



VOLUME 1



RENDERING IS FOR REFERENCE ONLY, REFER TO DRAWINGS FOR BUILDING DESIGN

NBISD ELEMENTARY SCHOOL

4365 Klein Meadows, New Braunfels, TX 78130

LIST OF ALTERNATES:

- ALTERNATE #1** - PRE-MANUFACTURED CANOPY
- ALTERNATE #1A:** PROVIDE INTERNALLY DRAINED PRE-MANUFACTURED CANOPY AS SHOWN IN DRAWINGS AT THE MAIN ENTRANCE. BOD: AVADEK ANODIZED ALUM CANOPY WITH EXPOSED DRAINAGE DECK AND STANDARD MANUFACTURER'S FASCIA. REFER DETAILS: A2 AND A3/AS011.
- ALTERNATE #1B:** PROVIDE INTERNALLY DRAINED PRE-MANUFACTURED CANOPY AS SHOWN IN DRAWINGS AT THE SPECIAL ED. ENTRANCE. BOD: AVADEK ANODIZED ALUM CANOPY WITH EXPOSED DRAINAGE DECK AND STANDARD MANUFACTURER'S FASCIA. REFER DETAILS: A2 AND A3/AS011.
- ALTERNATE #2** - PROVIDE GRADING, CURB, GUTTER, PAVING AND LANDSCAPING FOR (18) PARKING SPACES PARKING IN THE NORTH PARKING LOT - REF: CIVIL PLANS FOR ADDITIONAL INFO
- ALTERNATE #3** - NOT USED
- ALTERNATE #4** - PROVIDE CONCRETE MOW STRIP AT ALL FENCING LOCATIONS – REF: CIVIL PLANS FOR ADDITIONAL INFORMATION.
- ALTERNATE #5** - PROVIDE SUNSHADES SHOWN ON STOREFRONTS IN ELEVATIONS AND WALL SECTIONS. BOD: TUBELITE 2'-6" DEEP MAXBLOCK SUNSHADE WITH AIRFOIL BLADES

ISSUED FOR BIDDING AND CONSTRUCTION

2021.01.27

Stantec Project Number: 214000825

PROJECT TEAM

- OWNER**

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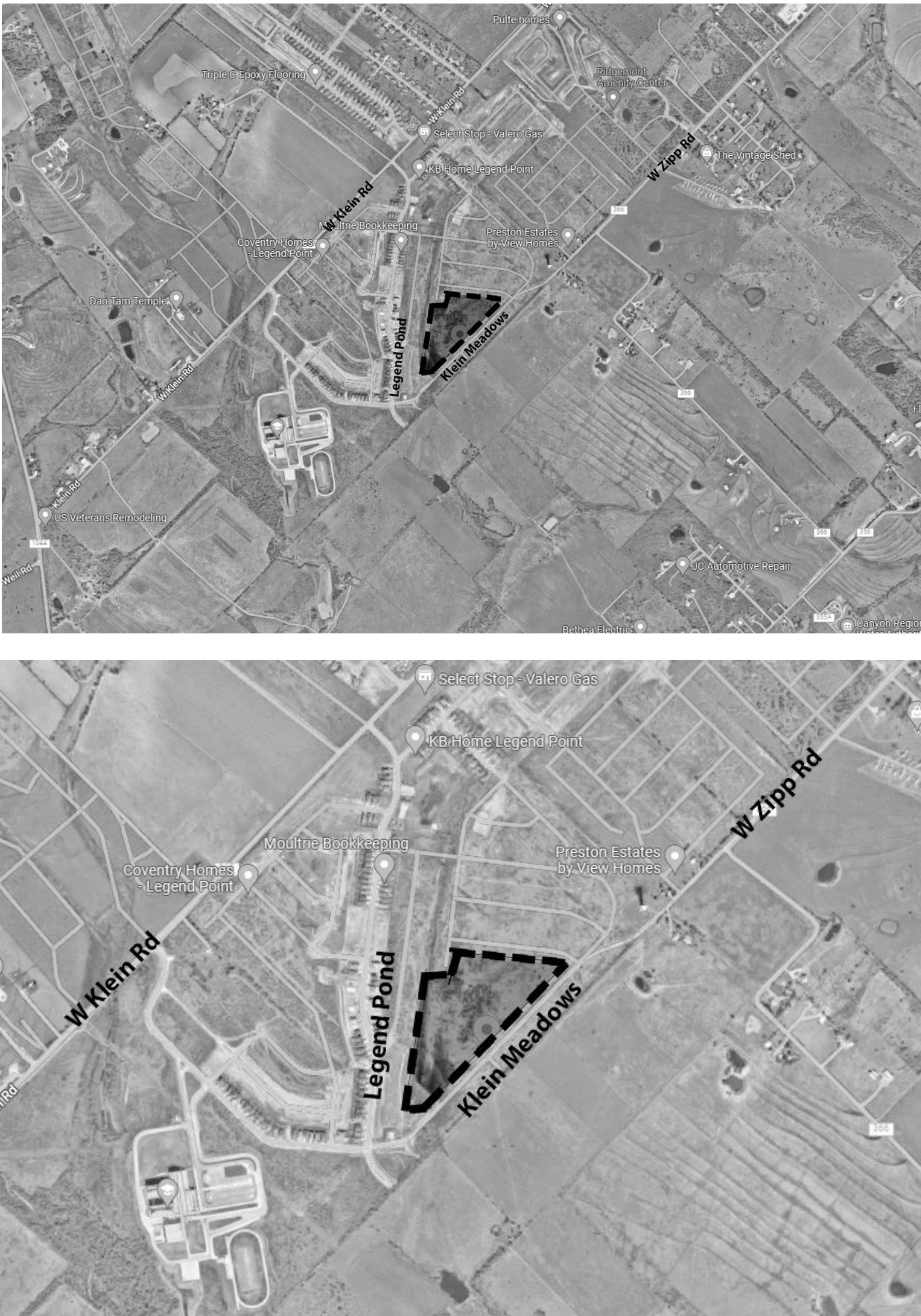
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PROJECT LOCATION



THE ARCHITECT'S SEAL ON THE COVER SHEET REPRESENTS THAT THE INFORMATION ON THE COVER SHEET IS ACCURATE IN ARCHITECT'S PROFESSIONAL OPINION BUT DOES NOT ASSUME PROFESSIONAL RESPONSIBILITY FOR DOCUMENTS SEALED BY OTHERS THAT ARE REFERENCED ON THE COVER SHEET. ALL PROFESSIONALS SEALING DRAWINGS AS A PART OF THE DESIGN ARE PROFESSIONALLY RESPONSIBLE FOR THEIR OWN SEALED DOCUMENTS.

EXIT ACCESS TRAVEL DISTANCE SUMMARY			
Comments	EXIT ROUTE	TRAVEL DISTANCE	COMMENTS
	EXIT ROUTE A2	273'-3"	Per Table 1017.2
	EXIT ROUTE B2	184'-3"	Per Table 1017.2
	EXIT ROUTE C2	126'-3"	Per Table 1017.2
	EXIT ROUTE D1	65'-9"	Per Table 1017.2
	EXIT ROUTE D2	292'-4"	Per Table 1017.2
	EXIT ROUTE D3	370'-1"	Per Table 1017.2
	EXIT ROUTE D4	179'-9"	Per Table 1017.2

EGRESS REQUIREMENTS: IBC 2018

OCCUPANT LOADS: (TAB. 1004.5)

FUNCTION OF SPACE: SQ. FT. PER OCCUPANT:

ACCESSORY STORAGE AREAS, MECH. EQUIPMENT ROOMS → 300 GROSS

ASSEMBLY W/OUT FIXED SEATS:

CONCENTRATED (CHAIRS ONLY) → 7 NET

STANDING SPACE → 5 NET

UNCONCENTRATED (TABLES AND CHAIRS) → 15 NET

BUSINESS AREAS

CONCENTRATED (1004.8) → 50 GROSS

UNCONCENTRATED → 150 GROSS

CLASSROOMS

SHOPS AND VOCATIONAL ROOMS → 50 NET

EXERCISE ROOMS → 50 GROSS

KITCHENS (COMMERCIAL) → 200 GROSS

LOCKER ROOMS → 50 GROSS

STAGES AND PLATFORMS → 15 NET

LIBRARY:

STACK AREA → 100 GROSS

READING ROOM → 50 NET

REQUIRED EGRESS WIDTH:

MINIMUM CORRIDOR WIDTH (1005.3.2 EXCEPTION 1) → (44" MIN TABLE 1020.2) OR .15" PER OCCUPANT

MINIMUM STAIR WIDTH (1005.3.1 EXCEPTION 1) → (44" MIN 1011.2) OR .20" PER OCCUPANT

NUMBER OF EXITS REQUIRED (TAB. 1006.2.1 / TAB. 1006.3.2)

1-48 OCCUPANTS → 1 (WITH MAX 75' TRAVEL DISTANCE)

50-500 OCCUPANTS → 2

501-1000 OCCUPANTS → 3

1001 OR MORE OCCUPANTS → 4

MAXIMUM TRAVEL DISTANCE TO AN EXIT (TAB. 1017.2) → 250'

MAXIMUM TRAVEL DISTANCE TO AN EXIT FOR OUTDOOR SEATING (TABLE 1020.7 EXCEPTION 3) → TRAVEL DISTANCE IS NOT LIMITED FOR TYPE I AND II CONSTRUCTION

MAXIMUM LENGTH OF DEAD END CORRIDORS 1020.4 → 50' EQUIPPED WITH AN AUTOMATIC SPINKLER SYSTEM (OR)

EXCEPTION 2 → UNLIMITED LENGTH WHEN MIN. WIDTH < 2.5 TIMES THE WIDTH OF THE DEAD END CORRIDOR

EXCEPTION 3 → PERMITTED AT ACCESSORY, NON-HAZARDOUS ROOMS W/ A DISCREMINABLE PATH OF TRAVEL PROVIDED, NOT PERMITTED THROUGH KITCHENS, STORAGE, OR SIMILAR

EXITS THROUGH ADJOINING ROOMS (1016.2) →

COMMON PATH OF TRAVEL (1006.2.1) → 75'-0" TO CHOICE OF 2 EXIT PATHS

OCCUPANCY SUMMARY LEVEL 1:

NOTE: DESIGN CAPACITY IS BASED ON THE MAX S.F. ALLOWED BY THE TEXAS EDUCATION AGENCY (TEA) AND IS LOWER THAN THE MAX OCCUPANCY ALLOWED BY THE (IBC). EGRESS CALCULATIONS ARE BASED ON THE (IBC) REQUIREMENTS.

BUILDING 1 / LEVELS 1 & 2 (AREAS C, & D)

1,599 OCCUPANTS

4 EXITS REQUIRED | 10 EXITS PROVIDED

240' EXITING CAPACITY REQUIRED

640' EXITING CAPACITY PROVIDED

BUILDING 2 / LEVEL 1.2 (AREA A AND B)

610 OCCUPANTS

3 EXITS REQUIRED | 4 EXITS PROVIDED

92' EXITING CAPACITY REQUIRED

256' EXITING CAPACITY PROVIDED

OCCUPANCY / EGRESS LEGEND:

INTERIOR AND EXTERIOR DOOR EGRESS (IBC SECTION 1005.1)

① 3'-0" DOOR (32" CLR) AT .15'OCCUPANT = 213 OCCUPANTS

② 4'-0" DOOR (44" CLR) AT .15'OCCUPANT = 293 OCCUPANTS

③ PAIR 3'-0" DOOR (88" CLR) AT .15'OCCUPANT = 433 OCCUPANTS

REQUIRED STAIR WIDTH = 2'OCCUPANT

OCCUPANCY SCHEDULE - BUILDING 1 LEVELS 1 & 2

Number	Name	Level	Area	Occupancy Table 1004.5	Occupancy (IBC)
C101	KINDER	Level 1	776.23 SF	Educational - Classroom - NET	39
C103	STO	Level 1.2	94.42 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
C104	KINDER FLEX	Level 1	1778.76 SF	Educational - Classroom - NET	89
C108	FLEX	Level 1	450.17 SF	Educational - Classroom - NET	23
C109	IDF	Level 1.2	101.08 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
C110	KINDER	Level 1	762.07 SF	Educational - Classroom - NET	40
C113	KINDER	Level 1	790.94 SF	Educational - Classroom - NET	40
C115	KINDER	Level 1	781.86 SF	Educational - Classroom - NET	40
C118	KINDER	Level 1	1218.45 SF	Educational - Classroom - NET	61
C119	FLEX/KINDER	Level 1	446.67 SF	Educational - Classroom - NET	23
C121	AV STOR	Level 1	242.63 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
C122	OFFICE	Level 1.2	242.63 SF	Business Areas - GROSS	3
C124	LIBRARY/MEDIA CENTER	Level 1	3579.97 SF	Library, Reading Rooms - NET	72
C125	SCIENCE	Level 1.2	1093.17 SF	Educational - Classroom - NET	35
D101	DINING	Level 1	1437.94 SF	Assembly - Unconcentrated (tables & chairs) - NET	296
D103	IDF	Level 1	130.28 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D105	FIRE RISER	Level 1	155.35 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D106	OFFICE	Level 1	112.21 SF	Kitchens, Commercial - GROSS	1
D107	WASH	Level 1	203.32 SF	Kitchens, Commercial - GROSS	2
D109	SERVERY	Level 1	810.08 SF	Kitchens, Commercial - GROSS	5
D110	FOOD PREP	Level 1	678.71 SF	Kitchens, Commercial - GROSS	4
D112	LCR	Level 1	95.33 SF	Kitchens, Commercial - GROSS	1
D114.1	COOLER	Level 1	179.48 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D114.2	FREEZER	Level 1	124.50 SF	Kitchens, Commercial - GROSS	1
D115	DRY STO	Level 1	175.11 SF	Kitchens, Commercial - GROSS	1
D116	MECH	Level 1	619.45 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	3
D117	ELEC	Level 1	225.28 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D122	JAN	Level 1	103.45 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D123	PLATFORM	Level 1.2	383.57 SF	Assembly - Concentrated (non-fixed chairs) - NET	84
D125	MUSIC STOR	Level 1	246.61 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D130	MUSIC	Level 1.2	1169.69 SF	Educational - Shops & Other Vocational Areas - NET	24
D131	GYM	Level 1.2	4737.92 SF	Assembly - Concentrated (non-fixed chairs) - NET	677
D132	JAN	Level 1.2	63.41 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D133	ELEC	Level 1	138.05 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D134	STOR	Level 1	61.63 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
D135	CUST OFF	Level 1	224.30 SF	Business Areas - GROSS	3



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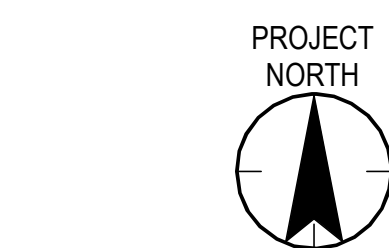
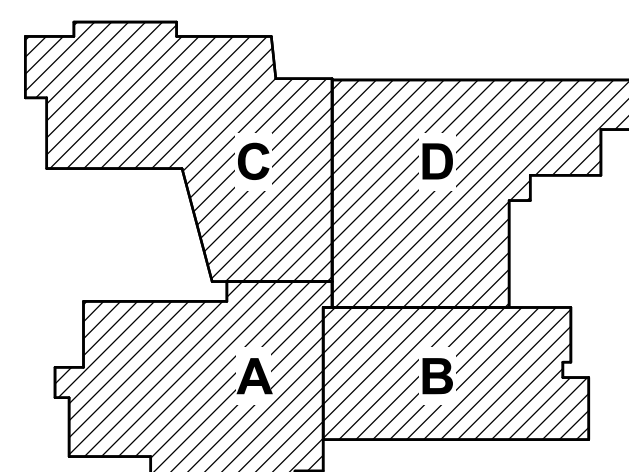
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Consultant

Notes

OCCUPANCY SCHEDULE - BUILDING 2 LEVEL 1.2

Number	Name	Level	Area	Occupancy Table 1004.5	Occupancy (IBC)
A102	TOUR LOUNGE	Level 1.2	638.72 SF	Business Areas - GROSS	7
A103	TLT	Level 1.2	54.74 SF	Business Areas - GROSS	1
A104	TLT	Level 1.2	59.36 SF	Business Areas - GROSS	1
A105	STO	Level 1.2	65.17 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A106	TOUR WKRM	Level 1.2	635.43 SF	Business Areas - GROSS	7
A107	ELEC	Level 1.2	91.38 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A108	CONF	Level 1.2	385.48 SF	Assembly - Unconcentrated (tables & chairs) - NET	21
A109	PRINCIPAL	Level 1.2	258.86 SF	Business Areas - GROSS	3
A110	CORRIDOR	Level 1.2	382.35 SF	Business Areas - GROSS	4
A111	OFFICE	Level 1.2	144.51 SF	Business Areas - GROSS	2
A112	OFFICE	Level 1.2	180.54 SF	Business Areas - GROSS	2
A113	AP	Level 1.2	186.54 SF	Business Areas - GROSS	2
A114	AP	Level 1.2	179.01 SF	Business Areas - GROSS	2
A115	RECEPTION	Level 1.2	487.81 SF	Business Areas - GROSS	5
A116A	COUNSELOR	Level 1.2	158.68 SF	Business Areas - GROSS	2
A116B	CONF	Level 1.2	158.10 SF	Assembly - Unconcentrated (tables & chairs) - NET	11
A117	SECL	Level 1.2	82.85 SF	Business Areas - GROSS	1
A118	TLT	Level 1.2	53.61 SF	Business Areas - GROSS	1
A119	MDF	Level 1.2	171.53 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A120	ISO	Level 1.2	81.63 SF	Business Areas - GROSS	1
A122	VAULT	Level 1.2	110.01 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A123	WKRM	Level 1.2	116.43 SF	Business Areas - GROSS	2
A124	CLINIC	Level 1.2	247.27 SF	Business Areas - GROSS	3
A126	STOR	Level 1.2	126.81 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A127	STOR/SAFE RM	Level 1.2	96.99 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A130	SPED	Level 1.2	780.17 SF	Educational - Classroom - NET	40
A131	SPED	Level 1.2	861.75 SF	Educational - Classroom - NET	41
A132	SPED	Level 1.2	802.18 SF	Educational - Classroom - NET	41
A134	SAFE RM	Level 1.2	118.75 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A135	FOCUS	Level 1.2	383.72 SF	Educational - Classroom - NET	20
A136	STORAGE	Level 1.2	123.86 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
A142	STOR	Level 1.2	156.70 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B101	1ST GRADE	Level 1.2	775.99 SF	Educational - Classroom - NET	39
B102	1ST GRADE FLEX	Level 1.2	1671.71 SF	Educational - Classroom - NET	84
B104	1ST GRADE	Level 1.2	812.89 SF	Educational - Classroom - NET	41
B105	1ST GRADE	Level 1.2	815.48 SF	Educational - Classroom - NET	41
B106	1ST GRADE	Level 1.2	794.32 SF	Educational - Classroom - NET	40
B109	JAN	Level 1.2	34.72 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B113	OFFICE	Level 1.2	125.55 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B114	STOR	Level 1.2	128.44 SF	Business Areas - GROSS	2
B115	ELEC	Level 1.2	77.72 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B116	STO	Level 1.2	203.30 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B117	IDF	Level 1.2	102.66 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1
B118	GYM STO A	Level 1.2	378.34 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	2
B119	LIT LIB	Level 1.2	348.95 SF	Educational - Classroom - NET	18
B120	FLEX	Level 1.2	446.15 SF	Educational - Classroom - NET	23
B121	FLEX 1ST GRADE	Level 1.2	802.33 SF	Educational - Classroom - NET	46
B122	1ST GRADE	Level 1.2	780.53 SF	Educational - Classroom - NET	40



Revision	By	Appd	YYYY-MM-DD

ISSUED FOR BIDDING AND CONSTRUCTION By Appd 2023.01.27

Permit/Seal



Client/Project Logo



Client/Project

New Braunfels ISD

NBISD ELEMENTARY SCHOOL

4365 Klein Meadows, New Braunfels, TX 78130

Title

EGRESS PLAN LEVEL 1

Project No.

214000825

Revision

Scale

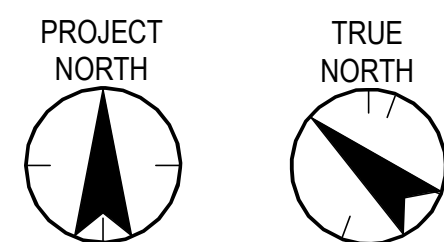
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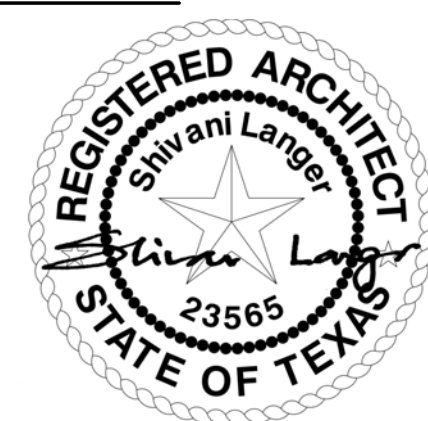
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REQUIRED STAIR WIDTH = .2'/OCCUPANT

OCCUPANCY SCHEDULE - BUILDING 2 LEVEL 2						
Number	Name	Level	Area	Occupancy Table 1004.5	Occupancy (BC)	
A201	2ND GRADE	Level 2	796.05 SF	Educational - Classroom - NET	40	
A202	2ND GRADE	Level 2	801.18 SF	Educational - Classroom - NET	41	
A203	STO	Level 2	1367.1 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
A204	STO	Level 2	1510.5 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
A205	FLEX	Level 2	776.21 SF	Educational - Classroom - NET	39	
A207	FLEX	Level 2	206.48 SF	Educational - Classroom - NET	11	
A208	2ND GRADE	Level 2	768.32 SF	Educational - Classroom - NET	40	
A209	2ND GRADE	Level 2	794.04 SF	Educational - Classroom - NET	40	
A210	2ND GRADE FLEX	Level 2	1632.82 SF	Educational - Classroom - NET	62	
A212	2ND GRADE	Level 2	782.94 SF	Educational - Classroom - NET	41	
A236	ELEC	Level 2	66.45 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
A243	FLEX ROOM	Level 2	307.99 SF	Educational - Classroom - NET	16	
B200	FLEX	Level 2	405.75 SF	Educational - Classroom - NET	21	
B203	JAN	Level 2	14.65 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B206	BOOK STOR	Level 2	212.25 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B208A	TESTING	Level 2	165.84 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B207	ELEC	Level 2	77.06 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B210	STO	Level 2	197.96 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B209	DP	Level 2	99.78 SF	Accessory Storage Areas, Mech. rooms, etc. - GROSS	1	
B218	TCHR WRMK	Level 2	604.56 SF	Business Areas - GROSS	7	
B211	FLEX 3RD GRADE	Level 2	903.74 SF	Educational - Classroom - NET	46	
B212	3RD GRADE	Level 2	779.18 SF	Educational - Classroom - NET	39	
B213	3RD GRADE	Level 2	775.99 SF	Educational - Classroom - NET	39	
B214	3RD GRADE FLEX	Level 2	1674.62 SF	Educational - Classroom - NET	84	
B216	3RD GRADE	Level 2	815.48 SF	Educational - Classroom - NET	41	
B217	3RD GRADE	Level 2	815.48 SF	Educational - Classroom - NET	41	
B218	3RD GRADE	Level 2	798.02 SF	Educational - Classroom - NET	40	

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Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD ELEMENTARY SCHOOL

4365 Klein Meadows, New Braunfels, TX 78130

Title
EGRESS PLAN LEVEL 2

Project No.
214000825
Revision

Scale
As indicated

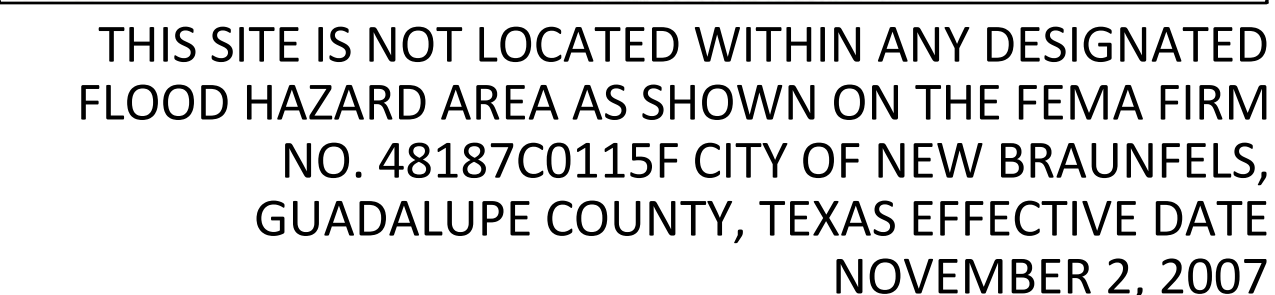
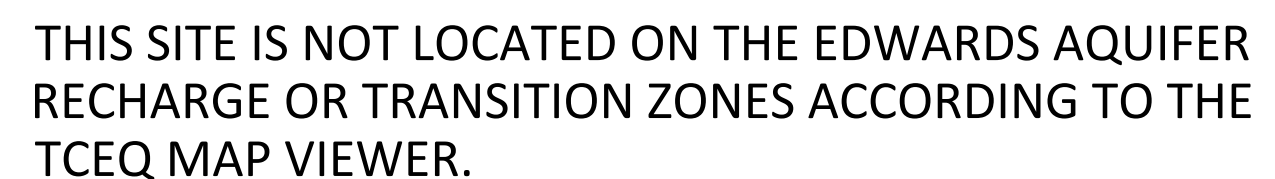
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4365 KLEIN MEADOWS NEW BRAUNFELS, TEXAS 78130

PROPERTY RECORDS OF GUADALUPE COUNTY, TEXAS

2017 NBISD BOND PROJECT



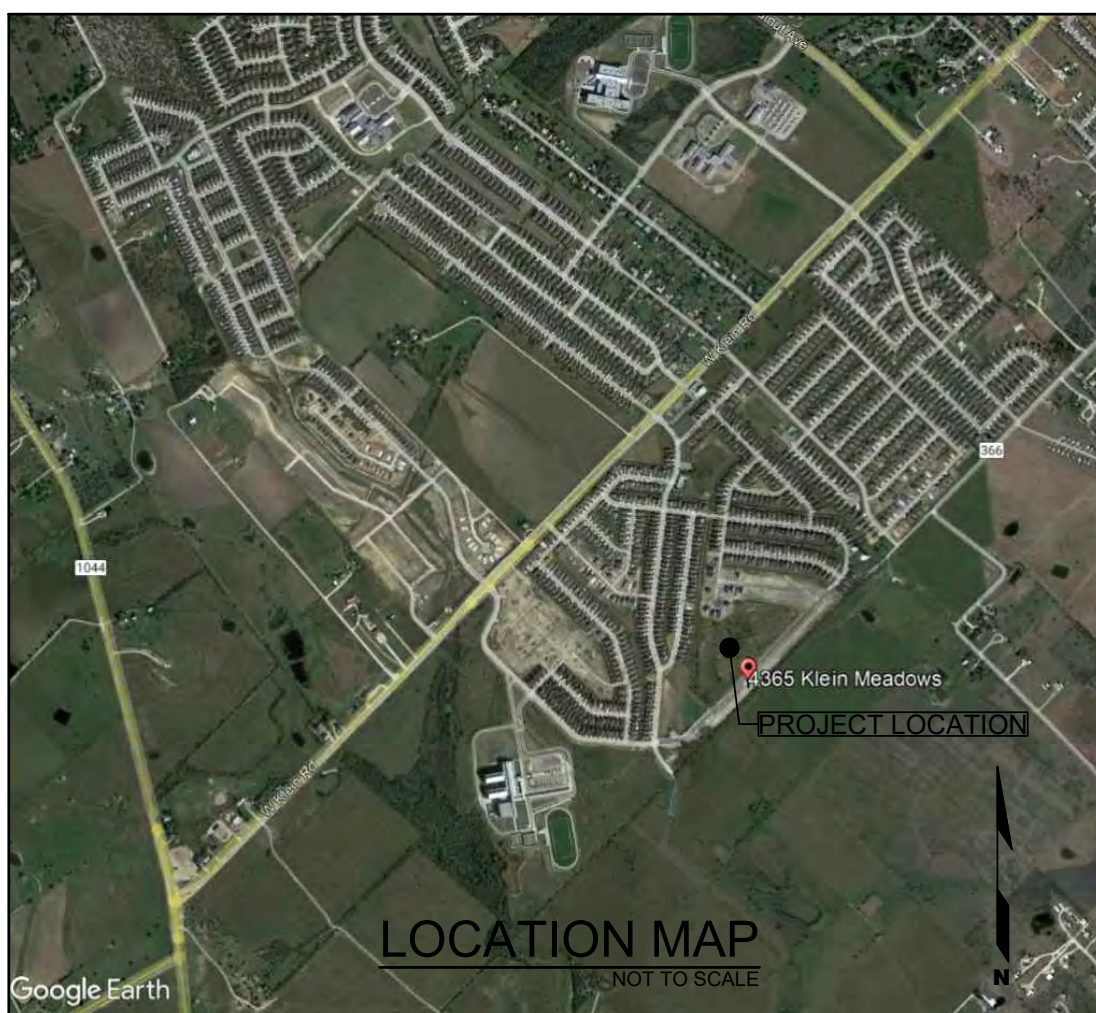
Fire Flow Demand	
Per Current International Fire Code	
Building Size In Square Feet	114,456 sf
Building Type Per Current IFC	Educational Group E II-B Construction
Building Height	35'- 0"
Available fire Flow calculated at 20 psi	2235 gpm
Required Fire Flow Per IFC	7250 gpm
Reduced Fire Flow 75% fire sprinkler Reduction	5,437 GPM
private Internal Fire Sprinkler System Demand	500 GPM
Minimum fire Flow (Design Eng. must include 1500 min or reduced fire flow amount which ever is greater	1,812 gpm

Domestic and Irrigation Water Demand	
Water Supply Fixture Units (Wsfu)	194
Domestic Demand Calculated per the WSFU	180 gpm
Irrigation Demand	60 gpm
Green Valley SUD Water Pressure Zone(s)	NO 1
Static Pressure	50 PSI
Highest Lot Served Lowest Lot Served	669 - 671
Lots with 65 psi or Greater require a PRV to be installed on the property owners side of the domestic water Meter	

New Braunfels Fire Department	
Design Standards	2018 IFC
Fire flow Demand @ 20 psi	7250 gpm
Intended Use	Educational Facility
Construction Classification	II-B
Building Fire Area	114,456 SF
Automatic Fire Sprinkler System	NFPA 13
Reduced Fire Flow Demand @ 20 psi	1,812 gpm
Fire Hydrant Flow Test	6/08/2020
Fire Hydrant Flow Test Location	Guenther & Nacodoches
High Rise	NO
Alternative Method of Compliance	N/A

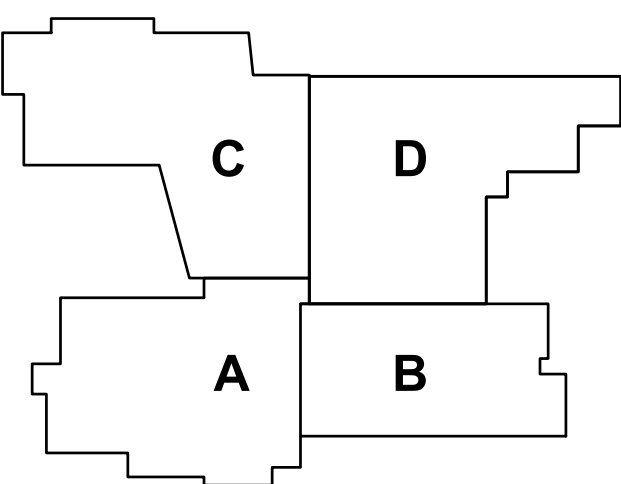
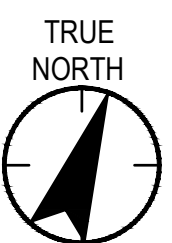
WATER: GREEN VALLEY SPECIAL UTILITY DISTRICT
WASTEWATER: GUADALUPE BLANCO RIVER AUTHORITY
ELECTRIC: GUADALUPE VALLEY ELECTRIC COOPERATIVE
GAS: CENTERPOINT

Index of Drawings	
Sheet Number	Sheet Title
C100	TITLE SHEET
C101	NOTES SHEET
C102	PLAT SHEET
CE100	OVERALL EROSION AND SEDIMENTATION CONTROL PLAN
CE500	ESC DETAILS
CS100	OVERALL SITE PLAN
CS101	NORTH SITE PLAN
CS102	SOUTH SITE PLAN
CS103	EAST SITE PLAN
CG100	OVERALL GRADING PLAN
CG101	NORTH GRADING PLAN
CG102	SOUTH GRADING PLAN
CG103	EAST GRADING PLAN
CN100	EXISTING DRAINAGE AREA MAP
CN101	PROPOSED DRAINAGE AREA MAP
CN102	OVERALL STORM SEWER PLAN
CN103	NORTH STORM SEWER PLAN
CN104	SOUTH STORM SEWER PLAN
CU200	PROFILE-STORM LINE-A
CU201	PROFILE STORM LINE- B
CU202	PROFILE-STORM LINE-C
CN500	STORM DETAILS 1
CN501	STORM DETAILS 2
CN502	DETENTION POND DETAILS
CL101	NORTH LAYOUT PLAN
CL102	SOUTH LAYOUT PLAN
CL103	EAST LAYOUT PLAN
CL104	COURTYARD LANDSCAPE SITE PLAN
CL500	LAYOUT DETAILS
CL501	LAYOUT DETAILS 2
CL502	LAYOUT DETAILS 3
CL503	LAYOUT DETAILS 4
CL504	COURTYARD PLAYSCAPE DETAILS
CP100	OVERALL PAVING PLAN
CP500	PAVING DETAILS
CU100	OVERALL UTILITY PLAN
CU101	NORTH UTILITY PLAN
CU102	SOUTH UTILITY PLAN
CU500	WATER DETAILS
CU501	WATER DETAILS
CU502	WASTEWATER DETAILS
L100	OVERALL LANDSCAPING PLAN
L101	NORTH LANDSCAPING PLAN
L102	SOUTH LANDSCAPING PLAN
L103	EAST LANDSCAPING PLAN
L500	SCREEN WALL DETAILS
CF100	FIRE PROTECTION PLAN

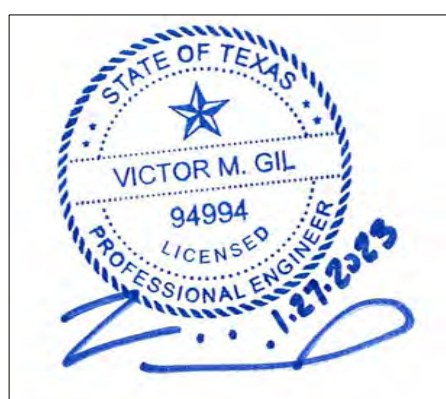


This note is being placed on the plan set in the absence of a temporary traffic control strategy with the full understanding that a minimum of 6 weeks prior to the start of construction, a temporary traffic control plan must be reviewed and approved by Right of Way Management Division. Standard Details are not a Traffic Control Plan. The owner/representative further recognizes that a review fee, as prescribed by the most current version is submitted to Right of Way Management Division for review.

- Pedestrian and bicycle traffic access must be maintained at all times, unless otherwise authorized by Right of Way Management.
- No long term lane closures will be authorized, unless Right of Way Management determines that adequate accommodations have been made to minimize traffic impact.
- Project should be phased so that utility installation minimally impacts existing or temporary pedestrian facilities.

[illegible]

File Name: N/A	Author	Designer	Checker	..
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
TITLE SHEET

Project No.
214000825
Revision

Scale

Drawing No.
C100

Stantec Architecture Inc.
3001 Bee Caves Road
Suite 300
Austin, 78746-5590
Tel: (512) 867-6000 • www.stantec.com

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Texas Registered Surveying Firm 10022600

Notes

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ARCHITECT:
STANTEC
3001 Bee Caves Rd., Ste. 300
Austin, TX 78746
Phone: (512) 867-6000
Fax: (512) 867-6001

January 11, 2021

Submittal Date

Site Development Permit Number

Submittal Date

Land Status

REVIEWED BY:

Development Services Department

APPROVED BY

Industrial Waste

New Braunfels Utilities

New Braunfels Fire Department

[illegible]

Consultant



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Texas Registered Engineering Firm F-1186
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Notes

SHEET 1 of 1

PLAT IS CURRENTLY UNDER REVEIW

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Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
PLAT SHEET

Project No. _____

214000825

Revision

Scale

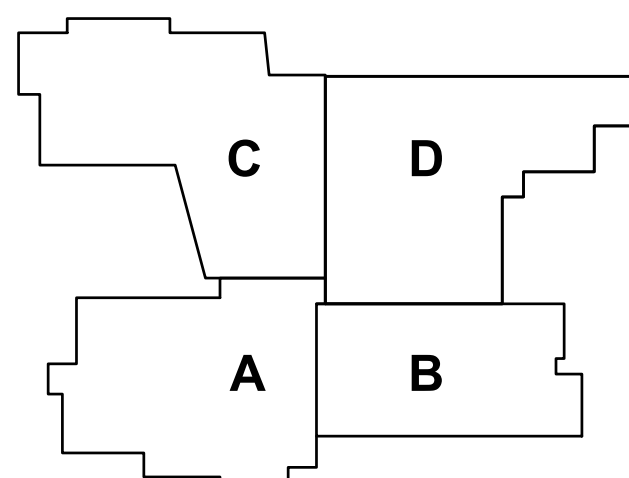
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Drawing No.

C102

Consultant

Notes

[illegible]

Permit/Sea



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
OVERALL EROSION AND SEDIMENTATION
CONTROL PLAN

Project No. _____

214000825

Revision

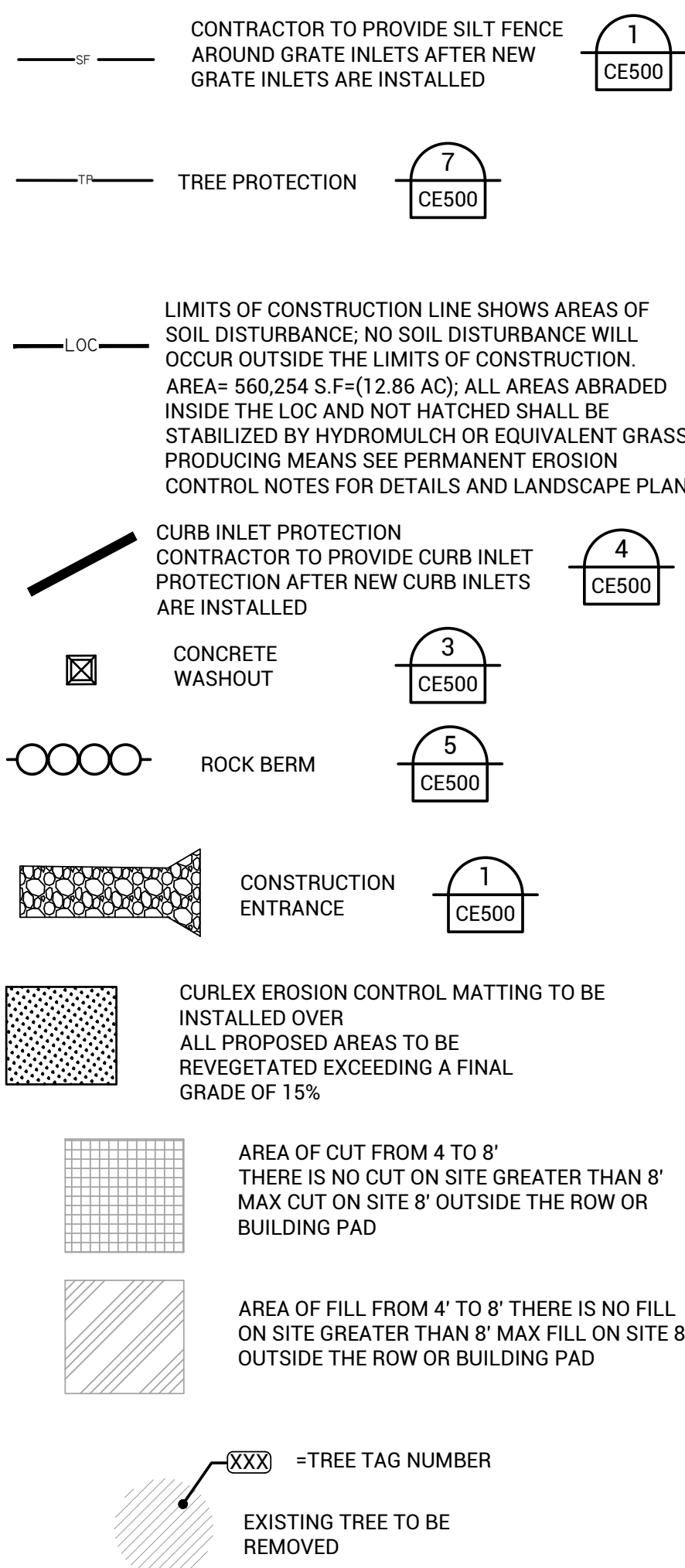
Scale

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Drawing No.

CE100

TEMPORARY EROSION CONTROL LEGEND



TEXAS POLLUTION DISCHARGE ELIMINATION NOTES

The Erosion Sedimentation control plan is provided for review and approval purposes and does NOT limit the responsibility of the Contractor to satisfy all of the requirements for Contractor's compliance with the Texas Pollution Discharge Elimination System Rule (TPDES) General Permit (TXR150000) and/or the TPDES Multi-Sector General Permit (TXR 050000).

Contractor is required to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) as required by Storm Water Pollution Prevention for Construction. The site is larger than 1 acre and the Contractor is required to develop its own Storm Water Pollution Prevention Plan (SWP3) utilizing the Best Management Practices (BMP) as required by EPA and TCEQ. A copy of the Notice of Intent NOI shall be posted at the entrance to the site with all other EPA and TCEQ required postings. Contractor shall be responsible for the required SWP3.

Contractor may subcontract with an Environmental Consulting Services firm to provide services to comply with all the Storm Water Compliance. These services may include: (1) Storm Water Permitting, (2) Storm Water Pollution Prevention Plans (SWPP) as required by Federal, Texas State, and local Regulatory agencies (3) Storm Water Site Postings, and (4) Required Site Inspections of non-compliant conditions, maintenance and other site conditions necessitating corrections to satisfy EPA and TCEQ and City of Hutto.

At the completion of the project, after the permanent erosion controls are established, the Contractor shall file a Notice of Termination (NOT) and maintain said such records for a period of at least 3 years after the date given in the NOT.

EROSION CONTROL NOTES

-Contractor shall utilize dust control measures during site construction such as irrigation trucks and mulching.

-Per TPDES requirements, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days. Seeding does not constitute as stabilization.

The contractor will clean up spoils that migrate onto the roads a minimum of once daily.

The contractor is responsible for removing any sediment transported from the LOC to the detention / water quality pond(s)."

Install the following inlet marker at every inlet: Almetek 4" DISC "No Dumping Drains to Creek" Marker, SD-A-4R-03-01-BLNA, Aluminum, Symbol: Fish, Color: blue, Use Almetek install specifications for surface w/adhesive for dry concrete install.

STANDARD NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. The contractor shall install erosion / sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation, etc.).
2. The placement of erosion / sedimentation controls shall be in accordance with the approved Erosion and Sedimentation Control Plan.
3. The placement of tree / natural area protective fencing shall be in accordance with the approved Grading / Tree and Natural Area Plan.
4. A pre-construction conference shall be held on-site with the contractor, design engineer/permit applicant and Environmental Inspector after installation of the erosion / sedimentation controls and tree/natural area protection measures and prior to beginning any site preparation work. The contractor shall notify the City of New Braunfels, at least three days prior to the meeting date.
5. Any significant variation in materials or locations of controls or fences from those shown on the approved plan must be approved by the reviewing Engineer, Environmental Specialist or City Arborist as appropriate.
6. The contractor is required to inspect the controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to the controls and fences. Accumulation at controls must be removed when the depth reaches six (6) inches.

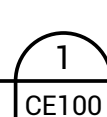
7. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.
8. Field revisions to the Erosion and Sedimentation Control Plan may be required by the Environmental Inspection during the course of construction to correct control inadequacies. Major revisions must be approved by the City of New Braunfels.
9. Permanent Erosion Control:
 - a. All disturbed areas shall be restored as noted below.
 - i. A minimum of four inches of topsoil shall be placed in all areas abraded by the contractor.
 - ii. The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows:
 - i. From September 15 to March 1, seeding shall be with a combination of 1.0 pounds per 1000 square feet of unhulled Bermuda and 5.0 pounds per 1000 square feet of Winter ryegrass with a purity of 95% with 90% germination.
 - ii. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1.0 pounds per 600 square feet with a purity of 95% with 85% germination.
 - iii. Fertilizer shall have an analysis of 15-15-15 and shall be applied at the rate of 600 pounds per acre.

(d) The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of 1/2 inch or more shall postpone the watering schedule for one week.

(e) Mulch type used shall be cellulose, applied at a rate of 2000 pounds per acre.

(f) Restoration shall be acceptable when the grass has grown at least 1-1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.

(g) When required, native grass seeding shall comply with requirements of the City of New Braunfels.



OVERALL EROSION AND SEDIMENTATION CONTROL PLAN

SCALE: 1"= 50'



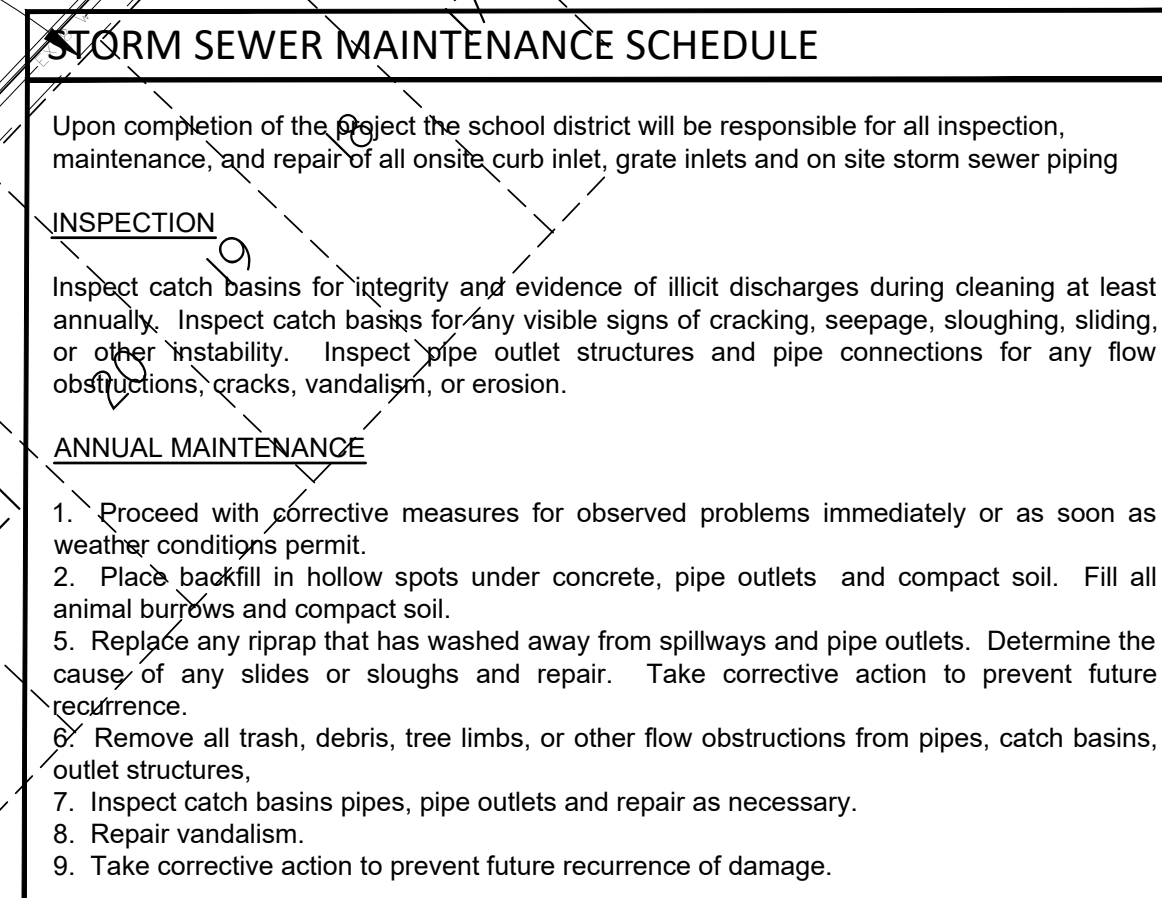
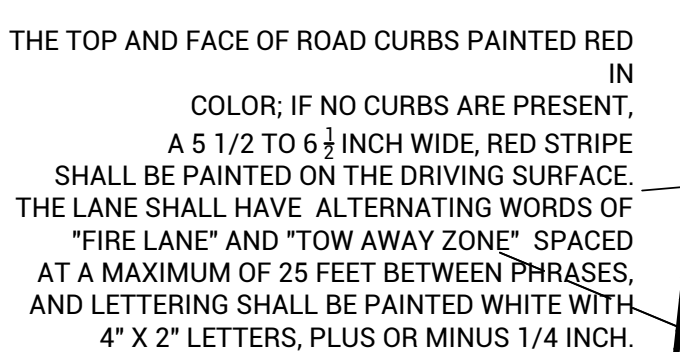
SEQUENCE OF CONSTRUCTION

A.	AFTER THE ACQUISITION OF ALL REQUIRED PERMITS, NOTIFY THE ENGINEER AND OWNER DEPARTMENT FOR A PRE-CONSTRUCTION CONFERENCE 3 DAYS IN ADVANCE.
B.	INSTALL THE TEMPORARY EROSION/SEDIMENTATION CONTROLS.
C.	ROUGH GRADE THE DETENTION POND FOR A SEDIMENTATION TRAP.
D.	DEMOLITION AND ROUGH GRADING.
E.	CONSTRUCTION OF STORM WATER SYSTEM.
F.	FINISH GRADING. INSTALL INLET SILT PROTECTION FOR THE STORM SEWER SYSTEM AFTER THE INLET IS CONSTRUCTED.
G.	PLACEMENT OF PARKING SURFACE MATCHING NEW GRADE.
H.	INSTALL PERMANENT EROSION CONTROLS.
I.	OBTAIN CONCURRENCE LETTER FROM ENGINEER, AND THE FINAL INSPECTION WILL BE SCHEDULED UPON RECEIPT OF THE LETTER
J.	REMOVE TEMPORARY EROSION CONTROLS AFTER ACCEPTANCE OF THE PERMANENT CONTROLS.

OVERALL BUILDING COVERAGE	59,825 S.F. 10.675% OF SITE
OVERALL GROSS FLOOR AREA	114,456 S.F.
F.A.R. INFORMATION	F.A.R. 0.18:1 18.7% OF SITE
MAX. IMPERVIOUS COVER	80%
TOTAL IMPERVIOUS COVER	295,844 S.F. 52.792%
TOTAL OPEN SPACE	264,552 S.F.

GENERAL NOTES	<p>ALL CONTRACTOR PARKING AND STAGING OF EQUIPMENT/MATERIALS SHALL BE WITHIN THE SCHOOL SITE. NO PARKING, OR STAGING OF MATERIALS/EQUIPMENT SHALL BE ALLOWED IN THE EXISTING NEIGHBORHOODS OR ADJACENT PROPERTIES</p> <p>ALL MASONRY PERIMETER CONCRETE FENCING ON SITE SHALL ALLOW FOR DRAINAGE BELOW AND/OR AROUND THE FENCING. FLOW SHALL BE RETURNED TO A SHEET FLOW CONDITION AND NOT COLLECTED AT ANY POINT.</p>
TRAFFIC CIRCULATION ANALYSIS	<p>NBISD ELEMENTARY SCHOOL SCHOOL DATES AUGUST 15 - MAY 25 SUBJECT TO CHANGE BY STATE</p> <p>FACILITY CAPACITY 90 EMPLOYEES</p> <p>ELEMENTARY EMPLOYEE PARKING: 90 SPACES</p> <p>HOURS OF OPERATION: SCHOOL OPENS: 6:35 AM SCHOOL CLOSES: 4:35 PM</p> <p>TOTAL ONSITE PARKING: 187 REGULAR SPACES</p>

ZONING SND-1



EXTENDED DETENTION BASIN MAINTENANCE SCHEDULE

Upon completion of the project the school district will be responsible for all inspection, maintenance, and repair of all onsite detention ponds, channels and grass swales.

INSPECTION

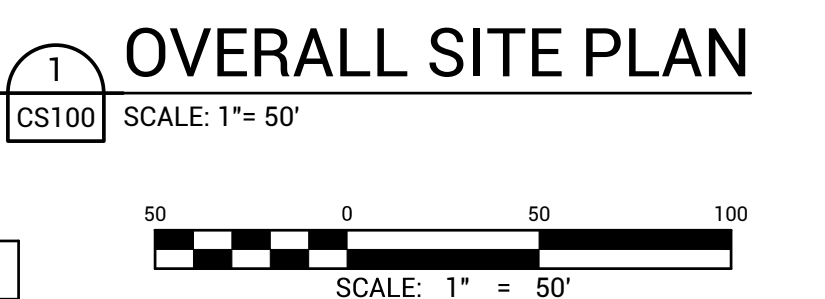
Inspect detention pond, channels and swales for erosion and any changes after every major storm even but at least monthly. Inspect embankments for any visible signs of erosion, seepage, sloughing, sliding, or other instability. Inspect outlet structures and walls for any flow obstructions, cracks, vandalism, or erosion.

REGULAR MAINTENANCE

1. Proceed with corrective measures for observed problems immediately or as soon as weather conditions permit.
2. Maintain good grass cover at all times. Fertilize grass according to type of grass.
3. Mow grass as required. When mowing is performed, a mulching mower should be used, or grass clippings should be collected and removed. Remove undesirable vegetation such as trees, bushes, vines, briars, briars and weeds. Minimize the use of herbicides.
4. Fill all eroded gullies and vehicle ruts and compact soil. Place backfill in hollow spots under concrete, spillways or outlet structures and compact soil. Fill all animal burrows and compact soil.
5. Replace any riprap that has washed away from spillways and pipe outlets. Determine the cause of any slides or sloughs and repair. Take corrective action to prevent future recurrence.
6. Remove all trash, debris, tree limbs, or other flow obstructions from detention pond, outlet structures, channels, swales and pipes.
7. Inspect walls, fences and ramps and repair as necessary.
8. Repair vandalism.
9. Take corrective action to prevent future recurrence of damage.

ANNUAL MAINTENANCE

1. Remove vegetation from any cracks in concrete spillways, walls or outlet structures and seal with a mastic joint filler.
2. Remove any accumulated sediment common to all ponds, channels and swales. Restore ponds, channels, and swales to design volume.
3. Reseed or resod grass as necessary to maintain good vegetative cover.

[illegible]

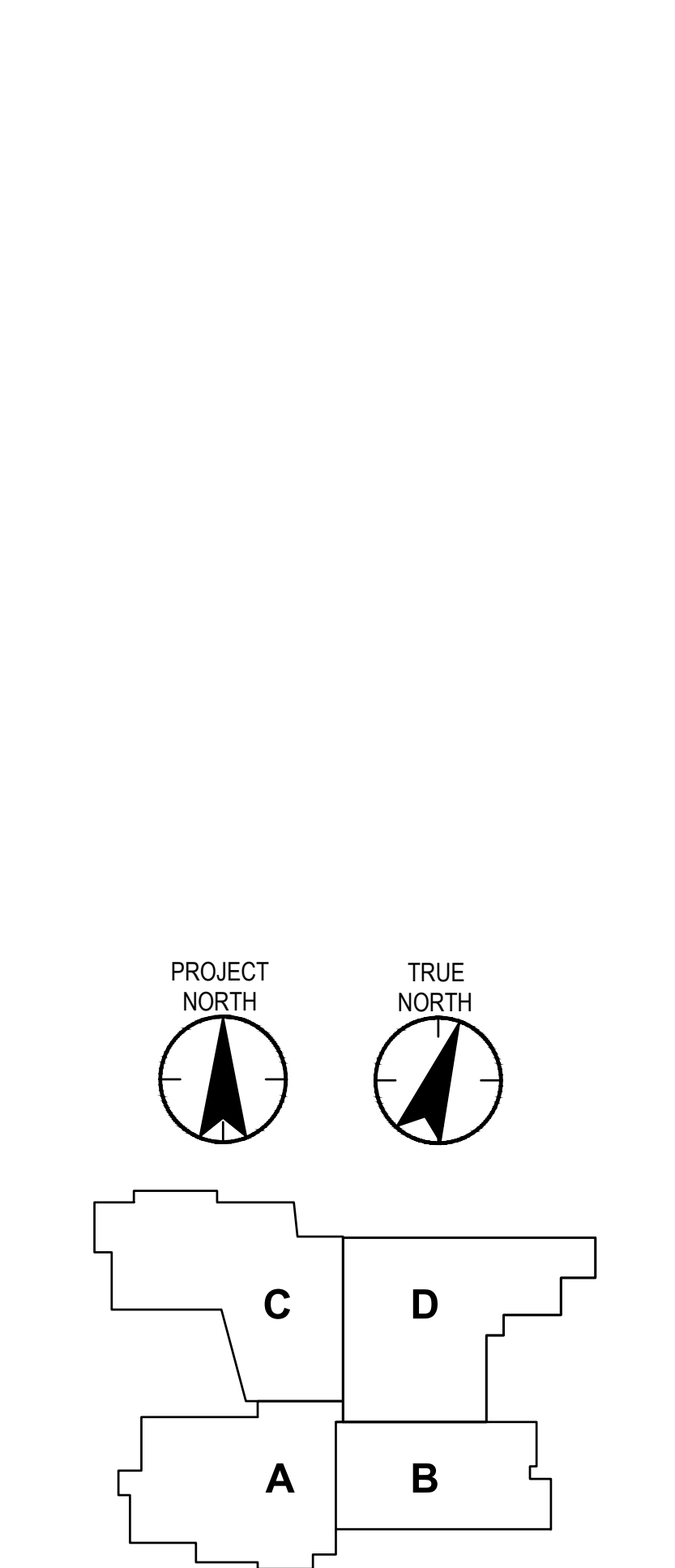


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Texas Registered Engineering Firm F-1186
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Notes

[illegible]

Permit/Seal



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NORTH SITE PLAN

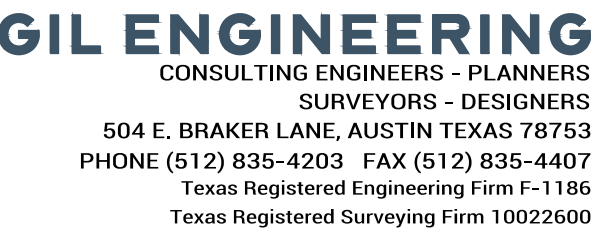
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214000825	..
Revision	Drawing No.

CS101

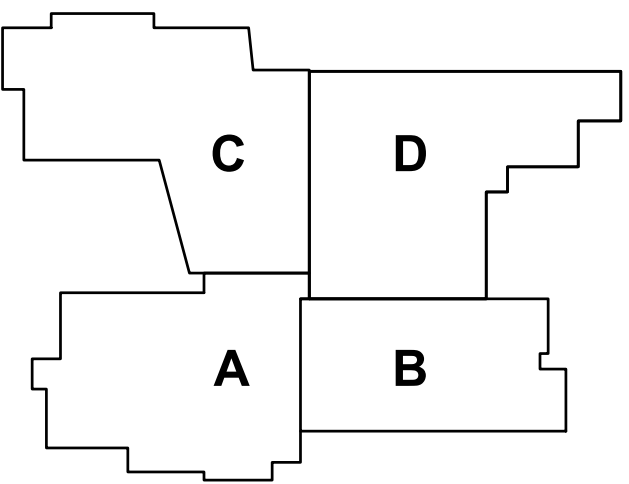


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Notes

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SOUTH SITE PLAN

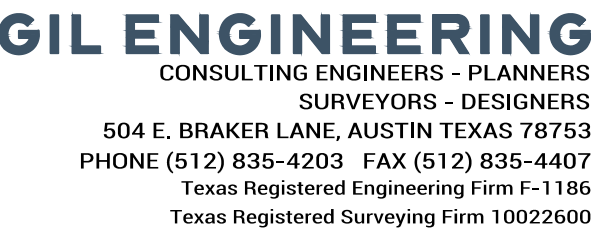
Project No.	Scale
214000825	..
Revision	Drawing No.

CS102

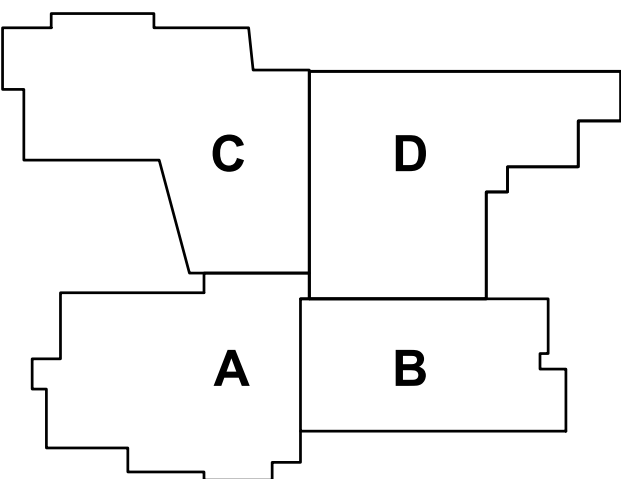


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	By	Appd	YYYY.MM.DD

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Title
EAST SITE PLAN

Project No. _____

214000825

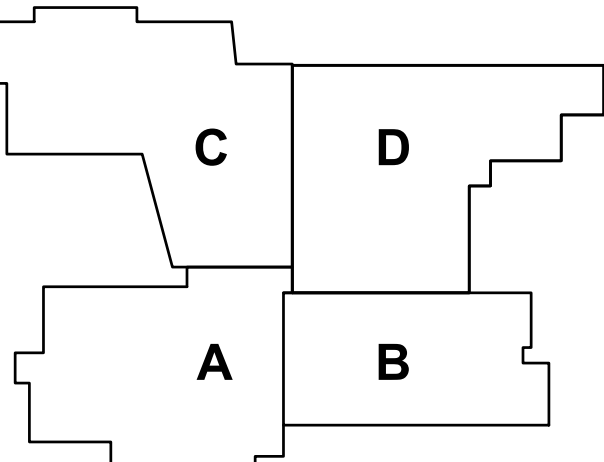
Revision

Scale

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Drawing No.

CS103



GRADING LEGEND	
TC	TOP OF CURB ELEVATION
GU	GUTTER ELEVATION
**	CONTRACTOR TO MATCH EXISTING ELEVATION
HP	HIGH POINT
LP	LOW POINT
	PROPOSED CONTOUR
	UNDERSLAB CONTOUR
100	EXISTING CONTOUR

ACCESSIBILITY GRADING NOTES

GRADING HAS BEEN DESIGNED TO HANDICAPPED ACCESSIBILITY STANDARD AS REQUIRED BY TEXAS DEPARTMENT OF LICENSING AND REGULATION, ARCHITECTURAL BARRIERS PROGRAM. CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH THE MOST CURRENT TEXAS ACCESSIBILITY STANDARDS AND ADMINISTRATIVE RULES AS PROVIDED IN INTERNET SITE WWW.LICENSE.STATE.TX.US.

CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING HANDICAPPED ACCESSIBLE PATHS FROM HANDICAPPED PARKING SPACES TO ENTRANCES BY CHECKING THAT GROSS SLOPES THAT ARE NOT GREATER THAN 1.75% AND THAT ACCESS AISLE WITH 4.75% MAXIMUM (UP OR DOWN) SLOPE HAVE BEEN PROVIDED.

CONTRACTOR SHALL ISSUE REQUEST FOR INSTRUCTIONS, PRIOR TO CONSTRUCTION, FOR ANY CONDITION WHICH DOES NOT APPEAR TO MEET THE TEXAS DEPARTMENT OF LICENSING AND REGULATION, ARCHITECTURAL BARRIERS PROGRAM REQUIREMENTS.

CONCRETE FLATWORK PLACED AGAINST THE BUILDING SHALL BE A MINIMUM OF 1/2" BELOW THE BRICK WEEP HOLES. HOWEVER, AT ENTRANCES AND DOORWAYS, THE CONCRETE FLATWORK SHALL BE FLUSH WITH THE BUILDING'S CONCRETE FINISH SURFACE. THE CONCRETE FLATWORK SHALL BE SLOPED AT 1:20 MAXIMUM FROM THE BUILDING'S CONCRETE FINISH SURFACE TO ACHIEVE THE REQUIRED "CLEARANCE" BELOW THE BRICK WEEP HOLES.

CONCRETE FLATWORK AT ENTRANCES AND DOORWAYS SHALL BE ANCHORED WITH 20" LONG #4 SMOOTH DOWELS AT 12" O.C. AND DRILLED A MINIMUM OF 8" INTO BUILDING'S CONCRETE FOUNDATION.

IT IS THE INTENT OF THE GRADING SHOWN TO SLOPE THE GROUND THAT IS IMMEDIATELY ADJACENT TO THE BUILDING'S FOUNDATION BE SLOPED AWAY FROM THE BUILDING AT A SLOPE NOT LESS THAN 5% (1 UNIT VERTICAL TO 20 UNITS HORIZONTAL) FOR A MINIMUM DISTANCE OF 10 FEET (MEASURED PERPENDICULAR TO THE BUILDING AT ALL POINTS). ALL SIDEWALKS AND OTHER IMPERVIOUS COVERED AREAS, WHERE SPOT ELEVATIONS ARE NOT GIVEN, SHALL BE SLOPED A MINIMUM OF 2% (1 UNIT VERTICAL TO 50 HORIZONTAL) FOR THE SAME 10 FEET.

TEXAS 811 DAMAGE PREVENTION NOTE

NOTE: EXISTING GAS LINES ARE LOCATED IN THIS AREA. CONTRACTOR SHALL BE RESPONSIBLE TO CALL TEXAS 811 FOR UTILITY LOCATOR SERVICES TO LOCATE GAS LINE. CONSTRUCTION IN THIS AREA IS SUBJECT TO CHAPTER 18 UNDERGROUND PIPELINE DAMAGE PREVENTION RULES, PROMULGATED BY THE RAILROAD COMMISSION OF TEXAS. ANY DAMAGE TO THE GAS LINES MUST BE IMMEDIATELY REPORTED TO 811 AND GAS COMPANY AND A TEXAS DAMAGE REPORTING FORM SUBMITTED BY THE CONTRACTOR TO THE RRC (GAS COMPANY DOING REPAIRS IS NOT SUFFICIENT) WITHIN 10 DAYS OF INCIDENT.

FEDERAL REGULATION TITLE 49 PART 192.181

ACCESS MUST BE PROVIDED TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

GRADING NOTES

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
- SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.
- ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.
- ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
- THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE. THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL, CLEAN STRIPPING AND TOPSOIL MAY BE STOCKPILE ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.
- THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).
- THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HERE ON WITHIN +/- ONE-TENTH (0.10) FOOT. CONCRETE OR PAVED AREAS SHALL BE WITHIN +/- FIVE HUNDREDTHS (0.05) FOOT.
- IN PROPOSED PAVING AREAS, IT IS INTENDED THAT THE MINIMUM GRADE IS 1%. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 1:0% UNLESS OTHERWISE SHOWN.
- THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.
- UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND 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 CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.
- POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
- FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

STORM SEWER MAINTENANCE SCHEDULE

Upon completion of the project the school district will be responsible for all inspection, maintenance, and repair of all onsite detention ponds, channels and grass swales.

INSPECTION

Inspect catch basins for integrity and evidence of illicit discharges during cleaning at least annually. Inspect catch basins for any visible signs of cracking, seepage, sloughing, sliding, or other instability. Inspect pipe outlet structures and pipe connections for any flow obstructions, cracks, vandalism, or erosion.

ANNUAL MAINTENANCE

- Proceed with corrective measures for observed problems immediately or as soon as weather conditions permit.
- Place backfill in hollow spots under concrete, pipe outlets and compact soil. Fill all animal burrows and compact soil.
- Replace any riprap that has washed away from spillways and pipe outlets. Determine the cause of any slides or sloughs and repair. Take corrective action to prevent future recurrence.
- Remove all trash, debris, tree limbs, or other flow obstructions from pipes, catch basins, outlet structures.
- Inspect catch basins pipes, pipe outlets and repair as necessary.
- Repair vandalism.
- Take corrective action to prevent future recurrence of damage.

DETENTION POND MAINTENANCE SCHEDULE

Upon completion of the project the school district will be responsible for all inspection, maintenance, and repair of all onsite detention ponds, channels and grass swales.

INSPECTION

Inspect detention pond, channels and swales for erosion and any changes after every major storm even but at least monthly. Inspect embankments for any visible signs of erosion, seepage, sloughing, sliding, or other instability. Inspect outlet structures and walls for any flow obstructions, cracks, vandalism, or erosion.

REGULAR MAINTENANCE

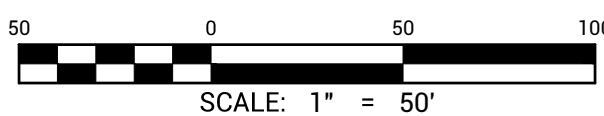
- Proceed with corrective measures for observed problems immediately or as soon as weather conditions permit.
- Maintain good grass cover at all times. Fertilize grass according to type of grass.
- Mow grass as required. When mowing is performed, a mulching mower should be used, or grass clippings should be collected and removed. Remove undesirable vegetation such as trees, bushes, vines, briars and weeds. Minimize the use of herbicide.
- Fill all eroded gullies and vehicle ruts and compact soil. Place backfill in hollow spots under concrete, spillways or outlet structures and compact soil. Fill all animal burrows and compact soil.
- Replace any riprap that has washed away from spillways and pipe outlets. Determine the cause of any slides or sloughs and repair. Take corrective action to prevent future recurrence.
- Remove all trash, debris, tree limbs, or other flow obstructions from detention pond, outlet structures, channels, swales and pipes.
- Inspect walls, fences and ramps and repair as necessary.
- Repair vandalism.
- Take corrective action to prevent future recurrence of damage.

ANNUAL MAINTENANCE

- Remove vegetation from any cracks in concrete spillways, walls or outlet structures and seal with a mastic joint filler.
- Remove any accumulated sediment common to all ponds, channels and swales. Restore ponds, channels, and swales to design volume.
- Reseed or reseed grass as necessary to maintain good vegetative cover.

OVERALL GRADING PLAN

CG100 SCALE: 1" = 50'



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
OVERALL GRADING PLAN

Project No.

214000825

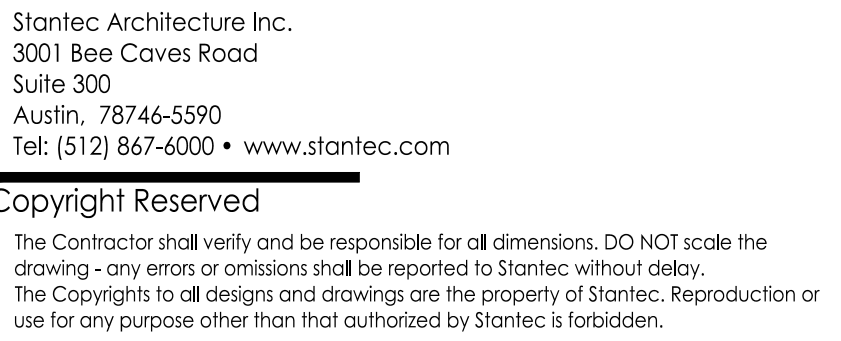
Revision

Scale

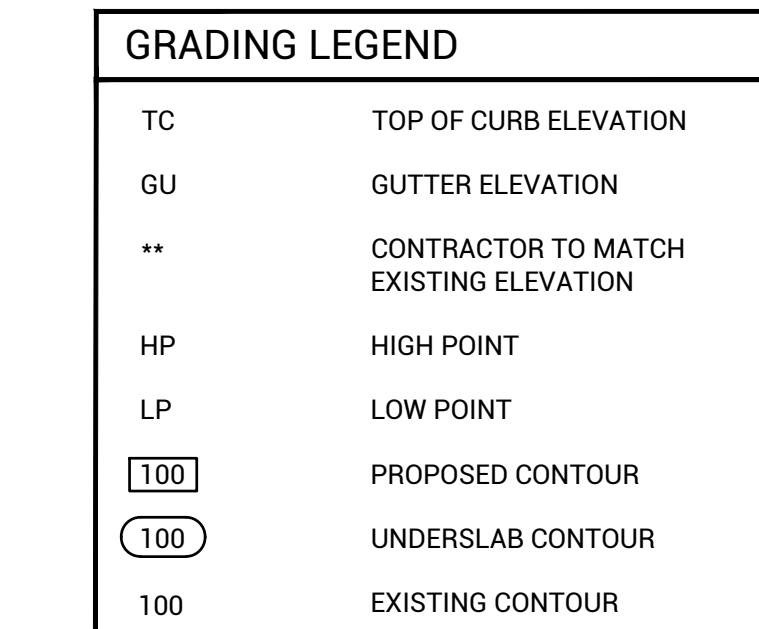
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Drawing No.

CG100

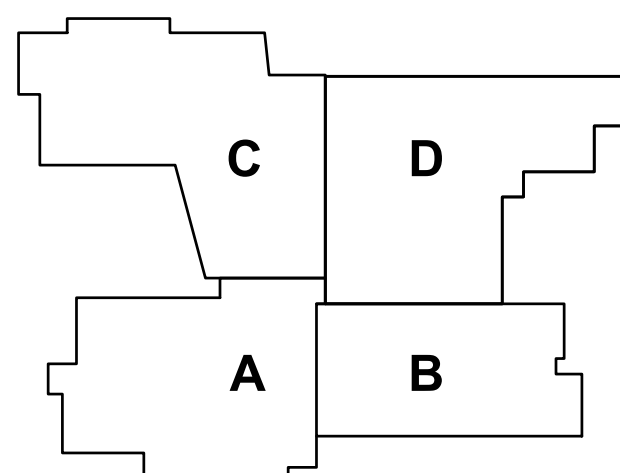
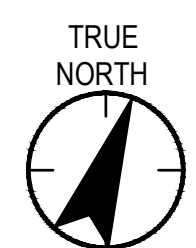


Notes



GRADING NOTES

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE COUNTY AND TxDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.
3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.
4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
5. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLean STRIPPING AND TOPSOIL MAY BE STOCKPILE ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE ENGINEER.
7. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TDCS/SWPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN FOR DETAIL.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TDCS BOOK).
9. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HERE ON WITHIN +/- ONE-TENTH (0.10) FOOT. CONCRETE OR PAVED AREAS SHALL BE WITHIN +/- FIVE HUNDRETHS (0.05) FOOT.
10. IN PROPOSED PAVING AREAS, IT IS INTENDED THAT THE MINIMUM GRADE IS 1% ALL EARTHEN AREAS SHALL BE MINIMUM 2% AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.
11. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.
12. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO EXERCISING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.
13. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.
14. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM EXISTING FOUNDATIONS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT OR TO ALLOW ANY PONDING OF WATER.
15. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

[illegible]

Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
NORTH GRADING PLAN

Project No.
214000825
Revision

Scale
..
Drawing No.
CG101

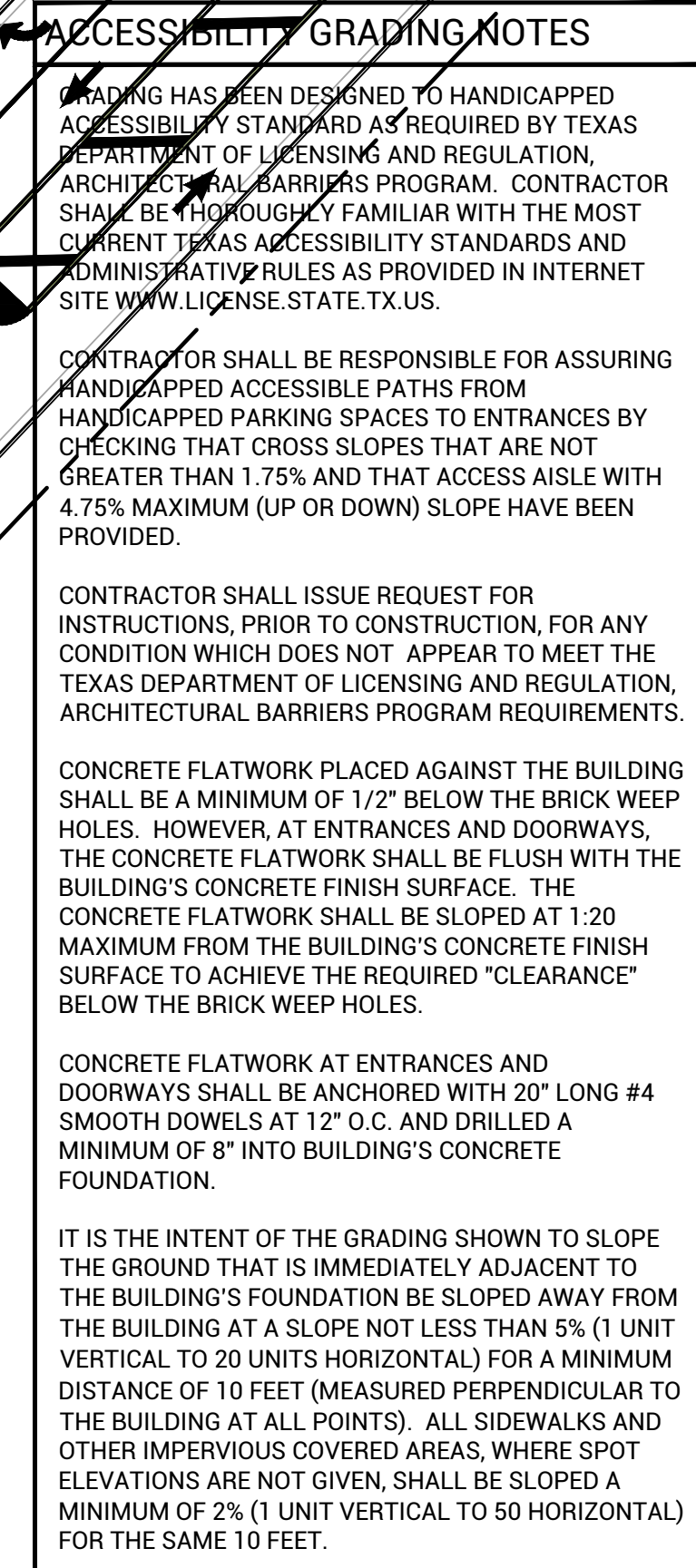


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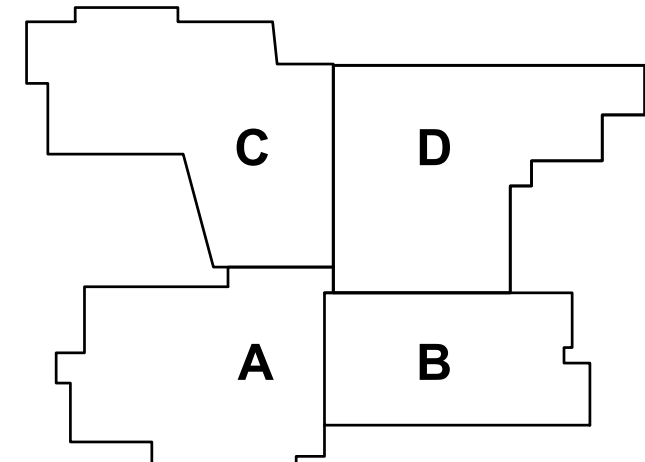
Notes



NOTE: EXISTING GAS LINES ARE LOCATED IN THIS AREA. CONTRACTOR SHALL BE RESPONSIBLE TO CALL TEXAS 811 FOR UTILITY LOCATOR SERVICES TO LOCATE GAS LINE. CONSTRUCTION IN THIS AREA IS SUBJECT TO CHAPTER 18 UNDERGROUND PIPELINE DAMAGE PREVENTION RULES, PROMULGATED BY THE RAILROAD COMMISSION OF TEXAS. ANY DAMAGE TO THE GAS LINES MUST BE IMMEDIATELY REPORTED TO 811 AND GAS COMPANY AND A TEXAS DAMAGE REPORTING FORM SUBMITTED BY THE CONTRACTOR TO THE RRC (GAS COMPANY DOING REPAIRS IS NOT SUFFICIENT) WITHIN 10 DAYS OF INCIDENT.

ACCESS MUST BE PROVIDED TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TPOOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.
3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING ON THE COMPLETION.
4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
5. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE. THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND OR LEAN STRIPPING AND TOPSOIL MAY BE STOCKPILE ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.
7. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGEWAYS.
9. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES TO SITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).
10. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HERE ON WITHIN +/- .ONE-TENTH (0.10) FT. CONCRETE OR PAVED AREAS SHALL BE WITHIN +/- FIVE HUNDREDTHS (0.05) FOOT.
11. IN PROPOSED PAVING AREAS, IT IS INTENDED THAT THE MINIMUM GRADE IS 1%. ALL EARTHEN SLOPES SHALL BE AT A MINIMUM OF 2:1 AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.
12. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.
13. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPEARANCES. PRIOR TO BEGINNING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.

[illegible]

Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
SOUTH GRADING PLAN

Project No.	Scale
214000825	..
Revision	Drawing No.

CG102



CG103 SCALE: 1" = 50'

30 0 30 60

SCALE: 1" = 30'

CG103 NTS

A diagram showing four rectangles arranged in a 2x2 grid. The rectangles are labeled A, B, C, and D. Rectangle A is at the bottom-left, B is at the bottom-right, C is at the top-left, and D is at the top-right. The rectangles are of different sizes and are arranged such that they share edges and form a larger, irregular shape.

Permit/Seal

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
EAST GRADING PLAN

Project No. _____

214000825

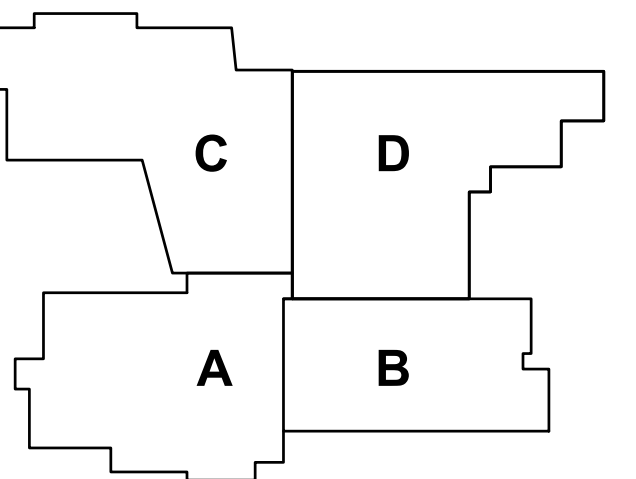
Revision

Scale

• •

Drawing No.

CG103



Time of Concentration (Existing Conditions)											
Area No.	Sheet Flow				Shallow Concentrated Flow				Total Calculate TC	TC value Used (Min)	NOTES
	Length (ft)	Mannings n	Slope (ft/ft)	TC (min)	Length (ft)	Mannings n	Slope (ft/ft)	TC (min)			
EDA1	100	0.15	0.0275	7.6	1727	0.150	0.0154	14.4	22.01	22.00	SCF UnPaved
CONDOESDM 4.2.2 EQ 4.4 0.007(nL) ² /S(P/2) ³ 50°-4					EQ 4-5 T _c =L/(60(16.1345)(n) ² /S ungravel T _c =L/(60(20.3282)(n) ² /S paved						

Storm Runoff Calculations (Existing Conditions)										
AREA NO.	Total Area (SF)	Impervious Cover (sf)	Pervious (sf)	Area (ac)	Curve Number	T _c (min)	Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)
EX A1	645,301	32,264	613,037	14.81	84	22	25.58	57.62	79.92	122.56
										POINT OF ANALYSIS - A

EXISTING CONDITIONS		
AREA (sf)	CN	DESCRIPTION
560395	84	50-75% GRASS COVER, FAIR, HSG D
84906	87	1/4 ACRE LOTS, 38% IMP, HSG D
645301	84	WEIGHTED AVERAGE
613037		95% PERVIOUS AREA
32264		5% IMPERVIOUS AREA

POINT OF ANALYSIS - A					
CONDITION / EVENT	2YR	10YR	25YR	50YR	100YR
EXISTING PEAK FLOW (cfs)	27.50	55.46	76.93	96.06	117.96
PROPOSED PEAK FLOW (cfs)	27.27	36.95	38.95	42.58	46.45
DECREASE RUNOFF (cfs)	0.23	18.51	37.98	53.48	71.51



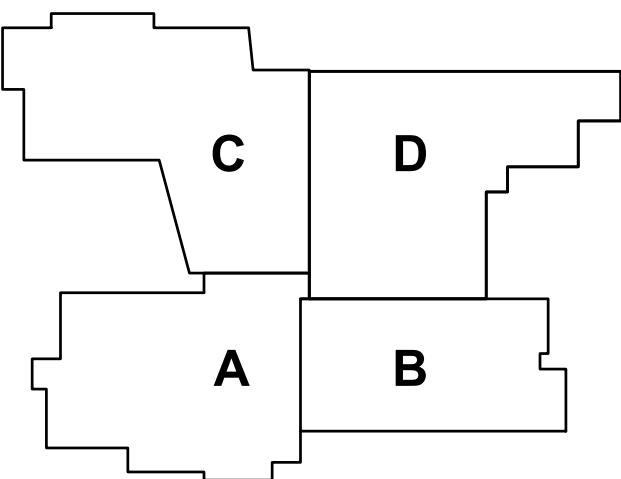
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Consultant



Notes

PROJECT
NORTH

[illegible]

Permit/Sea



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
PROPOSED DRAINAGE AREA MAP

Project No. _____

214000825

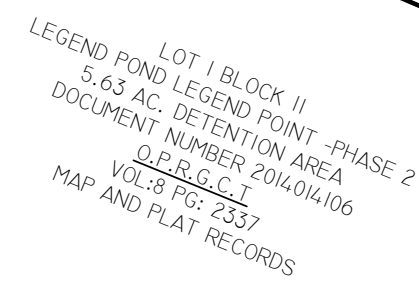
Revisor

Scale

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Drawing Nc

CN101



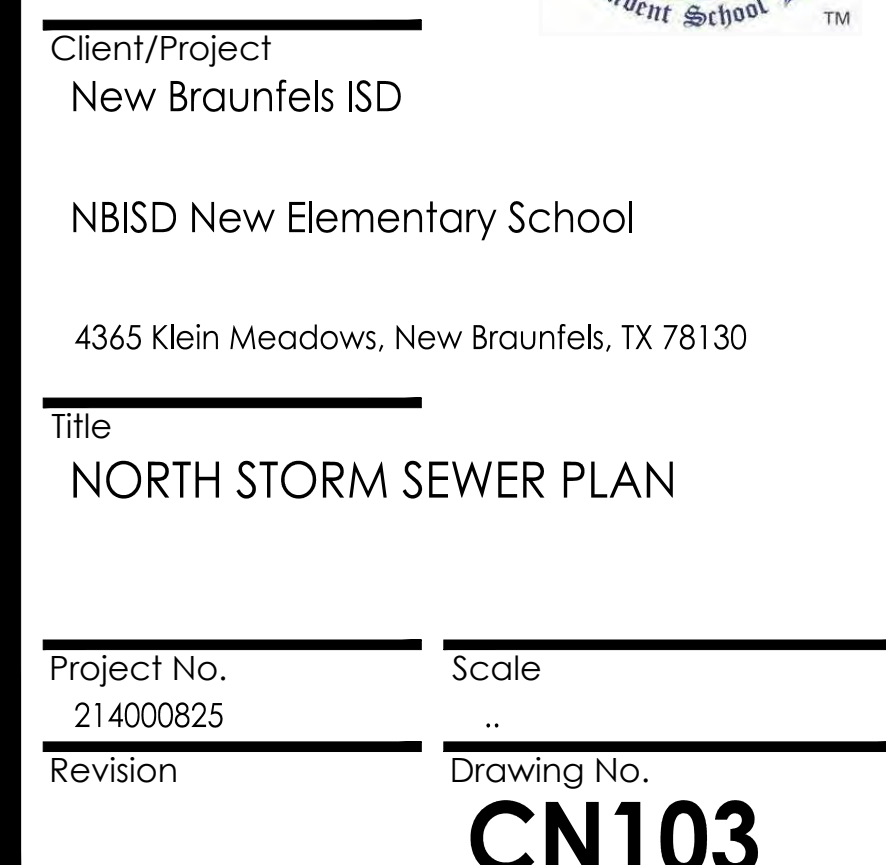
CN102 SCALE: 1" = 50'



50 0 50 100

SCALE: 1" = 50'





<div><div></div><div></div></div>	GUTTER FLOW-SPREAD- 10yr EVENT							
KEY NOTE	Q (cfs)	n	Ku	SX	SL	SPREAD (T) ft	Depth(in)	(d=TSX)
1	2.53	0.012	0.56	2.20%	1.11%	8.49	2.24	
2	1.64	0.012	0.56	1.00%	1.00%	12.05	1.45	
3	5.68	0.012	0.56	1.00%	1.60%	17.57	2.11	
4	4.06	0.012	0.56	2.00%	1.00%	10.96	2.63	
5	1.55	0.012	0.56	1.60%	2.80%	7.25	1.39	
6	1.4	0.012	0.56	4.40%	1.50%	4.17	2.20	
7	2.02	0.012	0.56	8.00%	1.50%	3.29	3.16	
8	0.76	0.012	0.56	2.00%	1.50%	5.43	1.30	
9	2.71	0.012	0.56	1.90%	1.50%	9.02	2.06	
10	2.37	0.012	0.56	4.75%	1.00%	5.22	2.98	
11	6.46	0.012	0.56	2.50%	1.25%	10.88	3.26	

HGL at Curb Inlets-25YR EVENT			
KEY NOTE	GUTTER LINE	HGL	HGL below gutter line (ft)
1	663.64	660.28	-3.36
2	660.81	658.66	-2.15
3	661.03	658.98	-2.05
4	660.97	658.91	-2.06
5	662.48	659.47	-3.01
6	662.98	660.36	-2.62
7	661.67	659.26	-2.41
8	662.28	659.88	-2.40
9	659.59	656.54	-3.05
10	655.9	652.94	-2.96
11	658.87	656.66	-2.21

GUTTER FLOW-SPREAD-10yr EVENT							
KEY NOTE	Q (cfs)	n	Ku	SX	SL	SPREAD (T) ft	Depth(in) (d-TSx)
1	2.53	0.012	0.56	2.20%	1.11%	8.49	2.24
2	1.64	0.012	0.56	1.00%	1.00%	12.05	1.45
3	5.68	0.012	0.56	1.00%	1.60%	17.57	2.11
4	4.06	0.012	0.56	2.00%	1.00%	10.96	2.63
5	1.55	0.012	0.56	1.60%	2.80%	7.25	1.39
6	1.4	0.012	0.56	4.40%	1.50%	4.17	2.20
7	2.02	0.012	0.56	8.00%	1.50%	3.29	3.16
8	0.76	0.012	0.56	2.00%	1.50%	5.43	1.30
9	2.71	0.012	0.56	1.90%	1.50%	9.02	2.06
10	2.37	0.012	0.56	4.75%	1.00%	5.22	2.98
11	6.46	0.012	0.56	2.50%	1.25%	10.88	3.26

CITY OF NEW BRAUNFELS DRAINAGE AND EROSION CONTROL DESIGN MANUAL EQUATIONS 5-2 AND 5-3

Culvert Report

HydroFlow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Friday, Sep 16 2022

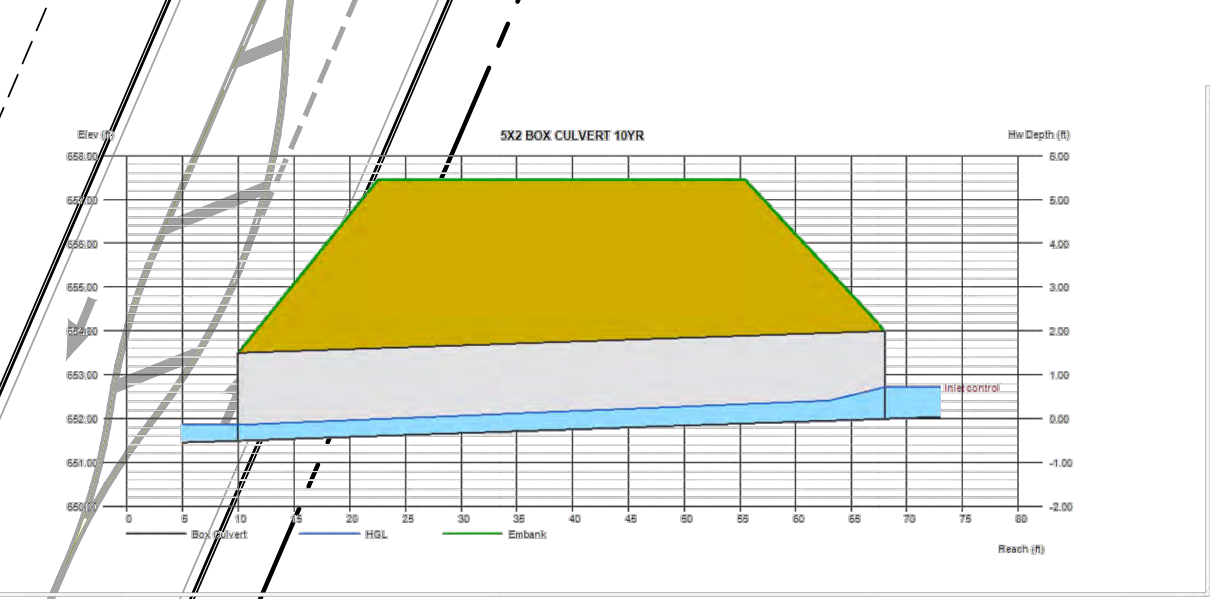
5X2 BOX CULVERT 10YR

Invert Elev Dn (ft)	= 651.60
Pipe Length (ft)	= 58.00
Slope (%)	= 0.86
Invert Elev Up (ft)	= 652.00
Rise (in)	= 24.0
Shape	= Box
Span (in)	= 60.0
No. Barrels	= 1
n-Value	= 0.012
Culvert Type	= Flared Wingwalls
Culvert Entrance	= 30D to 75D wingwall flares
Coeff. K.M.c.Y.k	= 0.026, 1, 0.0347, 0.81, 0.4

Embankment

Top Elevation (ft)	= 657.44
Top Width (ft)	= 33.00
Crest Width (ft)	= 20.00

Calculations	= 9.00
Qmin (cfs)	= 10.13
Qmax (cfs)	= Normal
Tailwater Elev (ft)	= 652.00
Highlighted	= 9.00
Qtotal (cfs)	= 9.00
Qpipe (cfs)	= 0.00
Qovertop (cfs)	= 5.00
Veloc Dn (ft/s)	= 3.87
Veloc Up (ft/s)	= 6.36
HGL Dn (ft)	= 651.86
HGL Up (ft)	= 652.47
Hw Elev (ft)	= 652.72
Hw/D (ft)	= 0.36
Flow Regime	= Inlet Control



Culvert Report

HydroFlow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Friday, Sep 16 2022

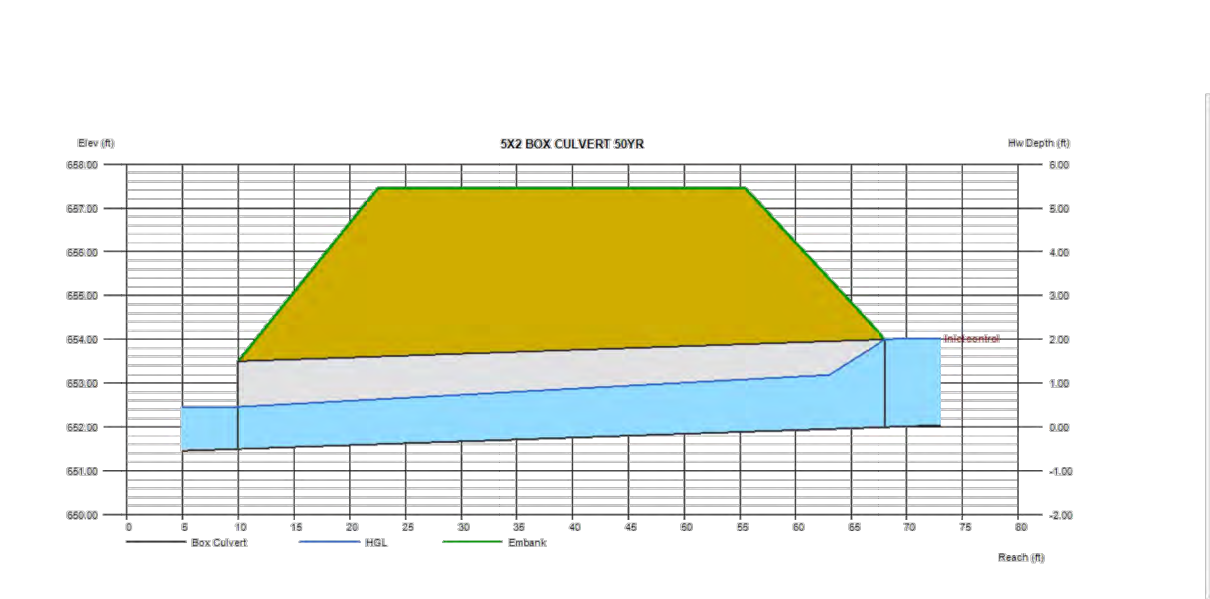
5X2 BOX CULVERT 50YR

Invert Elev Dn (ft)	= 651.50
Pipe Length (ft)	= 58.00
Slope (%)	= 0.86
Invert Elev Up (ft)	= 652.00
Rise (in)	= 24.0
Shape	= Box
Span (in)	= 60.0
No. Barrels	= 1
n-Value	= 0.012
Culvert Type	= Flared Wingwalls
Culvert Entrance	= 30D to 75D wingwall flares
Coeff. K.M.c.Y.k	= 0.026, 1, 0.0347, 0.81, 0.4

Embankment

Top Elevation (ft)	= 657.44
Top Width (ft)	= 33.00
Crest Width (ft)	= 20.00

Calculations	= 40.00
Qmin (cfs)	= 42.58
Qmax (cfs)	= Normal
Tailwater Elev (ft)	= 652.00
Highlighted	= 40.00
Qtotal (cfs)	= 40.00
Qpipe (cfs)	= 0.00
Qovertop (cfs)	= 3.33
Veloc Dn (ft/s)	= 6.36
Veloc Up (ft/s)	= 652.46
HGL Dn (ft)	= 653.26
HGL Up (ft)	= 654.03
Hw Elev (ft)	= 654.03
Hw/D (ft)	= 1.01
Flow Regime	= Inlet Control



Culvert Report

HydroFlow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Friday, Sep 16 2022

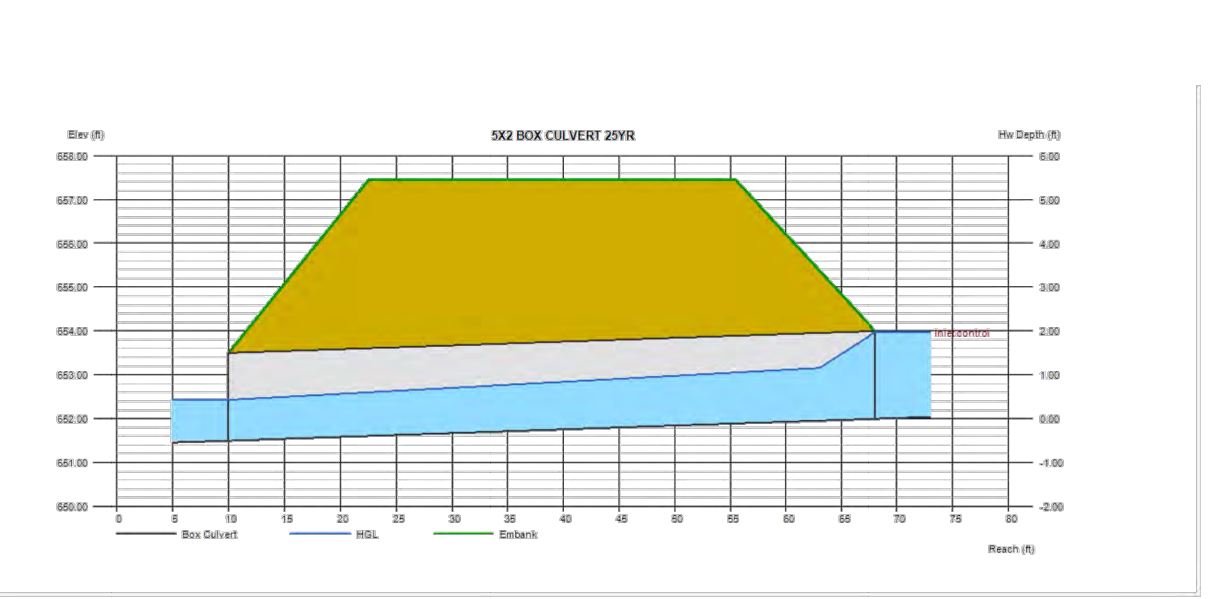
5X2 BOX CULVERT 25YR

Invert Elev Dn (ft)	= 651.50
Pipe Length (ft)	= 58.00
Slope (%)	= 0.86
Invert Elev Up (ft)	= 652.00
Rise (in)	= 24.0
Shape	= Box
Span (in)	= 60.0
No. Barrels	= 1
n-Value	= 0.012
Culvert Type	= Flared Wingwalls
Culvert Entrance	= 30D to 75D wingwall flares
Coeff. K.M.c.Y.k	= 0.026, 1, 0.0347, 0.81, 0.4

Embankment

Top Elevation (ft)	= 657.44
Top Width (ft)	= 33.00
Crest Width (ft)	= 20.00

Calculations	= 37.00
Qmin (cfs)	= 38.95
Qmax (cfs)	= Normal
Tailwater Elev (ft)	= 652.00
Highlighted	= 38.50
Qtotal (cfs)	= 38.50
Qpipe (cfs)	= 0.00
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 8.28
Veloc Up (ft/s)	= 6.28
HGL Dn (ft)	= 652.43
HGL Up (ft)	= 653.27
Hw Elev (ft)	= 653.27
Hw/D (ft)	= 0.99
Flow Regime	= Inlet Control



Culvert Report

HydroFlow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Friday, Sep 16 2022

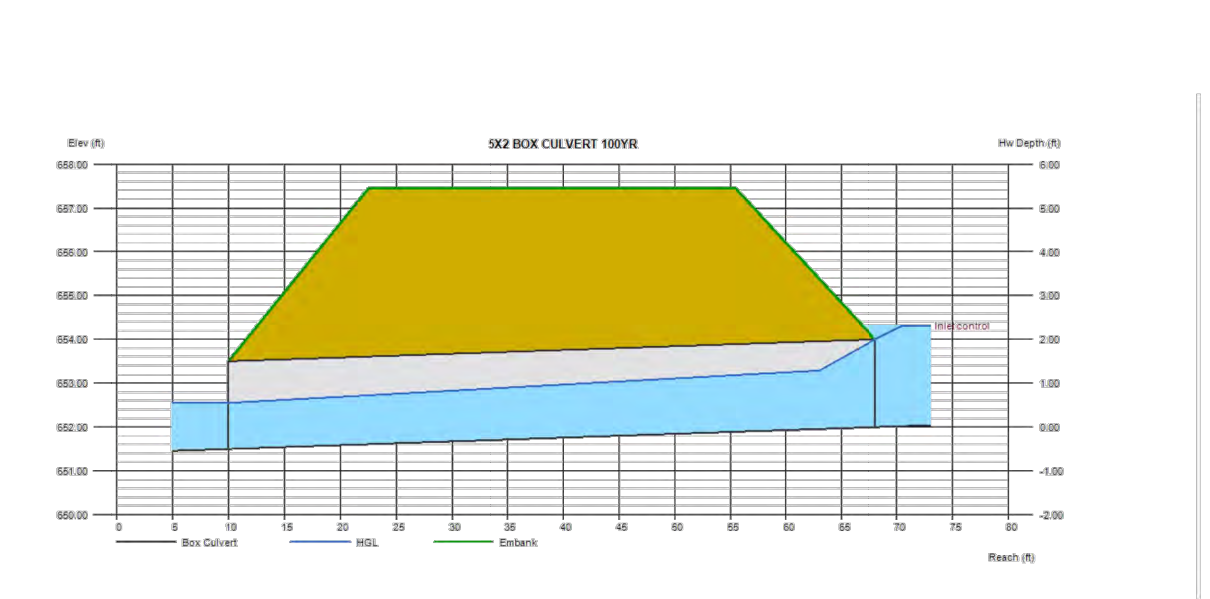
5X2 BOX CULVERT 100YR

Invert Elev Dn (ft)	= 651.50
Pipe Length (ft)	= 58.00
Slope (%)	= 0.86
Invert Elev Up (ft)	= 652.00
Rise (in)	= 24.0
Shape	= Box
Span (in)	= 60.0
No. Barrels	= 1
n-Value	= 0.012
Culvert Type	= Flared Wingwalls
Culvert Entrance	= 30D to 75D wingwall flares
Coeff. K.M.c.Y.k	= 0.026, 1, 0.0347, 0.81, 0.4

Embankment

Top Elevation (ft)	= 657.44
Top Width (ft)	= 33.00
Crest Width (ft)	= 20.00

Calculations	= 45.00
Qmin (cfs)	= 46.45
Qmax (cfs)	= Normal
Tailwater Elev (ft)	= 652.00
Highlighted	= 45.00
Qtotal (cfs)	= 45.00
Qpipe (cfs)	= 0.00
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 8.57
Veloc Up (ft/s)	= 6.62
HGL Dn (ft)	= 652.55
HGL Up (ft)	= 653.36
Hw Elev (ft)	= 654.31
Hw/D (ft)	= 1.16
Flow Regime	= Inlet Control
Shear Stress	= 0.125



STORM WATER LINE "F": 5'X2' BOX CULVERT

1 SOUTH STORM SEWER PLAN
CN104 SCALE: 1"= 50'

POINT OF ANALYSIS - A					
CONDITION / EVENT	2YR	10YR	25YR	50YR	100YR
EXISTING PEAK FLOW (cfs)	27.50	55.46	76.93	96.06	117.96
PROPOSED PEAK FLOW (cfs)	27.27	36.95	38.95	42.58	46.45
DECREASE RUNOFF (cfs)	0.23	18.51	37.98	53.48	71.51

Detention Pond STAGE STORAGE TABLE					
ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	
650.17	0	N/A	N/A	0.00	
651	9493	1.000	3940	3940	
651.66	23415.0400	1.000	10860	14799	
652	30587	1.000	20040	23980	
653.00	44543	1.000	37565	61545	
654	48532	1.000	46538	108082	
655.00	51467	1.000	50000	158082	
655.50	52953	1.000	26105	184187	
656.00	54347	1.000	26825	211012	
656.29	55126	1.000	15874	226885	

Detention Pond Storage Elevation Volume					
Storm Event	WSE	Storage (CF)	Outflow (CFS)	Velocity (ft/s)	Plug-flow detention time (min)
2	652.45	39302	27.27	7.61	86.90
10	653.19	70180	36.95	7.90	64.50
25	653.90	103385	38.95	7.93	58.80
50	654.55	135045	42.58	8.67	56.70
100	655.29	173297	46.45	9.46	56.00

DRAINAGE UTILITIES NOTE

STORM WATER CONTRACTOR IS REQUIRED TO PLACE STORM WATER PIPING TO THE BUILDING AND MAKE CONNECTION AT THE GRADE BEAM AT THE ELEVATIONS AS INDICATED ON THE DRAWING. VERIFY BUILDING STORM OUTLET ELEVATIONS BEFORE LAYING ANY PIPE. CONTRACTOR TO CONTACT ENGINEER IF ON SITE BUILDING STORM IS DIFFERENT THAN SHOWN ON THE PLANS

STORM WATER CONTRACTOR IS REQUIRED TO PLACE STORM WATER PIPING TO THE BUILDING AND TURN UP AT THE GRADE BEAM AND PLACE A BOOT OR CONNECTION DEVICE TO CONNECT RECTANGULAR DOWNSPOUTS TO ROUND PIPING.

STORM DRAINAGE NOTES

- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORK NEAR EXISTING UTILITIES AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION OPERATIONS THE CONTRACTOR WILL BE REQUIRED TO REPAIR OR REPLACE THE DAMAGED FACILITIES AT CONTRACTOR'S EXPENSE. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION.
- ALL LENGTHS OF PIPE ARE TO INSIDE FACE OF STRUCTURES. LENGTHS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE AND USABLE SYSTEM. CONTRACTOR SHALL ENSURE PROPER SIZE OF JUNCTION BOXES NEEDED WHERE INDICATED ON PLAN CONTRACTOR SHALL CONNECT STORM DRAIN PIPE TO JUNCTION BOXES PER MANUFACTURER'S SPECIFICATIONS.
- ALL STORM DRAIN TO JUNCTION BOX AND INLET CONNECTION SHALL HAVE CONCRETE COLLARS OF A SUFFICIENT WIDTH AND DEPTH TO MAKE THE CONNECTION.
- ALL GRATES SHALL BE H20 LOADING RATED GRATES. TOPS OF MANHOLES JUNCTION BOXES AND GRATES SHALL BE SET FLUSH TO THE FINISHED SURFACE BASED UPON GRADING PLAN.
- ON SITE STORM DRAINS SHALL COMPLY WITH THE CURRENT APPLICABLE CITY, COUNTY AND OR TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND MEET THE FOLLOWING REQUIREMENTS.

REINFORCED CONCRETE PIPE (RCP) PER ASTM C76/76M SHALL BE CLASS III WALL TYPE A, MESH REINFORCEMENT, AND BELL AND SPIGOT END JOINTS WITH GASKET, AND WATERTIGHT JOINTS PER ASTM C443/443M.

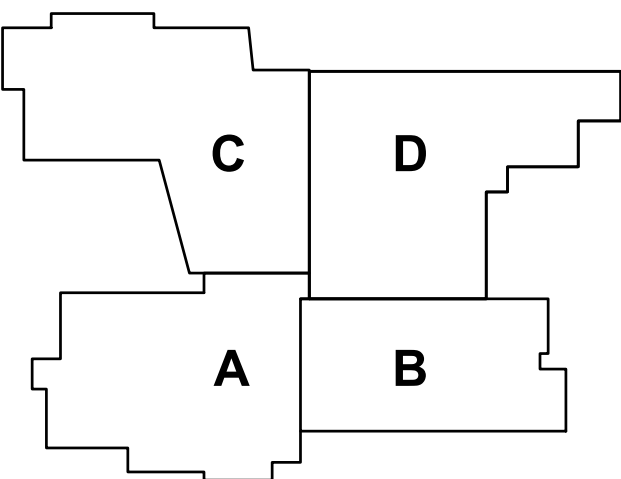
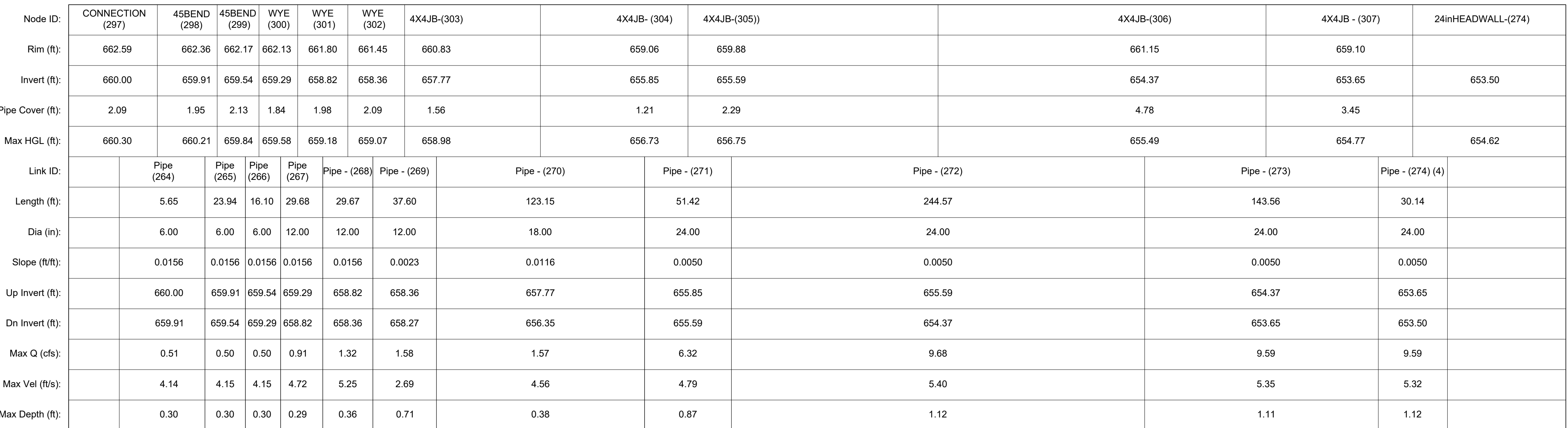
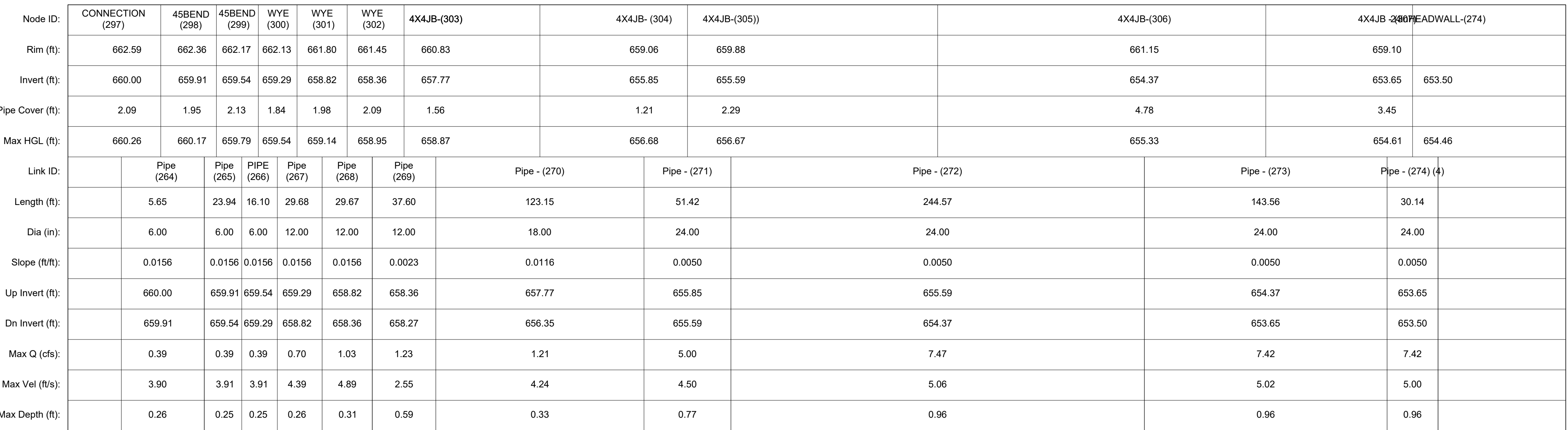
- CONTRACTOR SHALL PROVIDE ALL FITTINGS AS REQUIRED TO INSTALL PIPE, AREA DRAINS, AND ROOF DRAIN CONNECTIONS AS SHOWN ON THE PLANS.

CONTRACTOR TO VERIFY SUBROUT LOCATIONS AND INVERT ELEVATIONS PRIOR TO NEW STORM DRAIN PIPE WORK

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Notes



File Name: N/A	Author	Designer	Checker	..
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

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Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
PROFILE-STORM LINE-A

Project No. _____

214000825

Revision

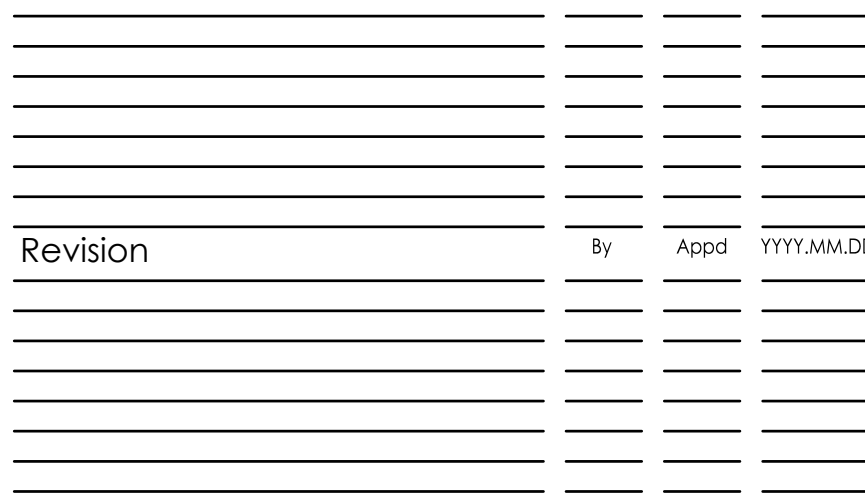
Scale

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Drawing No.

CU200

Consultant



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4365 Klein Meadows, New Braunfels, TX 78130

Title _____

PROFILE STORM LINE-B

Project No. _____

214000825

Scale

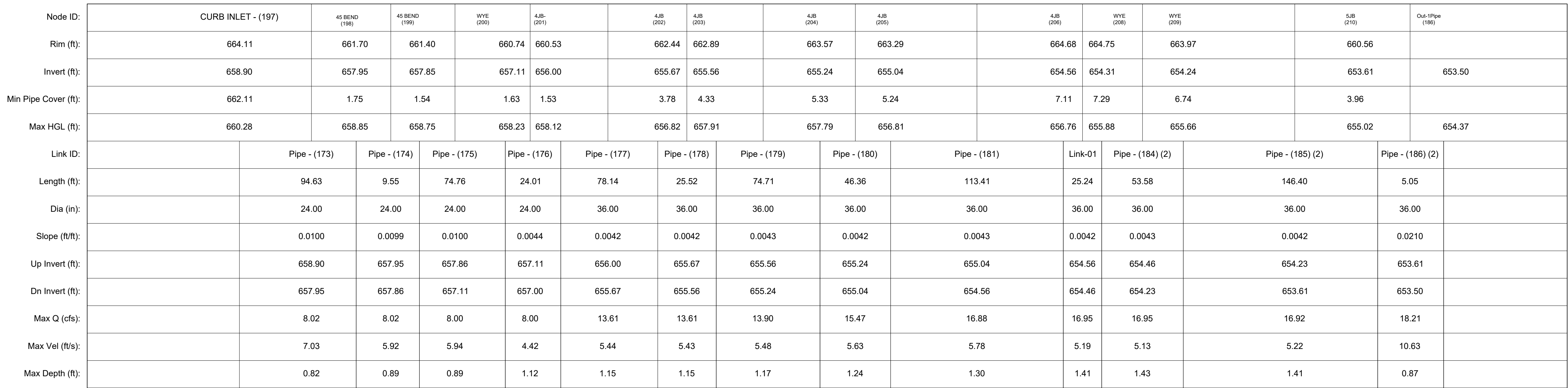
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Drawing No.

CU201

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Texas Registered Surveying Firm 1002

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Texas Registered Surveying Firm 1002



Profile view of the proposed 36-inch water transmission main from station 1+00 to 9+00. The profile shows the ground surface, the proposed pipe invert, and various manholes and structures. The elevation ranges from 651 to 667 feet. The stationing ranges from 1+00 to 9+00. The profile includes labels for 'GRADE', '2% VERTICAL', 'WYE', and '25.4% H/L'. Key structures include Link ID Pipes (174), (175), (176), (177), (178), (179), (180), (181), (182), (183), (184), and (185). The profile also shows the existing 36-inch water transmission main and the proposed 36-inch water transmission main.

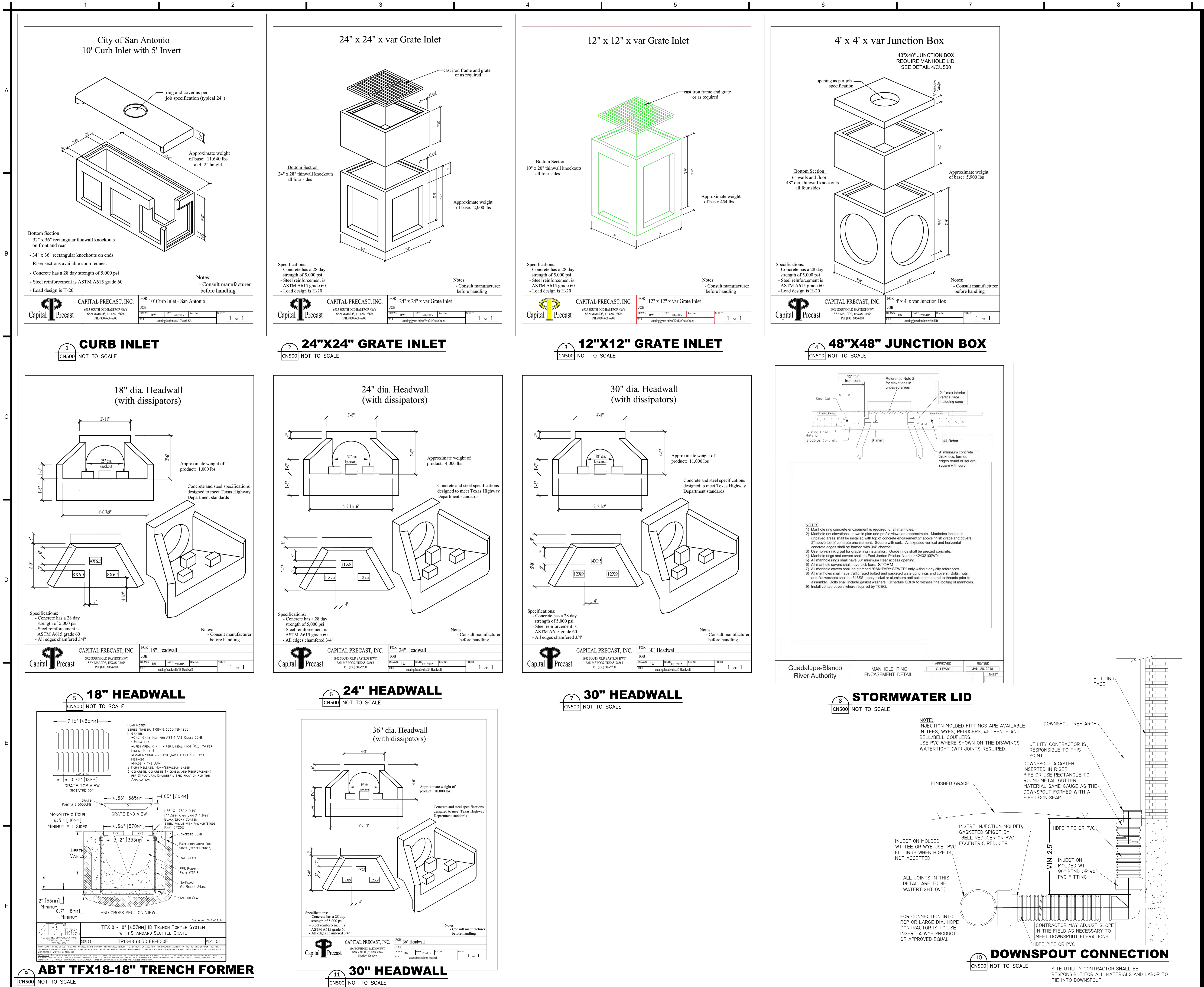
Min Pipe Cover (ft):	Node ID:	CURB INLET - (197)		Structure (198) (199)		WYE (200) JB - (201)		4JB - (202) JB - (203)		4JB - (204)	4JB - (205)		4JB - (206) WYE - (208)	WYE - (209)		Outfall Pipe (210) (186) (2)	
	Rim (ft):	664.11		661.90 661.40		660.74 660.53		662.44 662.89		663.57	663.29		664.68 664.75	663.97		660.56	
	Invert (ft):	658.90		657.55 657.85		657.11 656.00		655.67 655.56		655.24	655.04		654.56 654.31	654.24		652.50	
	Min Pipe Cover (ft):	662.11		1.73 1.54		1.63 1.53		3.78 4.33		5.33	5.24		7.11 7.29	6.74		3.96	
	Max HGL (ft):	660.28		658.55 658.89		658.43 658.32		656.99 657.96		657.89	656.84		656.79 656.12	655.90		655.25 654.50	
Link ID:		Pipe - (173)		Pipe - (174)	Pipe - (175)	Pipe - (176)	Pipe - (177)	Pipe - (178)	Pipe - (179)	Pipe - (180)	Pipe - (181)		Link-01	Pipe - (184) (2)	Pipe - (185) (2)		Pipe - (186) (2)
Length (ft):		94.63		9.55	74.76	24.01	78.14	25.52	74.71	46.36	113.41		25.24	53.58	146.40		5.05
Dia (in):		24.00		24.00	24.00	24.00	36.00	36.00	36.00	36.00	36.00		36.00	36.00	36.00		36.00
Slope (ft/ft):		0.0100		0.0099	0.0100	0.0044	0.0042	0.0042	0.0043	0.0042	0.0043		0.0042	0.0043	0.0042		0.0210
Up Invert (ft):		658.90		657.95	657.86	657.11	656.00	655.67	655.56	655.24	655.04		654.56	654.46	654.23		653.61
Dn Invert (ft):		657.95		657.86	657.11	657.00	655.67	655.56	655.24	655.04	654.56		654.46	654.23	653.61		653.50
Max Q (cfs):		10.31		10.31	10.28	10.28	17.51	17.51	17.86	19.91	21.93		22.01	21.98	21.93		23.62
Max Vel (ft/s):		7.34		6.30	6.34	4.68	5.82	5.81	5.86	6.02	6.18		5.53	5.46	5.57		11.44
Max Depth (ft):		0.95		1.03	1.03	1.32	1.32	1.33	1.34	1.42	1.50		1.65	1.66	1.64		1.00

[illegible]

NBISD New Elementary School

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Project No. 214000825	Scale ..
Revision	Drawing No. CU202



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Texas Registered Engineering Firm F-1186
Texas Registered Surveying Firm 1002600

Notes

PROJECT NORTH TRUE NORTH

C D
A B

Revision

By Appd YYYY.MM.DD

By Appd YYYY.MM.DD

File Name: N/A Author: [blank] Designer: [blank] Checker: [blank]
Dwn. Dgn. Chkd. YYYY.MM.DD

Permit/Seal

STATE OF TEXA
VICTOR M. GIL
94994
PROFESSIONAL ENGINEER
1.12.2015

Client/Project Logo

New Braunfels
Independent School District

Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
STORM DETAILS 1

Project No.
21400825

Revision

Scale
Drawing No.
CN500



Consultant



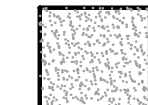
Notes

- NOTES:**
1. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR ALL SIGN AND SIGN PLACEMENTS.
 2. ALL TRAFFIC SIGNS WILL HAVE HIGH INTENSITY PRISMATIC SHEETING.
 3. ALL SCHOOL SIGNS WILL BE FLUORESCENT YELLOW/GREEN.
 4. REFER TO TxDOT PAVEMENT MARKING SHEETS AND APPLICABLE CITY OF NEW BRAUNFELS REQUIREMENTS FOR LATEST PAVEMENT MARKING REQUIREMENTS
 5. ALL PAVEMENT MARKINGS IN THE ROW SHALL BE THERMOPLASTIC PAVEMENT MARKINGS

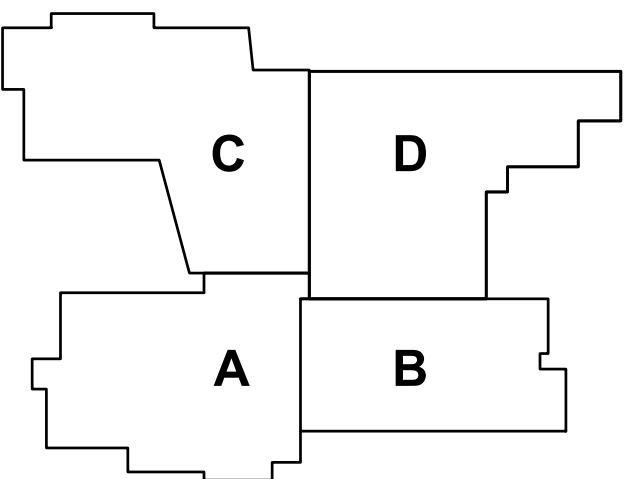
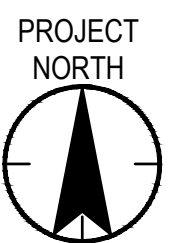
LAYOUT NOTES

1. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE REGARDING THE INTENT, PLACEMENT OR LIMITS OF DIMENSIONS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT.
2. THE CONTRACTOR SHALL PRESERVE ALL CONTROL POINTS, PROPERTY PINS, BENCH MARKS, AND/OR OTHER KEY CONTROL POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY SUCH POINT AT THEIR OWN EXPENSE IN THE EVENT THEY ARE REMOVED.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL HORIZONTAL AND VERTICAL CONTROL. PER THE CONTROL DRAWINGS.
5. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL USE THE PROPERTY PINS OR KEY CONTROL POINTS. BENCHMARKS ARE NOT TO BE USED FOR HORIZONTAL CONTROL.

HATCH LEGEND



CONCRETE SIDEWALK; SEE
PAVING PLAN FOR DETAIL

[illegible]

Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

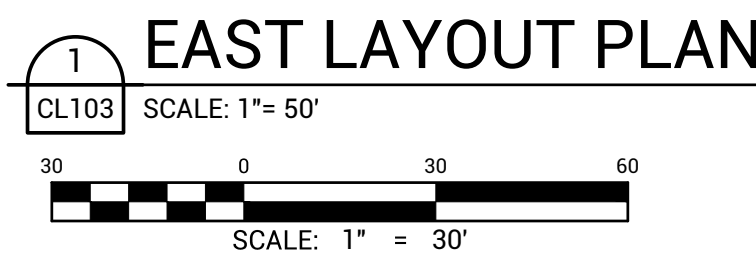
Title
SOUTH LAYOUT PLAN

Project No.
214000825
Revision

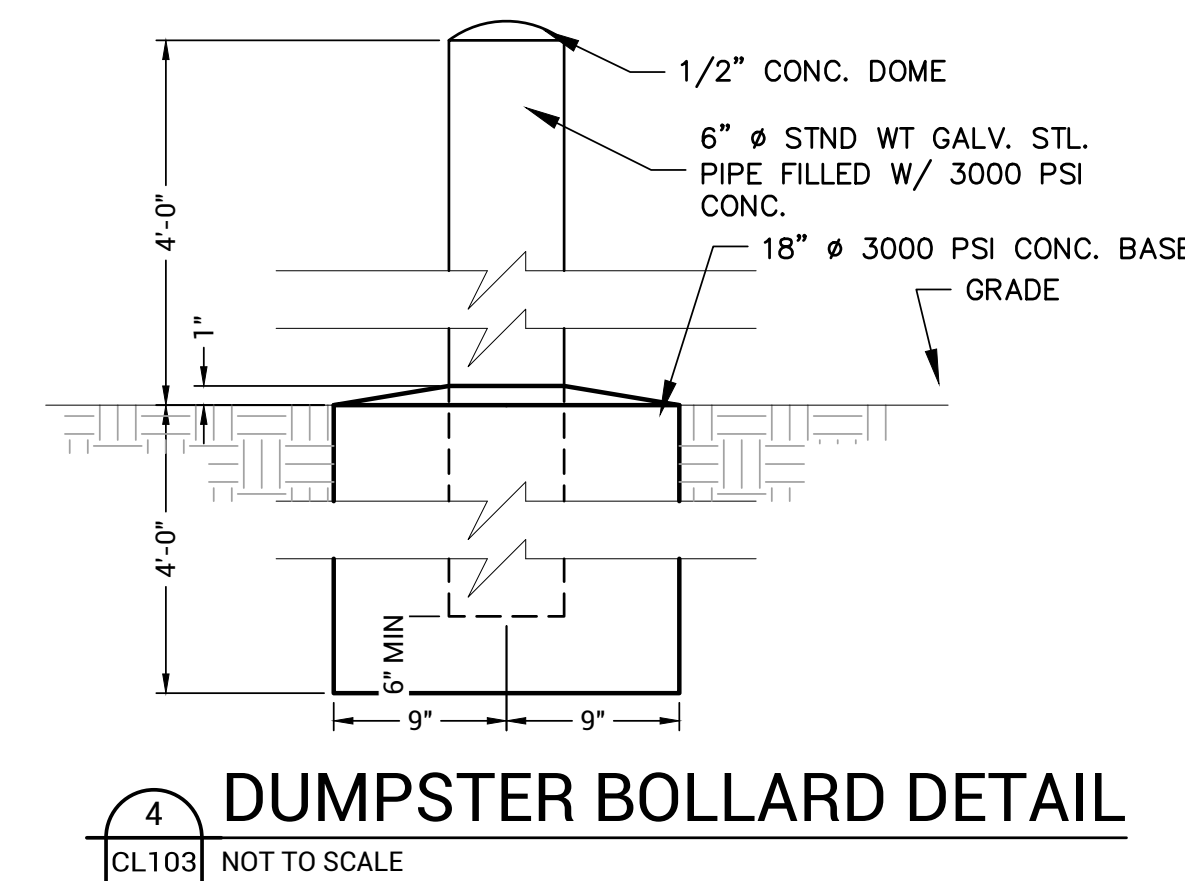
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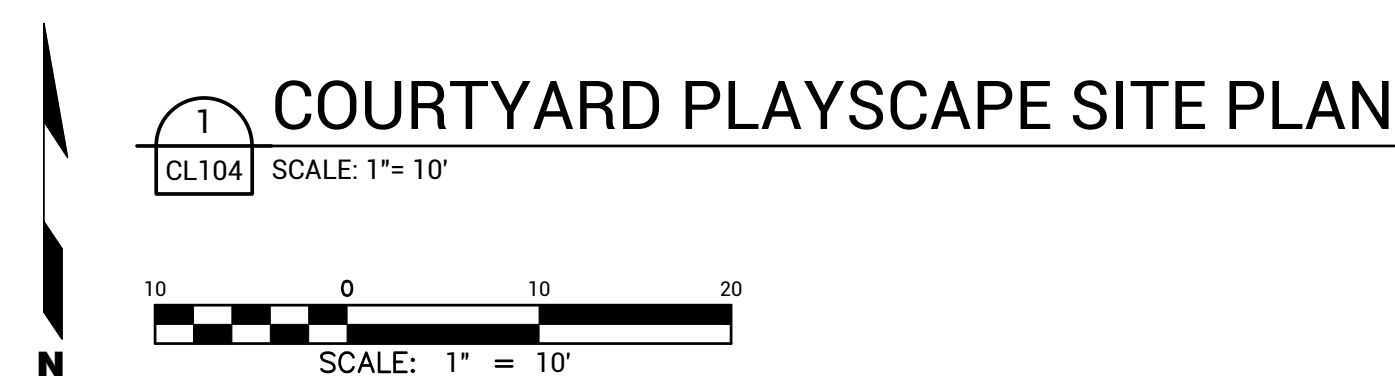
Drawing No

CL102









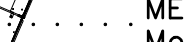



- ## LAYOUT NOTES
1. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT OR LIMITS OF DIMENSIONS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT.
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 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL HORIZONTAL AND VERTICAL CONTROL PER THE CONSTRUCTION DRAWINGS.
 5. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL USE THE PROPERTY PINS FOR ALL HORIZONTAL CONTROL POINTS. BENCHMARKS ARE NOT TO BE USED FOR HORIZONTAL CONTROL.





PLAY EQUIPMENT LEGEND

1		METRO FIRE TRUCK Model: 46514	4		OUTFITTER FACADE Model: DRM00030XX	7		SWAY FUN W/12' RAMP GUARDRAILS, CURBS AND RAMP BERM PLATE	9		SHADED MUSICAL PLAY PACKAGE Model: 63416
2		SCHOOL BUS Model: 49104	5		VET CLINIC FACADE Model: DRM00031XX	8		SMALL DRAMATIC PLAY PACKAGE Model: 96513	10		BEACH HOUSE Model: 60206
3		MARKET FACADE Model: DRM00029XX	6		5'x5' POLYTONE PLAYHOUSE Model: 47203						

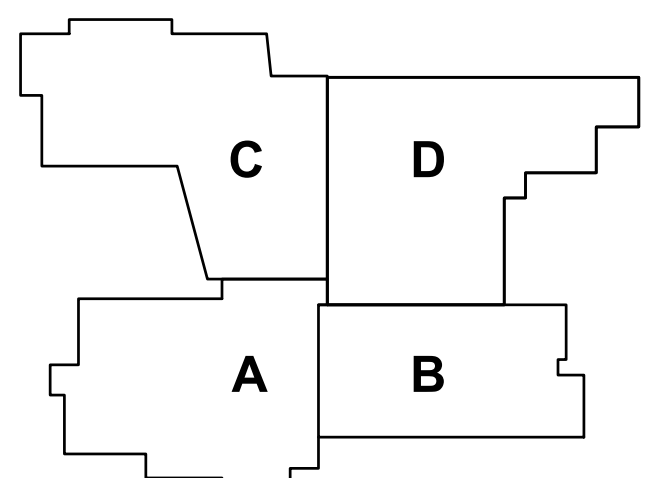
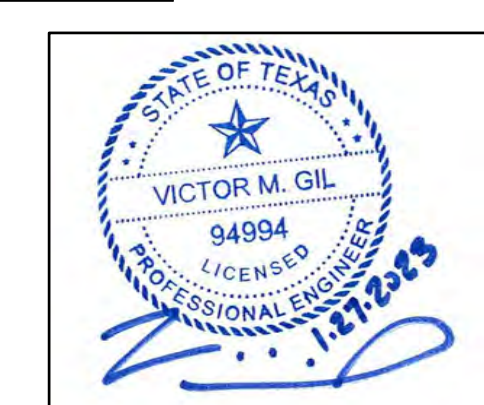


VET CLINIC FACADE
Model: DRM0031XX

1 BEACH HOUSE
Model: 60206

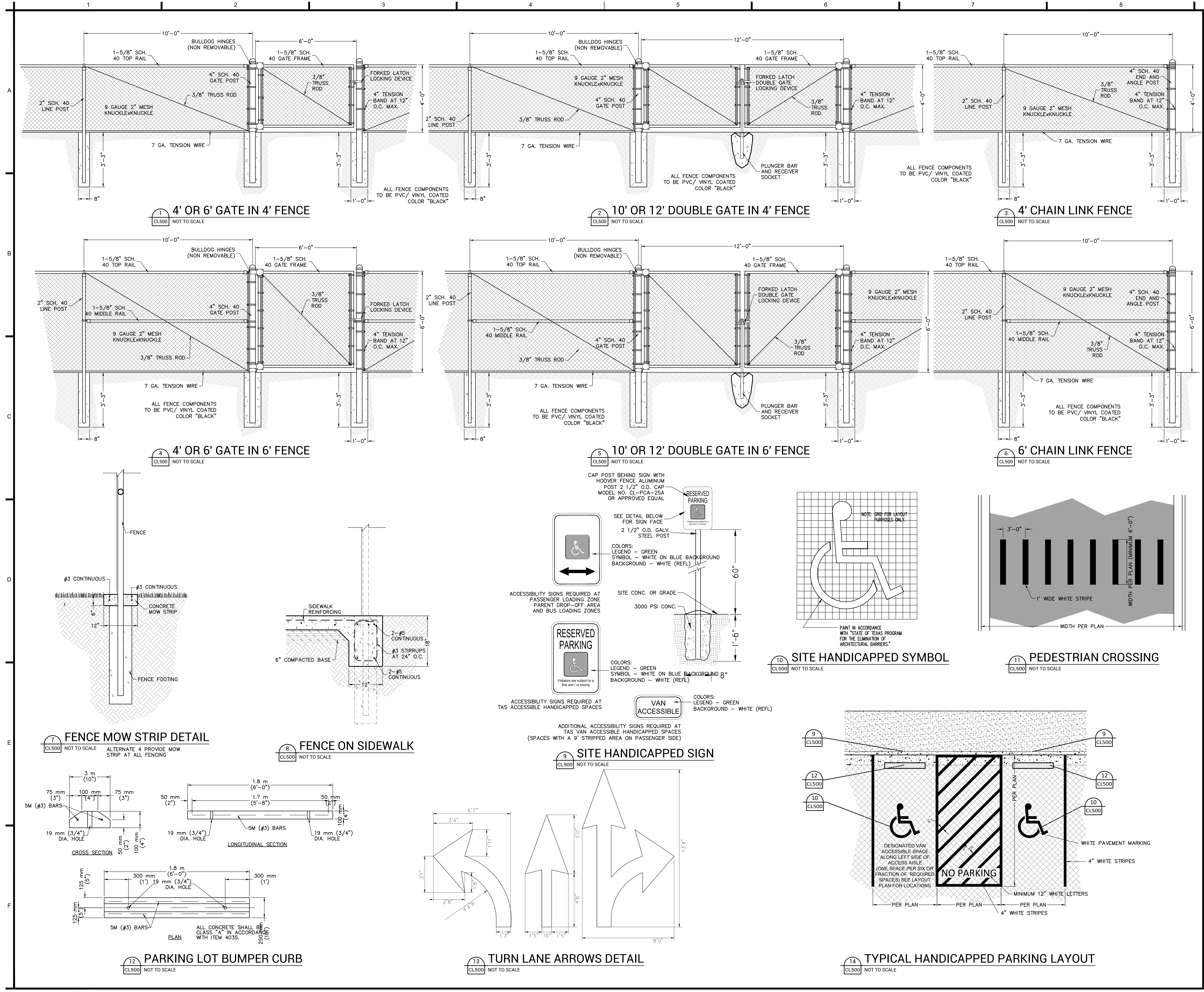


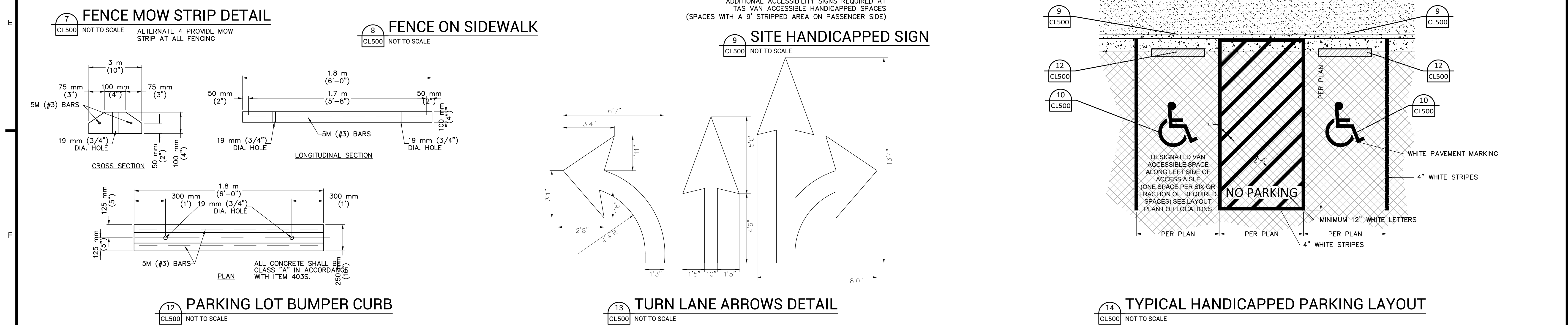
NOTE:
ALL PLAYGROUND EQUIPMENT WILL BE PURCHASED
AND INSTALLED THRU AN ALLOWANCE. THE
CONTRACTORS BASE BID DOES NOT INCLUDE
PLAYGROUND EQUIPMENT. THE ALLOWANCE IS FOR
EQUIPMENT AND EQUIPMENT INSTALLATION ONLY
AND DOES NOT INCLUDE SUBSURFACE DRAINAGE,
ROCK DRAINAGE LAYERS, SYNTHETIC TURF, AND
FIBER SURFACING WHICH SHOULD BE INCLUDED
UNDER "BASE BID".

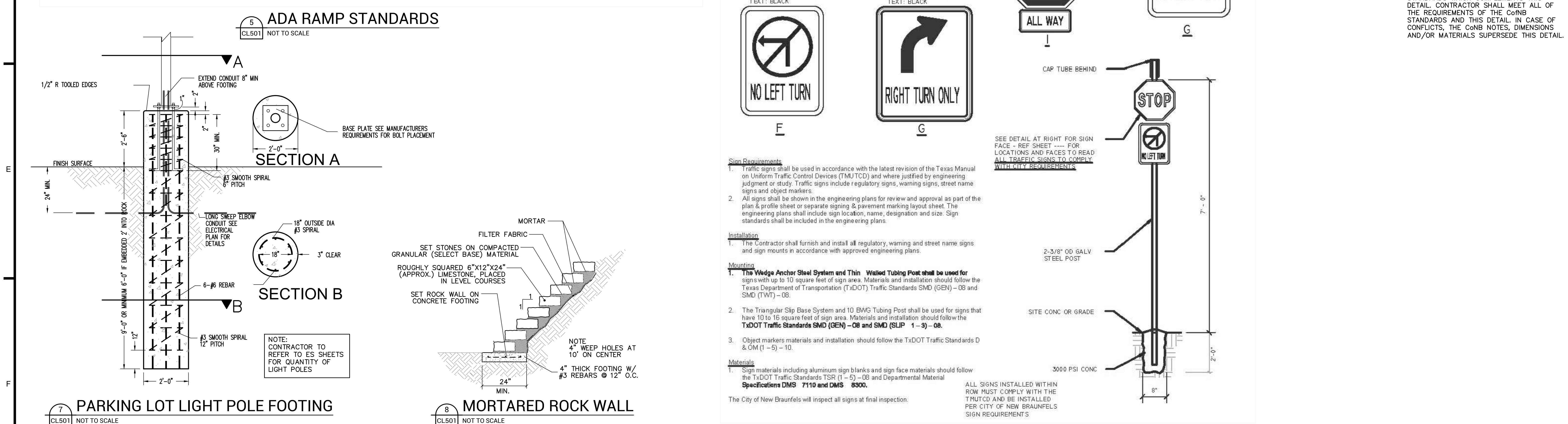
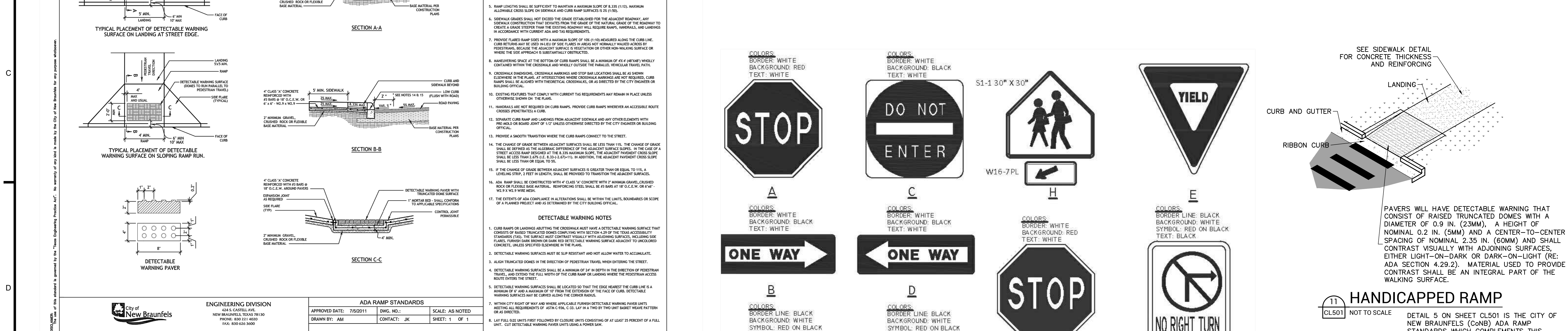
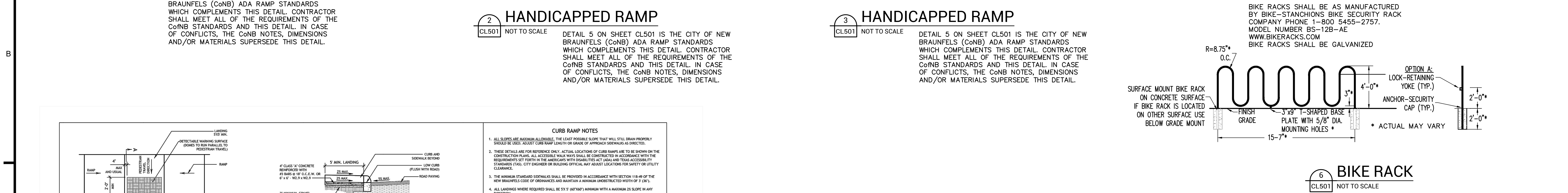
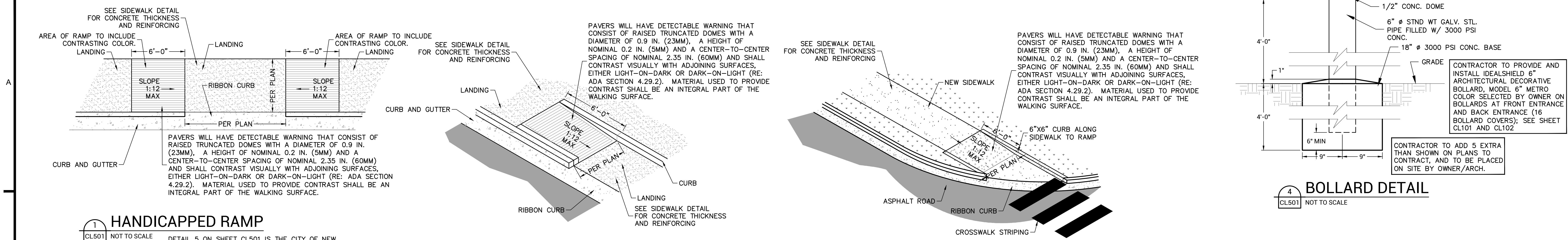
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Project No.	Scale
214000825	..
Revision	Drawing No.

CL104







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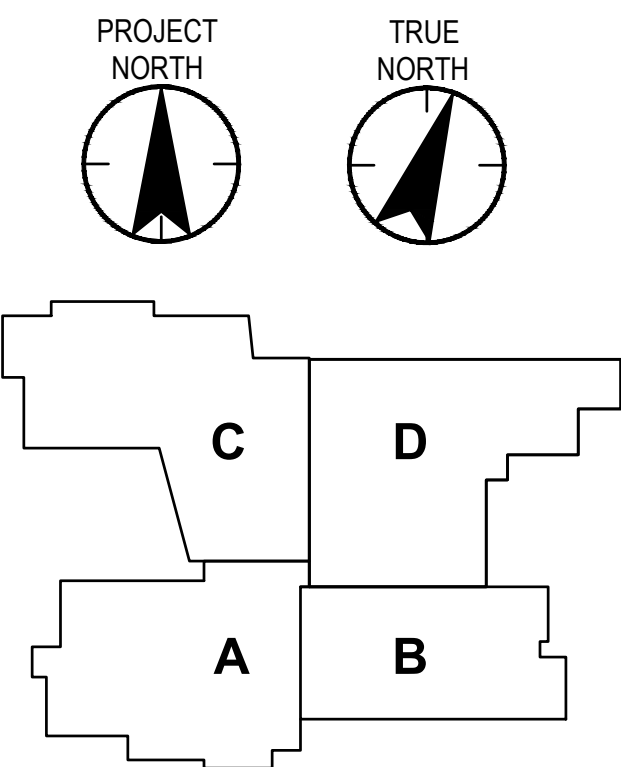
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Texas Registered Engineering Firm F-1186
Texas Registered Surveying Firm 10022600

Notes

[illegible]

Permit/Sea



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NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

PAVING DETAILS

Project No. _____

214000825

Revision

cale

• •

Drawing No.

CP500

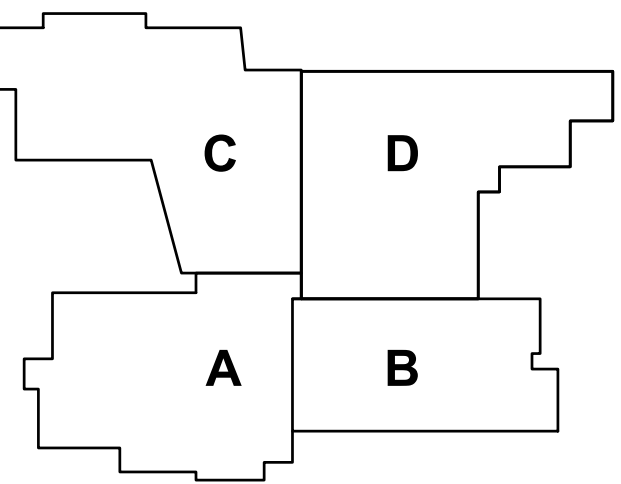
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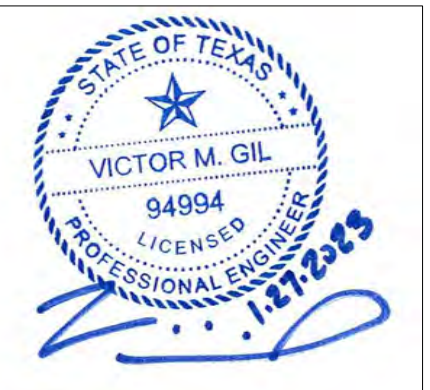
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Notes

[illegible]

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NBISD New Elementary School

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OVERALL UTILITY PLAN

Project No.

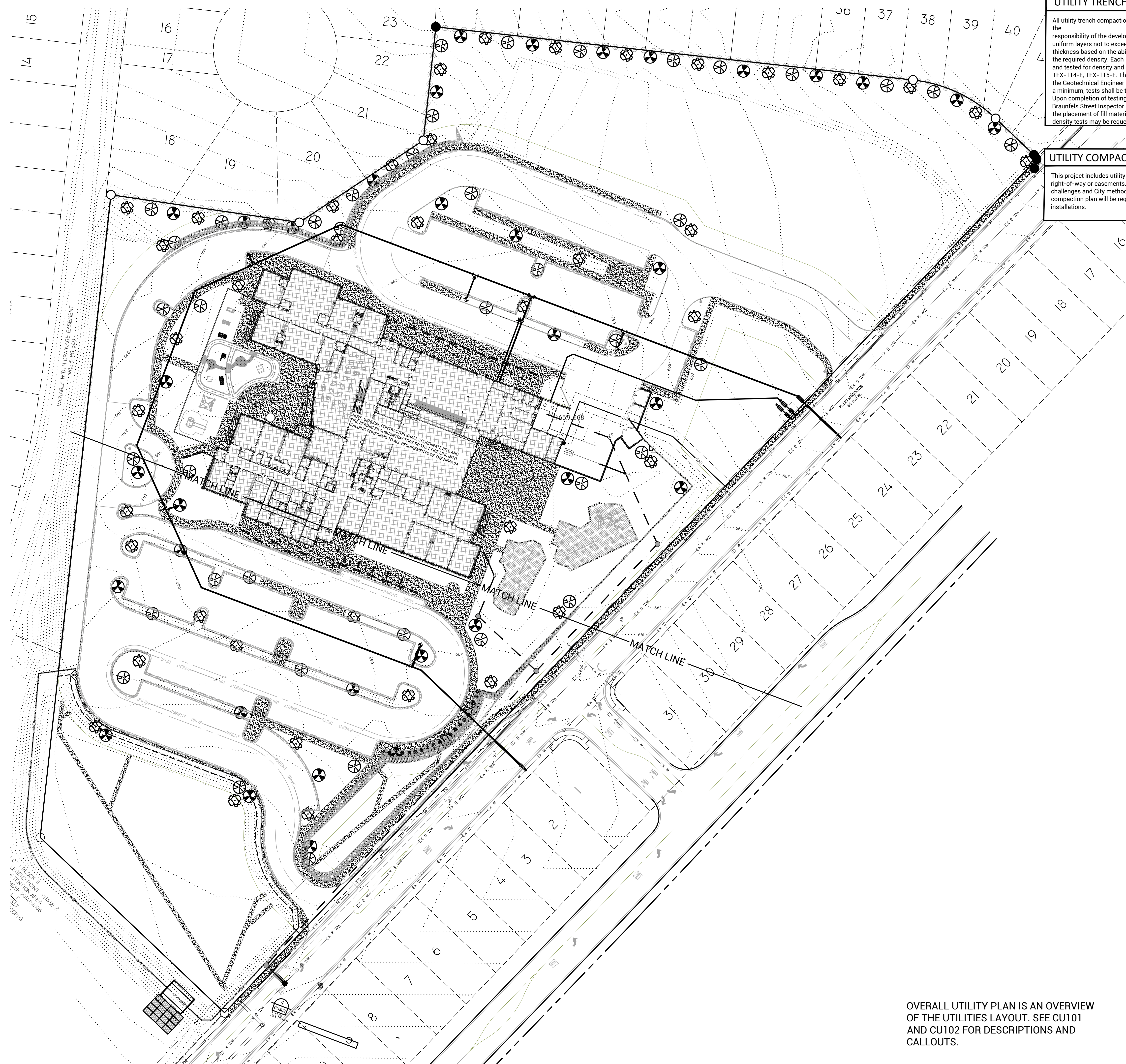
214000825

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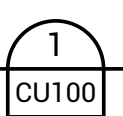
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Drawing No.

CU100

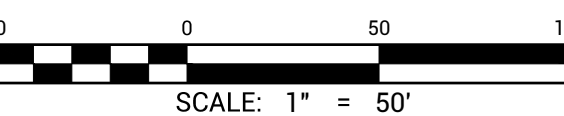


OVERALL UTILITY PLAN IS AN OVERVIEW OF THE UTILITIES LAYOUT. SEE CU101 AND CU102 FOR DESCRIPTIONS AND CALLOUTS.



OVERALL UTILITY PLAN

SCALE: 1" = 50'





Consultant

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Texas Registered Engineering Firm F-111
Texas Registered Surveying Firm 10022626

Notes

No valves, hydrants, cleanouts etc. shall be constructed within curbs, sidewalks, or driveways.

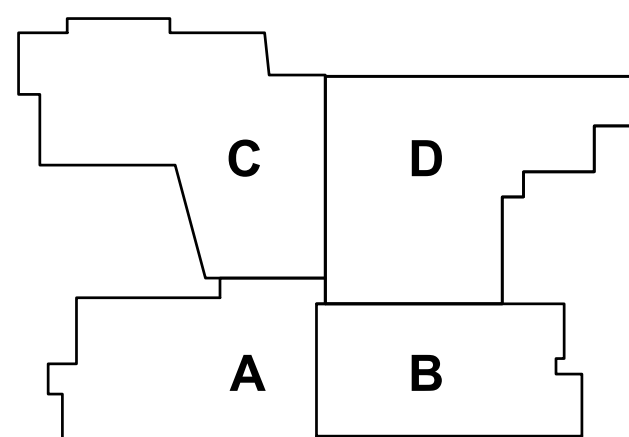
UTILITY TRENCH COMPACTION NOTE

All utility trench compaction tests within the street pavement/sidewalk section shall be the responsibility of the developer's Geotechnical Engineer. Fill material shall be placed in uniform layers not to exceed twelve inches (12") loose. Determine the maximum fill thickness based on the ability of the compacting operation and equipment used to meet the required density. Each layer of material shall be compacted to a minimum 95% density (95% for density on moist soil, 98% for dry soil) with the street with Test Method T-99 or T-155, per TEX-114-E, TEX-115-E. The number and location of required tests shall be determined by the Geotechnical Engineer and approved by the City of New Braunfels Street Inspector. A minimum, tests shall be taken every 200 LF for each lift and every other service line. Upon completion of testing the Geotechnical Engineer shall provide the City of New Braunfels Street Inspector with all testing documentation and a certification stating that the density of all material meets or exceeds the minimum density required by the plans. Additional density tests may be requested by the City of New Braunfels Inspector.

UTILITY COMPACTION NOTE

This project includes utility installations greater than 5-feet in depth located in public right-of-way or easements. Deep trenches pose compaction testing and construction challenges and City methods for testing and compaction may not be achievable. A utility compaction plan will be required and must be submitted for approval to City prior to utility installations.

TOTALS	
Footage of Public 8" Water main	1618 LF
water meters	2-2" meters
Number of Fire hydrants	5
Footage of Public 6" FH lateral	106 LF
Wastewater services	1
Footage of Public Wastewater main	24 LF
Number of Wastewater Manholes	5

[illegible]

Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
NORTH UTILITY PLAN

Project No. _____

214000825

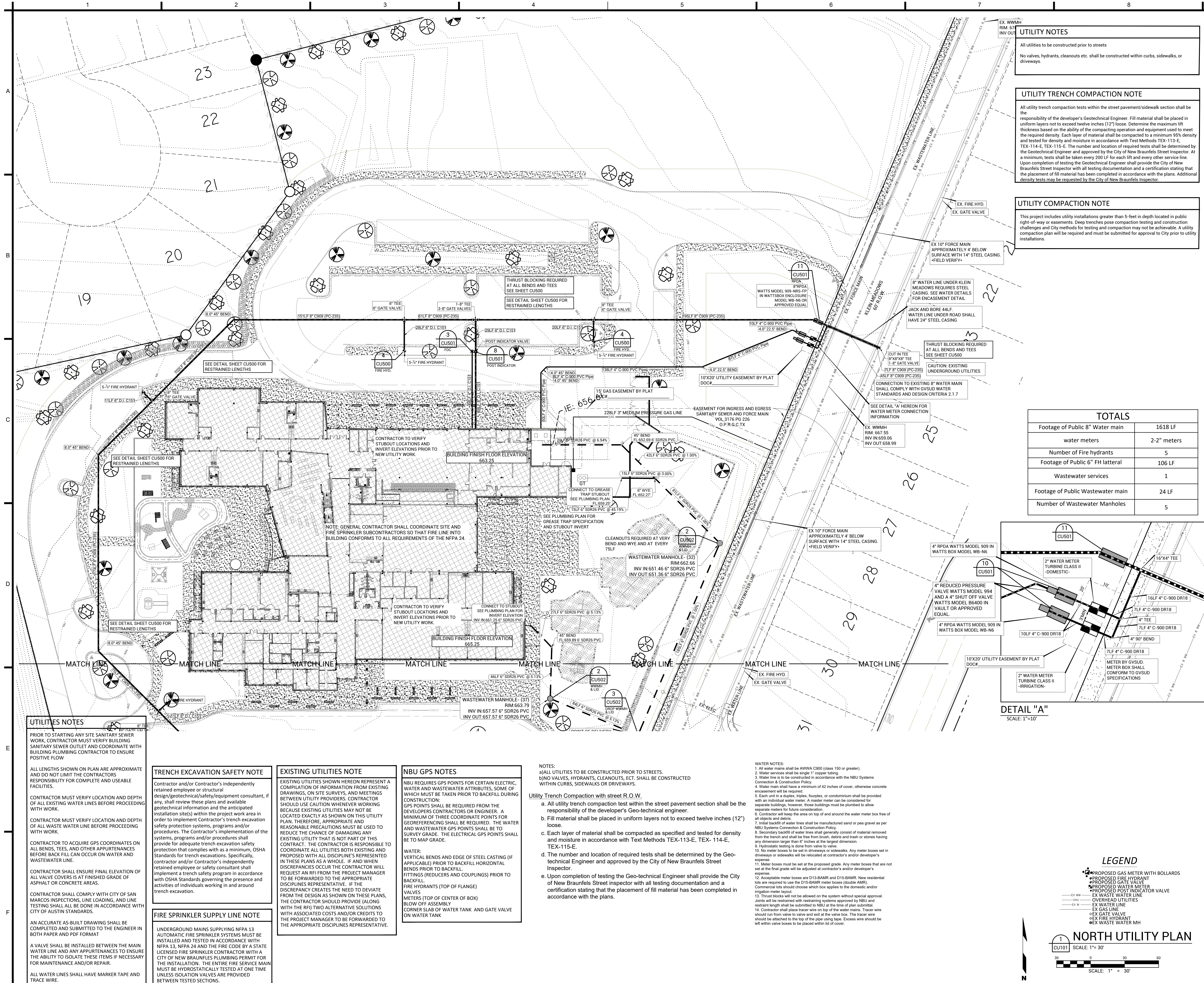
Revision

Scale

• •

Drawing No.

CU101





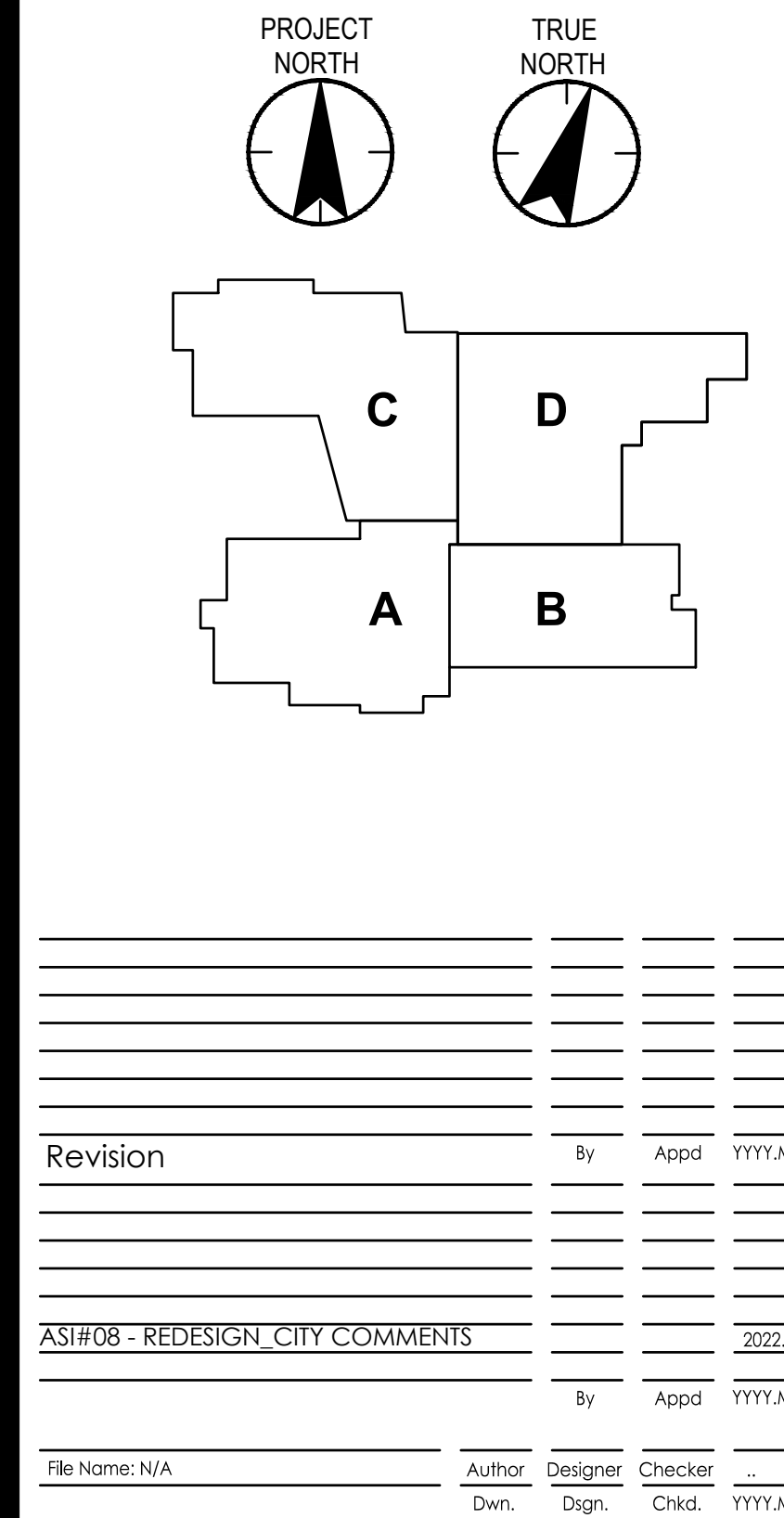
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Consultant



Notes



TOTALS	
Footage of Public 8" Water main	1618 LF
water meters	2-2" meters
Number of Fire hydrants	5
Footage of Public 6" FH lateral	106 LF
Wastewater services	1
Footage of Public Wastewater main	29 LF
Number of Wastewater Manholes	5



Client/Project Logo



Client/Project:

New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Br

Title
SOUTH UTILITY PLAN

Project No. _____

214000825

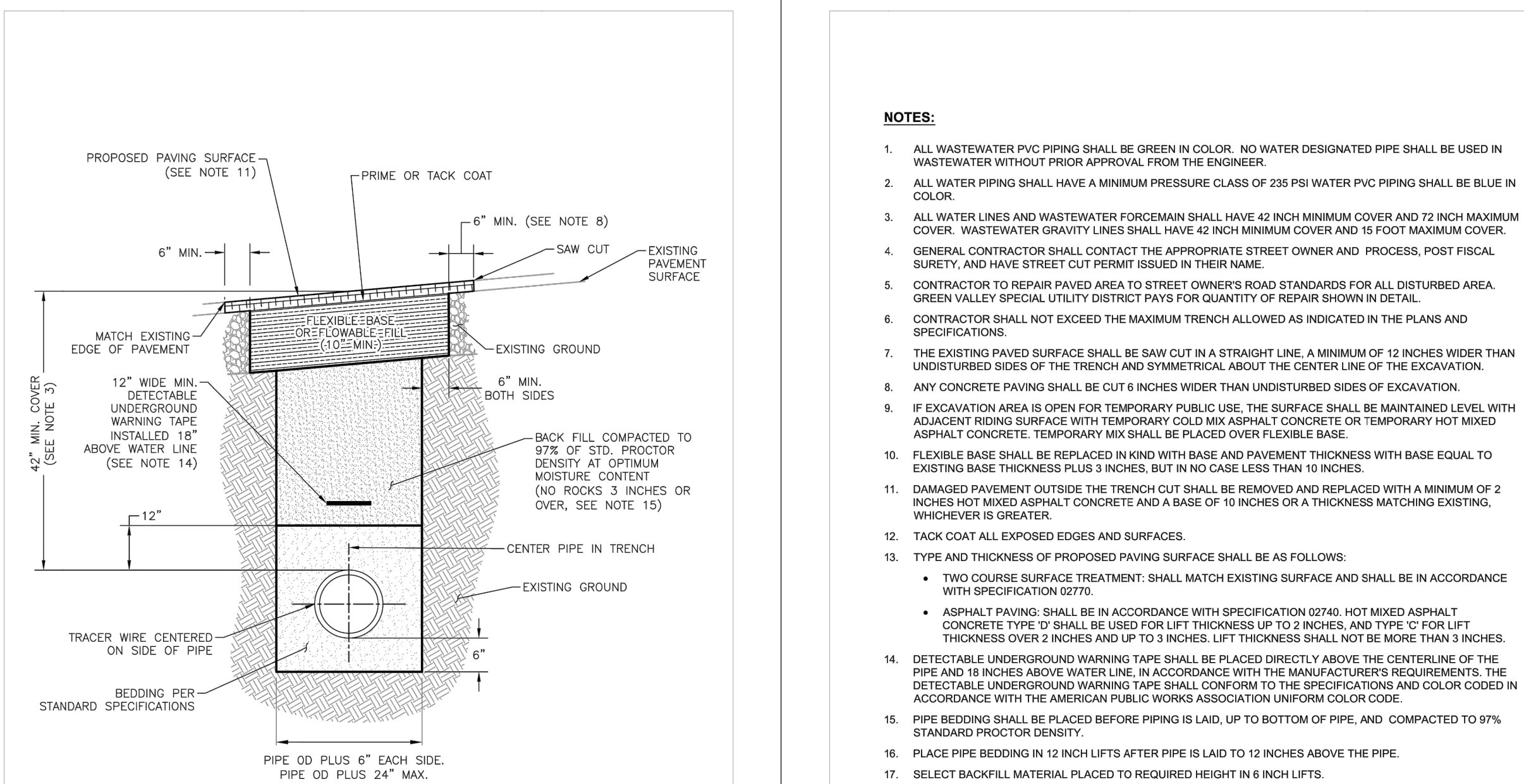
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Scale

Drawing No. _____

CU102

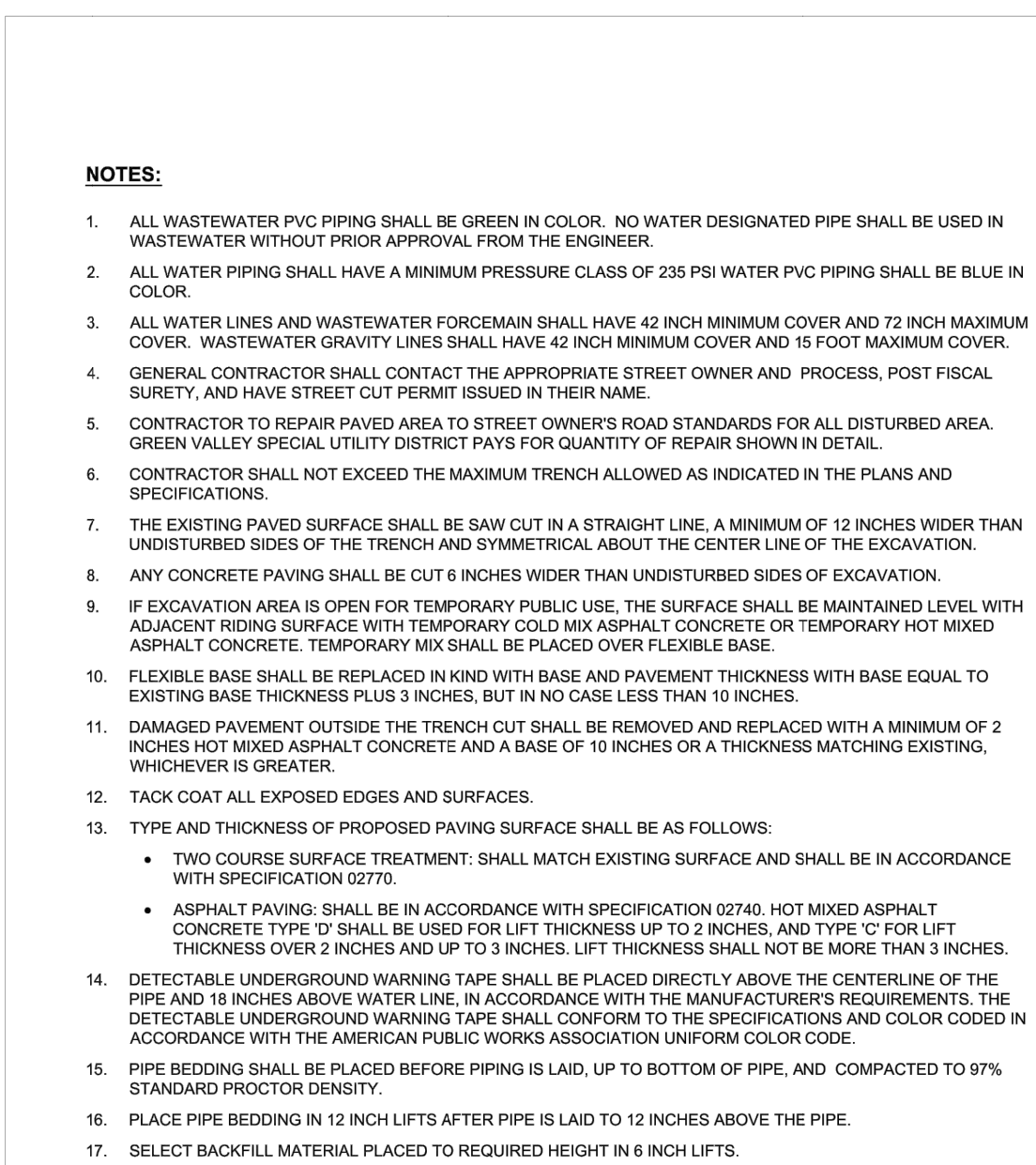
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	TRENCH DETAIL FOR PAVED AREAS (1 OF 2)	DETAIL NO. W-1
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

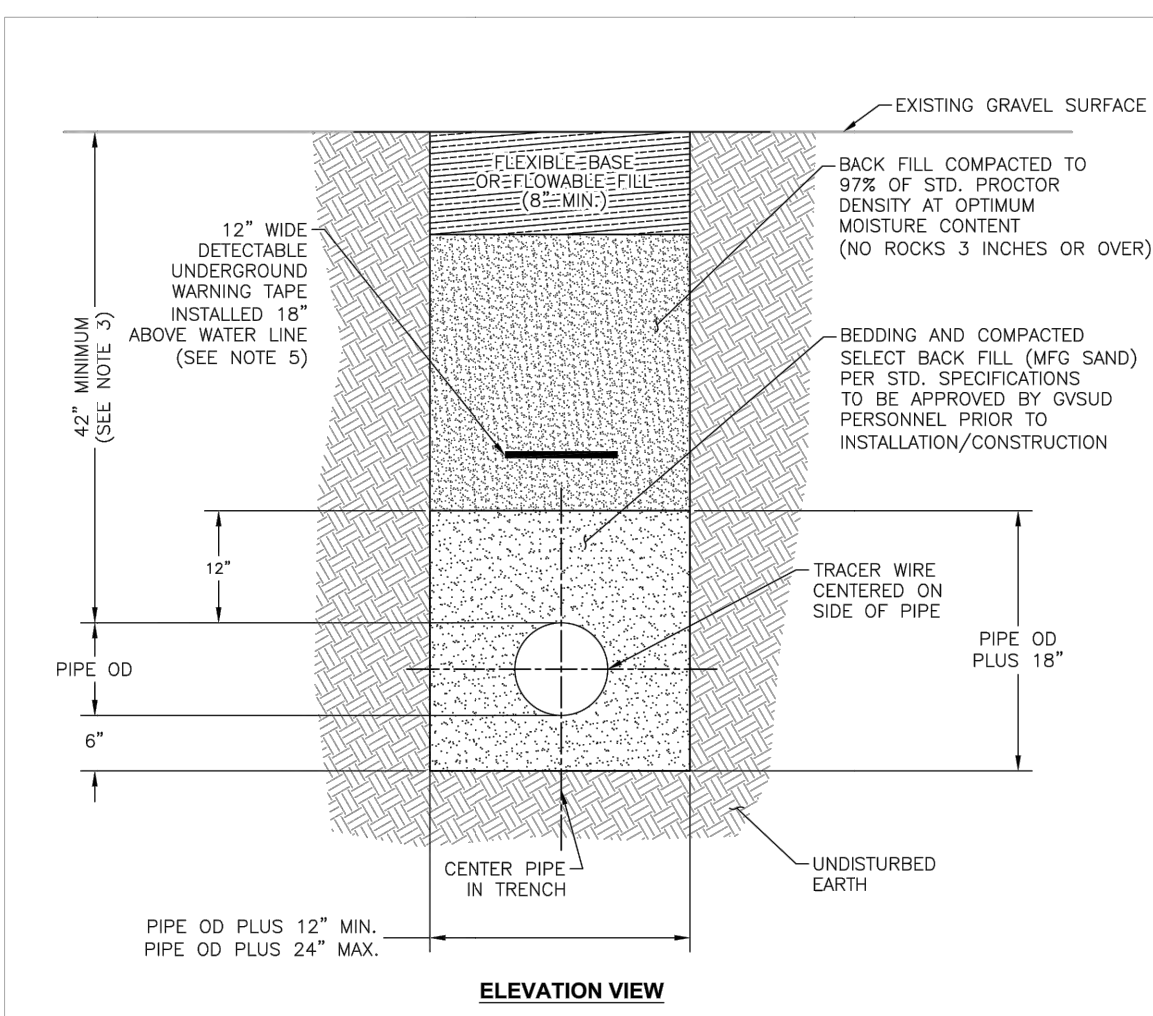
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B



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	TRENCH DETAIL FOR PAVED AREAS (2 OF 2)	DETAIL NO. W-1
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

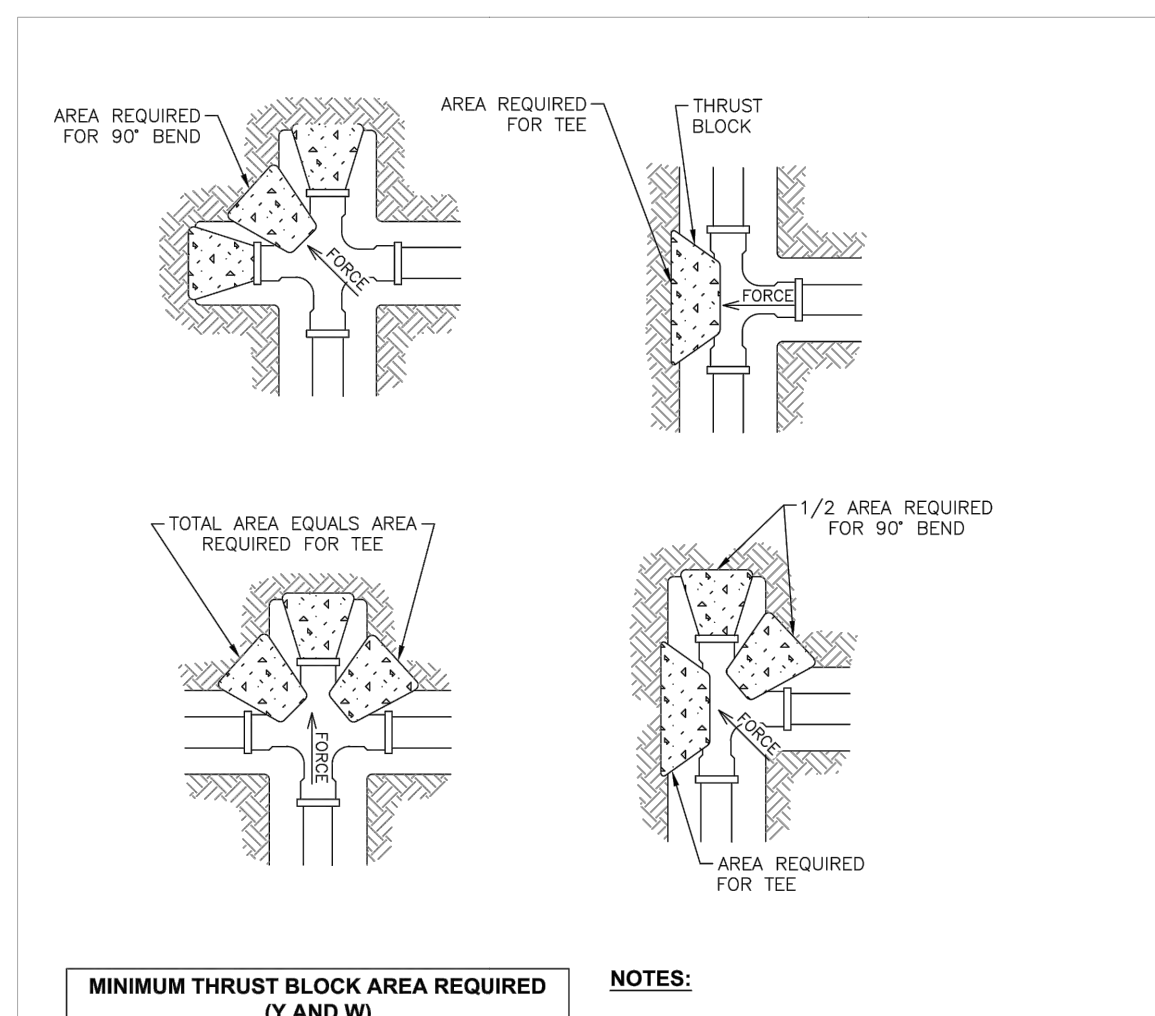
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	TRENCH DETAIL FOR GRAVEL SURFACED AREAS (1 OF 2)	DETAIL NO. W-2
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

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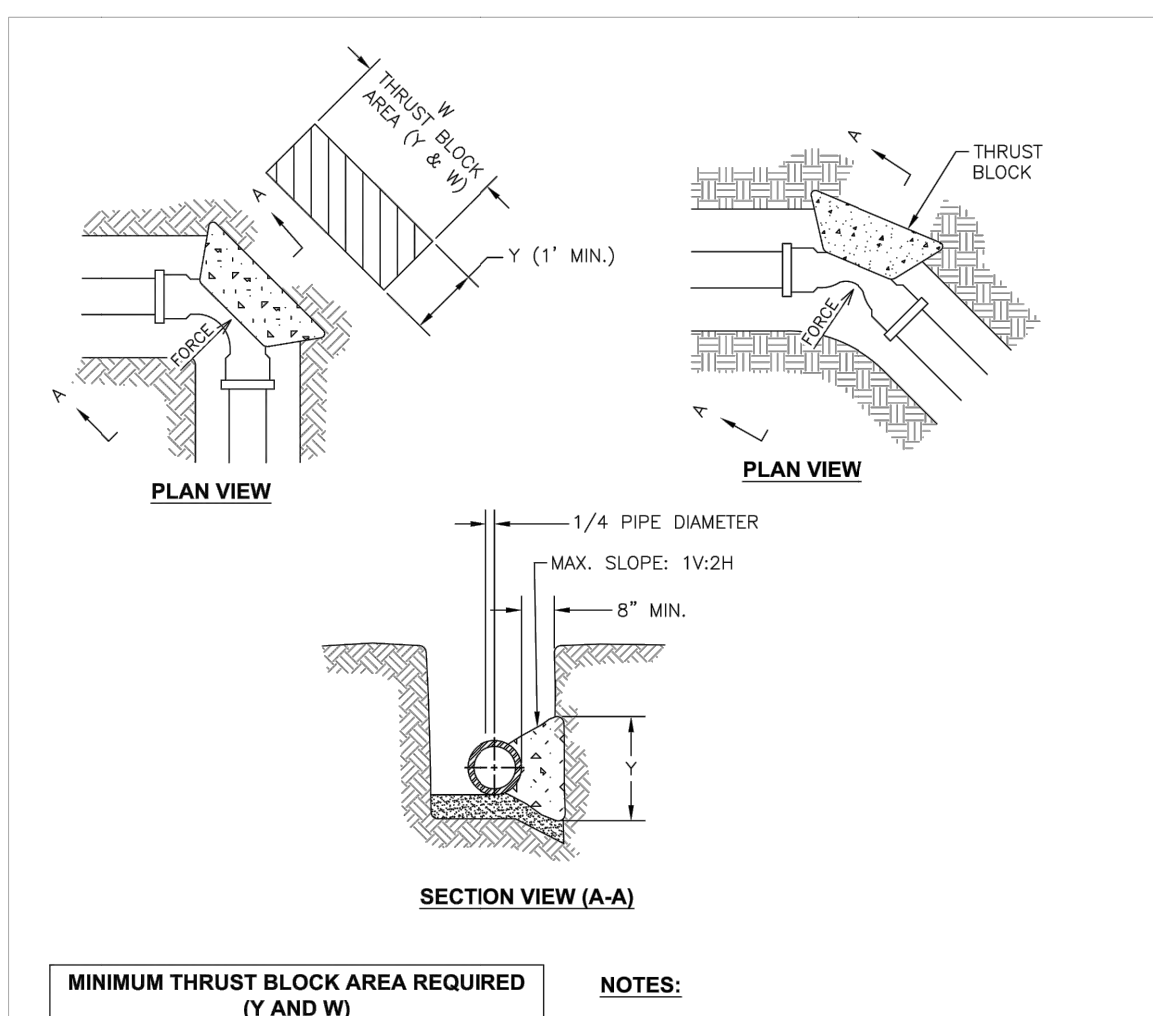
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	CONCRETE THRUST BLOCKING (1 OF 2)	DETAIL NO. W-4
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

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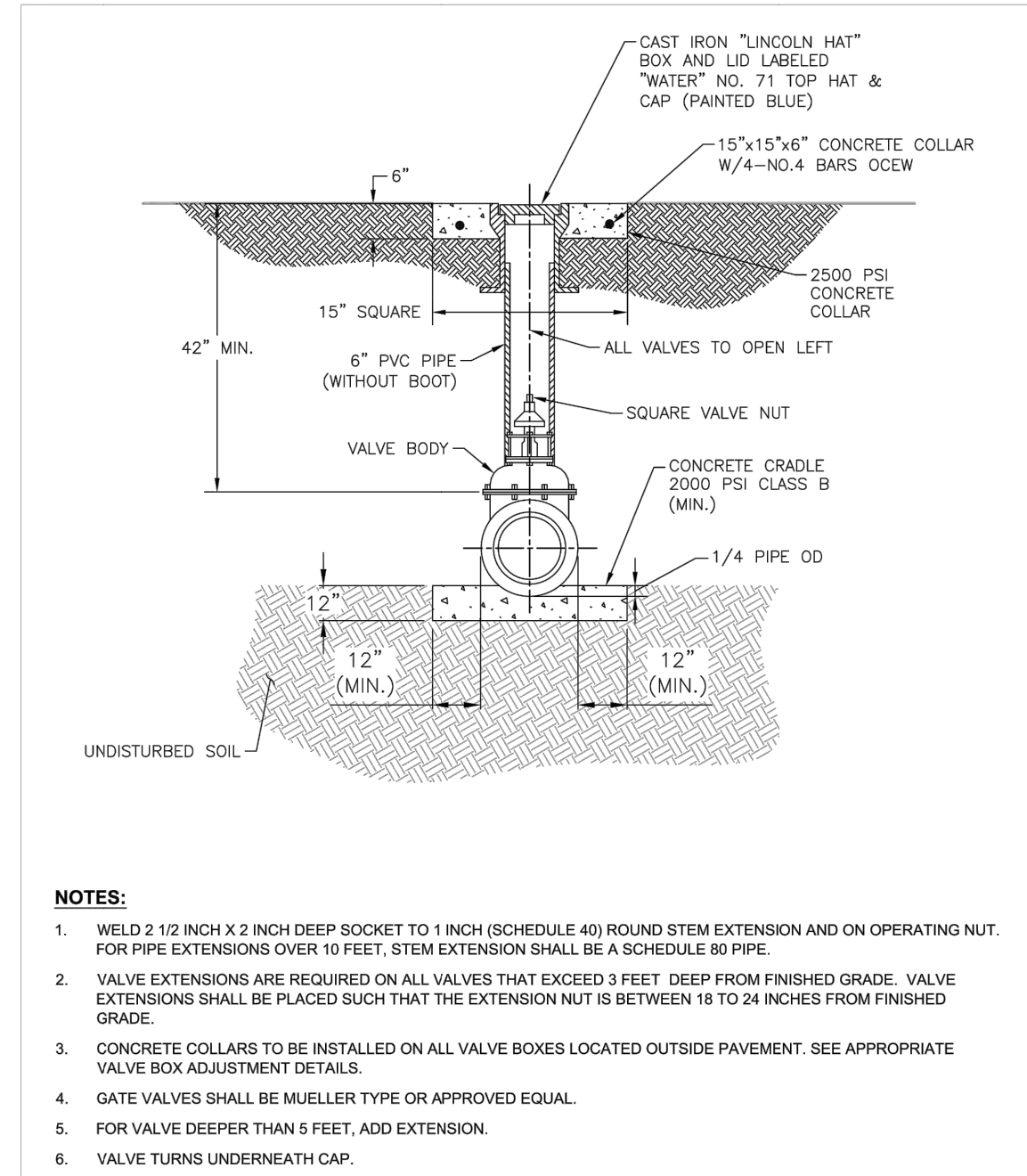
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	CONCRETE THRUST BLOCKING (2 OF 2)	DETAIL NO. W-4
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

B

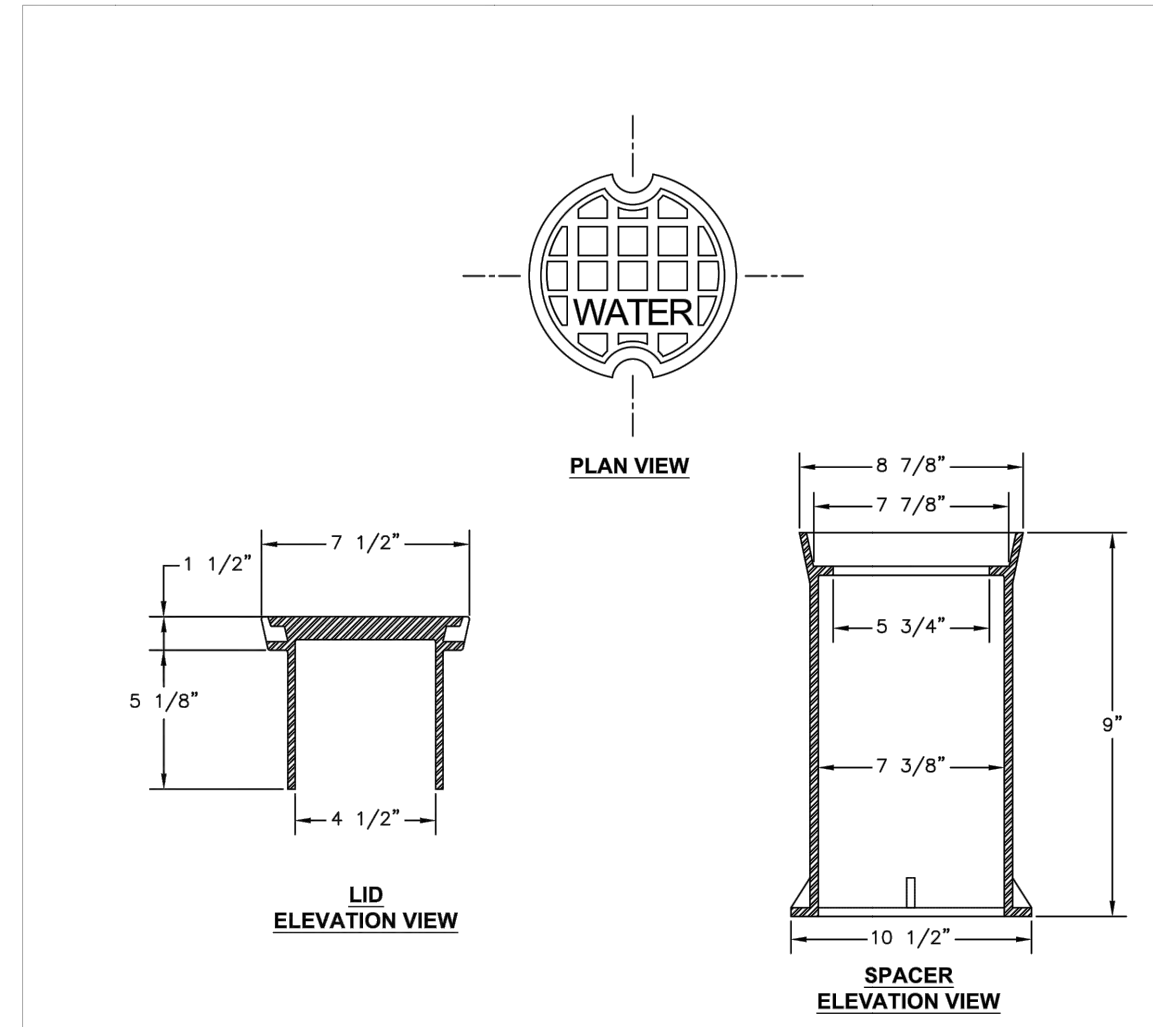
C



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	RIISING STEM VERTICAL GATE VALVE WITH BOX ASSEMBLY	DETAIL NO. W-11
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

D

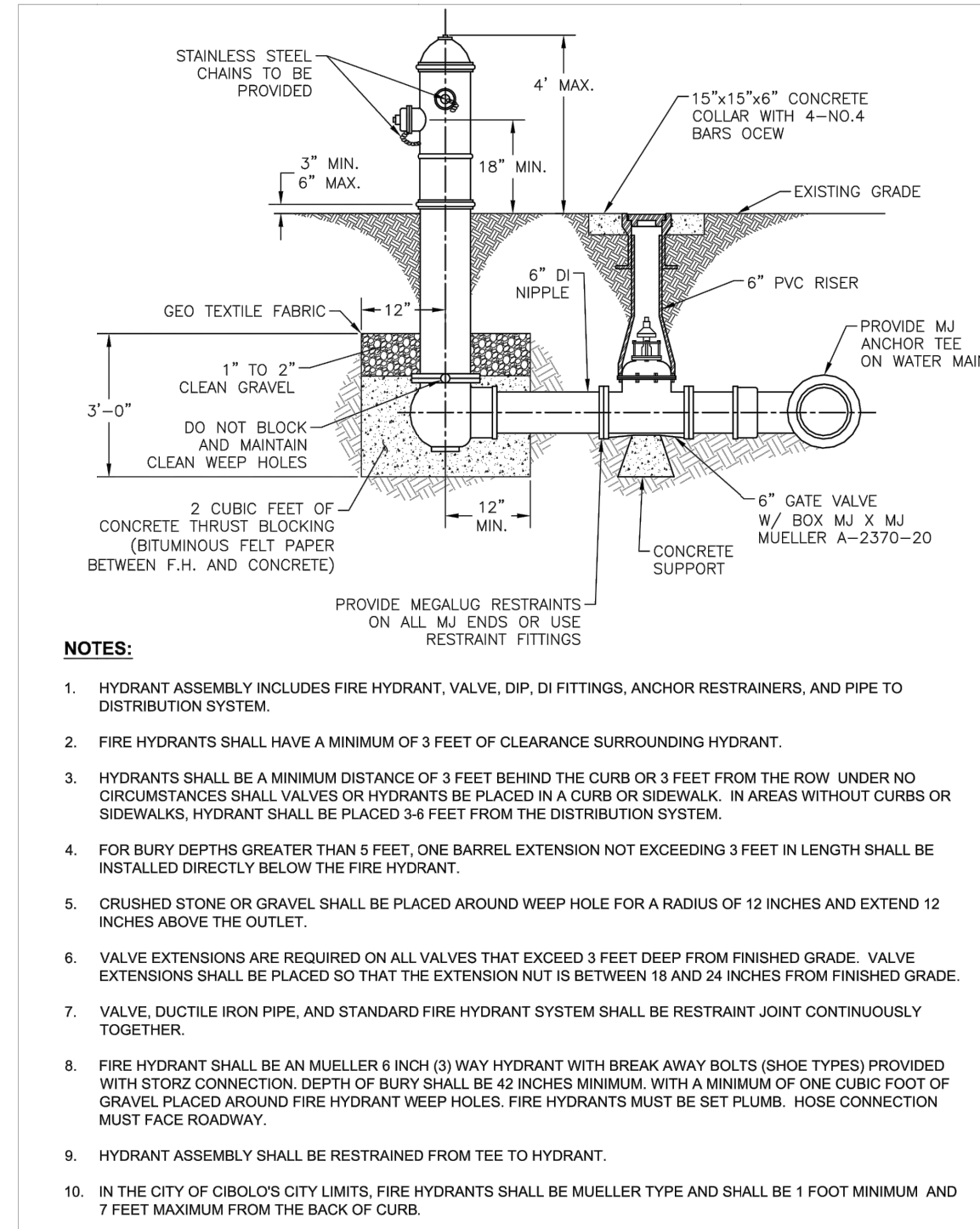
C



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	VALVE BOX CASTING LID	DETAIL NO. W-12
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

D

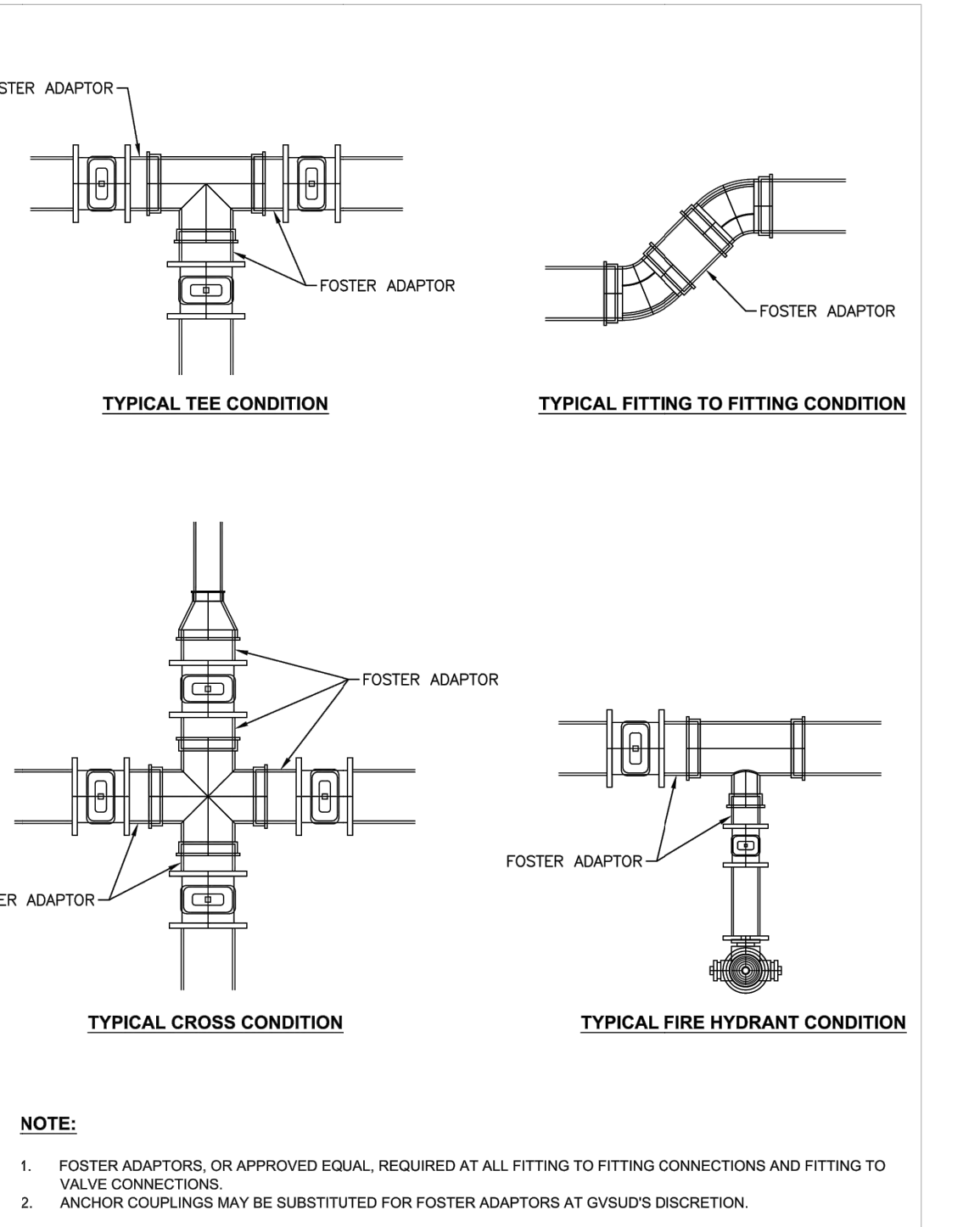
C



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	STANDARD HYDRANT ASSEMBLY INSTALLATION	DETAIL NO. W-22
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

D

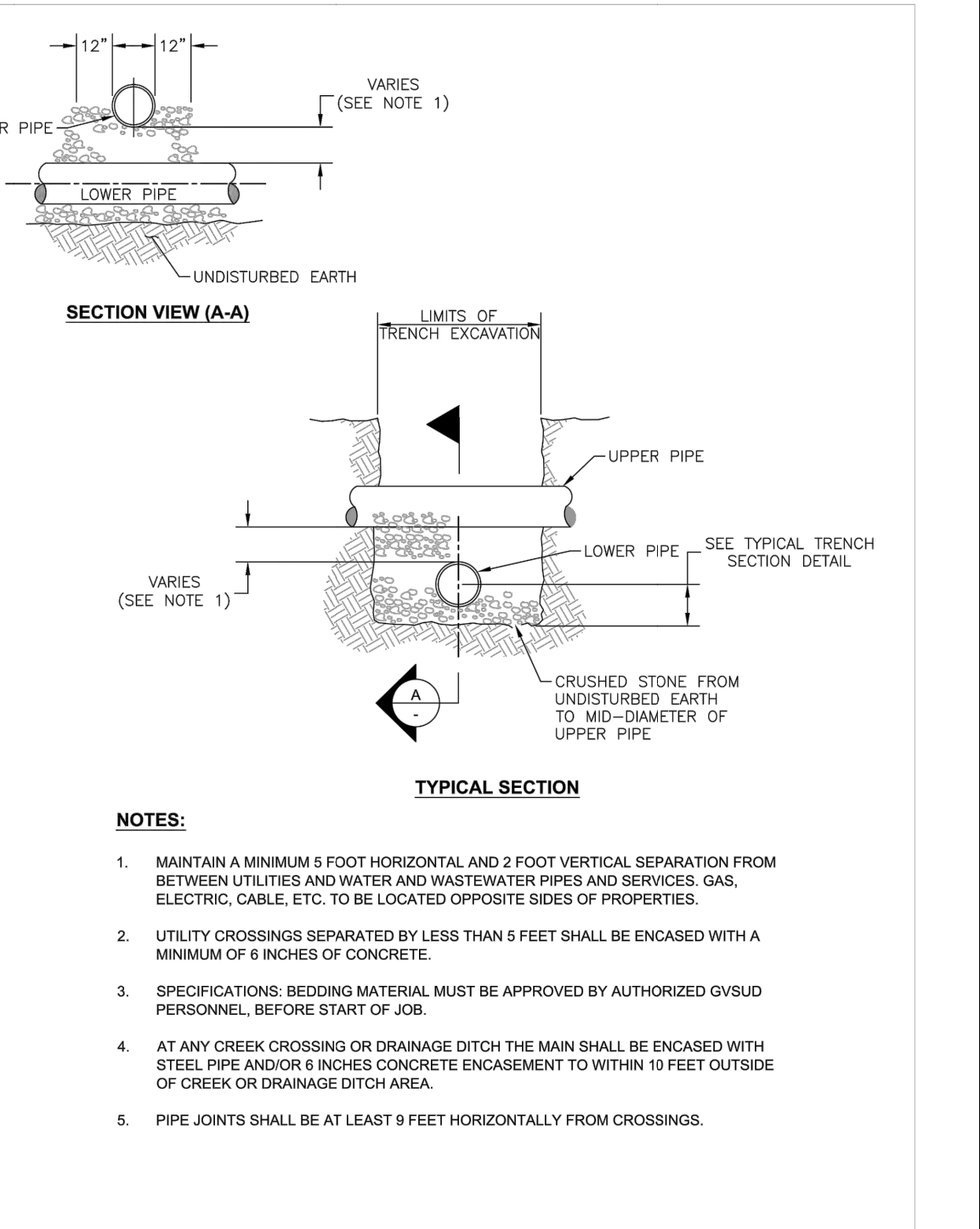
C



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	MECHANICAL JOINT ADAPTOR DETAIL	DETAIL NO. W-30
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

D

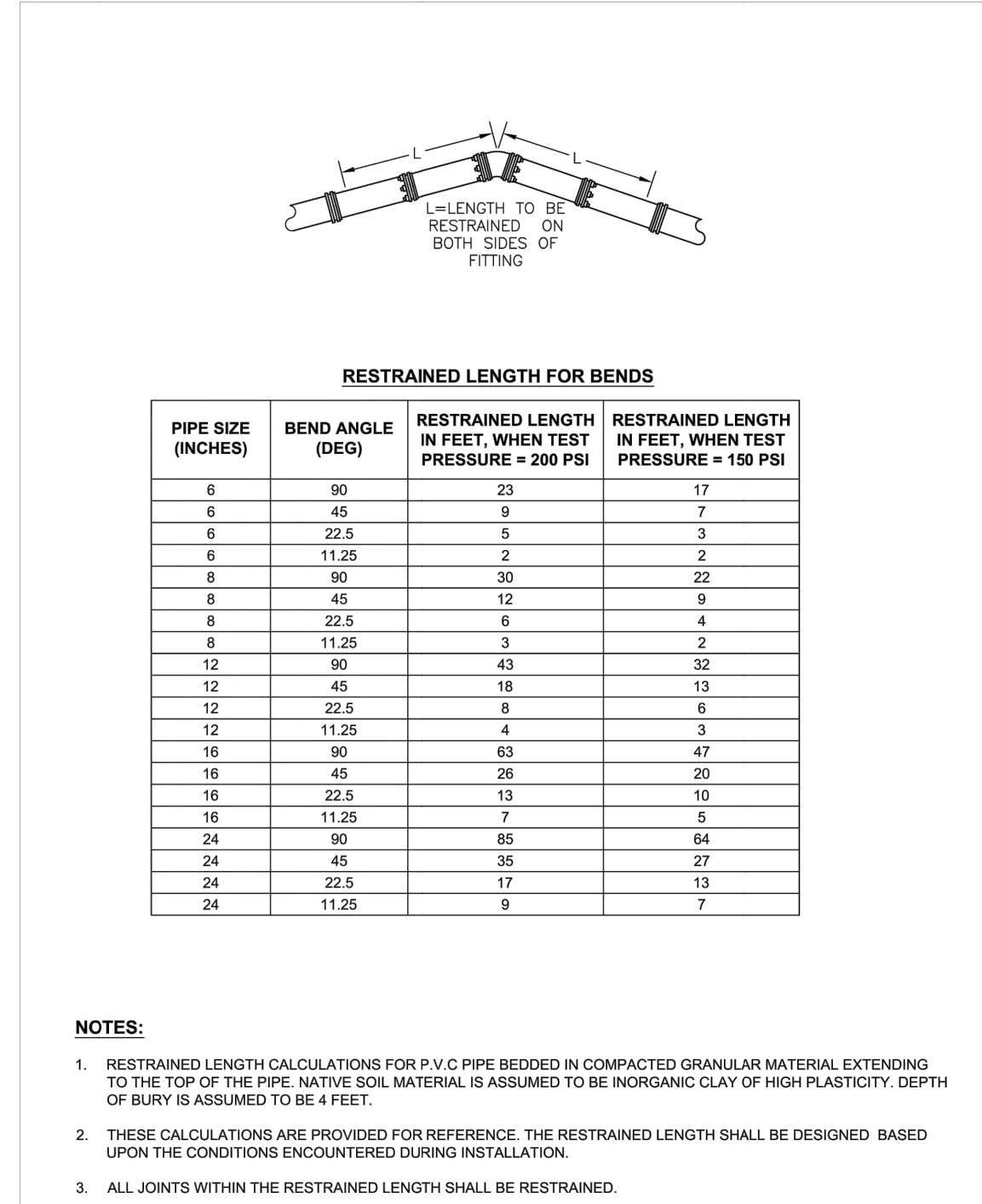
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	UTILITIES CROSSING DETAIL	DETAIL NO. W-10
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

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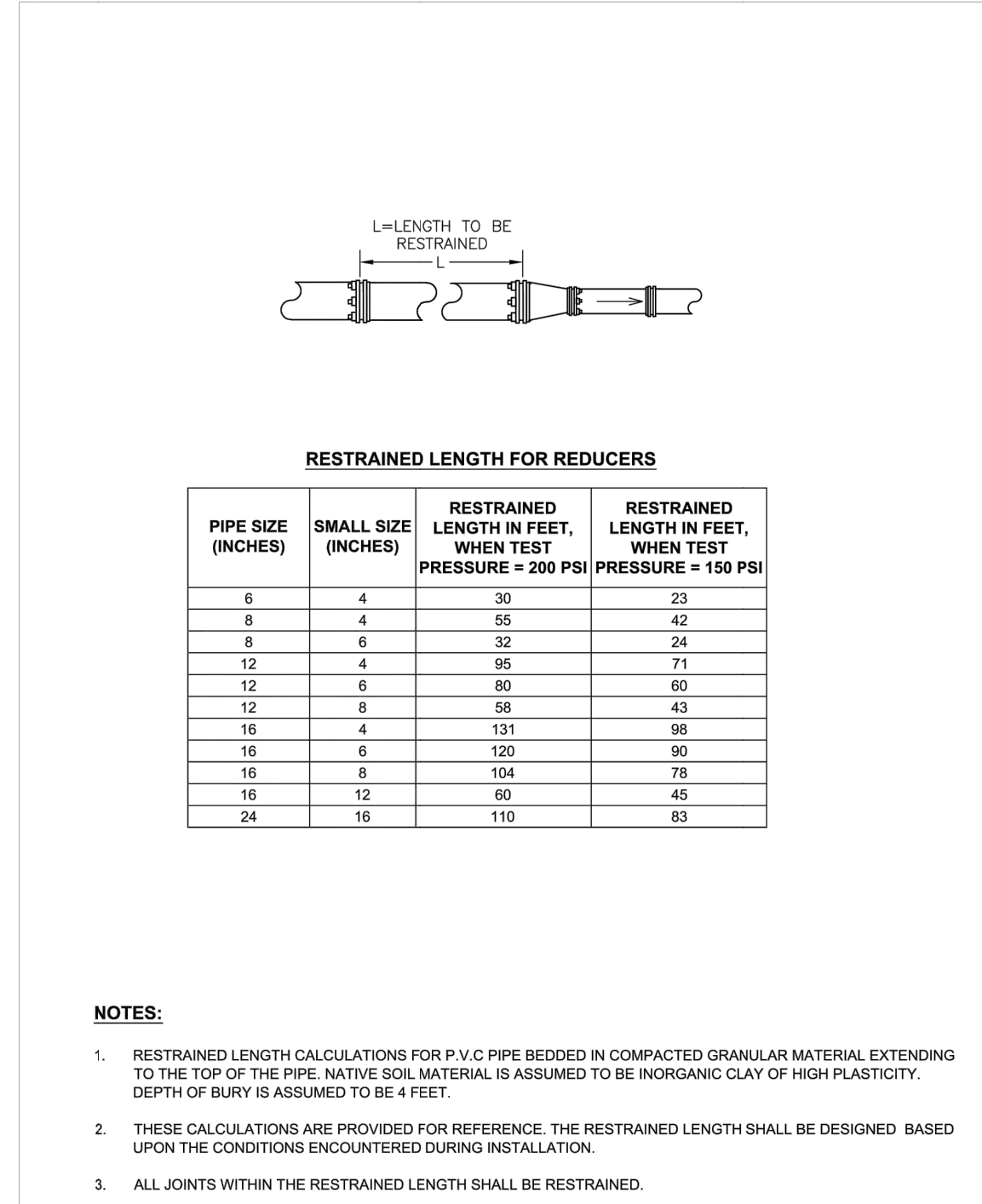
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GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	BEND RESTRAINED LENGTH DESIGN	DETAIL NO. W-18
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

F

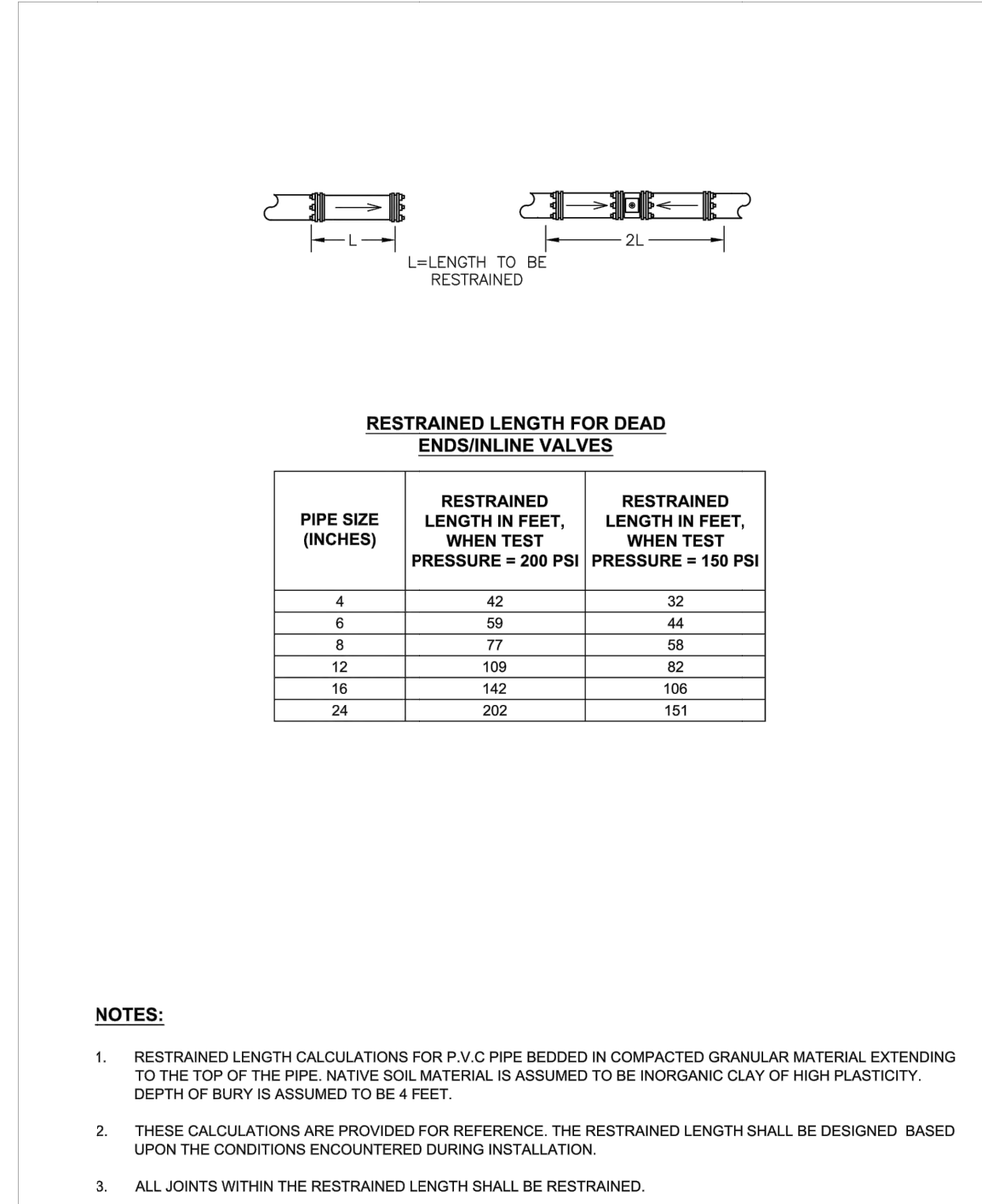
E



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	REDUCER RESTRAINED LENGTH DESIGN	DETAIL NO. W-19
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

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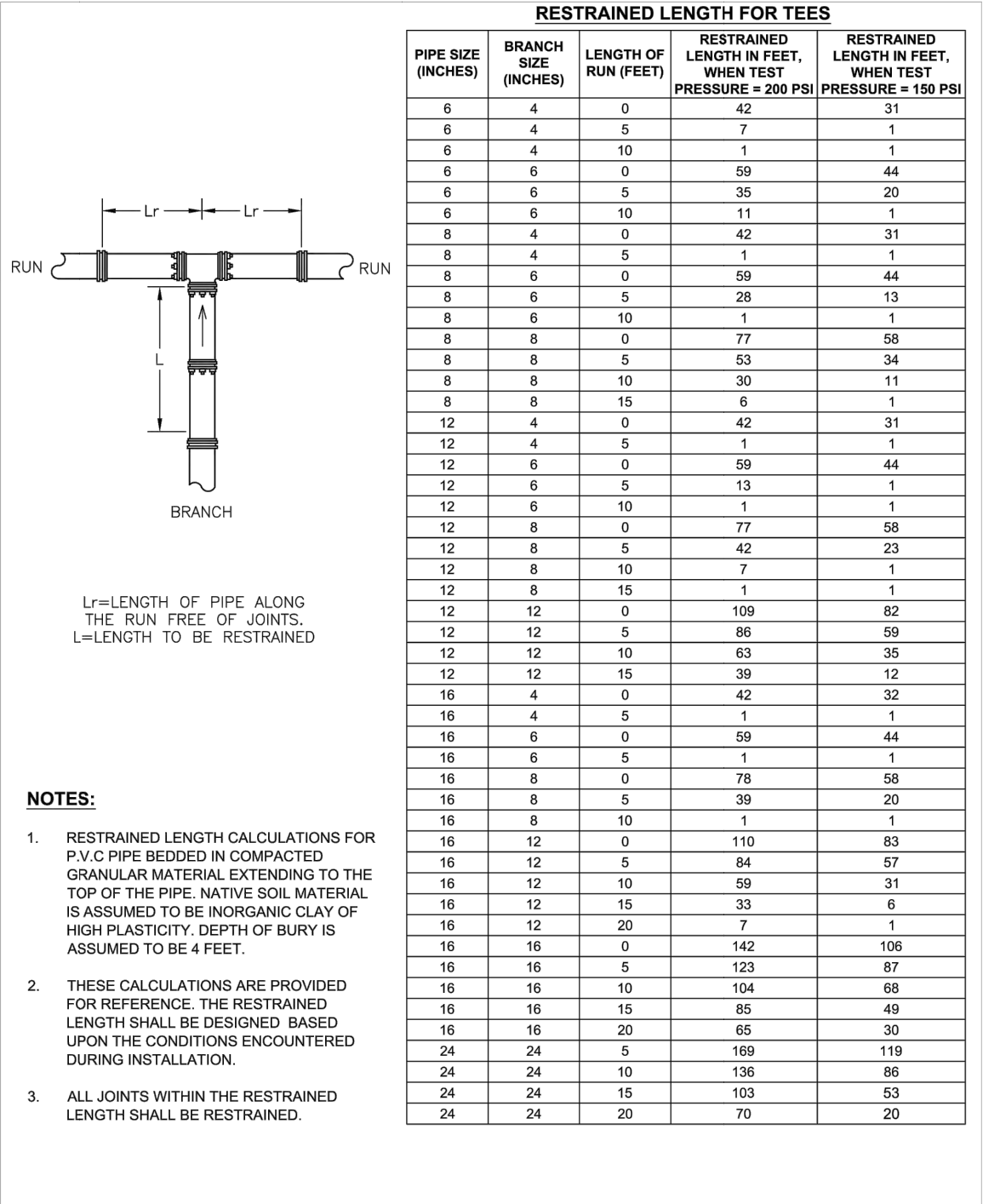
E



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	VALVE AND DEAD END RESTRAINED LENGTH DESIGN	DETAIL NO. W-20
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

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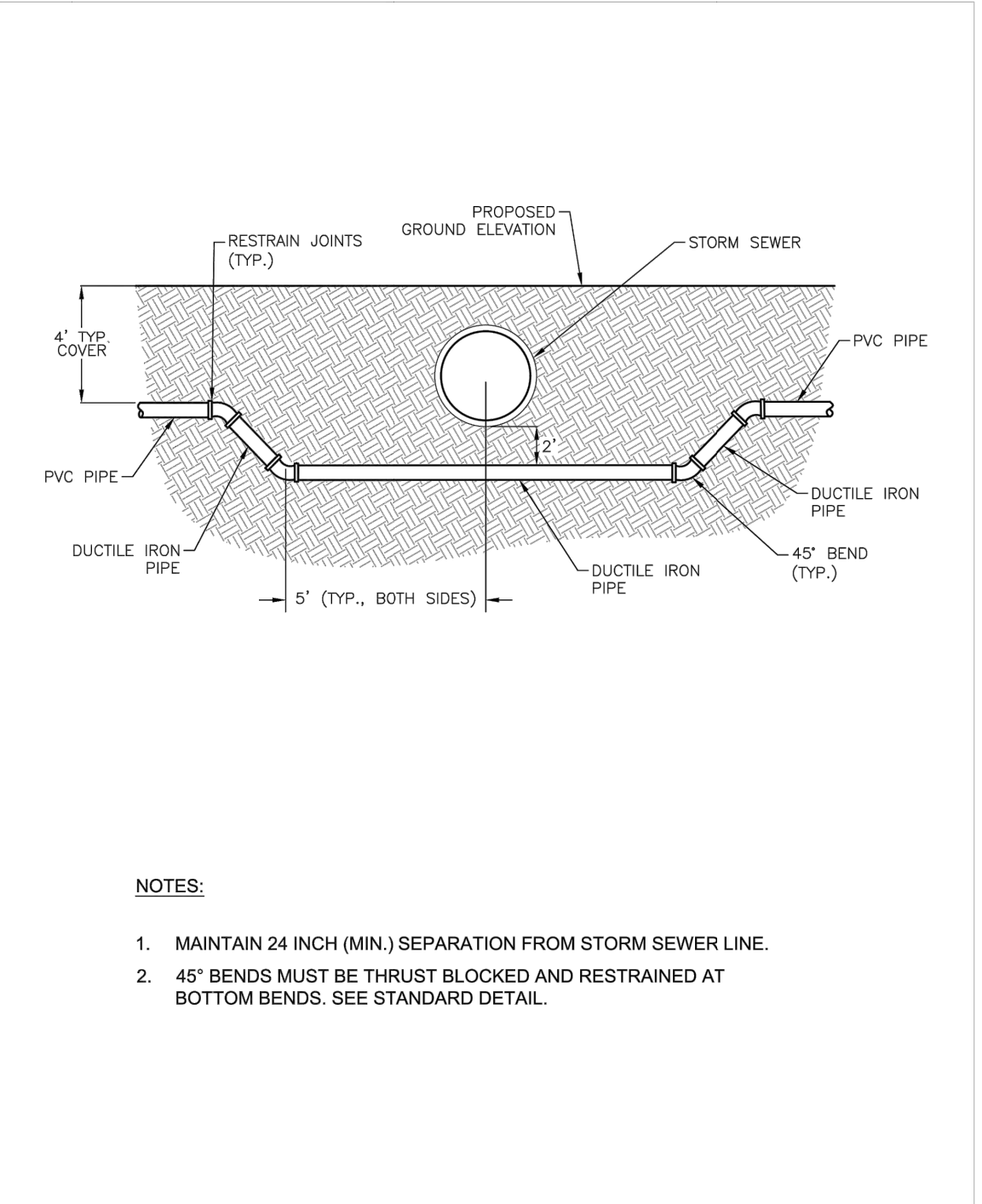
E



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	TEE RESTRAINED LENGTH DESIGN	DETAIL NO. W-21
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

F

E



GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	STORM SEWER CROSSING	DETAIL NO. W-17
REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

F

File Name: N/A

Author: Dwn. Designer: Dgn. Checker: Chkd. By: Appd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
WATER DETAILS

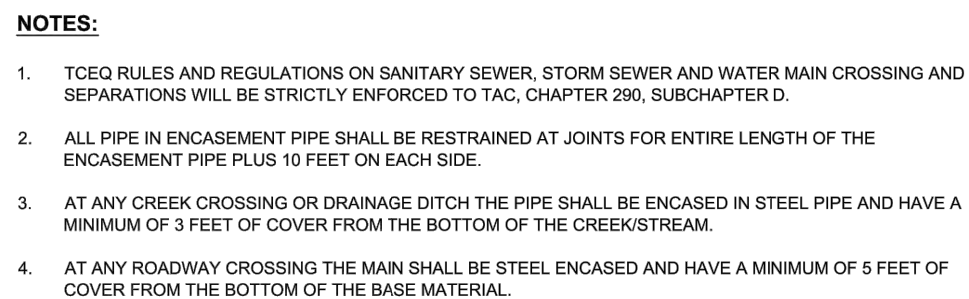
Project No.
21400825

Revision

Drawing No.
CU500


Scale

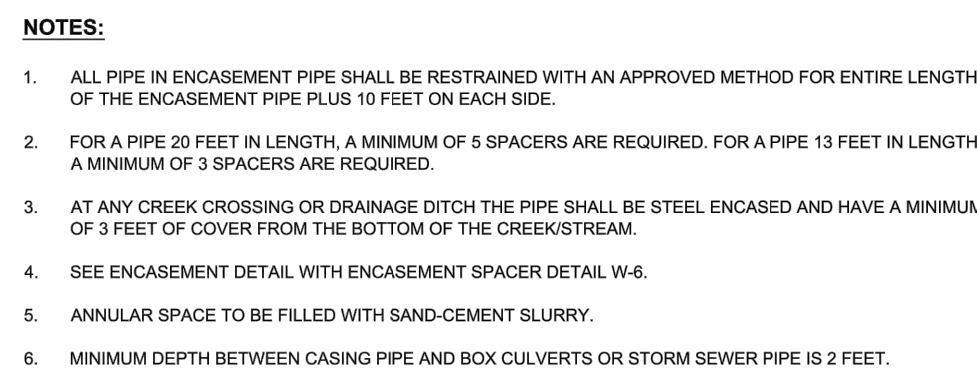
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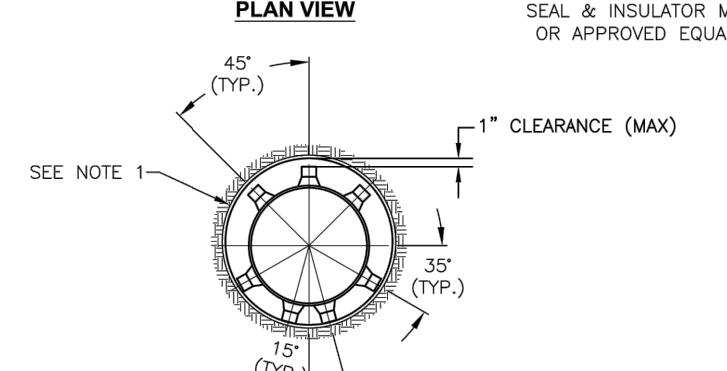
NOTES:

1. ALL PIPE IN ENCASEMENT PIPE SHALL BE RESTRAINED WITH AN APPROVED METHOD FOR ENTIRE LENGTH OF ENCASEMENT PIPE PLUS 10 FEET ON EACH SIDE.
2. FOR A PIPE 20 FEET IN LENGTH A MINIMUM OF 5 SPACERS ARE REQUIRED. FOR A PIPE 13 FEET IN LENGTH A MINIMUM OF 3 SPACERS ARE REQUIRED.
3. AT ANY ROADWAY CROSSING THE PIPE SHALL BE STEEL ENCASED AND HAVE A MINIMUM OF 5 FEET OF COVER FROM THE BOTTOM OF THE BASE MATERIAL.
4. FOR ROAD WAY VALVES, THE ENDS OF THE CASING PIPE SHALL EXTEND TO THE RIGHT OF WAY LINES.
5. ALL PIPE FITTINGS, JOINTS, AND APPURTENANCES SHALL MATCH OR EXCEED CLASS RATING OF PIPE AS SHOWN ON THE PLANS.
6. SEE ENCASEMENT DETAIL WITH ENCASEMENT SPACER DETAIL W-6.


	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	INSTALLATION OF PIPE IN STEEL ENCASEMENT UNDER ROADS	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-7



	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	INSTALLATION OF PIPE IN STEEL ENCASEMENT UNDER STREAMS / STORM SEWERS	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-8

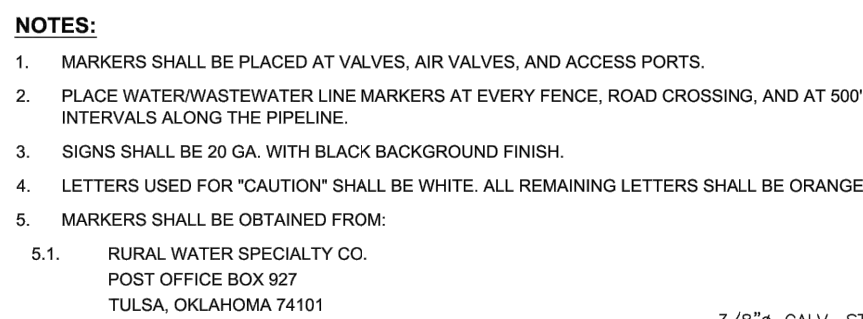



NOTES:	SECTION VIEW 1-1
<ol style="list-style-type: none"> 1. ENCASEMENT PIPE SHALL BE NEW STEEL PIPE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C200, LATEST EDITION. 2. ALL PIPE JOINTS WITHIN THE CASING ARE TO BE RESTRAINED WITH AN APPROVED METHOD FOR ENTIRE LENGTH OF THE ENCASEMENT PIPE PLUS 10 FEET ON EACH SIDE. 3. FOR ROADWAY CROSSINGS, THE END OF THE CASING PIPE SHALL EXTEND TO THE RIGHT OF WAY LINES. 4. ALL PIPE FITTINGS, VALVES, AND APPURTENANCES SHALL MATCH OR EXCEED PIPE CLASS RATING AS SHOWN ON THE PLANS. 5. REFER TO SPECIFICATION 02300 FOR CASING PIPE THICKNESS. 	

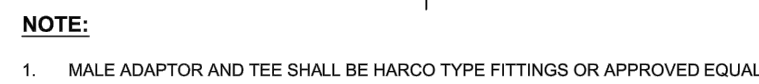
	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	TYPICAL JACKING, BORING, AND TUNNELING DETAIL	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-9




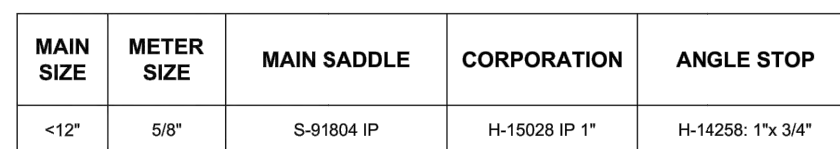
CU501	NOT TO SCALE
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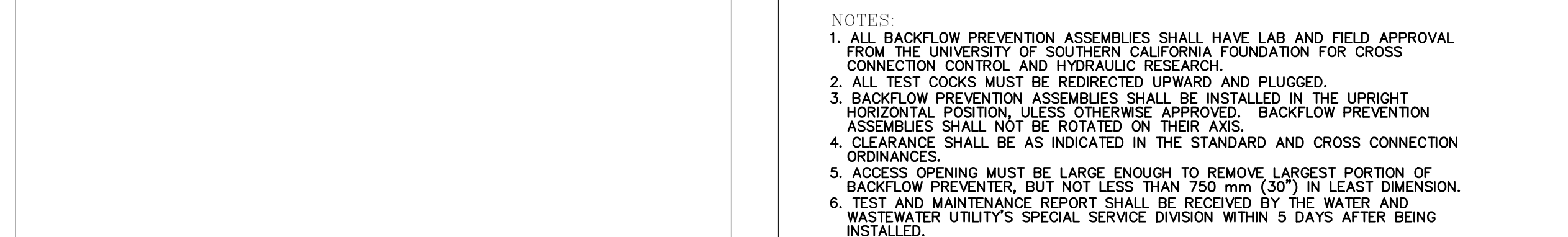
	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	UTILITY MARKER DETAIL	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-16




	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	DUAL LONG WATER SERVICE DETAIL	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-31



	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS	STANDARD SERVICE CONNECTION	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	DETAIL NO. W-23



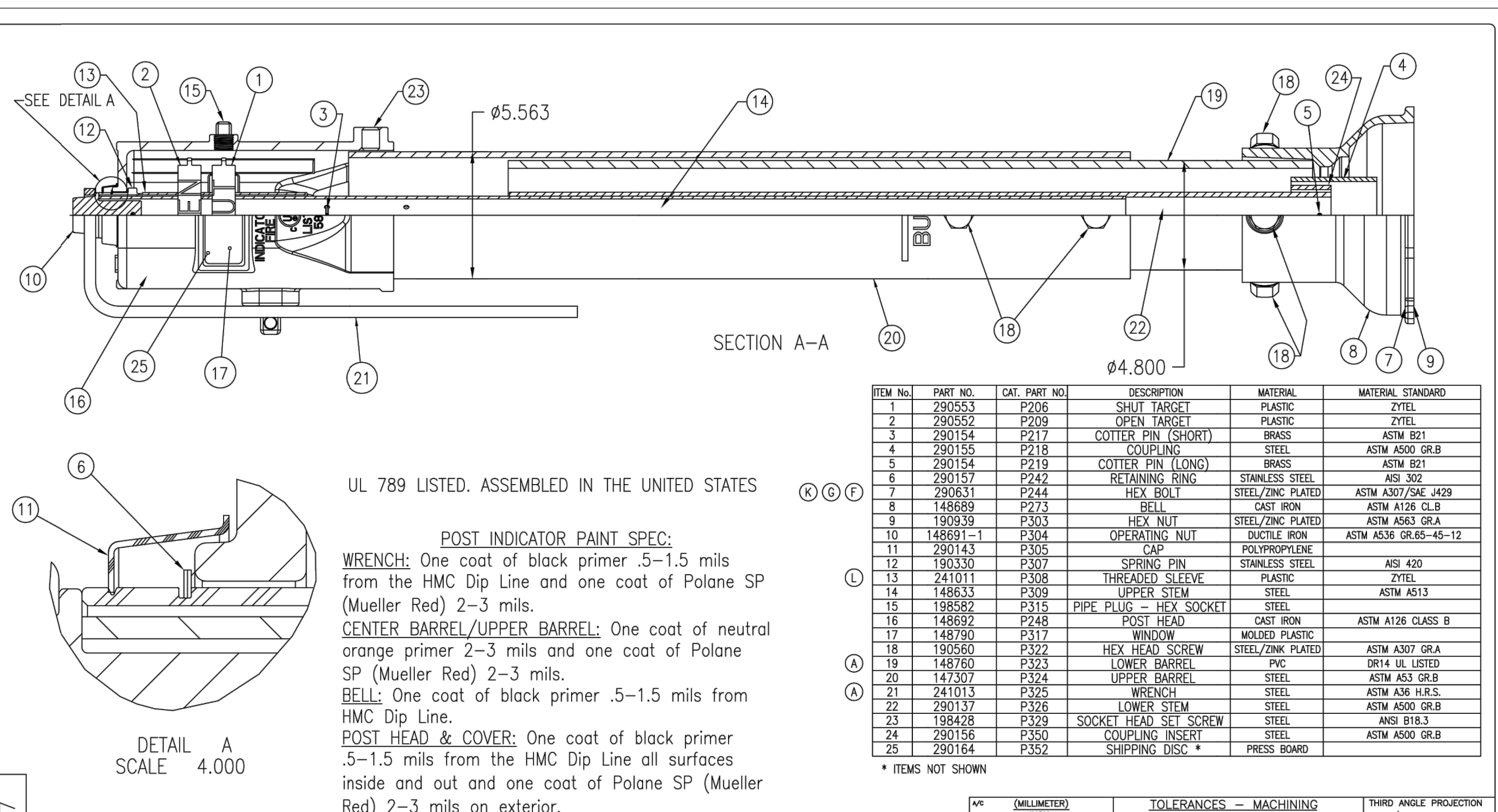
	GREEN VALLEY SPECIAL UTILITY DISTRICT STANDARD DETAILS		TYPICAL SERVICE LOCATION DETAIL	
	REVISED: FEBRUARY 2021	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		DETAIL NO. W-24



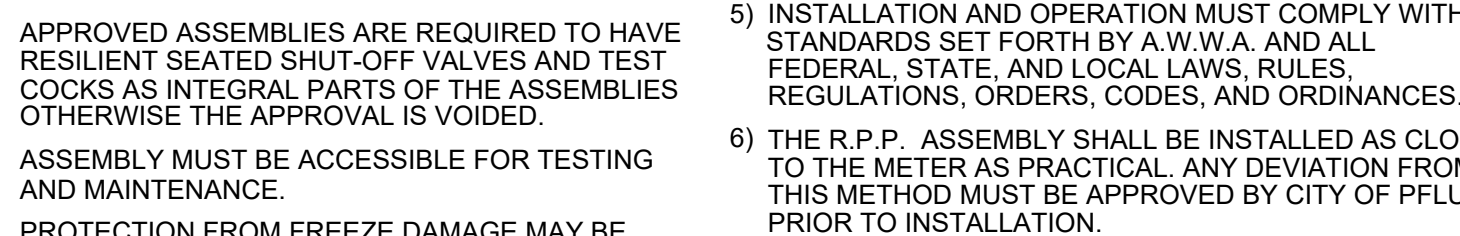
CU501	NOT TO SCALE
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NOTES:

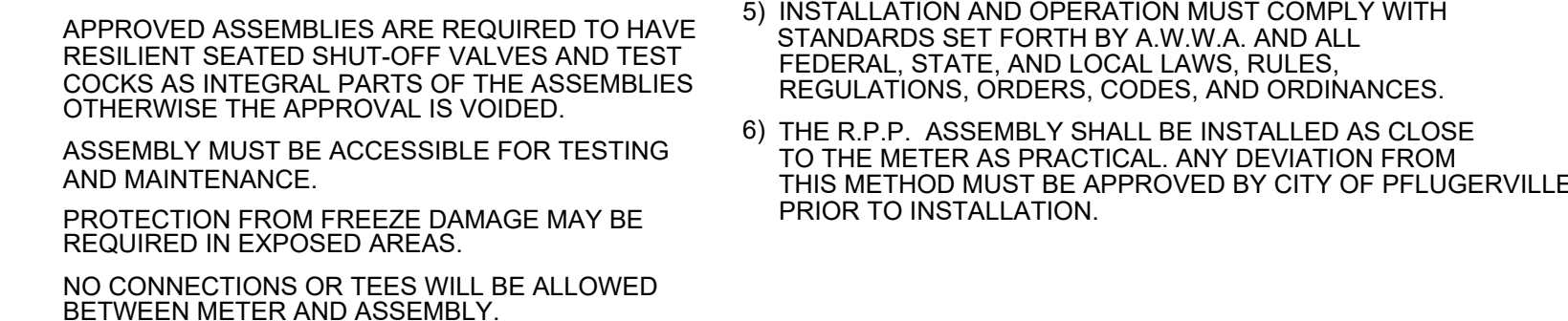
1. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE LAB AND FIELD APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL.
2. ALL TEST COCKS MUST BE REDIRECTED UPWARD AND PLUGGED.
3. BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN THE UPRIGHT POSITION.
4. BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE ROTATED ON THEIR AXIS.
5. CLOSURES SHALL BE AS INDICATED IN THE STANDARD AND CROSS CONNECTION ORDINANCES.
6. ACCESS OPENING MUST BE LARGE ENOUGH TO REMOVE LARGEST PORTION OF THE BACKFLOW PREVENTER, BUT HYDRAULIC RESISTANCE SHALL NOT EXCEED 750 mm (30") IN LEAST DIMENSION.
7. TEST AND MAINTENANCE REPORT SHALL BE RECEIVED BY THE WATER AND WASTEWATER UTILITY'S SPECIAL SERVICE DIVISION WITHIN 5 DAYS AFTER BEING

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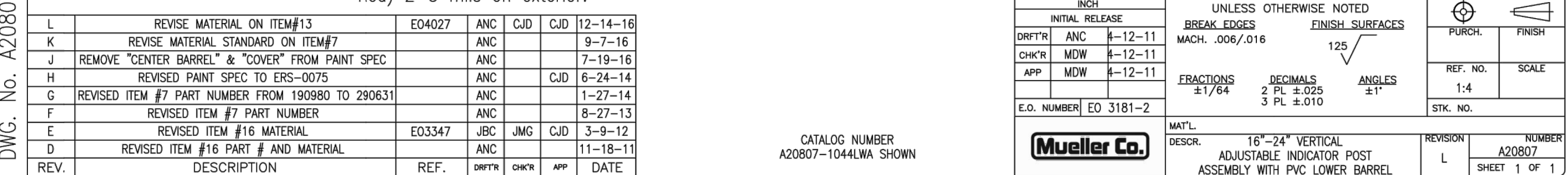
WT (MILLIMETERS) INCH	TOLERANCES — MACHINING UNLESS OTHERWISE NOTED		THIRD ANGLE PROJECTION
INITIAL RELEASE	BRIEF DIMENSIONS MACH. 006/016		PURCEL FINISH
DEPTH INCH #—12-11			
CHOKS INCH #—12-11			
AMP INCH #—12-11			
FRANCHES 21/54	DECIMALS 2 PL 2.010	ANGLES 21°	REF. NO. 1-4
C.O. NUMBER ED 3181-2	M/N'L		SKC. NO.
		DESCR. ADJUSTABLE INDICATOR POST ASSEMBLY WITH C.A. LOWER BARREL	



CU501	NOT TO SCALE
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CU501	NOT TO SCALE
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CU501	NOT TO SCALE
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Diagram illustrating the experimental setup for the study, showing three different mulch treatments applied to a tree. The treatments are:

- 1 PART PINE MULCH
- 1 PART SANDY LOAM
- 1 PART PEAT MOSS
- 1 PART EXISTING SOIL

The diagram shows a cross-section of the ground with a tree. The treatments are labeled as follows:


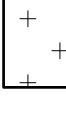









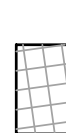


- 2" PINE BARK
- 6"
- 6"
- 6"

The diagram also shows the layers of the ground: MULCH, ROCKFILL, and EXISTING SOIL.

2 TYPICAL SHRUB PLANTING DETAIL

L100	NOT TO SCALE
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LANDSCAPING LEGEND

- 
 4" TOPSOIL AND BERMUDA GRASS SOD TO PROVIDED IN HATCHED AREAS WITH PERMANENT UNDERGROUND IRRIGATION SYSTEM. ALL 4:1 OR GREATER SLOPES SHALL BE STABILIZED BY BERMUDA GRASS SOD
- 
 4" TOPSOIL AND BERMUDA GRASS HYDROMULCH PROVIDED IN HATCHED AREAS TEMPORARILY IRRIGATED UNTIL ESTABLISHED
- 
 METAL LANDSCAPE EDGING
- 
 WEED BLOCK FABRIC AND 2" LANDSCAPING MULCH WITH PERMANENT UNDERGROUND IRRIGATION SYSTEM
- 
 RED YUCCA - *Hesperaloe parviflora* - 3 GAL
- 
 DWARF BURFORD HOLLY- *Ilex cornuta rotunda burfordii* - 3 GAL
- 
 CRETAEAGUS SPP- *Hawthorn* - 3 GAL
- 
 ILEX VOMITORIA NANA- Dwarf Yaupon - 3 GAL
- 
 SOUTHERN LIVE OAK - *Quercus virginiana* 1-1/2" CALIPER WITH BUBBLER AT EACH TREE
- 
 BUR OAK-*Quercus macrocarpa* 1-1/2" CALIPER WITH BUBBLER AT EACH TREE
- 
 CEDAR ELM- *Ulmus crassifolia* 1-1/2" CALIPER WITH BUBBLER AT EACH TREE
- 
 6' SCREENING WALL
- 
 50' PROPERTY LINE SETBACK ALONG STREET FRONTAGE TO INDICATE AREA OF REQUIRED PARKING LOT SCREENING.
- 
 FIBER ENGINEERED WOOD PLAYGROUND SURFACING


IRRIGATION NOTES

ALL MAINLINE AND LATERAL LINE PIPING AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SLEEVES. MAIN AND LATERAL LINE SLEEVES SHALL BE A MINIMUM OF TWICE (2X) THE DIAMETER OF THE PIPE TO BE SLEEVED. CONTROL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING.

- INSTALL ALL BACKFLOW PREVENTION DEVICES AND ALL PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER PER LOCAL CODES AND ALL GOVERNING AUTHORITIES.
- FINAL LOCATION OF THE BACKFLOW PREVENTER AND AUTOMATIC CONTROLLER SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- 120 VAC ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER.
- ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
- THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE WITH MINIMAL OVERSPRAY ONTO WALKS, STREETS, WALLS, ETC.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, STRUCTURES AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
- ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- THE DESIGNERS SHALL BE A REGISTERED LICENSED IRRIGATOR IN THE STATE OF TEXAS.
- ALL REMOTE CONTROL VALVES, GATE VALVES, QUICK COUPLERS, AND CONTROL WIRE SHALL BE INSTALLED IN APPROVED VALVES BOXES WITH LOCKING COVERS.
- ALL CONTROL WIRE TO BE 14 AWG SOLID COPPER INSULATED DIRECT BURIAL WIRE UL LISTED. WATERPROOF CONNECTORS TO BE USED ON ALL WIRE CONNECTIONS.
- IRRIGATION CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES, AND PAY ALL CHARGES AND FEES AND GIVE ALL NECESSARY NOTICES FOR THE COMPLETION OF WORK.
- IRRIGATION INSTALLATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION OF ENVIRONMENTAL QUALITY.
- IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER WITH "AS BUILT" DRAWINGS SHOWING THE LOCATION OF ALL MAINLINES, LATERAL LINES, VALVES AND WIRE WIRING.

~~OVERALL LANDSCAPING PLAN~~

SCALE: 1" = 50'



SCALE: 1" = 50'

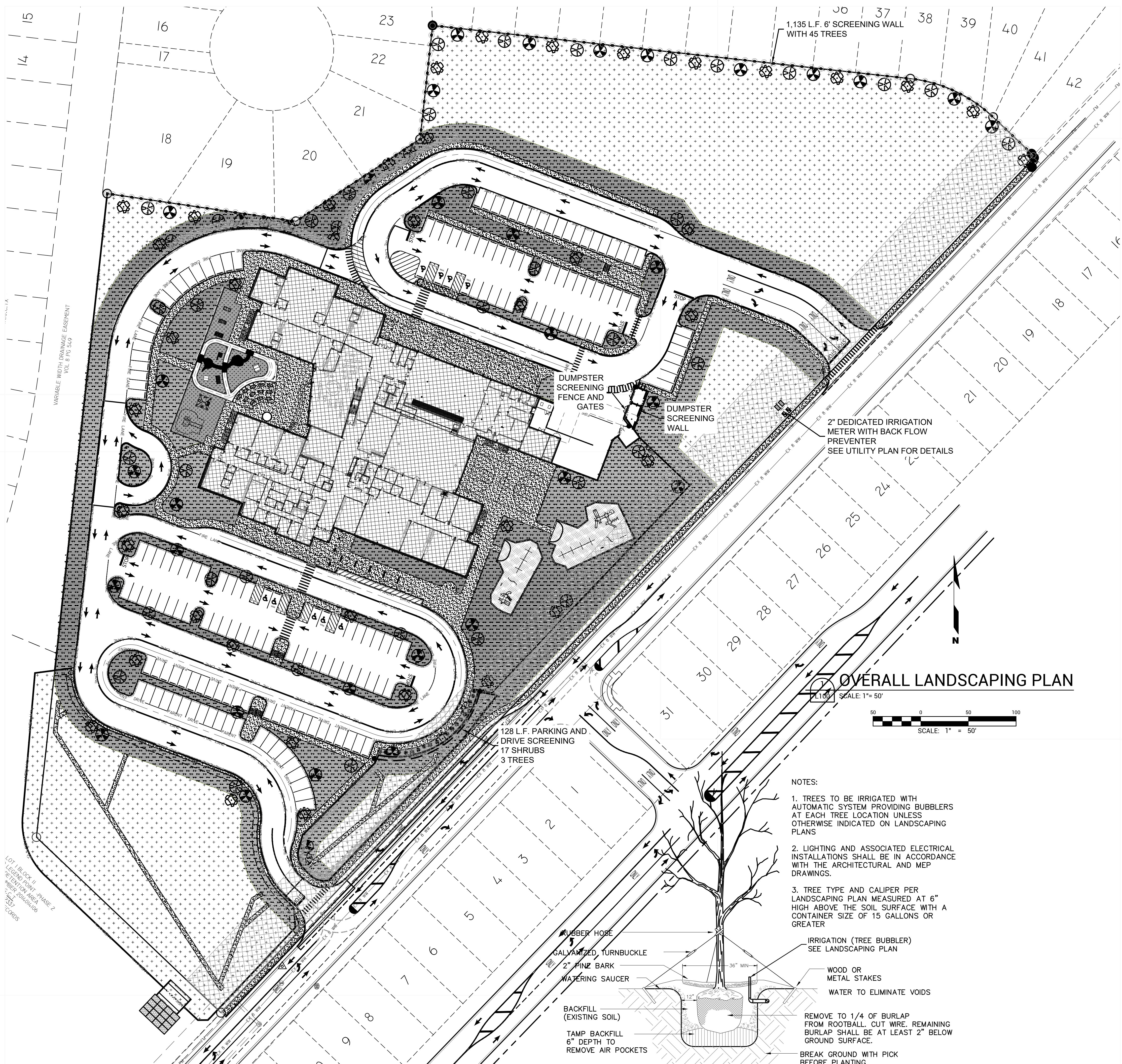
NOTES:

1. TREES TO BE IRRIGATED WITH AUTOMATIC SYSTEM PROVIDING BUBBLERS AT EACH TREE LOCATION UNLESS OTHERWISE INDICATED ON LANDSCAPING PLANS
2. LIGHTING AND ASSOCIATED ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL AND MEP DRAWINGS.
3. TREE TYPE AND CALIPER PER LANDSCAPING PLAN MEASURED AT 6" HIGH ABOVE THE SOIL SURFACE WITH A CONTAINER SIZE OF 15 GALLONS OR GREATER

[illegible]

3 TYPICAL TREE PLANTING DETAIL

L100	NOT TO SCALE
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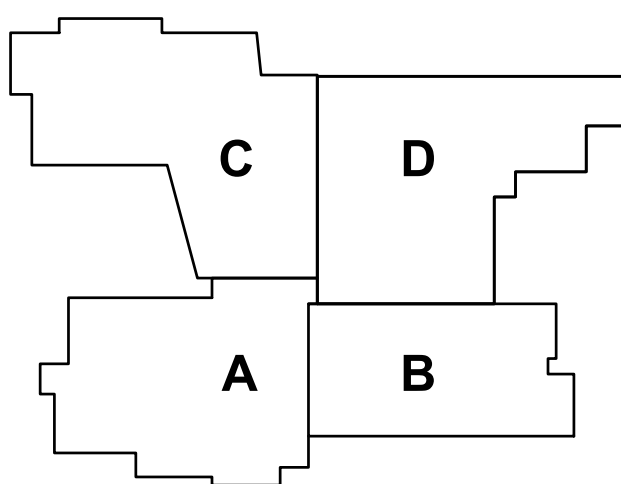
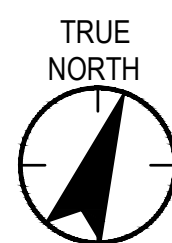
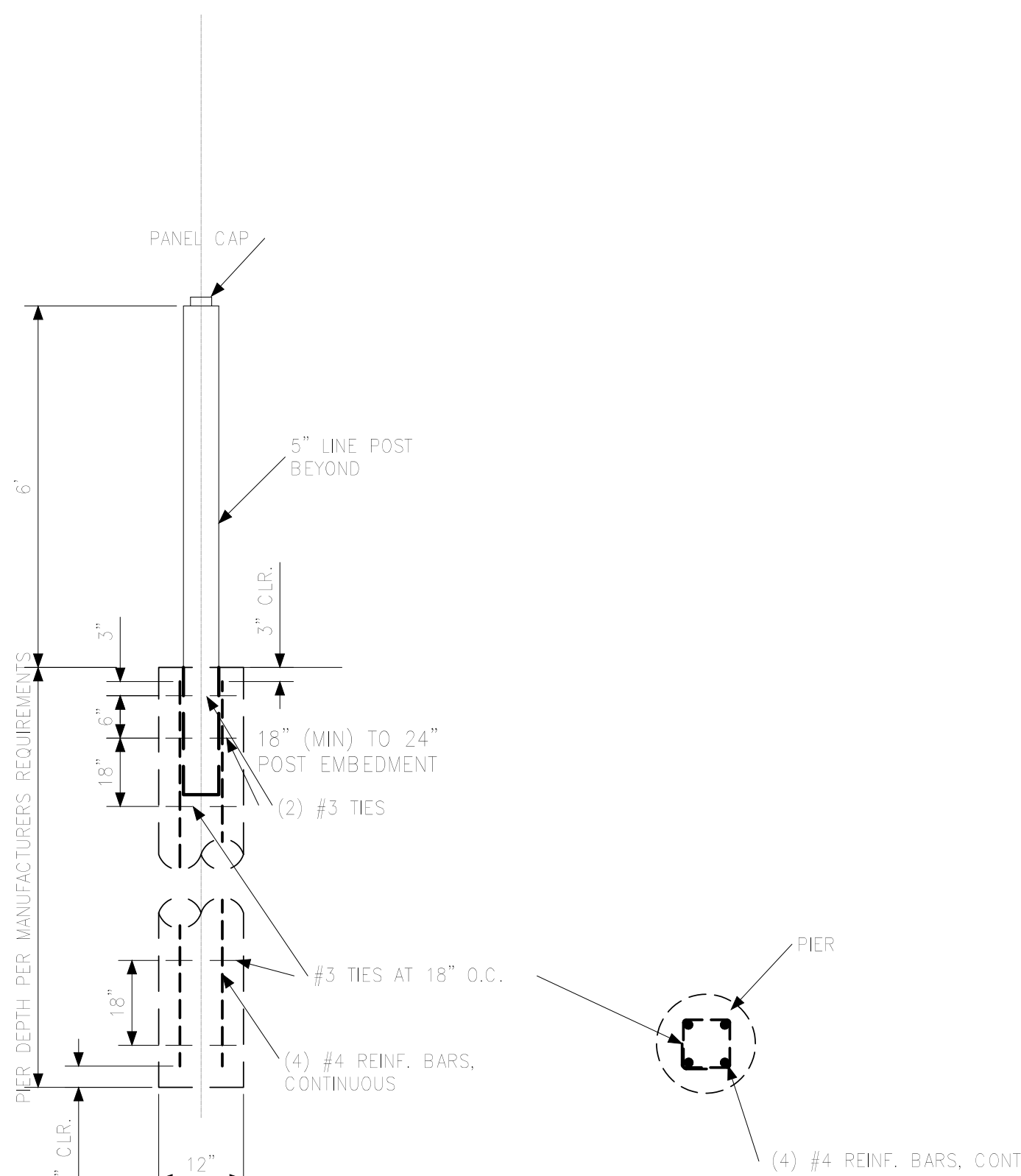
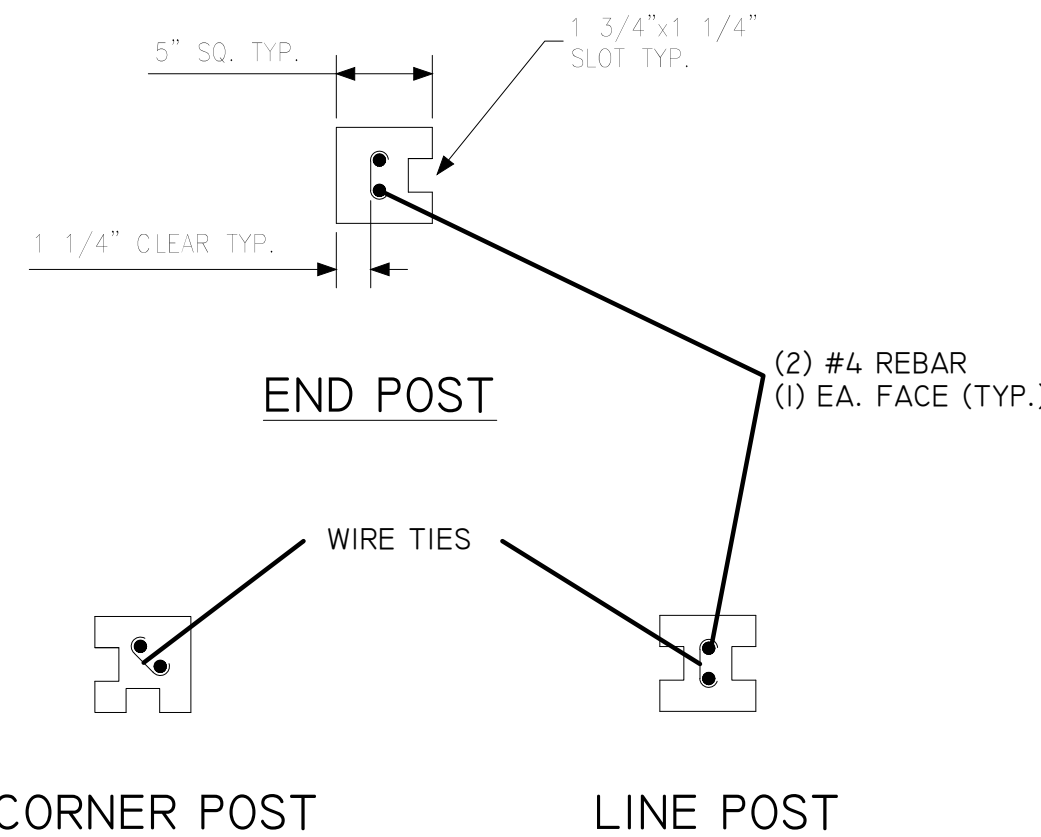
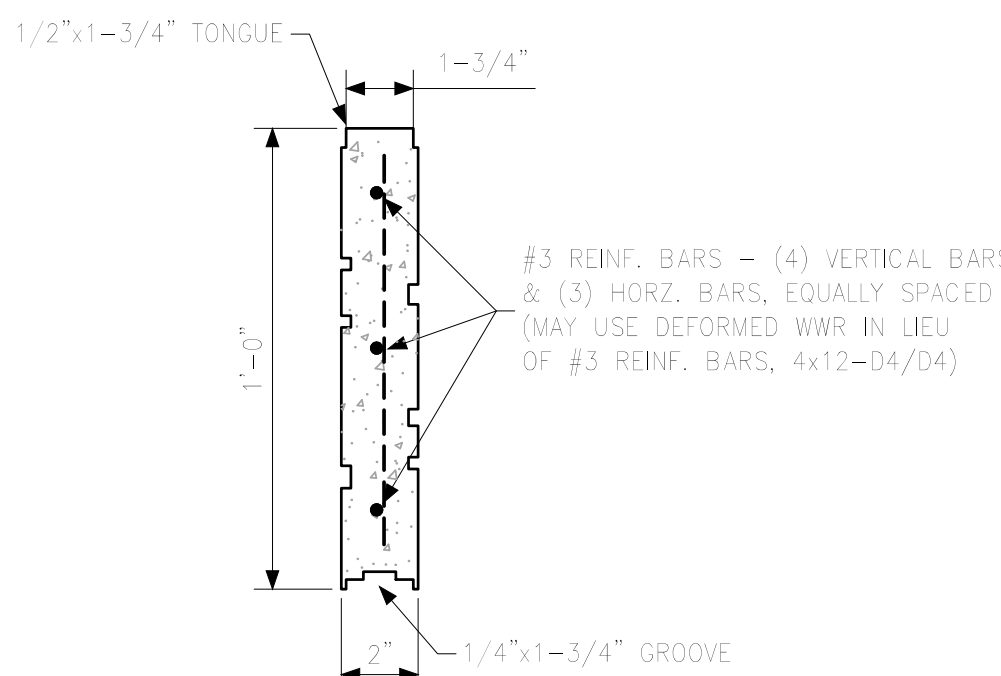
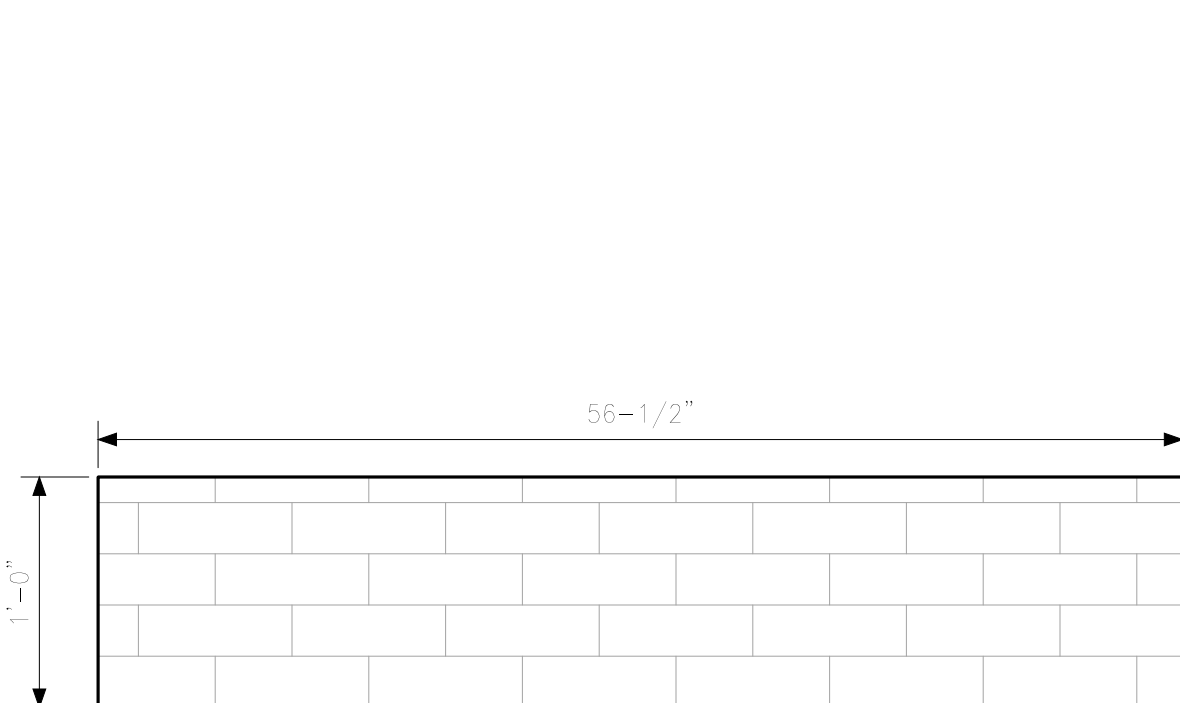
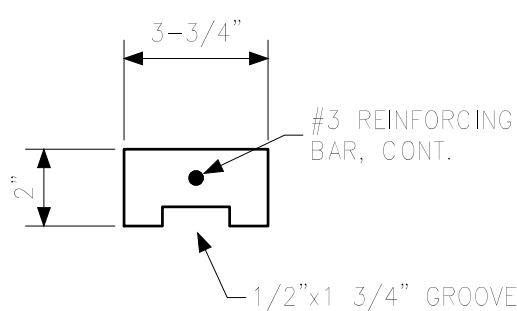
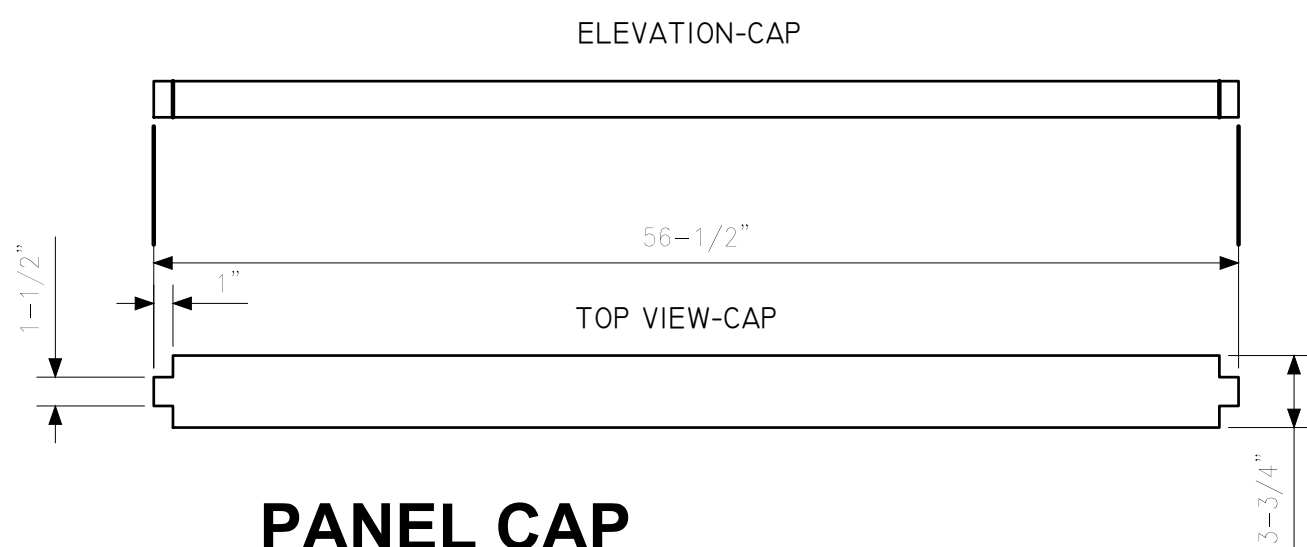


The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Notes

[illegible]

Permit/Sea



Client/Project Logos



Client/Project
New Braunfels ISD

NBISD New Elementary School

4365 Klein Meadows, New Braunfels, TX 78130

Title
SCREEN WALL DETAILS

Project No. _____

214000825

Scale

• •

Drawing No

L500

GENERAL:

- I. THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2006 EDITION.

2. APPLIED LOADS:
- A. WIND VELOCITY (V) = 90 MPH
 - B. EXPOSURE: B
 - C. IMPORTANCE FACTOR (I) = 1.0
 - D. VELOCITY PRESSURE EXPOSURE COEFFICIENT (Kz) = 0.70
 - E. WIND DIRECTIONALITY FACTOR (Kd) = 0.85
 - F. TOPOGRAPHIC FACTOR (Kzt) = 1.0
 - G. WIND PRESSURE P = 0.00256(Kz)(Kzt)(Kd)(V²)(I)
- $$P = 0.00256(0.70)(1.0)(0.85)(90)^2(1.0)$$
- $$P = 12.3 \text{ PSF}$$

- H. WORKING DESIGN STRESS: 33% INCREASE (1.33)
I. SEISMIC DESIGN: SITE CLASS D

3. PRECAST COMPONENTS TO BE MANUFACTURED BY NPCA CERTIFIED PLANT:
- A. POSTS, PANELS AND PANEL CAPS SHALL BE PRECAST OFF-SITE.
 - B. SCREENING WALL IS TO BE ERECTED ENTIRELY ON THE PROJECT PROPERTY.
 - C. PIERS/FOOTINGS ARE TO BE CAST IN PLACE ON SITE.

4. COLOR:
- A. POST, PANELS AND PANEL CAPS SHALL BE INTEGRALLY COLORED
 - B. COLOR SHALL BE BROWN AS APPROVED BY THE ON-SITE OWNER.

CONCRETE

- C. CONCRETE MATERIALS:**
1. CONCRETE SHALL BE NORMAL WEIGHT CONCRETE HAVING SAND AND GRAVEL OR CRUSHED STONE AGGREGATE. MIXED WITH ASTM-C150, TYPE I OR III PORTLAND CEMENT TO MEET THE MINIMUM COMPRESSIVE STRENGTH AS FOLLOWS:
1. PANELS & POST: 5000 PSI @ 28 DAYS
 2. FOOTINGS & PIERS: 3000 PSI @ 28 DAYS
 3. SIDEWALK & NON-STRUCTURAL: 3000 PSI @ 28 DAYS
- B. WATER USED FOR CONCRETE SHALL BE CLEAN WATER AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIES, ORGANIC OR OTHER DELETERIOUS SUBSTANCES.
- C. ALL CONCRETE PERMANENTLY EXPOSED TO THE WEATHER SHALL CONTAIN AN AIR-ENTRAINED ADMIXTURE RESULTING IN 3 TO 6 PER CENT ENTRAINED AIR OR RECOMMENDED BY THE MANUFACTURER.

- 2. CONCRETE WORKSMANSHIP:**
- A. FRESH POURED CONCRETE SHALL BE TAMPED IN TO PLACE USING STEEL RAMMER, SLICING TOOLS, OR MECHANICAL VIBRATOR, UNTIL CONCRETE IS THOROUGHLY COMPACT AND WITHOUT VOID.**
 - B. EXCAVATION FOR FOOTING SHALL BE ON UNDISTURBED SOIL OR TO THE DEPTH NOTED ON THE DRAWINGS. LEAVE THE BOTTOM BEARING SURFACE CLEAN AND SMOOTH. IF FOOTING EXCAVATIONS ARE MADE DEEPER THAN INTENDED, ONLY CONCRETE SHALL BE USED FOR FILL. REMOVE ALL LOOSE MATERIAL FROM EXCAVATIONS PRIOR TO CONCRETE POUR.**

REINFORCEMENTS:

1. REINFORCING MATERIAL:
- A. DEFORMED TYPE BARS SHALL CONFORM TO ASTM-A 615, GRADE 60 PLACED AS SHOWN ON THE DRAWINGS.
 - B. STEEL REINFORCING WIRE SHALL MEET U.S. STEEL WIRE GAUGE, ASTM-A 82. FY = 70,000 PSI MIN GALVANIZED.
 - C. ALL TIES AND STIRRUPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM-A/ 615, GRADE 40.
 - D. ALL WELDED WIRE REINFORCEMENT SHALL BE 4x12-D4/D5 HAVING 3 HORIZONTAL BARS AND 5 VERTICAL BARS.

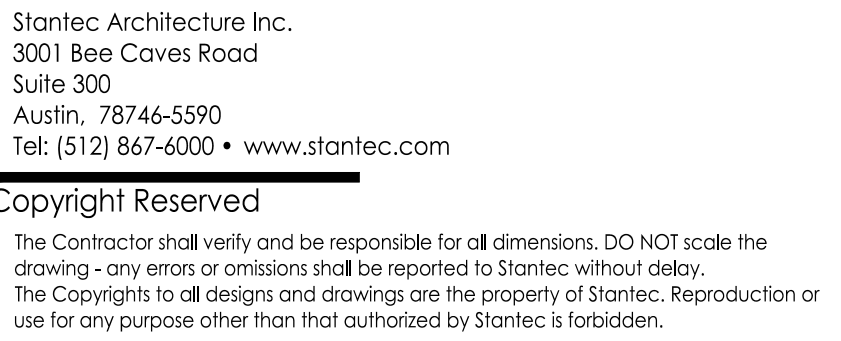
2. REINFORCING WORKSMANSHIP:
- A. REINFORCEMENT STEEL SHALL BE FABRICATED IN ACCORDANCE WITH THE CRSI STANDARD DETAIL. REINFORCING BARS SHALL BE COLD-BENT ONLY. USE OF HEAT TO BEND REINFORCEMENT STEEL SHALL BE CAUSE FOR REJECTION.
 - B. REINFORCEMENT STEEL BARS AND WIRE FABRIC SHALL BE THOROUGHLY CLEANED BEFORE PLACING AND AGAIN BEFORE THE CONCRETE IS PLACED. SHALL BE ACCURATELY POSITIONED AND SECURED IN PLACE. NO BRICK OF POROUS MATERIALS MAY BE USED TO SUPPORT THE STEEL OFF THE GROUND.
 - C. INSTALL ALL REINFORCEMENT WITH THE FOLLOWING CLEARANCE BETWEEN REINFORCING STEEL AND FACE OF CONCRETE:
 - 1. FOOTING, PIER OR BEAM BOTTOM (3")
 - 2. EARTH-FORMED PIER OR BEAM SIDE (2")
 - 3. FORMED FOOTING, PIER OR BEAM SIDES, EXPOSED (1")
 - 4. PRECAST EXPOSED TO WEATHER: PANELS (3/4"), POSTS (1-1/4")
 - D. SPLICES WITHIN CONTINUOUS UNSCHEDULED REINFORCING STEEL SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS

SOILS

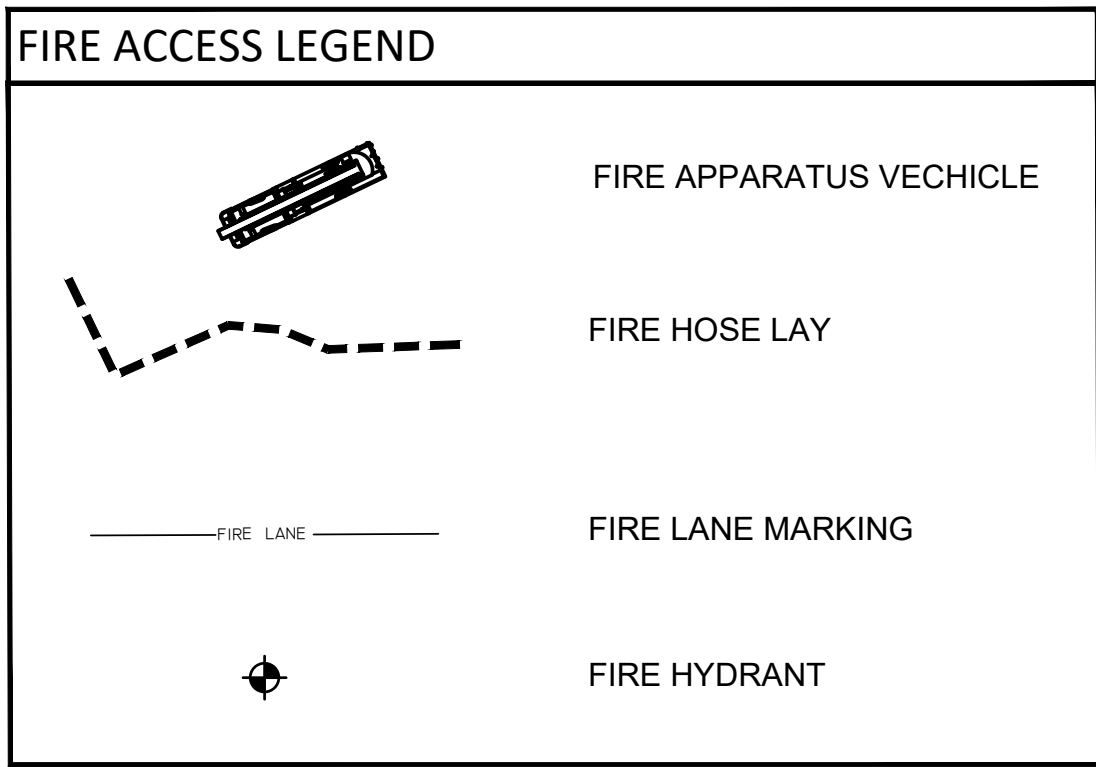
1. FOOTING SIZE IS BASED ON THE FOLLOWING MINIMUM SOIL PROPERTIES:
- A. SOIL COMPACTION ***** 90% STD. PROCTOR
 - B. BEARING CAPACITY ***** 1,500 PSF
 - C. FRICTION RESISTANCE ***** 260 PSF
 - D. LATERAL BEARING ***** 100 PSF/FT OF DEPTH

Fill

- I. ALL DESIGN CRITERIA BASED ON CONSTRUCTION ON NATURAL GROUND
SCREENWALL NOT TO BE CONSTRUCTED ON BERMS OR FILL DIRT.



New Braunfels Fire Department	
Design Standards	Current IFC
Fire flow Demand @20 psi	7250 gpm
Intended Use	Educational Facility
Construction Classification	II-B
Building Fire Area	114,456 SF
Automatic Fire Sprinkler System	NFPA 13
Reduced Fire Flow Demand @ 20 psi	1,812 gpm
Fire Hydrant Flow Test	8/18/2022
Fire Hydrant Flow Test Location	Klein Meadows
High Rise	NO
Alternative Method of Compliance	N/A

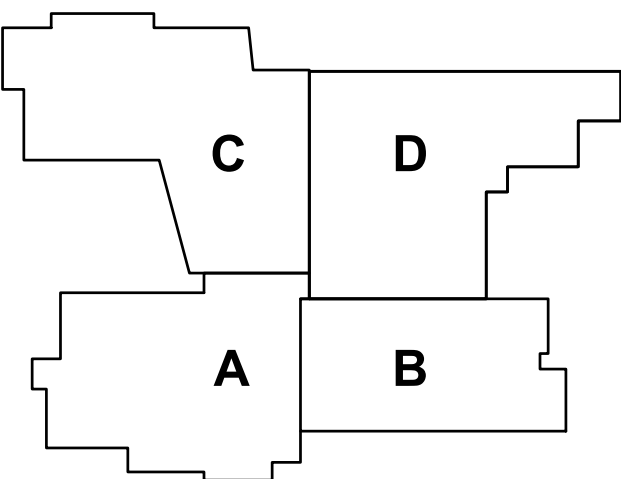


ZONING DISTRICT	SND-1		
PROPOSED USE	PUBLIC ELEMENTARY SCHOOL		
BUILDING COVERAGE	62,135 S.F.		
NUMBER OF STORIES	2		
ACTUAL HEIGHT	35'		
FINISH FLOOR ELEV.	671.85 AND 669.85		
FOUNDATION	SLAB ON GRADE		
CONSTRUCTION TYPE	TYPE II-B		
ACTUAL STAFF / OCCUPANCY	90 STAFF / 900 K-5 STUDENTS		
OCCUPANT LOAD	FIRST FLOOR	2,180	
PER IBC	SECOND FLOOR	1,568	
	TOTAL PER IBC	3,748	

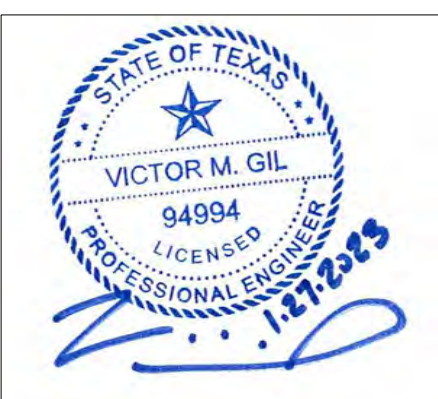
FIRE ACCESS ROADS SHALL BE INSTALLED TO MEET THE FOLLOWING MINIMUM GUIDELINES:

1. LANES SHALL BE A MINIMUM OF 20 FEET IN WIDTH.
2. OVERHEAD CLEARANCE SHALL BE A MINIMUM OF 15 FEET, 6 INCHES FROM THE FINISHED DRIVING SURFACE.
3. THE TOP AND FACE OF ROAD CURBS SHALL BE PAINTED RED IN COLOR; IF NO CURBS ARE PRESENT, A $\frac{5}{8}$ TO $\frac{1}{2}$ INCH WIDE, RED STRIPE SHALL BE PAINTED ON THE DRIVING SURFACE.
4. THE LANE SHALL HAVE ALTERNATING WORDS OF "FIRE LANE" AND "NO PARKING" SPACE AT A MAXIMUM OF 2' BETWEEN WORDS, AND LETTERING SHALL BE PAINTED WHITE WITH 4" X 2" LETTERS, PLUS OR MINUS $\frac{1}{8}$ INCH.
5. WHEN REQUIRED, SIGNAGE INDICATING "FIRE LANE NO PARKING" SHALL BE SPACED AT A MAXIMUM OF 75 FEET APART, ALONG THE LENGTH OF THE FIRE LANE (SEE EXAMPLE OF APPROVED SIGNS).
6. FACILITIES WITHOUT CURB SIDE PARKING ABOVE THE BUILDING SHALL FOLLOW OPTION B.
7. FACILITIES WITH HEAD-IN PARKING ABOVE THE BUILDING SHALL FOLLOW OPTION B.

NOTES: THESE GUIDELINES SHALL BE CONSTRUED TO AFFECT THE VALIDITY OR ENFORCEMENT OF PREVIOUSLY INSTALLED AND APPROVED ACCESS ROAD AND FIRE LANE MARKINGS.

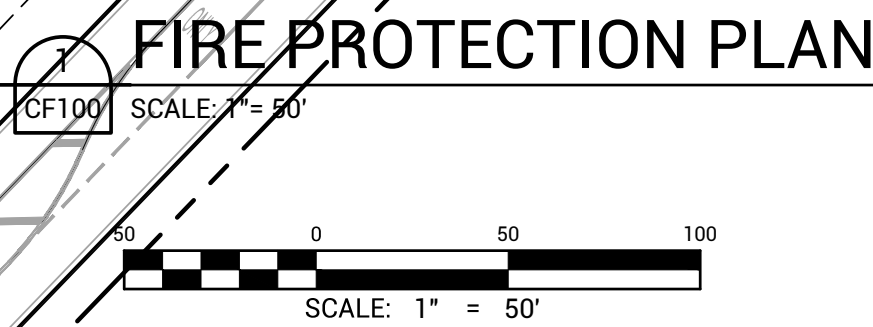


Revision		By	Appd	YYYY.MM.DD
		By	Appd	YYYY.MM.DD
File Name: N/A	Author Dwn.	Designer Dgn.	Checker Chd.	YYYY.MM.DD

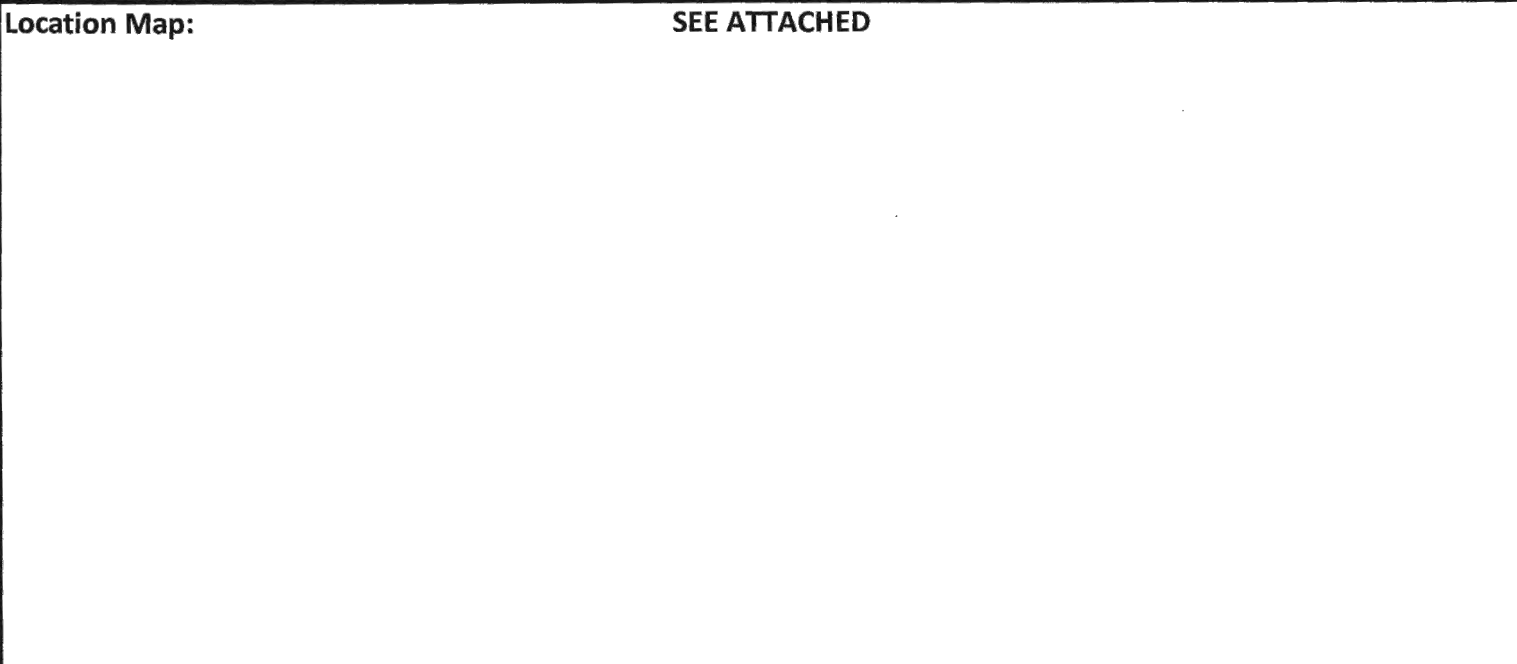


NBISD New Elementary School
4365 Klein Meadows, New Braunfels, TX 78130

Project No.	Scale
214000825	..
Revision	Drawing No.



Date of Inspection: AUGUST 18, 2022

Location Map:	SEE ATTACHED
	

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