

ORDINANCE NO. 5326

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DENISON, TEXAS, ADOPTING UPDATED STANDARD CONSTRUCTION DETAILS; AMENDING CHAPTER 22 "SUBDIVISION REGULATIONS", ARTICLE IV "REQUIREMENTS FOR PUBLIC IMPROVEMENTS AND DESIGN", DIVISION 1 "ADEQUATE PUBLIC FACILITIES POLICY", SECTION 22-74 "CONFORMANCE TO PLANS AND INCORPORATION OF MANUALS" BY PROVIDING FOR THE INCORPORATION FO THE CITY'S STANDARD CONSTRUCTION DETAILS AND PUBLIC WORKS DESIGN MANUAL; PROVIDING FOR A PENALTY; PROVIDING FOR SAVINGS, REPEALING, AND SEVERABILITY CLAUSES; PROVIDING THAT THE MEETING AT WHICH THIS ORDINANCE WAS PASSED WAS AN OPEN MEETING IN COMPLIANCE WITH THE TEXAS OPEN MEETINGS ACT; AND PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Denison, Texas (the "**City**") is a Home Rule Municipality acting under its Charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Texas Local Government Code; and

WHEREAS, the City Council of the City (the "**City Council**") has previously adopted standard construction details for public works projects, including a version adopted on March 10, 2023 by Ordinance No. 5281; and

WHEREAS, since the passage of Ordinance No. 5281, the City's public works department has updated the standard construction details, and recommends adoption of the updated version attached hereto as **Exhibit A**, and incorporated herein for all purposes; and

WHEREAS, the City desires to incorporate the standard construction details updated herein, and the Public Works Design Manual adopted by Ordinance 5280 on March 20, 2023 into the City's codified Subdivision Ordinance; and

WHEREAS, the City is authorized by Chapter 212 of the Texas Local Government Code to, after a public hearing on the matter, adopt rules governing subdivisions of land within the municipality's jurisdiction to promote the health, safety, morals, or general welfare of the municipality, and the safe, orderly, and healthful development of the municipality; and

WHEREAS, after holding a public hearing on December 4, 2023, the City Council finds it desirable and in the best interest of the health, safety, and general welfare of the citizens to update the City's standard construction details.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DENISON, TEXAS:

Section 1. Incorporation of Premises. The above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

Section 2. Standard Construction Details Adopted. The City Council does hereby adopt the updated Standard Construction Details attached hereto as **Exhibit A** and repeal the earlier adopted versions.

Section 3. Amendment to Section 22-74. Chapter 22 “Subdivision Regulations”, Article IV “Requirements for Public Improvements and Design”, Division 1 “Adequate Public Facilities Policy”, Section 22-74 “Conformance to plans and incorporation of manuals”, subsection (b) is hereby amended to read as follows:

“(b) *Manuals incorporated.* The following construction and design manuals are incorporated herein by reference as if fully set forth: 1) Latest version of North Central Texas Council of Governments Standard Specifications for Public Works Construction (NCTCOG Standards); 2) Latest version of American Water Works Association Standards (AWWA); 3) Latest version of City’s Standard Construction Details; and 4) Latest version of City’s Public Works Design Manual.”

Section 4. Penalty. Any person, firm, corporation, or entity violating this Ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined pursuant to Section 1-12 of the City's Code of Ordinances. Each occurrence in violation of this Ordinance shall constitute a separate and distinct offense. Each day a violation of this Ordinance occurs constitutes a separate offense. The penal provisions imposed under this Ordinance shall not preclude the City from filing suit to enjoin the violation. The City retains all legal rights and remedies available to it pursuant to local, state, and federal law.

Section 5. Savings Clause. If any ordinance shall have any provisions in conflict with this Ordinance, or the provisions of the manuals adopted and incorporated herein, the stricter provisions shall apply. Any remaining portions of said ordinances shall remain in full force and effect.

Section 6. Severability. Should any section, subsection, sentence, clause, or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City hereby declares that it would have passed this Ordinance, and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences clauses and phrases be declared unconstitutional or invalid.

Section 7. Open Meeting. It is hereby officially found and determined that the meeting at which this Ordinance was passed was open to the public as required by law, and that public notice of the time, place, and purpose of said meeting was given, all as required by Section

551.042, Texas Government Code.

Section 8. Effective Date. This Ordinance shall become effective upon its passage and publication as may be required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF DENISON, TEXAS, on this the 4th day of December 2023.

APPROVED:



JANET GOTT, Mayor

ATTEST:



Christine Wallentine, City Clerk



Exhibit A

Updated Standard Details

CITY OF DENISON, TEXAS

STANDARD CONSTRUCTION DETAILS



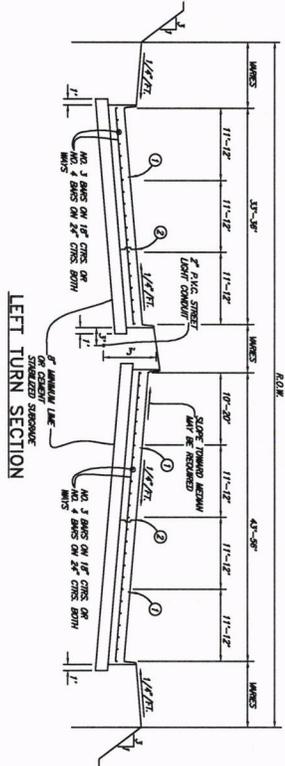
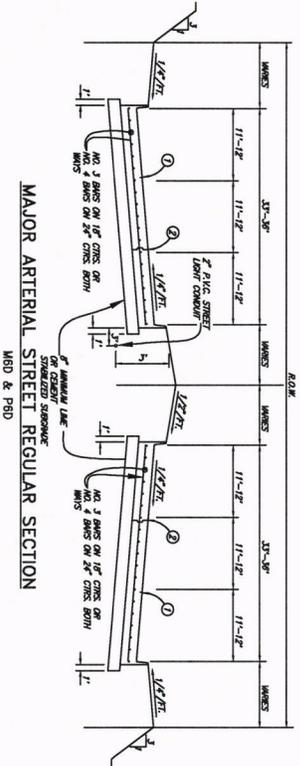
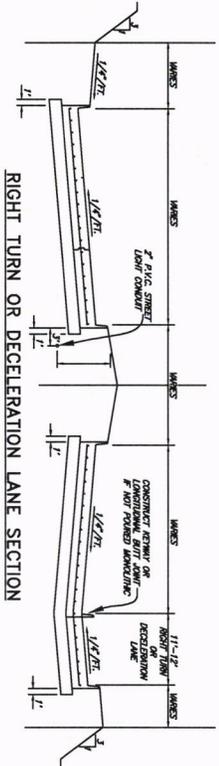
DECEMBER 04, 2023

SHEET NUM	SHEET TITLE	SHEET NUM	SHEET TITLE
0	COVER SHEET	24	SANITARY SEWER – AERIAL CROSSING
1	GENERAL NOTES	25	SANITARY SEWER – MANHOLES
2	PAVING – SECTIONS – MAJOR & MINOR ARTERIAL STREETS	26	SANITARY SEWER SERVICES
3	PAVING – SECTIONS – LOCAL STREETS	27	TYPICAL EMBEDMENT
4	PAVING – SECTIONS – LOCAL & COLLECTOR STREETS	28	THIN BRICK SCREENING WALL
5	PAVING DETAILS	29	BRICK SCREENING WALL – RETAINING WALL
6	PAVING DETAILS	30	CHAIN LINK FENCING
7	PAVING DETAILS	31	CHAIN LINK FENCING
8	PAVING – ALLEY – DRIVEWAYS	32	FARM FENCE – STEEL GATE
9	PAVING – ALLEY – DRIVEWAYS	33	WROUGHT IRON FENCING
10	PAVING – GEOMETRICS	34	WROUGHT IRON FENCING
11	CONCRETE FLUME – EROSION CONTROL	35	DUMPSTER DETAILS
12	PAVING – SIDEWALKS	36	DUMPSTER DETAILS
13	STORM SEWER – INLET	37	PIPE BOLLARD & I.T. DETAIL FOR GATE
14	STORM SEWER – INLET	38	TREE PROTECTION PLAN
15	STORM SEWER – INLET – DETAILS	39	JUNCTION BOX
16	CHANNELS – CONCRETE	40	GROUND MOUNTED STREET NAME BLADE & PROJECT SIGN DETAILS
17	CHANNELS – CONCRETE	41	TYPICAL HARD SURFACE INSTALLATION SIGN BASE DETAILS
18	WATER SERVICES – FIRE HYDRANT	42	GROUND MOUNTED STREET NAME BLADE (D3-1) DETAILS
19	WATER – VALVES	43	OVERHEAD STREET NAME BLADE (D3-1) DETAILS
20	METER VAULT	44	TYPICAL STREET NAME SIGN PLACEMENTS
21	METER VAULT	45	TRAFFIC SIGN BLANK DIMENSIONS
22	PRV VAULT AND AUTOMATIC FLUSH POINT	46	TYPICAL SCHOOL ZONE FLASHER ASSEMBLY
23	WATER – VALVES	47	FOUNDATION & FLASHER ASSEMBLY STANDARDS
		48	STREET LIGHT DETAILS

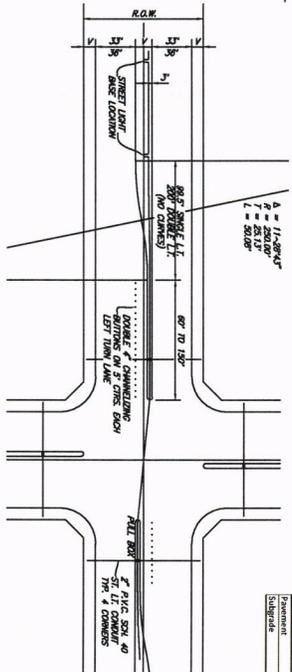
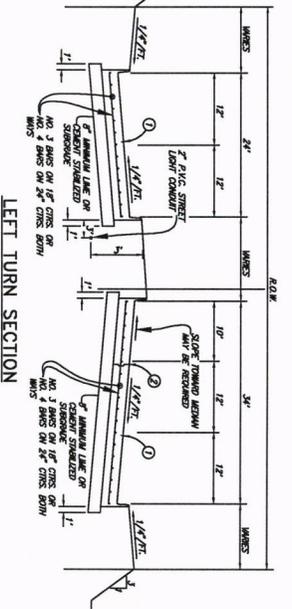
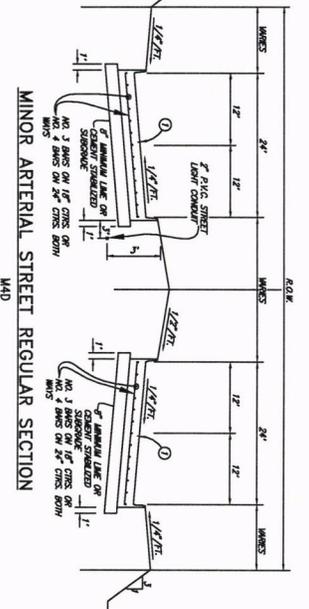


PLAT SCALE: 1/2" = 1'-0"

PLAT STYLE: *monochrome.ctb* PLOTTED BY: *Colton Starnes* ON: 12/1/2023



- LEGEND**
- ① - SHED LOCATIONAL DRAIN, 4" DIA.
 - A - CONSTRUCTION JOINT / FULL WIDTH
 - B - BELIEF IF WHEN PAVING IS 25 FT. WIDHT TO BE MOVED IN FUTURE
 - C - INSTALL CURB F. PAVING IS LESS THAN FULL WIDTH OF 33'-3 3/4" (LEBND. PLAN)



Minimum Thickness	Asphalt	Concrete	Local	Track/Lane	Finish	Underlay
Subbase	12"	12"	12"	12"	12"	12"

NOTE:
LINE OR CENTER SUBGRADE TO BE RECOMMENDED BY GEOTECHNICAL ENGINEER AND MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR.

CITY OF DENISON, TEXAS

STANDARD CONSTRUCTION DETAILS

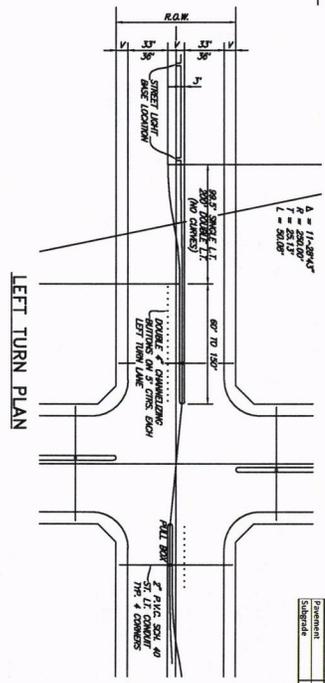
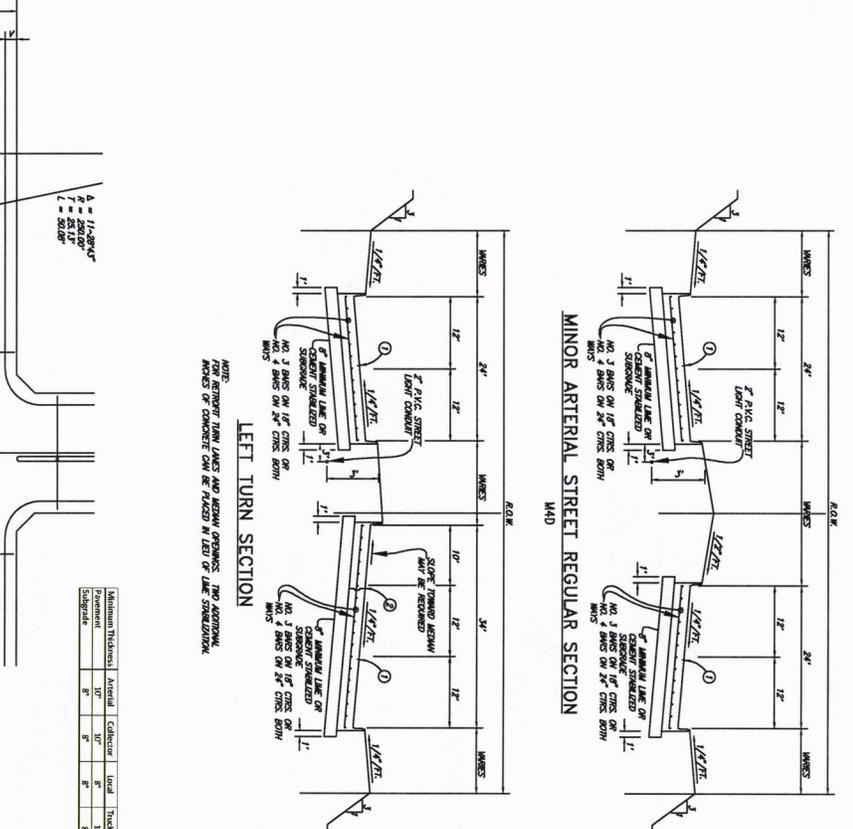
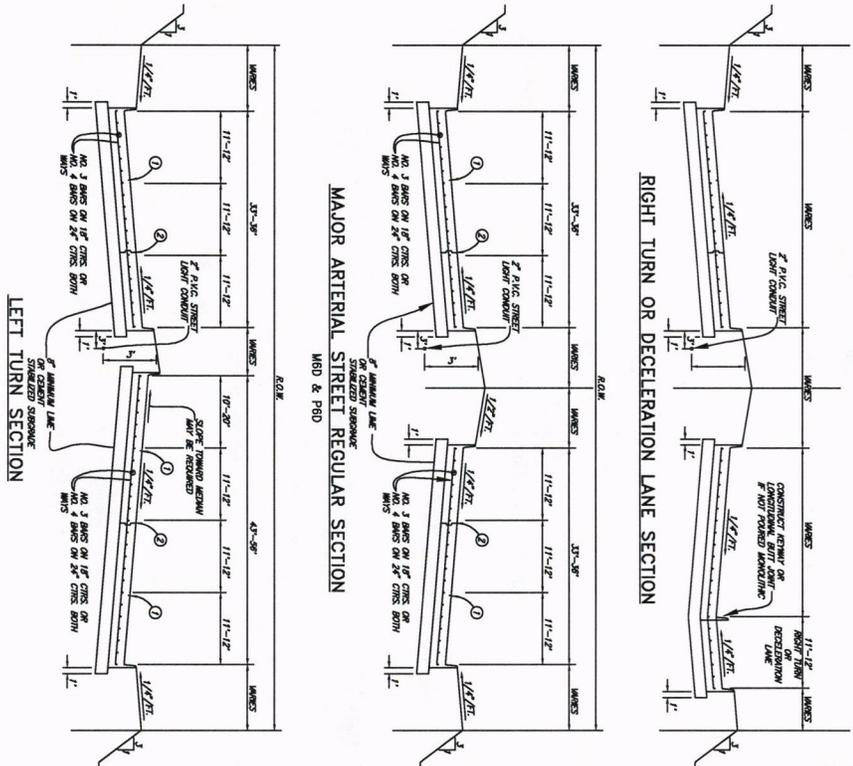


DECEMBER 04, 2023

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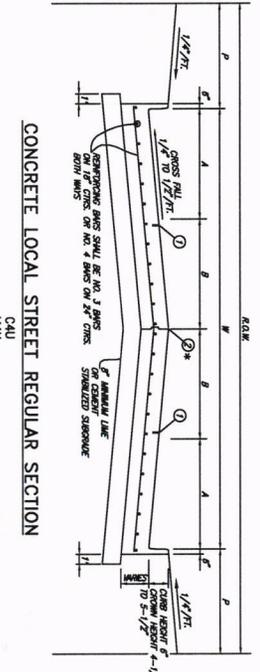
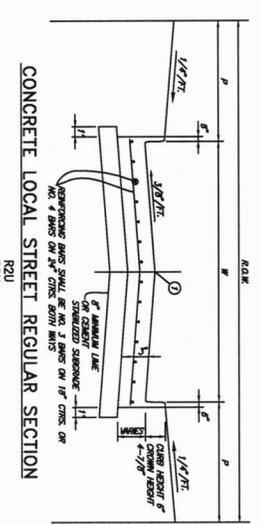


- LEGEND**
- ① - SAND LONGITUDINAL CURB / CURB / CURB
 - A - CONSTRUCTION JOINT (FILL WIDTH BY (O.D.) ALLOWED WHERE APPROVED)
 - ② - B. DETECT. IT WHEN PAVING IS 25 FT. WIDEN TO BE WIDENED IN FUTURE.
 - C. INSTALL CURB F. PAVING IS LESS THAN FILL WIDTH OF 35'-36" (LEHEND, PLAN)



Minimum Thickness	Material	Color	Use	Total Thickness	Finish	Individual
1/2"	Concrete	Light	Subgrade	1/2"	Smooth	1/2"
1/2"	Concrete	Light	Subgrade	1/2"	Smooth	1/2"
1/2"	Concrete	Light	Subgrade	1/2"	Smooth	1/2"

NOTE:
LINE OR GEMENT SURGRADE TO BE RECOMMENDED BY GEOTECHNICAL ENGINEER AND MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR.



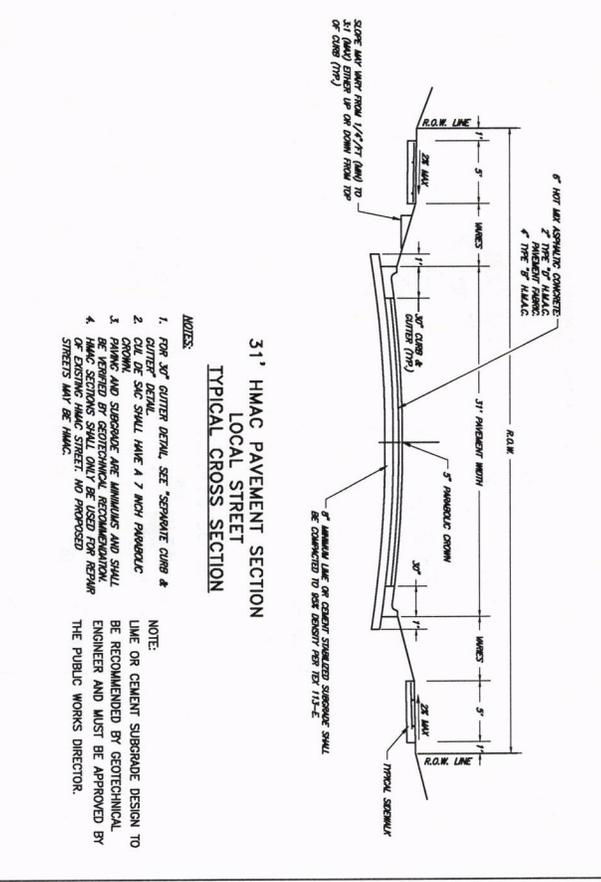
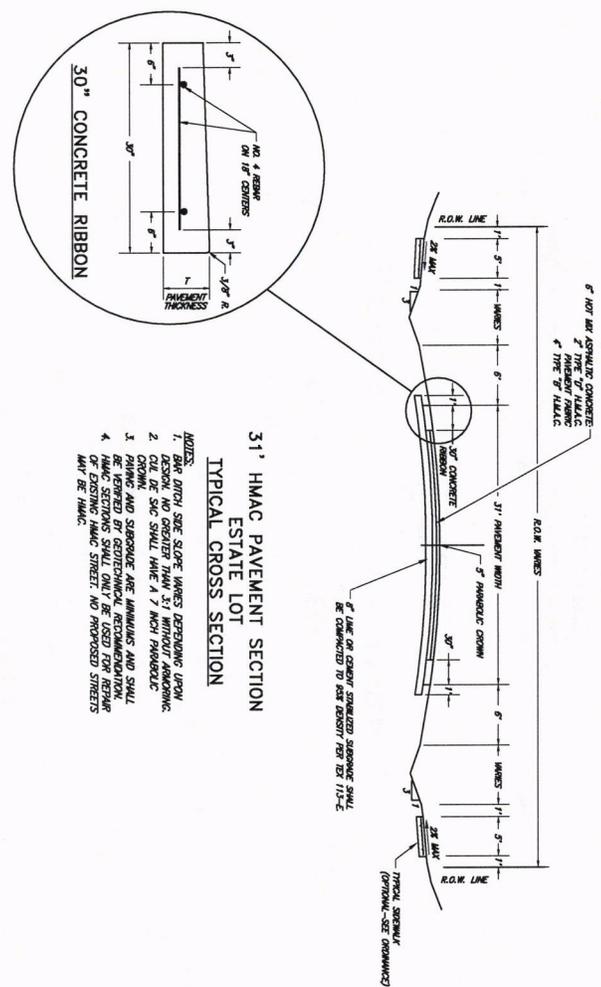
Material Thickness	Asphalt	Concrete	Local	Through Lane	Shoulder	Industrial
Pavement	12"	12"	6"	12"	6"	12"
Subgrade	5"	5"	5"	5"	5"	5"

① - SAVED LONGITUDINAL DRAIN JOINT
 ② - IS ALLOWED WHERE APPROVED BY CITY

R2U, C2U, C4U, M4U & M5U PAVING SECTIONS SHALL HAVE A MINIMUM PAVEMENT THICKNESS OF 8 INCHES UNLESS THE GEOTECHNICAL ENGINEER RECOMMENDS OTHERWISE.

ROADWAY WIDTH (W)	TOTAL CROWN HEIGHT	MIN-POINT	1/4 POINT
28'	4"	2'-1/4"	1/4"
36'	6"	3'-3/8"	3/8"
44'	8"	5'-3/8"	3/8"

31'-0" PAVEMENT MUST MEET CROWN ORDERS AT CURBS, AT MID-PANES & 6" PARABOLIC POINTS ONLY TO BE CONSTRUCTED WITH 5/8" ROAD WHEELS



- NOTES:**
- BAR PATCH SIZE SLOPE WARES DEPENDING UPON DESIGN, NO GREATER THAN 3:1 WITHOUT APPROVAL.
 - CROWN, SEE SHALL HAVE A 7' HIGH PARABOLIC.
 - PAVING AND SUBGRADE ARE LAMINAR AND SHALL BE REVERSED BY GEOTECHNICAL RECOMMENDATION.
 - EXISTING HMAC STREET, NO PROPOSED STREETS MAY BE HMAC.

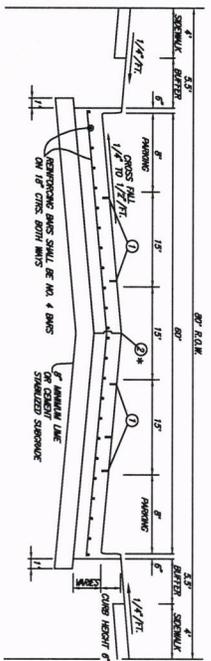
- NOTES:**
- FOR 30" GUTTER DETAIL, SEE "SEPARATE CURB & GUTTER DETAIL".
 - CROWN, SEE SHALL HAVE A 7' HIGH PARABOLIC.
 - PAVING AND SUBGRADE ARE LAMINAR AND SHALL BE REVERSED BY GEOTECHNICAL RECOMMENDATION.
 - EXISTING HMAC STREET, NO PROPOSED STREETS MAY BE HMAC.

NOTE: LIME OR CEMENT SUBGRADE DESIGN TO BE RECOMMENDED BY GEOTECHNICAL ENGINEER AND MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR.

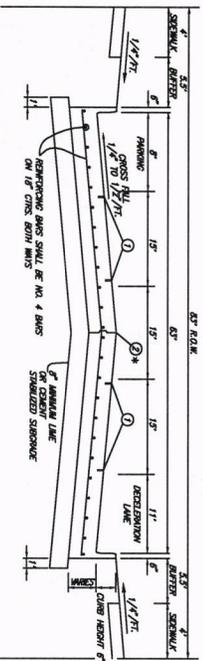


CITY OF DENISON, TEXAS
 STANDARD CONSTRUCTION DETAILS
 PAVING / SECTIONS / LOCAL STREETS

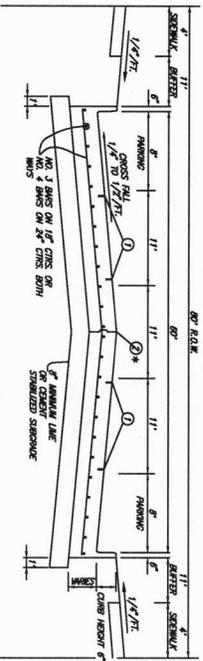
December, 2023
 SHEET NO. 3



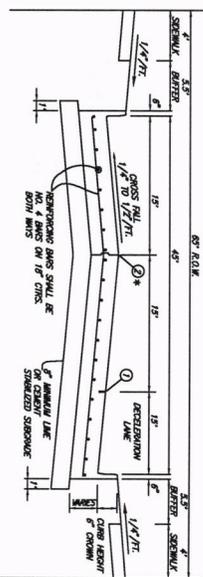
CONCRETE INDUSTRIAL STREET WITH PARKING SECTION



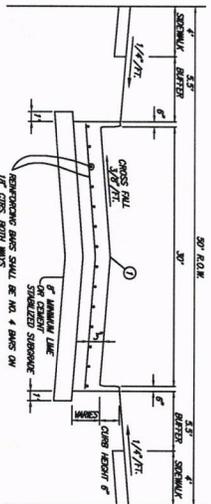
CONCRETE INDUSTRIAL STREET WITH DECELERATION LANE SECTION



MAJOR COLLECTOR WITH PARKING SECTION



CONCRETE INDUSTRIAL LOCAL STREET WITH RIGHT TURN DECELERATION LANE SECTION



CONCRETE INDUSTRIAL STREET REGULAR SECTION

- LEGEND**
- ① - SAVED LONGITUDINAL DRAINAGE JOINT
 - ② - IS ALLOWED WHERE APPROVED BY CITY

Material	Thickness	Amount	Schedule	Total	Trade Line	Trade Line	Horizontal
Pavement	8"	8"	8"	8"	8"	8"	8"
Subgrade	8"	8"	8"	8"	8"	8"	8"

NOTE:
 LIME OR CEMENT SUBGRADE DESIGN TO BE RECOMMENDED BY GEOTECHNICAL ENGINEER AND MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR.



CITY OF DENISON, TEXAS

STANDARD CONSTRUCTION DETAILS
 PAVING / SECTIONS / LOCAL & COLLECTOR STREETS

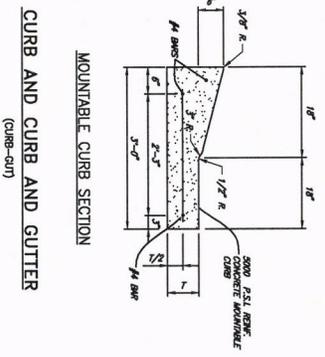
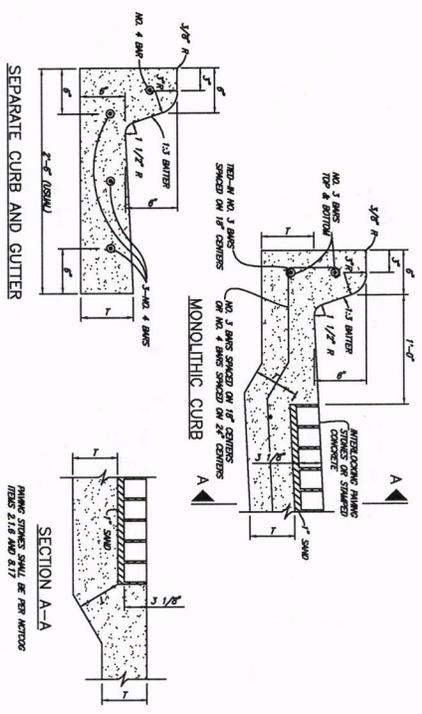
December, 2023

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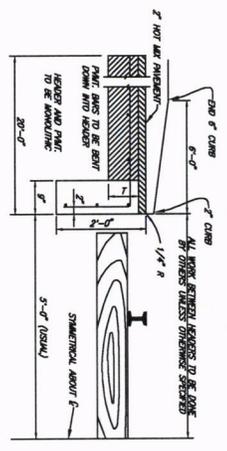


CITY OF DENISON, TEXAS
 STANDARD CONSTRUCTION DETAILS
 PAVING / DETAILS

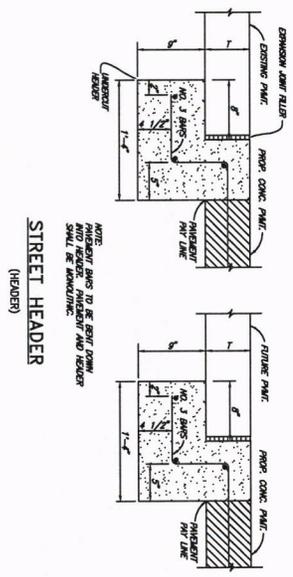
December 2023
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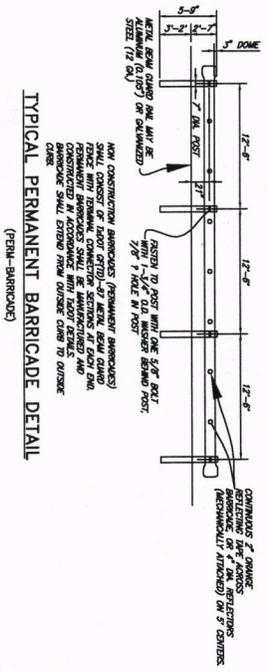
CURB AND CURB AND GUTTER
 (CURB-CUR)



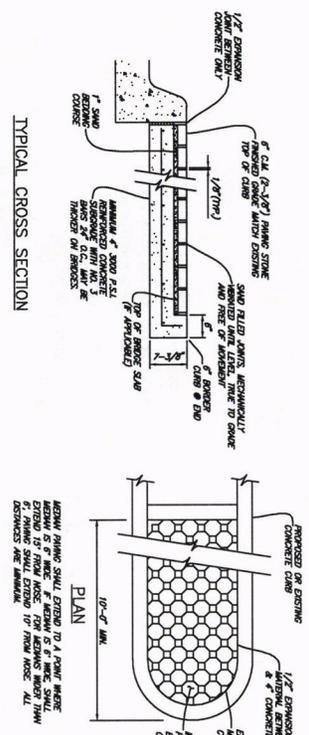
RAIL HEADER
 (RR-HEADER)



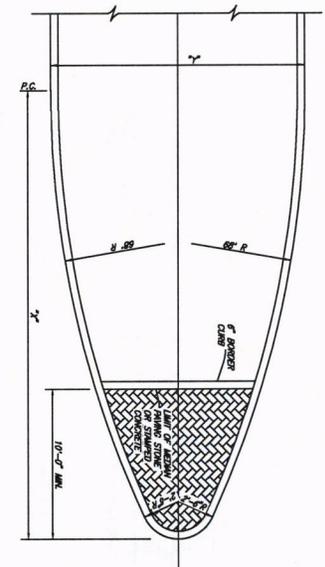
STREET HEADER
 (HEADER)



TYPICAL PERMANENT BARRICADE DETAIL
 (PERM-BARRICADE)



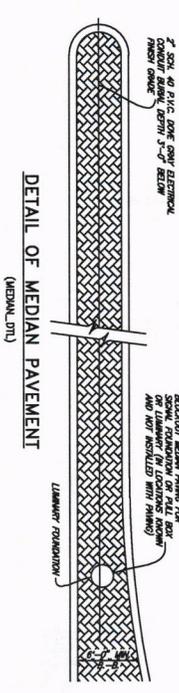
STAMPED CONCRETE OR INTERLOCKING PAVING STONE
 COLOR AND FINISH TO BE SUPPLIED BY CITY
 (MEDIAN STONE)



DETAIL OF NOSE FOR MEDIAN ISLAND

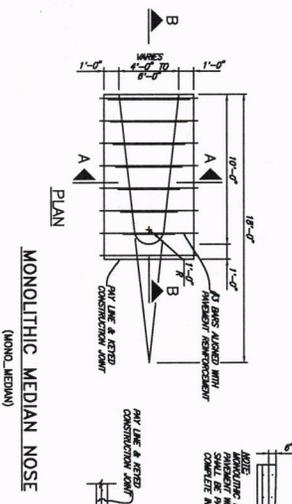
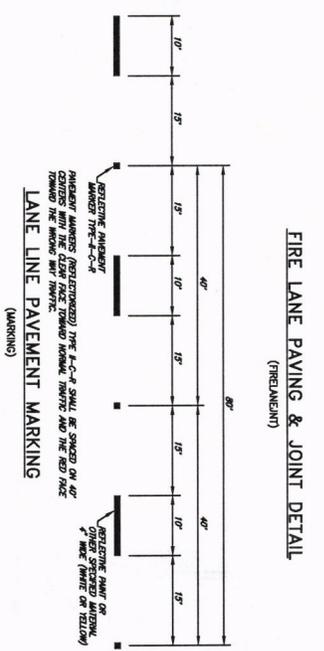
DIMENSIONS OF MEDIAN NOSE

X = 13.00'	Y = 22.00'	X = 20.50'	Y = 14.00'
X = 15.00'	Y = 5.00'	X = 20.50'	Y = 17.00'
X = 18.00'	Y = 5.00'	X = 22.50'	Y = 20.00'
X = 20.00'	Y = 10.00'	X = 26.47'	Y = 24.00'



FIRE LANE PAVING & JOINT DETAIL
 (PRELIMINARY)

1. ALL FIRE LANES SHALL BE PAVED WITH A MINIMUM OF 8 INCHES OF 3000 P.S.I. CONCRETE REINFORCED WITH #3 REBAR PLACED ON 18 INCH CENTERS EACH WAY ON A 8 INCH LAYER STABILIZED SUBGRADE. THE REBAR SHALL BE STABILIZED IN SPACED 18 INCHES PER APPROVED SPECIFICATIONS. IN SPACED 18 INCHES PER APPROVED SPECIFICATIONS. (15) SURFACE AREA TREATED TO A MINIMUM 8 INCH THICKNESS.
2. ALL FIRE LANES MAY BE PAVED WITH 8 INCHES OF 3000 P.S.I. CONCRETE (28 DAYS COMPRESSIVE STRENGTH) REINFORCED WITH #3 REBAR PLACED ON 18 INCH CENTERS EACH WAY ON A 8 INCH LAYER STABILIZED SUBGRADE. CONSTRUCTION JOINTS SHALL BE SPACED AT A MINIMUM OF 15.5 FEET ON CENTERS EACH WAY. CONSTRUCTION JOINTS MAY BE TOOK ON SAND JOINTS AT A DEPTH TO PREVENT PONDING. THE PONDING SURFACE SHOULD HAVE A MINIMUM SLOPE OF 1/4" (2" PER 100 FEET).
3. ALTERNATE PAVING DESIGN: THE DEVELOPER MAY SUBMIT AN ALTERNATE PAVING DESIGN (28 DAYS COMPRESSIVE STRENGTH) REINFORCED WITH #3 REBAR PLACED ON 18 INCH CENTERS EACH WAY ON A 8 INCH LAYER STABILIZED SUBGRADE. CONSTRUCTION JOINTS SHALL BE SPACED AT A MINIMUM OF 15.5 FEET ON CENTERS EACH WAY. CONSTRUCTION JOINTS MAY BE TOOK ON SAND JOINTS AT A DEPTH TO PREVENT PONDING. THE PONDING SURFACE SHOULD HAVE A MINIMUM SLOPE OF 1/4" (2" PER 100 FEET).



CITY OF DENISON, TEXAS
 STANDARD CONSTRUCTION DETAILS
 PAVING / DETAILS

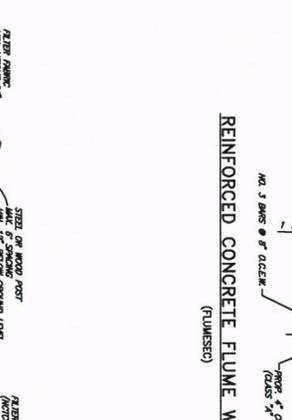
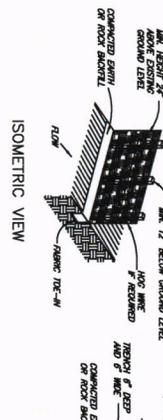
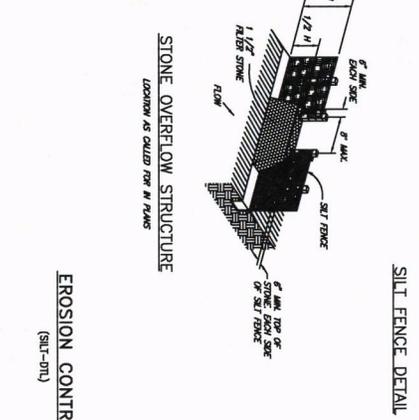
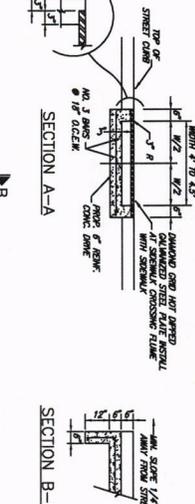
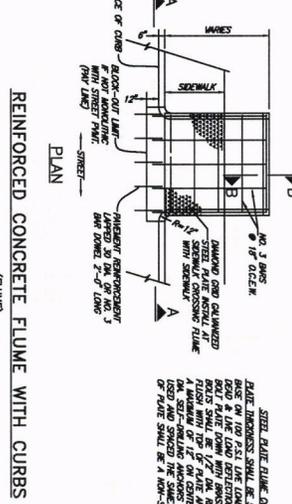
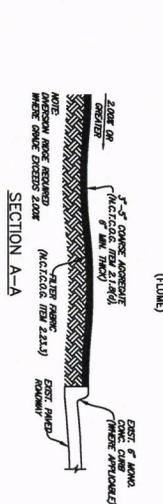
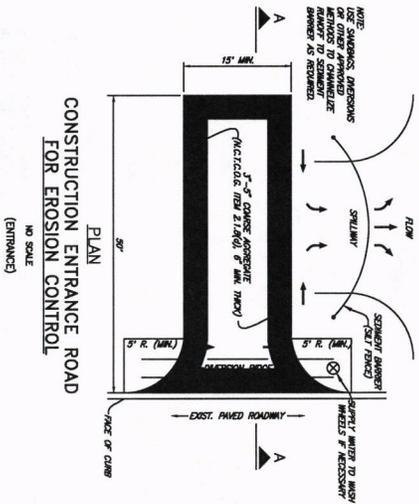


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
CONCRETE FLUME / EROSION CONTROL

CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
CONCRETE FLUME / EROSION CONTROL

December, 2023

SHEET NO.
11



REINFORCED CONCRETE FLUME WITHOUT CURBS
(FLUMES)
NOTES:
1) REBAR SPACING SHALL BE AS SHOWN.
2) 1/2" DIA. CHAMFER REQUIRED ON ALL CORNERS.

STONE OVERFLOW STRUCTURE
LOCATION AS CALLED FOR IN PLANS

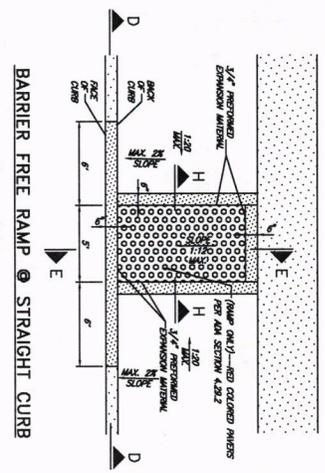
ISOMETRIC VIEW

SILT FENCE DETAIL

SECTION VIEW

NOTES:
1) THE CONTRACTOR SHALL INSPECT SILT FENCE BESETL
2) THE CONTRACTOR SHALL INSPECT SILT FENCE BESETL
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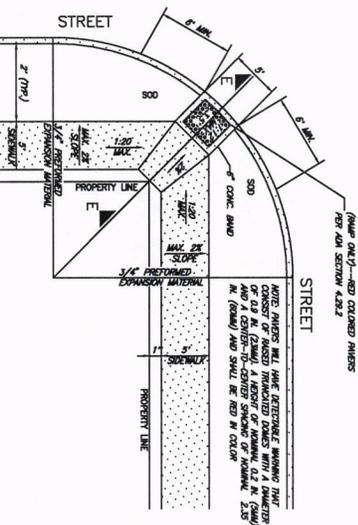
EROSION CONTROL
(SILT-DN)



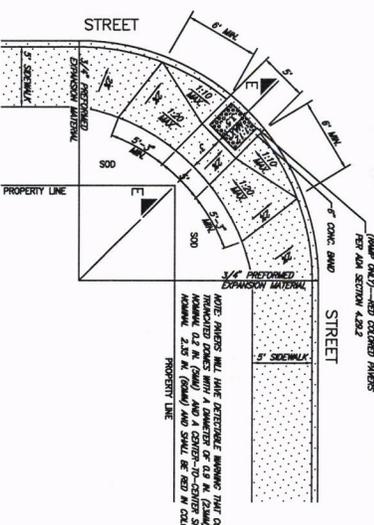
SECTION D-D
 BARRIER FREE RAMP @ STRAIGHT CURB



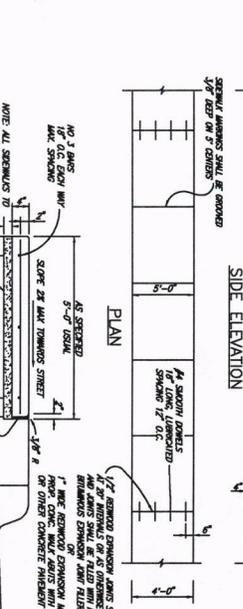
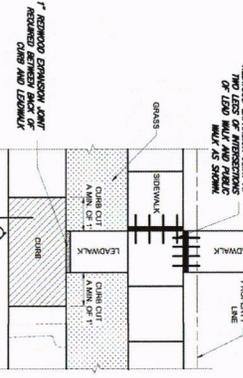
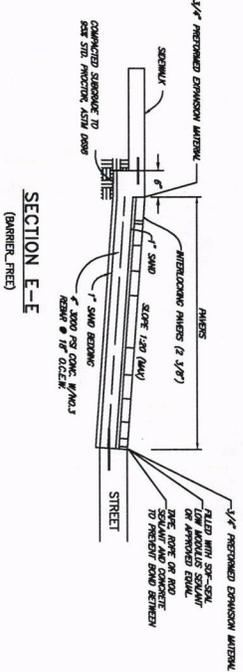
SECTION H-H
 RAMP FOR 5 FOOT SIDEWALK AWAY FROM CURB



RAMP FOR 5 FOOT SIDEWALK AWAY FROM CURB

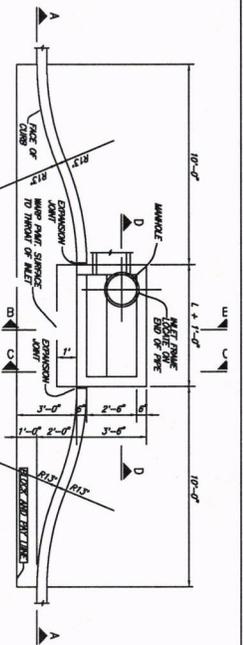


RAMP FOR 5 FOOT SIDEWALK NEXT TO CURB

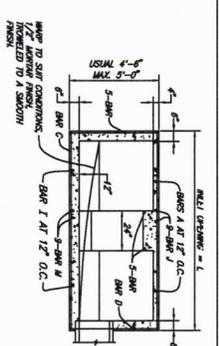


SECTION E-E
 (BARRIER FREE)
 REINFORCED CONCRETE SIDEWALK
 (SIDEWALK)

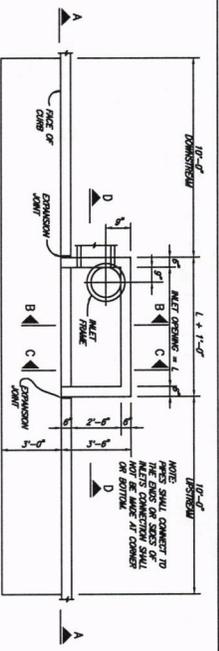
	CITY OF DENISON, TEXAS STANDARD CONSTRUCTION DETAILS PAVING / SIDEWALKS	December, 2023	12
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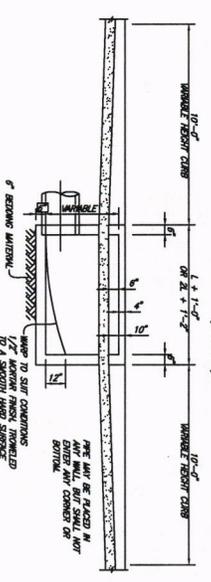
PLAN - RECESSED INLET (REC-NR1)



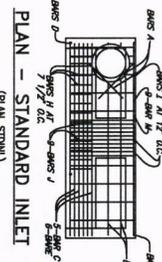
SECTION D-D - STANDARD AND RECESSED INLETS (SECT-A-1)



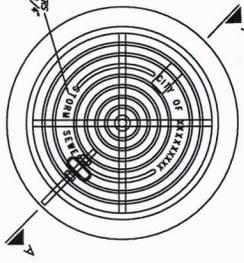
PLAN - STANDARD INLET (STINDLT)



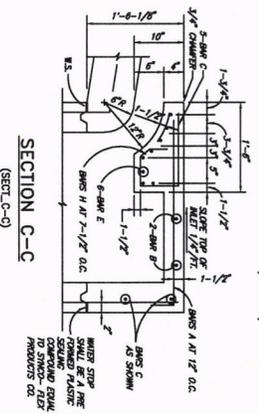
SECTION A-A-RECESSED AND STANDARD INLETS (PLAN-10)



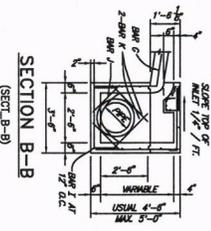
PLAN - STANDARD INLET (PLAN-STINDL)



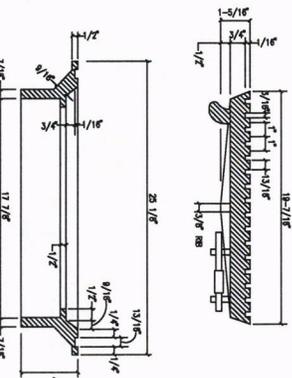
PLAN OF COVER



SECTION C-C (SECT-C-3)



SECTION B-B (SECT-B-8)



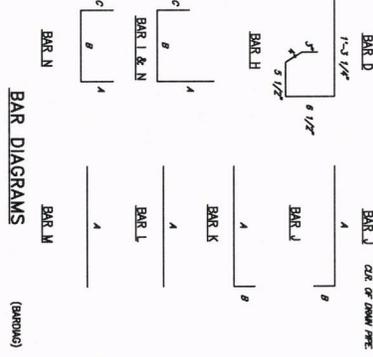
SECTION OF FRAME AND COVER SECTION A-A INLET FRAME AND COVER (MIL-COV4)

REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS	INLET LENGTH THE 1/8 IN.	BAR DIMENSIONS	A	B	C
10	4	3	5-2"	0-3"	-
	5	3	6-10"	-	-
	6	3	7-6"	-	-
	7	3	8-2"	-	-
	8	3	8-8"	-	-
	9	3	9-4"	-	-
	10	3	10-0"	-	-
	11	3	10-6"	-	-
	12	3	11-2"	-	-
	13	3	11-8"	-	-
	14	3	12-4"	-	-
	15	3	13-0"	-	-
	16	3	13-6"	-	-
	17	3	14-2"	-	-
	18	3	14-8"	-	-
	19	3	15-4"	-	-
	20	3	16-0"	-	-
	21	3	16-6"	-	-
	22	3	17-2"	-	-
	23	3	17-8"	-	-
	24	3	18-4"	-	-
	25	3	19-0"	-	-
	26	3	19-6"	-	-
	27	3	20-2"	-	-
	28	3	20-8"	-	-
	29	3	21-4"	-	-
	30	3	22-0"	-	-

* SEE DRAWING FOR DIMENSIONS 10' INLETS



BAR DIAGRAMS (BARNO4)

DESIGNED: 12/4/23 - Madsen

FILED: 12/21/2023 10:01:01 AM design standard update/production drawing/Update-12.dwg

PLOT SCALE: 1:2

PLOT STYLE: monochrome.ctb

PLOTTED BY: Cohen Swanson ON 12/21/2023

CITY OF DENISON, TEXAS

STANDARD CONSTRUCTION DETAILS

STORM SEWER / INLET

December, 2023

SHEET NO. 13



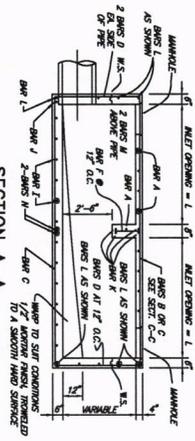


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
STORM SEWER / INLET

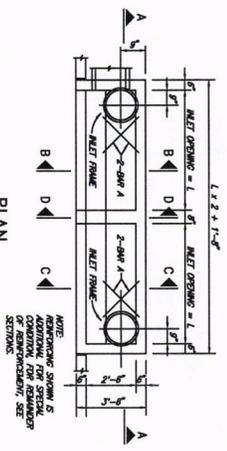
December, 2023

SHEET NO.
14

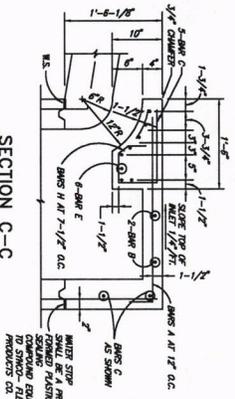
15 AND 20 FOOT INLETS
(SECTION A-A)



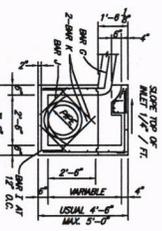
20 FOOT INLETS
(PLAN, 20)



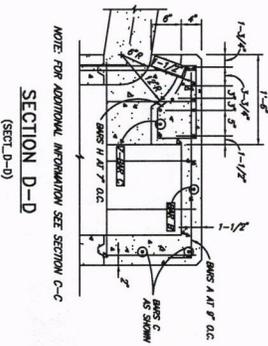
SECTION C-C
(SECTION C-C)



SECTION B-B
(SECTION B-B)



SECTION D-D
(SECTION D-D)



REINFORCING STEEL SCHEDULE

DOUBLE INLETS
DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

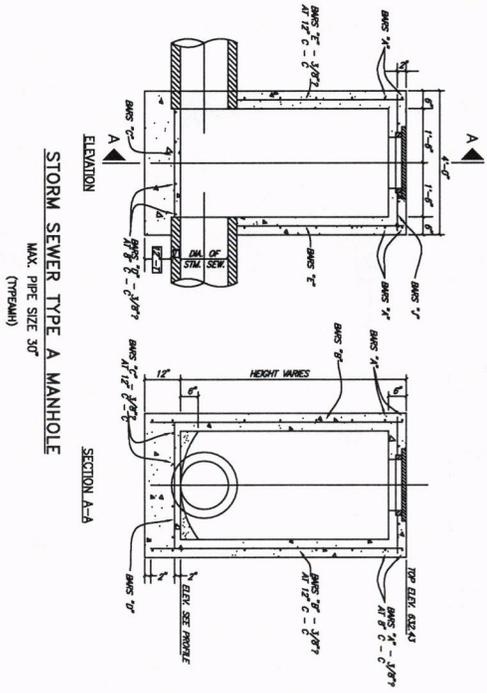
INLET SIZE (FT)	BAR NO.	BAR NO. (1/8 IN)	BAR NO. (1/2 IN)	BAR NO. (3/4 IN)	BAR NO. (1 IN)
7.5 FT	A	3	18	3'-0"	0'-0"
	B	3	18	3'-0"	0'-0"
	C	4	16	1'-6"	0'-0"
	D	4	9	6'-0"	-
	E	5	6	18'-0"	-
	F	4	5	1'-0"	-
	G	3	15	2'-0"	1'-0"
	H	3	20	6'-0"	3'-0"
	I	4	5	1'-0"	-
	J	3	1	3'-0"	0'-0"
	K	4	11	3'-0"	0'-0"
	L	4	2	3'-0"	0'-0"
	M	4	2	6'-0"	3'-0"
	N	4	2	6'-0"	6'-0"
10 FT	A	3	23	3'-0"	0'-0"
	B	3	2	18'-0"	-
	C	4	16	21'-0"	0'-0"
	D	4	9	6'-0"	-
	E	5	6	21'-0"	-
	F	4	5	1'-0"	-
	G	3	15	2'-0"	1'-0"
	H	3	20	6'-0"	3'-0"
	I	4	5	1'-0"	-
	J	3	1	3'-0"	0'-0"
	K	4	11	3'-0"	0'-0"
	L	4	2	3'-0"	0'-0"
	M	4	2	6'-0"	3'-0"
	N	4	2	6'-0"	6'-0"

* SEE DRAWING FOR DIMENSIONS
** FIELD CUT AS REQUIRED TO ACCOMMODATE DOWN PIPE
*** FIELD CUT AS REQUIRED TO ACCOMMODATE DOWN PIPE

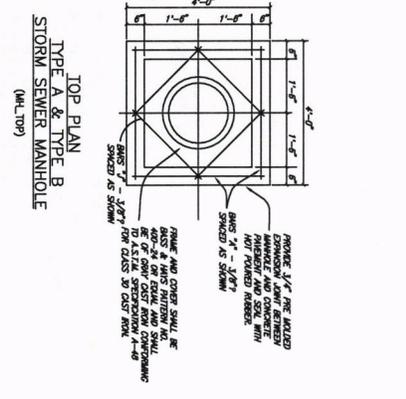
(BARLIST)



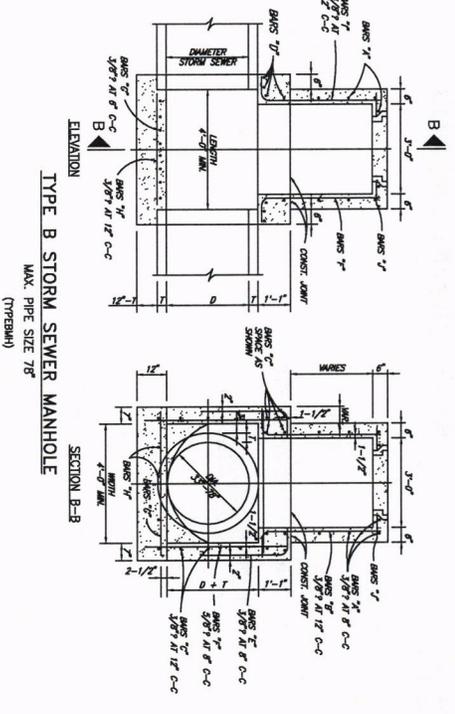
(BARLIST)



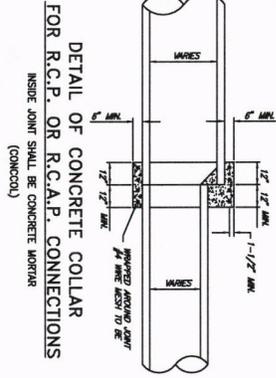
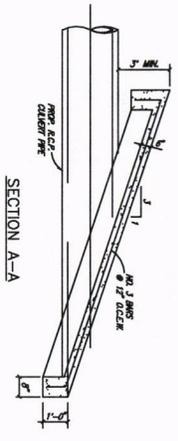
STORM SEWER TYPE A MANHOLE
MAX. PIPE SIZE 30"



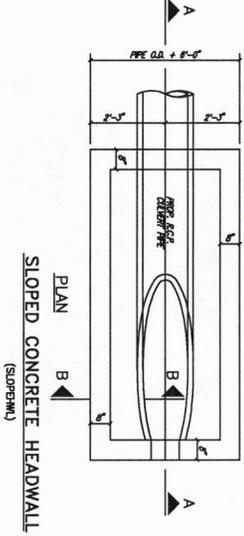
**TYPE A & TYPE B
STORM SEWER MANHOLE**
(MULTI-PIPS)



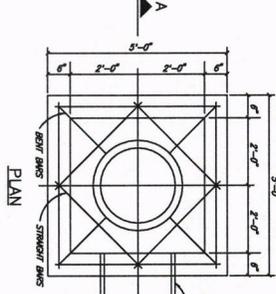
TYPE B STORM SEWER MANHOLE
MAX. PIPE SIZE 78"



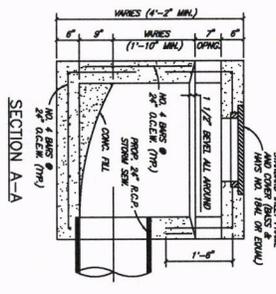
**DETAIL OF CONCRETE COLLAR
FOR R.C.P. OR R.C.A.P. CONNECTIONS**
INSIDE JOINT SHALL BE CONCRETE WORK
(CONCOCO)



SLOPED CONCRETE HEADWALL
(SLOPEMIN)



STANDARD DROP INLET
(DROPHLET)

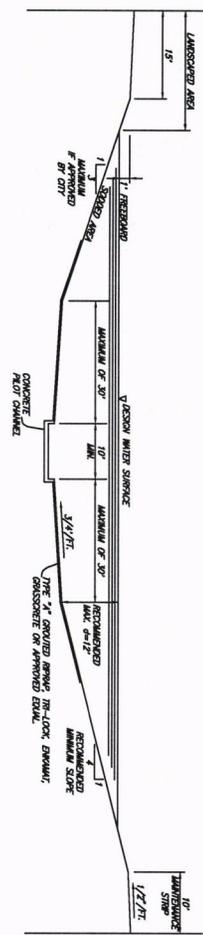


**STANDARD INLET FRAME
AND COVER (RINGS & GRATE)**

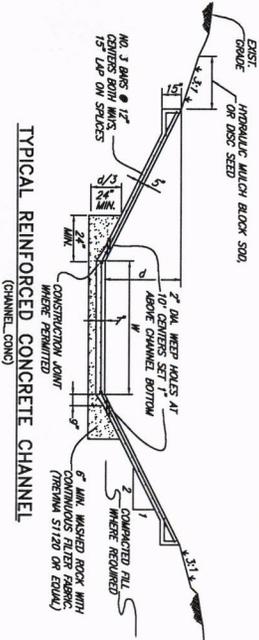


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
STORM SEWER INLET / DETAILS

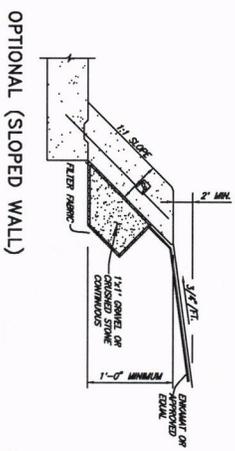
December, 2023
SHEET NO. 15



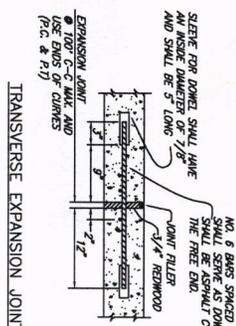
TYPICAL CHANNEL WITH REINFORCED CONCRETE LINED PILOT CHANNEL
(CHANNEL SECT)



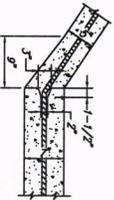
TYPICAL REINFORCED CONCRETE CHANNEL
(CHANNEL COMP)



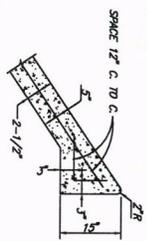
OPTIONAL (SLOPED WALL)



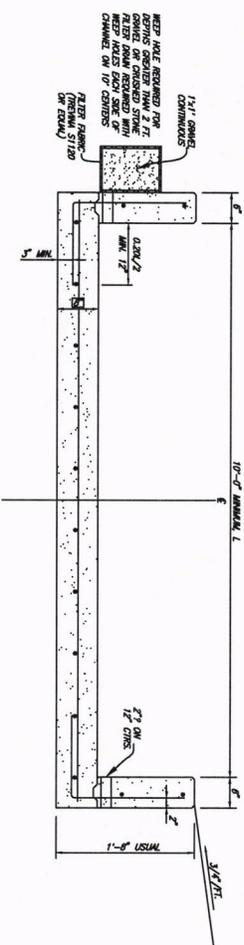
TRANSVERSE EXPANSION JOINT



CONSTRUCTION JOINT
OPTIONAL
CONCRETE CHANNEL
(CHANNEL DITS)



SLAB EDGE - DETAIL "A"



REINFORCED CONCRETE PILOT CHANNEL (VERTICAL WALL)
(CHANNEL PILOT)

- GENERAL NOTES FOR LINED CHANNELS**
1. CONSTRUCTION JOINT SHOWN FOR CONVENIENCE ONLY; MONOLITHIC CONSTRUCTION MAY BE USED.
 2. ALL VISIBLE SURFACES SHALL BE A TROWEL FINISH.
 3. ALL REINFORCING STEEL SHALL BE 3/8" DIA. AND SPACED 12" CENTER TO CENTER BOTH WAYS UNLESS OTHERWISE SPECIFIED.
 4. IF WOOD FORMS ARE USED WITH CONSTRUCTION JOINT, THEY SHALL BE TWO, 2"x4" AND SHALL NOT BE REMOVED UNTIL CONCRETE ON SLOPES IS READY TO BE PLACED.
 5. ALL CONCRETE IN LINED CHANNEL SHALL BE M2000 CLASS 2" (MIN. 3000 P.S.I.) CONCRETE.
 6. FLAT BOTTOM TO BE CONSTRUCTED WHEN CHANNEL WIDTH IS LESS THAN 12 FEET.
 7. 3/4" CHAMFER ON ALL CONCRETE CORNERS. (GENL CHANNEL NOTE)

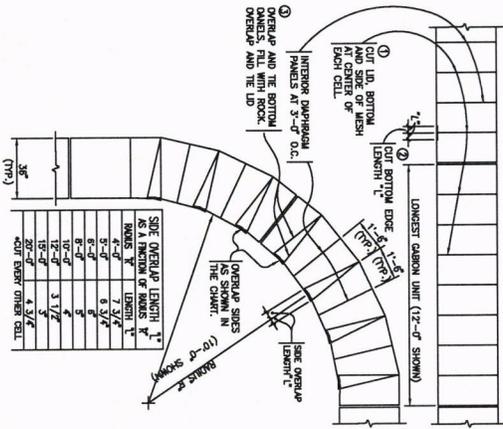


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
CHANNELS / GABIONS

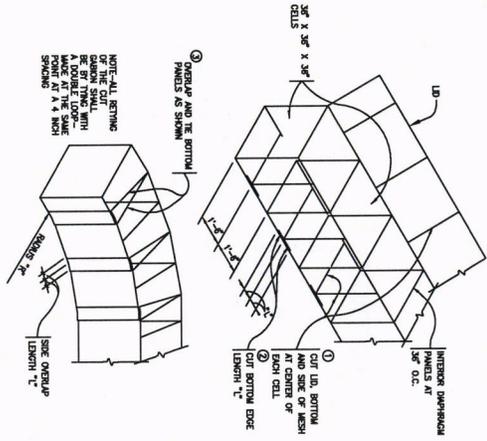
December, 2023

SHEET NO.
17

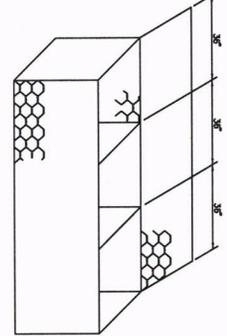
GABION RADIUS PROCEDURE



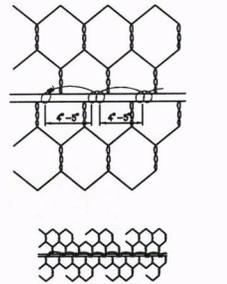
GABION RADIUS PROCEDURE (RADIIUS)



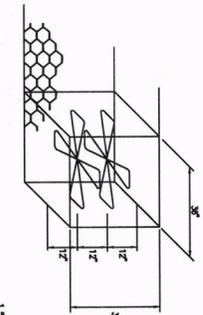
GABION CONTAINER



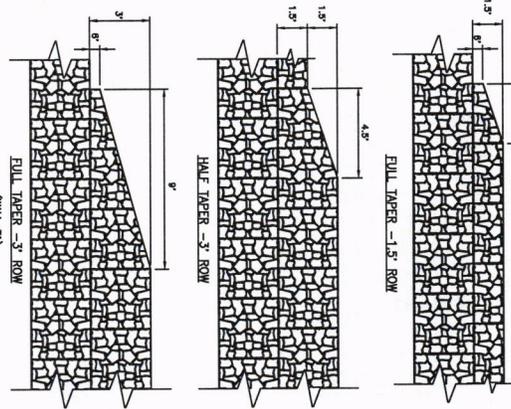
GABION TIE



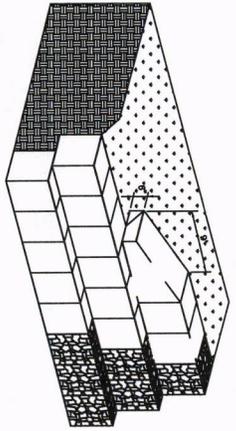
INNER TIE WIRE



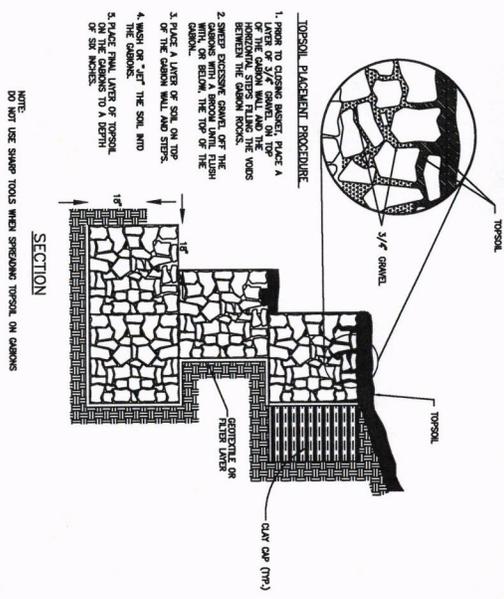
TAPERED WALL HEIGHT TRANSITION



STANDARD TAPER FOR WALL HEIGHTS TRANSITIONS (TAPER-1)



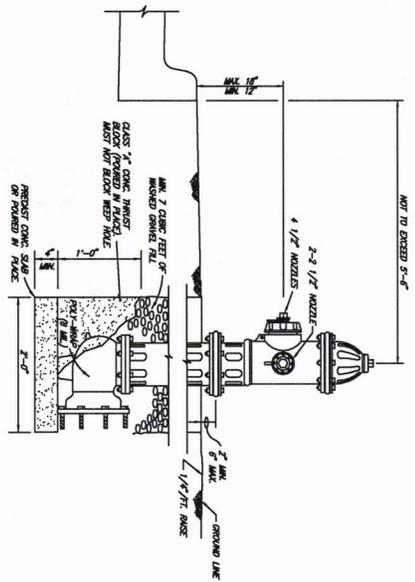
VEGETATED GABION WALL TOPSOIL PLACEMENT (VEG-WALL)



CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
CHANNELS / GABIONS

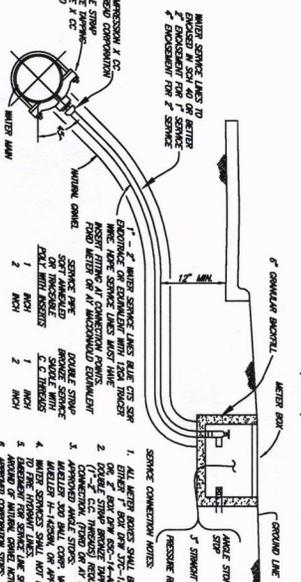
December, 2023

SHEET NO.
17



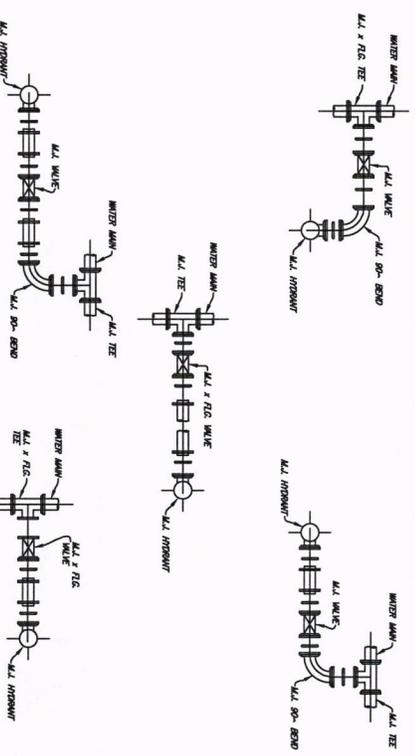
- FIRE HYDRANT NOTES:**
1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO ALL CURRENT SPECIFICATIONS FOR FIRE HYDRANTS FOR OUTDOOR WATER WORKS SERVICE FOR WATER AND GAS. HYDRANTS SHALL HAVE A 2.5" WATER WORKS AND A 4.5" GAS WORKS. HYDRANTS SHALL BE APPROXIMATELY 7' FROM CURB AND 12" FROM SIDEWALK. ALL HYDRANTS SHALL BE PROVIDED BY THE CITY.
 2. IF ABOVE & BELOW GROUND LEVEL, HYDRANT SHALL BE PROTECTED BY A 6" CONCRETE PAD TO A MINIMUM OF 6" ABOVE & BELOW GROUND LEVEL. HYDRANT SHALL BE SET IN A 12" DIA. CONCRETE PAD WITH A 1/4" GAP BETWEEN HYDRANT AND PAD. HYDRANT SHALL BE SET IN A 12" DIA. CONCRETE PAD WITH A 1/4" GAP BETWEEN HYDRANT AND PAD.
 3. ONE OF HYDRANTS WITH A DEVELOPMENT INDEX SHOULD BE CLEAR HYDRANTS. ALL HYDRANTS SHOULD BE CEMENTED TO CONCRETE PAD. HYDRANTS SHALL BE CEMENTED TO CONCRETE PAD. HYDRANTS SHALL BE CEMENTED TO CONCRETE PAD.
 4. OPEN LEFT
 5. NO OPENING AIR
 6. FIRE HYDRANT SHOULD BE ONE OF THE FOLLOWING SERVICE INDEXES (SEE SPEC & LATEST STANDARDS REQUIRED):
CLASS A - LIGHT BLUE (RATED CAPACITY OF 1000 GPM OR GREATER)
CLASS B - GREEN (RATED CAPACITY OF 500 - 1000 GPM)
CLASS C - RED (RATED CAPACITY OF LESS THAN 500 GPM)

TYPICAL FIRE HYDRANT INSTALLATION (FIREHOSE)

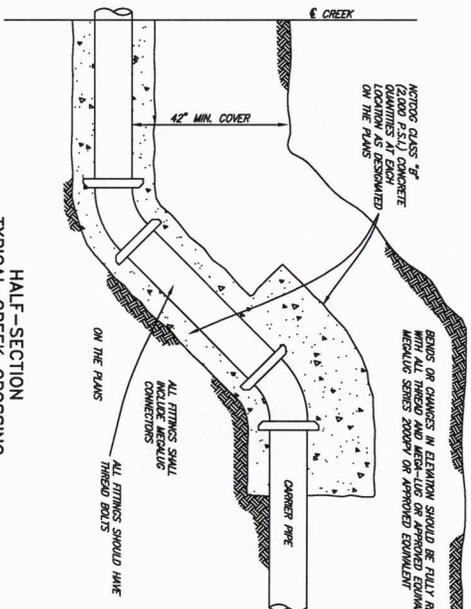


- SERVICE CONNECTION NOTES:**
1. ALL WATER SERVICES SHALL BE 6" DIA. SERVICES. EITHER 1" OR 1.5" DIA. SERVICE SHALL BE USED. EITHER 1" OR 1.5" DIA. SERVICE SHALL BE USED.
 2. 1.5" DIA. SERVICE SHALL BE USED FOR ALL SERVICES. 1.5" DIA. SERVICE SHALL BE USED FOR ALL SERVICES.
 3. APPROVED WATER SERVICES AT APPROVED DEVELOPMENT.
 4. WATER SERVICES SHALL NOT BE CONNECTED TO FIRE HYDRANT LINES.
 5. APPROVED WATER SERVICES SHALL BE 2.5" DIA. (6").
 6. APPROVED WATER SERVICES SHALL BE 2.5" DIA. (6").
 7. APPROVED WATER SERVICES SHALL BE 2.5" DIA. (6").
 8. APPROVED WATER SERVICES SHALL BE 2.5" DIA. (6").

TYPICAL SERVICE CONNECTION WITH METER BOX (METERS)

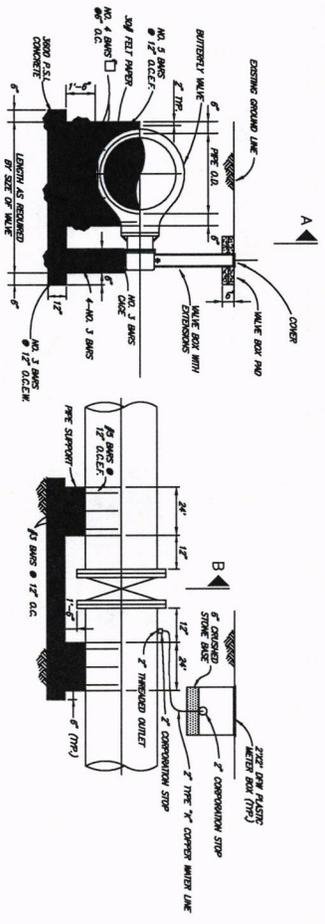


TYPICAL FIRE HYDRANT INSTALLATION PLANS (FH-PLANS)

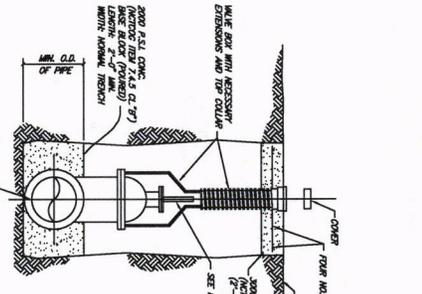


HALF-SECTION TYPICAL CREEK CROSSING (CREEK X)

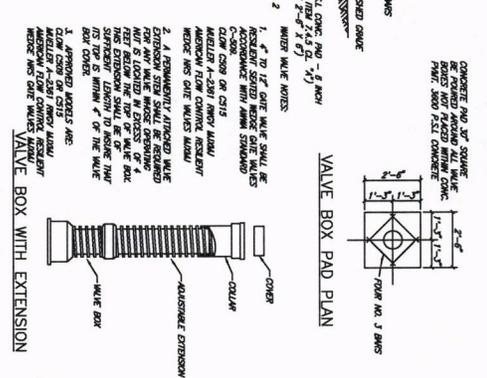
CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
WATER SERVICES / FIRE HYDRANT



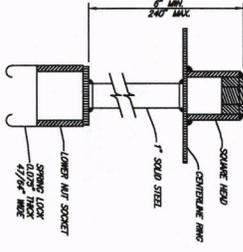
BUTTERFLY VALVE INSTALLATION
(BUTTERFLY)



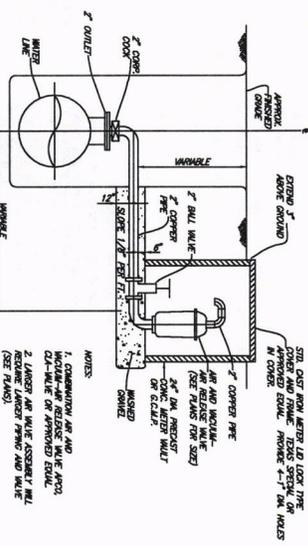
VALVE SETTING & BOX
(BUTTERFLY)



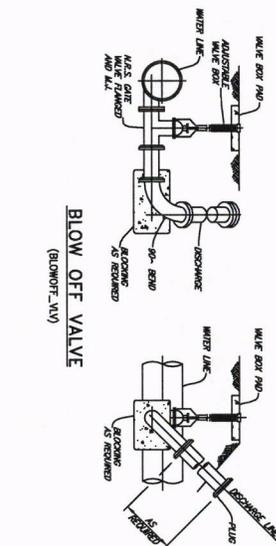
GATE VALVE INSTALLATION
(VERTICAL)



SPRING LOCK VALVE EXTENSION
(LOCK)



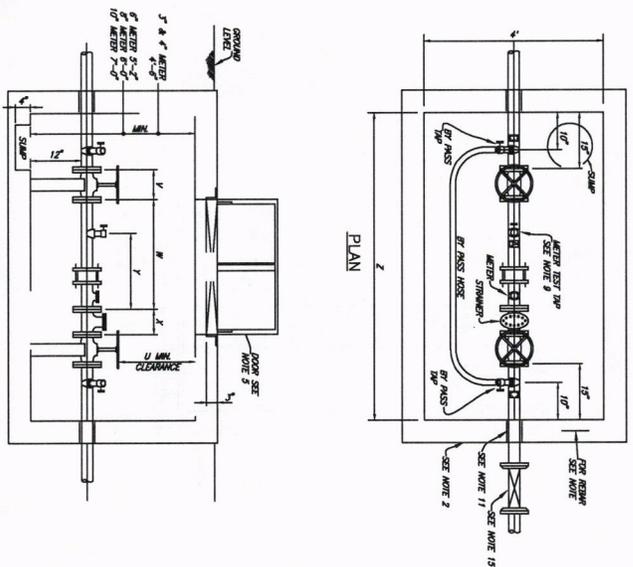
AIR AND VACUUM - AIR RELEASE VALVE INSTALLATION
(AIR VALVE)



BLOW OFF VALVE
(BLOWOFF VALVE)

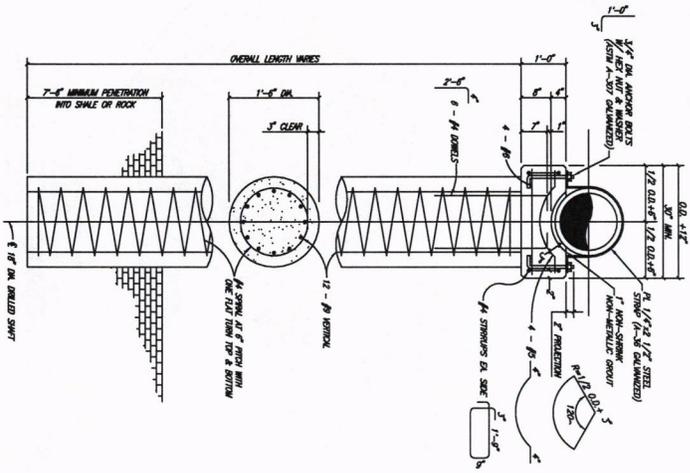


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
WATER VALVES

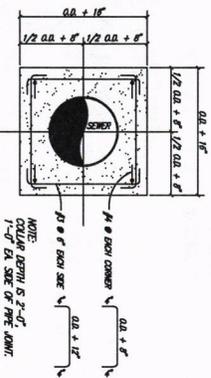


ELEVATION
 METER VAULT (METER VAULT2)

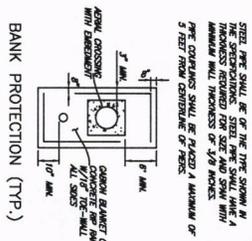
DOMESTIC		METER VAULT		REGULATION	
METER SIZE	U	METER SIZE	U	METER SIZE	U
3"	11-1/2"	6"	19-1/2"	12"	25-1/2"
4"	13-1/2"	8"	21-1/2"	14"	27-1/2"
6"	15-1/2"	10"	23-1/2"	16"	29-1/2"
8"	17-1/2"	12"	25-1/2"	18"	31-1/2"
10"	19-1/2"	14"	27-1/2"	20"	33-1/2"
12"	21-1/2"	16"	29-1/2"	22"	35-1/2"
14"	23-1/2"	18"	31-1/2"	24"	37-1/2"
16"	25-1/2"	20"	33-1/2"	26"	39-1/2"
18"	27-1/2"	22"	35-1/2"	28"	41-1/2"
20"	29-1/2"	24"	37-1/2"	30"	43-1/2"
22"	31-1/2"	26"	39-1/2"	32"	45-1/2"
24"	33-1/2"	28"	41-1/2"	34"	47-1/2"
26"	35-1/2"	30"	43-1/2"	36"	49-1/2"
28"	37-1/2"	32"	45-1/2"	38"	51-1/2"
30"	39-1/2"	34"	47-1/2"	40"	53-1/2"
32"	41-1/2"	36"	49-1/2"	42"	55-1/2"
34"	43-1/2"	38"	51-1/2"	44"	57-1/2"
36"	45-1/2"	40"	53-1/2"	46"	59-1/2"
38"	47-1/2"	42"	55-1/2"	48"	61-1/2"
40"	49-1/2"	44"	57-1/2"	50"	63-1/2"
42"	51-1/2"	46"	59-1/2"	52"	65-1/2"
44"	53-1/2"	48"	61-1/2"	54"	67-1/2"
46"	55-1/2"	50"	63-1/2"	56"	69-1/2"
48"	57-1/2"	52"	65-1/2"	58"	71-1/2"
50"	59-1/2"	54"	67-1/2"	60"	73-1/2"
52"	61-1/2"	56"	69-1/2"	62"	75-1/2"
54"	63-1/2"	58"	71-1/2"	64"	77-1/2"
56"	65-1/2"	60"	73-1/2"	66"	79-1/2"
58"	67-1/2"	62"	75-1/2"	68"	81-1/2"
60"	69-1/2"	64"	77-1/2"	70"	83-1/2"
62"	71-1/2"	66"	79-1/2"	72"	85-1/2"
64"	73-1/2"	68"	81-1/2"	74"	87-1/2"
66"	75-1/2"	70"	83-1/2"	76"	89-1/2"
68"	77-1/2"	72"	85-1/2"	78"	91-1/2"
70"	79-1/2"	74"	87-1/2"	80"	93-1/2"
72"	81-1/2"	76"	89-1/2"	82"	95-1/2"
74"	83-1/2"	78"	91-1/2"	84"	97-1/2"
76"	85-1/2"	80"	93-1/2"	86"	99-1/2"
78"	87-1/2"	82"	95-1/2"	88"	101-1/2"
80"	89-1/2"	84"	97-1/2"	90"	103-1/2"
82"	91-1/2"	86"	99-1/2"	92"	105-1/2"
84"	93-1/2"	88"	101-1/2"	94"	107-1/2"
86"	95-1/2"	90"	103-1/2"	96"	109-1/2"
88"	97-1/2"	92"	105-1/2"	98"	111-1/2"
90"	99-1/2"	94"	107-1/2"	100"	113-1/2"
92"	101-1/2"	96"	109-1/2"	102"	115-1/2"
94"	103-1/2"	98"	111-1/2"	104"	117-1/2"
96"	105-1/2"	100"	113-1/2"	106"	119-1/2"
98"	107-1/2"	102"	115-1/2"	108"	121-1/2"
100"	109-1/2"	104"	117-1/2"	110"	123-1/2"
102"	111-1/2"	106"	119-1/2"	112"	125-1/2"
104"	113-1/2"	108"	121-1/2"	114"	127-1/2"
106"	115-1/2"	110"	123-1/2"	116"	129-1/2"
108"	117-1/2"	112"	125-1/2"	118"	131-1/2"
110"	119-1/2"	114"	127-1/2"	120"	133-1/2"
112"	121-1/2"	116"	129-1/2"	122"	135-1/2"
114"	123-1/2"	118"	131-1/2"	124"	137-1/2"
116"	125-1/2"	120"	133-1/2"	126"	139-1/2"
118"	127-1/2"	122"	135-1/2"	128"	141-1/2"
120"	129-1/2"	124"	137-1/2"	130"	143-1/2"
122"	131-1/2"	126"	139-1/2"	132"	145-1/2"
124"	133-1/2"	128"	141-1/2"	134"	147-1/2"
126"	135-1/2"	130"	143-1/2"	136"	149-1/2"
128"	137-1/2"	132"	145-1/2"	138"	151-1/2"
130"	139-1/2"	134"	147-1/2"	140"	153-1/2"
132"	141-1/2"	136"	149-1/2"	142"	155-1/2"
134"	143-1/2"	138"	151-1/2"	144"	157-1/2"
136"	145-1/2"	140"	153-1/2"	146"	159-1/2"
138"	147-1/2"	142"	155-1/2"	148"	161-1/2"
140"	149-1/2"	144"	157-1/2"	150"	163-1/2"
142"	151-1/2"	146"	159-1/2"	152"	165-1/2"
144"	153-1/2"	148"	161-1/2"	154"	167-1/2"
146"	155-1/2"	150"	163-1/2"	156"	169-1/2"
148"	157-1/2"	152"	165-1/2"	158"	171-1/2"
150"	159-1/2"	154"	167-1/2"	160"	173-1/2"
152"	161-1/2"	156"	169-1/2"	162"	175-1/2"
154"	163-1/2"	158"	171-1/2"	164"	177-1/2"
156"	165-1/2"	160"	173-1/2"	166"	179-1/2"
158"	167-1/2"	162"	175-1/2"	168"	181-1/2"
160"	169-1/2"	164"	177-1/2"	170"	183-1/2"
162"	171-1/2"	166"	179-1/2"	172"	185-1/2"
164"	173-1/2"	168"	181-1/2"	174"	187-1/2"
166"	175-1/2"	170"	183-1/2"	176"	189-1/2"
168"	177-1/2"	172"	185-1/2"	178"	191-1/2"
170"	179-1/2"	174"	187-1/2"	180"	193-1/2"
172"	181-1/2"	176"	189-1/2"	182"	195-1/2"
174"	183-1/2"	178"	191-1/2"	184"	197-1/2"
176"	185-1/2"	180"	193-1/2"	186"	199-1/2"
178"	187-1/2"	182"	195-1/2"	188"	201-1/2"
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182"	191-1/2"	186"	199-1/2"	192"	205-1/2"
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186"	195-1/2"	190"	203-1/2"	196"	209-1/2"
188"	197-1/2"	192"	205-1/2"	198"	211-1/2"
190"	199-1/2"	194"	207-1/2"	200"	213-1/2"
192"	201-1/2"	196"	209-1/2"	202"	215-1/2"
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200"	209-1/2"	204"	217-1/2"	210"	223-1/2"
202"	211-1/2"	206"	219-1/2"	212"	225-1/2"
204"	213-1/2"	208"	221-1/2"	214"	227-1/2"
206"	215-1/2"	210"	223-1/2"	216"	229-1/2"
208"	217-1/2"	212"	225-1/2"	218"	231-1/2"
210"	219-1/2"	214"	227-1/2"	220"	233-1/2"
212"	221-1/2"	216"	229-1/2"	222"	235-1/2"
214"	223-1/2"	218"	231-1/2"	224"	237-1/2"
216"	225-1/2"	220"	233-1/2"	226"	239-1/2"
218"	227-1/2"	222"	235-1/2"	228"	241-1/2"
220"	229-1/2"	224"	237-1/2"	230"	243-1/2"
222"	231-1/2"	226"	239-1/2"	232"	245-1/2"
224"	233-1/2"	228"	241-1/2"	234"	247-1/2"
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228"	237-1/2"	232"	245-1/2"	238"	251-1/2"
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232"	241-1/2"	236"	249-1/2"	242"	255-1/2"
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238"	247-1/2"	242"	255-1/2"	248"	261-1/2"
240"	249-1/2"	244"	257-1/2"	250"	263-1/2"
242"	251-1/2"	246"	259-1/2"	252"	265-1/2"
244"	253-1/2"	248"	261-1/2"	254"	267-1/2"
246"	255-1/2"	250"	263-1/2"	256"	269-1/2"
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280"	289-1/2"	284"	297-1/2"	290"	303-1/2"
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284"	293-1/2"	288"	301-1/2"	294"	307-1/2"
286"	295-1/2"	290"	303-1/2"	296"	309-1/2"
288"	297-1/2"	292"	305-1/2"	298"	311-1/2"
290"	299-1/2"	294"	307-1/2"	300"	313-1/2"
292"	301-1/2"	296"	309-1/2"	302"	315-1/2"
294"	303-1/2"	298"	311-1/2"	304"	317-1/2"
296"	305-1/2"	300"	313-1/2"	306"	319-1/2"
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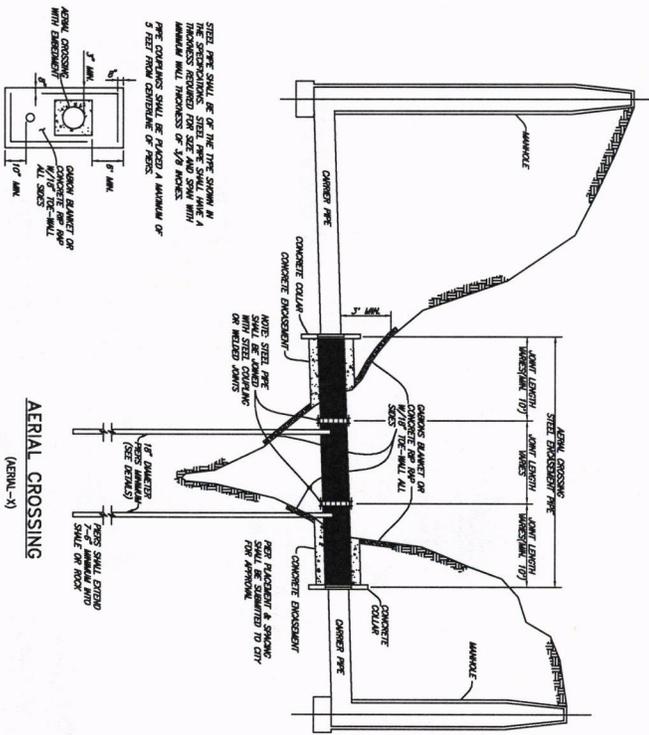
AERIAL CROSSING PIER & PIER CAP
(PIER)



AERIAL CROSSING CONCRETE COLLAR
(COLLAR)



BANK PROTECTION (TYP.)

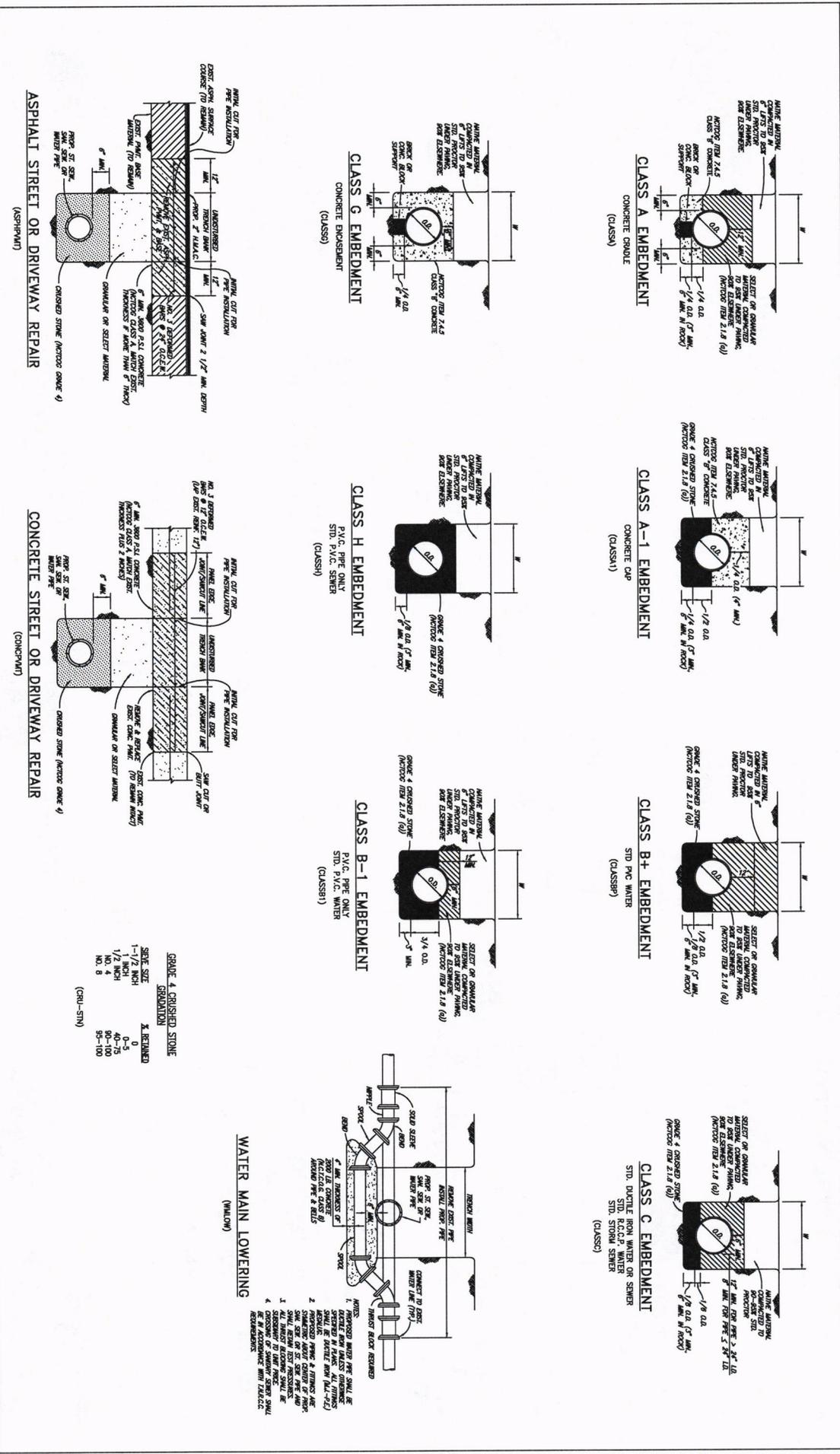


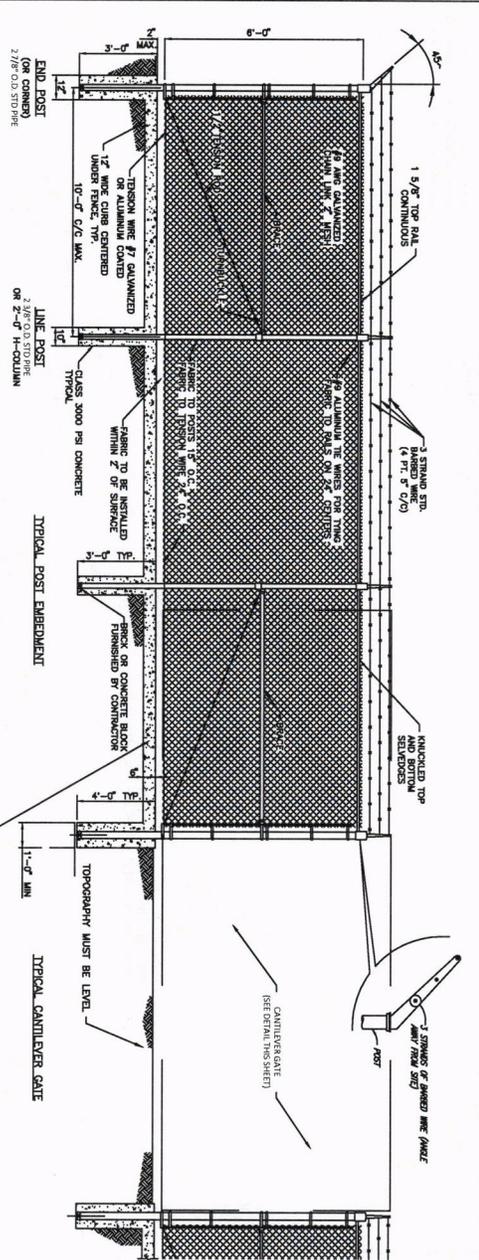
AERIAL CROSSING
(AERIAL-X)

NOTE:
ENGINEERING DESIGN SHALL BE SUBMITTED TO CITY FOR APPROVAL FOR USE FOR EACH CROSSING. PIERS SHALL BE PLACED AT MAXIMUM SPAN DISTANCE AS DICTATED BY ENGINEER'S DESIGN. ENGINEER'S DESIGN SHALL BE BASED UPON GEOTECHNICAL REPORT RECOMMENDING PIER PLACEMENT.

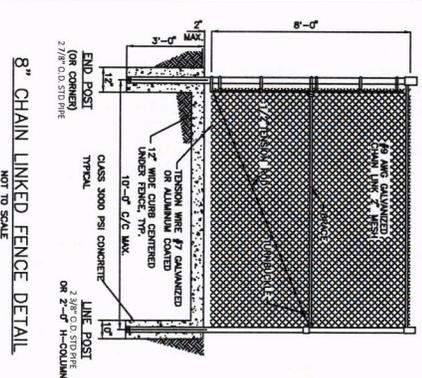
CITY OF DENISON, TEXAS

STANDARD CONSTRUCTION DETAILS TYPICAL EMBEDMENT

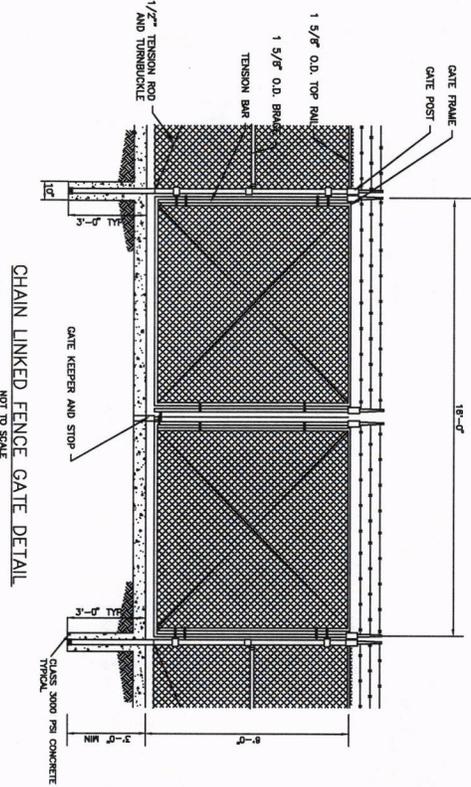




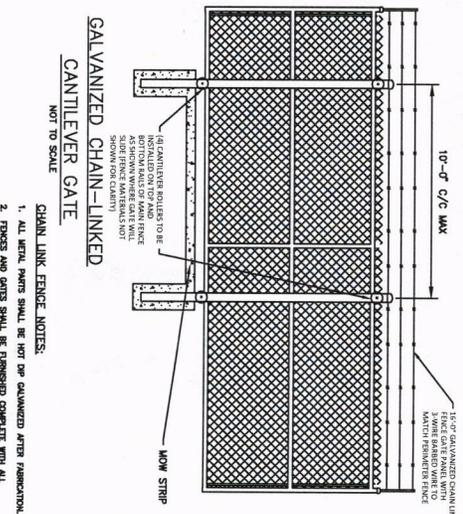
CHAIN LINKED FENCE DETAIL
NOT TO SCALE



8" CHAIN LINKED FENCE DETAIL
NOT TO SCALE



CHAIN LINKED FENCE GATE DETAIL
NOT TO SCALE

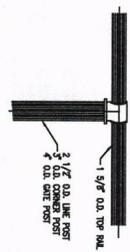


GALVANIZED CHAIN-LINKED
CANTILEVER GATE
NOT TO SCALE

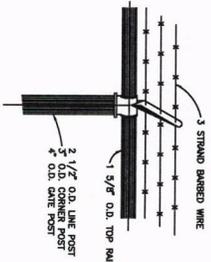
CHAIN LINK FENCE NOTES:

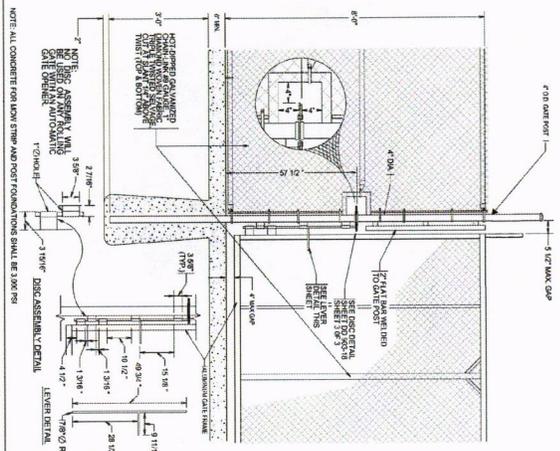
1. ALL METAL PARTS SHALL BE HOT DP GALVANIZED AFTER FABRICATION.
2. FENCES AND GATES SHALL BE FINISHED COMPLETE WITH ALL NECESSARY FINISHES AND HARDWARE AND ALL EXPOSED SURFACES SHALL BE MAINTENANCE STANDARD WHICH ALSO MEET THE REQUIREMENTS OF THIS DRAWING.
3. TOP GATES - SECTIONS OF FENCES, SLOE ROPE AND TENSIONERS SHALL BE MAINTENANCE STANDARD WHICH ALSO MEET THE REQUIREMENTS OF THIS DRAWING.
4. CANTILEVER GATE ONE MUST BE APPROVED BY CITY OF DENISON FROM TO 5. CANTILEVER GATE MUST BE CONSTRUCTED ON LEVEL GROUND, FINISHED WITH SLOPE WITHIN 0.1% OF THE GATE.
6. CONTRACTOR SHALL FINISH AND INSTALL AN AUTOMATIC GATE OPERATOR OR REMOTE CONTROL SYSTEM TO THE GATE.
7. FENCES SHALL BE FINISHED WITH 10\"/>

FENCE TOP
NO SCALE

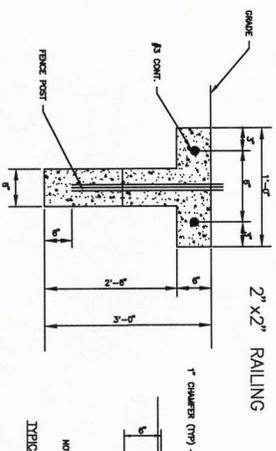


FENCE TOP
N.T.S.

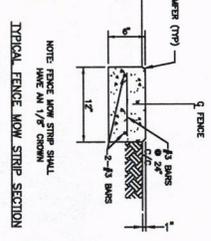




HEAVY DUTY CANTILEVER SLIDE GATE DETAIL
NOT TO SCALE

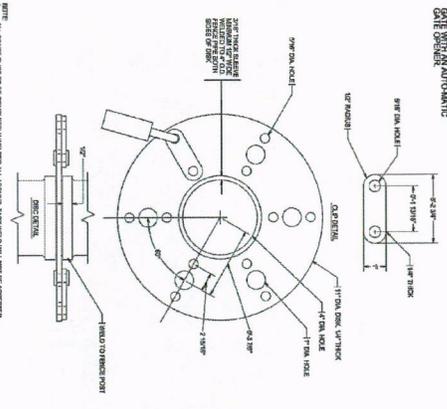


2" x 2" RAILING
NOT TO SCALE

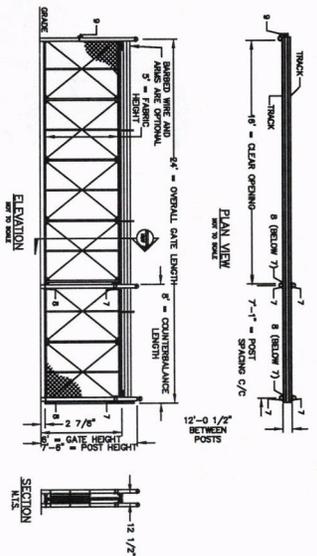


TYPICAL FENCE MOW STRIP SECTION
NOT TO SCALE

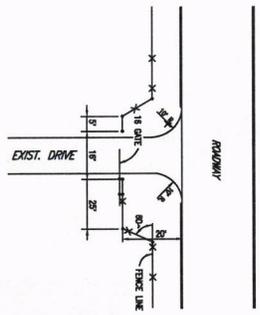
- NOTES:**
1. PROVIDE EXPANSION JOINTS AT MAXIMUM 117' O.C. AND AT INTERSECTIONS. PROVIDE SMOOTH CHORDS AT EQUAL SPACING. NOT TO EXCEED 5'-6" O.C. BRUSH FINISH. PROVIDE EXPANSION JOINT MATERIAL AGAINST ALL CURBS AND STRUCTURE.
 2. INSTALL TYPICAL MOW STRIP ALL AROUND UNPAVED AREAS OF ALL NEW STRUCTURES INCLUDING METER VAULTS, FENCES, AND MANHOLES.



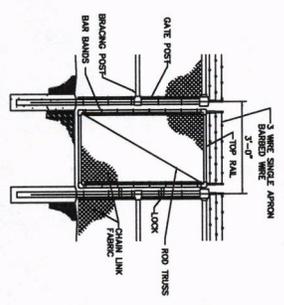
GATE HANGER ASSEMBLY
NOT TO SCALE



20' SET BACK CANTILEVER FENCE GATE DETAIL
NOT TO SCALE



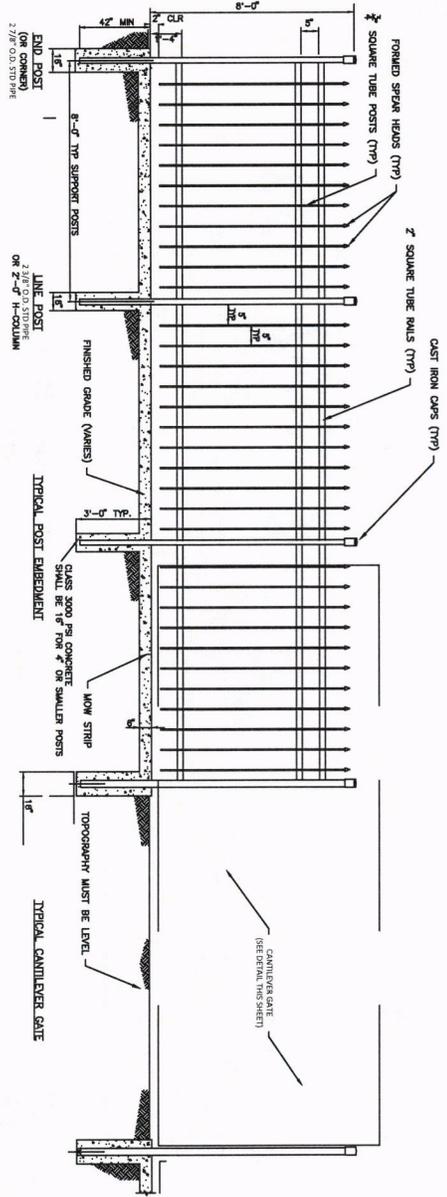
CHAIN-LINKED PEDESTRIAN GATE DETAIL
NOT TO SCALE



- NOTES:**
1. ALL FITTINGS STANDARDLY PROVIDED FOR 4" O.D. POSTS. OTHER SIZES AVAILABLE UPON REQUEST.
 2. BARB ARMS (FOR BARBED WIRE) INCLUDED FOR 8" GATE HEIGHT. GATE HEIGHT DOES NOT INCLUDE BARB ARMS OR BARB WIRE.

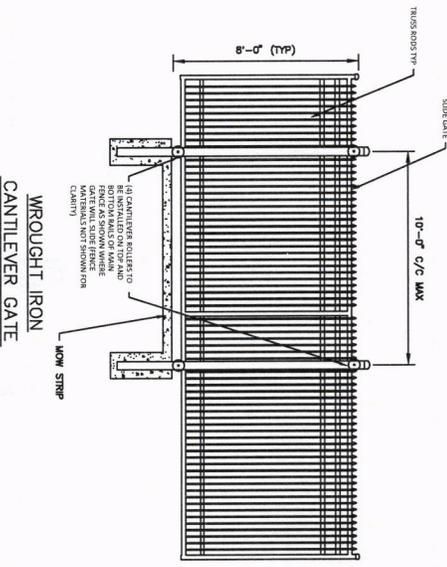


CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
CHAIN LINK FENCING

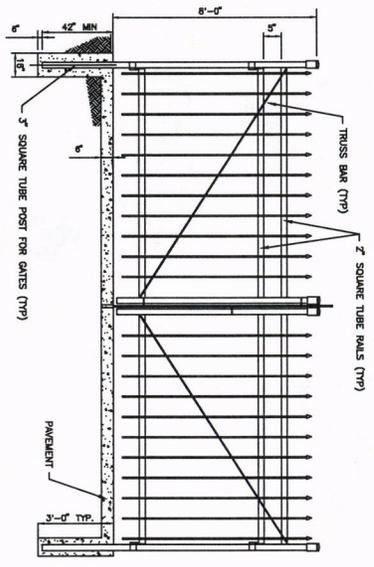


WROUGHT IRON FENCE DETAIL
NOT TO SCALE

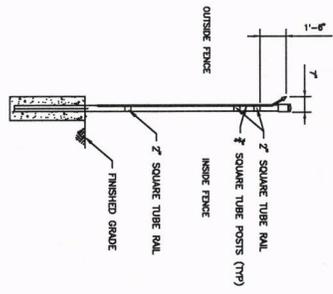
1. STEP DOWN FENCE IS REQUIRED TO FOLLOW GRADE WHILE MAINTAINING CONSTANT TYP OF FENCE ELEMENTS. POSTS TO C-301 TYP AND FINISH GRADE FOR ADDITIONAL INFORMATION AND DESIGN DETAILS.



WROUGHT IRON CANTILEVER GATE
NOT TO SCALE

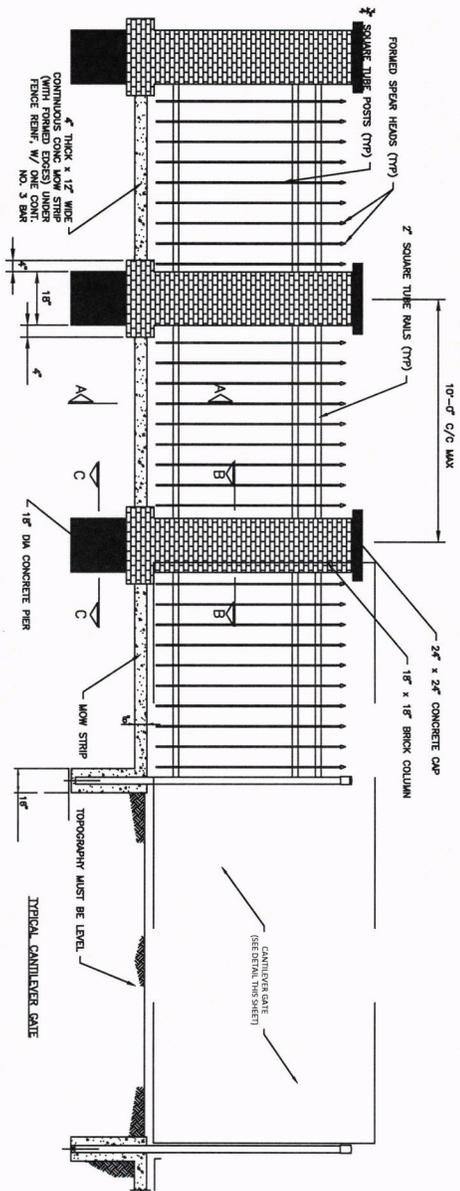


PRIVATE WROUGHT IRON SWING GATE DETAIL
NOT TO SCALE



SIDE VIEW OF WROUGHT IRON FENCE
NOT TO SCALE

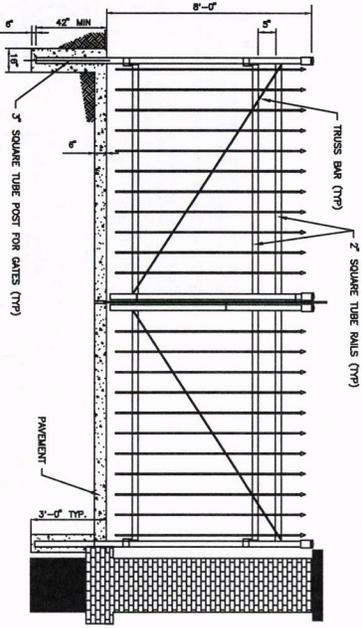
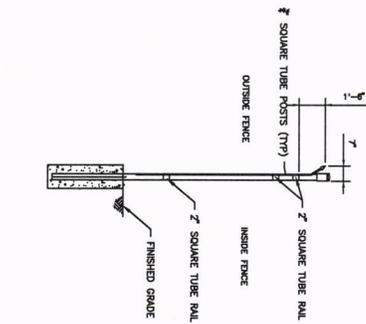
			
<p>CITY OF DENISON, TEXAS</p> <p>STANDARD CONSTRUCTION DETAILS</p> <p>WROUGHT IRON FENCING</p>			
<p>December, 2023</p>			
<p>33</p>			



WROUGHT IRON FENCE WITH BRICK
POSTS DETAIL
NOT TO SCALE

NOTES
1. STEP DOWN FENCE IS REQUIRED TO FOLLOW GRADE WHILE MAINTAINING
FLAT TOP SURFACE. SEE ELEVATION AND PROFILE
PLANS FOR ADDITIONAL REQUIREMENTS AND OTHER DETAILS.

SIDE VIEW OF WROUGHT IRON FENCE
NOT TO SCALE

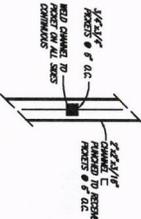


WROUGHT IRON SWING GATE WITH BRICK
POSTS DETAIL
NOT TO SCALE

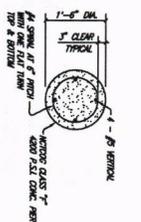
FENCE CONCRETE CAP
NO SCALE
(CONCRETE)



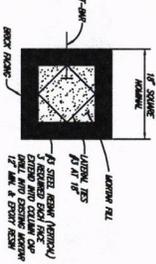
PLAN - FENCE RAIL AT PICKET
NO SCALE
(FRAMEWORK)



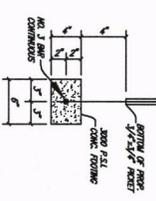
FENCE SECTION C-C
NO SCALE
(FRAMEWORK)



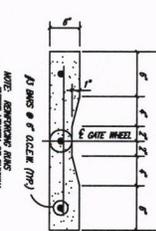
FENCE SECTION B-B
NO SCALE
(CONCRETE)



FENCE SECTION A-A
NO SCALE
(FRAMEWORK)



CONCRETE GATE WHEEL RUNWAY
NO SCALE
(CONCRETE)



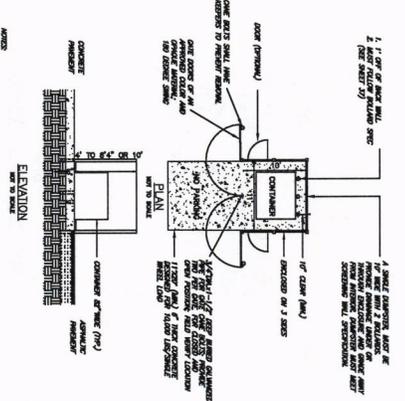
CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
WROUGHT IRON FENCING

December, 2023

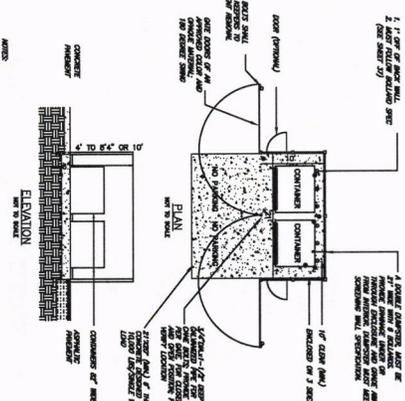
34

- DUMPSTER ENCLOSURES**
1. CHANGE CONTAINERS ARE REQUIRED TO BE SCREENED ON ALL SIDES, AND CONSTRUCTED SO AS TO BE ACCESSIBLE TO DOUBLE TRUCKS. PLYWOODS SCREENING SHALL BE 1/2" THICK AND SHALL BE 1/2" CLEAR OF THE CONTAINER. THE REQUIRED ENCLOSURE SHOULD BE FINISHED WITH THE REQUIREMENTS OF THE ZONING ORDINANCE AND THE MANUAL STANDARDS ADOPTED BY THE CITY.
 2. THE MANUAL HEIGHT OF THE SCREENING DEVICE FOR DOUBLE TRUCKS OR HEAVY CONTAINERS SHALL BE 10 FEET. THE MANUAL HEIGHT OF A SCREENING DEVICE IS 10 FEET.
 3. WHEN SITING A DUMPSTER ENCLOSURE ON A PROPERTY, APPLICANTS SHOULD CONSIDER THE SCREENING DEVICE TO BE LOCATED AT THE FRONT OF THE PROPERTY. ACCESS TO THE DUMPSTER, ACCESS TO THE ENCLOSURE AT LEAST 50 FEET STRAIGHT FROM THE SCREENING DEVICE FOR BACKING FOR FRONT LOADING AND A 20' APPROACH AND DEPARTURE CLEARANCE FOR SIDE LOADING, AND OTHER DETAIL THE SITE OR ADJACENT TO THE DUMPSTER, SHALL BE MAINTAINED. THE SCREENING DEVICE SHALL BE LOCATED WITHIN THE PROPERTY LINE AND BE LOCATED WITHIN THE PROPERTY LINE. LOCATIONS THAT REQUIRE A TRUCK TO PERSONAL DISCRETE BACKING (> 50 FEET) ARE DISCOURAGED.
 4. SCREENING GATES ARE REQUIRED TO BE SOLID METAL AND SCREEN THE DUMPSTER FROM VIEW WHEN CLOSED. GATES SHOULD SWING OUT TO AN ANGLE GREATER THAN 180 DEGREES. GATES SHOULD BE 1/2" CLEAR OF THE ENCLOSURE. GATES SHOULD ALSO SWING CLEAR OF ALL PRELIMINARY WALLS WHEN OPEN. ACCESS, GATES SHOULD ALSO SWING CLEAR OF ALL PRELIMINARY WALLS WHEN OPEN.
 5. SCREENING (DUMPSTERS) IS REQUIRED AROUND SCREENING WALLS WHETHER THEY ARE CONCRETE OR METAL. SCREENING SHALL BE 1/2" CLEAR OF THE WALLS.
 6. FOR MORE INFORMATION ABOUT THE MANUAL STANDARDS FOR DUMPSTER ENCLOSURES, VISIT THE CITY OF DENISON WEBSITE AT WWW.DENISONTX.GOV.
 7. PROPERTY OWNER MUST CONTACT THE ENGINEERING SERVICES TO OBTAIN PROPER SIZE AND QUANTITY OF DUMPSTERS/CONTAINERS NEEDED TO ENSURE ADEQUATE STORAGE AND WASTE COLLECTION AND SERVICE NEEDS.

SINGLE CONTAINER DUMPSTER ENCLOSURE
NOT TO SCALE



DOUBLE CONTAINER DUMPSTER ENCLOSURE
NOT TO SCALE



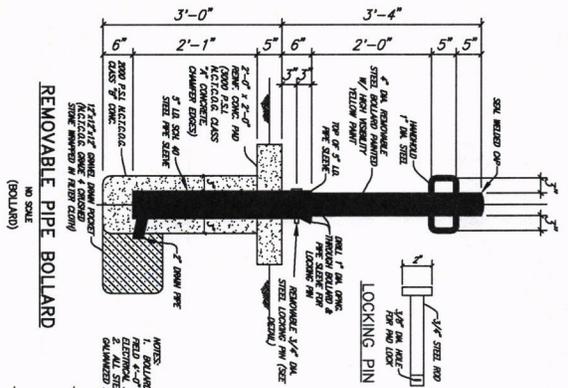
CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM



PROJECT: 12/4/23 - Columbia
 I:\del\2023\08\01 denison design standards update\production\denison--M.dwg
 PLOT SCALE: 1:2 PLOT STYLE: monochrome.ctb PLOTTED BY: Colton Starnes ON: 12/1/2023

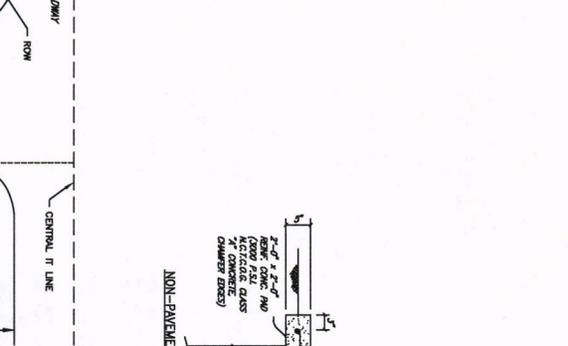
CITY OF DENISON, TEXAS
 STANDARD CONSTRUCTION DETAILS
 DUMPSTER DETAILS

December, 2023
 SHEET NO.
35



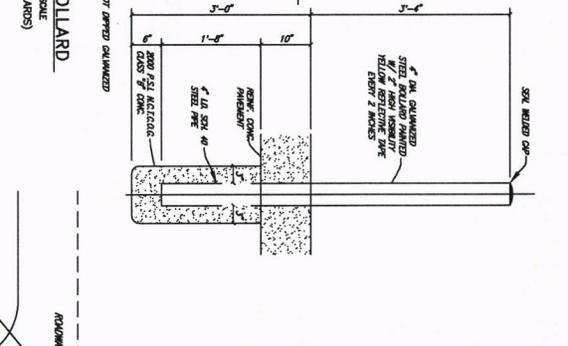
REMOVABLE PIPE BOLLARD
(NO SCALE)

NOTE:
PIPE BOLLARDS SHALL BE LOCATED IN THE FIELD & NOT AT THE END OF THE DRIVEWAY. ALL STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.



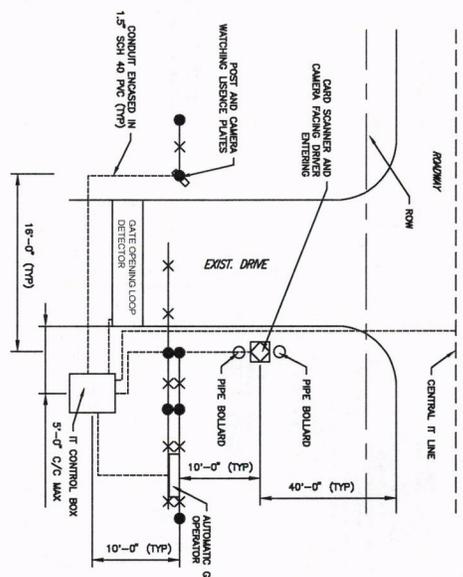
NON-PAVEMENT LOCATIONS

NOTE:
ALL STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.



PIPE BOLLARD
(NO SCALE)

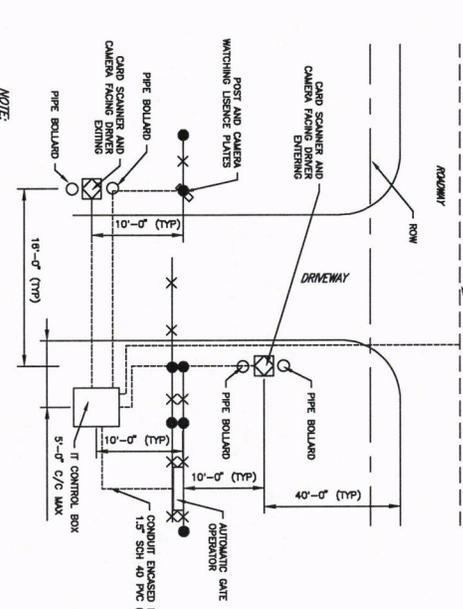
NOTE:
ALL STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.



REMOVABLE PIPE BOLLARD
(NO SCALE)

NOTE:
A. CITY OF DENISON I.T. DEPARTMENT TO PROVIDE CAMERAS, CARDS/SCANNERS & I.T. CONTROL BOX

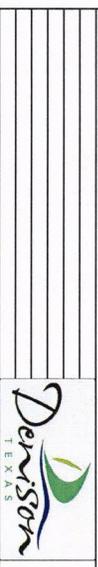
I.T. SET UP FOR CANTILEVER FENCE GATE DETAIL (PUBLIC)
NOT TO SCALE



PIPE BOLLARD
(NO SCALE)

NOTE:
A. CITY OF DENISON I.T. DEPARTMENT TO PROVIDE CAMERAS, CARDS/SCANNERS & I.T. CONTROL BOX

I.T. SET UP FOR CANTILEVER FENCE GATE DETAIL (PRIVATE)
NOT TO SCALE



REVISION: 12/4/23 - Clarifications

FILED: 10/27/2023 10:01 AM DENISON, TEXAS

PLOT SCALE: 1:2

PLOT STYLE: monochrome.ctb

PLotted By: Colton Starnes ON 12/1/2023

CITY OF DENISON, TEXAS

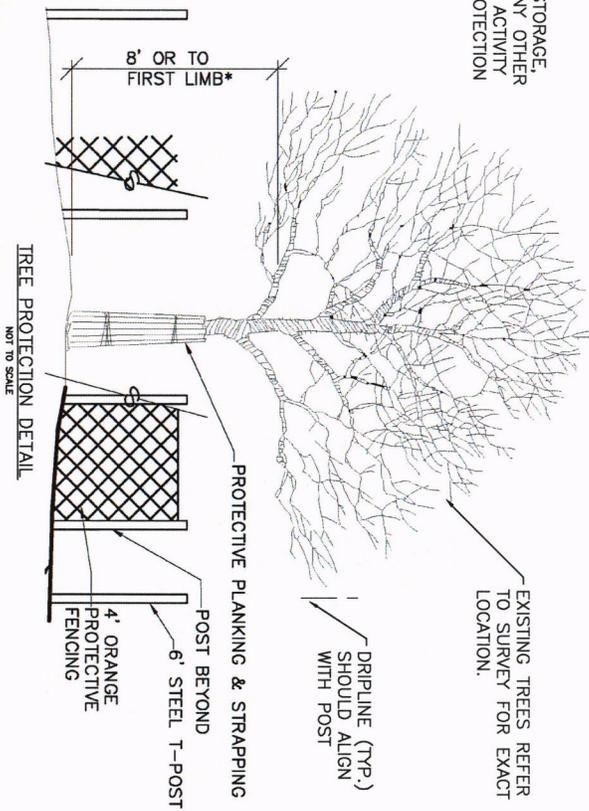
STANDARD CONSTRUCTION DETAILS

PIPE BOLLARD AND I.T. DETAIL FOR GATE

December, 2023

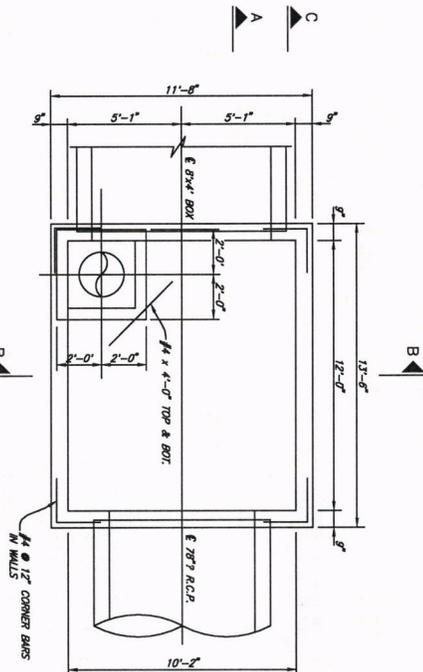
SHEET NO. 37

NO GRADING, STORAGE, PARKING OR ANY OTHER CONSTRUCTION ACTIVITY WITHIN THE PROTECTION FENCE

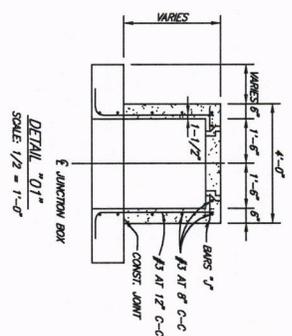


- NOTE:
- A. ANY TREE PRUNING MUST HAVE PRIOR APPROVAL BY LANDSCAPE ARCHITECT. REFER TO PLANNING PLAN FOR PLANT DEMO.
 - B. PRIOR TO GRADING, BRUSH REMOVAL, OR CONSTRUCTION, THE DEVELOPER SHALL CLEARLY TAG OR MARK ALL TREES TO BE PRESERVED.
 - C. THE DEVELOPER SHALL ERECT PROTECTIVE FENCING AROUND EACH TREE OR GROUP OF TREES TO PREVENT THE PLACEMENT OF DEBRIS OR FILL WITHIN THE ROOT PROTECTION ZONE. THE FENCE SHALL BE INSTALLED PRIOR TO THE RELEASE OF ANY PERMIT. IF THE PROTECTION FENCE IS FOUND REMOVED, DOWN, OR ALTERED AT ANY TIME DURING CONSTRUCTION PRIOR TO FINAL INSPECTION OR LANDSCAPE INSTALLATION, A STOP WORK ORDER MAY BE ISSUED.
 - D. DURING THE CONSTRUCTION PHASE OF DEVELOPMENT, THE DEVELOPER SHALL ESTABLISH A CONSTRUCTION ENTRANCE THAT AVOIDS PROTECTED TREES AND PROHIBIT CLEANING, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS UNDER THE CANOPY OF ANY TREE OR GROUP OF TREES BEING PRESERVED. THE DEVELOPER SHALL NOT ALLOW THE DISPOSAL OF ANY WASTE MATERIAL SUCH AS, BUT NOT LIMITED TO, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, ETC. IN THE CANOPY AREA.
 - E. NO ATTACHMENTS OR WIRES OF ANY KIND, OTHER THAN THOSE OF A PROTECTIVE NATURE SHALL BE ATTACHED TO ANY TREE.
 - F. NO FILL OR EXCAVATION MAY OCCUR WITHIN THE DRP LINE OF A TREE TO BE PRESERVED UNLESS THERE IS A SPECIFIC APPROVED PLAN FOR USE OF TREE WELLS OR RETAINING WALLS. MAJOR CHANGES OF GRADE, SW (6) DITCHES OR GRADERS WILL REQUIRE ADDITIONAL MEASURES TO MAINTAIN PROPER OXYGEN AND WATER EXCHANGE WITH THE ROOTS.



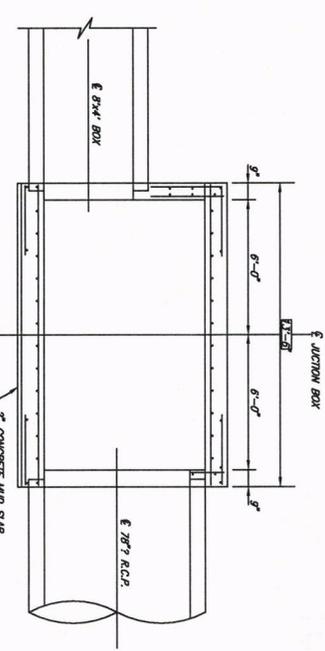


PLAN-JUNCTION BOX
3/8" = 1'-0"

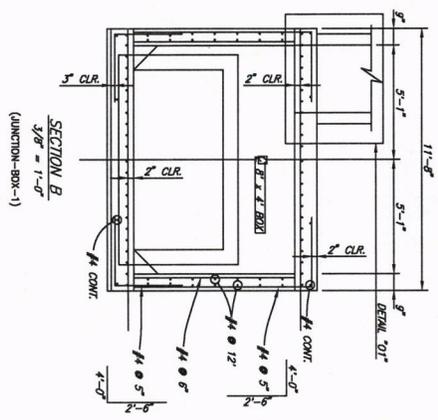


DETAIL "D1"
SCALE: 1/2" = 1'-0"

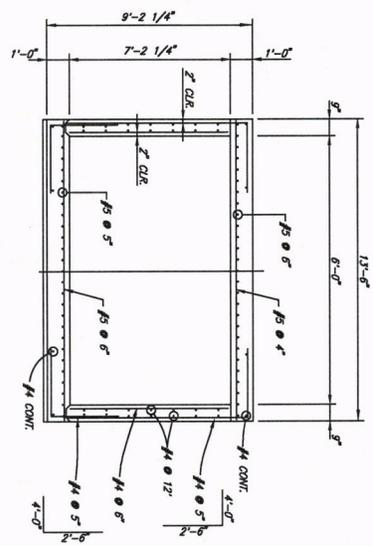
- NOTE:
1. CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF MICHLE'S STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 2. CONCRETE SHALL BE CLASS "C" - 3,000 P.S.I.
 3. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.
 4. FIELD CUT REINFORCING STEEL TO CLEAR PRECAST BOX AND R.C.P. BY 2".



SECTION A
3/8" = 1'-0"



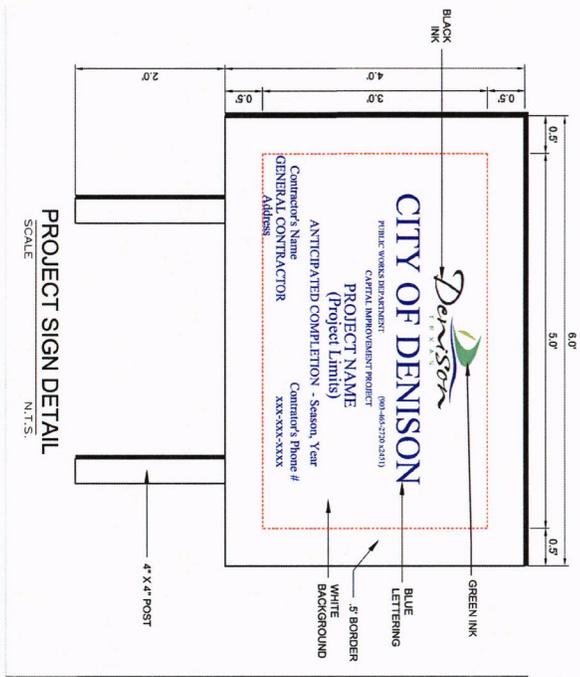
SECTION B
3/8" = 1'-0"
(JUNCTION-BOX-1)



SECTION C
3/8" = 1'-0"



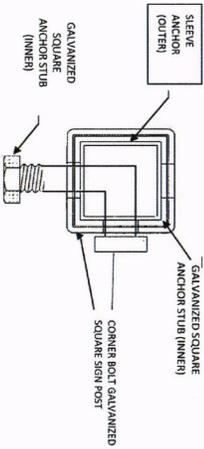
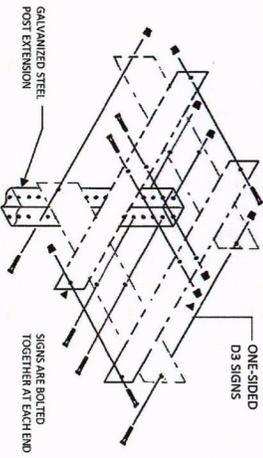
CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
JUNCTION BOX



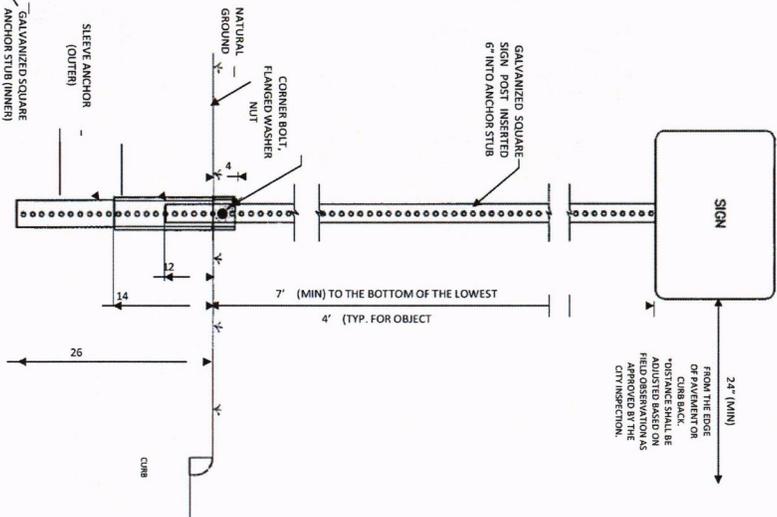
PROJECT SIGN DETAIL
SCALE: N.T.S.

Color Palette

	PMS 482 C100 M88 Y0 K20 R10 G28 B119		PMS 443 C21 M3 Y1 K2 R198 G211 B223		PMS 558 C05 M5 Y27 K15 R172 G164 B137
	PMS 497 C90 M13 Y68 K05 R137 G143 B 75		PMS 477 C22 M7 Y51 K22 R103 G188 B107		PMS 808 C05 M0 Y0 K100 R100 G00 B20



TYPICAL GROUND SIGN INSTALLATION
PERFORATED SQUARE METAL TUBING



TYPICAL STOP SIGN AND
STREET NAME SIGN INSTALLATION

SLEEVE DETAILS

GALVANIZED SQUARE SIGN POST EXTENSION (PERFORATED)	1-1/2" x 1-1/2" (14 GAUGE)
GALVANIZED SQUARE SIGN POST (PERFORATED)	1-3/4" x 1-3/4" (14 GAUGE)
GALVANIZED SQUARE SIGN POST (PERFORATED) (INNER)	2" x 2" x 30" (14 GAUGE)
GALVANIZED SQUARE SIGN POST (PERFORATED) (OUTER)	2 3/4" x 2 3/4" x 18" (14 GAUGE)

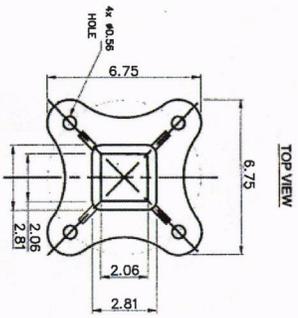


CITY OF DENISON, TEXAS

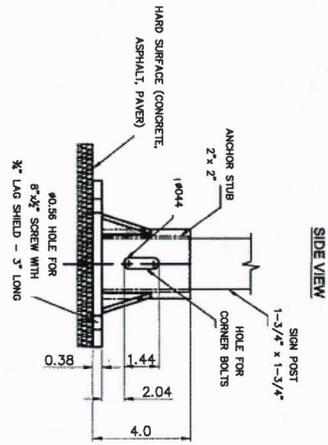
STANDARD CONSTRUCTION DETAILS
GROUND MOUNTED STREET NAME BLADE & PROJECT SIGN DETAILS

December, 2023

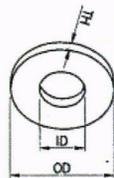
TYPICAL HARD SURFACE INSTALLATION GALVANIZED SIGN BASE
 (USED ONLY WHEN UNDERGROUND CONDITIONS PROHIBIT USE OF STANDARD ANCHOR SLEEVE
 - APPROVAL FROM PUBLIC WORKS DIRECTOR OR DESIGNER NEEDED PRIOR TO USE)



NOTES:
 1. HOT DIP GALVANIZE PER ASTM A-153
 2. ALL DIMENSIONS ARE IN INCHES



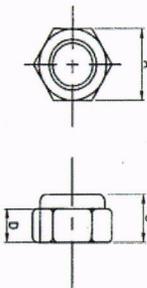
1/2" FLAT WASHERS, LOW CARBON, SAE ZINC PLATED



SAE FLAT WASHERS		OD		THICKNESS-TH	
SIZE	TOLERANCE	BASIC PLUS	MINUS	BASIC PLUS	MINUS
1/2	0.018	0.018	0.008	1.082	0.074
				0.030	0.121

DIMENSIONS: ASME B18.21.1, TYPE A PLAIN WASHERS
 MATERIAL: CARBON STEEL
 FINISH: Fe/Zn 3MT PER ASTM F1941

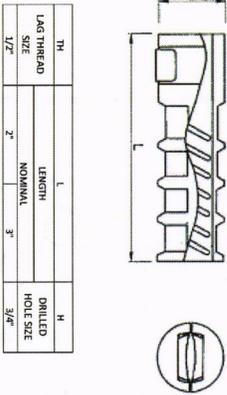
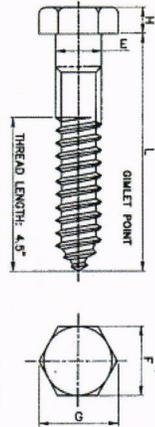
HEX NYLON INSERT LOCKNUTS (NE), GRADE 8, YELLOW ZINC PLATED



SIZE	THICKNESS	WIDTH ACROSS FLATS	HEIGHT
1/2	0.39	0.50	0.25

DIMENSIONS: ASME B18.21.1
 MATERIAL: CARBON STEEL, GRADE 8 PER ASME B18.16.8, NYLON *
 THREAD REQUIREMENTS: ASME B1.1 UNCLD UNG CLASS 2B

8" HEX LAG SCREWS, HOT DIPPED GALVANIZED



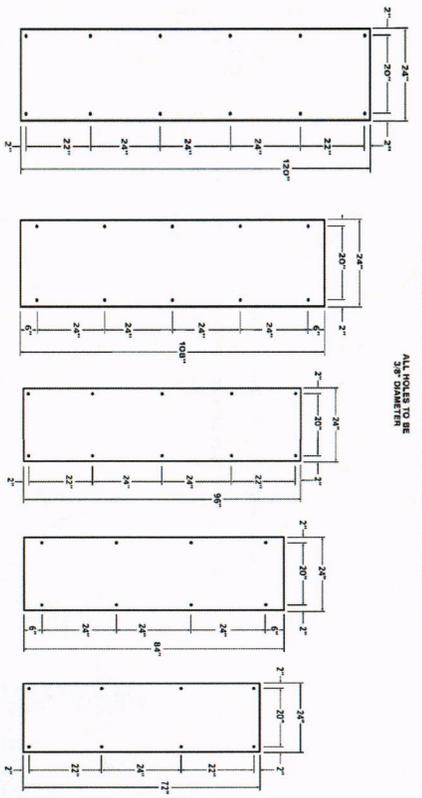
TH	L	H
LAG THREAD SIZE	LENGTH NOMINAL	DRILLED HOLE SIZE
1/2"	3"	3/4"

DIAMETER	BODY DIAMETER	WIDTH ACROSS FLATS	WIDTH ACROSS CORNERS	HEIGHT	LENGTH
1/2"	0.515	0.482	0.35	0.86	0.75

MATERIAL: PER A307 GRADE A
 COATING: HOT DIP ZINC PER ASTM F2329 OR IN ACCORDANCE WITH CLASS C OF ASTM AND CLASS D FOR 3/8" DIAMETER OR LARGER

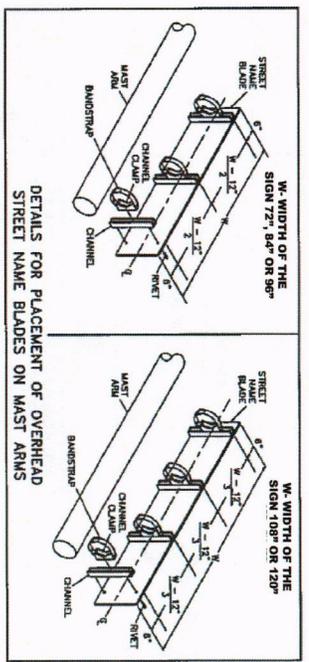


D3-1 OVERHEAD SIGN PANEL DIMENSIONS

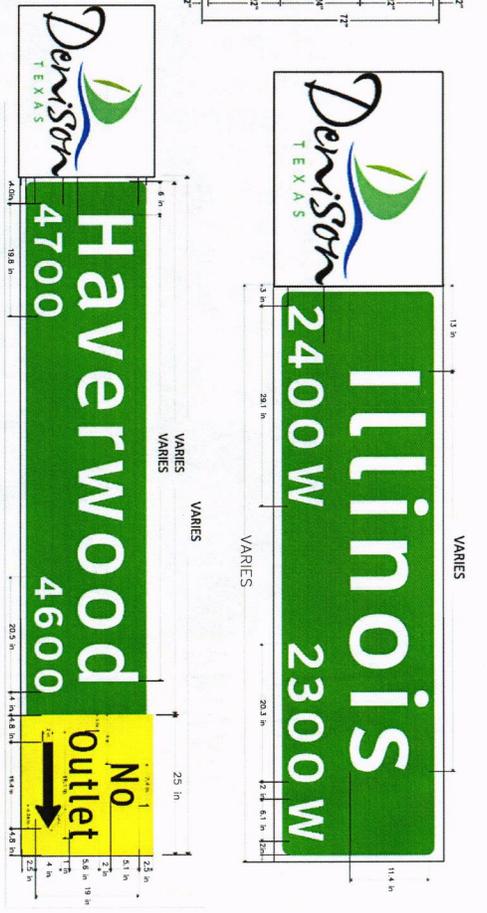


HEIGHT	24"
LENGTH	72", 84", 96", 108", or 120"
THICKNESS	0.100"
SUBSTRATE	ALUMINUM ALLOY, 5052-H38 (ASTM B-209)
SIGN FACE MATERIAL	GREEN FILM OVER ASTM-4956 TYPE XI FULL CURE PRISMATIC GRADE RETROREFLECTIVE SHEETING OR EQUIVALENT
SIGN FONT	CLEARVIEW HWY SW
COLOR	LETTERS - WHITE REFLECTIVE BACKGROUND - GREEN FILM

DETAILS FOR MOUNTING TRAFFIC SIGNS ON SIGNAL MAST ARMS AND POLES



D3-1 OVERHEAD STREET NAME SIGN EXAMPLES (DIMENSIONS SHOWN ARE TYPICAL)



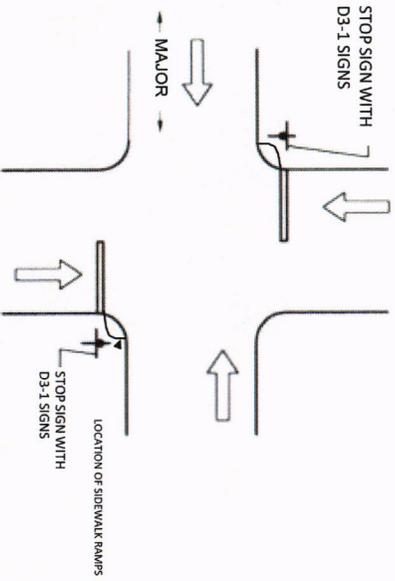
NOTE: SIGN LENGTH WILL BE DICTATED BY THE NUMBER OF LETTERS IN THE NAME. THE HEIGHT SHALL BE 24"



CITY OF DENISON, TEXAS
STANDARD CONSTRUCTION DETAILS
OVERHEAD STREET NAME BLADE (D3-1) DETAILS

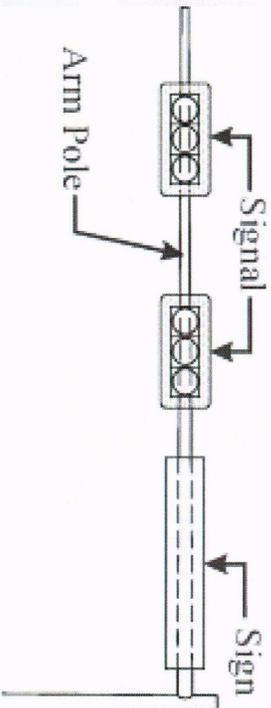
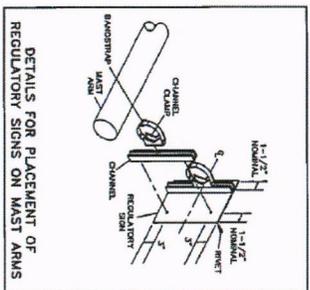
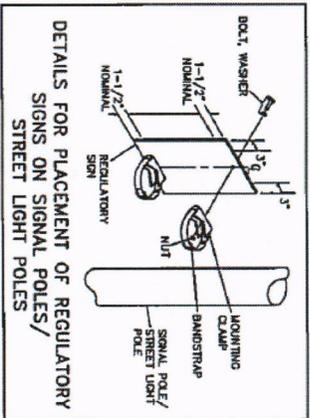
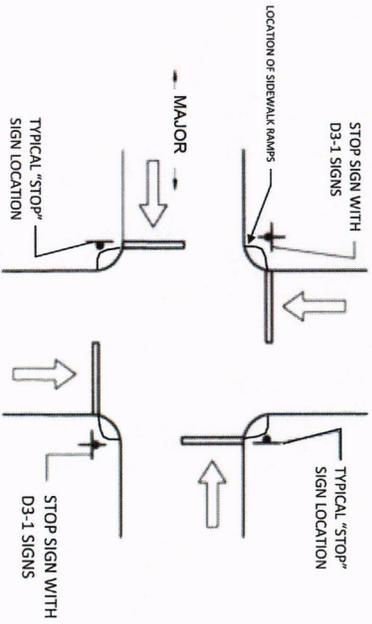
December, 2023

TWO-WAY STOP CONTROL INTERSECTION



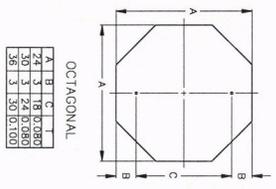
**STOP SIGNS ARE TO BE INSTALLED IN ADVANCE OF CROSSWALK AND RAMP

ALL-WAY STOP CONTROL INTERSECTION



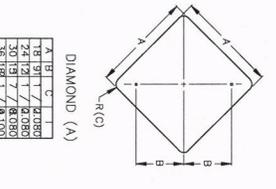
TYPICAL SIGN PLACEMENTS ON SIGNAL MAST ARMS

		CITY OF DENISON, TEXAS STANDARD CONSTRUCTION DETAILS TYPICAL STREET NAME SIGN PLACEMENTS		December 2023	SHEET NO. 44
REVISED: 12/4/23 - Codebook updates	PLOT SCALE: 1/2" = 1'-0"	PLOT STYLE: monochrome.ctb	PLOTTED BY: Colton Stevens ON 12/17/2023		
P:\data\2023\106101 Denison design standards\update\production drawings\Denison-43.dwg					



OCTAGONAL

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	JK	KL	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KL	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	VV	VW	VX	VY	VZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
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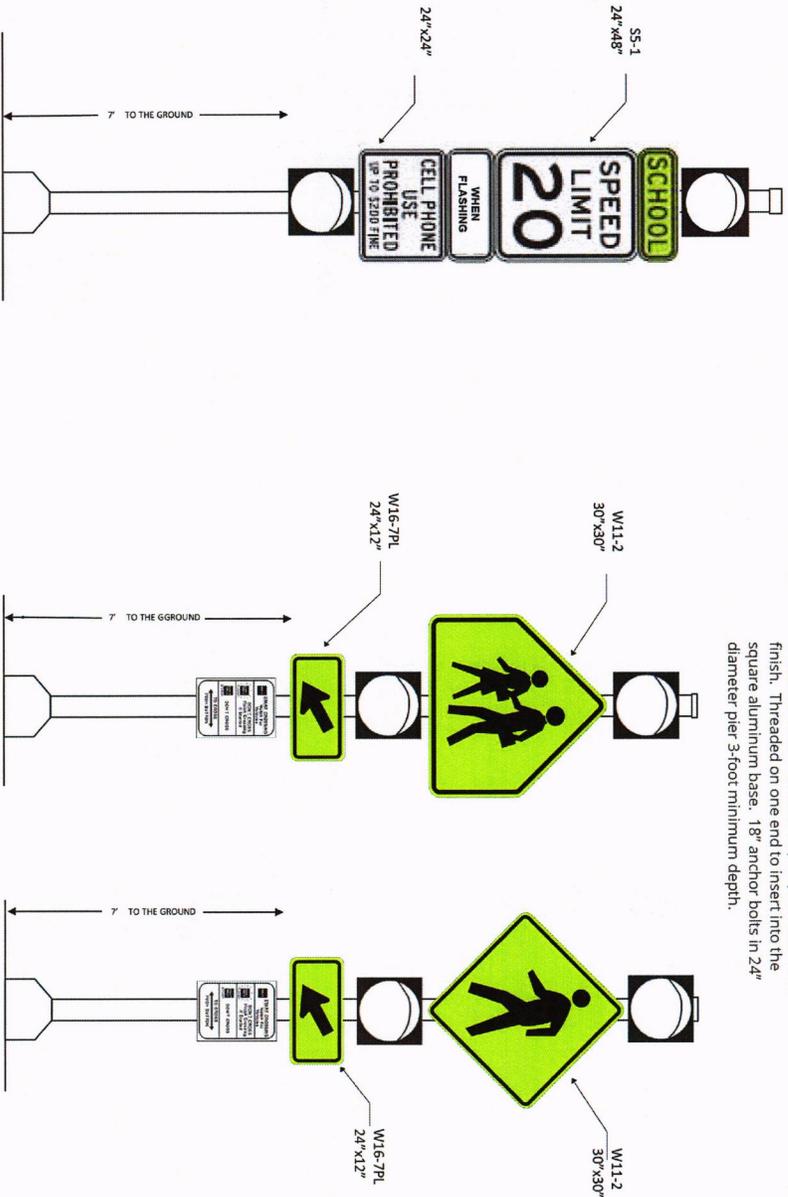


DIAMOND (A)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	JK	KL	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KL	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ
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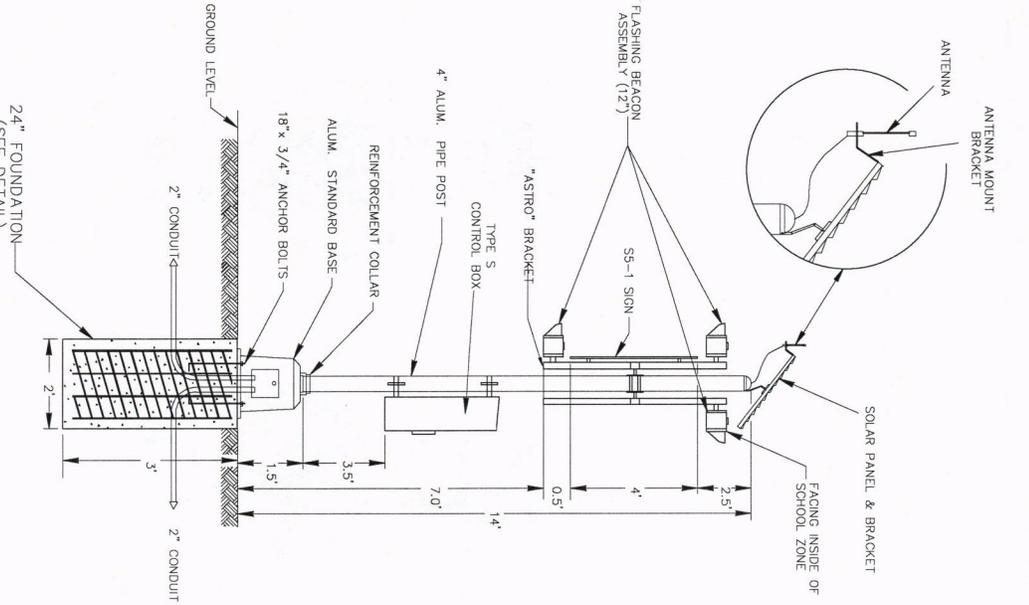
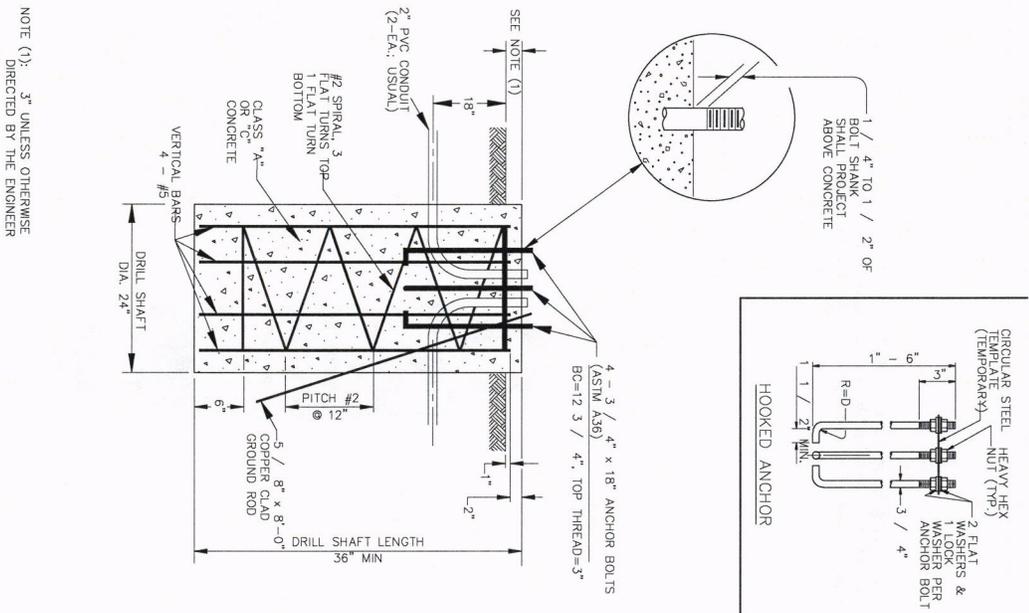
SCHOOL FLASHERS - FLASHING BEACONS

Poles are 4-1/2" O.D. with a spun pole aluminum finish. Threaded on one end to insert into the square aluminum base. 18" anchor bolts in 24" diameter pier 3-foot minimum depth.



*INSTALL A 12" WHITE TRANSVERSE LINE ACROSS THE FULL PAVEMENT WIDTH TO MARK EACH END OF ESTABLISHED REDUCED SCHOOL SPEED LIMIT WITHIN THE SCHOOL ZONE IN ACCORDANCE WITH TMUTCD SECTION 7C.03

		CITY OF DENISON, TEXAS	
STANDARD CONSTRUCTION DETAILS TYPICAL SCHOOL ZONE FLASHER ASSEMBLY		December, 2023	
SHEET NO.		46	



<p>END SCHOOL ZONE SPEED LIMIT 30</p>	<p>← S5-2A (COSA) 24" x 9" R2-1 24" x 30"</p>
<p>S1-1 36" x 36"</p>	<p>← S1-1 36" x 36"</p>
<p>SCHOOL SPEED LIMIT 20 WHEN FLASHING</p>	<p>← (DIAMOND GRADE FLUORESCENT YELLOW GREEN) S5-1 24" x 48" (HIGH INTENSITY WHITE)</p>
<p>W16-17 30" x 18"</p>	<p>← (DIAMOND GRADE FLUORESCENT YELLOW GREEN) W16-17 30" x 18"</p>
<p>AHEAD</p>	<p>← (DIAMOND GRADE FLUORESCENT YELLOW GREEN) W16-9P 36" x 20"</p>

ALL SIGNS SHALL COMPLY WITH STANDARD HIGHWAY SIGNS MANUAL, LATEST EDITION

NOTE (1): 3" UNLESS OTHERWISE DIRECTED BY THE ENGINEER

