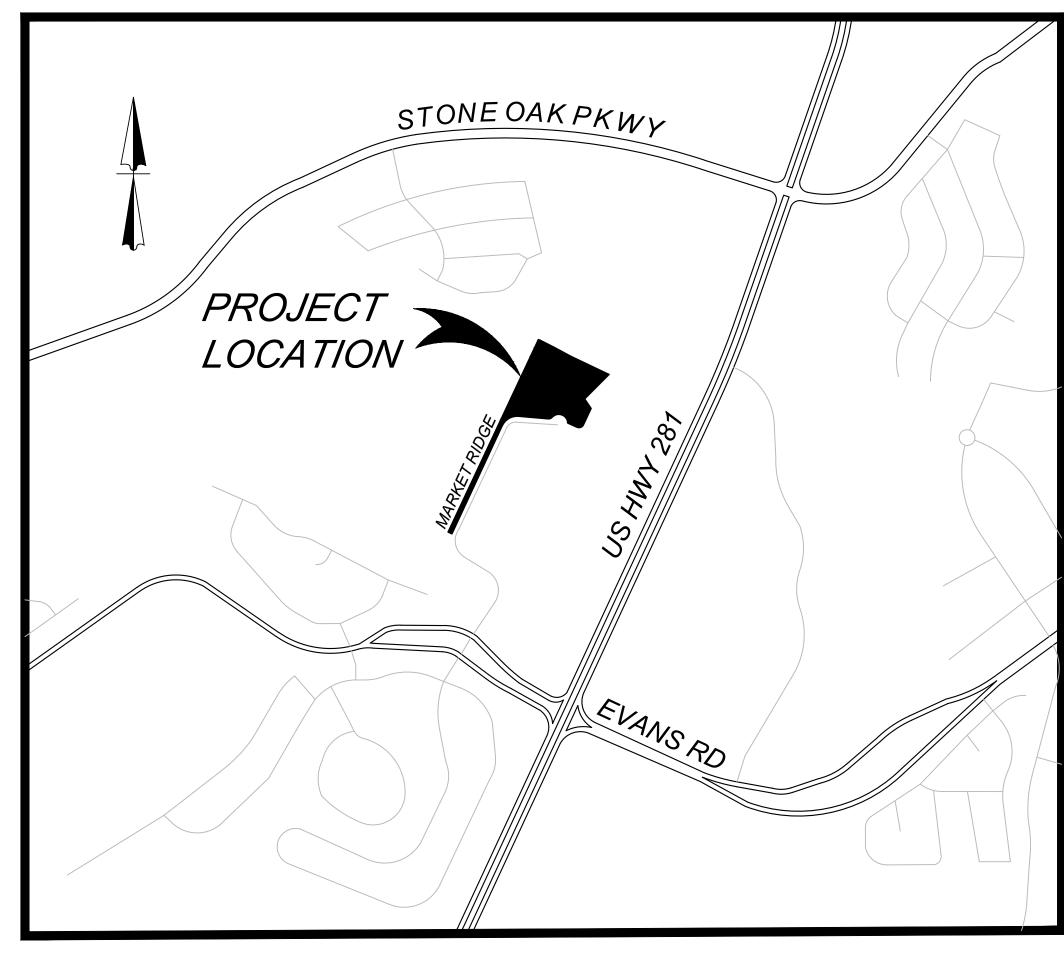
MARKET RIDGE PHASE 4

21243 MARKET RIDGE, SAN ANTONIO, TEXAS 78258



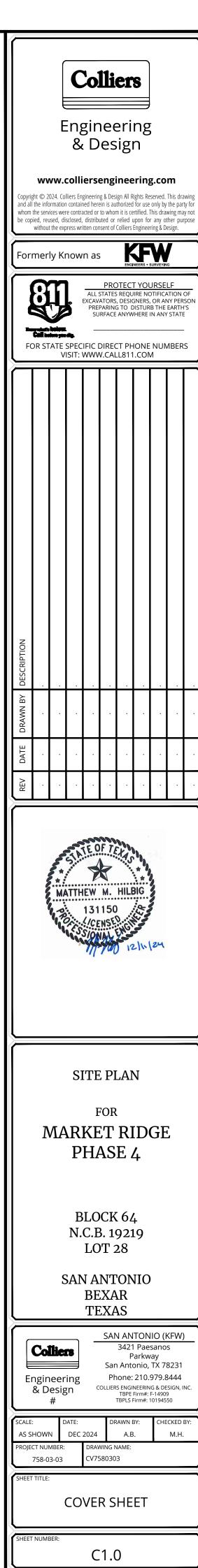
LOCATION MAP N.T.S

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DEVELOPER INFORMATION

BIG SPRING CONCEPTS, LTD.
CONTACT: FRANK SITTERLE, JR.
2015 EVANS RD., STE. 100
SAN ANTONIO, TEXAS 78258 - 7462
PHONE: 210-835-4424



LEGAL DESCRIPTION LOT 4, BLOCK 243, CB 4451 OUT OF THE NWC CULEBRA & RANCH VIEW WEST PLAT AS RECORDED IN VOL. 20003, PG 552-556 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS

KEY NOTES

28' ELECTRIC, GAS, TELEPHONE, AND 16' SANITARY SEWER EASEMENT CABLE T.V. EASEMENT (VOL. 6090, PG. 1106 O.P.R.) (VOL. 9588, PG. 195 D.P.R.) 28' GAS, TELEPHONE, ELECTRIC.

16' SANITARY SEWER EASEMENT 6 (VOL. 9588, PG. 195 D.P.R.) 2 AND CATV EASEMLING (VOL. 12936, PG. 569 O.P.R.) VARIABLE WIDTH OVERHEAD ELECTRIC EASEMENT (DOC. NO. 20230129166) 14' ELECTRIC, GAS, TELEPHONE, AND CABLE

T.V. EASEMENT (VOL. 9588, PG. 195 D.P.R.)

20' DRAINAGE EASEMENT (8) (PLAT NO. 24-####) VARIABLE WIDTH DRAINAGE EASEMENT (VOL. 9588, PG. 195 D.P.R.) VARIABLE WIDTH DRAINAGE EASEMENT 9 VARIABLE WID 11 2. ... (PLAT NO. 24-####)

COORDINATION NOTE:

1. CONTACT TWC (TIME WARNER CABLE) TO COORDINATE CABLE TV SERVICE.

2. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS (CITY PUBLIC SERVICE) FOR INSPECTIONS AND CONDUIT SIZES FOR PRIMARY AND SECONDARY ELECTRICAL SERVICES. (210)-353-2256.

3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928.

4. CONTRACTOR TO COORDINATE WITH CPS (CITY PUBLIC SERVICE) TO PLAN GAS SERVICES. (210)-353-2256. 5. CONTRACTOR TO COORDINATE WITH SAWS (SAN ANTONIO WATER SYSTEM)

6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

TO PLAN SANITARY SEWER AND WATER SERVICES. (210)-704-7297.

DEMOLITION NOTES

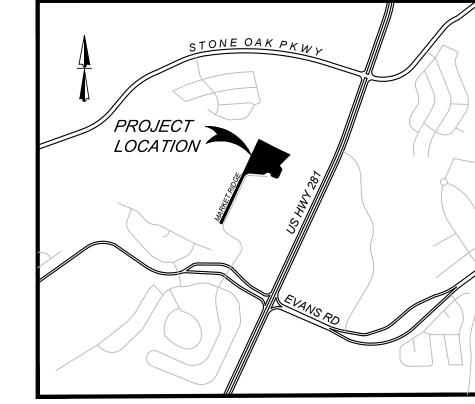
- LOCATION OF EXISTING UTILITIES AND DRAINAGE SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
- DEMOLITION CONTRACTOR IS RESPONSIBLE FOR CLEARING THE SITE OF ALL OBSTRUCTIONS THAT EXIST ON THIS SITE PRIOR TO THE START OF CONSTRUCTION OR DURING THE CONSTRUCTION SO AS TO NOT IMPEDE THE BUILDING CONSTRUCTION PROCESS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES, POWER POLES TO BE REMOVED, VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED, AND ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER TO IDENTIFY ANY MATERIAL OR EQUIPMENT SCHEDULED FOR REMOVAL TO BE SALVAGED AND REUSED. CONTRACTOR SHALL REPLACE AT HIS EXPENSE ANY DESTROYED MATERIAL OR EQUIPMENT THAT WAS MARKED FOR SALVAGE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS/APPROVALS BEFORE BEGINNING DEMOLITION OR CONSTRUCTION.
- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT THE WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
- ALL EXISTING ELECTRIC SERVICES TO BE REMOVED ARE TO BE BY CPS ENERGY AT OWNER'S EXPENSE. CONTRACTOR SHALL COORDINATE WITH CPS ENERGY AND OWNER AS REQUIRED BEFORE REMOVAL OF ANY ELECTRIC FACILITIES.
- CONTRACTOR SHALL NOT START DEMOLITION OF ANY FEATURE SHOWN ON THIS DRAWING UNTIL THE STORM WATER POLLUTION PREVENTION PLAN IS COMPLETE AND EROSION CONTROL MEASURES ARE INSTALLED.
- GOVERNING THE DEMOLITION, REMOVAL, TRANSPORTATION, AND DISPOSAL, OF ALL DEMOLISHED OR UNWANTED MATERIAL.
- 11. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR DEMOLITION.
- 12. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL PROPERTY CORNERS AND SHALL HAVE AT HIS EXPENSE, ALL CORNERS REPLACED WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES.
- 13. CONTRACTOR SHALL NOT DEMOLISH ANY SAWS WATER OR SANITARY SEWER LINE WITHOUT SAWS APPROVAL.
- 14. CONTRACTOR SHALL INSTALL A MINIMUM 6-FOOT HIGH, CHAIN LINK, PROTECTIVE FENCE ALONG THE PERIMETER OF THE CONSTRUCTION/DEMOLITION LIMITS. PROTECTIVE FENCE SHALL BE IN PLACE BEFORE ANY DEMOLITION OR CONSTRUCTION BEGINS AND SHALL REMAIN IN PLACE AND IN GOOD REPAIR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL TAKE SPECIAL CARE TO INSTALL VEHICULAR BARRIERS AND FENCING TO PROHIBIT VEHICULAR AND PEDESTRIAN ACCESS-TO THAT AREA CONTRACTOR SHALL COORDINATE WITH THE OWNER TO ENSURE THAT FENCING AND BARRIERS INSTALLED ARE ADEQUATE.

<u>CAUTION!!:</u> THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT

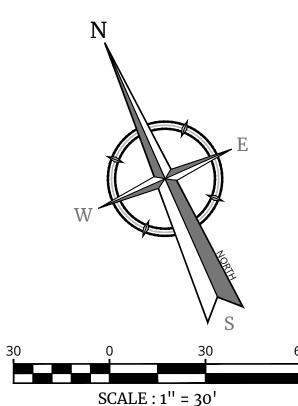
CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



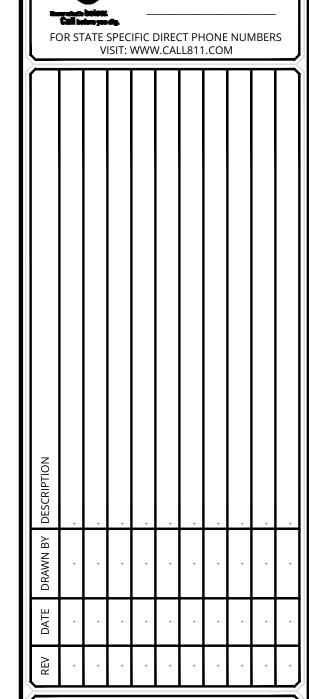
LOCATION MAP N.T.S



LEGEND

PROPERTY LINE EXISTING CURB **EXISTING CONTOURS** EXISTING GAS LINE

> EXISTING 12" WATER MAIN **EXISTING SANITARY** SEWER LINE & MANHOLE **DEMO CURB**



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SITE PLAN

MATTHEW M. HILBIG

131150

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219 LOT 28

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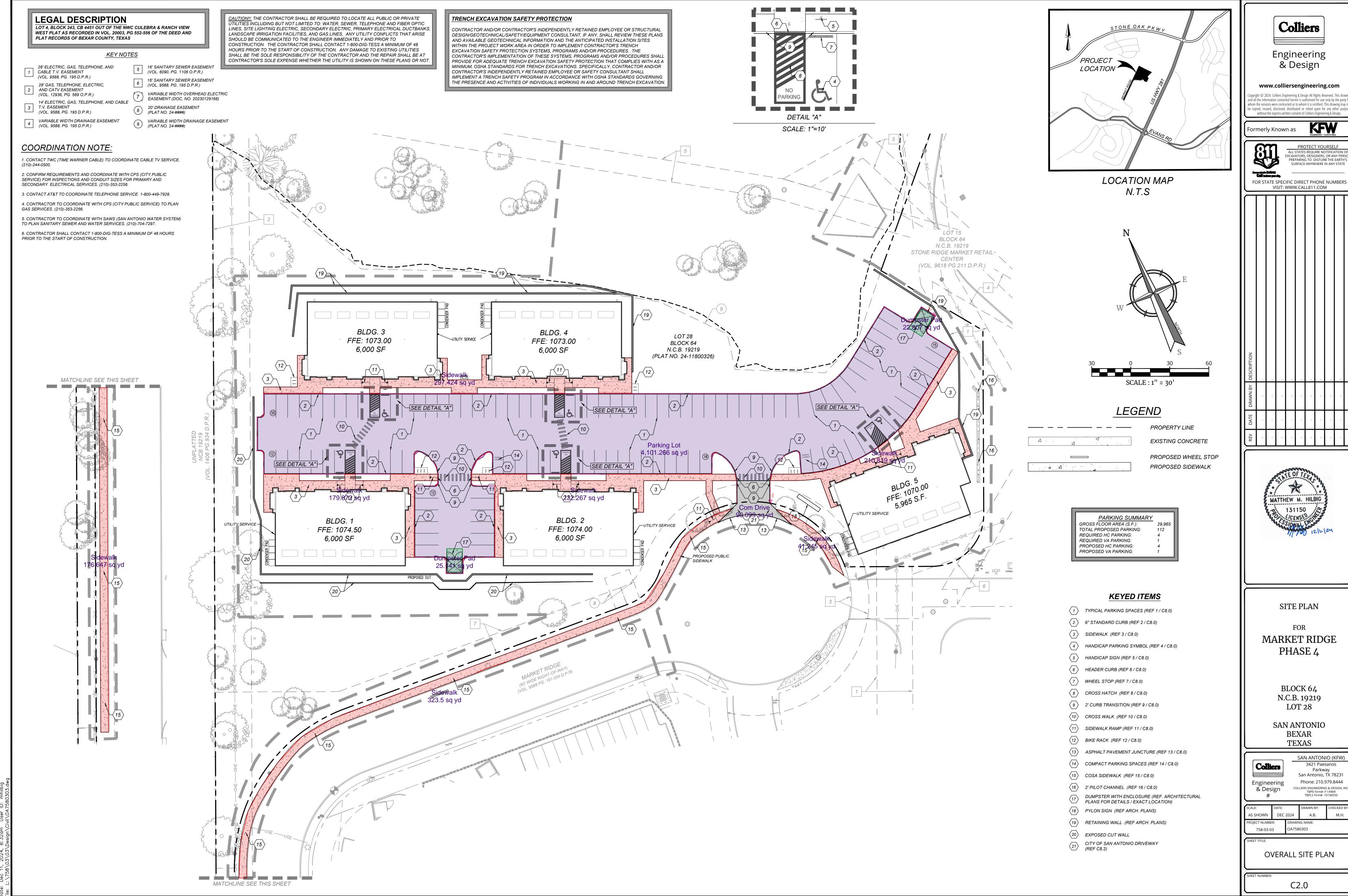
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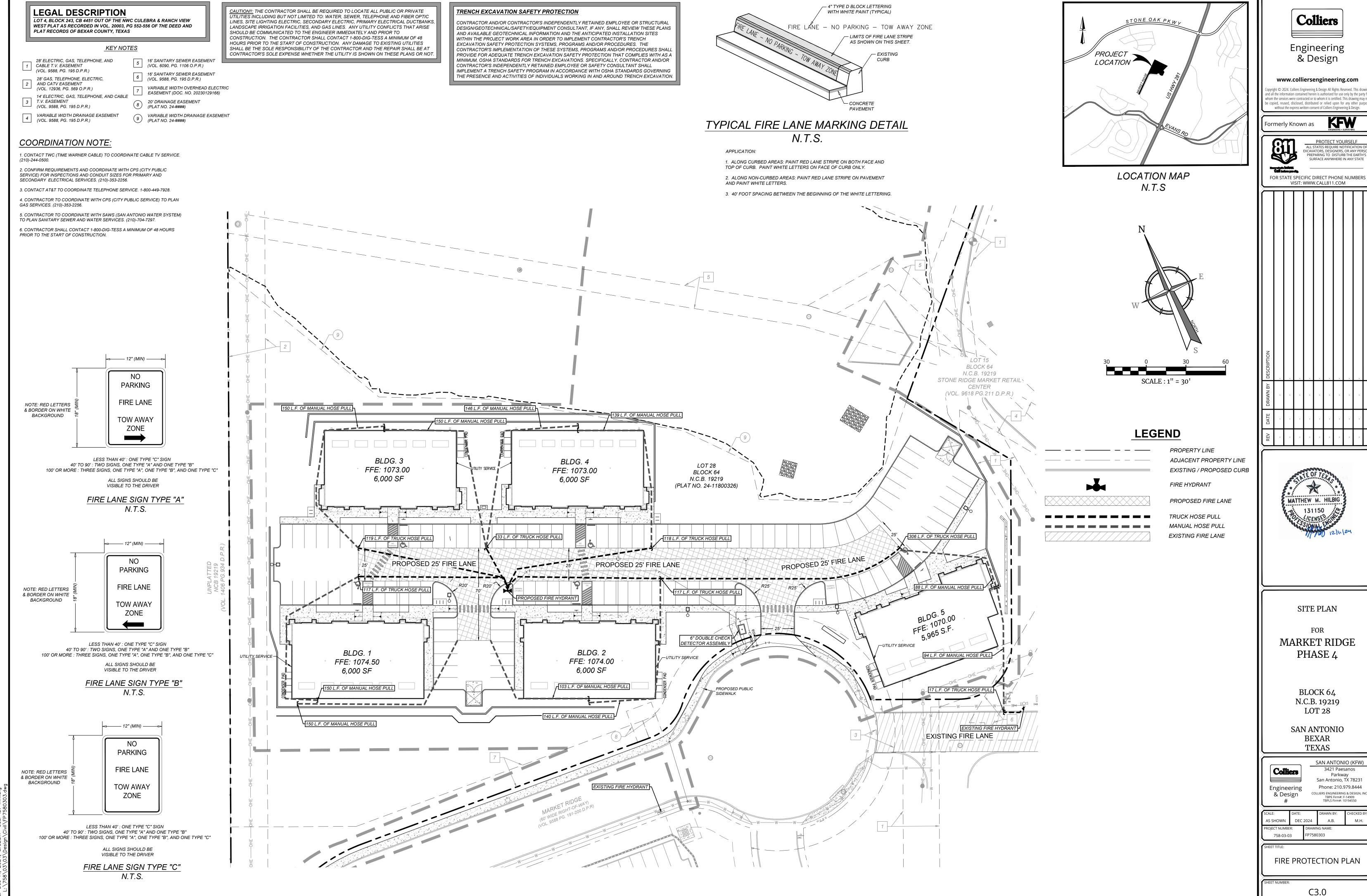
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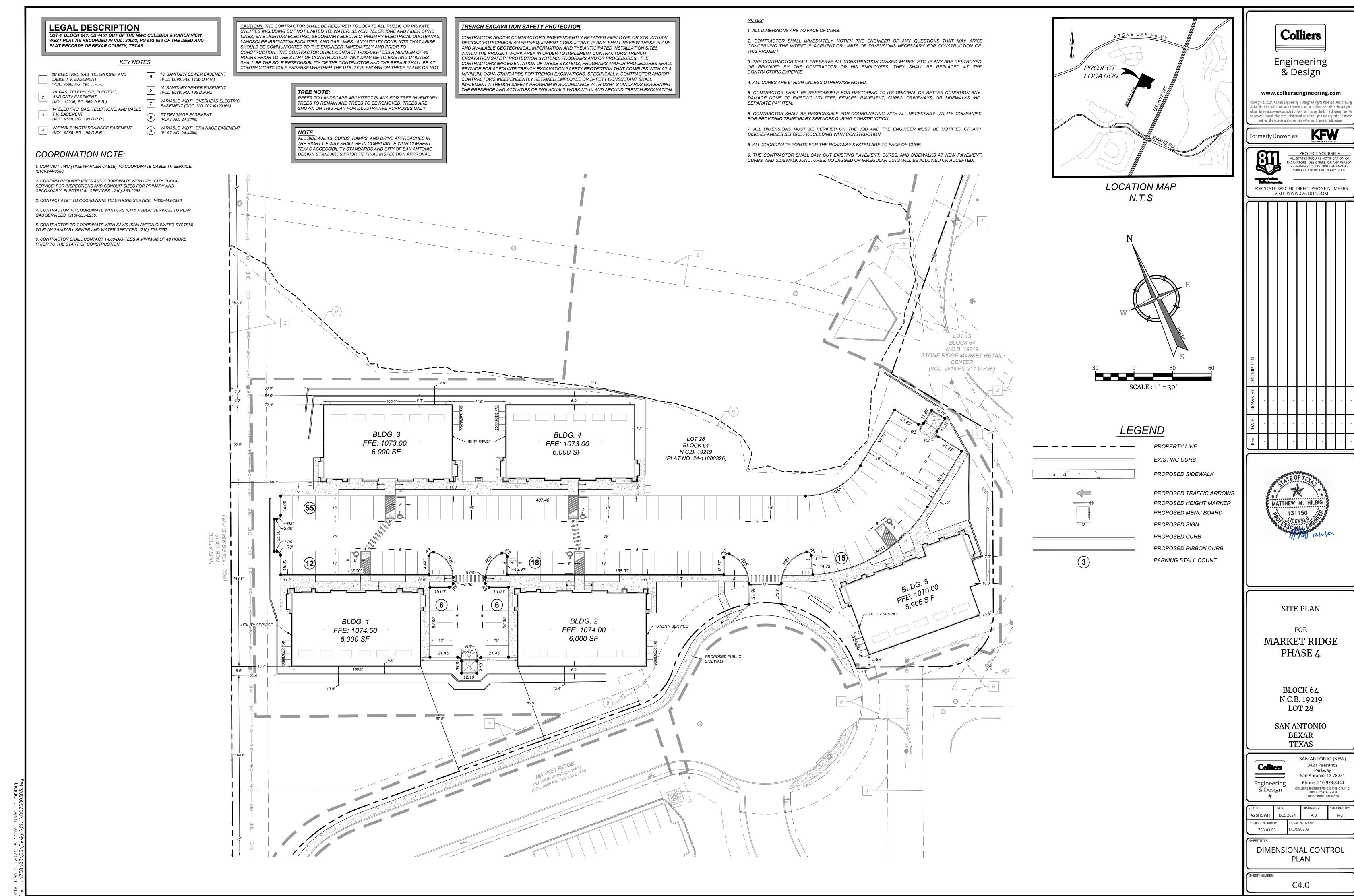
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JTILITY GENERAL NOTES

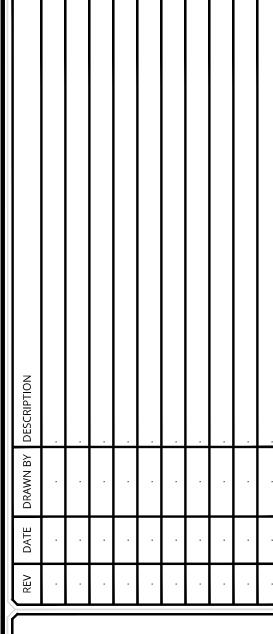
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SITE PLAN

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219 LOT 28

SAN ANTONIO

BEXAR **TEXAS**

SAN ANTONIO (KFW) Engineering & Design

3421 Paesanos San Antonio, TX 78231 Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550

A.B. IAN 2025 U7580303

OVERALL UTILITY PLAN

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

AS SHOWN

758-03-03

LEGAL DESCRIPTION LOT 4, BLOCK 243, CB 4451 OUT OF THE NWC CULEBRA & RANCH VIEW WEST PLAT AS RECORDED IN VOL. 20003, PG 552-556 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS KEY NOTES 28' ELECTRIC, GAS, TELEPHONE, AND 16' SANITARY SEWER EASEMENT (VOL. 6090, PG. 1106 O.P.R.) CABLE T.V. EASEMENT (VOL. 9588, PG. 195 D.P.R.) 16' SANITARY SEWER EASEMENT 28' GAS, TELEPHONE, ELECTRIC. (VOL. 9588. PG. 195 D.P.R.) 2 | AND CAIV EASEMILIS. (VOL. 12936, PG. 569 O.P.R.) AND CATV EASEMENT VARIABLE WIDTH OVERHEAD ELECTRIC EASEMENT (DOC. NO. 20230129166) 14' ELECTRIC, GAS, TELEPHONE, AND CABLE 20' DRAINAGE EASEMENT T.V. EASEMENT (8) (PLAT NO. 24-####) (VOL. 9588, PG. 195 D.P.R.) VARIABLE WIDTH DRAINAGE EASEMENT VARIABLE WIDTH DRAINAGE EASEMENT 4 (VOL. 9588, PG. 195 D.P.R.) (PLAT NO. 24-####) **COORDINATION NOTE:** 1. CONTACT TWC (TIME WARNER CABLE) TO COORDINATE CABLE TV SERVICE. 2. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS (CITY PUBLIC SERVICE) FOR INSPECTIONS AND CONDUIT SIZES FOR PRIMARY AND SECONDARY ELECTRICAL SERVICES. (210)-353-2256. 3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS (CITY PUBLIC SERVICE) TO PLAN GAS SERVICES. (210)-353-2256. 5. CONTRACTOR TO COORDINATE WITH SAWS (SAN ANTONIO WATER SYSTEM) TO PLAN SANITARY SEWER AND WATER SERVICES. (210)-704-7297. 6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. 1. THE CONTRACTOR SHALL SAW-CUT EXISTING PAVEMENT, CURBS, AND SIDEWALKS AT NEW JUNCTURES. NO JAGGED OR IRREGULAR CUTS WILL BE ALLOWED OR ACCEPTED. 2. ALL DIMENSIONS ARE TO FACE OF CURB OR STRIPING. 3. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THIS PROJECT. 4. ALL DIMENSIONS MUST BE VERIFIED ON THE JOB AND THE ENGINEER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. 5. ALL SIDEWALKS, CURBS, RAMPS, AND DRIVE APPROACHES IN THE RIGHT OF WAY SHALL BE IN COMPLIANCE WITH CURRENT TEXAS ACCESSIBILITY STANDARDS AND CITY OF SCHERTZ DESIGN STANDARDS PRIOR TO FINAL INSPECTION APPROVAL. CONTRACTOR TO COORDINATE WITH CITY TO CONFIRM EXTENT OF EXISTING SIDEWALK IN RIGHT OF WAY THAT WILL REQUIRE REMOVAL AND REPLACEMENT. **GRADING NOTES:** 1. ALL GRADES AND CONTOURS SHOWN ARE FINAL, TOP OF FINISHED SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL SUBTRACT THICKNESS OF PAVEMENT, BASE, TOP SOIL, SOD, ETC. TO ACHIEVE SUBGRADE ELEVATION. 2. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS, CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING 3. NO ABRUPT CHANGE OF GRADE SHALL OCCUR IN THE ROADWAYS, PARKING AREAS, OR . CONTRACTOR SHALL CONSTRUCT TO OBTAIN GRADES SHOWN HEREON ± ONE-TENTI (0.10) FOOT. 5. ALL DISTURBED AREAS NOT COVERED BY IMPERVIOUS COVER SHALL BE REVEGETATED/STABILIZED. 6. UTILITIES SHOWN ON THE PLANS ARE FROM THE BEST INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE. 7. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PLANS SHALL CONFORM TO ALL APPLICABLE BEXAR COUNTY PUBLIC WORKS STANDARD SPECIFICATIONS, CITY OF SCHERTZ STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION), SCHERTZ WATER SYSTEMS STANDARD SPECIFICATIONS, AND CPS ENERGY SERVICE STANDARDS (LATEST EDITION). 8. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL OR BETTER CONDITION ANY DAMAGES DONE TO EXISTING BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, SIDEWALKS, OR DRIVEWAYS (NO SEPARATE PAY ITEM). 9. DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, CITY PUBLIC SERVICE (CPS) MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA. 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL NECESSARY UTILITY COMPANIES FOR PROVIDING TEMPORARY UTILITY SERVICES DURING

CONSTRUCTION. THE CONTRACTOR SHALL PAY FOR ALL TEMPORARY UTILITY SERVICES. 11. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS, AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS

13. ALL EXCAVATION IS UNCLASSIFIED.

14. ALL EXCAVATIONS AND BACKFILLING SHALL BE AS PER GEOTECHNICAL SPECIFICATIONS. ALL BACKFILL MUST BE IN COMPACTED 12 - INCH LIFTS MAXIMUM, AND NO WATER JETTING

15. ALL CURBS ARE 6 INCHES HIGH UNLESS OTHERWISE SPECIFIED.

16. SEE CIVIL DETAIL SHEETS FOR APPLICABLE DETAILS.

SIDEWALKS SHALL NOT EXCEED 5% NO EXCEPTIONS.

17. ALL CONSTRUCTION AREAS WITHIN THE SITE SHALL BE STRIPPED OF ALL VEGETATION AND LOOSE TOPSOIL. ANY POCKETS OF DEBRIS ENCOUNTERED SHOULD ALSO BE

18. REFER TO GEOTECHNICAL REPORT FOR SUBSURFACE INFORMATION AND CONSTRUCTION GUIDELINES.

19. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 2% UNLESS OTHERWISE SHOWN.

20. ANY TREE PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF SCHERTZ

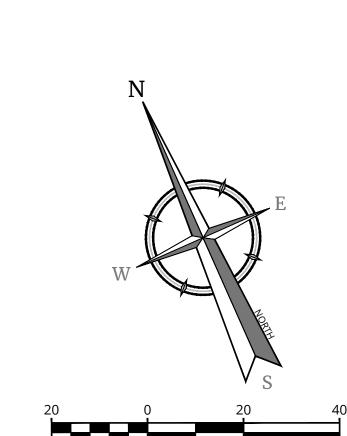
BUILDINGS SHALL NOT EXCEED 2%. SLOPE ALONG THE LENGTH OF TRAVEL OF SAID

SPECIFICATIONS. 21. MAXIMUM SLOPE ON HANDICAP ACCESSIBLE PARKING SPACES IS 2% IN ANY DIRECTION. HANDICAP ACCESSIBLE CROSS SLOPES ON SIDEWALKS AND FLATWORK AROUND

<u>CAUTION!!:</u> THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT

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TONE OAK PKW



EXISTING / PROPOSED CURB EXISTING CONTOURS PROPOSED CONTOURS

> PROPOSED SPOT ELEVATION EXISTING SPOT ELEVATION

> > **PROPOSED**

BUILDING

MATTHEW M. HILBIG 131150

SITE PLAN

FOR MARKET RIDGE PHASE 4

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BLOCK 64 N.C.B. 19219 LOT 28

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3421 Paesanos

TBPE Firm#: F-14909 TBPLS Firm#: 10194550

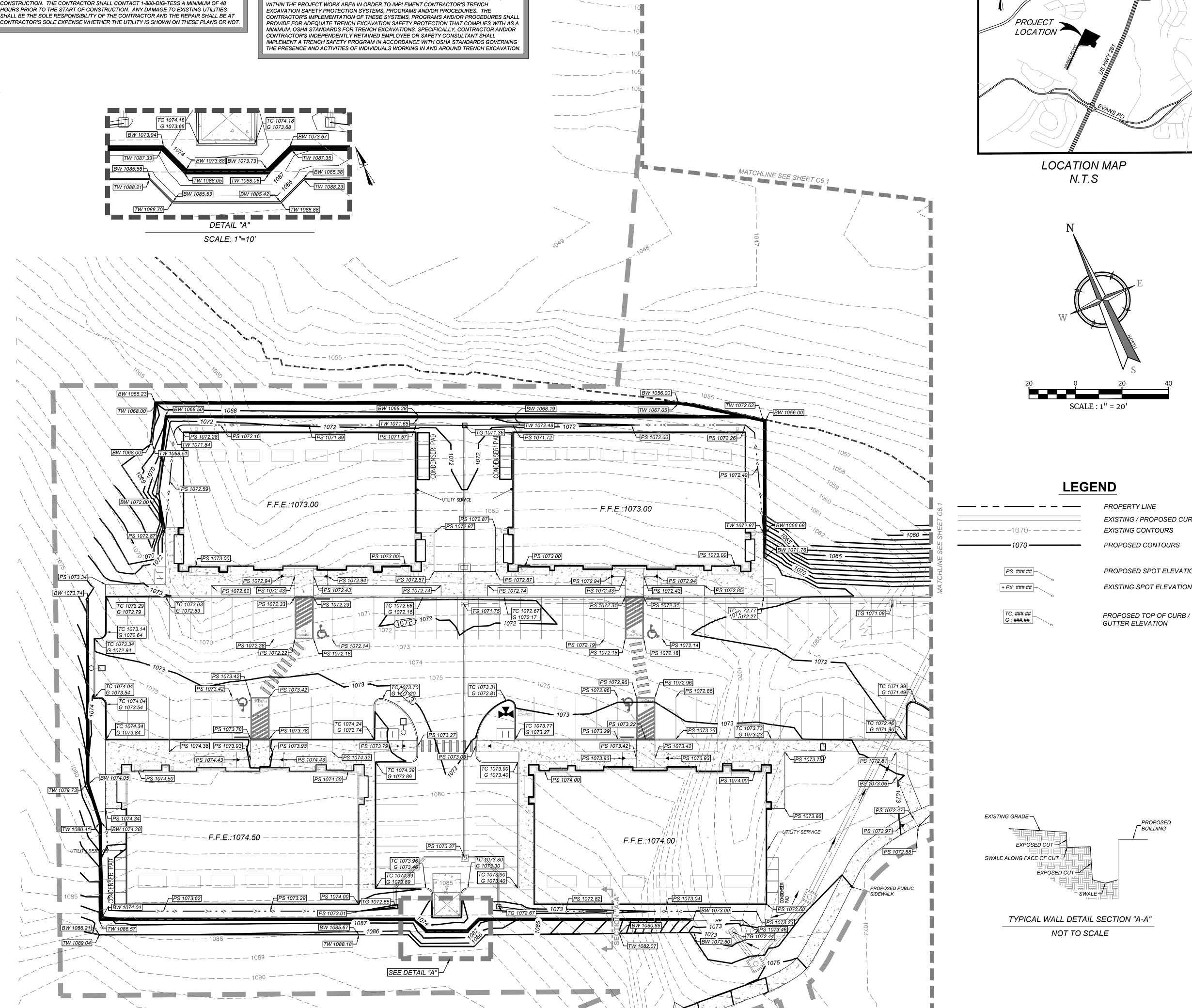
A.B.

SAN ANTONIO (KFW) San Antonio, TX 78231 Phone: 210.979.8444 Engineering & Design

AS SHOWN

R7580303 758-03-03

GRADING PLAN (1 OF 2)





Date: Dec 11 2024 8:33am User ID: mhilhia

LEGAL DESCRIPTION

LOT 4, BLOCK 243, CB 4451 OUT OF THE NWC CULEBRA & RANCH VIEW WEST PLAT AS RECORDED IN VOL. 20003, PG 552-556 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS

KEY NOTES

- 28' ELECTRIC, GAS, TELEPHONE, AND CABLE T.V. EASEMENT (VOL. 9588, PG. 195 D.P.R.)
- 28' GAS, TELEPHONE, ELECTRIC. 2 | AND CATV EASEMENT (VOL. 12936, PG. 569 O.P.R.) AND CATV EASEMENT 14' ELECTRIC, GAS, TELEPHONE, AND CABLE
- T.V. EASEMENT (VOL. 9588, PG. 195 D.P.R.)
- 4 VARIABLE WIDTH DRAINAGE (VOL. 9588, PG. 195 D.P.R.)
- VARIABLE WIDTH DRAINAGE EASEMENT
- 16' SANITARY SEWER EASEMENT (VOL. 6090, PG. 1106 O.P.R.) 16' SANITARY SEWER EASEMENT
 - (VOL. 9588. PG. 195 D.P.R.) VARIABLE WIDTH OVERHEAD ELECTRIC (210)-244-0500. EASEMENT (DOC. NO. 20230129166)

VARIABLE WIDTH DRAINAGE EASEMENT

(PLAT NO. 24-####)

- 20' DRAINAGE EASEMENT (8) (PLAT NO. 24-####)
 - GAS SERVICES. (210)-353-2256.
 - 5. CONTRACTOR TO COORDINATE WITH SAWS (SAN ANTONIO WATER SYSTEM) TO PLAN SANITARY SEWER AND WATER SERVICES. (210)-704-7297.

PRIOR TO THE START OF CONSTRUCTION.

COORDINATION NOTE:

1. CONTACT TWC (TIME WARNER CABLE) TO COORDINATE CABLE TV SERVICE.

SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO

<u>CAUTION!!:</u> THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC

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LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE

CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48

HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES

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2. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS (CITY PUBLIC SERVICE) FOR INSPECTIONS AND CONDUIT SIZES FOR PRIMARY AND SECONDARY ELECTRICAL SERVICES. (210)-353-2256.

3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS (CITY PUBLIC SERVICE) TO PLAN

6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS

STORM DRAIN GENERAL NOTES:

1. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH FINAL PLAN OR RECORD MEASUREMENTS, LOCATIONS, TOPS AND LENGTH OF SERVICE CONNECTIONS AND UNDERGROUND PIPING UPON COMPLETION OF CONSTRUCTION.

2. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO THE

3. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT HIS EXPENSE.

4. THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE, AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHALL BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE

5. ALL ONSITE STORM DRAIN PIPES WILL BE PRIVATE AND NOT DEDICATED TO THE CITY OF SAN ANTONIO.

6. ALL STORM DRAIN PIPE SHALL BE HDPE N-12 PROLINK ULTRA HDPE PIPE (UNLESS NOTED OTHERWISE) WITH BELLED ENDS AND WITH RUBBER GASKETS. NO SUBSTITUTIONS SHALL BE ALLOWED UNLESS AUTHORIZED BY OWNER.

7. ALL LENGTHS OF PIPE ARE TO INSIDE FACE OF STRUCTURES.

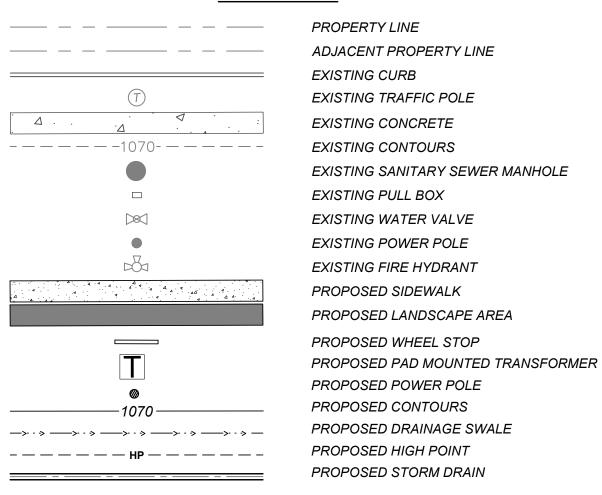
8. CONTRACTOR SHALL ENSURE PROPER SIZE OF JUNCTION BOXES NEEDED WHERE INDICATED ON PLAN. CONTRACTOR SHALL CONNECT STORM DRAIN PIPE TO JUNCTION BOXES PER MANUFACTURERS SPECIFICATIONS. SIZE OF GRATE INLETS ARE REFERENCED FOR PROPER SIZE OF GRATES AND DO NOT REFLECT SIZE OF PROPOSED JUNCTION BOXES ASSOCIATED WITH GRATE COVERS.

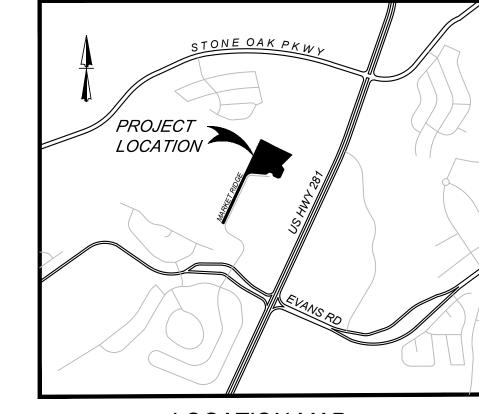
NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PIPE, MANHOLES, JUNCTION BOXES, ADA ACCESSIBLE TRENCH DRAINS, ETC. TO ENGINEER PRIOR TO ORDERING MATERIALS FOR CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

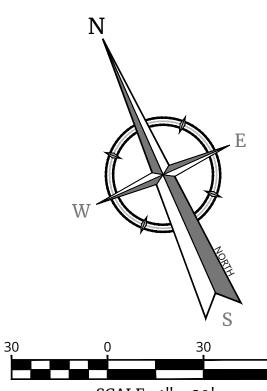
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

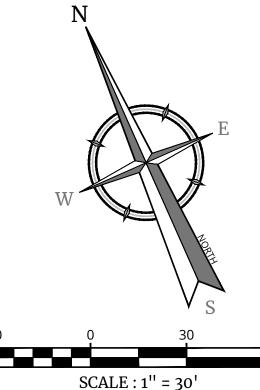
LEGEND

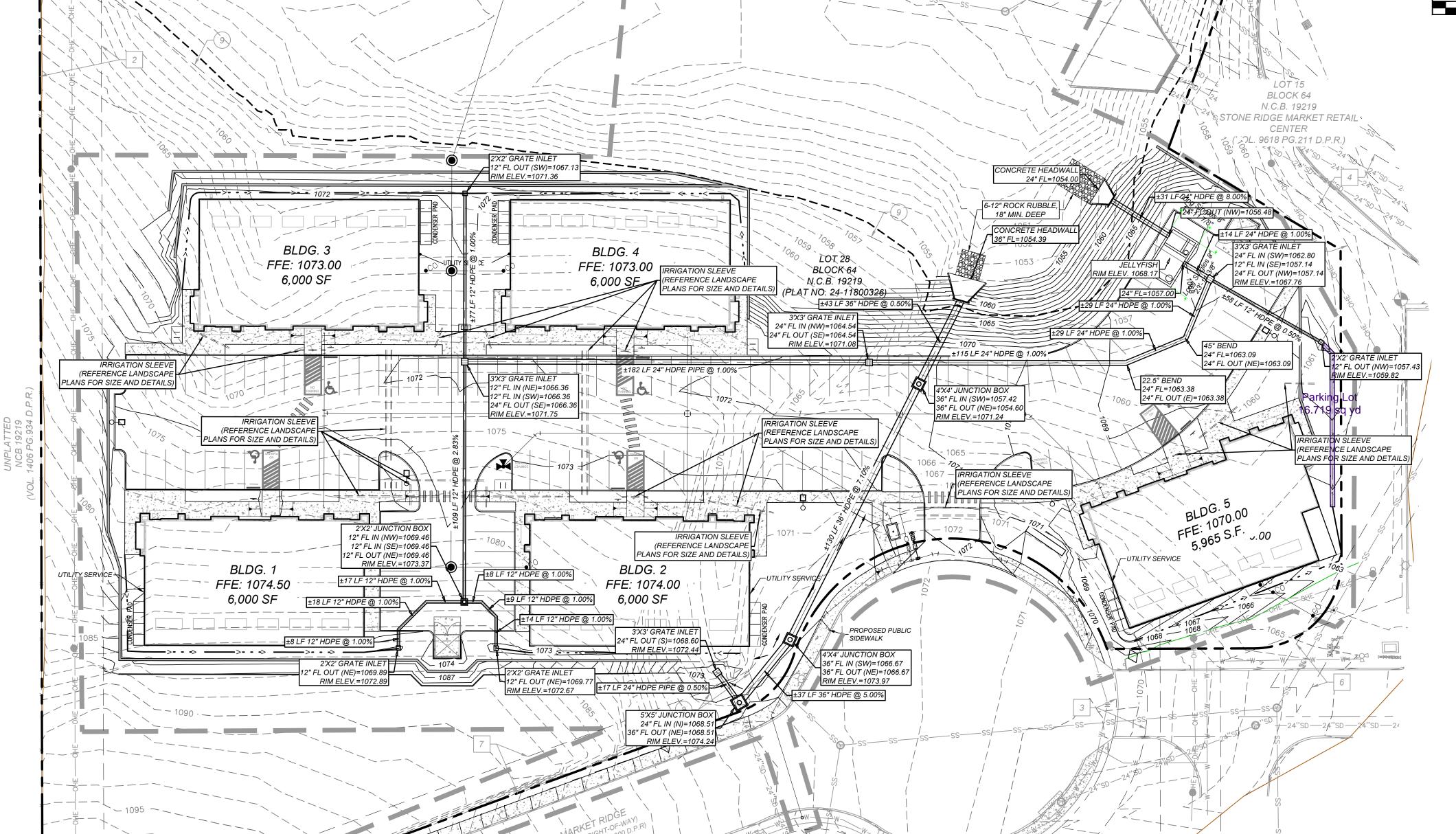




LOCATION MAP N.T.S









MATTHEW M. HILBIG

131150

Colliers

Engineering

& Design

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS

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PREPARING TO DISTURB THE EARTH'S SURFACE ANY WHERE IN ANY STATE

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219 LOT 28

SAN ANTONIO BEXAR **TEXAS**

SAN ANTONIO (KFW) Engineering & Design

AS SHOWN

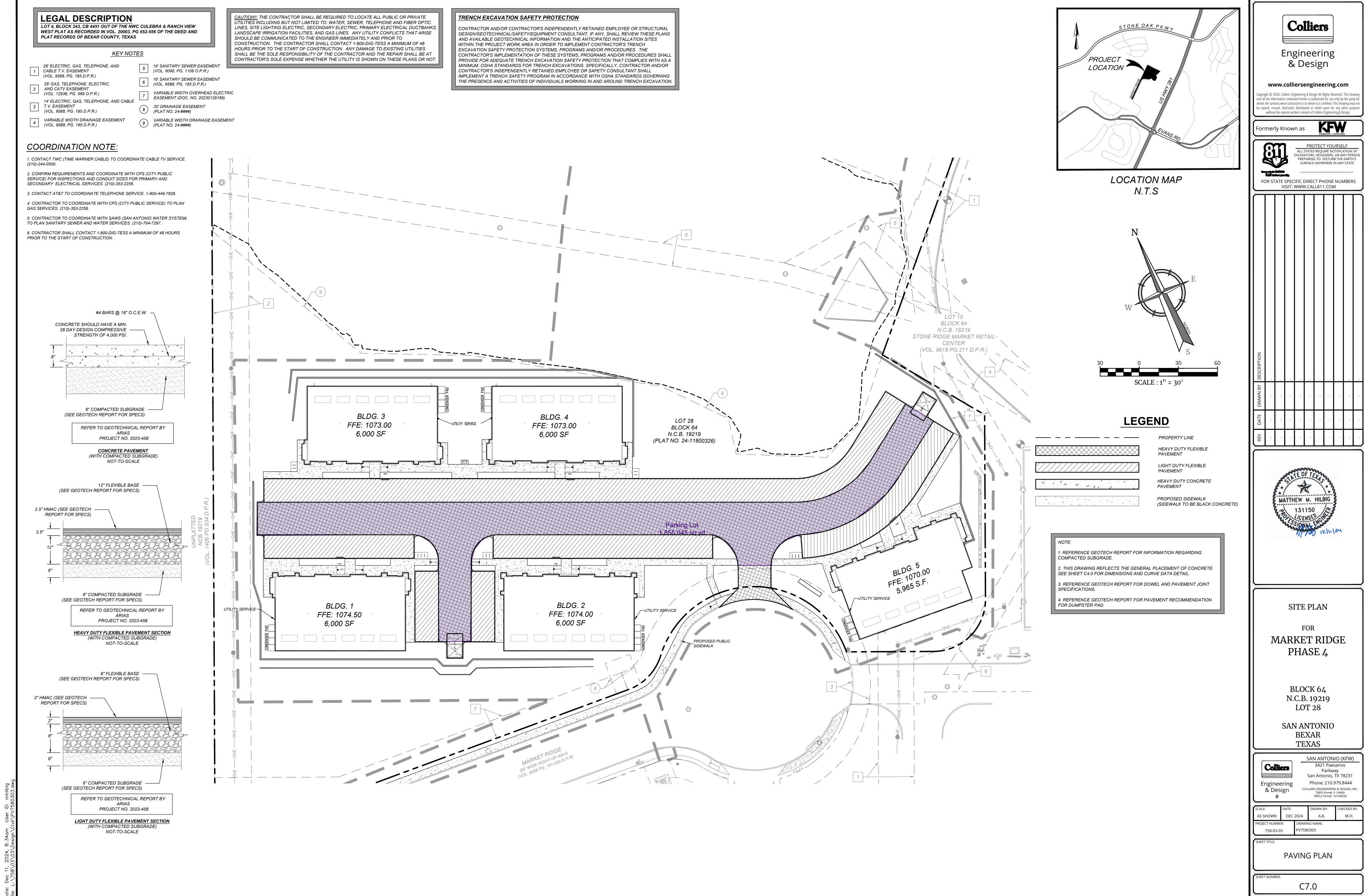
3421 Paesanos San Antonio, TX 78231 Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550

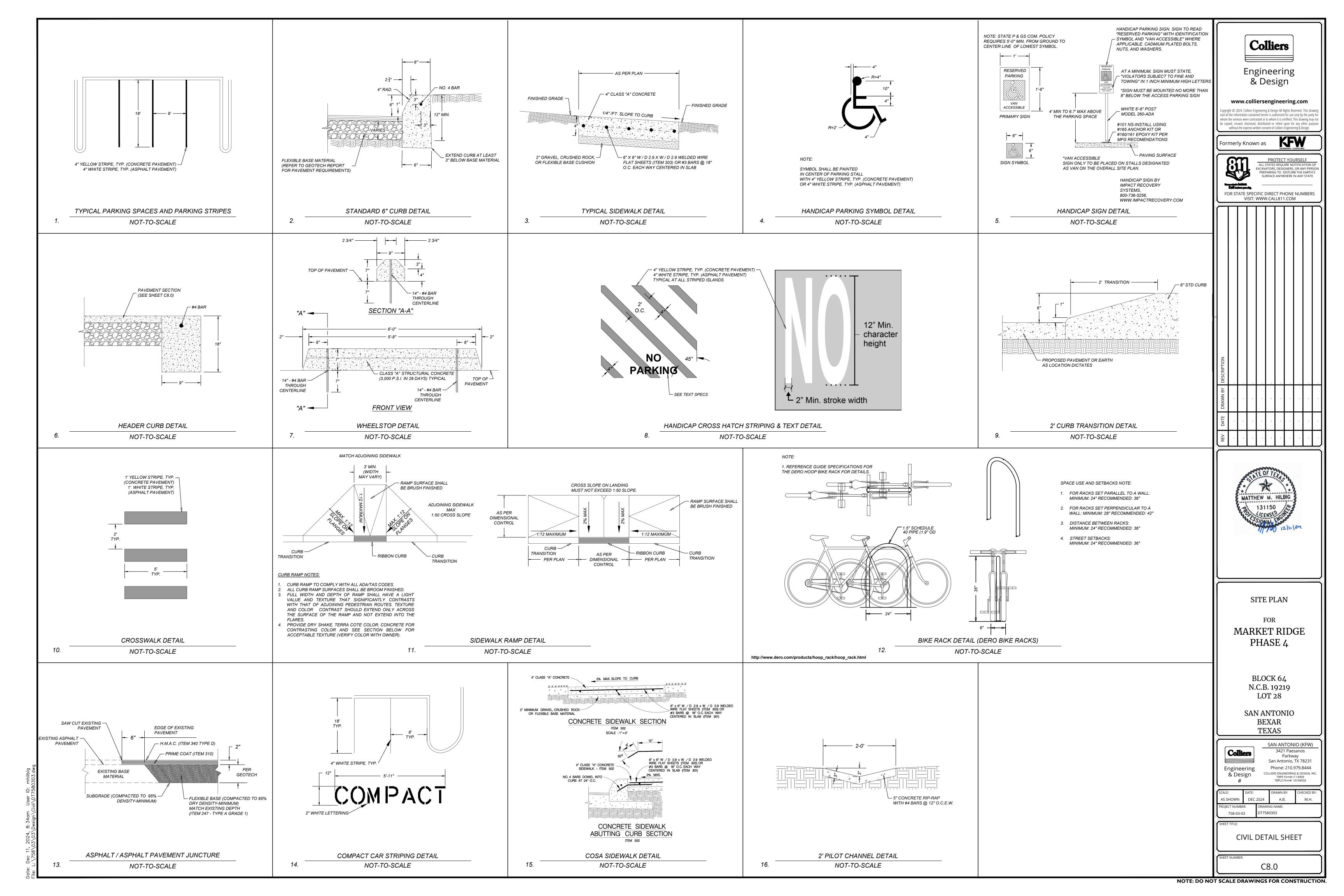
A.B.

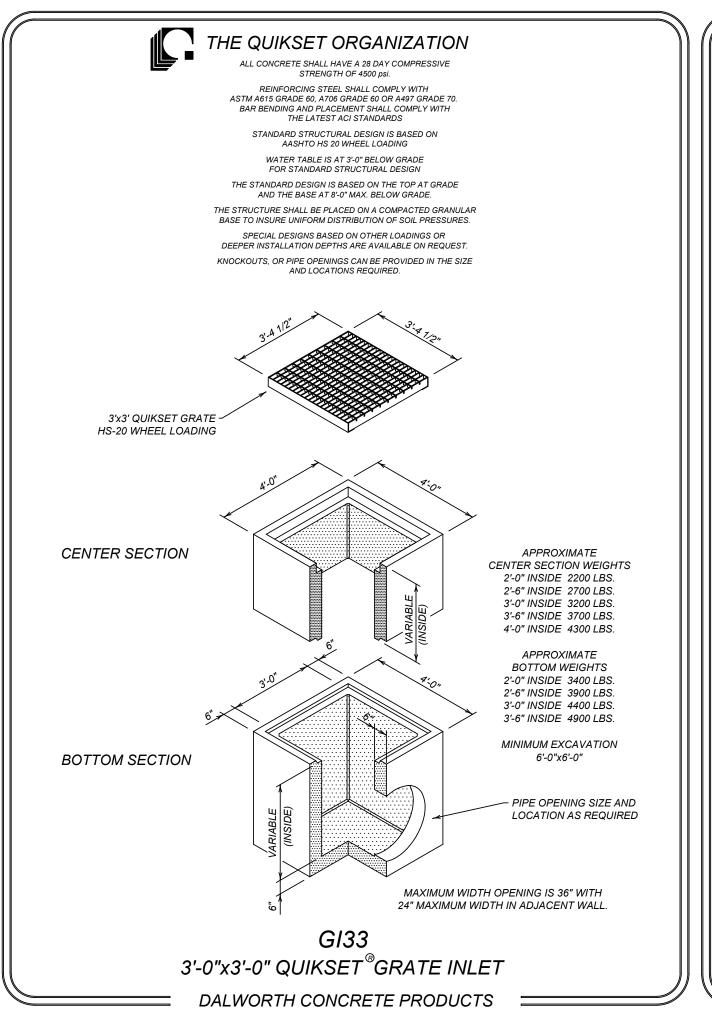
07580303 758-03-03

STORM DRAIN PLAN

C6.2

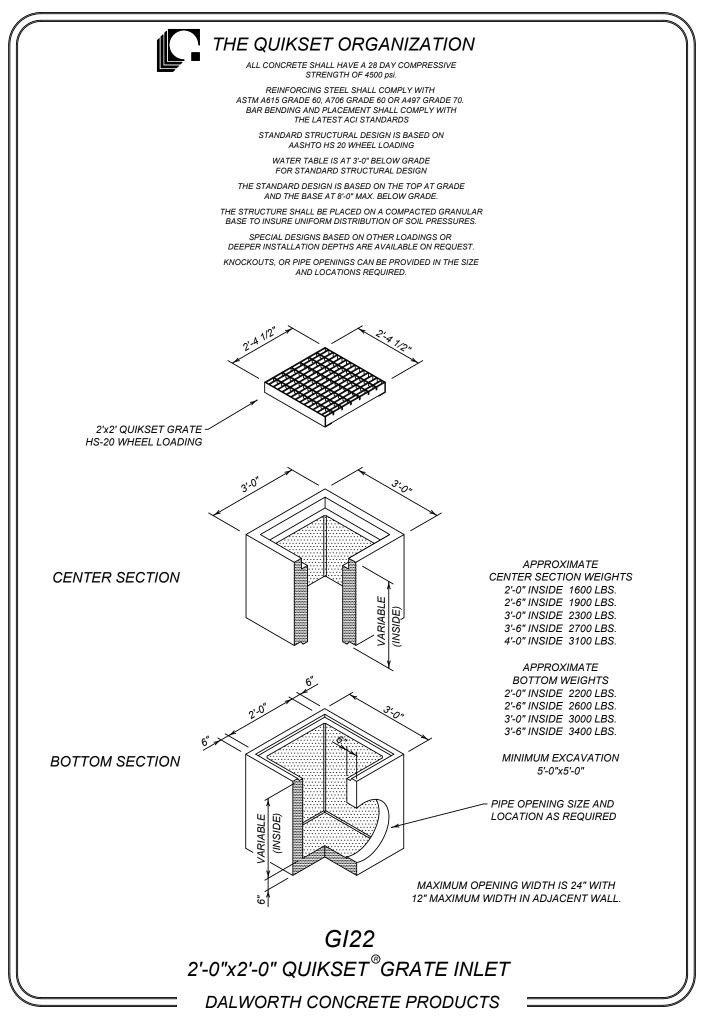




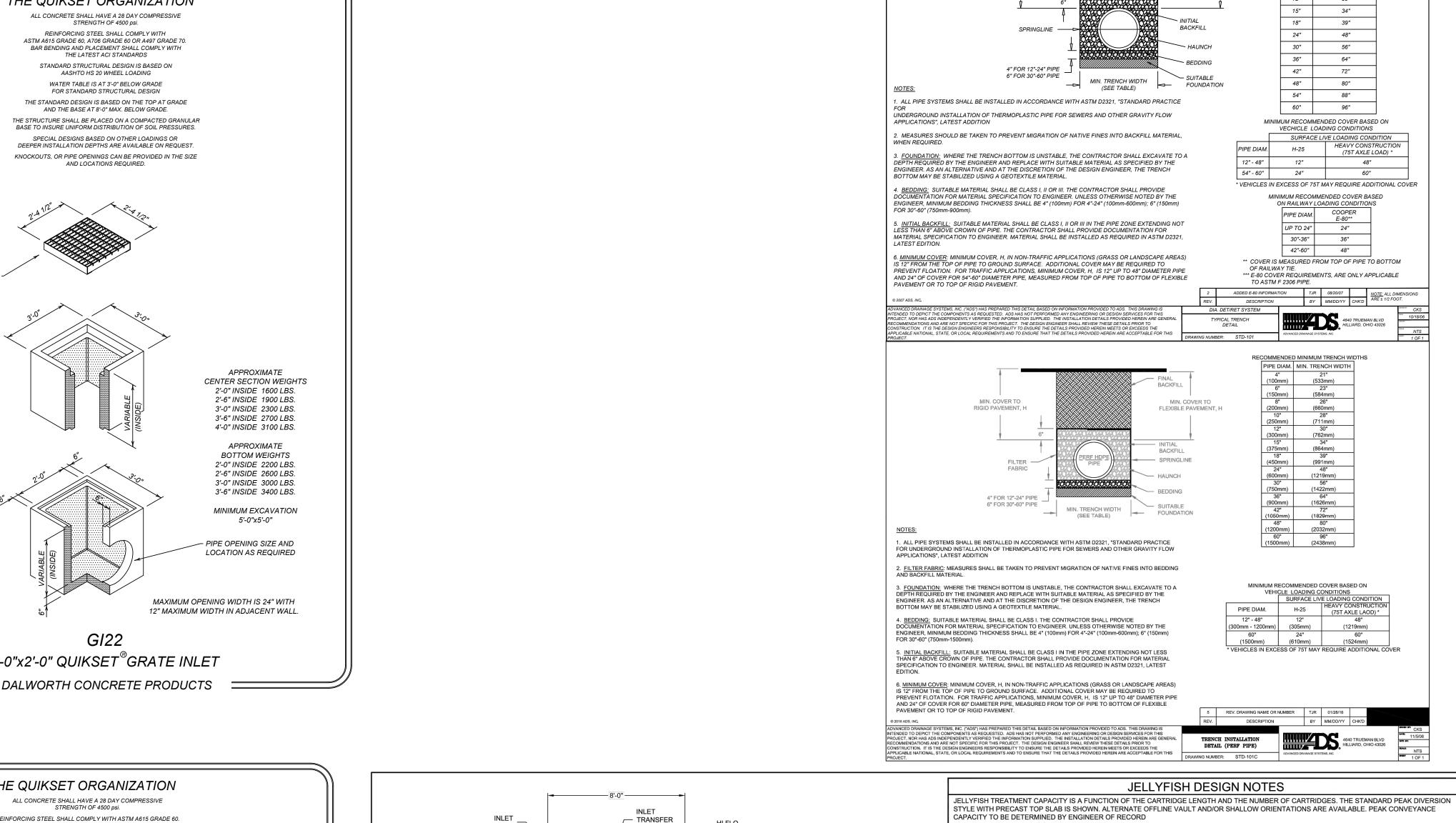


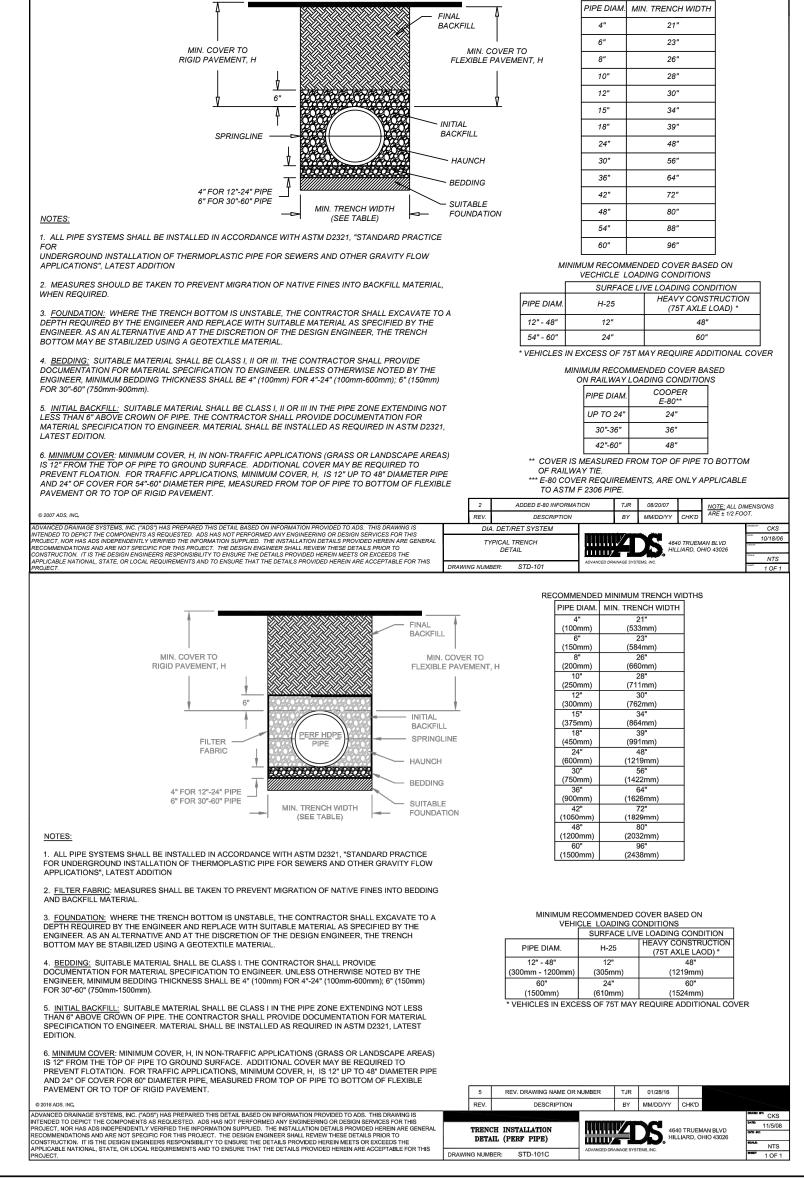
Copyright 1990 Dalworth Concrete Products, Inc. Printed in U.S.A.

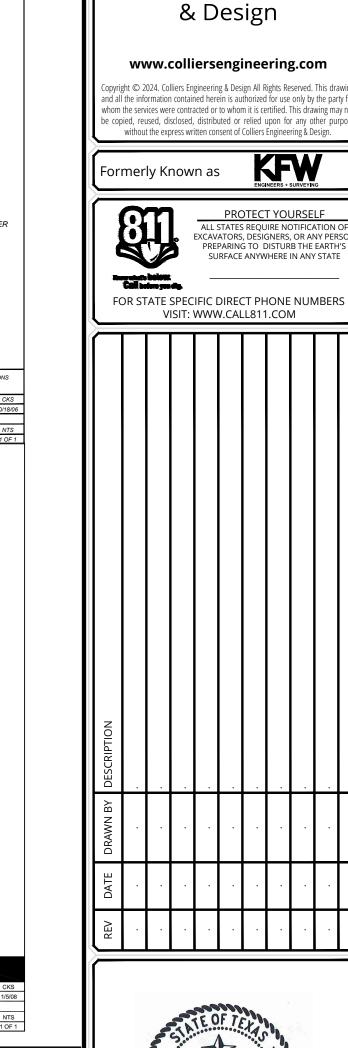
DALWORTH CONCRETE PRODUCTS



DALWORTH CONCRETE PRODUCTS







Colliers

Engineering



SITE PLAN

FOR

MARKET RIDGE

PHASE 4



0.178 / 0.089

FRAME AND COVER (DIAMETER VARIES)

SITE SPECIFIC DATA REQUIREMENTS							
STRUCTURE	: ID				'	WQU #1	
WATER QUA	LITY FLO	N RATE (cfs)			2.51	
PEAK FLOW	RATE (cfs	;)				45.94	
RETURN PERIOD OF PEAK FLOW (yrs)			T	25			
# OF CARTRIDGES REQUIRED (HF / DD) 13 / 3				13 / 3			
CARTRIDGE LENGTH						54"	
PIPE DATA:	I.E.	MAT'L	DIA	SLOP	E %	HGL	
INLET #1	1057.00'	HDPE	24"	*		*	
INLET #2	*	*	*	*		*	
OUTLET	1056.48'	HDPE	24"	*		*	
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.							
RIM ELEVAT	RIM ELEVATION 1068.17'					1068.17'	
41151 51 654		10=				=1011=	
ANTI-FLOTA	ANTI-FLOTATION BALLAST						
ANTI-FLOTATION BALLAST		WIDTH		Н	HEIGHT *		

NOTES/SPECIAL REQUIREMENTS:

BLOCK 64 N.C.B. 19219 LOT 28

> SAN ANTONIO BEXAR **TEXAS**

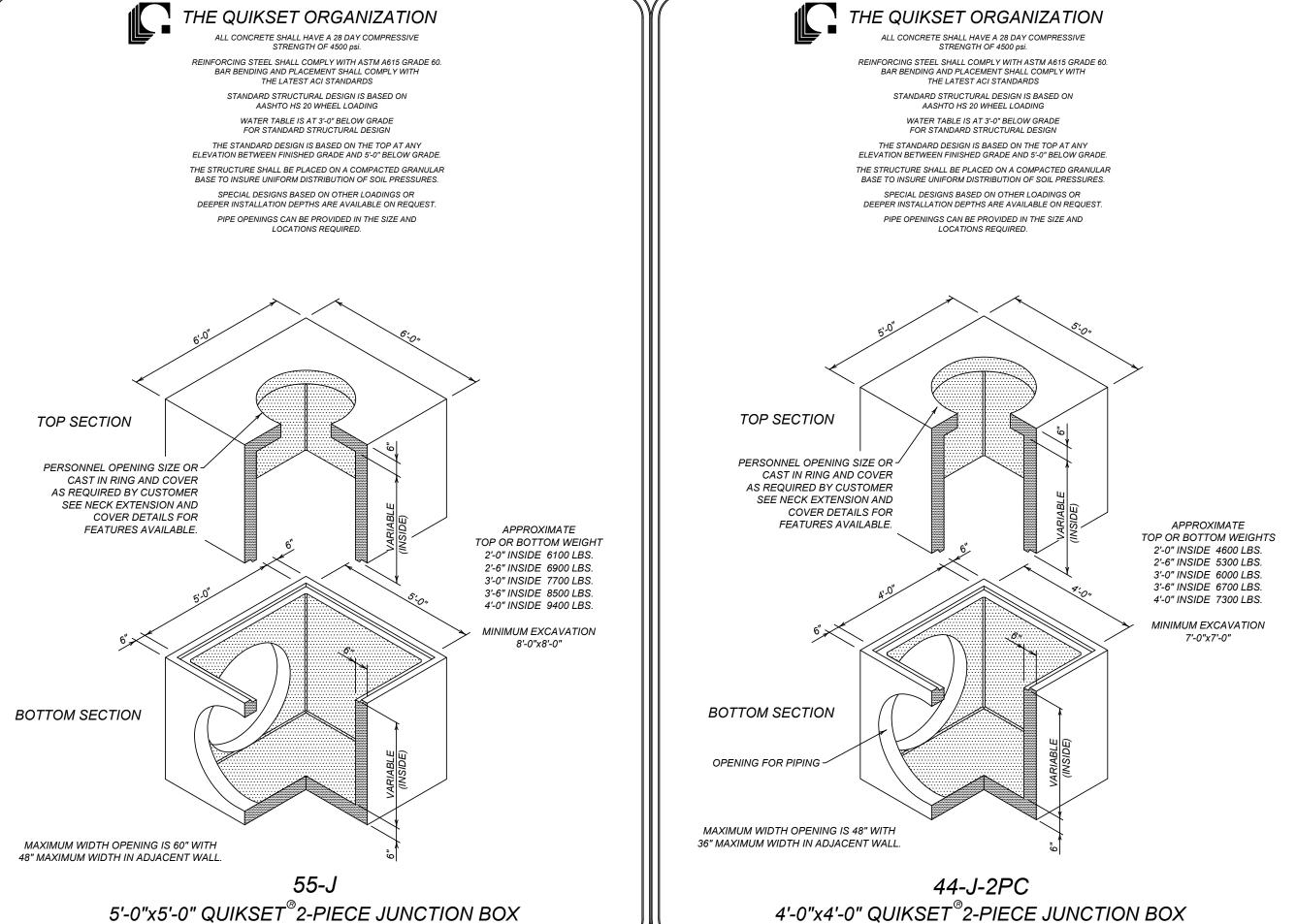
SAN ANTONIO (KFW) Engineering & Design

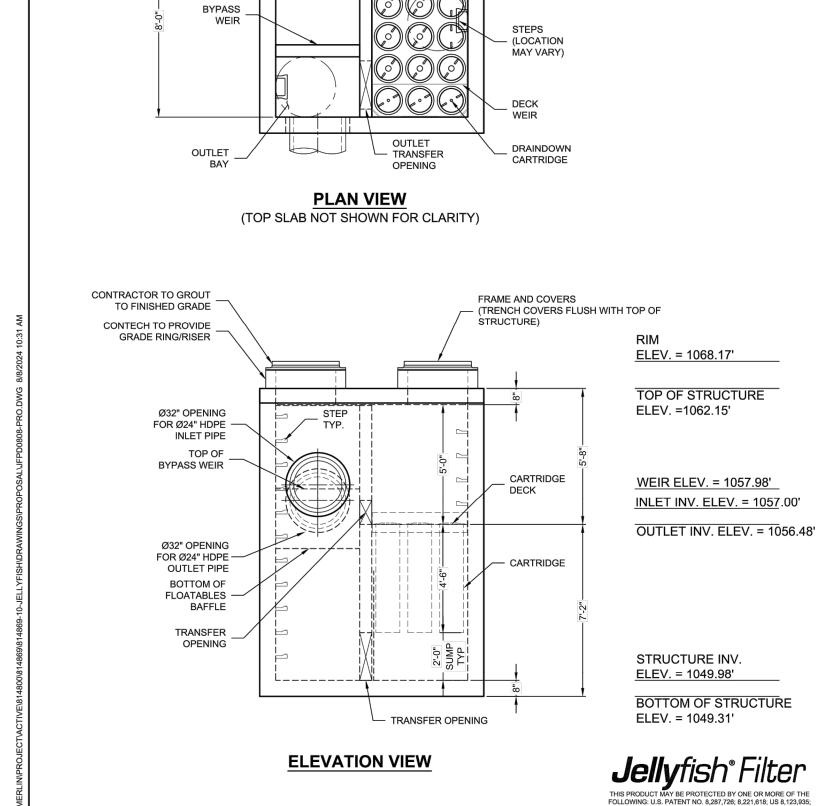
3421 Paesanos San Antonio, TX 78231 Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550

A.B.

AS SHOWN TDT7580303 758-03-03

STORM DETAIL SHEET





OPENING

FLOATABLES

BAFFLE

PER ENGINEER OF RECORD ENERAL NOTES:

CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE. 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com 3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.

4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO. 5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD. 6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION. 7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR 8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD. INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED

CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.

C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH

D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION. www.ContechES.com

9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069

APPROVED WATERSTOP OR FLEXIBLE BOOT).

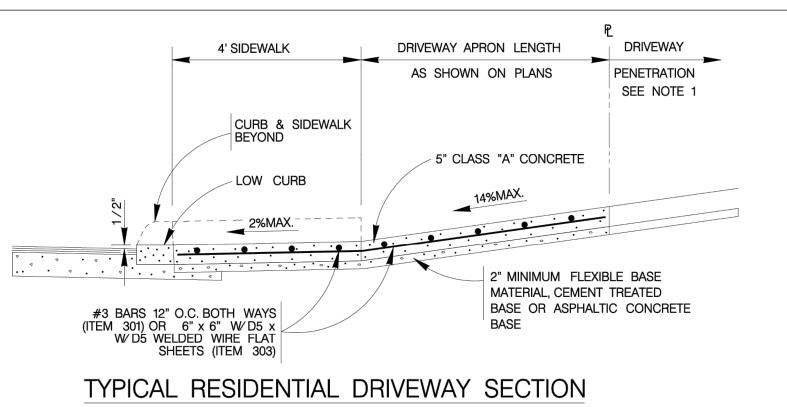
JTLET INVERT TO STRUCTURE INVERT (A

MAX. TREATMENT (CF:

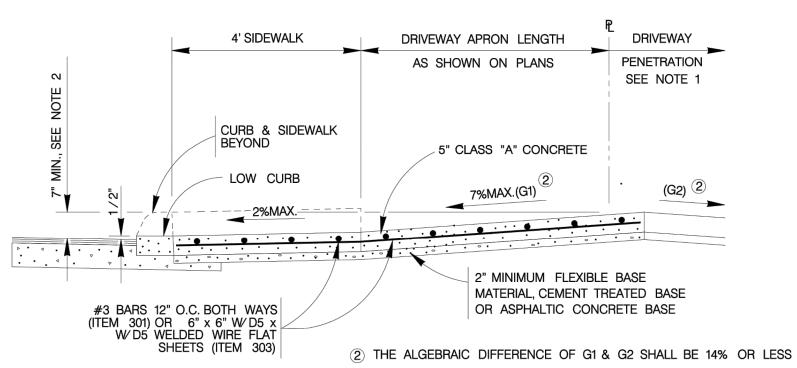
DECK TO INSIDE TOP (MIN) (B)

LOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)

JELLYFISH JFPD0808 - 814869 - 010 MARKET RIDGE PHASE 4 **JELLYFISH** SITE DESIGNATION: SAN ANTONIO, TX

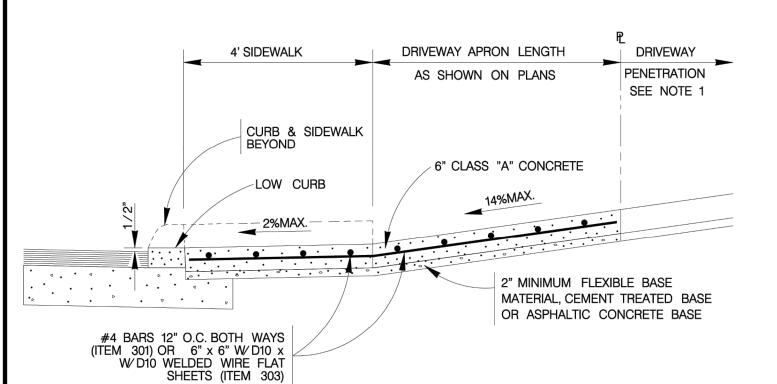


WITH SIDEWALK ABUTTING CURB ITEM 503.1



TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS ABUTTING CURB ITEM 503.1



TYPICAL COMMERCIAL DRIVEWAY SECTION

WITH SIDEWALK ABUTTING CURB ITEM 503.2

CONCRETE DRIVEWAY NOTES

I. DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY THAT MAY BE NECESSARY TO RECONSTRUCT WITHIN PRIVATE PROPERTY TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE. THIS PORTION OF THE DRIVEWAY SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS AS MAY APPLY: A.) CONCRETE DRIVEWAY PAID FOR UNDER ITEM NO. 503.1 OR 503.2.

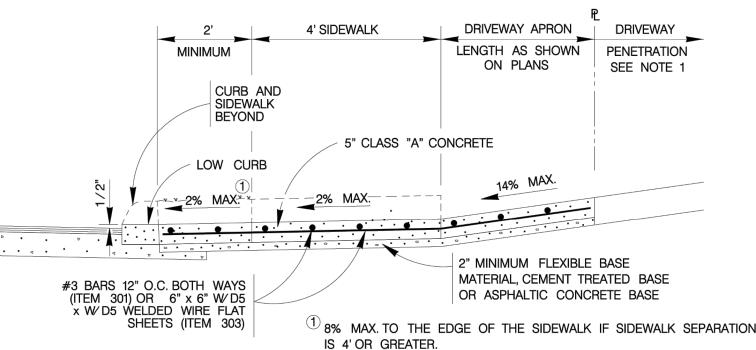
B.) ASPHALTIC CONCRETE DRIVEWAY PAID FOR UNDER ITEM NO. 503.4 AND SHALL INCLUDE A MINIMUM OF 1" ASPHALT TYPE 'D' & 6" FLEXIBLE BASE C.) GRAVEL DRIVEWAY PAID FOR UNDER ITEM NO. 503.5 AND SHALL INCLUDE A MINIMUM OF 6" FLEXIBLE BASE

2. 7" MINIMUM HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE. IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.

3. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

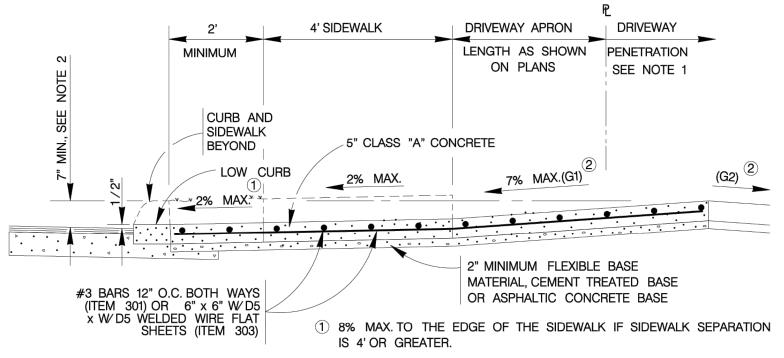
TYPE	MINIMUM	MAXIMUI
RESIDENTIAL	10'	20'
COMMERCIAL - ONE WAY	12'	20'
COMMERCIAL - TWO WAY	24'	30'

- 4. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 2' FROM THE BACK OF CURB.
- 5. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND SEPARATED A MINIMUM OF 2' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6'WHEN LOCATED AT THE BACK OF CURB.
- 6. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
- 7. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3 /8" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.
- 8. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- 9. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



TYPICAL RESIDENTIAL DRIVEWAY SECTION

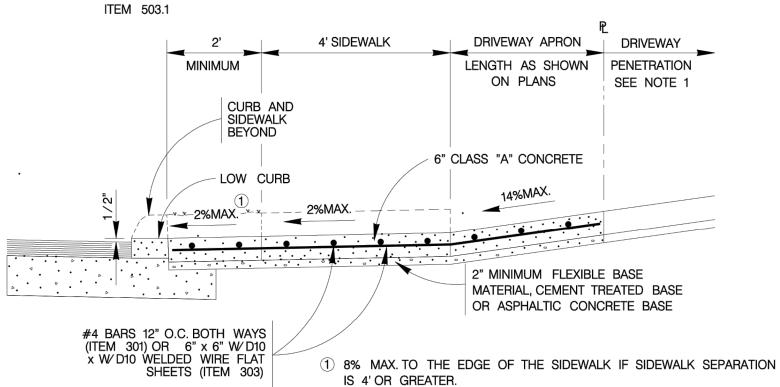
WITH SIDEWALK SEPARATED FROM CURB ITEM 503.1



(2) THE ALGEBRAIC DIFFERENCE OF G1 & G2 SHALL BE 14% OR LESS

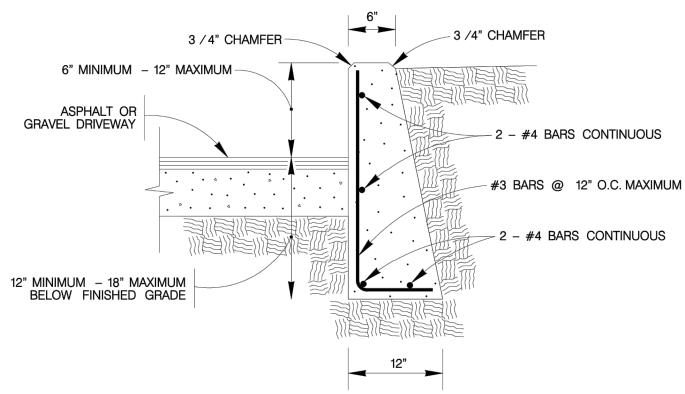
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS SEPARATED FROM CURB



TYPICAL COMMERCIAL DRIVEWAY SECTION

WITH SIDEWALK SEPARATED FROM CURB ITEM 503.2



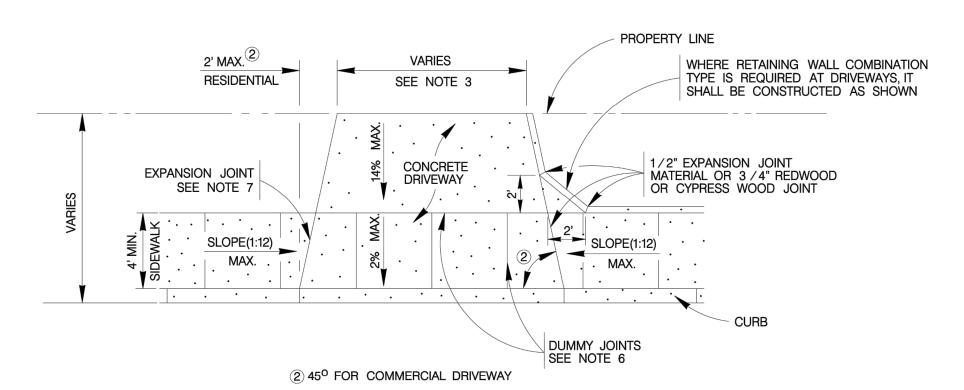
ON COMPACTED SUBGRADE

SLOPE (1:12) VARIES VARIES SLOPE (1:12) **VARIES** SEE NOTE 3 MAXIMUM MAXIMUM

> 2 RESIDENTIAL: 2' MAXIMUM; COMMERCIAL: SEE PLAN VIEW

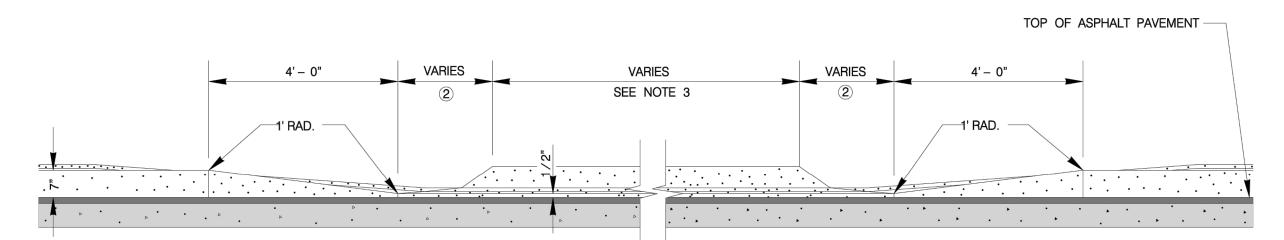
CURB PROFILE AT DRIVEWAY

WITH SIDEWALK ABUTTING CURB



TYPICAL DRIVEWAY PLAN VIEW

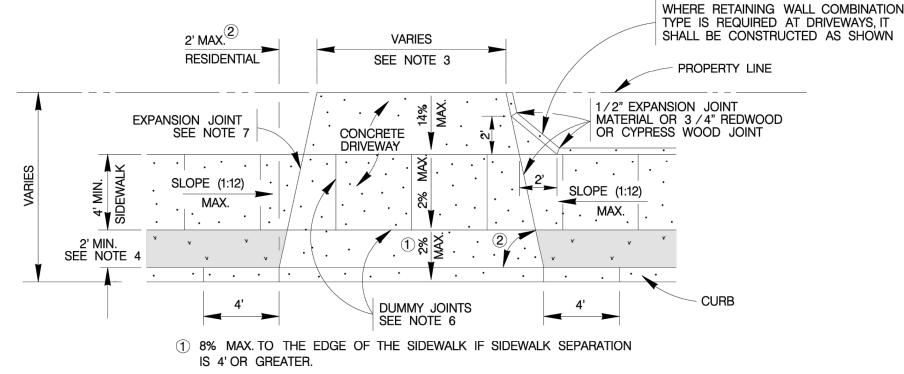
WITH SIDEWALK ABUTTING CURB



2 RESIDENTIAL : 2' MAXIMUM; COMMERCIAL: SEE PLAN VIEW

CURB PROFILE AT DRIVEWAY

WITH SIDEWALK SEPARATED FROM CURB



2 45° FOR COMMERCIAL DRIVEWAY

TYPICAL DRIVEWAY PLAN VIEW

WITH SIDEWALK SEPARATED FROM CURB

MAY 2009

CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CONCRETE DRIVEWAY STANDARDS

% SUBMITTAL PROJECT NO.: DATE:

DRWN. BY: V. VASQUEZ DSGN. BY: CHKD. BY: R.S. HOSSEINI, P.E. SHEET NO.: OF

C8.2

COSA DRIVEWAY DETAIL

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS

*

MATTHEW M. HILBIG

131150 CENSE CH

SITE PLAN

FOR

MARKET RIDGE

PHASE 4

BLOCK 64

N.C.B. 19219

LOT 28

SAN ANTONIO

BEXAR

TEXAS

SAN ANTONIO (KFW)

3421 Paesanos

San Antonio, TX 78231

Phone: 210.979.8444

TBPE Firm#: F-14909 TBPLS Firm#: 10194550

A.B.

OSADT7580303

VISIT: WWW.CALL811.COM

Formerly Known as

811

KFW

PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION (EXCAVATORS, DESIGNERS, OR ANY PER

PREPARING TO DISTURB THE EARTH'

TOP OF ASPHALT PAVEMENT

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

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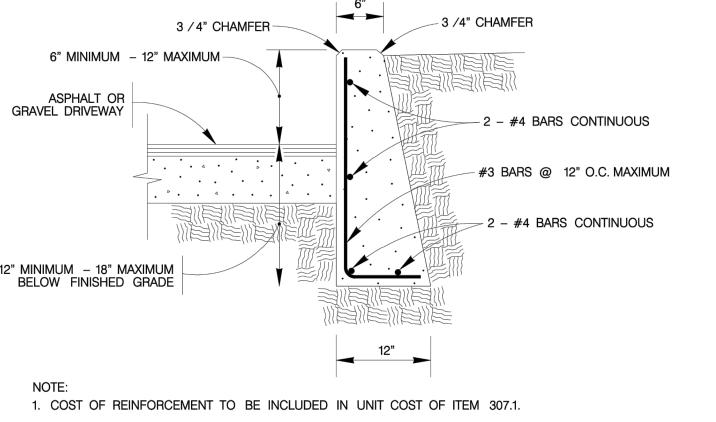
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DEC 2024

AS SHOWN

758-03-03



DRIVEWAY - CONCRETE RETAINING WALL

CONCRETE RETAINING WALL COMBINATION TYPE SHALL BE USED FOR CONCRETE DRIVEWAYS.

ITEM 307.1

LEGAL DESCRIPTION LOT 4, BLOCK 243, CB 4451 OUT OF THE NWC CULEBRA & RANCH VIEW WEST PLAT AS RECORDED IN VOL. 20003, PG 552-556 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS

KEY NOTES

28' ELECTRIC, GAS, TELEPHONE, AND 16' SANITARY SEWER EASEMENT CABLE T.V. EASEMENT (VOL. 6090, PG. 1106 O.P.R.) (VOL. 9588, PG. 195 D.P.R.) 16' SANITARY SEWER EASEMENT 28' GAS, TELEPHONE, ELECTRIC. (VOL. 9588, PG. 195 D.P.R.) 2 | AND CATV EASEMENT (VOL. 12936, PG. 569 O.P.R.) VARIABLE WIDTH OVERHEAD ELEC EASEMENT (DOC. NO. 2023012916

14' ELECTRIC, GAS, TELEPHONE, AND CABLE T.V. EASEMENT (VOL. 9588, PG. 195 D.P.R.)

VARIABLE WIDTH DRAINAGE EASEMENT (VOL. 9588, PG. 195 D.P.R.)

(8) (PLAT NO. 24-####) VARIABLE WIDTH DRAINAGE EASE (PLAT NO. 24-####)

20' DRAINAGE EASEMENT

COORDINATION NOTE:

1. CONTACT TWC (TIME WARNER CABLE) TO COORDINATE CABLE TV SERVICE.

2. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS (CITY PUBLIC SERVICE) FOR INSPECTIONS AND CONDUIT SIZES FOR PRIMARY AND SECONDARY ELECTRICAL SERVICES. (210)-353-2256.

3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928.

4. CONTRACTOR TO COORDINATE WITH CPS (CITY PUBLIC SERVICE) TO PLAN GAS SERVICES. (210)-353-2256. 5. CONTRACTOR TO COORDINATE WITH SAWS (SAN ANTONIO WATER SYSTEM)

6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

TO PLAN SANITARY SEWER AND WATER SERVICES. (210)-704-7297.

INSTALLATION:

1. ALL OPERATORS SHALL SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS IN ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES

2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE LIMITS OF THE SITE BOUNDARY.

3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREAS DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED, THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

2. SILT FENCE LIMITS / LOCATION ARE APPROXIMATE AND CAN BE ADJUSTED FOR FINAL LOCATION OF FILL LIMITS.

3. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

4. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT, AND EQUIPMENT AND STORAGE ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

PROJECT COMPLETION:

1. ALL DISTURBED AREAS NOT COVERED BY IMPERVIOUS COVER ARE TO BE STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).

2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL UPGRADIENT AREAS HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).

1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS.

2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORMWATER POLLUTION PREVENTION PLAN REGULATIONS ONLY.

3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH THE REGULATIONS CONTAINED WITHIN IT.

4. CPS IS A SECONDARY OPERATOR IN THIS PROJECT. THEY WILL BE INSTALLING THE ELECTRIC UTILITIES.

<u>CAUTION!!:</u> THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT

THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

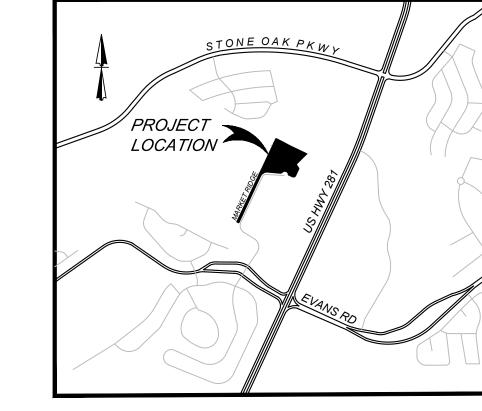
THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS. THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE

PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM

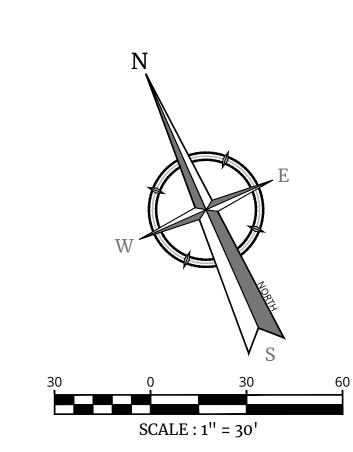
WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

TRENCH EXCAVATION SAFETY PROTECTION		SW3P MODIFICATIONS				
ı	TRENCH EXCAVATION SAFETY PROTECTION		DATE	SIGNATURE	DESCRIPTION	
ı	CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL					
п	DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS					
ı	AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES					
ı	WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH					
ı	EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE					
ı	CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL					
п	PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A					
ı	MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR					
п	CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL					
ı	IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING					

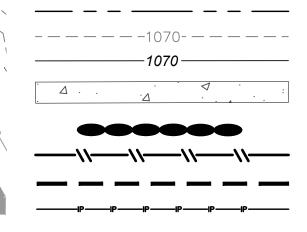




LOCATION MAP N.T.S



LEGEND



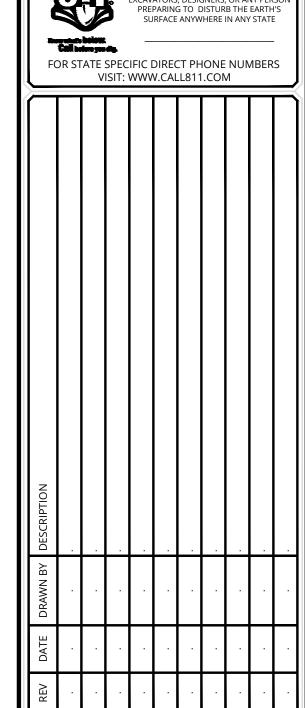
PROPERTY LINE PROPOSED CONTOURS

EXISTING CONCRETE

INLET PROTECTION SILT FENCE PROJECT LIMITS PROPOSED INLET

PROTECTION PROPOSED STABILIZED CONSTRUCTION ENTRANCE PROPOSED CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA PROPOSED CONCRETE

TRUCK WASHOUT PIT



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SITE PLAN

MATTHEW M. HILBIG

131150

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219 LOT 28

SAN ANTONIO BEXAR **TEXAS**

Engineering & Design

AS SHOWN

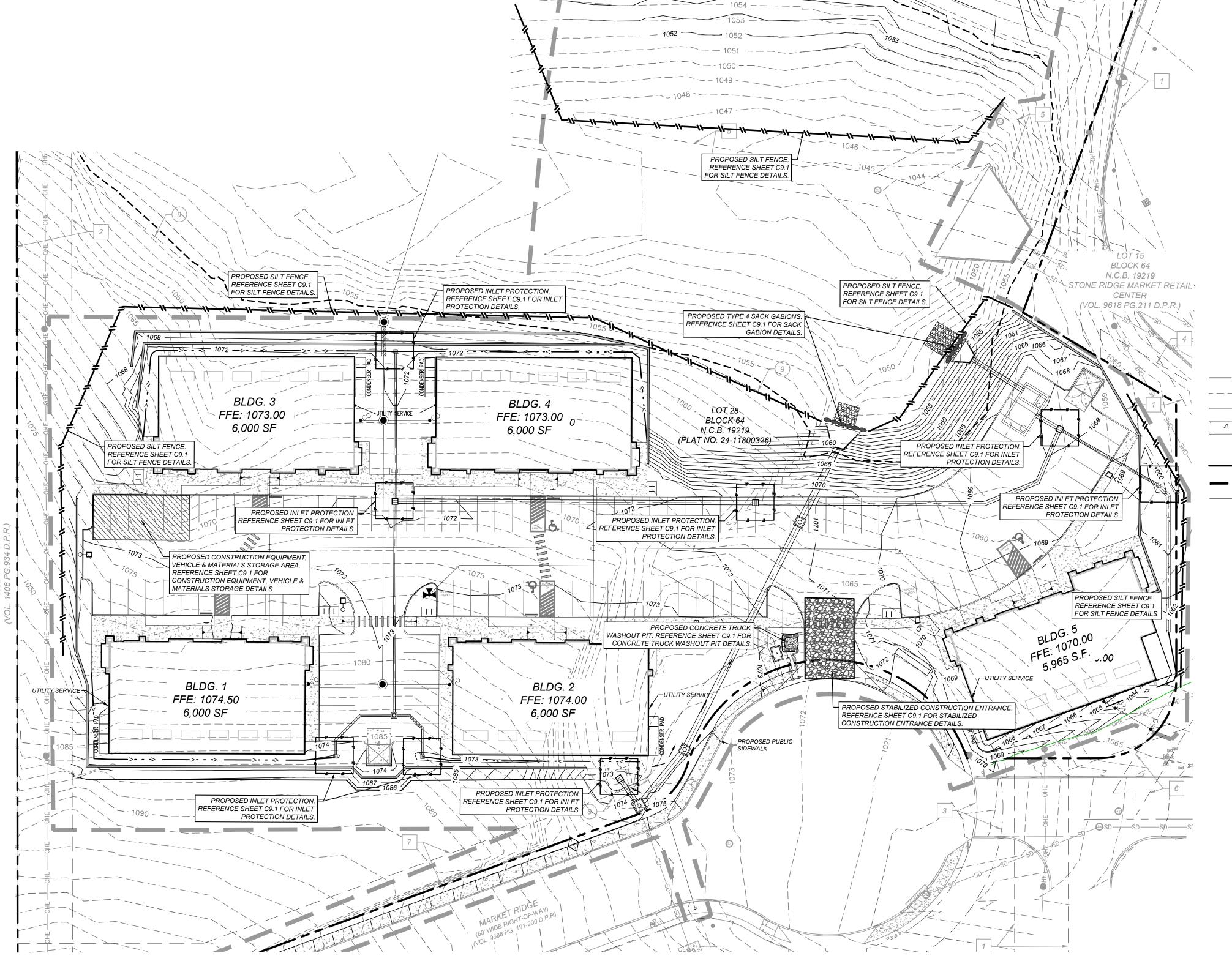
Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550 A.B.

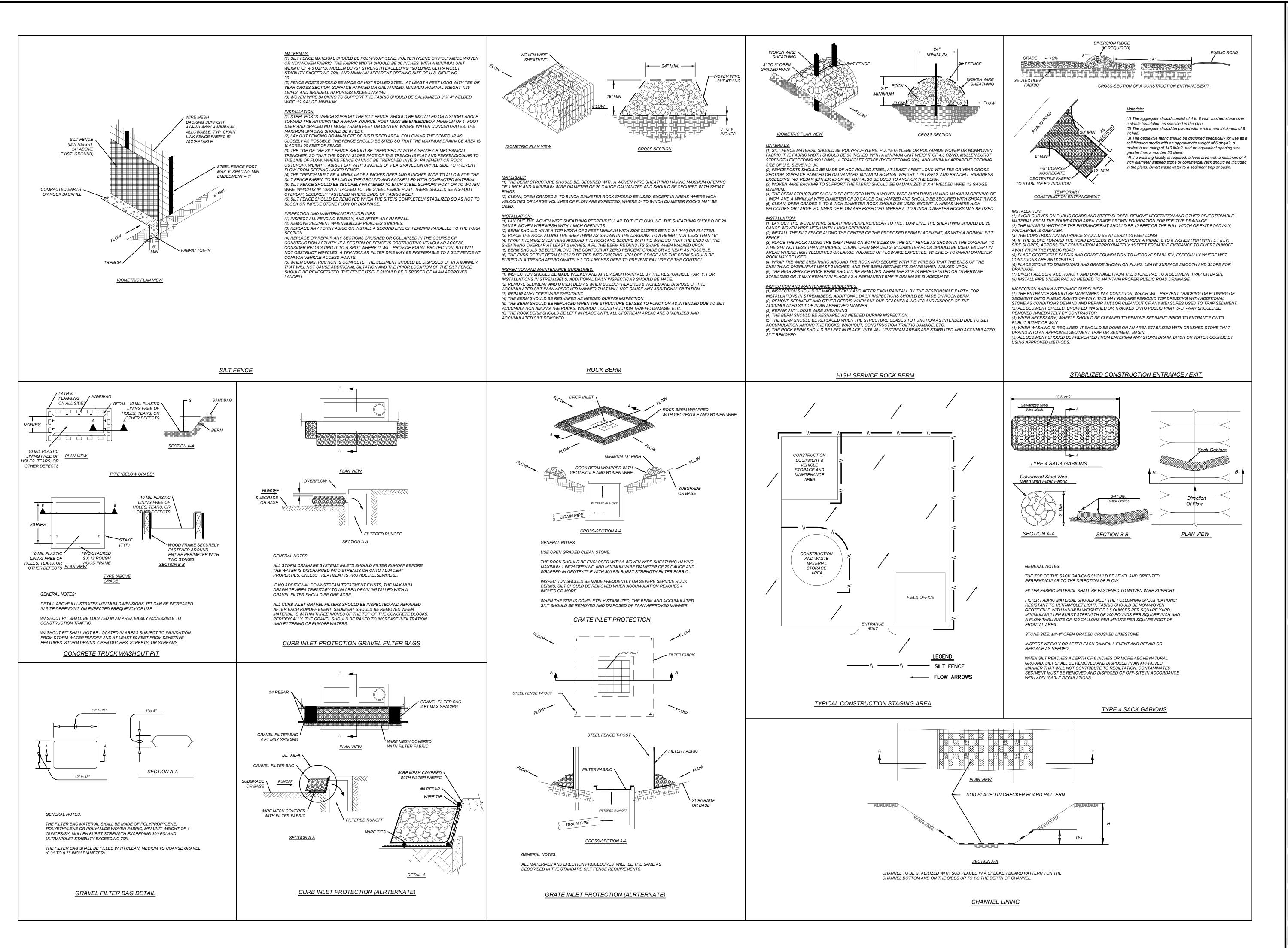
SAN ANTONIO (KFW) 3421 Paesanos

San Antonio, TX 78231

7580303 758-03-03 **EROSION CONTROL PLAN**

C9.0





Date: Dec 11, 2024, 8: 35am User ID: mhilbig

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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MATTHEW M. HILBIC

SITE PLAN

FOR

MARKET RIDGE

PHASE 4

BLOCK 64

N.C.B. 19219

LOT 28

SAN ANTONIO

BEXAR

TEXAS

SAN ANTONIO (KFW)

3421 Paesanos

San Antonio, TX 78231

Phone: 210.979.8444

TBPE Firm#: F-14909 TBPLS Firm#: 10194550

A.B.

CDT7580303

EROSION CONTROL DETAIL

SHEET

ALL STATES REQUIRE NOTIFICATION (EXCAVATORS, DESIGNERS, OR ANY PER

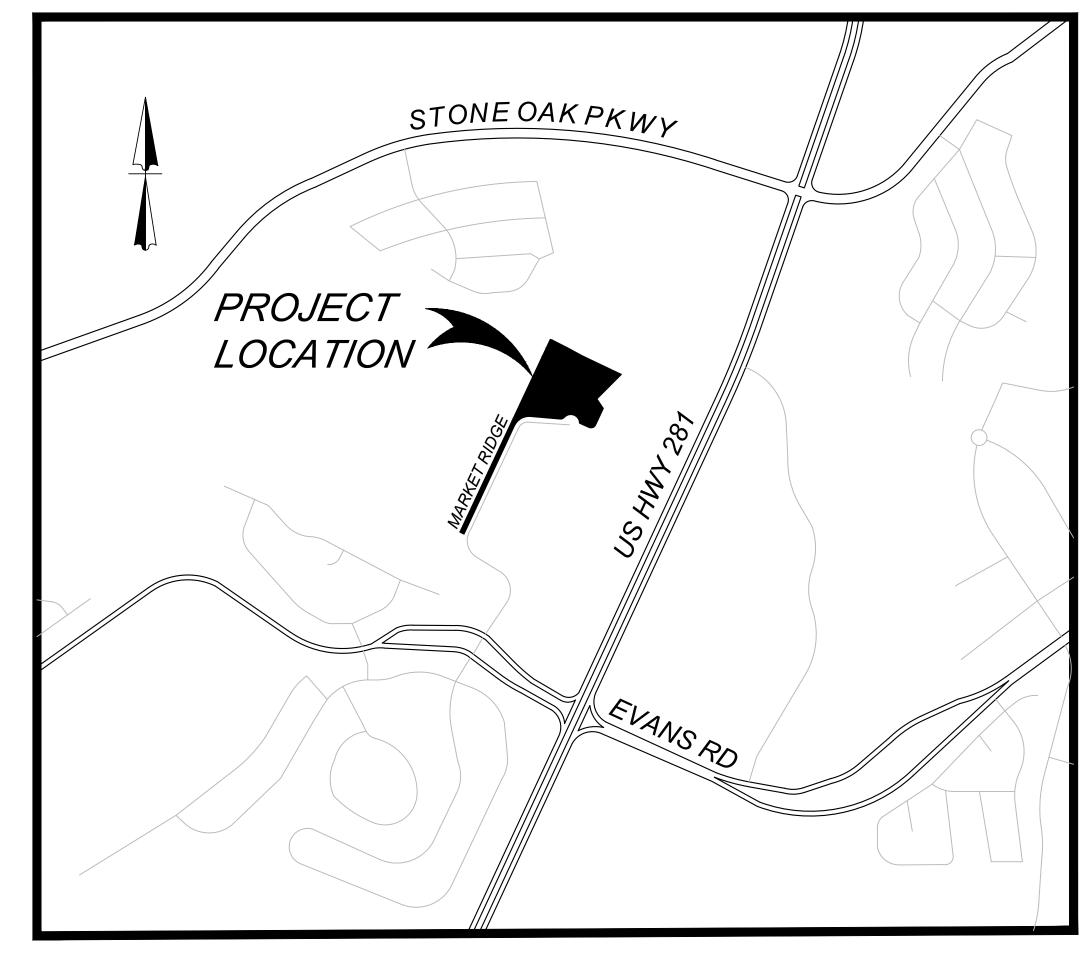
PREPARING TO DISTURB THE EARTH'S

SURFACE ANYWHERE IN ANY STATE

Formerly Known as

MARKET RIDGE PHASE 4

SAN ANTONIO, TEXAS 78258 8" SANITARY SEWER IMPROVEMENTS



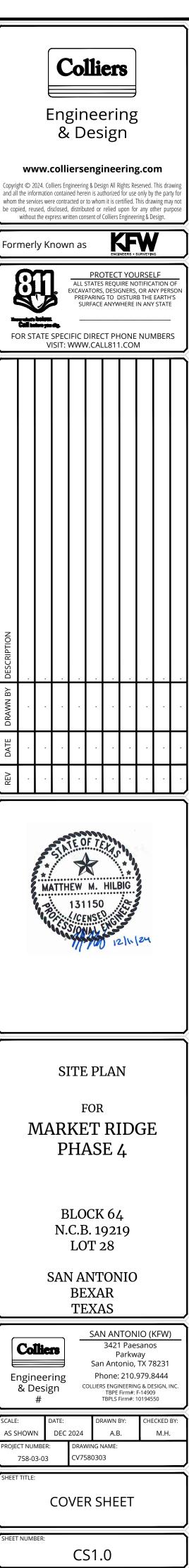
LOCATION MAP N.T.S

INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	CS1.0
SANITARY SEWER GENERAL NOTES	CS1.1
OVERALL SANITARY SEWER PLAN	CS2.0
LINE "A" PLAN & PROFILE	CS3.0
SANITARY SEWER DETAILS	CS4.0

DEVELOPER INFORMATION

BIG SPRING CONCEPTS, LTD.
CONTACT: FRANK SITTERLE, JR.
2015 EVANS RD., STE. 100
SAN ANTONIO, TEXAS 78258 - 7462
PHONE: 210-835-4424



Texas Commission on Environmental Quality Organized Sewage Collection System (SCS) **General Construction Notes**

- 1. This Organized Sewage Collection System must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard
- 2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the Sewage Collection System plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.
- A written notice of construction must be submitted to the presiding TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include: - the name of the approved project;
- the activity s tart date; and - the contact information of the prime contractor.
- Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
- 5. Prior to beginning any construction activity, all temporary erosion and sedimentation control measures must be properly installed and maintained in accordance with the manufacturers specifications. These control must remain in place until the disturbed areas have been permanently stabilized.
- 6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the
- Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of six (6) inches.
- Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.
- 9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole

The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet CS4.0.

It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.

- 10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
- 11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer:

If pipe flexure is proposed, the following method of preventing deflection of the joint must

Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet _CS4.0_. (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet <u>CS3.0</u> and marked after backfilling as shown in the detail on Plan Sheet CS4.0_.

- 13. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.
- 14. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).

- 16. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:
- (a) For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements: (1) Low Pressure Air Test.
 - (A) A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.
 - For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection. (i) A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater
 - (ii) Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3 T = 0.085xDxK

above the pipe.

- T = time for pressure to drop 1.0 pound per square inch gauge in
- K = 0.000419 X D X L, but not less than 1.0
- D = average inside pipe diameter in inches
- L = length of line of same size being tested, in feet
 - Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface
- (C) Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table

PIPE DIAMETER (INCHES)	MINIMUM TIME (SECONDS)	LENGTH FOR MINIMUM (FEET)	TIME FOR LONGER LENGTH (SECONDS/FOOT)
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

- (D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
- (E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
- (F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
- (G) A testing procedure for pipe with an inside diameter greater than 33
- inches must be approved by the executive director. (2) Infiltration/Exfiltration Test. (A) The total exfiltration, as determined by a hydrostatic head test, must not
 - exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream (B) An owner shall use an infiltration test in lieu of an exfiltration test when
 - pipes are installed below the groundwater level.
 - (C) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever
 - (D) For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subpargraph (C) of this
- (E) If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce the infiltration or exfiltration to an amount within the limits specified. An
- owner shall retest a pipe following a remediation action. (b) If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:
- For a collection pipe with inside diameter less than 27 inches, deflection

measurement requires a rigid mandrel. (A) Mandrel Sizing.

- A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
- If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID
- controlled pipe. All dimensions must meet the appropriate standard.
- (B) Mandrel Design. A rigid mandrel must be constructed of a metal or a rigid plastic
- material that can withstand 200 psi without being deformed. A mandrel must have nine or more odd number of runners or
- A barrel section length must equal at least 75% of the inside diameter of a pipe.
- (iv) Each size mandrel must use a separate proving ring.
 - (i) An adjustable or flexible mandrel is prohibited.
 - (ii) A test may not use television inspection as a substitute for a deflection test.
 - (iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners

on a case-by-case basis.

- (2) For a gravity collection system pipe with an inside diameter 27 inches and
- greater, other test methods may be used to determine vertical deflection. (3) A deflection test method must be accurate to within plus or minus 0.2%
- (4) An owner shall not conduct a deflection test until at least 30 days after the final backfill
- (5) Gravity collection system pipe deflection must not exceed five percent
- (6) If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least
- 17. All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
 - All manholes must pass a leakage test. An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic
 - exfiltration testing, vacuum testing, or other method approved by the executive director. (1) Hydrostatic Testing.
 - (A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole
 - (B) To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one
 - (C) A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.
 - (2) Vacuum Testing. (A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a
 - (B) No grout must be placed in horizontal joints before testing.
 - Stub-outs, manhole boots, and pipe plugs must be secured to prevent movement while a vacuum is drawn.
 - An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a
 - (E) A test head must be placed at the inside of the top of a cone
 - section, and the seal inflated in accordance with the manufacturer's recommendations.
 - (F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
 - A test does not begin until after the vacuum pump is off. (H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.
- 18. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

San Antonio Regional office Austin Regional office 12100 Park 35 Circle, Building A 14250 Judson Road San Antonio, Texas 78233-4480 Austin. Texas 78753-1808 Phone (512) 339-2929 Phone (210) 490-3096 Fax (512) 339-3795 Fax (210) 545-4329

TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures. The Contractor's implementation of the systems, programs and/or procedures shall provide for adequate trench excavation, safety protection that complies with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA

governing the presence and activities of individuals working in and around trench

I. WHERE A SEWER MAIN CROSSES OVER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE (9) FEET, ALL PORTIONS OF THE SEWER MAIN WITHIN NINE (9) FEET OF THE WATER LINE SHALL BE CONSTRUCTED USING 150 PSI PRESSURE RATED DUCTILE IRON, CAST IRON OR PVC PIPE AND JOINED WITH EQUALLY PRESSURE RATED PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE AT LEAST EIGHTEEN (18) FEET IN LENGTH MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM.)

II. WHERE A SEMI-RIGID OR RIGID SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET BUT GREATER THAN TWO FEET, THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF THE SEWER WITHIN NINE FEET OF THE WATER MAIN.

III. WHERE A SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN TWO FEET, THE SEWER MAIN SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI WITHIN NINE FEET OF THE WATER MAIN, SHALL HAVE A SEGMENT OF SEWER PIPE CENTERED ON THE WATER MAIN, SHALL BE PLACED NO CLOSER THAN SIX INCHES BETWEEN OUTER DIAMETERS, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE OF A LENGTH GREATER THAN EIGHTEEN (18) FEET MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM)

IV. WHERE A SEWER MAIN PARALLELS A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET, THE SEWER MAIN SHALL BE BELOW THE WATER MAIN, SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI FOR BOTH PIPE AND JOINTS FOR A DISTANCE OF NINE FEET BEYOND THE POINT OF CONFLICT, SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE BETWEEN OUTER DIAMETERS OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL.

V. SANITARY SEWER MANHOLES SHALL NOT BE INSTALLED ANY CLOSER THAN NINE FEET TO WATER MAINS.

COMPACTION NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12 INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. PERMITS AND/OR WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

SAWS GENERAL NOTES:

- 1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
- A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290. B. Current TXDOT "Standard Specifications for Construction of Highways, Streets
- and Drainage." C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction.'
- D. Current City of San Antonio "Standard Specifications for Public Works Construction"
- 2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to

E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.

3. The Contractor shall obtain the SAWS Standard Details from the SAWS website.

http://www.saws.org/business_center/specs. Unless otherwise noted within the

- design plans. 4. The Contractor is to make arrangements with the SAWS Construction Inspection
- Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any
- 5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.
- 6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:

SAWS Utility Locates: http://www.saws.org/Service/Locates COSA Drainage (210) 207-0724 or (210) 207-6026 COSA Traffic Signal Operations (210) 206-8480 COSA Traffic Signal Damages (210) 207-3951 Texas State Wide One Call Locator 1-800-545-6005 or 811

- 7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.
- 8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.
- 9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.
- 10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.
- recognized holidays. Request should be sent to constworkreq@saws.org. Weekend Work: Contractors are required to notify the SAWS Inspection

Construction Department 48 hours in advance to request weekend work. Request

11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS

should be sent to constworkreq@saws.org. Any and all SAWS utility work installed without holiday/weekend approval will be

subject to be uncovered for proper inspection.

- 12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests performed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.
- 13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection

1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the SAWS Construction Inspection Division at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.

For water mains 12" or higher: SAWS Emergency Operations Center (210)

- 2. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos-containing material (ACM), may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe".
- 3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a cap/plug.
- 4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves, and bends, in accordance with the Standard Drawings DD-839 Series and Item No. 839, in the SAWS Standard Specifications for Construction.
- 5. All valves shall read "open right".
- 6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of 1,110 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below 1,110 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if *PRV is/are required for such lot(s), only single service connections shall be allowed. *Note: A pressure regulator is also known as a pressure reducing valve (PRV).

7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.

8. Backflow Prevention Devices:

All irrigation services within residential areas are required to have backflow prevention devices.

All commercial backflow prevention devices must be approved by SAWS prior to

9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use.

Sewer Notes

- 1. The Contractor is responsible for ensuring that no Sanitary Sewer Overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:
- A. Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at (210) 233-2014. Provide the address of the spill and an estimated volume or flow.
- B. Attempt to eliminate the source of the SSO.
- C. Contain sewage from the SSO to the extent of preventing a possible contamination of waterway.
- D. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soils/materials.
- E. Clean the affected sewer mains and remove any debris.

F. Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24

Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by SAWS, including any fines from EPA, TCEQ and/or any other Federal, State or Local Agencies.

No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the TCEQ and SAWS.

- 2. If bypass pumping is required, the Contractor shall perform such work in accordance with SAWS Standard Specification for Water and Sanitary Sewer Construction, Item No. 864, "Bypass Pumping". 3. Prior to tie-ins, any shutdowns of existing force mains of any size must be
- coordinated with the SAWS Construction Inspection Division at (210) 233-2973 at least one week in advance of the shutdown. The Contractor must also provide a seguence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.

4. Sewer pipe where water line crosses shall be 160 psi and meet the requirements

of ASTM D2241, TAC 217.53 and TCEQ 290.44(e)(4)(B). Contractor shall center a

20' joint of 160 psi pressure rated PVC at the proposed water crossing. 5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's

improvements. (NSPI)

- 6. Spills, Overflows, or Discharges of Wastewater: All spills, overflows, or discharges of wastewater, recycled water, petroleum products, or chemicals must be reported immediately to the SAWS Inspector assigned to the Counter Permit or General Construction Permit (GCP). This requirement applies to every spill, overflow, or discharge regardless of size.
- 7. Manhole and all pipe testing (including the TV inspection) must be performed and passed prior to Final Field Acceptance by SAWS Construction Inspection Division, as per the SAWS Specifications For Water and Sanitary Sewer Construction.

8. All PVC pipe over 14 feet of cover shall be extra strength with minimum pipe stiffness of 115 psi.

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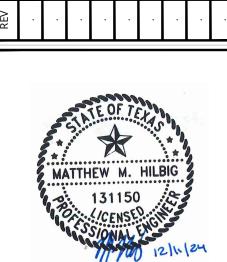
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SITE PLAN

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219

SAN ANTONIO BEXAR

TEXAS

LOT 28

Colliers Engineering & Design

AS SHOWN

3421 Paesanos San Antonio, TX 78231 Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550

A.B.

SAN ANTONIO (KFW)

S_NOTES7580303 758-03-03 SANITARY SEWER

DEC 2024

GENERAL NOTES

CS1.1

LEGAL DESCRIPTION LOT 4, BLOCK 243, CB 4451 OUT OF THE NWC CULEBRA & RANCH VIEW WEST PLAT AS RECORDED IN VOL. 20003, PG 552-556 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS KEY NOTES 28' ELECTRIC, GAS, TELEPHONE, AND 16' SANITARY SEWER EASEMENT 1 CABLE T.V. EASEMENT (VOL. 6090, PG. 1106 O.P.R.) (VOL. 9588, PG. 195 D.P.R.) 16' SANITARY SEWER EASEMENT 28' GAS, TELEPHONE, ELECTRIC. (VOL. 9588, PG. 195 D.P.R.) 2 AND CATV EASEMLING (VOL. 12936, PG. 569 O.P.R.) VARIABLE WIDTH OVERHEAD ELECTRIC EASEMENT (DOC. NO. 20230129166) 14' ELECTRIC, GAS, TELEPHONE, AND CABLE 20' DRAINAGE EASEMENT T.V. EASEMENT (8) (PLAT NO. 24-####) (VOL. 9588, PG. 195 D.P.R.) VARIABLE WIDTH DRAINAGE EASEMENT (VOL. 9588, PG. 195 D.P.R.) VARIABLE WIDTH DRAINAGE EASEMENT (PLAT NO. 24-####)

<u>CAUTION!!:</u> THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT

COORDINATION NOTE:

1. CONTACT TWC (TIME WARNER CABLE) TO COORDINATE CABLE TV SERVICE. (210)-244-0500.

2. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS (CITY PUBLIC SERVICE) FOR INSPECTIONS AND CONDUIT SIZES FOR PRIMARY AND SECONDARY ELECTRICAL SERVICES. (210)-353-2256.

3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS (CITY PUBLIC SERVICE) TO PLAN GAS SERVICES. (210)-353-2256.

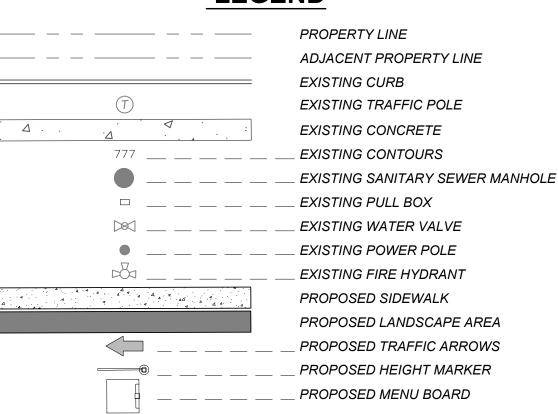
5. CONTRACTOR TO COORDINATE WITH SAWS (SAN ANTONIO WATER SYSTEM) TO PLAN SANITARY SEWER AND WATER SERVICES. (210)-704-7297.

6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

LEGEND



7. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT. PLACEMENT. OR LIMITS. OF DIMENSIONS OR GRADES . ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT NECESSARY FOR CONSTRUCTION OF THIS PROJECT. SHALL CONFORM TO ALL APPLICABLE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION). SAWS SPECIFICATIONS (LATEST EDITION

8. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AT NEW PAVEMENT AND CURB CITY BUILDING CODE AND REGULATIONS AS WELL AS OTHER SAFETY CODES AND INSPECTION PROVISIONS APPLICABLE TO THE PROJECT AND REQUIREMENTS OF THE FIRE DEPARTMENT. SANITARY SEWER SYSTEM CONSTRUCTION SHALL COMPLY WITH THE SAN ANTONIO WATER

JUNCTURES. NO JAGGED OR IRREGULAR CUTS IN PAVEMENT WILL BE ALLOWED OR

9. ALL EXCAVATIONS AND BACK FILLING OF UTILITY TRENCHES SHALL MEET GEOTECHNICAL REPORT RECOMMENDATIONS OR TYPICAL SAWS UTILITY TRENCH SPECIFICATIONS. ALL BACK FILL MUST BE IN COMPACTED 12-INCH LIFTS, AND NO WATER JETTING IS ALLOWED.

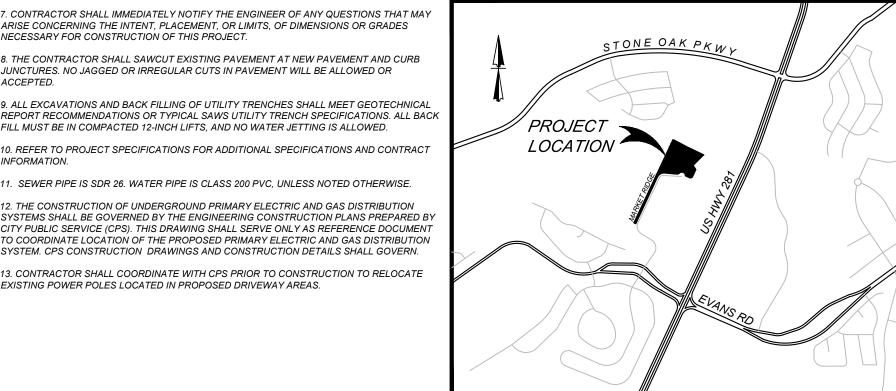
10. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL SPECIFICATIONS AND CONTRACT INFORMATION

SYSTEMS SHALL BE GOVERNED BY THE ENGINEERING CONSTRUCTION PLANS PREPARED BY

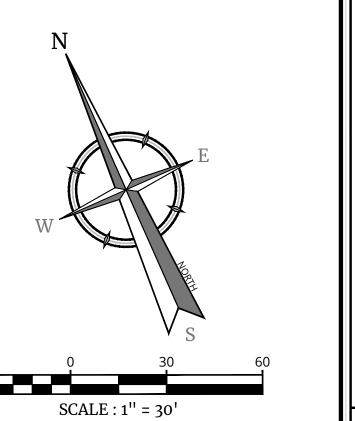
O COORDINATE LOCATION OF THE PROPOSED PRIMARY ELECTRIC AND GAS DISTRIBUTION

1. SEWER PIPE IS SDR 26. WATER PIPE IS CLASS 200 PVC, UNLESS NOTED OTHERWISE. 12. THE CONSTRUCTION OF UNDERGROUND PRIMARY ELECTRIC AND GAS DISTRIBUTION

SYSTEM. CPS CONSTRUCTION DRAWINGS AND CONSTRUCTION DETAILS SHALL GOVERN. 13. CONTRACTOR SHALL COORDINATE WITH CPS PRIOR TO CONSTRUCTION TO RELOCATE BETTER, ANY DAMAGES DONE TO EXISTING BUILDINGS, RETAINING WALLS, UTILITIES, FENCES, EXISTING POWER POLES LOCATED IN PROPOSED DRIVEWAY AREAS.



LOCATION MAP N.T.S



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SITE PLAN

FOR MARKET RIDGE PHASE 4

> BLOCK 64 N.C.B. 19219 LOT 28

SAN ANTONIO BEXAR **TEXAS**

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3421 Paesanos San Antonio, TX 78231 Phone: 210.979.8444 TBPE Firm#: F-14909 TBPLS Firm#: 10194550

SAN ANTONIO (KFW)

A.B. AS SHOWN DEC 2024 DA7580303 758-03-03

> OVERALL SANITARY SEWER PLAN

> > CS2.0

_ PROPOSED WHEEL STOP __ __ _ PROPOSED PAD MOUNTED TRANSFORMER _ _ _ _ _ PROPOSED PPOWER POLE EXISTING SANITARY SEWER MANHOLE 8" FL IN (SW)=1043.5 RIM ELEV.=1048.36 PROPOSED SANITAR' SEWER DROP MANHOLE 8" FL IN (SW)=1053.00 8" FL OUT (NE)=1044.48 RIM ELEV.= 1057.64 BLDG. 3 ±12 LF 6" SDR 26 @ 5.90% FFE: 1073.00 FFE: 1073.00 6,000 S CLEANOUT A2 6" FL OUT (SE)=1068.00 6" FL OUT (NW)=1069.00 PROPOSED SANITARY SEWER DROP MANHOLE 8" FL IN (SW)=1065.94 6" FL IN (SE)=1068.53 6" FL IN (NW)=1067.31 CLEANOUT A4 6" FL OUT (SE)=1069.00 6" FL OUT (NW)=1069.00 " FL OUT (SE)=1065.00 +34 LF 6" SDR 26 @ 4.71% FFE: 1074.00 /--UTILITY SE/RVICE// FFE: 1074.50 ±38 LF 6" SDR 26 @ 4.26% 6,000 SF 6,000 SF VERTICAL STACK ROPOSED SANITARY 6" FL=1064.87 SEWER MANHOLE ' FL OUT (SE)=1051.62 6" FL IN (NW)=1067.39 PROPOSED PUBLIC 6" FL IN (SE)=1067.39 CONNECT TO EXISTIN SIDEWALK ' FL OUT (NE)=1067.29 SEWER LINE RIM ELEV.=1073.1 6" FL OUT (E)=1051.20 ±10 LF 6" SDR 26 @ 2.00%

SYSTEM STANDARD SPECIFICATIONS AS WELL AS TCEQ RULES (TAC 210 AND TAC 217).

APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

3. THE FIRE AND DOMESTIC WATER LINES SHALL BE INSTALLED AND TESTED IN ACCORDANCE

WITH SAWS REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE SAWS FOR

4. ALL UTILITY CONNECTIONS TO BUILDING SHALL BE COORDINATED WITH MECHANICAL AND

ELECTRIC PLANS. FOR INFORMATION ON GAS, ELECTRIC, AND TELEPHONE UTILITIES, SEE THE

LIGHTING. OR WARNING CONTROL DEVICES USED OR REQUIRED TO COMPLETE THE WORK.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL CONDITION, OR

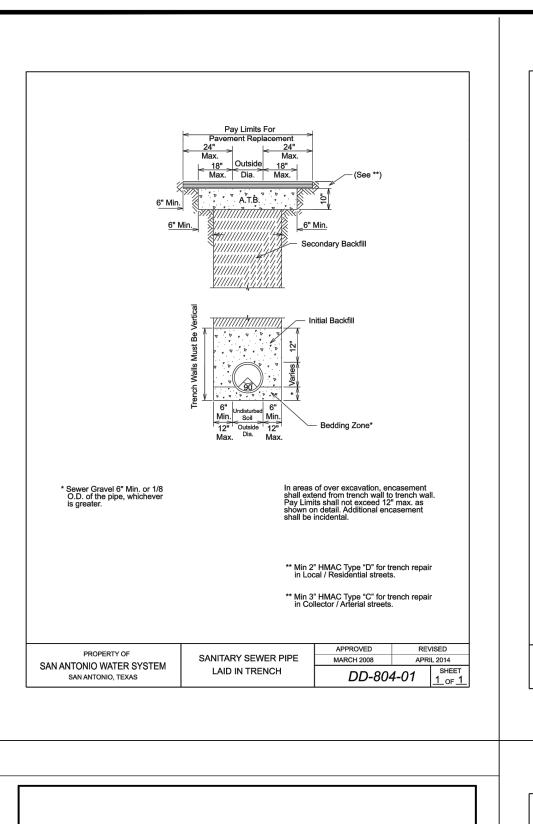
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS. TESTS.

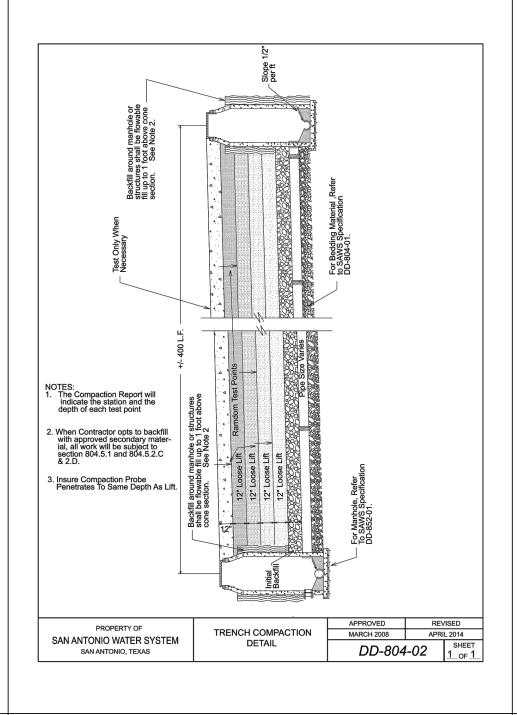
5. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL TRAFFIC CONTROL DEVICES.

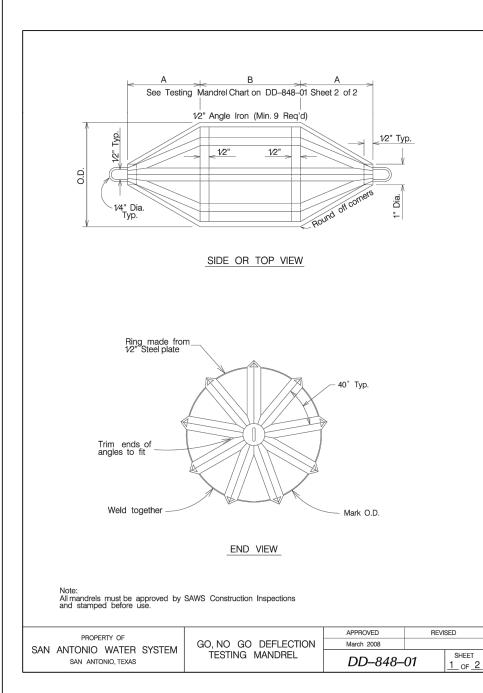
PERMITTING, INSPECTION, AND CONSTRUCTION OPERATIONS.

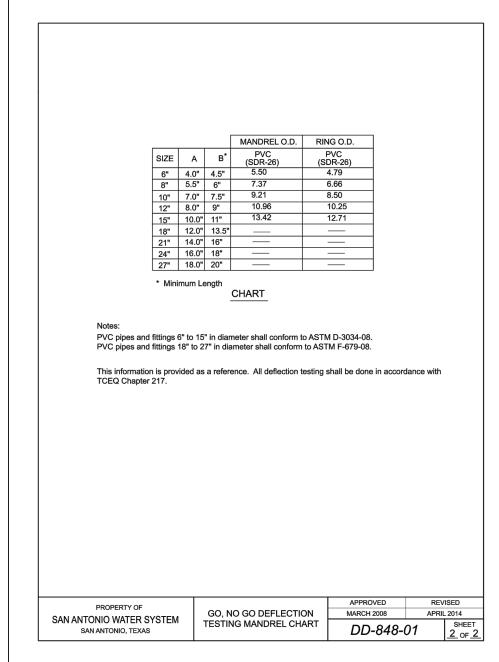
PAVEMENT, CURBS OR DRIVEWAYS (NO SEPARATE PAY ITEM).

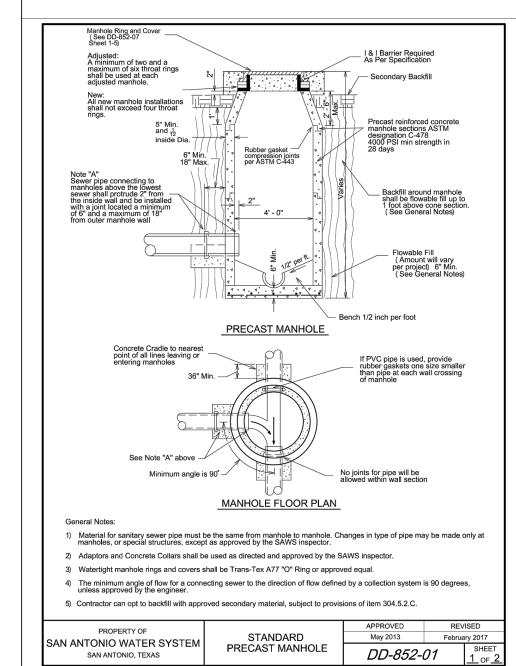
MECHANICAL AND ELECTRIC PLANS.

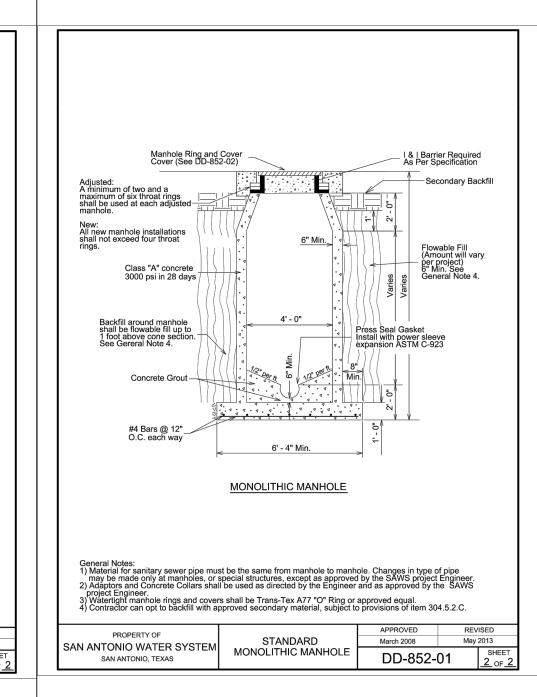


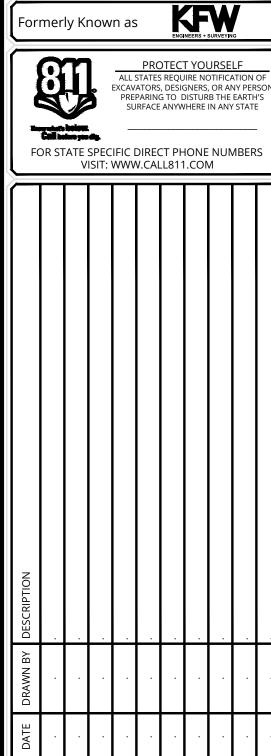












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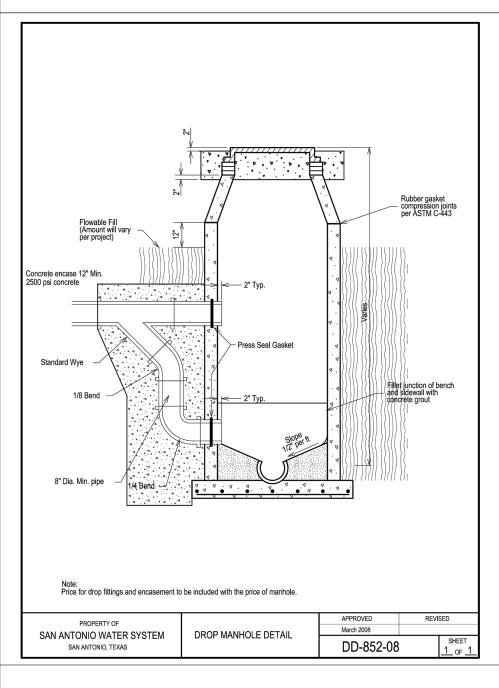
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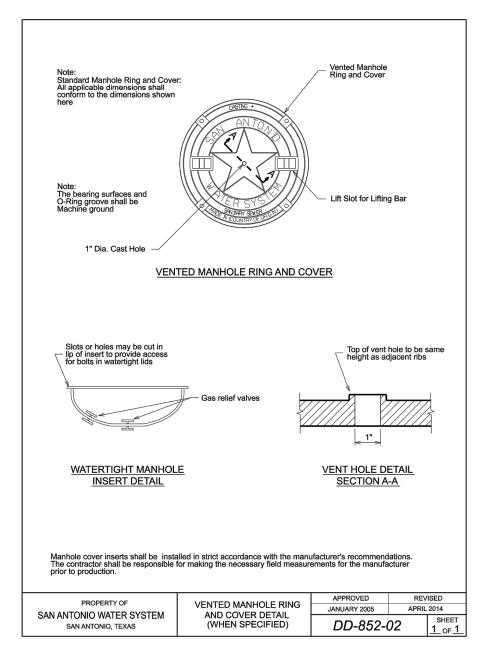
& Design

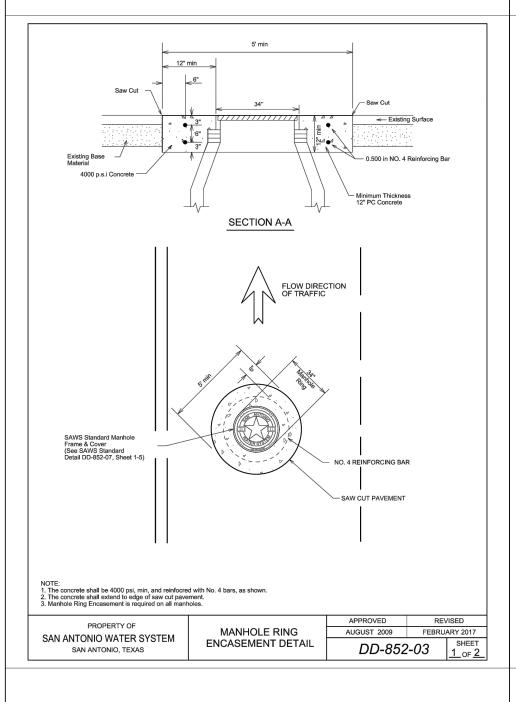
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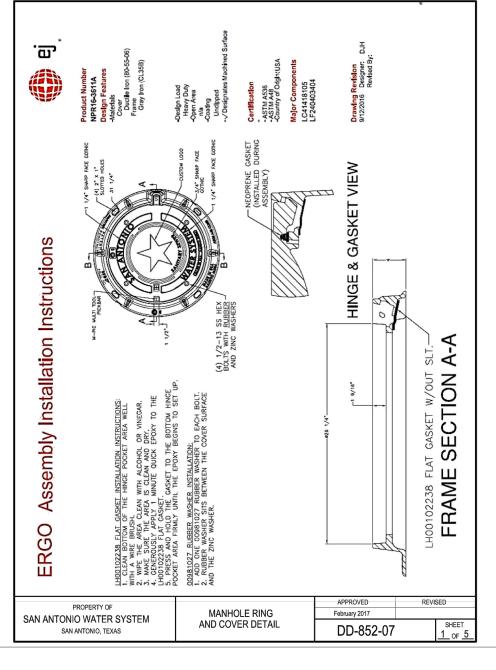
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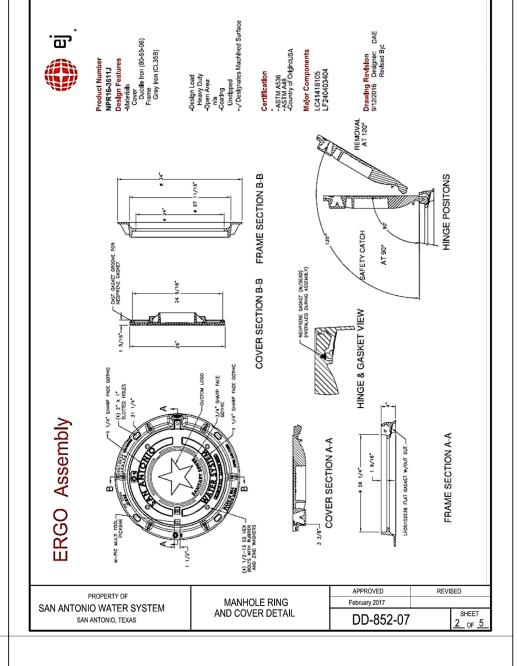
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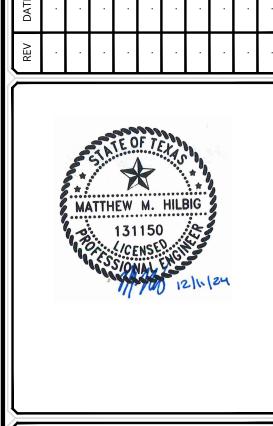


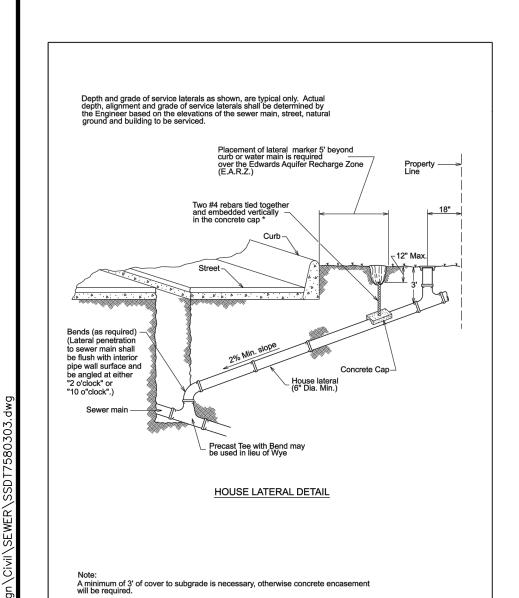










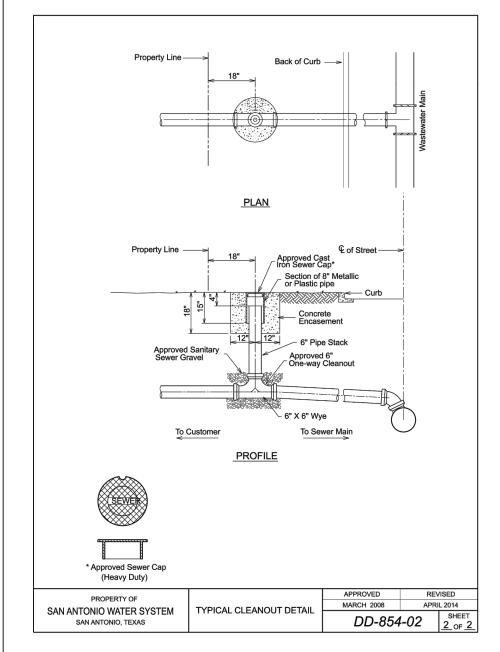


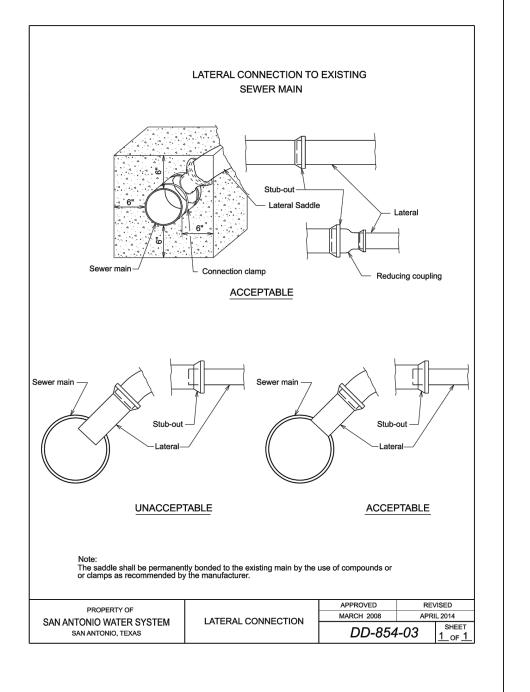
DETAIL (IN THE E.A.R.Z.)

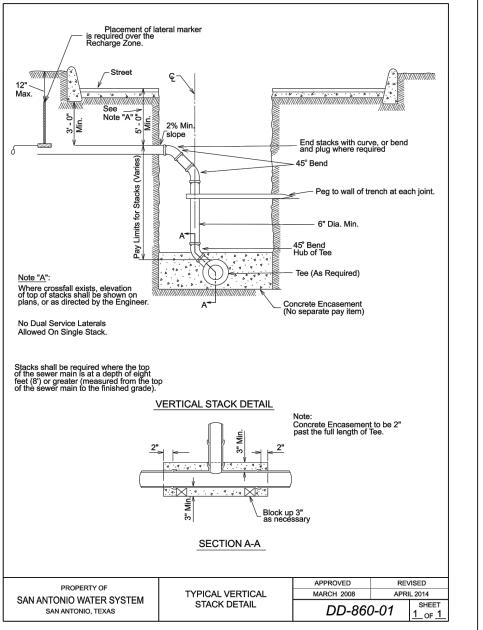
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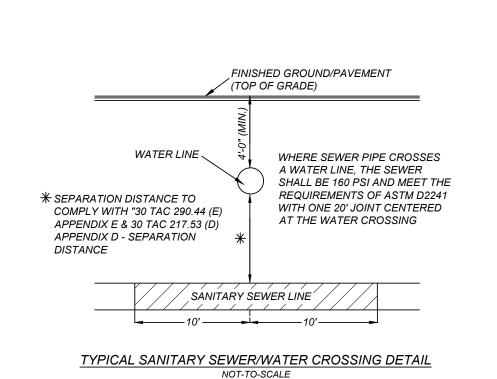
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APRIL 2014









SITE PLAN FOR MARKET RIDGE

PHASE 4

BLOCK 64 N.C.B. 19219

LOT 28

SAN ANTONIO **BEXAR TEXAS**

SAN ANTONIO (KFW)

3421 Paesanos Colliers San Antonio, TX 78231 Phone: 210.979.8444 Engineering COLLIERS ENGINEERING & DESIGN, INC & Design TBPE Firm#: F-14909 TBPLS Firm#: 10194550 AS SHOWN A.B.

SDT7580303 758-03-03 SANITARY SEWER DETAILS

CS4.0

SAN ANTONIO WATER SYSTEM

SAN ANTONIO, TEXAS