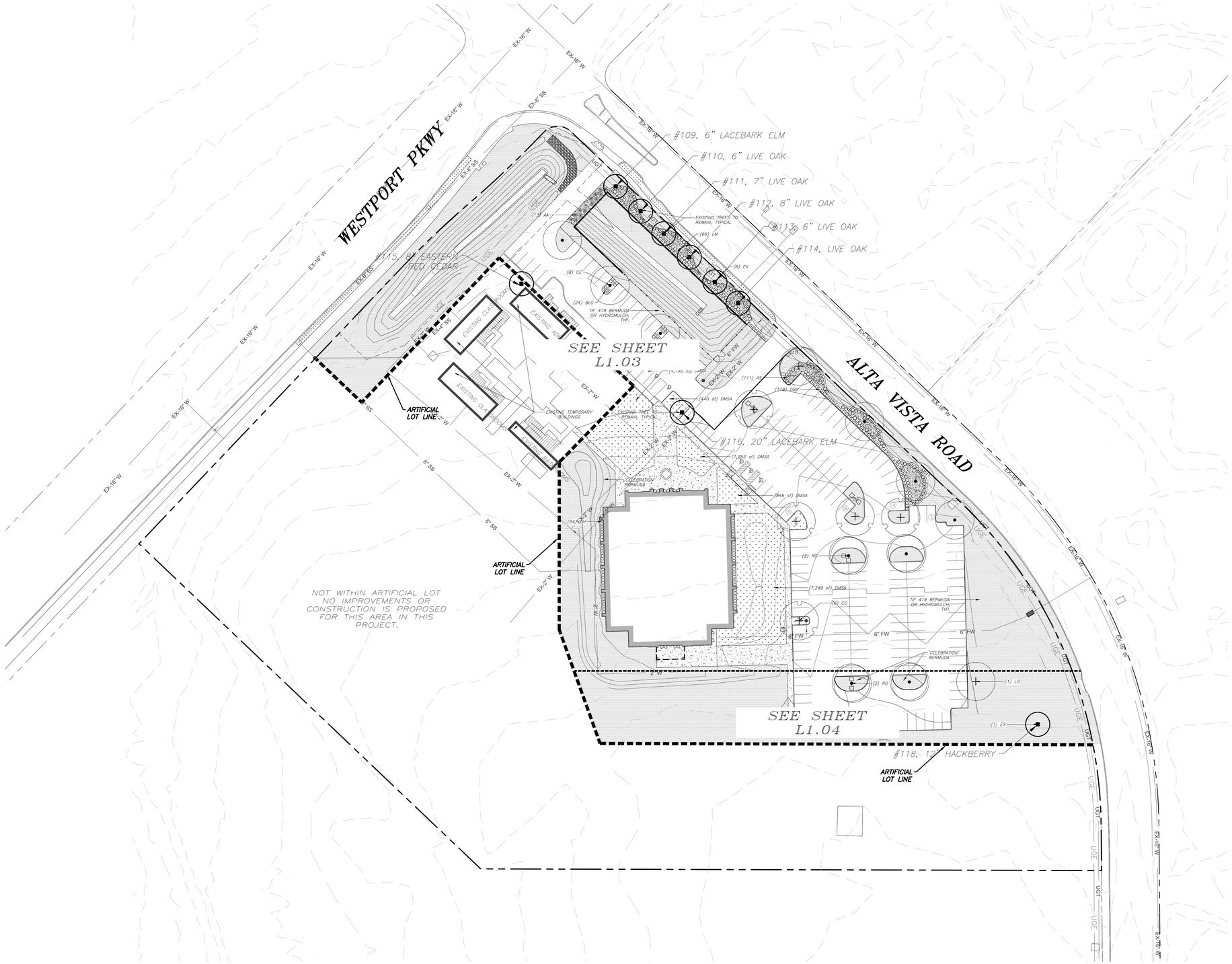

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OVERALL LANDSCAPE PLAN

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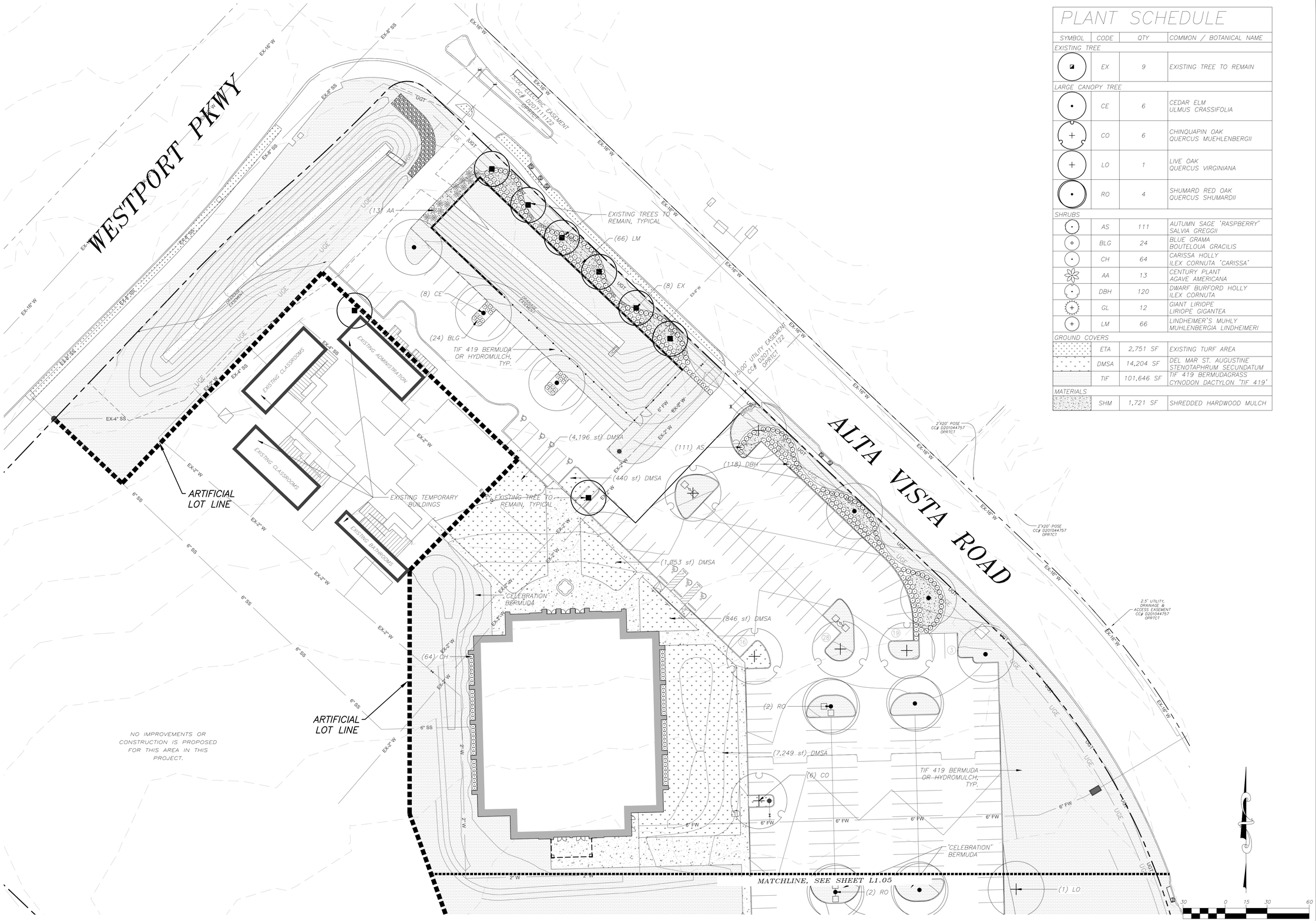

PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME
EXISTING TREE			
	EX	9	EXISTING TREE TO REMAIN
LARGE CANOPY TREE			
	CE	6	CEDAR ELM ULMUS CRASSIFOLIA
	CO	6	CHINQUAPIN OAK QUERCUS MUEHLENBERGII
	LO	1	LIVE OAK QUERCUS VIRGINIANA
	RO	4	SHUMARD RED OAK QUERCUS SHUMARDII
SHRUBS			
	AS	111	AUTUMN SAGE 'RASPBERRY' SALVIA GREGGII
	BLG	24	BLUE GRAMA BOUTELOUA GRACILIS
	CH	64	CARISSA HOLLY ILEX CORNUTA 'CARISSA'
	AA	13	CENTURY PLANT AGAVE AMERICANA
	DBH	120	DWARF BURFORD HOLLY ILEX CORNUTA
	GL	12	GIANT LIRIOPE LIRIOPE GIGANTEA
	LM	66	LINDHEIMER'S MUHLY MUHLENBERGIA LINDHEIMERI
GROUND COVERS			
	ETA	2,751 SF	EXISTING TURF AREA
	DMSA	14,204 SF	DEL MAR ST. AUGUSTINE STENOTAPHRUM SECUNDATUM
	TIF	101,646 SF	TIF 419 BERMUDAGRASS CYNODON DACTYLON 'TIF 419'
MATERIALS			
	SHM	1,721 SF	SHREDDED HARDWOOD MULCH

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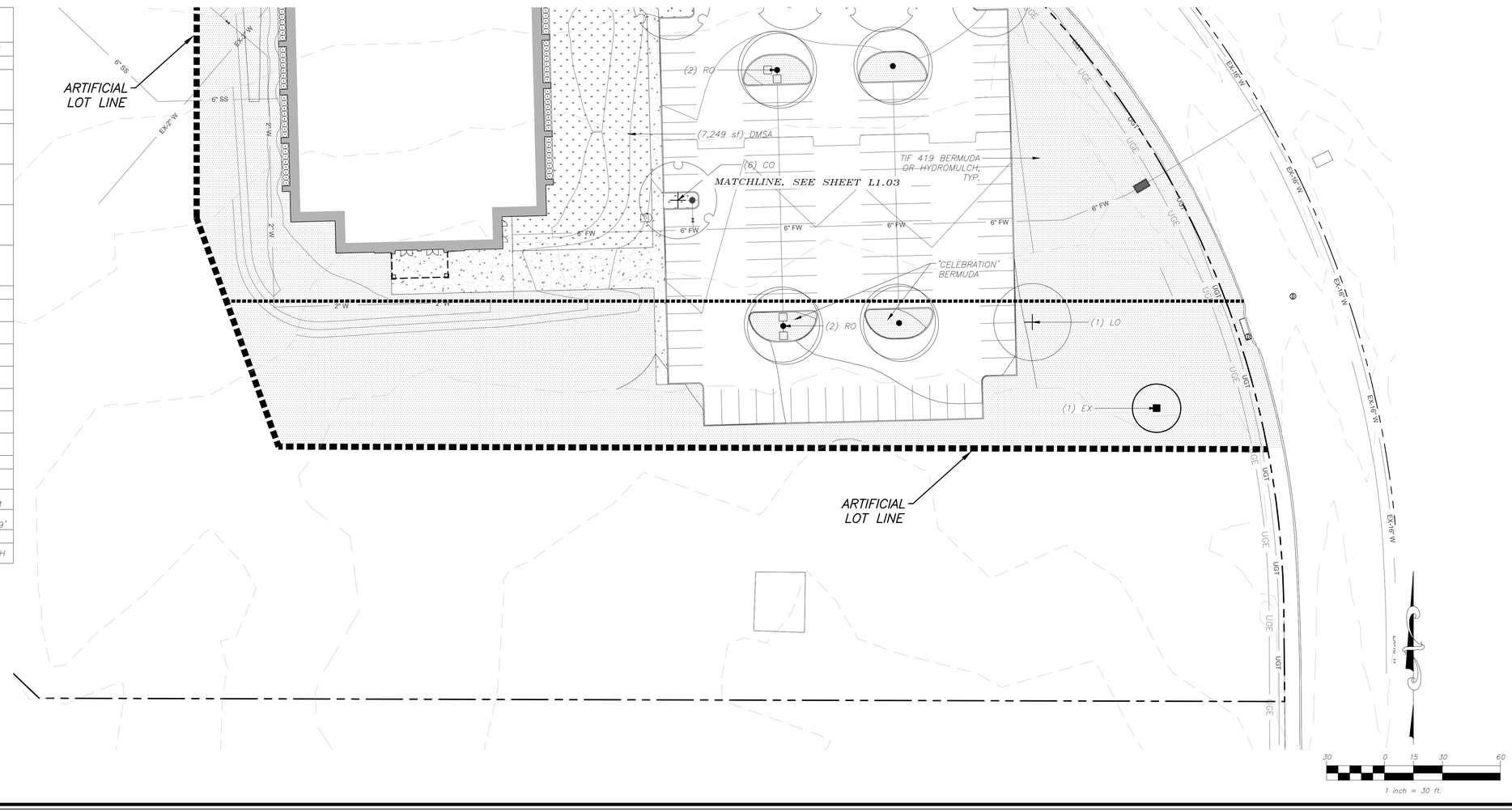
PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME
EXISTING TREE			
	EX	9	EXISTING TREE TO REMAIN
LARGE CANOPY TREE			
	CE	6	CEDAR ELM ULMUS CRASSIFOLIA
	CO	6	CHINQUAPIN OAK QUERCUS MUEHLENBERGII
	LO	1	LIVE OAK QUERCUS VIRGINIANA
	RO	4	SHUMARD RED OAK QUERCUS SHUMARDII
SHRUBS			
	AS	111	AUTUMN SAGE 'RASPBERRY' SALVIA GREGGII
	BLG	24	BLUE GRAMA BOUTELOUA GRACILIS
	CH	64	CARISSA HOLLY ILEX CORNUTA 'CARISSA'
	AA	13	CENTURY PLANT AGAVE AMERICANA
	DBH	120	DWARF BURFORD HOLLY ILEX CORNUTA
	GL	12	GIANT LIRIOPE LIRIOPE GIGANTEA
	LM	66	LINDHEIMER'S MUHLY MUHLENBERGIA LINDHEIMERI
GROUND COVERS			
	ETA	2,751 SF	EXISTING TURF AREA
	DMSA	14,204 SF	DEL MAR ST. AUGUSTINE STENOTAPHRUM SECUNDATUM
	TIF	101,646 SF	TIF 419 BERMUDAGRASS CYNODON DACTYLON 'TIF 419'
MATERIALS			
	SHM	1,721 SF	SHREDDED HARDWOOD MULCH



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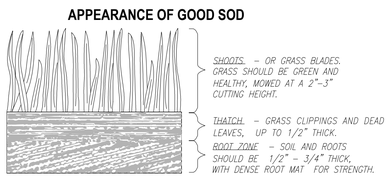
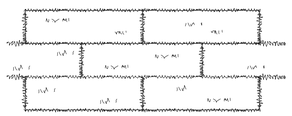
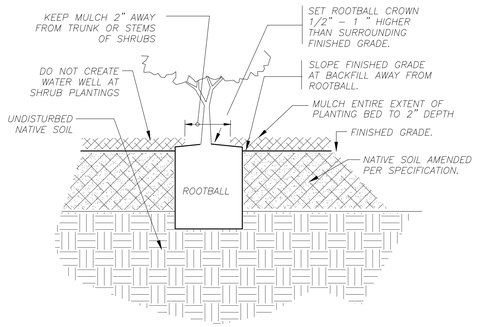




LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

1 SOD

NOT TO SCALE

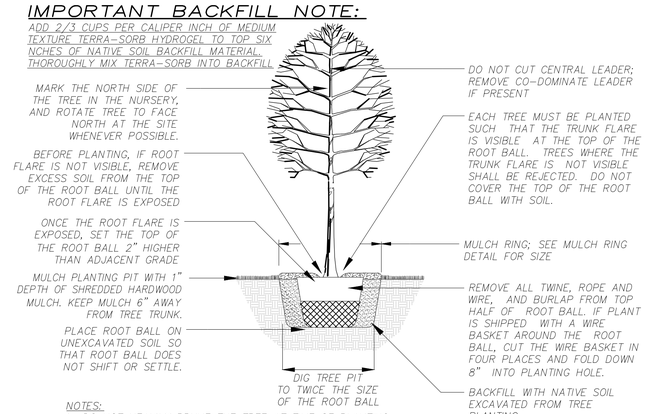


2 SHRUB PLANTING

NTS

IMPORTANT BACKFILL NOTE:

ADD 2/3 CUPS PER CALIPER INCH OF MEDIUM TEXTURE TERRA-SORB HYDROGEL TO TOP SIX NCHES OF NATIVE SOIL BACKFILL MATERIAL. THOROUGHLY MIX TERRA-SORB INTO BACKFILL.



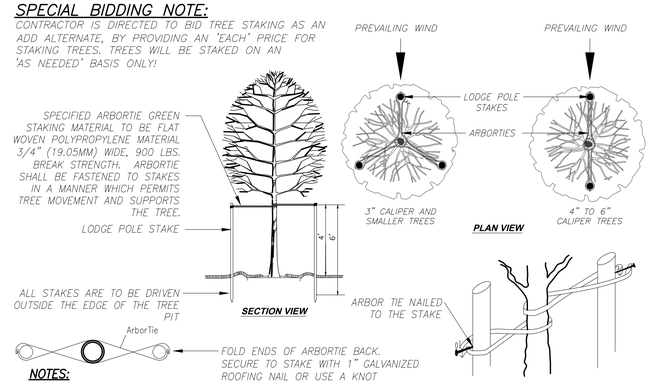
NOTES:
1. DO NOT HEAVILY PRUNE THE TREE AT TIME OF PLANTING.
2. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

3 TREE PLANTING DETAIL IN ALL SOIL TYPES

NTS

SPECIAL BIDDING NOTE:

CONTRACTOR IS DIRECTED TO BID TREE STAKING AS AN ADD ALTERNATE, BY PROVIDING AN 'EACH' PRICE FOR STAKING TREES. TREES WILL BE STAKED ON AN 'AS NEEDED' BASIS ONLY!

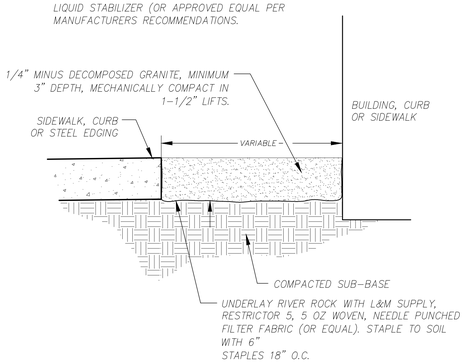


NOTES:
1. USE GREEN ARBORTIE MATERIAL TO ASSURE UPRIGHT TREE POSITION AND STABILITY.
2. TIGHTEN ARBORTIE ONLY ENOUGH TO KEEP FROM SLIPPING AND TO ALLOW FOR SOME TRUNK MOVEMENT.
3. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN A SUFFICIENT ROOT SYSTEM TO OVERCOME STAKING. STAKES SHALL BE REMOVED NO LATER THAN THE END OF THE FIRST GROWING SEASON AFTER STAKING.

6 TREE STAKING, 3" CALIPER AND SMALLER, AND 4" TO 6" CALIPER

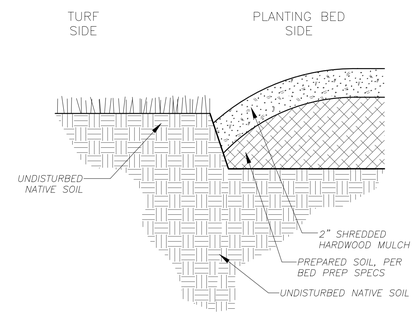
NTS

NOTE:
STABILIZE DECOMPOSED GRANITE WITH SOILTAC LIQUID STABILIZER (OR APPROVED EQUAL PER MANUFACTURERS RECOMMENDATIONS.



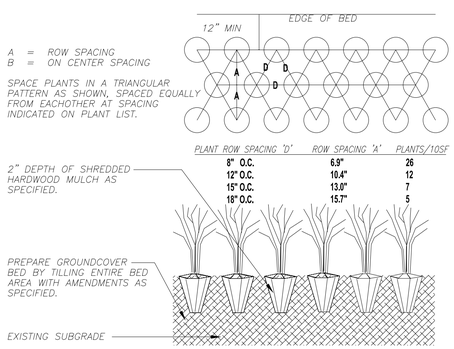
4 DECOMPOSED GRANITE

N.T.S.



5 SHOVEL CUT EDGE AT PLANTING BED

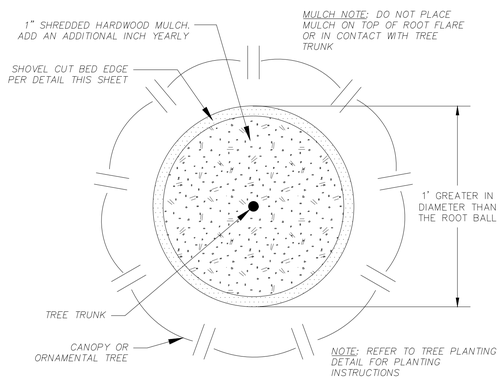
NTS



PLANT ROW SPACING 'D'	ROW SPACING 'A'	PLANTS/105'SF
8" O.C.	6.9"	26
12" O.C.	10.4"	12
15" O.C.	13.0"	7
18" O.C.	15.7"	5

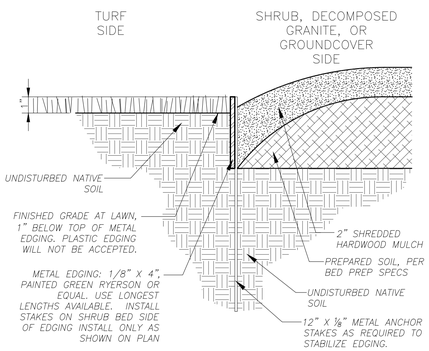
7 GROUNDCOVER PLANTING

NOT TO SCALE



8 MULCH RING AT TREES

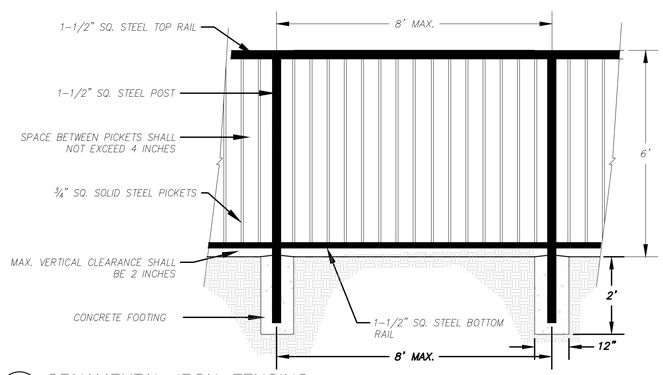
NTS



9 STEEL EDGING AT PLANTING BED

N.T.S.

1. CONCRETE FOOTINGS TO BE 8' O.C. MAX. OR AS REQUIRED FOR GRADE OR DIRECTIONAL CHANGES.
2. ALL FENCE MEMBERS TO BE PRIMED & PAINTED w/RUST INHIBITOR PAINT; COLOR – BLACK.



10 ORNAMENTAL IRON FENCING

NTS

ST. TERESA OF CALCUTTA CATHOLIC CHURCH
FORT WORTH, TEXAS

LANDSCAPE PLANS

mmma
civil engineering surveying landscape architecture planning
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PROJECT NUMBER:	3788-00-01
PROJECT MANAGER:	R. CRONIN
DRAWN BY:	D. JOINER
CHECKED BY:	R. CRONIN
ISSUE DATE:	8/20/2024

REV.	DATE	DESCRIP.	BY

SHEET CONTENT:

LANDSCAPE DETAILS

SHEET NO:

L1.05

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