Fort Bend County
Engineering Department
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

PERMIT APPLICATION REVIEW FORM FOR CABLE, CONDUIT, AND POLE LINE ACTIVITY IN FORT BEND COUNTY

[ ] **Right of Way Permit**

[X] **Commercial Driveway Permit**

Permit No: 2018-17892

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

- [X] a. Name of road, street, and/or drainage ditch affected.
- [X] b. Vicinity map showing course of directions
- [X] c. Plans and specifications

(2) BOND:

- [ ] County Attorney, approval when applicable.
- [ ] Perpetual bond currently posted. Bond No: _____ Amount: _____
- [ ] Performance bond submitted. Bond No: _____ Amount: _____
- [X] Cashier's Check Check No: [redacted] Amount: $5,000.00

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

_____ _____
Drainage District Approval Date

We have reviewed this project and agree it meets minimum requirements.

Charly O. Ay 01/26/2018
Permit Administrator Date

Fort Bend County
Engineering Department
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

[ ] **Right of Way Permit**

[X] **Commercial Driveway Permit**

Permit No: 2018-17892

Applicant: **Teddy's House LLC/Jim Lawless AIA**

Job Location Site: **8717 Scanlan Trace, Missouri City, TX 77459**

Bond No. [redacted] **Date of Bond:** _____ **Amount:** **$5,000.00**

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistant with Chapter 181, Vernon's Texas Statutes and Codes Annoted.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
   a. 48 hours in advance of construction start up, and
   b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 6th day of February, 2018, Upon Motion of Commissioner _____, seconded by Commissioner _____, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

By: Charles O. Dy
County Engineer

By: N/A
Drainage District Engineer/Manager

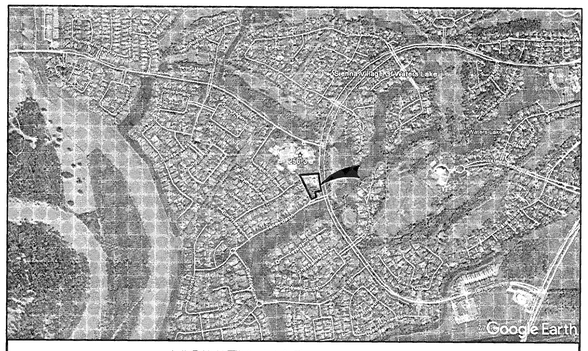
Presented to Commissioners Court and approved.

Date Recorded _____ Comm. Court No. _____

Clerk of Commissioners Court

By: _____
Deputy

SIENNA KIDS ACADEMY
LOCATED AT
8717 SCANLAN TRACE
MISSOURI CITY, TX 77346



VICINITY MAP
NTS

KEY MAP # 650-K

INDEX OF DRAWINGS

SHT. NO.	DESCRIPTION
1	COVER SHEET
2	GRADING & DRAINAGE (C-1)
3	STORM SEWER LAYOUT (C-2)
4	PAVING JOINT LAYOUT (C-3)
5	STORM WATER POLLUTION PREVENTION PLAN (C-4)
6	NOTES & DETAILS (C-5)

TEXAS ENGINEERING & MAPPING CO.
REGISTRATION # F-2906

STATE OF TEXAS
CARLOS J. BARILLAS
50474
REGISTERED PROFESSIONAL ENGINEER

Digitally signed by
Carlos J. Barillas
Date: 2017.12.15
11:27:57 -06'00'

TEXAS ENGINEERING AND MAPPING
12810 CENTURY DRIVE
STAFFORD, TEXAS 77477
PHONE: (281) 491-2525 FAX: (281) 491-2535
Job No. 356-52A

FORT BEND COUNTY ENGINEER

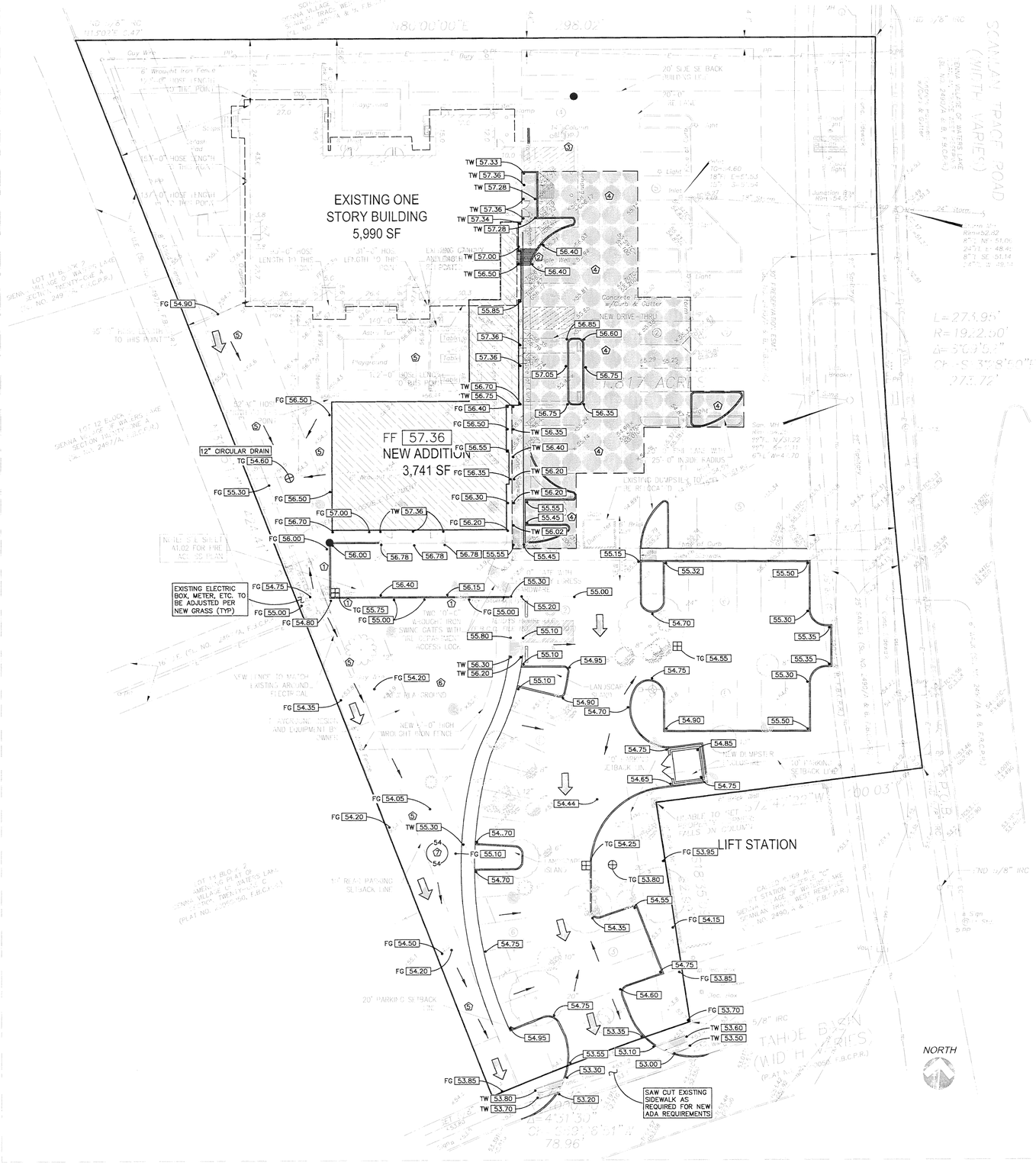
ENGINEER: Richard W. Stolleis, PE, ProE
for RICHARD W. STOLLEIS, P.E.

DATE: 12/19/17

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN ONE (1) YEAR FROM DATE OF APPROVAL.

APPROVED: Casandra Hall
for DEVELOPMENT COORDINATOR

DATE: 12/19/17



SEE C-0 TOPOGRAPHIC SURVEY FOR BENCHMARK INFORMATION.

SEE SHEET C-0 FOR ADDITIONAL TOPOGRAPHIC INFORMATION

ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% PER ADA REQUIREMENTS.

CONTRACTOR TO FIELD VERIFY ALL CRITICAL EXISTING ELEV'S, LOCATION AND FLOWLINES OF EXISTING STORM SEWER, DRAINAGE FACILITIES, WATER AND SANITARY SEWER BEFORE COMMENCING ANY CONSTRUCTION.

COORDINATE WITH ARCHITECT FOR ALL DEMOLITION.

OWNER TO OBTAIN ALL PERMITS REQUIRED BY THE FORT BEND COUNTY, TEXAS, AND ALL GOVERNMENTAL AUTHORITIES WITH JURISDICTION, PRIOR TO STARTING CONSTRUCTION OF UTILITY AND/OR DRIVEWAYS WITHIN PUBLIC RIGHTS OF WAY.

CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH CIVIL DRAINAGE PLAN AND ASSURE POSITIVE DRAINAGE FROM THE BUILDING OVER THE SIDEWALK AND TO THE PARKING LOT. ANY PROBLEMS ENCOUNTERED DURING CONSTRUCTION SHALL BE COORDINATED WITH THE CIVIL ENGINEER BEFORE FINAL CONSTRUCTION. IF LANDSCAPING BEDS ARE USED ADJACENT TO THE BUILDING CONTRACTOR SHALL ASSURE THAT DRAINAGE IS NOT BLOCKED. REFER TO LANDSCAPE FRENCH DRAIN DETAIL IF NEEDED.

CONTRACTOR SHALL COORDINATE WITH OWNER, GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER FOR SELECT FILL REQUIREMENTS AND PROCEDURES UNDER BUILDING SLABS. SEE SOILS REPORT FOR ALL REQUIRED DESIGN CRITERIA. CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION UNTIL THE REQUIRED SELECT FILL PROCEDURE UNDER BUILDING SLABS HAS BEEN APPROVED.

CONTRACTOR SHALL ALSO COORDINATE WITH SOILS REPORT FOR ALL REQUIRED FILL, COMPACTION AND LIME STABILIZATION UNDER PROPOSED PAVING SECTIONS.

CLEAN-OUTS, INLETS AND/OR JUNCTION BOXES LOCATED IN PAVEMENT OR SIDEWALK SHALL HAVE TRAFFIC BEARING LIDS OR GRATES.

SOME OF THE STORM SYSTEM ARE SHALLOW OPTION INSTALLATION FOR SHALLOW INLET

USE BRICK SHALLOW INLET IF REQUIRED

LEGEND

- EXISTING ELEV.
- 71.20 TOP OF PAVEMENT
- TG 69.80 TOP OF GRATE ELEV.
- FL 69.80 FLOW LINE ELEV.
- TW 69.90 TOP OF WALK ELEV.
- FG 69.80 FINISHED GRADE ELEV
- SQUARE GRATE INLET
- JUNCTION BOX
- CIRCULAR GRATE INLET
- SLOPE ARROW
- 100 YR. EXTREME EVENT FLOW

SLAB ANALYSIS

MAXIMUM 100 YR. STORM ELEVATION=55.15
FF=57.36
THEREFORE FF=2.21 HIGHER THAN THE MAXIMUM 100 YR. PONDING ELEVATION

1	CURB WITH TURN DOWN BEAM SEE DETAIL ON SHEET C-5
2	EXISTING CLEAN OUT TO BE FLUSH WITH NEW WALK
3	CONTRACTOR TO FIELD VERIFY EXACT ELEVATION AND ASSURE THAT THE EXISTING ELEVATION MEETS ADA REQUIREMENTS REMOVE AND REPLACE IF NECESSARY
4	EXISTING CONCRETE TO BE REMOVED AND REPLACED AS SHOWN CONTRACTOR TO VERIFY THAT THE SLOPES DO NOT EXCEED ADA REQUIREMENTS
5	CONTRACTOR TO ASSURE POSITIVE DRAINAGE
6	COORDINATE WITH ARCHITECT FOR DRAINAGE REQUIREMENTS IN NEW PLAYGROUND (TYP)
7	10" HDPE FL=52.60 SEE SHEET C-2 FOR ADDITIONAL INFORMATION

APPROVED: _____
DEVELOPMENT COORDINATOR
DATE: 12/19/17

TEXAS ENGINEERING & MAPPING CO.
REGISTRATION # F-2906

STATE OF TEXAS · CARLOS J. BARILLAS · 50474 · REGISTERED · PROFESSIONAL ENGINEER

Digitally signed by Carlos J. Barillas
Date: 2017.12.15 11:28:56 -06'00'

C-1 **GRADING & DRAINAGE**
Scale 1" = 20' JOB NO: 244-20

SEE SHT C-1 FOR GRADING & DRAINAGE
SEE SHT C-2 FOR STORM SEWER LAYOUT
SEE SHT C-3 FOR PAVING JOINT LAYOUT
SEE SHT C-4 FOR SWPPP
SEE SHT C-5 FOR NOTES & DETAILS

TEXAS ENGINEERING AND MAPPING CO.
12810 CENTURY DRIVE
STAFFORD, TEXAS 77477
PHONE: (281) 491-2525 FAX: (281) 491-2535

JOB NUMBER :
1708
DATE :
10-23-17
REVISIONS :

A New Addition for:
SIENNA KIDS ACADEMY
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MISSOURI CITY, TX 77359

JIM LAWLESS, AIA, PLLC
Architects & Planners
931 Pheasant Valley Dr.
Suite 220
Missouri City, Texas
77489
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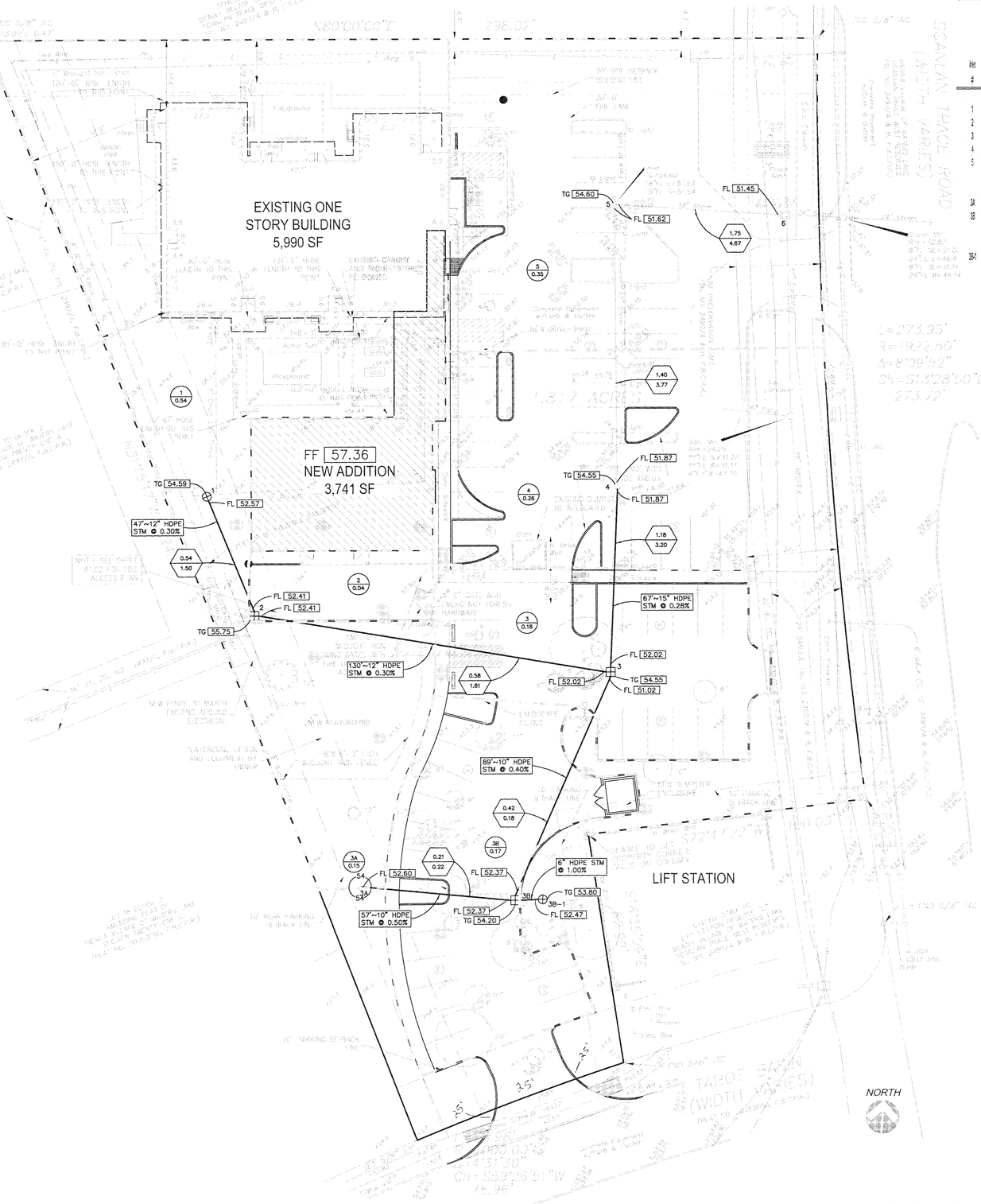
DRAWING :
C-1



STORM SEWER CALCULATIONS

2 YR STORM TABLE

Wet #	Wet #	Area No.	Delta Area (acres)	ACC Area (acres)	Runoff Coefficient C	Sum of C	C x A	Intensity I (in/hr)	Sum of Flows (cfs)	Time of Flow (min)	C Time (min)	Pipe Length (ft)	Reach or Pipe (ft)	Diameter or Pipe (inches)	Hydraulic Area (ft²)	Hydraulic Radius (ft)	Slope (%)	Manning "n"	Design Capacity (cfs)	Design Velocity (ft/s)	Fall (ft)	Drop (ft)	Flowline Elevation Upstream (ft)	Top of Pipe Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Top of Pipe Elevation Downstream (ft)	2 Yr Actual Velocity (ft/s)	Hydraulic Gradient (ft/s)	Change in Head (ft)	Minor Losses (ft)	Elevation of Hyd. Grad. Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Throat Area Required (ft²)	Throat Wet Area Provided (ft²)	pavement Elevation Upstream (ft)	pavement Elevation Downstream (ft)	cover Upstream (ft)	cover Downstream (ft)	Ponding Upstream (ft)	Ponding Downstream (ft)
1	2	1	0.54	0.54	0.80	0.432	0.479	5.56	2.67	0.4393	47	42	0.7054	0.25	0.32	0.011	2.382	3.003	0.15	0.00	53.26	53.95	52.91	53.91	1.514	0.1703	0.0808	0.0204	54.15	54.06	0.70	16	0.79	54.50	53.75	1.04	2.24	-0.42	-1.69
2	3	2	0.04	0.58	0.80	0.464	0.471	5.51	2.59	0.6666	100	42	0.7054	0.25	0.30	0.011	2.366	2.935	0.28	0.00	52.41	53.41	52.02	53.02	2.051	0.2047	0.2591	0.0035	54.06	53.77	0.95	16	0.79	55.75	54.55	2.34	1.53	-1.69	-0.78
3	4	3	0.19	1.19	0.80	0.944	0.966	5.20	5.02	0.4307	67	45	1.2272	0.3125	0.27	0.011	3.967	3.233	0.191	0.00	52.02	53.27	51.84	53.09	2.605	0.2484	0.1544	0.0527	53.77	53.55	0.23	24	1.40	54.25	54.53	1.25	1.48	-0.78	-1.03
4	5	4	0.26	1.44	0.80	1.152	1.362	5.07	6.90	0.3307	100	15	1.2272	0.3125	0.20	0.011	4.111	3.350	0.206	0.00	51.84	53.05	51.54	52.73	3.155	0.3931	0.3073	0.0773	53.55	53.41	0.32	24	1.40	54.25	54.53	1.45	1.81	-1.03	-1.50
5	6	5	0.35	1.79	0.80	1.432	1.324	4.77	6.32	0.4071	65	16	1.7571	0.375	0.20	0.011	5.532	3.742	0.10	0.00	51.34	53.04	51.41	52.91	2.702	0.2070	0.1345	0.0257	53.10	52.91	0.43	24	1.40	54.50	53.60	1.55	2.09	-1.52	-2.09
3A	3B	3A	0.15	0.15	0.40	0.060	0.815	6.22	22.15	2.305	95	10	0.5464	0.2083	0.40	0.011	1.638	3.003	0.23	0.00	52.60	53.43	52.38	53.21	0.356	0.0018	0.0054	0.0012	53.22	53.21	0.10	16	0.79	54.00	54.25	0.57	1.04	-0.78	-1.04
3B	3	3B	0.21	0.42	0.80	0.336	0.567	1.18	23.82	0.6666	89	10	0.5464	0.2083	0.40	0.011	1.638	3.003	0.356	0.00	52.38	53.21	52.03	53.86	2.161	0.2098	0.2279	0.0056	53.15	53.86	0.27	16	0.79	54.25	54.55	1.04	1.69	-1.10	-1.69
3B-1	3B	3B-1	0.06	0.06	0.80	0.048	3.791	0.10	21.09	0.4655	9	10	0.5464	0.2083	0.50	0.011	1.831	3.357	0.046	0.00	14.47	15.30	14.43	15.26	0.335	0.0016	0.0005	0.0008	15.26	15.25	0.08	16	0.79	19.55	19.93	4.25	4.04	4.29	4.04

MAX PONDING IN 100 YR STORM

	MAX 100 YR	FF ELEV	DIFF FT
at # 4	55.7	57.37	1.67
at # 3	55.1	57.37	2.27
at # 2	55.7	57.37	1.67
at # 1	55	57.37	2.37
at # 3A	54.2	57.37	3.17
at # 3B	54.75	57.37	2.62

REQUIREMENT PER COUNTY = 12" MINUMUM

- SEE C-0 TOPOGRAPHIC SURVEY FOR BENCHMARK INFORMATION.
- SEE SHEET C-0 FOR ADDITIONAL TOPOGRAPHIC INFORMATION
- ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% PER ADA REQUIREMENTS.
- CONTRACTOR TO FIELD VERIFY ALL CRITICAL EXISTING ELEV'S, LOCATION AND FLOWLINES OF EXISTING STORM SEWER, DRAINAGE FACILITIES, WATER AND SANITARY SEWER BEFORE COMMENCING ANY CONSTRUCTION.
- COORDINATE WITH ARCHITECT FOR ALL DEMOLITION.
- OWNER TO OBTAIN ALL PERMITS REQUIRED BY THE FORT BEND COUNTY, TEXAS, AND ALL GOVERNMENTAL AUTHORITIES WITH JURISDICTION, PRIOR TO STARTING CONSTRUCTION OF UTILITY AND/OR DRIVEWAYS WITHIN PUBLIC RIGHTS OF WAY.
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- CONTRACTOR SHALL ALSO COORDINATE WITH SOILS REPORT FOR ALL REQUIRED FILL, COMPACTION AND LIME STABILIZATION UNDER PROPOSED PAVING SECTIONS.
- CLEAN-OUTS, INLETS AND/OR JUNCTION BOXES LOCATED IN PAVEMENT OR SIDEWALK SHALL HAVE TRAFFIC BEARING LIDS OR GRATES.
- CAUTION WITH STORM SEWER AT ALL INLETS ARE EXTREMELY SHALLOW CONTRACTOR TO USE EXTREME CAUTION DURING SUB-GRADE STABILIZATION PROCESS
- CONTRACTOR TO FIELD VERIFY EXISTING FLOWLINES BEFORE STARTING STORM SEWER WORK

LEGEND

- EXISTING ELEV.
- 71.20 TOP OF PAVEMENT
- TG 69.80 TOP OF GRATE ELEV.
- FL 69.80 FLOW LINE ELEV.
- TW 69.80 TOP OF WALK ELEV.
- FG 69.80 FINISHED GRADE ELEV
- SQUARE GRATE INLET
- JUNCTION BOX
- CIRCULAR GRATE INLET
- SLOPE ARROW
- EXTREME EVENT FLOW
- 00.00 ACCUMULATIVE ACREAGE
- 00.00 ACCUMULATIVE CFS (2-YR)
- 00.00 AREA NUMBER
- 00.00 ACREAGE
- DRAINAGE AREA MAP

APPROVED: _____ DEVELOPMENT COORDINATOR

DATE: 12/19/17

TEXAS ENGINEERING & MAPPING CO.
REGISTRATION # F-2906

STATE OF TEXAS
CARLOS J. BARILLAS
50474
REGISTERED PROFESSIONAL ENGINEER

Digitally signed by Carlos J. Barillas
Date: 2017.12.15 11:29:53 -06'00'

C-2 STORM SEWER LAYOUT

Scale 1" = 20' JOB NO: 244-20

SEE SHT C-1 FOR GRADING & DRAINAGE
SEE SHT C-2 FOR STORM SEWER LAYOUT
SEE SHT C-3 FOR PAVING JOINT LAYOUT
SEE SHT C-4 FOR SWPPP
SEE SHT C-5 FOR NOTES & DETAILS

TEXAS ENGINEERING AND MAPPING CO.
12810 CENTURY DRIVE
STAFFORD, TEXAS 77477
PHONE: (281) 491-2525 FAX: (281) 491-2535

JOB NUMBER : 1708

DATE : 10-23-17

REVISIONS :

A New Addition for:
SIENNA KIDS ACADEMY
8717 SCANLAN TRACE
MISSOURI CITY, TX 77359

JIM LAWLESS, AIA, PLLC
Architects & Planners
931 Pheasant Valley Dr.
Suite 220
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77489
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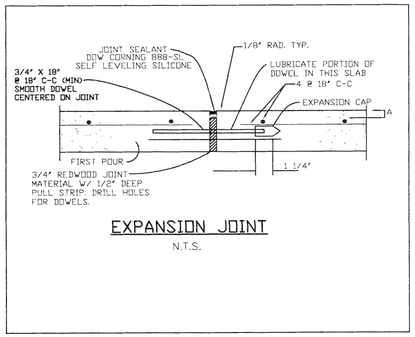
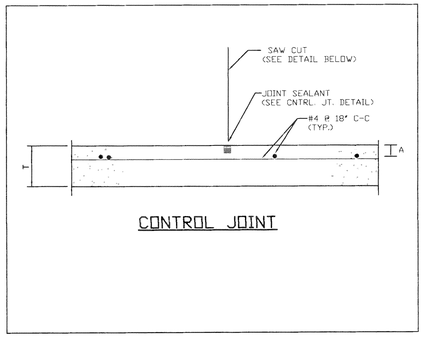
DRAWING : C-2

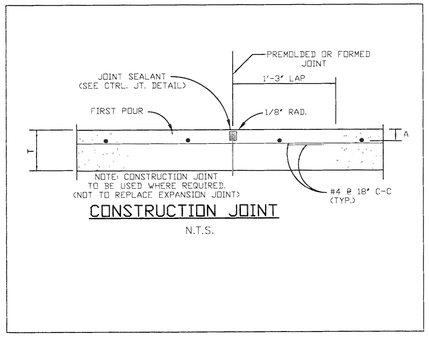


EXPANSION JOINT

N.T.S.

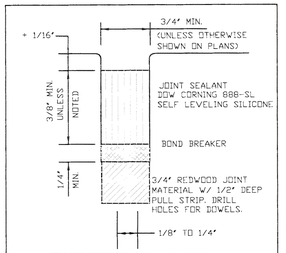


CONTROL JOINT



CONSTRUCTION JOINT

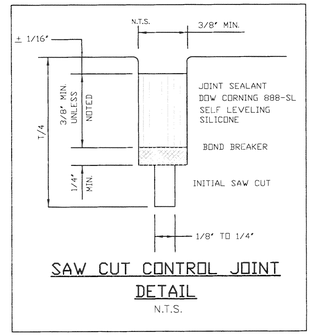
N.T.S.



EXPANSION JOINT
DETAIL

N.T.S.

SCHEDULE	
SLAB THICK "T" (IN.)	COVER "A" (IN.)
4	2
5	2
6	2
7	2-3/8



SAW CUT CONTROL JOINT
DETAIL

N.T.S.

FOR ADDITIONAL PAVING AND SWPPP NOTES AND DETAILS REFER TO SHEET C-4

LEGEND

- ISOLATION JOINT
- EXPANSION JOINT
- CONTROL OR CONSTRUCTION JOINT
- SQUARE GRATE INLET
- JUNCTION BOX
- 5" THICK CONCRETE PAVEMENT
- 6" THICK CONCRETE PAVEMENT
- 7" THICK CONCRETE PAVEMENT

APPROVED: _____
DEVELOPMENT COORDINATOR

DATE: 12/19/17

TEXAS ENGINEERING & MAPPING CO.
REGISTRATION # F-2906

STATE OF TEXAS
CARLOS J. BARILLAS
50474
REGISTERED
PROFESSIONAL ENGINEER

Digitally signed by
Carlos J. Barillas
Date: 2017.12.15
11:30:26 -06'00'

C-3 **PAVING JOINT LAYOUT**

Scale 1" = 20' JOB NO: 244-20

SEE SHT C-1 FOR GRADING & DRAINAGE
SEE SHT C-2 FOR STORM SEWER LAYOUT
SEE SHT C-3 FOR PAVING JOINT LAYOUT
SEE SHT C-4 FOR SWPPP
SEE SHT C-5 FOR NOTES & DETAILS

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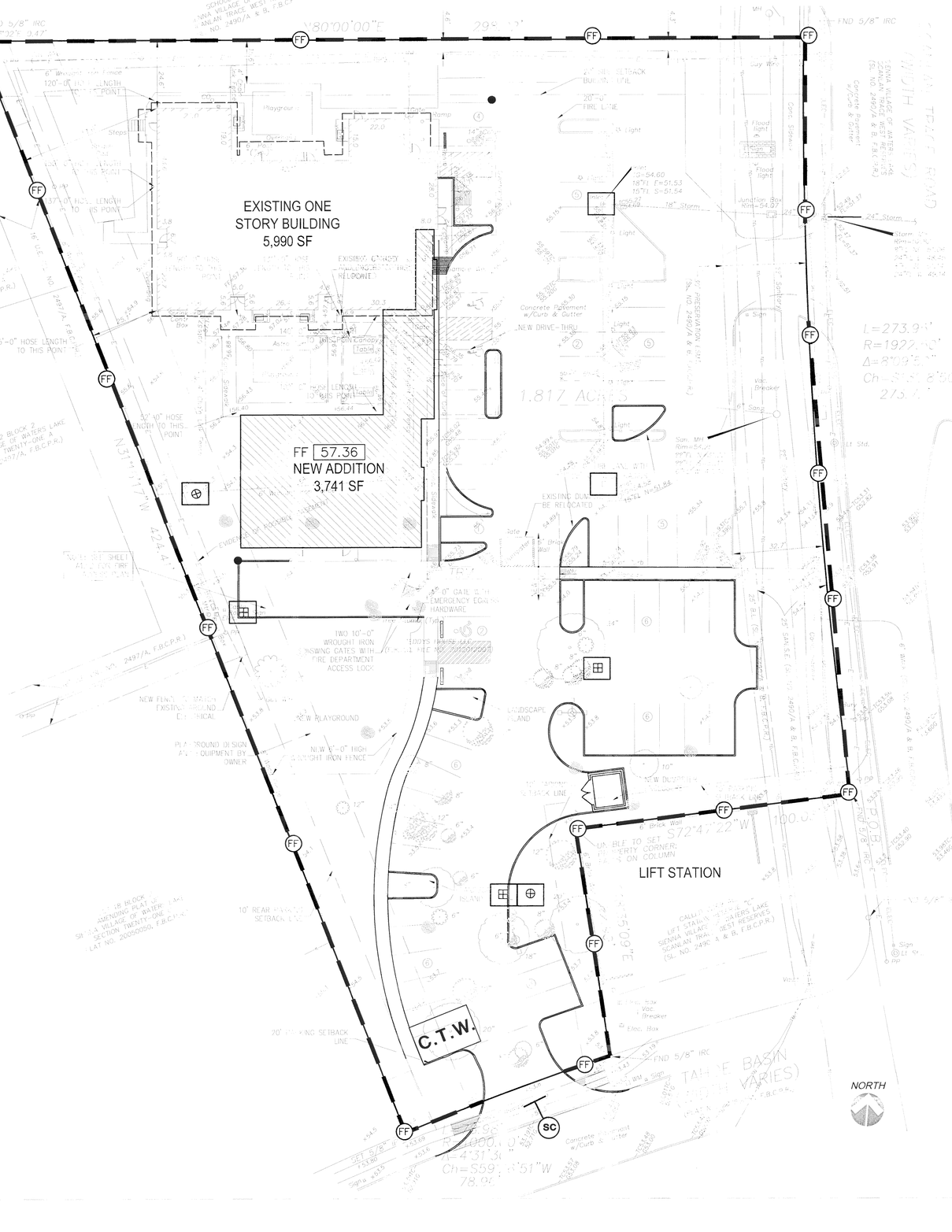
DRAWING :
C-3


EXISTING ONE STORY BUILDING 5,990 SF
FF 57.36
NEW ADDITION 3,741 SF
LIFT STATION
C.T.W.
SC
NORTH
EXISTING DUMPSTER TO BE RELOCATED
NEW DRIVE-THRU
Concrete Pavement w/Curb & Gutter
20'-0" FIRE LINE
TWO 10'-0" WROUGHT IRON SWING GATES WITH FIRE DEPARTMENT ACCESS LOCK
6'-0" HIGH WROUGHT IRON FENCE
NEW PLAYGROUND
PLAYGROUND DESIGN BY OWNER
EXISTING ONE STORY BUILDING 5,990 SF
1.817 ACRES
L=273.91'
R=1922.00'
Δ=8°09'42"
Ch=S58°58'50"E
215.70'
S72°43'22"W 100.00'
S17°31'38"E 78.02'
Ch=S59°04'51"W
TAKE BASIN (VARIES)
SET 5/8" IRC
FND 5/8" IRC
Sanitary Sewer Manhole
Storm Sewer Manhole
Water Valve
Fire Hydrant
Flood Light
Light Pole
Electric Box
Telephone Box
Gas Meter
Gas Valve
Sign
Trash Can
Picnic Table
Bench
Ramp
Steps
Playground
Canopy
Concrete Pavement
Curb & Gutter
Junction Box
Storm Sewer
Sanitary Sewer
Water Line
Gas Line
Electric Line
Telephone Line
Overhead Utility Line
Fence
Property Line
Building Setback Line
Easement
Right-of-Way
Curb Inlet
Area Inlet
Manhole
Cleanout
Vault
Breaker
Elec. Box
Tele.

CONSTRUCTION NOTES:

1. Storm sewer pipe, 18-inch diameter or larger shall be reinforced concrete meeting A.S.T.M., C-76, Class III. Bedding, backfilling and installation of pipe and construction of appurtenances shall be in accordance with Fort Bend County and MUD standards.

2. Storm sewer pipe shall be ADS N-12 Pipe (HDPE Corrugated Polyethylene Pipe) per A.S.T.M. F-405, A.S.T.M. F-667, A.S.T.M. D-2321, AASHTO M-294. Bedding, backfilling and installation of pipe and construction of appurtenances shall be in accordance with Fort Bend County, and MUD requirements.

3. All utilities presented on these drawings are shown at the approximate locations based on the best available information. The Contractor shall field determine the exact locations prior to commencing construction. he shall be fully responsible for any and all damages caused by his failure to exactly locate and maintain these underground utilities.

4. Contractor shall uncover existing utilities at all points of crossing to determine if conflict exists before commencing any construction. Notify the Engineer at once of any conflict.

5. Where concrete curb or walk is indicated, elevation shall be 6 inches above top of pavement elevation shown. Coordinate with architectural site plan.

6. All fill, compaction and subgrade preparation shall be in accordance with soil report specifications.

7. All sewers under or within one (1) foot of proposed or future pavement shall be backfilled with 1-1/2 sack cement stabilized sand to within one (1) foot of subgrade.

8. The work area shall be barricaded and illuminated during darkness and periods of inactivity, when in an area of direct public access.

9. Contractor shall provide sheeting, shoring and bracing as necessary to protect workmen and existing utilities during all phases of construction.

10. Utilities are to be taken to within five (5) feet of building. See plumbing sheets indicated for continuation of service connections into building.

11. Contractor shall be responsible for protecting, maintaining, and restoring all drainage system.

12. All finished grades shall vary uniformly between finished elevations shown.

13. Some of the existing underground utilities shown hereon have not been field verified.

14. Contractor is to notify all utility companies to verify location and depth of all existing utility lines.

15. Contractor to obtain all permits required by all governing agencies.

16. Contractor to co-ordinate with architects and M.E.P. drawings for connection and location of all downspouts and all plumbing utilities.

17. Overhead lines may exist on the property. We have not attempted to mark those lines since they are clearly visible, but you should locate them prior to beginning any construction. Texas law, Section 752, Health & Safety Code, forbids all activities in which persons or things MAY come within six (6) feet of live overhead high voltage lines. Parties responsible for the work,including contractors, are l legally responsible for the safety of construction workers under this law. This law carries both criminal and civil liability. To arrange for lines to be turned off or moved, Reliant Energy H.L.&P. at 713-207-7777.

18. Contractor shall provide and install traffic control devices in conformance with Part VI of the Texas Manual on Uniform Traffic Control Devices (Texas M.U.T.C.D. most recent edition with revisions) during construction.

19. Caution: UNDERGROUND GAS FACILITIES

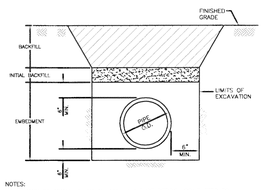
Entex main lines (to include Unit Gas Transmission, and/or Industrial Gas Supply Corporation where applicable) are shown in an approximate location ONLY. Service lines are usually not shown. The contractor shall contact the Utility Coordinating Committee at 713-223-4567 or 1-800-669-8344 a minimum of 48 hours prior to construction to have main and service lines field located.

* When Reliant Energy Entex pipe line markings are NOT visible, call 713-967-8037 (7:00a.m.to 4:30p.m.) for status of line location request before excavation begins.
* When excavating within eighteen inches (18") of the indicated location of Reliant Energy Entex facilities, all excavation must be accomplished using NON-mechanized excavating procedures.
* When Reliant Energy Entex facilities are exposed, sufficient support must be provided to thefacilities to prevent excessive stress on the piping.

20. Southwestern Bell Telephone Co. utilities may exist in street right of way. The contractor shall determine the exact location before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve these underground utilities.

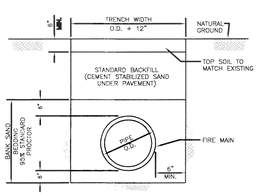
21. All existing power poles, light standards, signs, etc. which affect the proposed construction, shall be removed and/or relocated as required whether shown on drawings or not.

26. The Contractor shall provide a trench safety system to meet appropriate requirements established in Occupational Safety and Health Administration (OSHA) Safety & Health Regulations, 29 CFR 1926, Subpart P - Excavations, Trenching and Shoring, and OSHA s proposed standards on trenching, excavation published in Volume 52, No. 72 of the Federal Register, April 15, 1987, Pages 12288-12339. Should the referenced OSHA standards be modified or amended, the more stringent requirements shall apply.



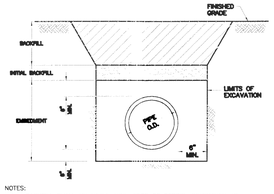
NOTES:
1. BACKFILL SHALL BE NATIVE SOIL, FREE OF DEBRIS, COMPACTED TO 95% STANDARD PROCTOR DENSITY, EXCEPT AS REQUIRED UNDER PAVEMENT.
2. INITIAL BACKFILL SHALL BE UNIFORMLY GRADED MATERIAL (MAXIMUM SIZE, 3" DIAMETER), PLACED IN 8" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY, EXCEPT AS REQUIRED UNDER PAVEMENT.
3. EMBEDMENT SHALL BE CEMENT STABILIZED SAND (1.5 SACKS PER CUBIC YARD) COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. UNDER PAVING OR WITHIN 3' OF PAVEMENT, THE INITIAL BACKFILL AND ALL BACKFILL UP TO THE PAVEMENT SUBGRADE SHALL BE CEMENT STABILIZED SAND (1.5 SACKS PER CUBIC YARD) COMPACTED TO 95% STANDARD PROCTOR DENSITY.
5. TRENCH SHORING IN ACCORDANCE WITH OSHA, SHALL BE INSTALLED AS REQUIRED.
6. SOIL IN THE PIPE ZONE SHALL CONSIST OF NON-WATERBEARING, COHESIVE SOILS WITH A SHEAR STRENGTH OF 1000 PSF OR GREATER. WHEN WET SAND EXISTS IN THE PIPE ZONE, MODIFIED BEDDING SHALL BE INSTALLED.

STORM SEWER BEDDING AND BACKFILL
N.T.S.



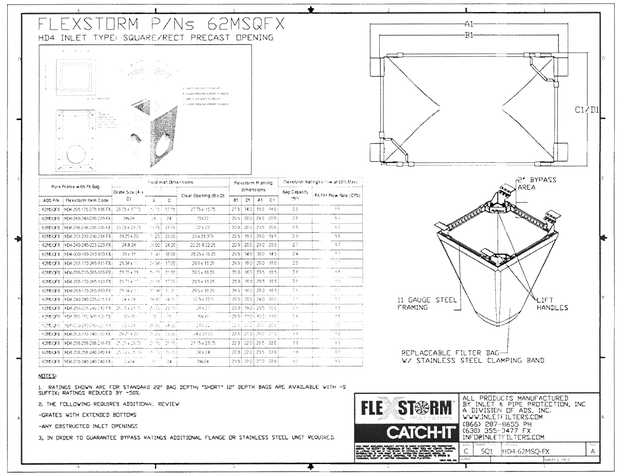
NOTES:
1. BACKFILL SHALL BE NATIVE SOIL, FREE OF DEBRIS, PLACED IN LIFTS, 8" THICK OR LESS, COMPACTED TO 95% STANDARD PROCTOR DENSITY, EXCEPT AS REQUIRED UNDER PAVEMENT.
2. BACKFILL UNDER PAVEMENT AND PUBLIC STREETS SHALL BE CEMENT STABILIZED SAND (1.5 SACKS OF CEMENT PER CUBIC YARD OF SAND), COMPACTED TO 95% STANDARD PROCTOR DENSITY.
3. TRENCH SHORING, IN ACCORDANCE WITH OSHA, SHALL BE INSTALLED AS REQUIRED.

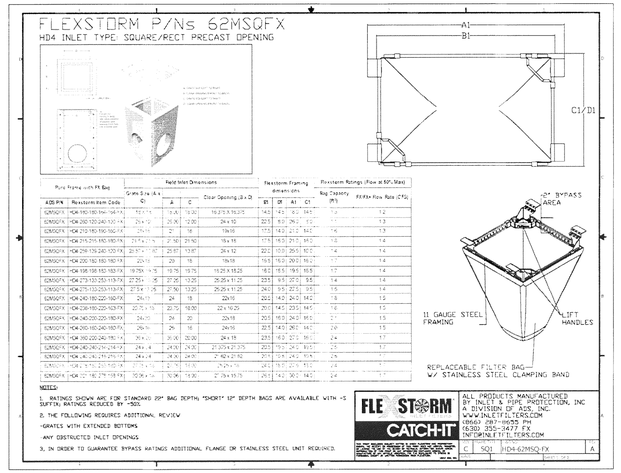
FIRE/WATER MAIN BEDDING AND BACKFILL
N.T.S.

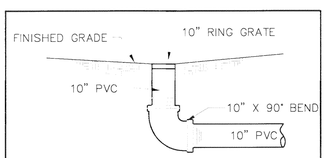


NOTES:
1. BACKFILL SHALL BE NATIVE SOIL, FREE OF DEBRIS, COMPACTED TO 95% STANDARD PROCTOR DENSITY, EXCEPT AS REQUIRED UNDER PAVEMENT.
2. INITIAL BACKFILL SHALL BE UNIFORMLY GRADED MATERIAL (MAXIMUM SIZE, 3" DIAMETER), PLACED IN 8" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY, EXCEPT AS REQUIRED UNDER PAVEMENT.
3. EMBEDMENT SHALL BE CEMENT STABILIZED SAND (1.5 SACKS PER CUBIC YARD) COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4. UNDER PAVING OR WITHIN 3' OF PAVEMENT, THE INITIAL BACKFILL AND ALL BACKFILL UP TO THE PAVEMENT SUBGRADE SHALL BE CEMENT STABILIZED SAND (1.5 SACKS PER CUBIC YARD) COMPACTED TO 95% STANDARD PROCTOR DENSITY.
5. TRENCH SHORING IN ACCORDANCE WITH OSHA SHALL BE INSTALLED WHERE REQUIRED.
6. SOIL IN THE PIPE ZONE SHALL CONSIST OF NON-WATERBEARING, COHESIVE SOILS WITH A SHEAR STRENGTH OF 1000 PSF OR GREATER. WHEN WET SAND EXISTS IN THE PIPE ZONE, MODIFIED BEDDING SHALL BE INSTALLED.

CLASS "A-A" SANITARY SEWER BEDDING AND BACKFILL
N.T.S.

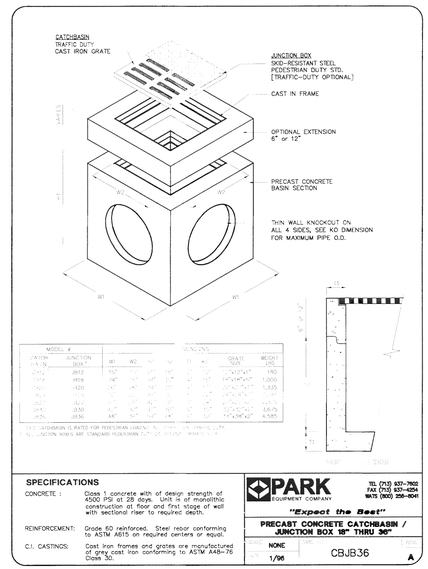


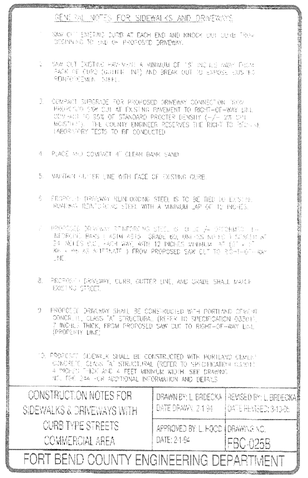


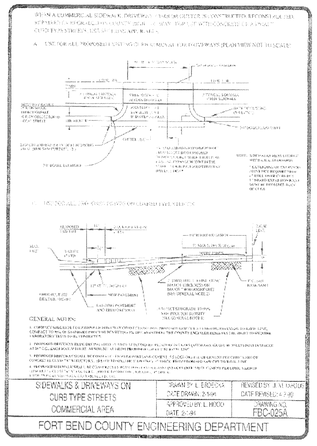


10" CIRCULAR DRAIN DETAIL
N.T.S.

NOTE:
ALL FILL COMPACTION, PAVING AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH SOILS REPORT SPECIFICATIONS.







FORT BEND COUNTY
CONSTRUCTION-GENERAL NOTES

1. FORT BEND COUNTY MUST BE INVITED TO THE PRE-CONSTRUCTION MEETING.
2. CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOURS NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PAVING AT CONSTRUCTION@FORTBENDCOUNTYTX.GOV.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAYS.
4. ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES, REGULATIONS AND REQUIREMENTS RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS AS CURRENTLY AMENDED.
5. ALL ROADS WIDTHS, CURBS RADII AND CURB ALIGNMENTS SHOWN INDICATES BACK OF CURBS.
6 A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
7. ALL CONCRETE PAVEMENT SHALL BE 5 1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
8. ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
9. 4"X 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
10. AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACED IN ACCORDANCE WITH TXDOT PED-12A STANDARD DETAILS SHEET.
A.D.A.-HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAVING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REGULATIONS.
11. CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAPS RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
12. ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMP INSTALLED.
13. GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" , AS CURRENTLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION-BOTH DAY AND NIGHT.
14. ALL R1-1 STOP SIGNS SHALL BE 30"X30" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
15. STREET NAME SIGNAGE SHALL BE ON A 9" HIGH SIGN FLAT BLADE W/REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAMES SHALL BE MOUNTED TO STOP SIGN POST.
16. A BLUE DOUBLE REFLECTORIZED BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATION. THE BUTTON SHALL BE PLACED 12 INCHES OFF OF THE CENTERLINE OF THE STREET ON THE SAME SIDE AS THE HYDRANT.
17. THE PROJECT AND ALL PARTS THEREOF SHALL BE SUBJECT TO INSPECTION FROM THE TIME BY INSPECTORS DESIGNATED BY FORT BEND COUNTY. NO SUCH INSPECTIONS SHALL RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER. NEITHER FAILURE TO INSPECT NOR FAILURE TO DISCOVER OR REJECT ANY OF THE WORK AS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, REQUIREMENTS AND SPECICATIONS OF FORT BEND COUNTY OR ANY PROVISION OF THIS PROJECT SHALL BE CONSTRUED TO IMPLY AN ACCEPTANCE OF SUCH WORK OR TO RELIEVE THE CONTRCTOR OF ANY OF ITS OBLIGATIONS HEREUNDER.

NOTE: FORT BEND COUNTY NOTES SUPERSEDE ANY CONFLICTING NOTES.

APPROVED: _____
DEVELOPMENT COORDINATOR
DATE: 12/19/17

TEXAS ENGINEERING & MAPPING CO.
REGISTRATION # F-2906

Digitally signed by Carlos J. Barillas
Date: 2017.12.15 11:31:58 -06'00'

C-5 NOTES & DETAILS

NOT TO SCALE JOB NO: 244-20

SEE SHT C-0 FOR TOPOGRAPHIC SURVEY
SEE SHT C-1 FOR GRADING & DRAINAGE
SEE SHT C-2 FOR UNDERGROUND UTILITIES
SEE SHT C-3 FOR NOTES & DETAILS
SEE SHT C-4 FOR UNDERGROUND UTILITIES
SEE SHT C-5 FOR NOTES & DETAILS

TEXAS ENGINEERING AND MAPPING CO.
12810 CENTURY DRIVE
STAFFORD, TEXAS 77477
PHONE: (281) 491-2525 FAX: (281) 491-2535

JOB NUMBER :
1708

DATE :
09-14-17

REVISIONS :

A New Addition for:
SIENNA KIDS ACADEMY
8717 SCANLAN TRACE
MISSOURI CITY, TX 77346

JIM LAWLESS, AIA, PLLC
Architecte de Planners
937 Pheasant Valley Dr.
Suite 220
Missouri City, Texas
77489
(281) 240-6101

NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION

DRAWING :
C-5