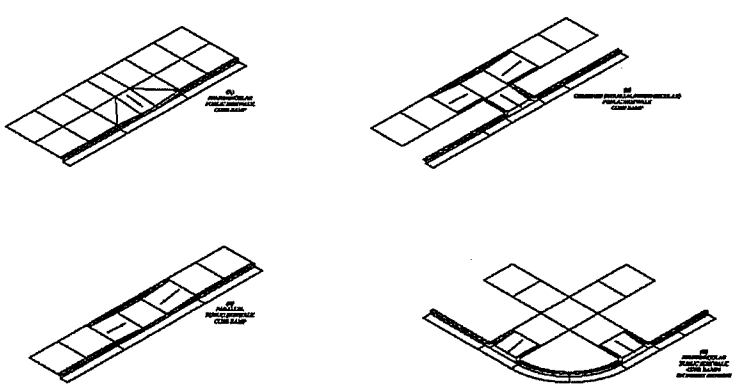
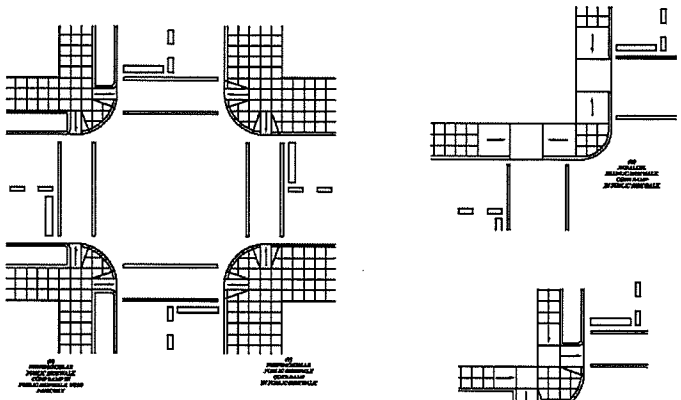
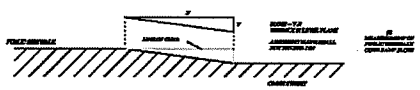


PUBLIC SIDEWALK CURB RAMPS



PUBLIC SIDEWALK CURB RAMPS AT MARKED CROSSINGS



ADA ACCESSIBILITY GUIDELINES
FOR BUILDINGS AND FACILITIES

SECTION 14.2.4
PUBLIC SIDEWALK CURB RAMPS
(AS PUBLISHED IN FEDERAL REGISTER, JUNE 26, 1991)

(1) GENERAL

(A) A PUBLIC SIDEWALK CURB RAMP AND LEVEL LANDING COMPLYING WITH 14.2.4 SHALL BE PROVIDED WHERE(EVER) A PUBLIC SIDEWALK CROSSES A CURB OR OTHER CHANGE IN LEVEL AT EACH STREET CROSSING AND WHERE OTHER WISE REQUIRED IN THIS SECTION AND SHALL BE CONNECTED TO A CONTINUOUS PASSAGE IN EACH DIRECTION OF TRAVEL.

(B) THE PROVISIONS OF [sections] 4.7 AND 4.8 DO NOT APPLY TO PUBLIC SIDEWALK CURB RAMPS.

(2) TYPES OF PUBLIC SIDEWALK CURB RAMPS
PUBLIC SIDEWALK CURB RAMPS SHALL BE PERPENDICULAR TO THE CURB AT STREET CROSSINGS AND EACH SHALL BE WITH A LEVEL LANDING AT THE TOP [SEE FIG. (A)]. AT MARKED CROSSINGS, THE BOTTOM OF THE RAMP RUN, EXCLUSIVE OF FLARED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS [SEE FIGS. (B) AND (F)]. SINGLE (ie., DIAGONAL OR DEPRESSED CORNER) PUBLIC SIDEWALK CURB RAMPS SERVING TWO STREET CROSSING DIRECTIONS AND BUILT-UP (ie., PROJECTED) PUBLIC SIDEWALK CURB RAMPS ARE NOT PERMITTED IN NEW CONSTRUCTION.

EXCEPTION: WHERE PUBLIC PEDESTRIAN RIGHT-OF-WAY WIDTH ESTABLISHED BY LOCAL OR STATE REGULATION, GUIDELINES, OR PRACTICE WILL NOT ACCOMMODATE A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP AND LANDING CONFIGURE WITH 14.2.4(2), A PARALLEL PUBLIC SIDEWALK CURB RAMP WITH A LEVEL LANDING AT ITS BOTTOM SHALL BE PROVIDED INSTEAD OF A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP [SEE FIG. (E)]. AT MARKED CROSSINGS, THE LANDING AT THE BOTTOM OF THE RAMP RUN SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS [SEE FIG. (C)]. A COMBINATION OF PARALLEL AND PERPENDICULAR PUBLIC SIDEWALK CURB RAMPS AND LANDINGS MAY ALSO BE PROVIDED [SEE FIGS. (C) AND (D).

(3) WIDTH
PUBLIC SIDEWALK CURB RAMPS SHALL BE 36 IN. (915 MM) WIDE MINIMUM, EXCLUSIVE OF FLARED SIDES.

(4) LANDINGS

(A) WHERE A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP IS PROVIDED, A LANDING THE WIDTH OF THE PUBLIC SIDEWALK CURB RAMP SHALL BE PROVIDED AT THE TOP OF THE RAMP RUN [SEE FIG. (A)]. THE SLOPE OF THE LANDING SHALL NOT EXCEED 1:50 IN ANY DIRECTION. THE LANDING SHALL BE 48 IN. (1220 MM) MINIMUM IN LENGTH AND SHALL CONNECT TO THE CONTINUOUS PASSAGE IN EACH DIRECTION OF TRAVEL.

(B) WHERE A PARALLEL PUBLIC SIDEWALK CURB RAMP IS PROVIDED, AS PERMITTED IN 14.2.4(2), EXCEPTION, A LANDING THE WIDTH OF THE PARALLEL PUBLIC SIDEWALK CURB RAMP AND A MINIMUM OF 48 IN. (1220 MM) IN LENGTH IN THE DIRECTION OF THE RAMP RUN SHALL BE PROVIDED AT THE BOTTOM OF THE PARALLEL PUBLIC SIDEWALK CURB RAMP. THE SLOPE OF THE LANDING SHALL NOT EXCEED 1:50 IN ANY DIRECTION. AT MARKED CROSSINGS, THE REQUIRED LANDING AT THE BOTTOM OF THE PARALLEL PUBLIC SIDEWALK CURB RAMP SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS.

(C) WHERE PARALLEL AND PERPENDICULAR PUBLIC SIDEWALK CURB RAMPS ARE COMBINED TO SERVE A STREET CROSSING, AS PERMITTED IN 14.2.4(2), THE LANDING REQUIRED FOR THE PERPENDICULAR PUBLIC SIDEWALK CURB RAMP MAY BE CONCURRENT WITH THAT PROVIDED FOR THE PARALLEL PUBLIC SIDEWALK CURB RAMP.

(5) SLOPE
THE MAXIMUM FEASIBLE RUNNING SLOPE SHALL BE PROVIDED FOR ANY PUBLIC SIDEWALK CURB RAMP AND SHALL BE MEASURED FROM A LEVEL PLANE, AS SHOWN IN FIG. F. THE MAXIMUM RUNNING SLOPE OF ANY PUBLIC SIDEWALK CURB RAMP SHALL BE 1:12. THE MAXIMUM CROSS SLOPE OF ANY PUBLIC SIDEWALK CURB RAMP SHALL BE 1:20.

EXCEPTION: A PARALLEL PUBLIC SIDEWALK CURB RAMP ALLOWED BY 14.2.4(2) EXCEPTION SHALL HAVE A MAXIMUM SLOPE OF 1:12 WHEN MEASURED FROM A LEVEL PLANE AS SHOWN IN FIG. (F) BUT SHALL NOT BE REQUIRED TO EXCEED 96 IN. (2440 MM) IN LENGTH.

(6) FLARES
WHERE A SIDE OF A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP IS CONTIGUOUS WITH A PUBLIC SIDEWALK, IT SHALL BE FLARED, WITH A SLOPE OF 1:10 MAXIMUM. A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP MAY HAVE A RETURNED SIDE OR FLARE OF ANY SLOPE WHERE NOT CONTIGUOUS WITH A PUBLIC SIDEWALK OR WHERE PROTECTED BY A GUARDRAIL OR OTHER BARRIER.

(7) SURFACES

(A) THE SURFACE OF A PUBLIC SIDEWALK CURB RAMP SHALL BE STABLE, FIRM AND SLIP-RESISTANT. GRATINGS AND EMBLOR ACCESS COVERS SHALL NOT BE LOCATED ON PUBLIC SIDEWALK CURB RAMPS OR LANDINGS. THE SURFACE OF A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP OR THE LANDING OF A PARALLEL PUBLIC SIDEWALK CURB RAMP SHALL CONTRAST VISUALLY WITH ADJOINING PUBLIC SIDEWALK SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.

(8) DETECTABLE WARNINGS. (RESERVED)

(9) TRANSITIONS
TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES CONNECTING TO THE FULL WIDTH OF A PUBLIC SIDEWALK CURB RAMP CALL BE 1:20 MAXIMUM FOR A DISTANCE OF 36 IN. (915 MM), AS MEASURED FROM THE BASE OF THE PUBLIC SIDEWALK CURB RAMP OR LANDING EDGE AT THE STREET [SEE FIG. (J)]. GRATINGS OR SIMILAR ACCESS COVERS SHALL NOT BE LOCATED IN THE AREA AT THE BASE OF THE PUBLIC SIDEWALK CURB RAMP OR LANDING.

(10) OBSTRUCTIONS
PUBLIC SIDEWALK CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.

SECTION 14.3.2
SPECIAL TECHNICAL PROVISIONS FOR ALTERATIONS TO EXISTING PEDESTRIAN AREAS, ELEMENTS, AND FACILITIES IN THE PUBLIC RIGHT-OF-WAY

(1) PUBLIC SIDEWALKS
WHERE NECESSARY TO PROVIDE A CONTINUOUS PASSAGE COMPLYING WITH 14.3.1, PUBLIC SIDEWALK SURFACES MAY BE WARPED OR BLENDED. WHERE COMPLIANCE WITH REQUIREMENTS FOR CROSS SLOPE WITHIN THE CONTINUOUS PASSAGE CANNOT BE FULLY MET DUE TO SITE INFEASIBILITY, THE MINIMUM CROSS SLOPE FEASIBLE SHALL BE PROVIDED. EXISTING GRATINGS AND SIMILAR APPURTENANCES THAT COMPLY WITH 14.3.1(D) AND (E) MAY BE LOCATED IN THE CONTINUOUS PASSAGE OF SITE FEASIBILITY PERMITS. SEE THESE RELOCATION DURING ALTERATIONS.

(2) PUBLIC SIDEWALK CURB RAMPS
WHERE SITE INFEASIBILITY PRECLUDES THE INSTALLATION OF A PUBLIC SIDEWALK CURB RAMP COMPLYING WITH ALL PROVISIONS OF 14.2.2, THE MAXIMUM ACCESSIBILITY FEASIBLE SHALL BE PROVIDED, ACCORDING TO EACH OF THE FOLLOWING SPECIAL TECHNICAL PROVISIONS:

(A) TYPES OF PUBLIC SIDEWALK CURB RAMPS. PUBLIC SIDEWALK CURB RAMP TYPE SHALL BE DETERMINED BY EXISTING PUBLIC RIGHT-OF-WAY WIDTH AND THE EXISTENCE OF OTHER SITE CONSTRAINTS, IN THE FOLLOWING RECOMMENDED PRIORITY: (I) PERPENDICULAR, (II) PARALLEL OR COMBINED, AND (III) DIAGONAL. A PROJECTED (BUILT-UP) PUBLIC SIDEWALK CURB RAMP IS PERMITTED IN ALTERATIONS TO PUBLIC RIGHTS-OF-WAY WHERE OTHER DESIGNS CANNOT BE ACCOMMODATED.

(B) WIDTH. (RESERVED) NOTE: FEDERAL WIDTH REQUIREMENT SUPERCEDED BY CITY CODE)

(C) LANDINGS. LANDINGS SHALL BE PROVIDED AND SHALL COMPLY WITH THE FOLLOWING SPECIAL TECHNICAL PROVISIONS:

(I) WHERE PUBLIC PEDESTRIAN RIGHT-OF-WAY WIDTH IS INSUFFICIENT TO ACCOMODATE A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP WITH A TOP LANDING 48 IN (1220 MM) IN LENGTH, A BOTTOM LANDING OF THE MAXIMUM FEASIBLE LENGTH AND A MINIMUM LENGTH OF 36 IN. (915 MM) SHALL BE PROVIDED. SIDE FLARES SHALL HAVE A MAXIMUM SLOPE OF 1:2.

(II) WHERE SITE INFEASIBILITY PRECLUDES A PARALLEL PUBLIC SIDEWALK CURB RAMP WITH A BOTTOM LANDING 48 IN (1219 MM) IN LENGTH, A BOTTOM LANDING OF THE MAXIMUM FEASIBLE LENGTH AND A MINIMUM LENGTH OF 48 IN. (1220 MM) SHALL BE PROVIDED.

(III) WHERE SITE INFEASIBILITY PRECLUDES A LANDING SLOPE OF 1:20 IN ANY DIRECTION, THE SLOPE PERPENDICULAR TO THE CURB FACE SHALL NOT EXCEED 1:50.

(IV) WHERE SITE INFEASIBILITY PRECLUDES A LANDING SLOPE OF 1:50 WHEN MEASURED PERPENDICULAR TO THE CURB FACE, THE MINIMUM FEASIBLE SLOPE IN EACH DIRECTION SHALL BE PROVIDED.

(D) SLOPE

(I) WHERE PUBLIC RIGHT-OF-WAY WIDTH IS INSUFFICIENT TO ACCOMODATE A LANDING AND A PERPENDICULAR PUBLIC SIDEWALK CURB RAMP WITH A MAXIMUM RUNNING SLOPE OF 1:12, THE MINIMUM FEASIBLE RUNNING SLOPE BETWEEN 1:12 AND 1:10 IS PERMITTED FOR A RISE OF 6 IN. (150 MM) MAXIMUM.

(II) WHERE PUBLIC RIGHT-OF-WAY WIDTH IS INSUFFICIENT TO ACCOMODATE A LANDING AND PERPENDICULAR PUBLIC SIDEWALK CURB RAMP WITH A MAXIMUM RUNNING SLOPE OF 1:10, THE MINIMUM FEASIBLE RUNNING SLOPE BETWEEN 1:8 AND 1:10 SHALL BE PERMITTED FOR A RISE OF 3 IN. (75 MM) MAXIMUM.

(III) A PUBLIC SIDEWALK CURB RAMP SHALL HAVE THE MAXIMUM SLOPE PERMITTED IN (I) OR (II) WHEN MEASURED FROM A LEVEL PLANE AS SHOWN IN FIG. (F) BUT SHALL NOT BE REQUIRED TO EXCEED 72 IN. (1830 MM) IN LENGTH.

(IV) WHERE COMPLIANCE WITH REQUIREMENTS FOR CROSS SLOPE CANNOT BE FULLY MET DUE TO SITE INFEASIBILITY, THE MINIMUM FEASIBLE CROSS SLOPE SHALL BE PROVIDED.

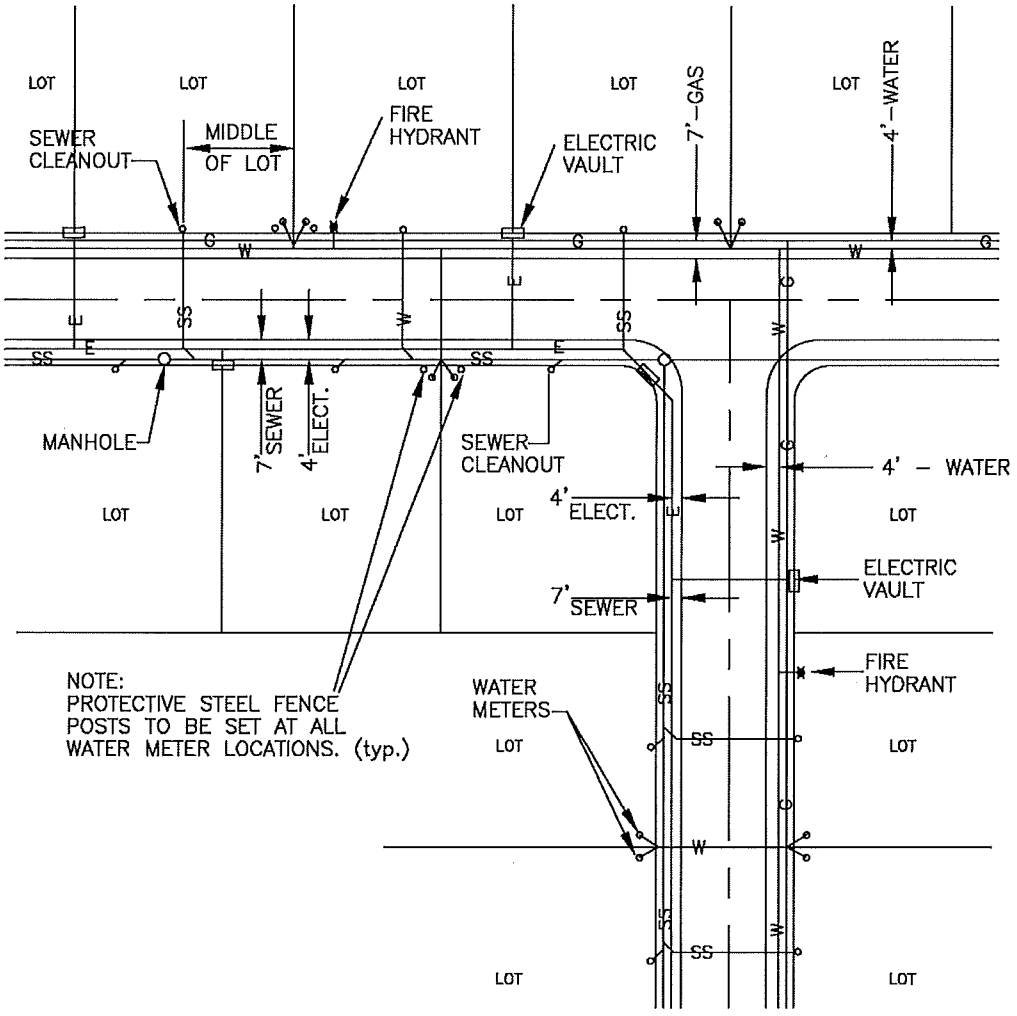
(E) FLARES

(I) EXISTING GRATINGS AND SIMILAR APPURTENANCES THAT COMPLY WITH 14.3.1(D) AND (E) MAY BE LOCATED IN PUBLIC SIDEWALK CURB RAMPS IF SITE INFEASIBILITY PRECLUDES THEIR RELOCATION DURING ALTERATIONS.

(F) WHERE COUNTER SLOPES OF EXISTING ADJOINING GUTTERS AND ROAD SURFACES EXCEED 1:20, NEWLY INSTALLED PUBLIC SIDEWALK CURB RAMP SURFACES MAY BE SLIGHTLY CROWNED AND PROJECTED BEYOND THE CURB FACE (PROVIDED THE LANDING EDGE AT THE STREET SURFACE CAN BE SMOOTHLY BLENDED AND SIDES ARE FLARED, WITHOUT ABRUPT DROP-OFF).

CITY OF NIXA

DATE DRAWN: 3/9/95	LAST REVISIONS: 02/12/01
DRAWN BY:	SCALE: NO SCALE
SHEET: 1 of 1	SHEET DESCRIPTION: ADA PUBLIC SIDWALK CURB RAMP REQUIREMENTS (94 REVISION)
PROJECT:	



W–WATER–SET 4' FROM CURB ON ONE SIDE.
G–GAS–SET 7' FROM CURB ON WATER SIDE.
E–ELECTRIC–SET 4' FROM CURB ON OPPOSITE SIDE AS WATER.
SS–SEWER–SET 7' FROM CURB ON ELECTRIC SIDE.

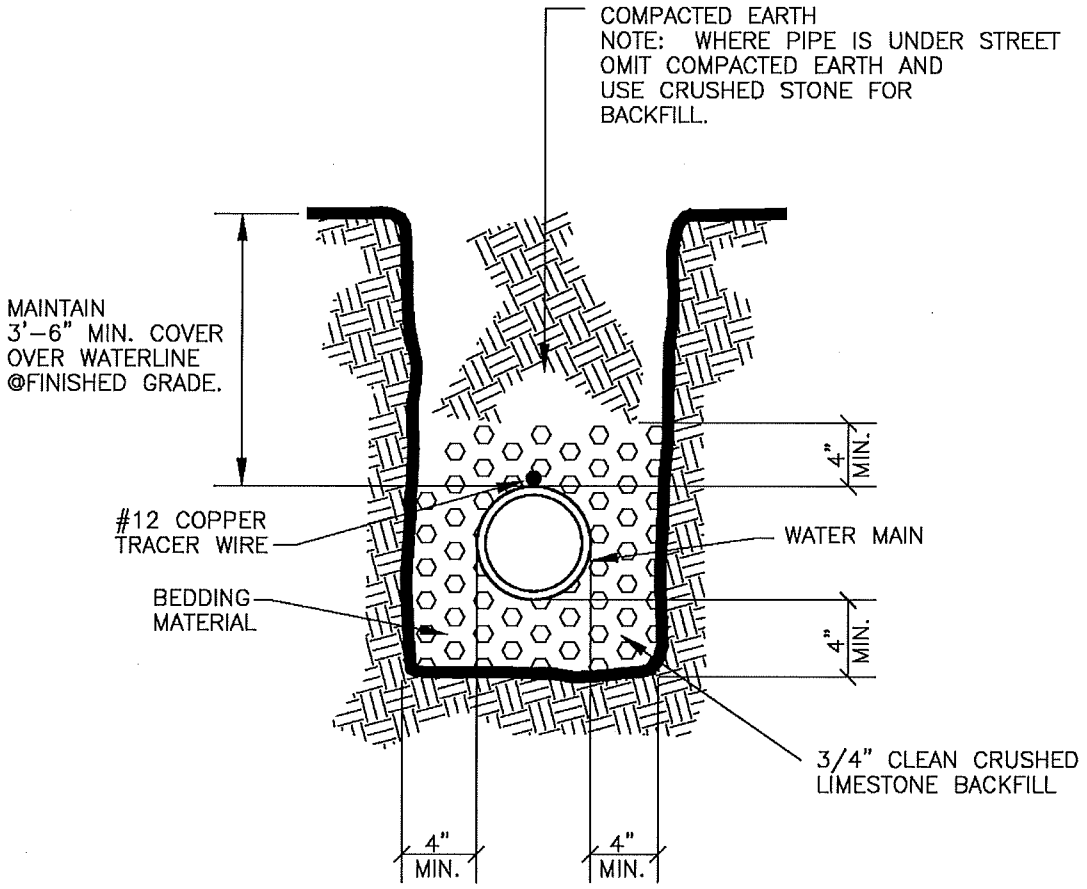
WATER METERS EVERY OTHER LOT LINE & ELECTRIC ON LOT LINES WHERE WATER METERS ARE NOT LOCATED.

CITY OF NIXA

TYPICAL UTILITY LOCATIONS

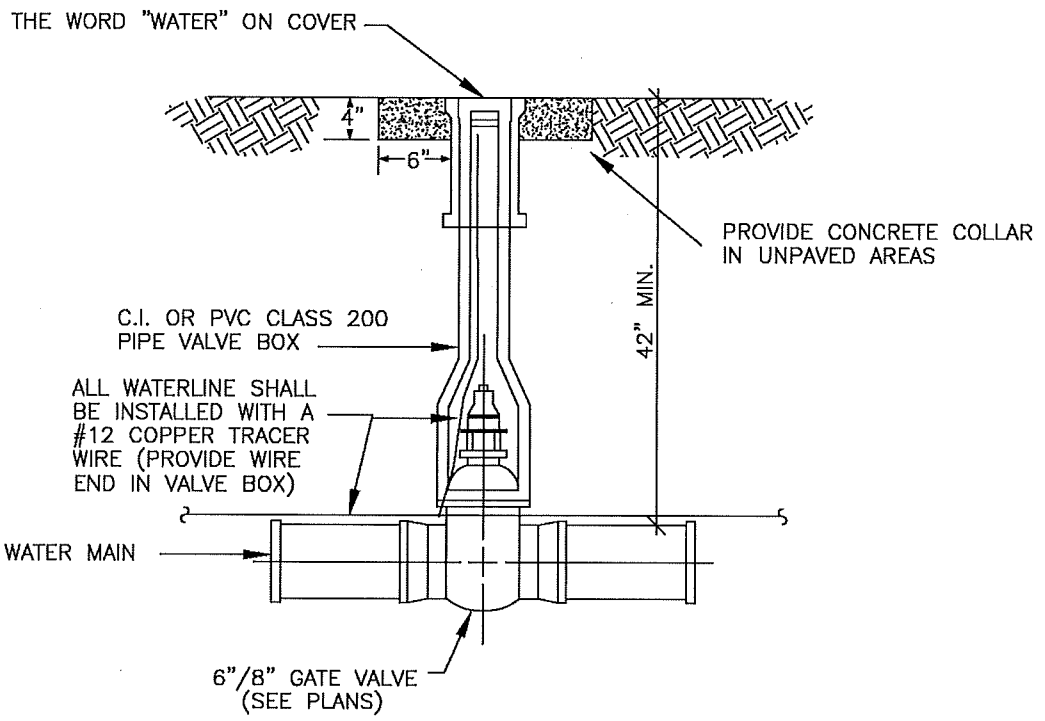
DATE: 01/31/99

DWG: A1



CITY OF NIXA	TYPICAL WATERLINE EMBEDMENT DETAIL	DATE: 01/31/99
		DWG: B1

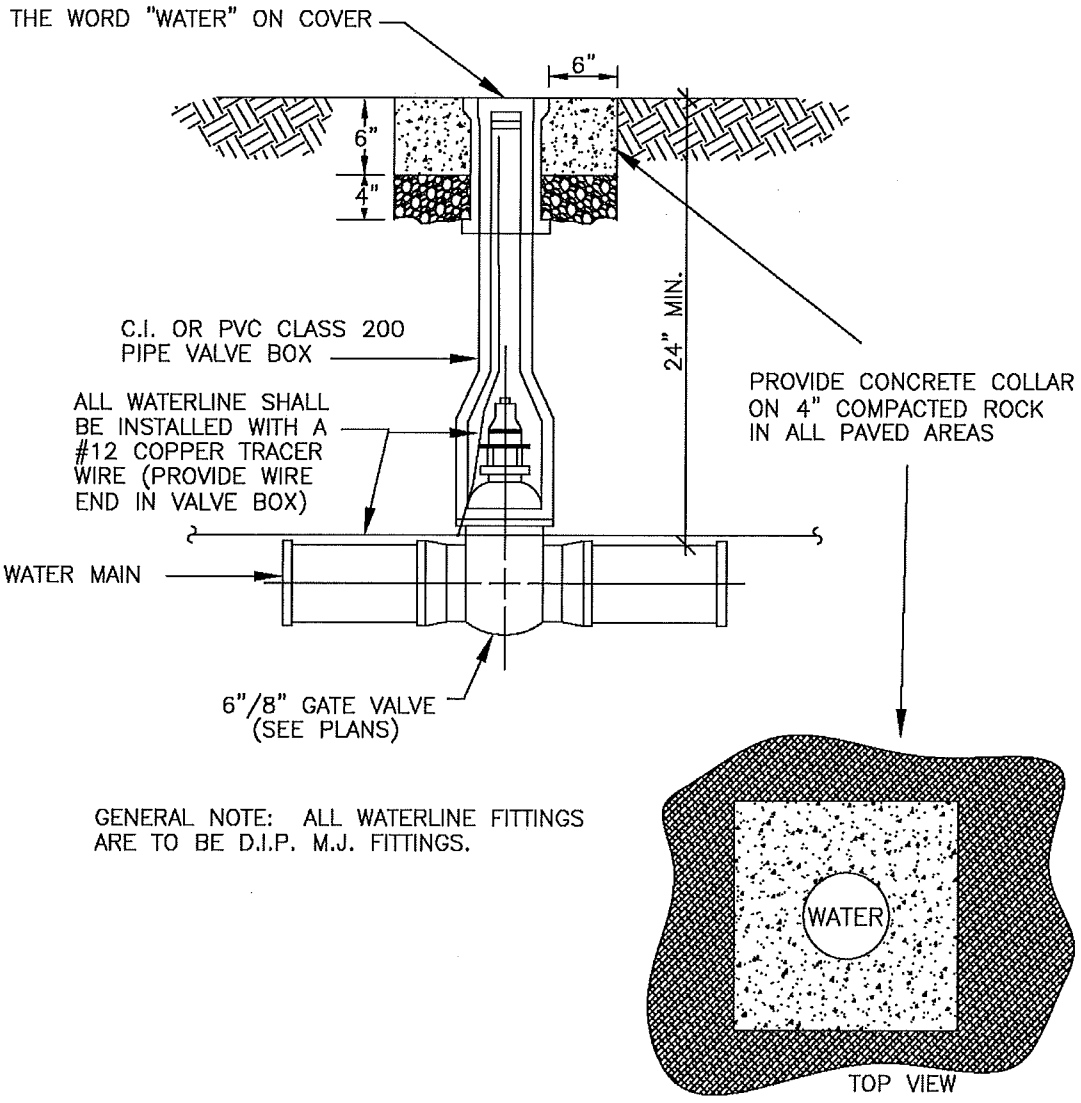
NOTE:
IN LIEU OF C.I. VALVE BOX SHOWN AN ALTERNATIVE PVC VALVE BOX ACCEPTABLE TO THE CITY WILL BE ALLOWED.



GENERAL NOTE: ALL WATERLINE FITTINGS ARE TO BE D.I.P. M.J. FITTINGS.

CITY OF NIXA	TYPICAL VALVE DETAIL	DATE: 10/26/06
		DWG: B2

NOTE:
IN LIEU OF C.I. VALVE BOX SHOWN AN ALTERNATIVE PVC VALVE BOX ACCEPTABLE TO THE CITY WILL BE ALLOWED.

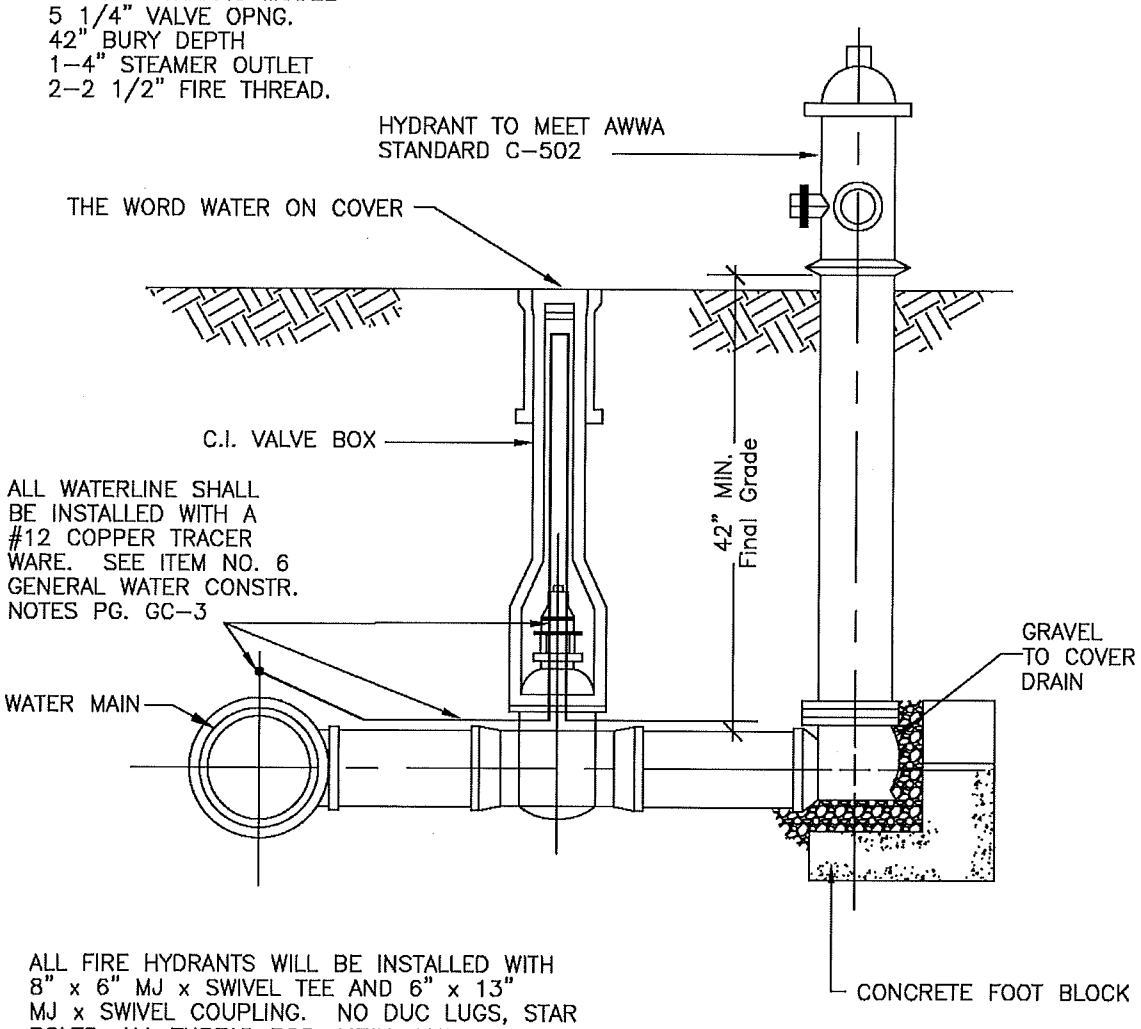


GENERAL NOTE: ALL WATERLINE FITTINGS ARE TO BE D.I.P. M.J. FITTINGS.

CITY OF NIXA	TYPICAL VALVE DETAIL	DATE: 09/16/04
		DWG: B2a

HYDRANT TO BE 3–WAY
6" SHOE TRAFFIC MODEL
5 1/4" VALVE OPNG.
42" BURY DEPTH
1–4" STEAMER OUTLET
2–2 1/2" FIRE THREAD.

HYDRANT TO BE PLACED WITH
NOZZLES FACING STREET



ALL FIRE HYDRANTS WILL BE INSTALLED WITH
8" x 6" MJ x SWIVEL TEE AND 6" x 13"
MJ x SWIVEL COUPLING. NO DUC LUGS, STAR
BOLTS, ALL THREAD ROD, MEGA–LUGS OR
RETAINER GLANDS WILL BE ALLOWED.

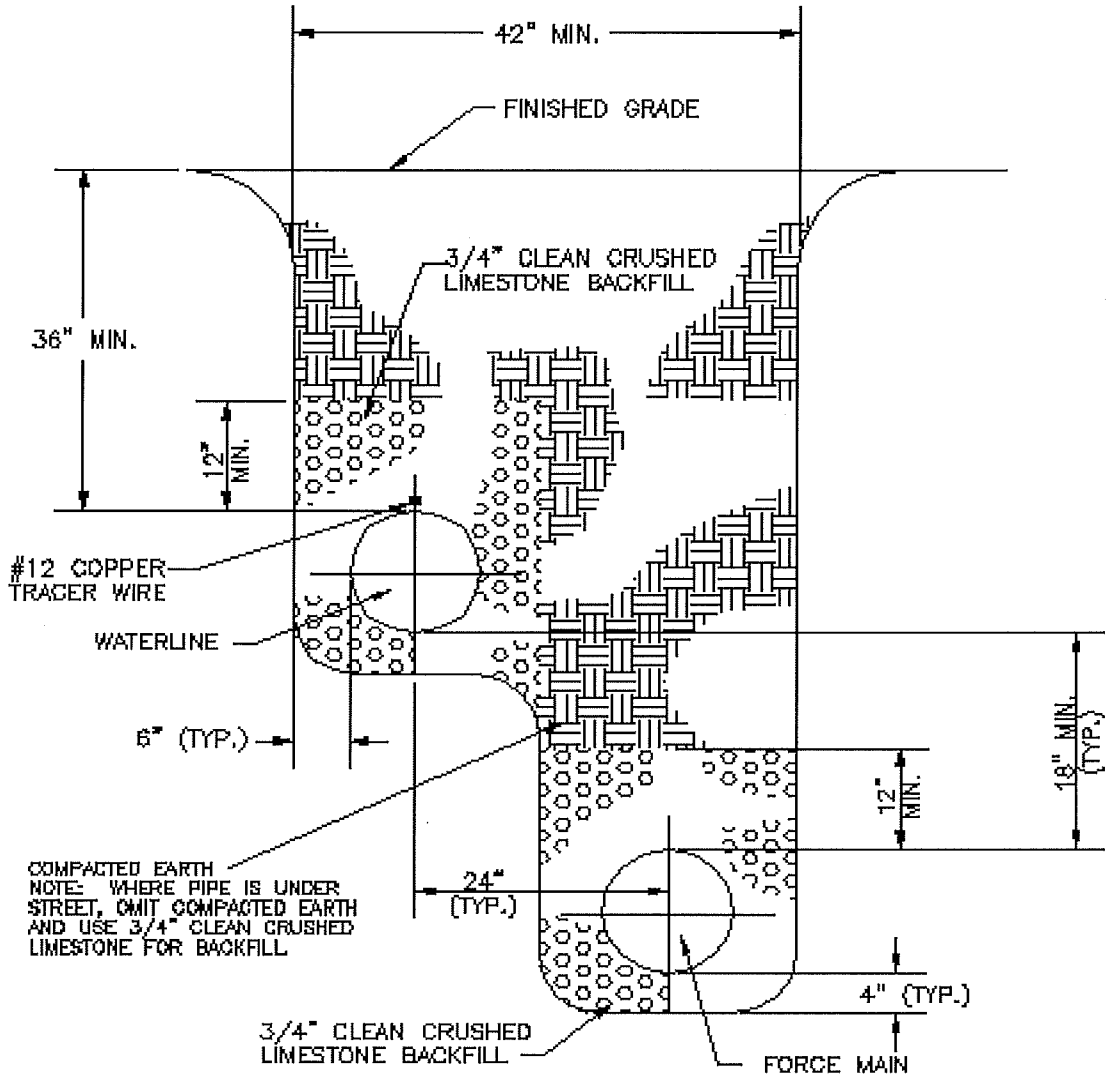
GENERAL NOTE: ALL WATERLINE FITTINGS
ARE TO BE D.I.P. M.J. FITTINGS.

CITY OF NIXA

HYDRANT DETAIL

DATE: 10/31/06

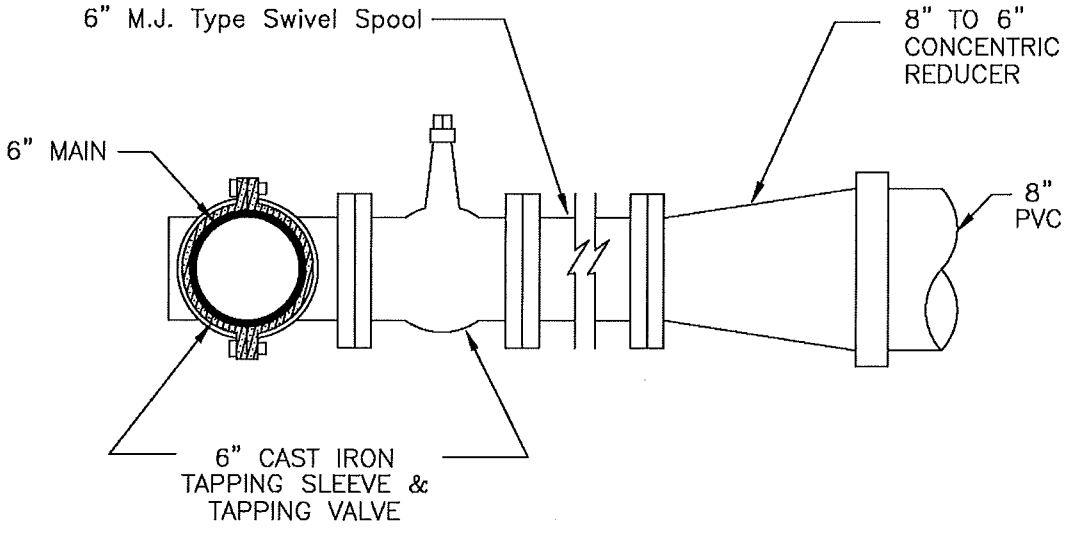
DWG: B3



* PRIOR WRITTEN APPROVAL MUST BE OBTAINED FROM THE MISSOURI DEPT. OF NATURAL RESOURCES BEFORE USING THIS ARRANGEMENT.

CITY OF NIXA	TYPICAL COMMON TRENCH DETAIL	DATE: 01/31/99 DWG: B4

ALL WATERLINE SHALL BE INSTALLED WITH A #12 COPPER TRACER WIRE



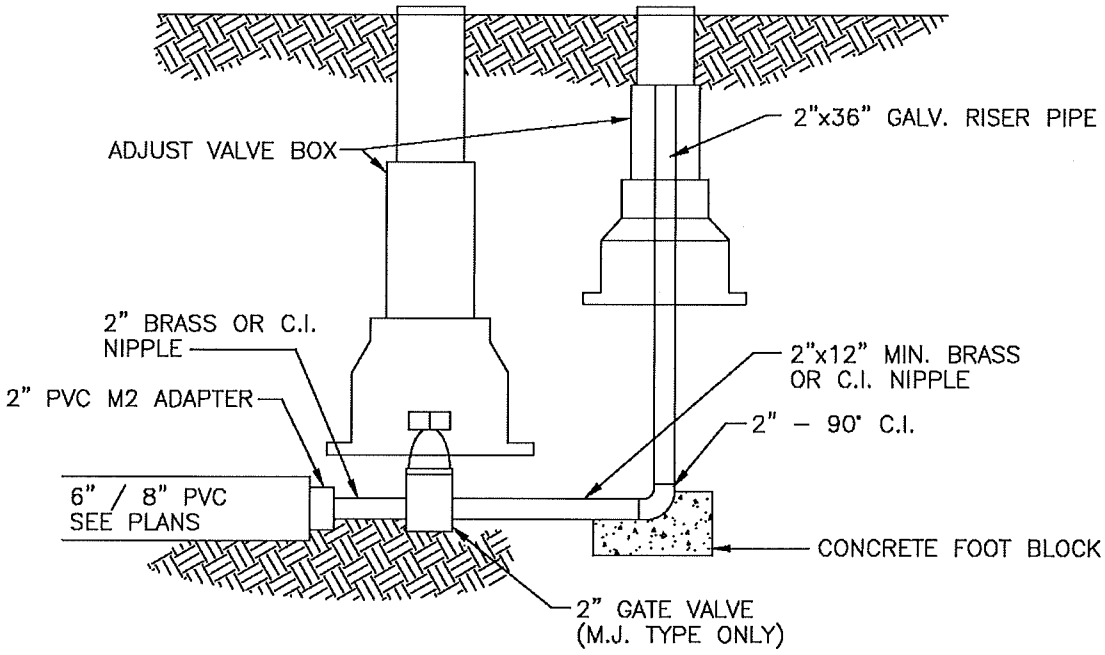
GENERAL NOTE: ALL WATERLINE FITTINGS ARE TO BE D.I.P. M.J. FITTINGS

CITY OF NIXA

6" LIVE-TAP DETAIL

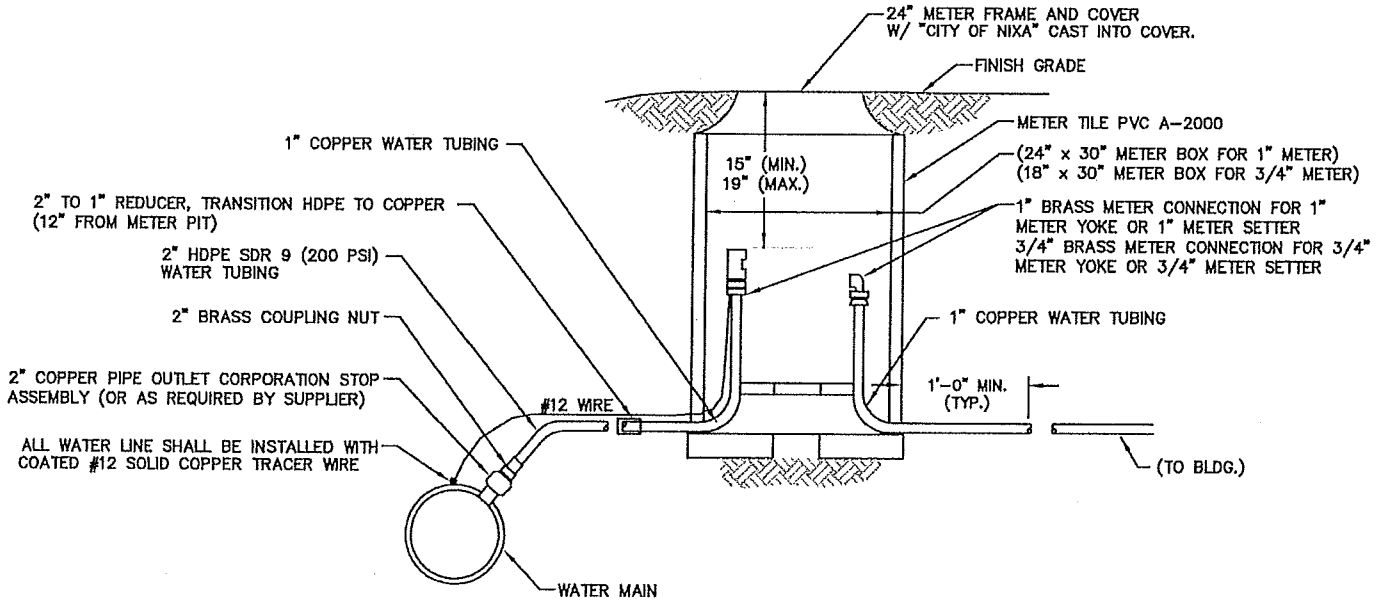
DATE: 10/31/06

DWG: B5



NOTE:
IN LIEU OF FLUSH HYDRANT SHOWN AN ALTERNATE FROST PROOF FLUSH HYDRANT ACCEPTABLE TO THE CITY MAY BE CONSIDERED.

CITY OF NIXA	TYP. 2" FLUSH VALVE DETAIL	DATE: 10/31/06
		DWG: B6



GENERAL NOTE: ALL WATERLINE FITTINGS SHALL BE D.I.P., M.J. FITTINGS.

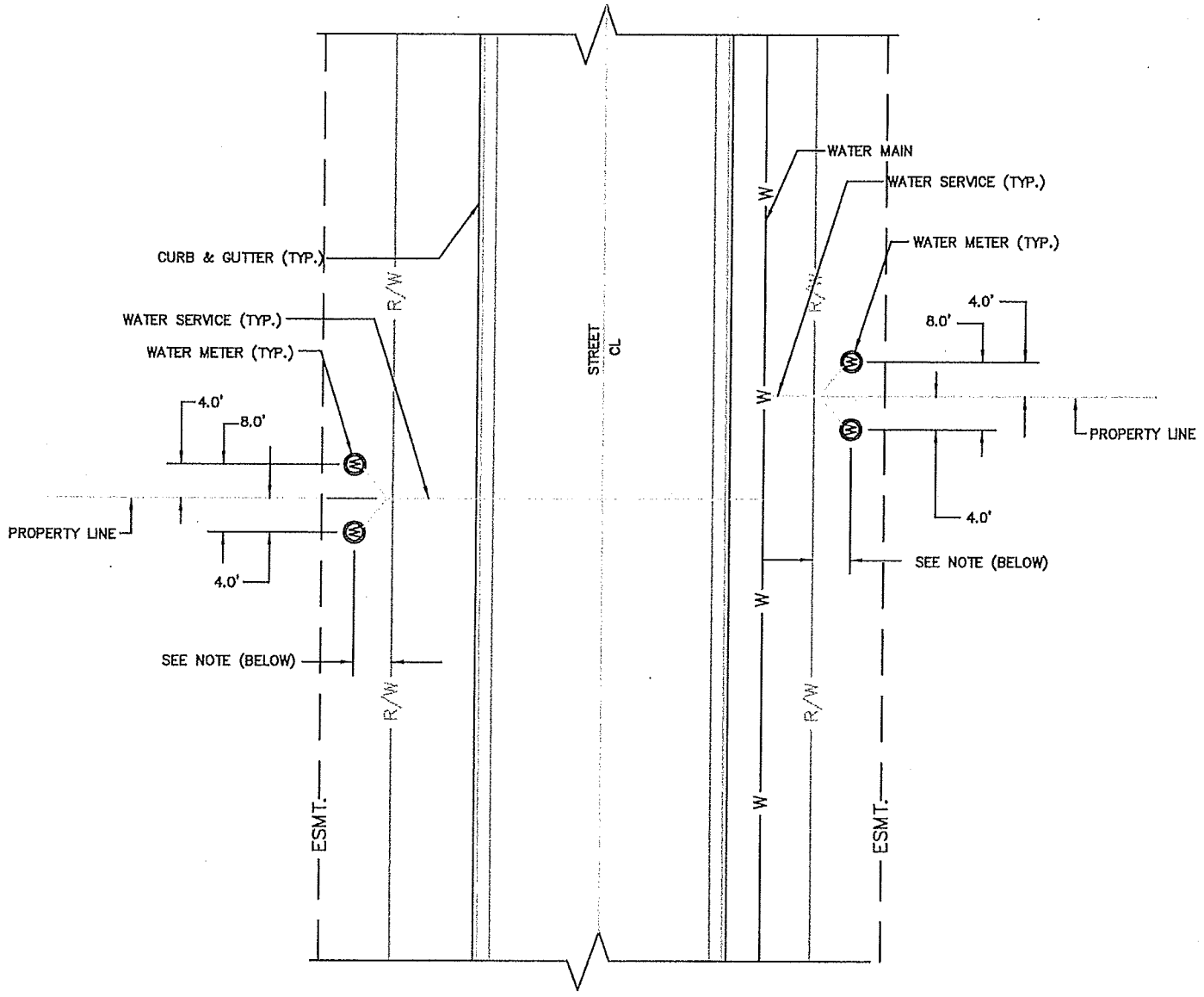
METER SIZE	METER BOX DIAMETER	METER YOKE
3/4"	18"	3/4"
1"	24"	1"
1 1/2"	30"	1 1/2"
2"	36"	2"

CITY OF NIXA

TYPICAL WATER SERVICE CONNECTION

DATE: 2 / 6 / 15

DWG: B7



NOTE:
PLACE THE CENTER OF THE METER PIT
4'-0" FROM THE EDGE OF THE R/W LINE.
UNLESS OTHERWISE NOTED OR INDICATED.

A. CROSSING SERVING SINGLE LOT

1. CROSSING SHALL BE MADE USING 1" DIAMETER SDR 9 (CTS) HDPE TUBING.
2. SERVICES ON SAME SIDE AS WATER MAIN SHALL BE HDPE WITH TYPE K COPPER STUBOUTS AT METER BOX. (SEE TYPICAL WATER SERVICE CONNECTION DETAIL).

B. CROSSING SERVING TWIN LOTS

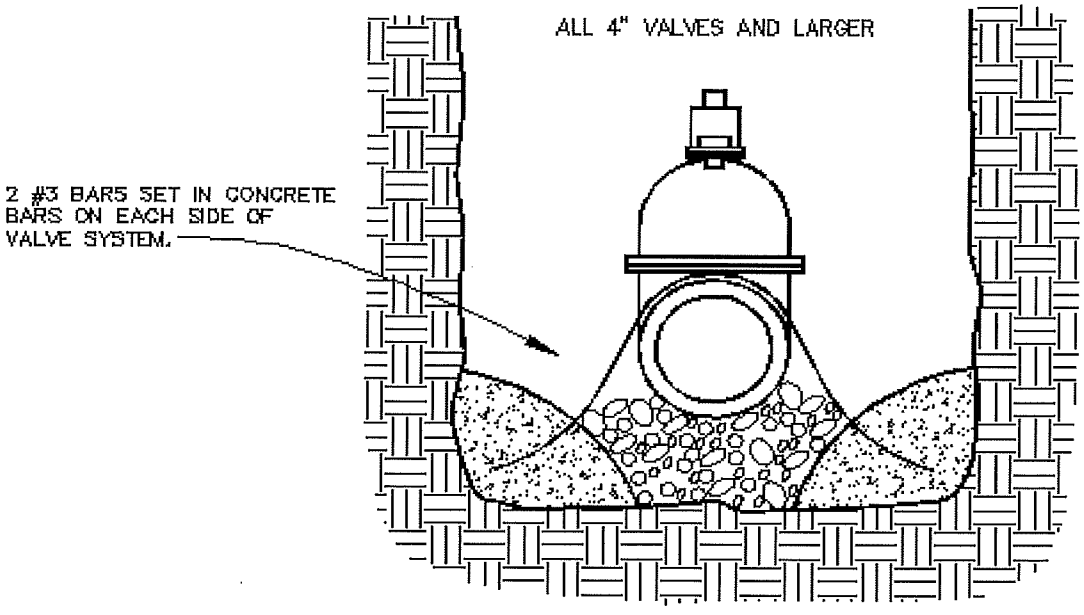
1. CROSSING SHALL BE MADE USING A SINGLE 2" DIAMETER SDR 9 (CTS) HDPE TUBING OR 2 – 1" DIAMETER SDR 9 (CTS) HDPE TUBING.
2. SERVICES ON SAME SIDE AS WATER MAIN SHALL BE HDPE WITH TYPE K COPPER STUBOUTS AT METER BOX. (SEE TYPICAL WATER SERVICE CONNECTION DETAIL).

CITY OF NIXA

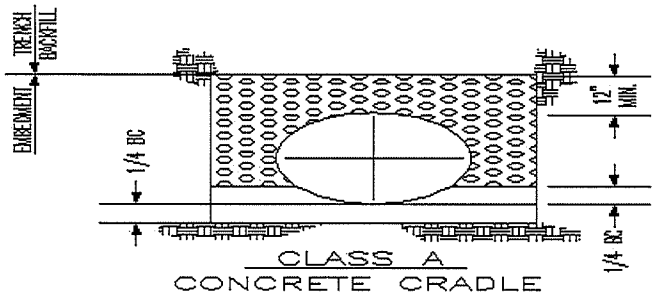
TYPICAL WATER SERVICE

DATE: 2 / 6 / 15

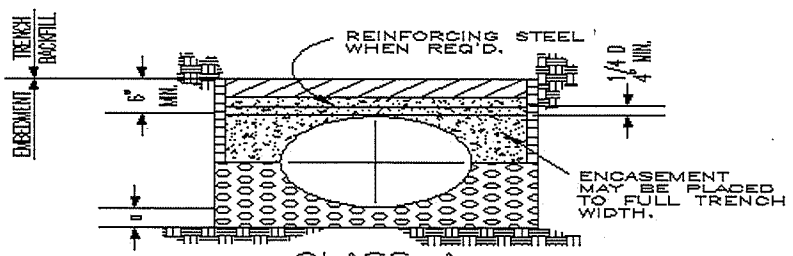
DWG: B9



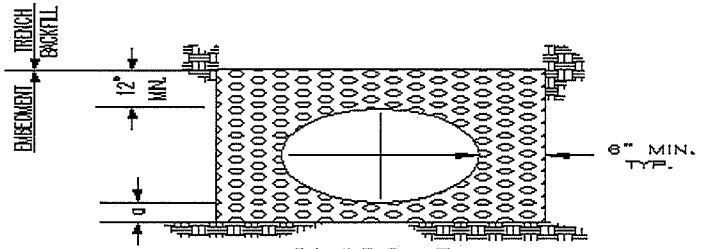
CITY OF NIXA	ANCHOR FOR GATE VALVE	DATE: 01/31/99
		DWG: B10



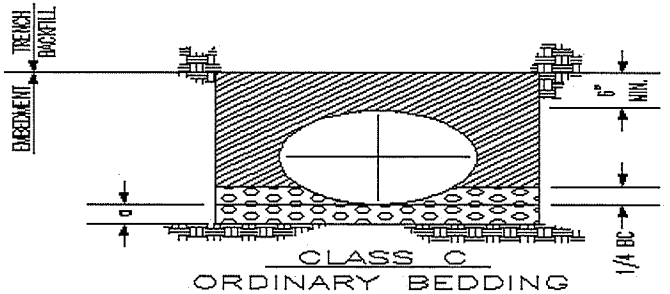
CLASS A
CONCRETE CRADLE



CLASS A
CONCRETE ARCH



CLASS B
FIRST CLASS BEDDING



CLASS C
ORDINARY BEDDING

TABLE OF EMBEDMENT DEPTHS BELOW PIPE		
SOIL TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A & B	18" & SMALLER	4"
A & B	LARGER THAN 18"	1/4 O.D.
C	32" & SMALLLER	4"
C	LARGER THAN 32"	1/4 O.D.
ROCK TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A & B	15" & SMALLER	6"
A & B	LARGER THAN 15"	1/4 O.D.
C	32" & SMALLER	6"
C	LARGER THAN 32"	1/4 O.D.

LEGEND

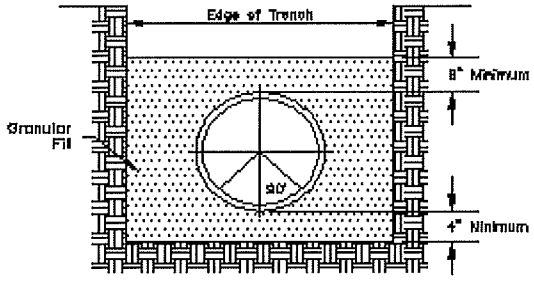
BC	OUTSIDE DIAMETER OF PIPE
D	NOMINAL PIPE SIZE
a	EMBEDMENT BELOW PIPE (SEE TABLE)
	HAND PLACED EMBEDMENT
	GRANULAR EMBEDMENT
	CONCRETE
	UNDISTURBED EARTH

CITY OF NIXA

TYPICAL EMBEDMENT DETAIL

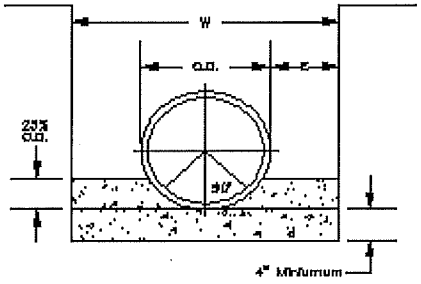
DATE: 01/31/99

DWG: C1

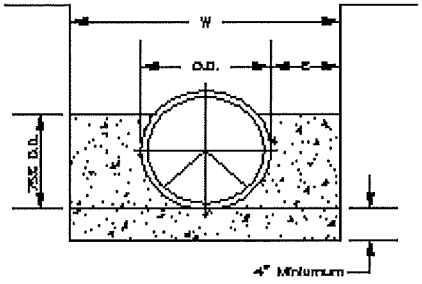


Minimum Depth of Granular Backfill – 1/4 Pipe Diameter but never less than 4" below the Pipe and a minimum of 6" above the Pipe.

Granular Backfill must conform to bedding material. (In cuts less than 12" minimum aggregate cover is 12")

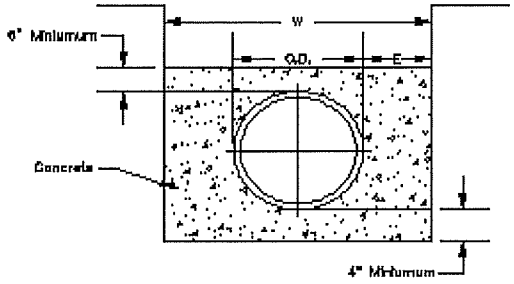


CONCRETE LOW CRADLE

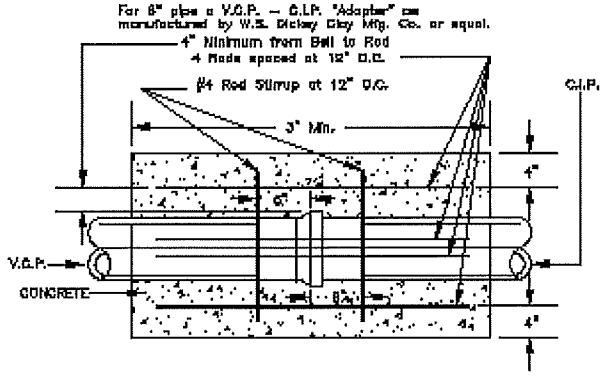


CONCRETE HIGH CRADLE

NOTE: W = Trench Width
W = O.D. + 2E
E = 9" (8" to 24" Pipe)
E = 12" (27" to 36" Pipe)
E = 15" (42" to 72" Pipe)

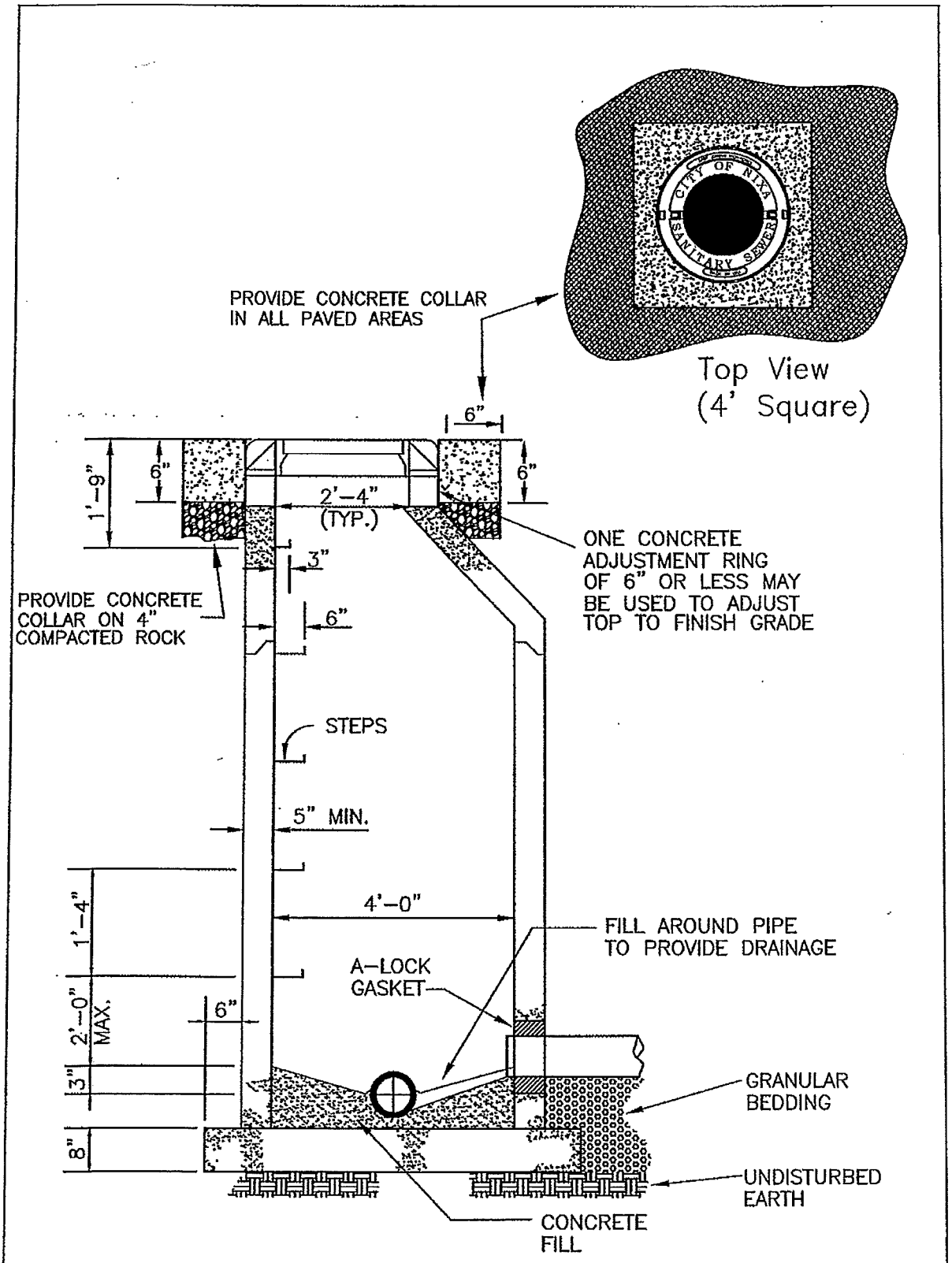


CONCRETE ENCASEMENT



V.C.P. – C.I.P. JUNCTION ENCASEMENT

CITY OF NIXA	SANITARY SEWER CRADLE/ENCASEMENT	DATE: 01/31/99
		DWG: C2

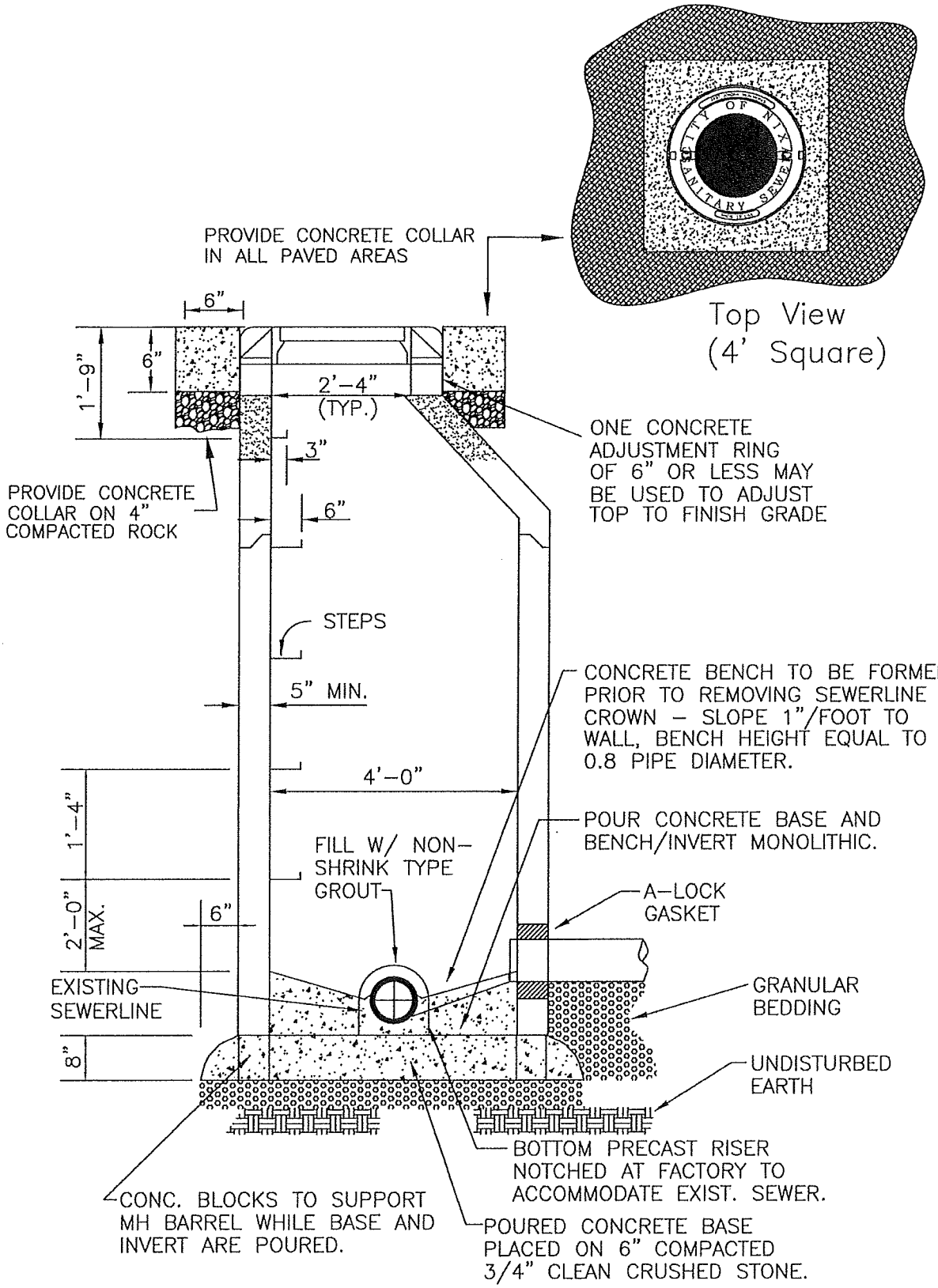


CITY OF NIXA MISSOURI

STANDARD MANHOLE DETAIL

DATE: 6/7/13

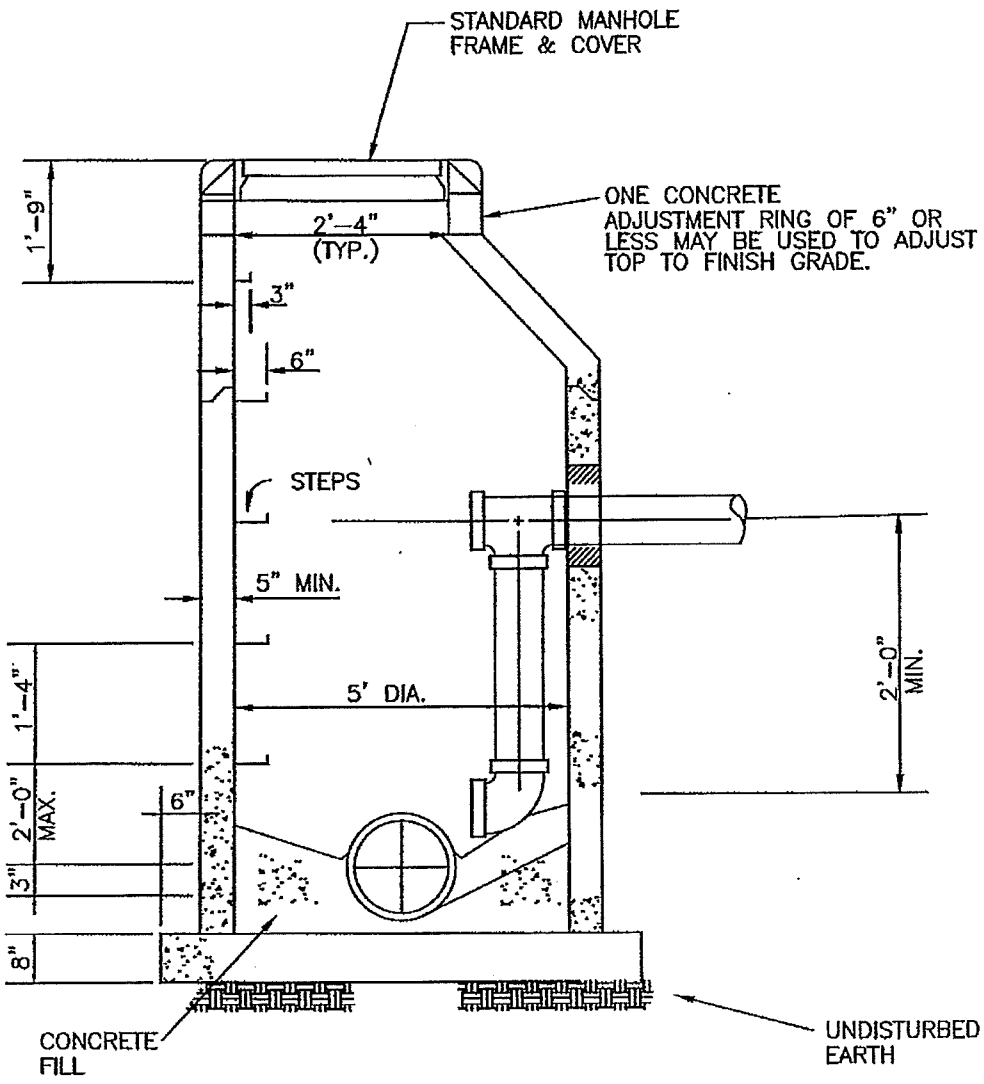
DWG: C3



STANDARD MANHOLE OVER EXISTING SEWER DETAIL

DATE: 5/15/15

DWG: C3a

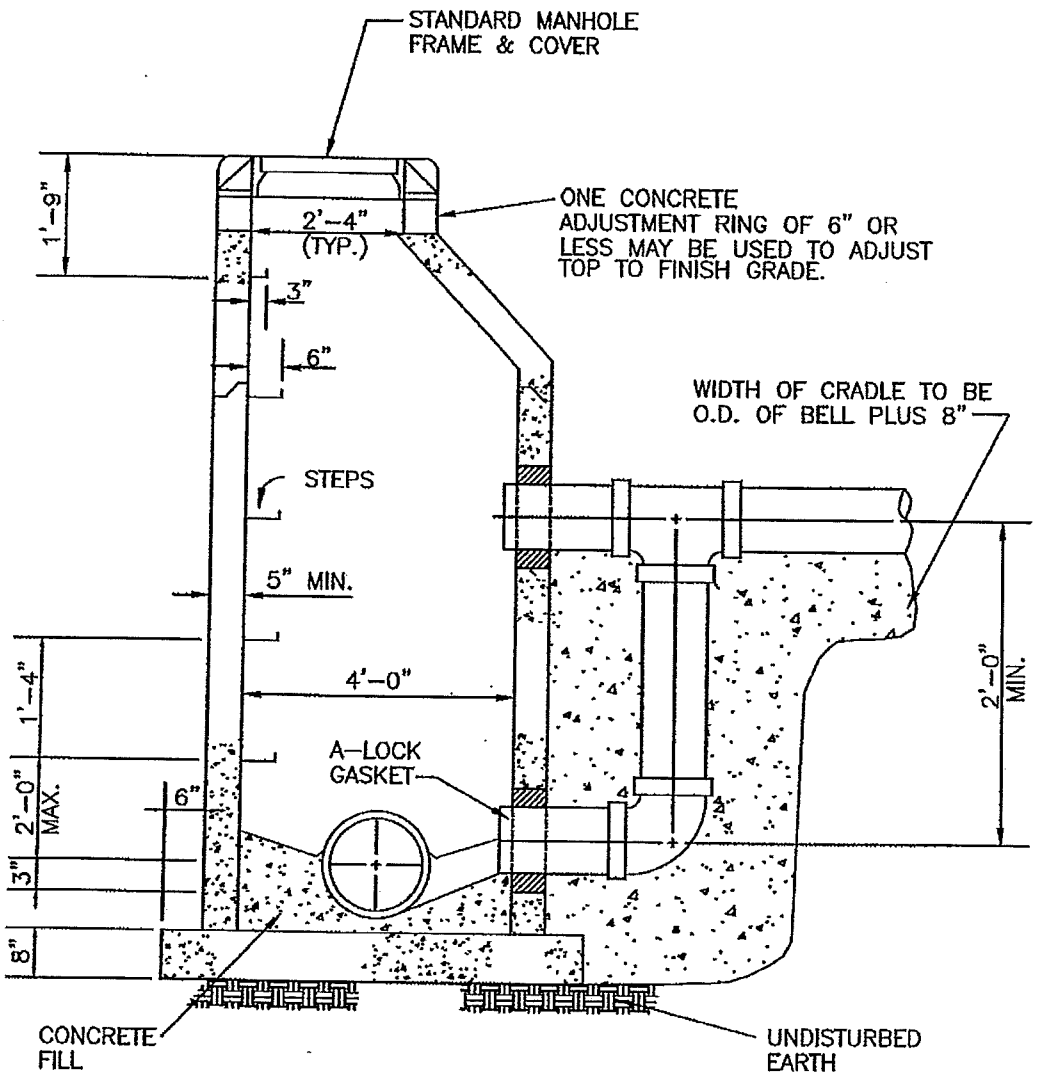


CITY OF NIXA MISSOURI

STANDARD INSIDE DROP MANHOLE DETAIL

DATE: 6/7/13

DWG: C4



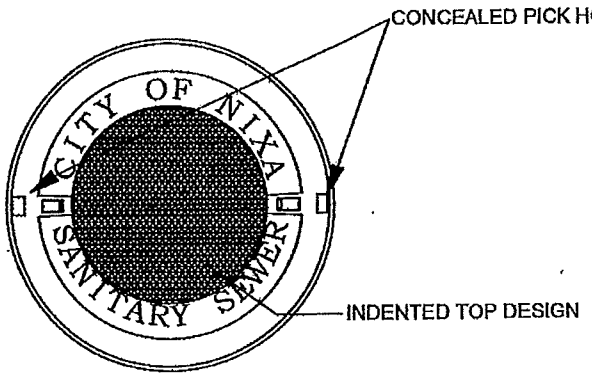
CITY OF NIXA MISSOURI

STANDARD OUTSIDE DROP MANHOLE DETAIL

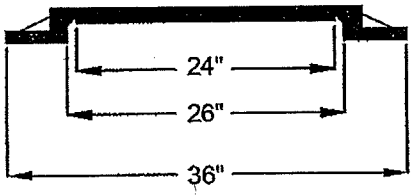
DATE: 6/7/13

DWG: C4a

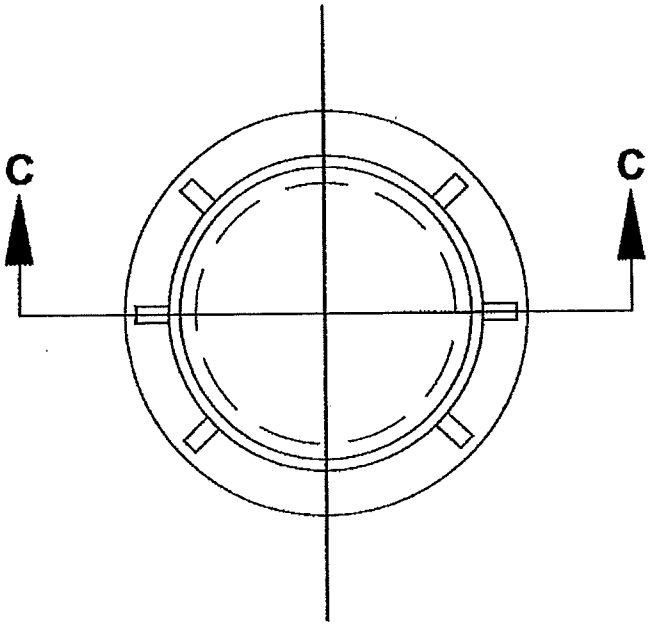
CASTING IN LID
SHALL READ
"CITY OF NIXA
SANITARY SEWER"



PLAN VIEW (COVER)



SECTION "CC"

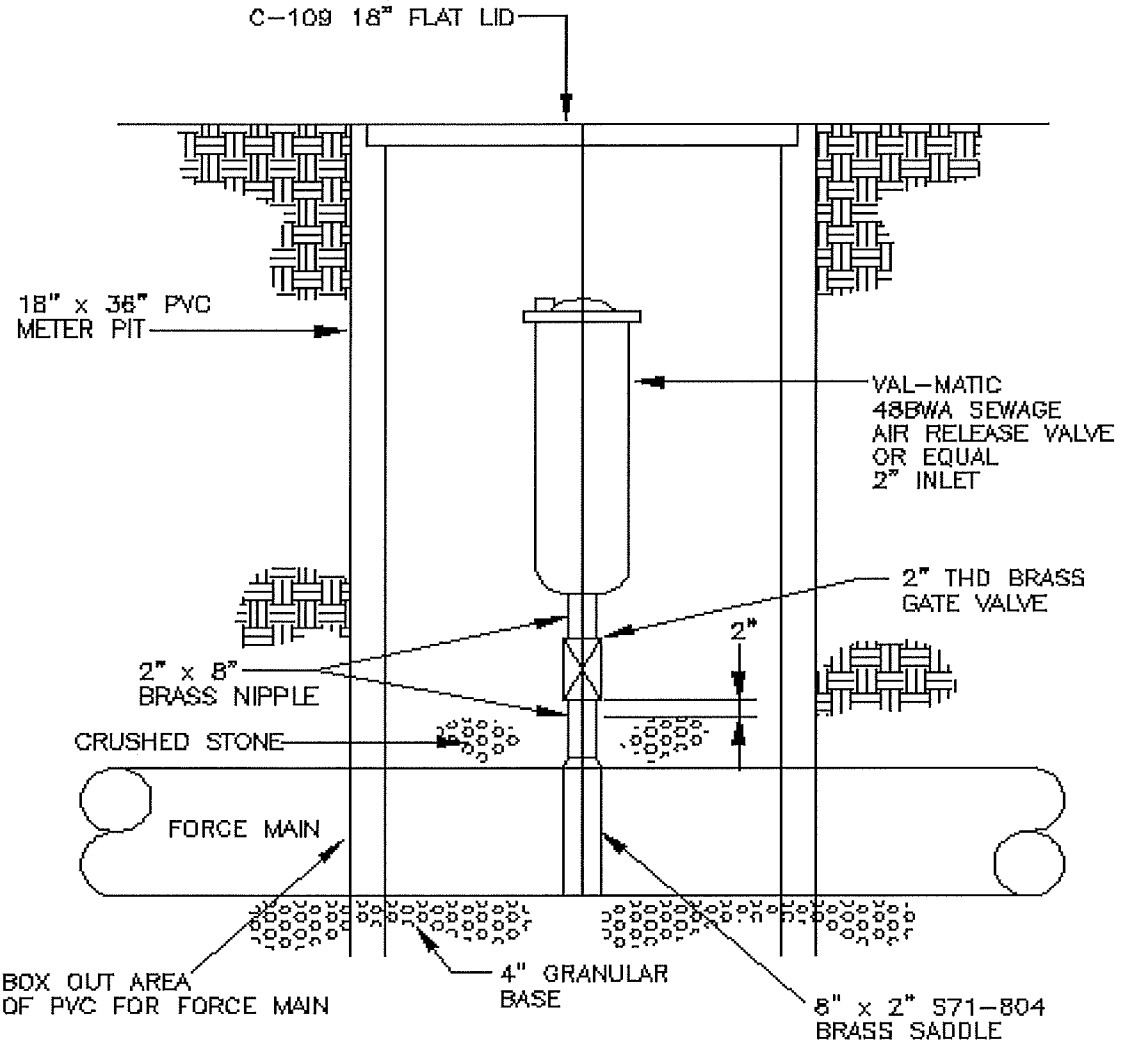


PLAN VIEW (FRAME)

NEENAH R-1642, DEETER 1247, EJ 1045 FRAME WITH 1040 AGS COVER

NOTE: Bolt down watertight frame & cover shall be required in detention areas & drainage ways.

CITY OF NIXA MISSOURI	MANHOLE FRAME & COVER DETAIL	DATE: 06/07/13 DWG: C5



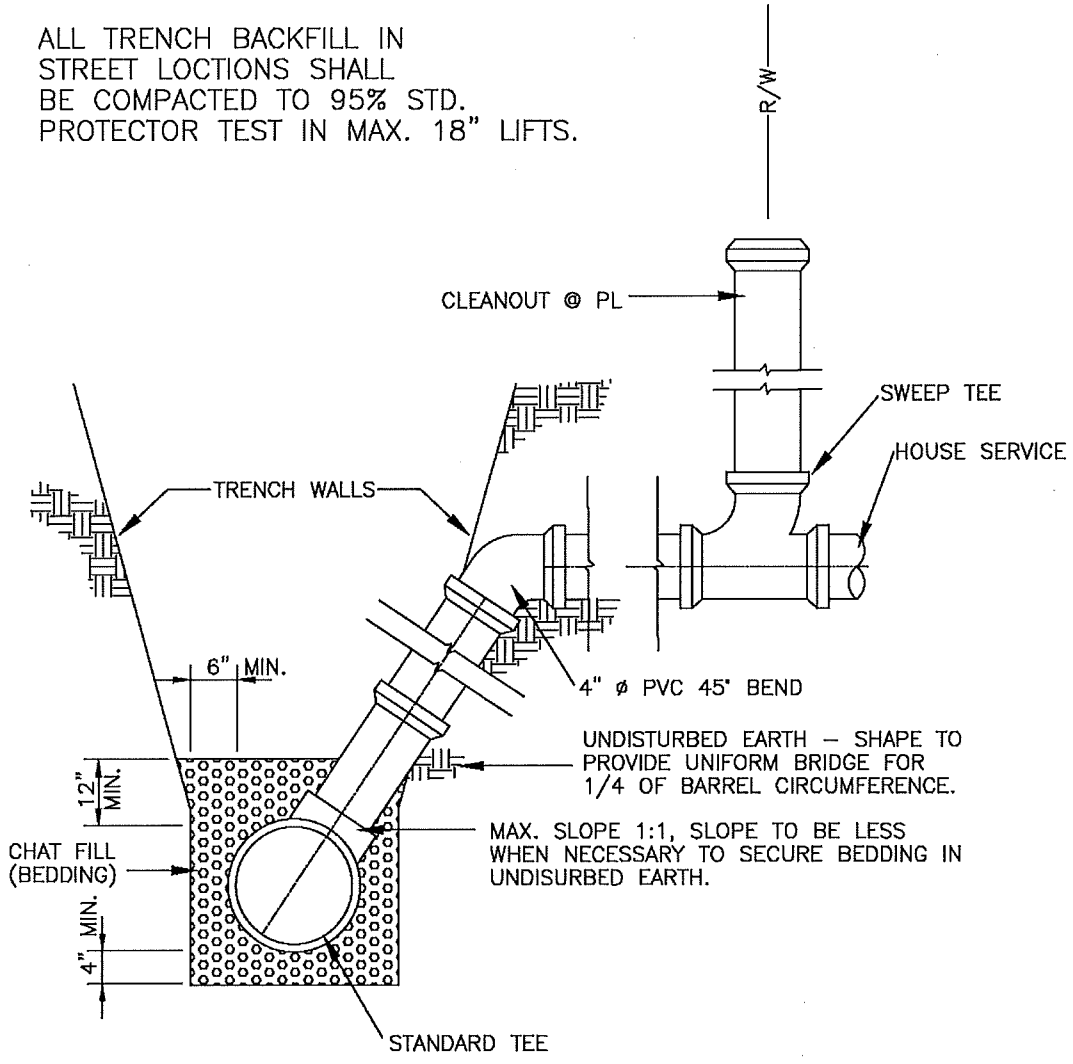
CITY OF NIXA

AIR RELEASE VALVE DETAIL

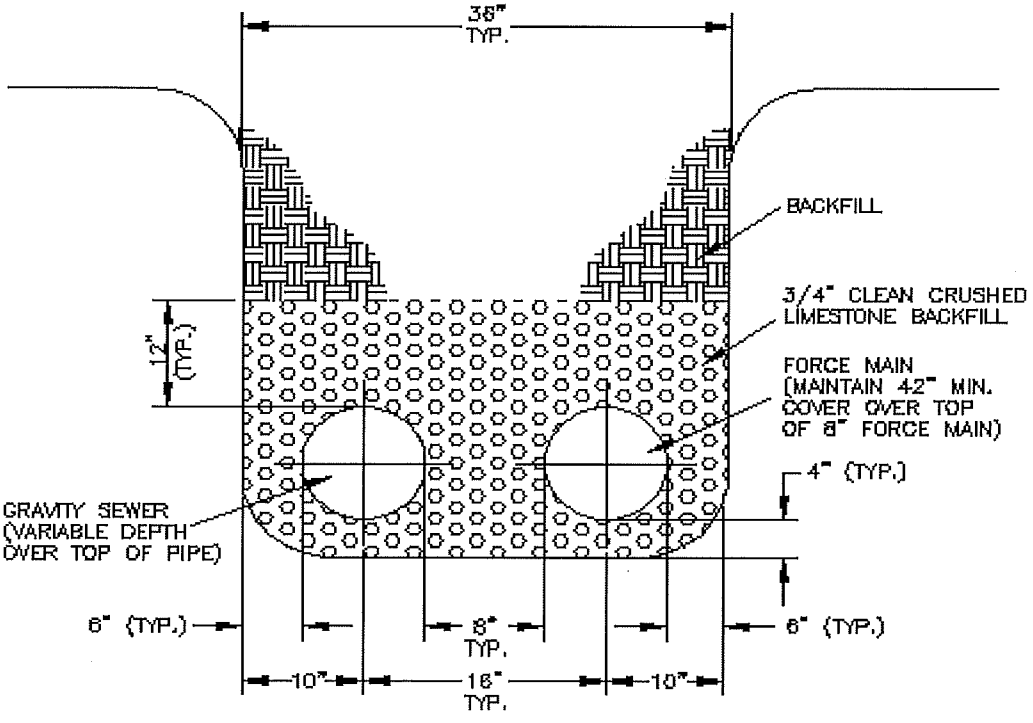
DATE: 01/31/99

DWG: C6

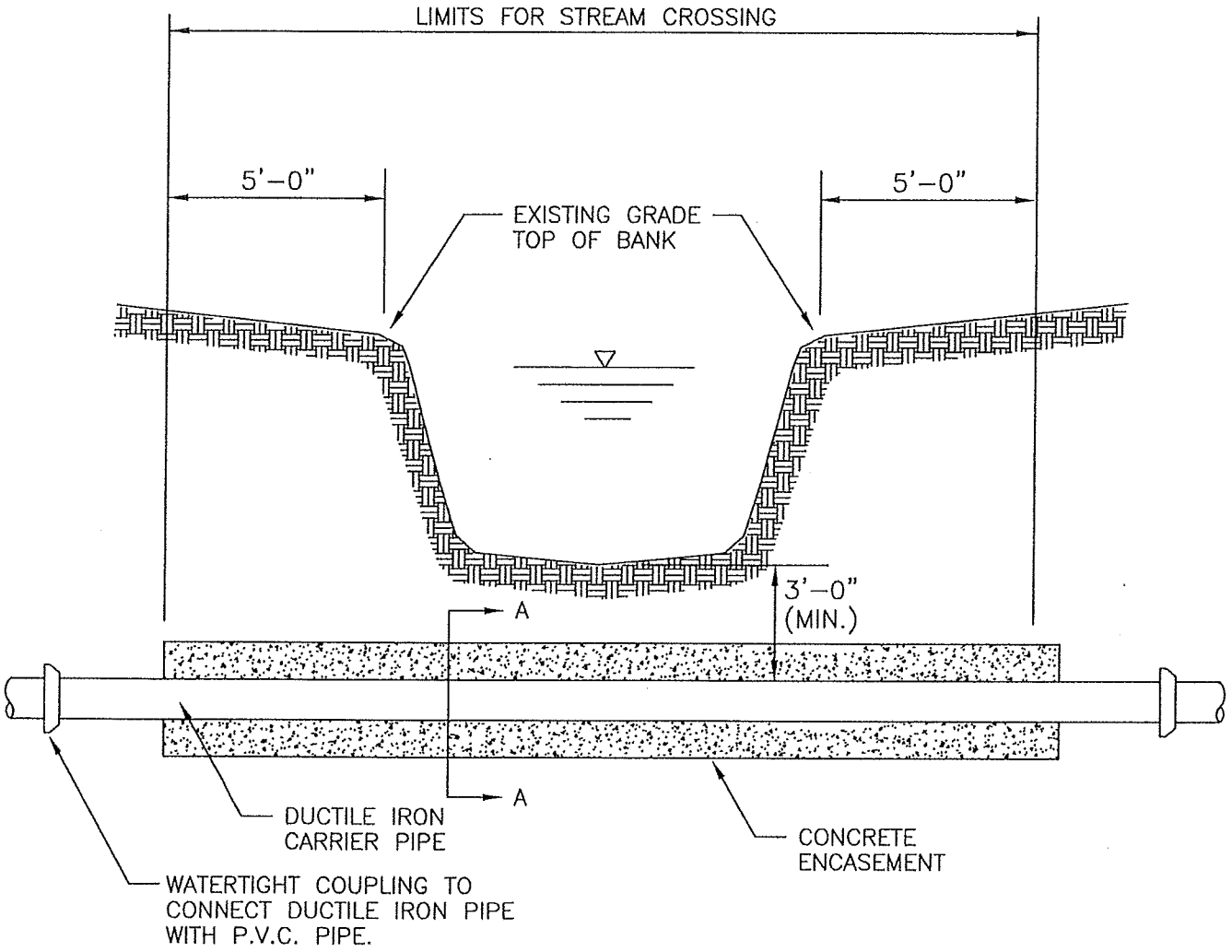
ALL TRENCH BACKFILL IN
STREET LOCTIONS SHALL
BE COMPACTED TO 95% STD.
PROTECTOR TEST IN MAX. 18" LIFTS.

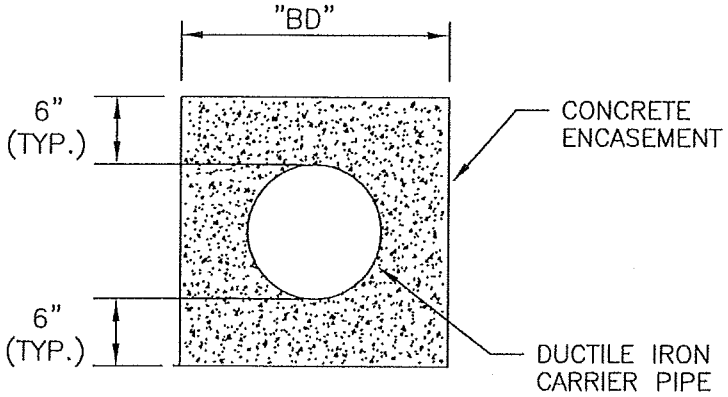


CITY OF NIXA	TYPICAL SEWER SERVICE DETAIL	DATE: 10/31/06
		DWG: C7



CITY OF NIXA	TYPICAL COMMON TRENCH DETAIL	DATE: 01/31/99 DWG: C8





SECTION A–A

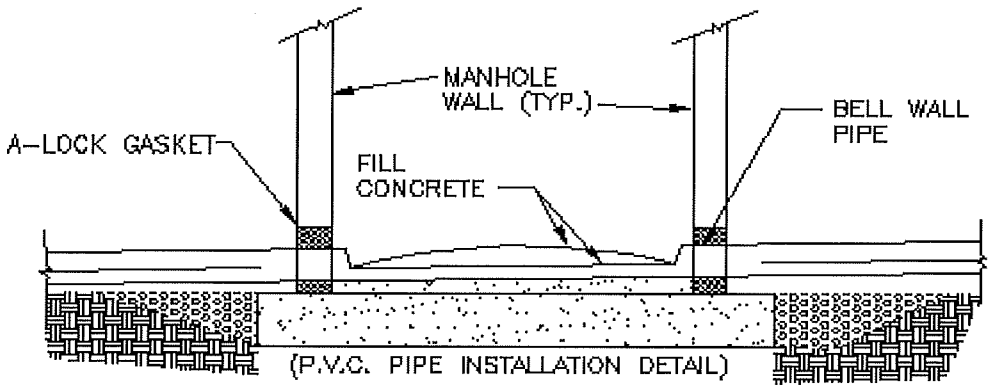
PIPE SIZE "D" (IN.)	TRENCH WIDTH "BD" (FT.)
6	2.00
8	2.33
10	2.50
12	3.00
15	3.25
18	3.83
24	4.42

NIXA

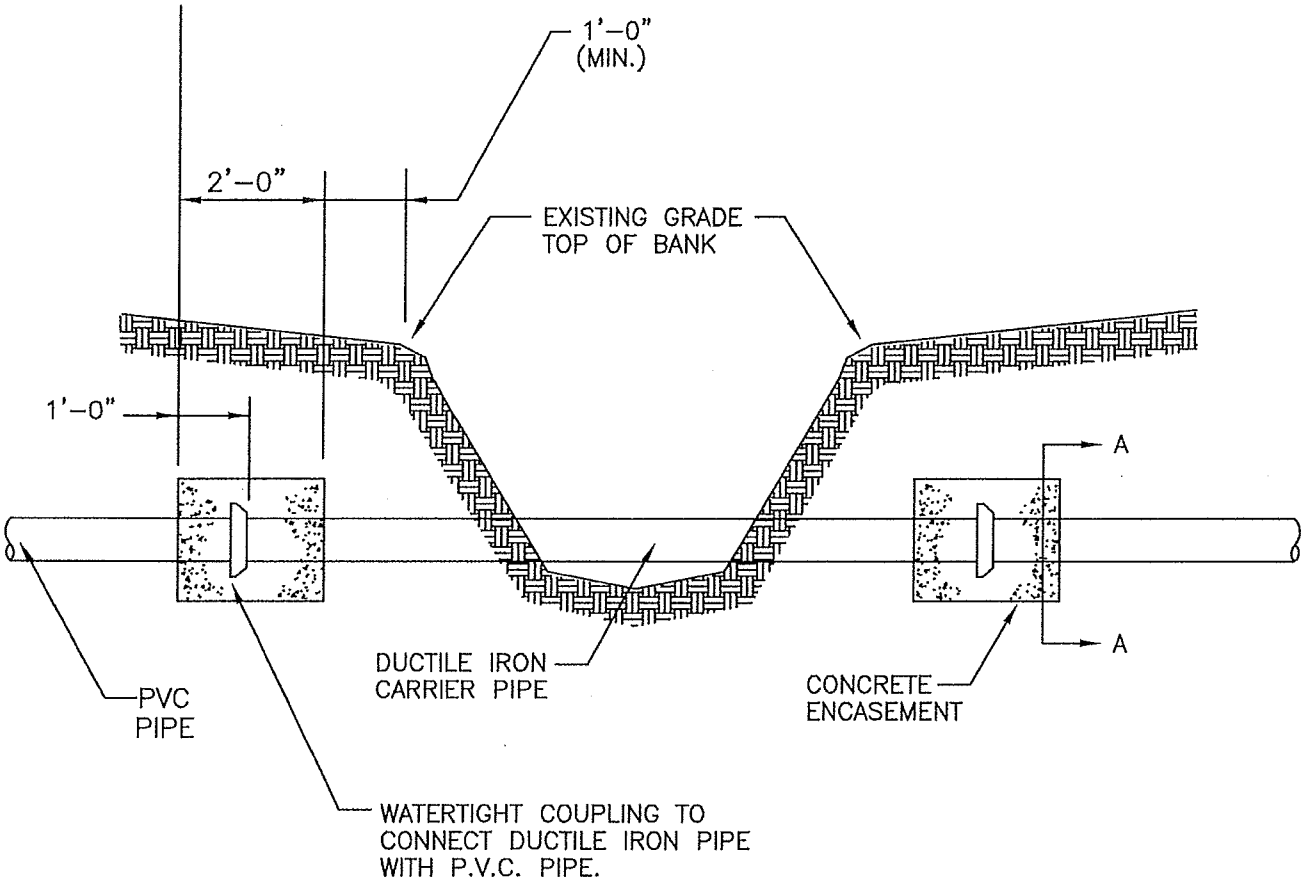
SANITARY SEWER STREAM CROSSING DETAIL

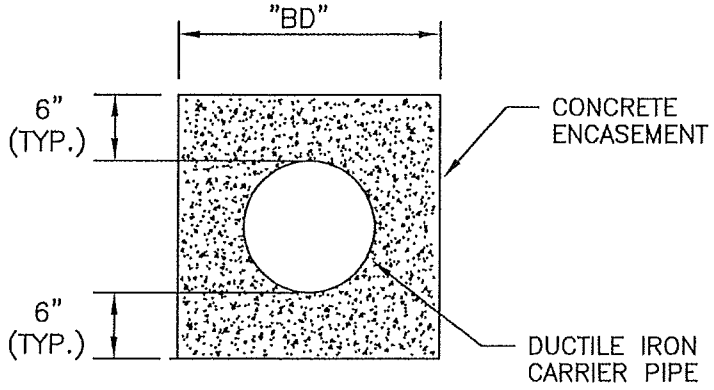
DATE: 5/15/15

DWG: C9



CITY OF NDXA	STANDARD SECTION	DATE: 01/31/99
		DWG: C10





SECTION A–A

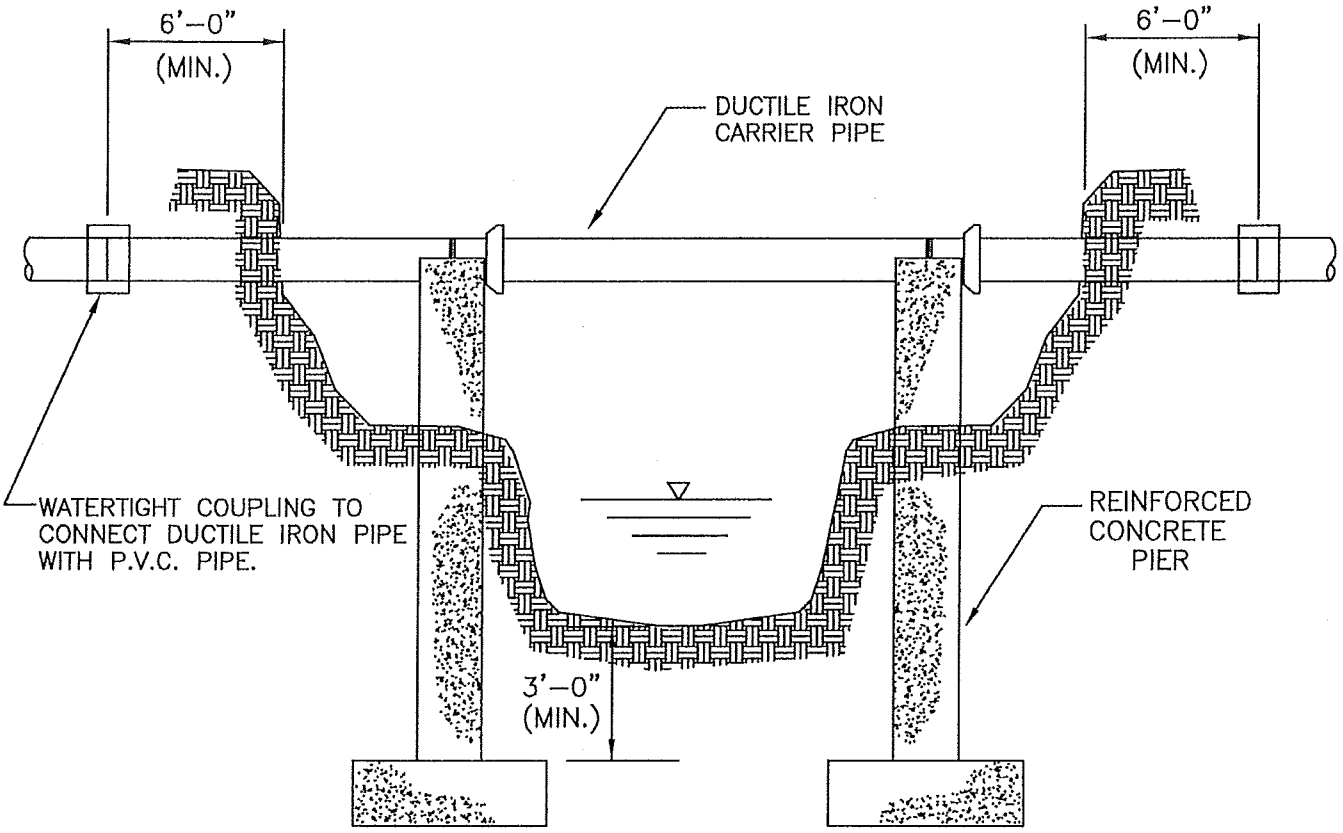
PIPE SIZE "D" (IN.)	TRENCH WIDTH "BD" (FT.)
6	2.00
8	2.33
10	2.50
12	3.00
15	3.25
18	3.83
24	4.42

CITY OF NIXA MISSOURI

SANITARY SEWER AERIAL CROSSING DETAIL

DATE: 5/15/15

DWG: C11



NOTE:

1. WHENEVER POSSIBLE NO PIERS SHALL BE PLACED WITHIN NORMAL FLOW OF CREEK. FOOTINGS SHALL BE PLACED A MINIMUM OF 3 FEET BELOW THE CREEK BED.

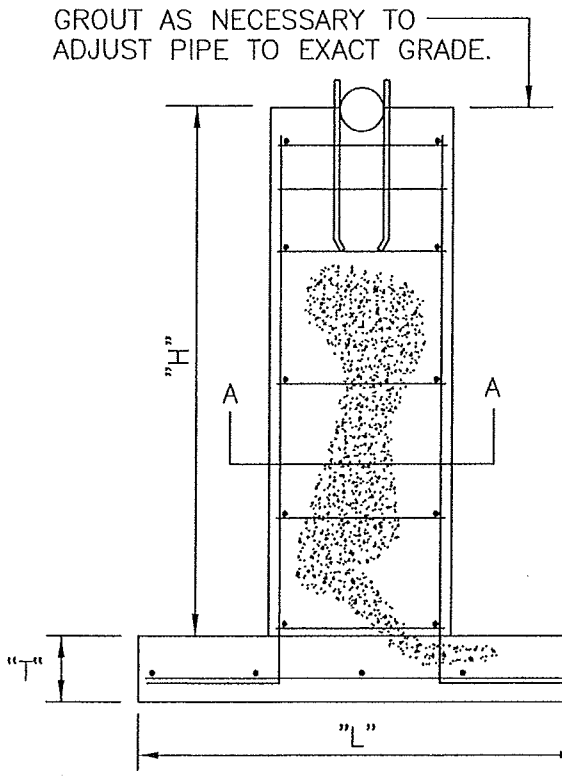
2. REINFORCED CONCRETE PIERS SHALL BE PLACED BEHIND THE BELL OF EACH JOINT OF DUCTILE IRON PIPE.

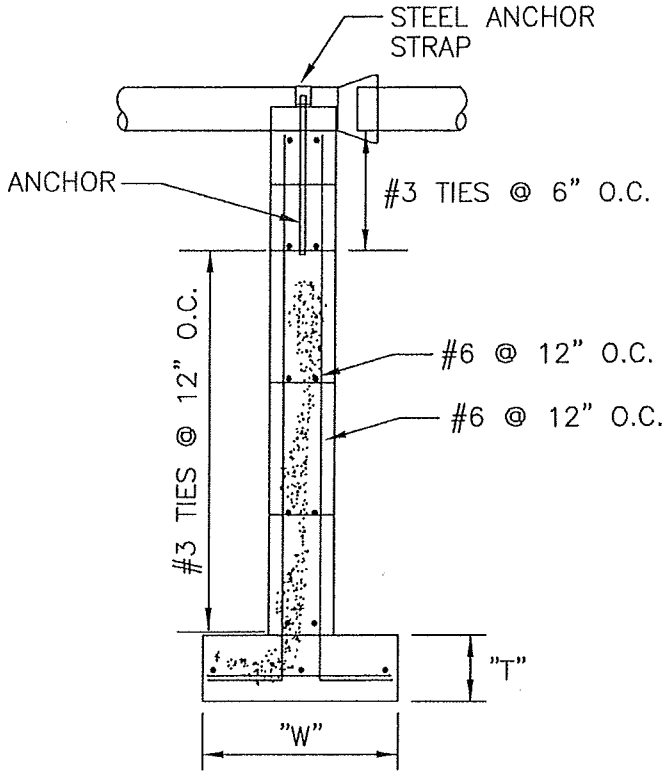
3. ALL PIER PLACEMENT SHALL BE APPROVED BY CITY OF NIXA PUBLIC WORKS DEPARTMENT.

4. DISTURBED AREA SHALL BE RIP–RAPPED AS REQUIRED TO ELIMINATE EROSION.

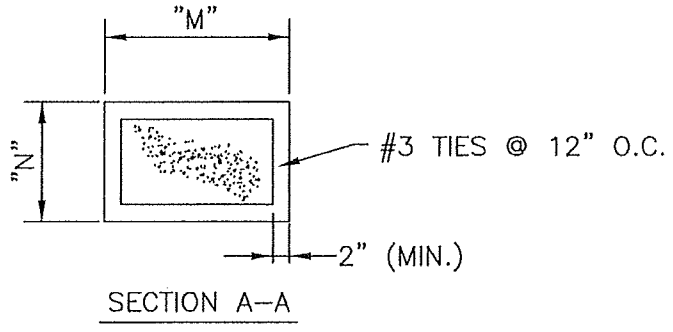
5. CONCRETE PIERS ARE NOT REQUIRED FOR AERIAL SPANS LESS THAN 20'–0" IN LENGTH.

CITY OF NIXA MISSOURI	SANITARY SEWER AERIAL CROSSING W/PIERS DETAIL	DATE: 5/15/15
		DWG: C11a

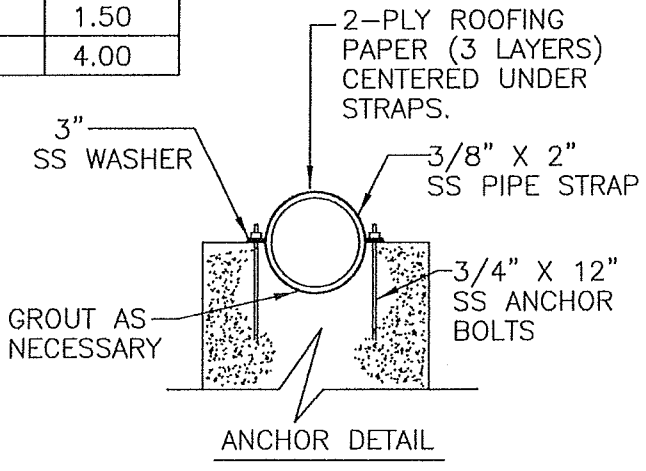




PIER HEIGHT "H" (FT.)	0–5 (FT.)	5–10 (FT.)	10–15 (FT.)
"W"	3.00	4.00	5.00
"L"	4.00	5.00	7.00
"T"	1.00	1.00	1.50
"N"	1.00	1.00	1.50
"M"	2.00	3.00	4.00



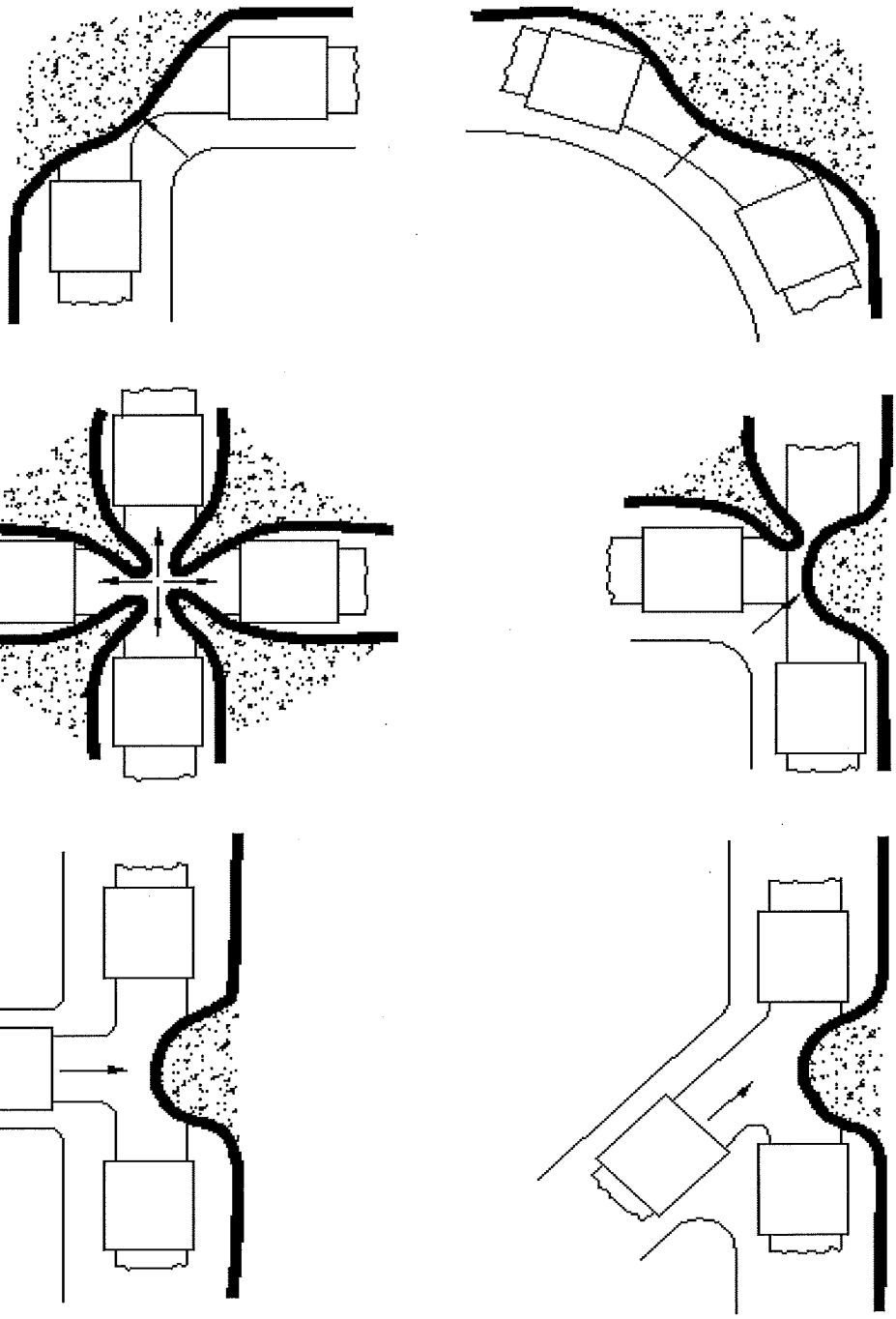
SECTION A–A



ANCHOR DETAIL

NOTE:
THIS CONSTRUCTION DETAIL IS A SUGGESTED DESIGN ONLY AND DOES NOT RELIEVE DESIGN ENGINEER FROM PROPER DESIGN OF ALL STRUCTURES. ENGINEER SHALL SUBMIT ALL PIER SUPPORTED PIPING SYSTEMS TO CITY OF NIXA PUBLIC WORKS FOR APPROVAL.

NIXA	SANITARY SEWER CONCRETE PIER DETAIL	DATE: 5/15/15
		DWG: C12

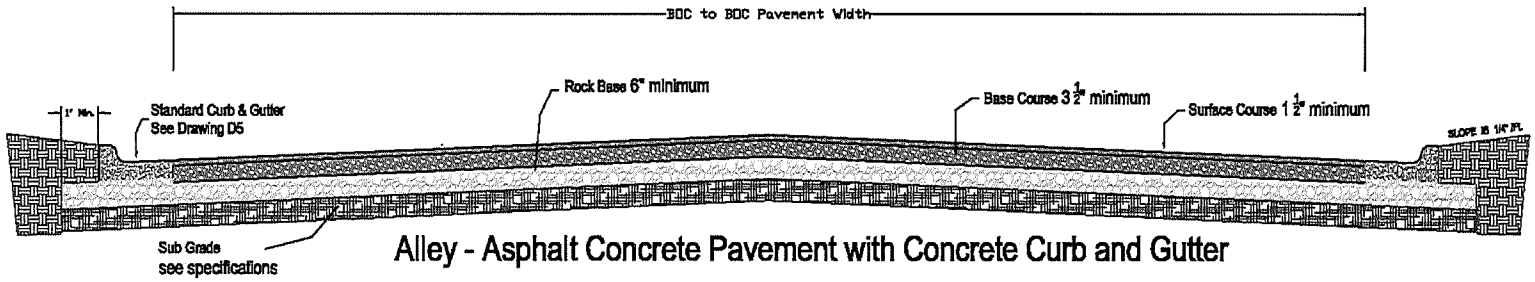


MIN. 2 CU. FT. CONCRETE EACH THRUST BLOCK CONTINUOUS FROM CENTERLINE PIPE TO UNDISTURBED TRENCH WALL.

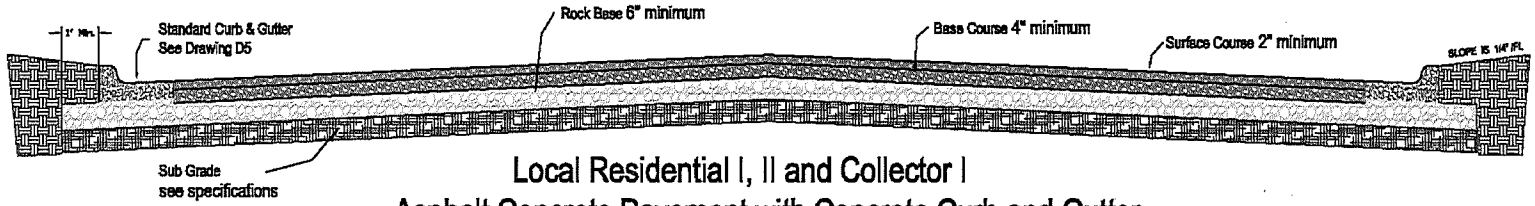
CITY OF NIXA	TYPICAL THRUST BLOCK DETAIL	DATE: 01/31/99
		DWG: C13

CITY OF IXA

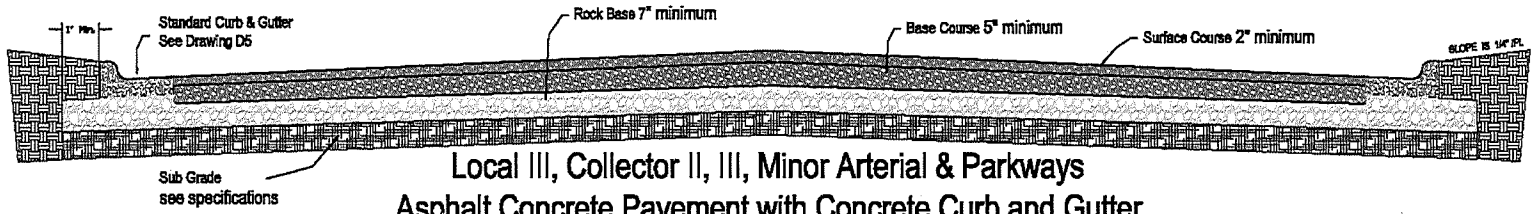
Street Construction - Minimum Standards



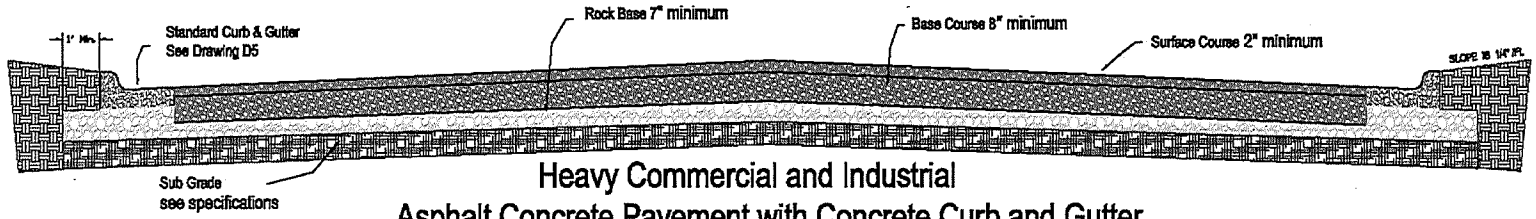
Alley - Asphalt Concrete Pavement with Concrete Curb and Gutter



Local Residential I, II and Collector I
Asphalt Concrete Pavement with Concrete Curb and Gutter

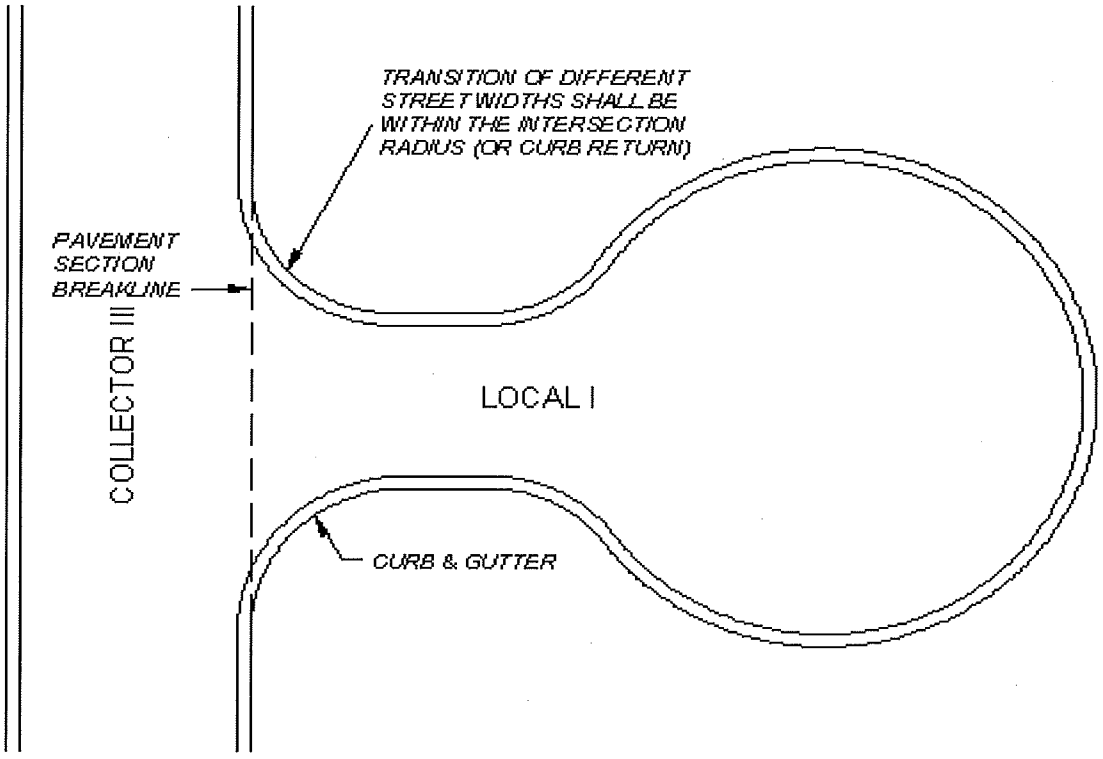


Local III, Collector II, III, Minor Arterial & Parkways
Asphalt Concrete Pavement with Concrete Curb and Gutter



Heavy Commercial and Industrial
Asphalt Concrete Pavement with Concrete Curb and Gutter

DATE: 02/14/05
DWG: D1 - AC



INTERSECTION WITH DIFFERING PAVEMENT TYPES

NOTE: SUBGRADE & TYPE I BASE MUST BE COMPACTED TO 95% STANDARD PROCTOR.

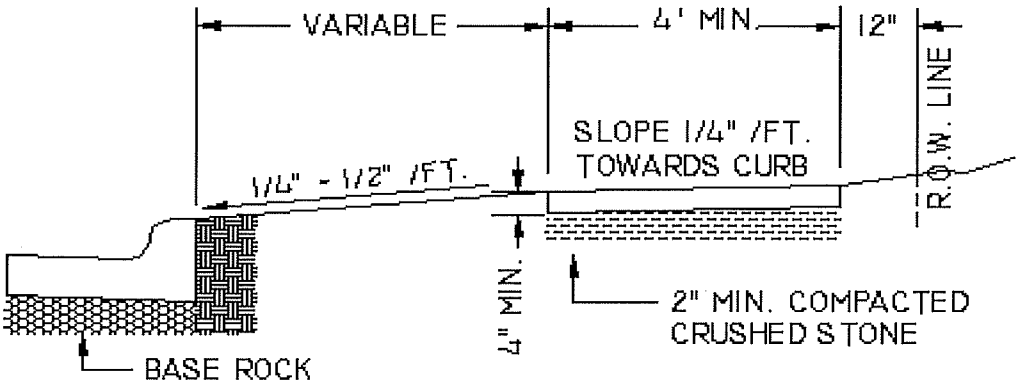
CITY OF NIXA		DATE: 09/22/99
		DWG: D1-B

CITY OF NIXA

Street Construction - Minimum Standards for Cement Concrete Surfaces

DATE: 02/14/05

DWG: D1-CC



NOTES:

1. JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE SIDEWALK.

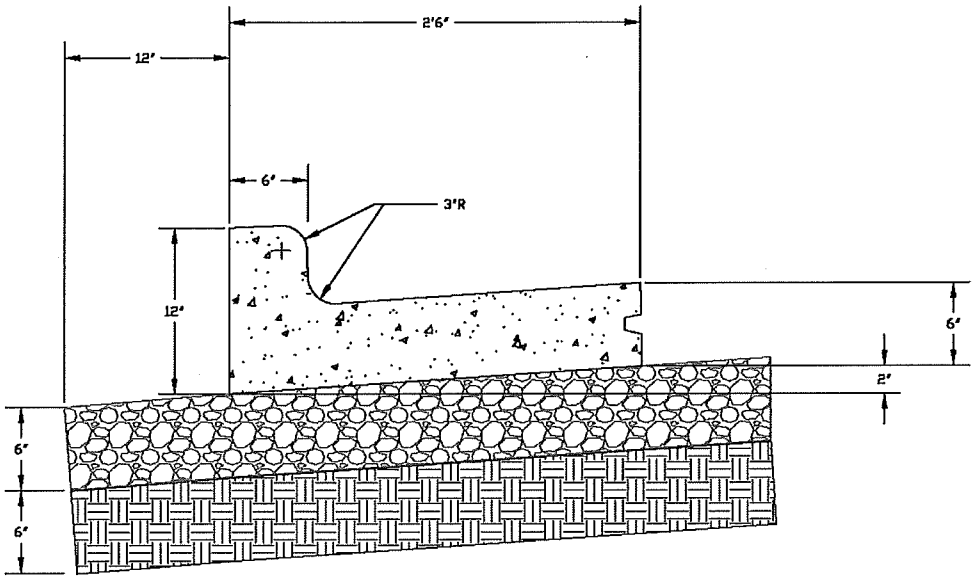
2. THE SIDEWALK SHALL BE MARKED OFF INTO SQUARE STONES BY CONTRACTION JOINTS. CONTRACTION JOINTS SHALL BE ONE-EIGHT (1/8) INCH WIDE (MIN.) BY ONE (1) INCH DEEP AND SHALL BE FORMED BY TOOLING.

3. EXPANSION JOINTS SHALL BE FORMED BY A ONE-HALF (1/2) INCH THICK PREFORMED JOINT FILLER, EXTENDING THE FULL DEPTH OF THE SLAB, AND SECURED SO THAT THE JOINT FILLER IS NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS.

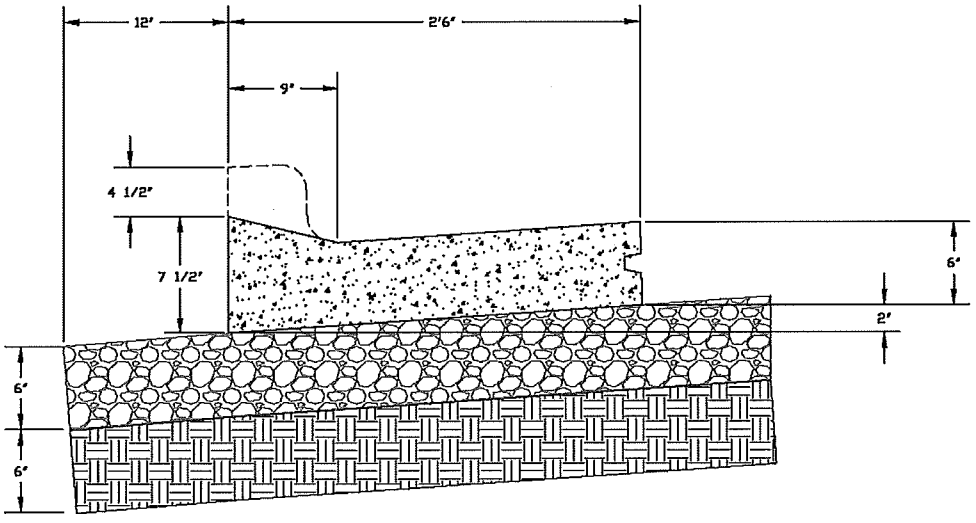
4. EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS TO OTHER STRUCTURES AND SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALK AND NOT MORE THAN 100 FEET APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS.

CITY OF NIXA	CONCRETE SIDEWALK DETAIL	DATE: 01/31/99
		DWG: D3

TYPICAL CURB AND GUTTER - CONCRETE



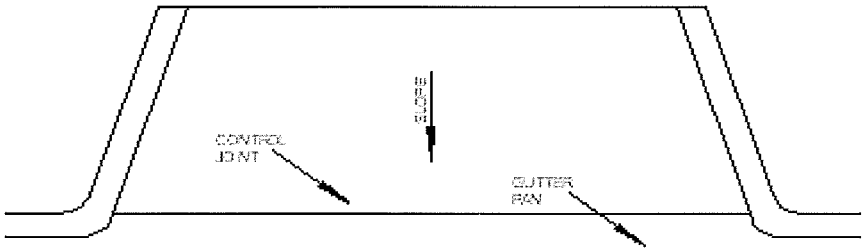
TYPICAL DRIVEWAY OPENING - CONCRETE

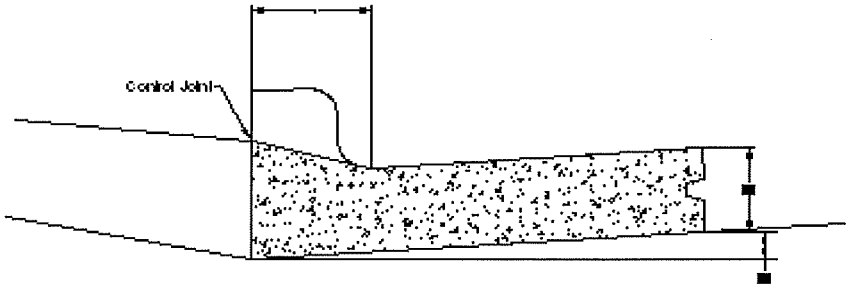


NOTES:

1. Keyway or #5 Dowel @ 2'6" to be used on all Concrete Pavement. Keyway and Dowel may be ommitted where Asphalt Pavement is used.
2. 6" Type 1 compacted base rock shall be placed under curb and extended 1' behind curb.
3. Subgrade & Type I Base Rock must be compacted to 95% Standard Proctor.

CITY OF NIXA	CONCRETE CURB and GUTTER - DETAIL	DATE: 02/14/05 DWG: D5



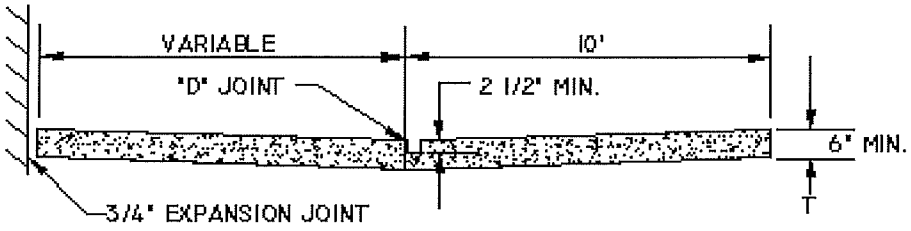


See Drawing D5 for Gutter Detail

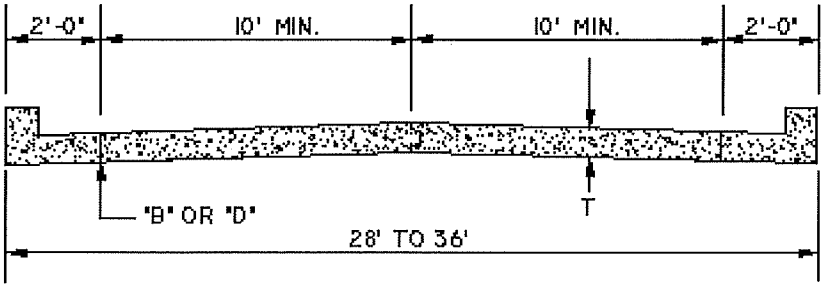
Gutter Pan shall remain intact or be replaced - no joints are allowed in the bottom of the gutter pan.

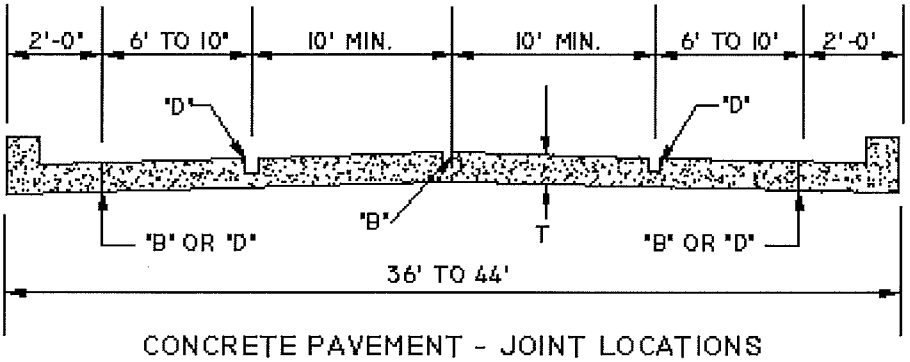
Control Joints are required where driveway meets gutter line.

CITY OF NIXA	STANDARD CURB TAPER & DRIVEWAY OPENING	DATE: 10/31/06
		DWG: D6

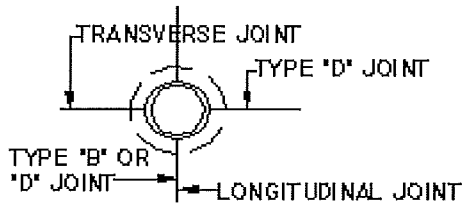


TYPICAL ALLEY SECTION

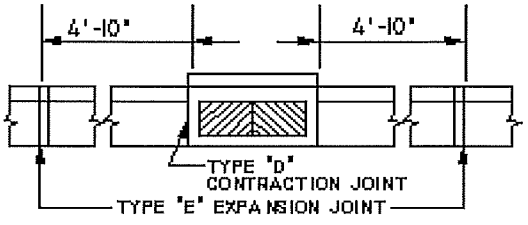




CONCRETE PAVEMENT - JOINT LOCATIONS



JOINT LOCATION AT INLETS



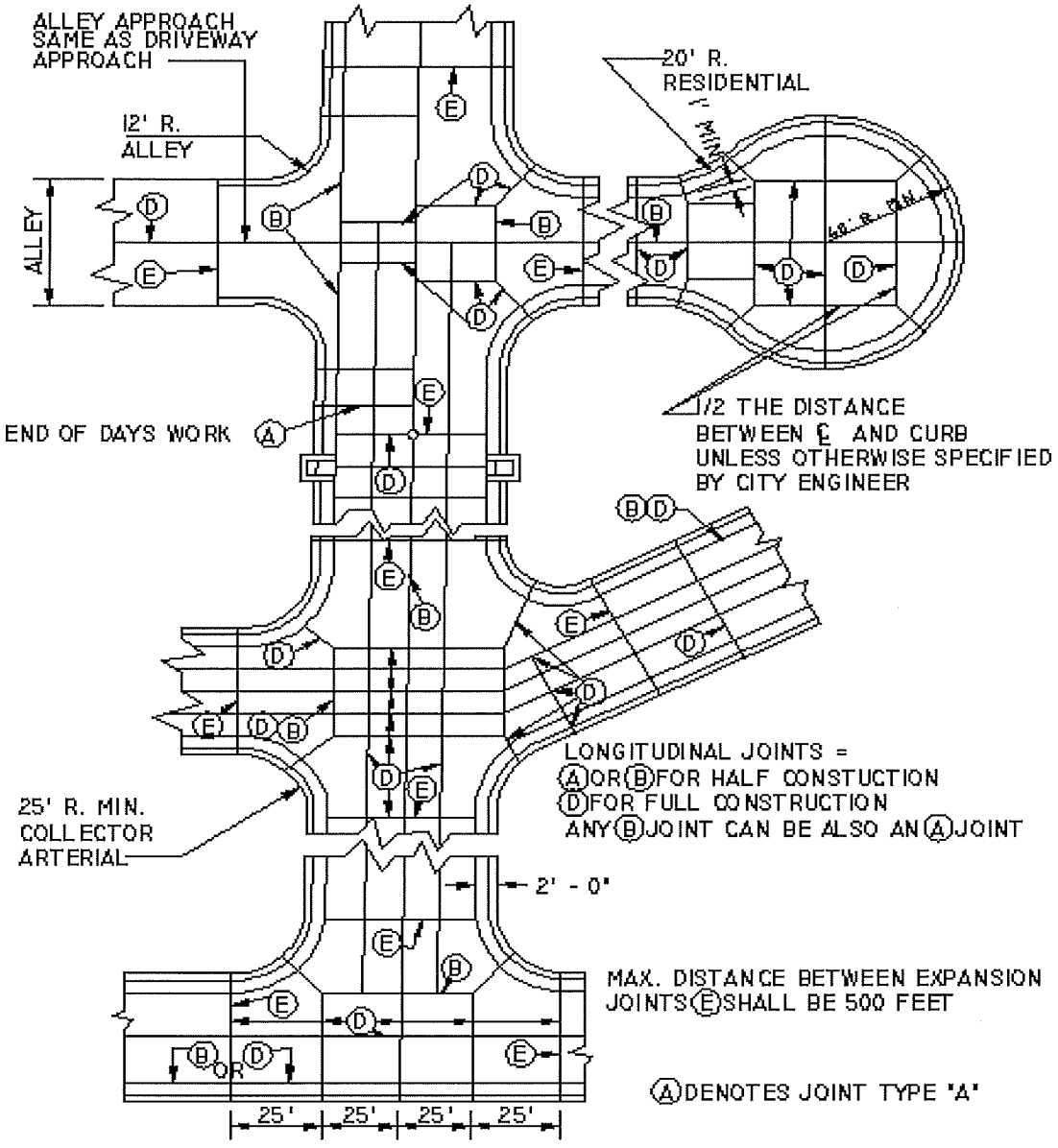
JOINT LOCATION AT INLETS

CITY OF NIXA

CONCRETE PAVEMENT JOINT DETAILS

DATE: 01/31/99

DWG: D7

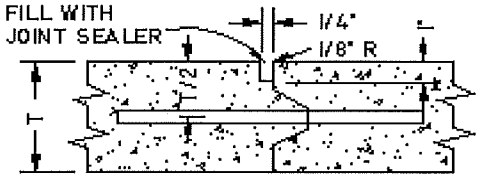


CITY OF NIXA

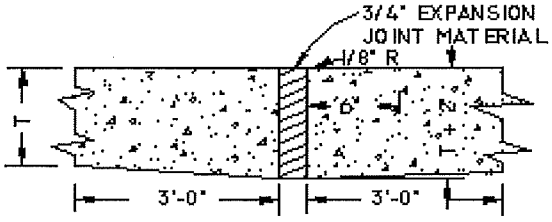
CONCRETE PAVEMENT JOINT LOCATION

DATE: 01/31/99

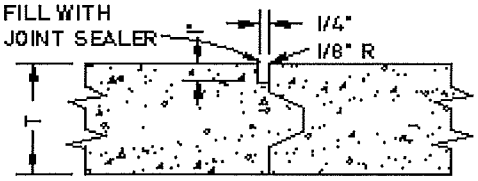
DWG: D8



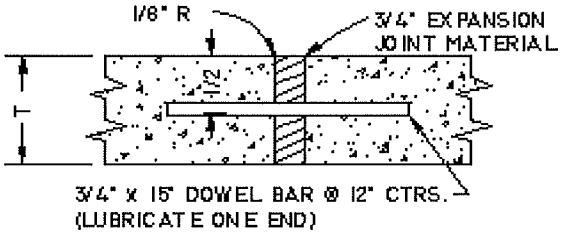
KEYED CONSTRUCTION JOINT WITH
24" No. 6 DEFORMED BAR @ 24" CTRS.
(TYPE "A")



EXPANSION JOINT
(TYPE "E")

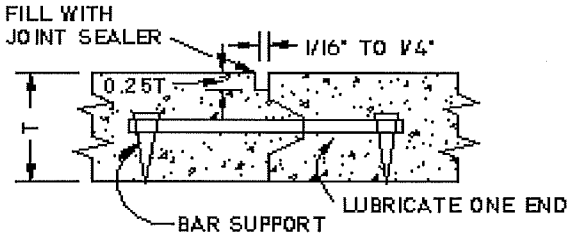


KEYED CONSTRUCTION JOINT
WITHOUT BAR
(TYPE "B")

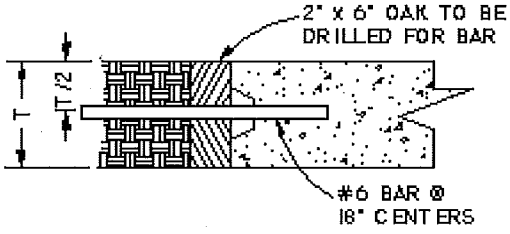


3/4" x 15" DOWEL BAR @ 12" CTRS.
(LUBRICATE ONE END)

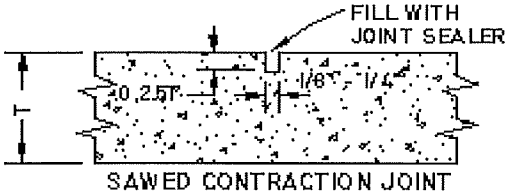
DOWELED EXPANSION JOINT
(TYPE "F")



SAWED CONTRACTION JOINT WITH
1" x 18" DOWEL BAR @ 12" CTRS.
(TYPE "C")

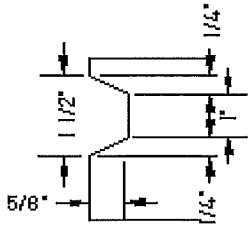


CONSTRUCTION HEADER
CONCRETE



SAWED CONTRACTION JOINT
(TYPE "D")

DEPT OF SAW JOINT
6" PAV. = 1 1/2"
7" PAV. = 1 3/4"
8" PAV. = 2"



DETAIL KEY

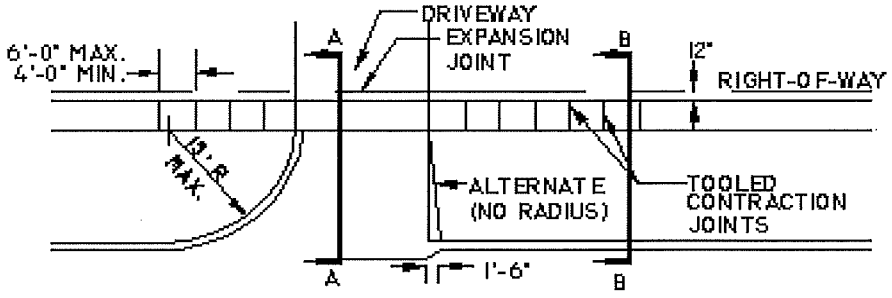
KEYWAY FORMED BY FASTENING KEY TO FORM

CITY OF NXA

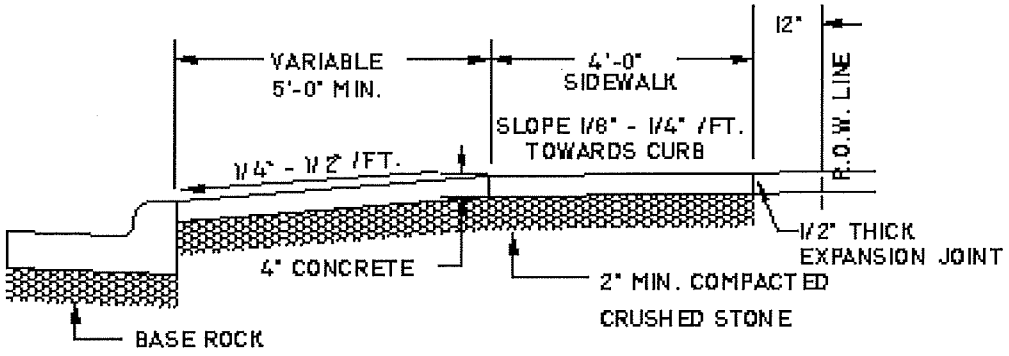
CONCRETE PAVEMENT JOINT DETAILS

DATE: 01/31/99

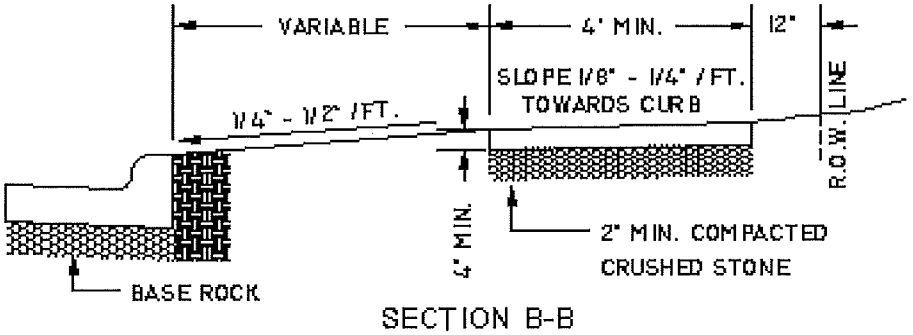
DWG: D9



PLAN



SECTION A-A

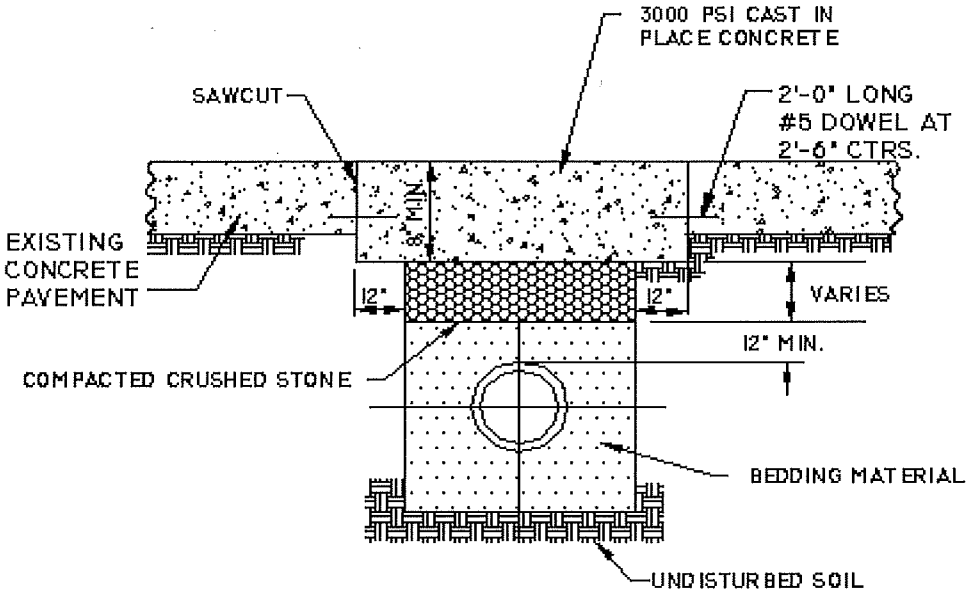


SECTION B-B

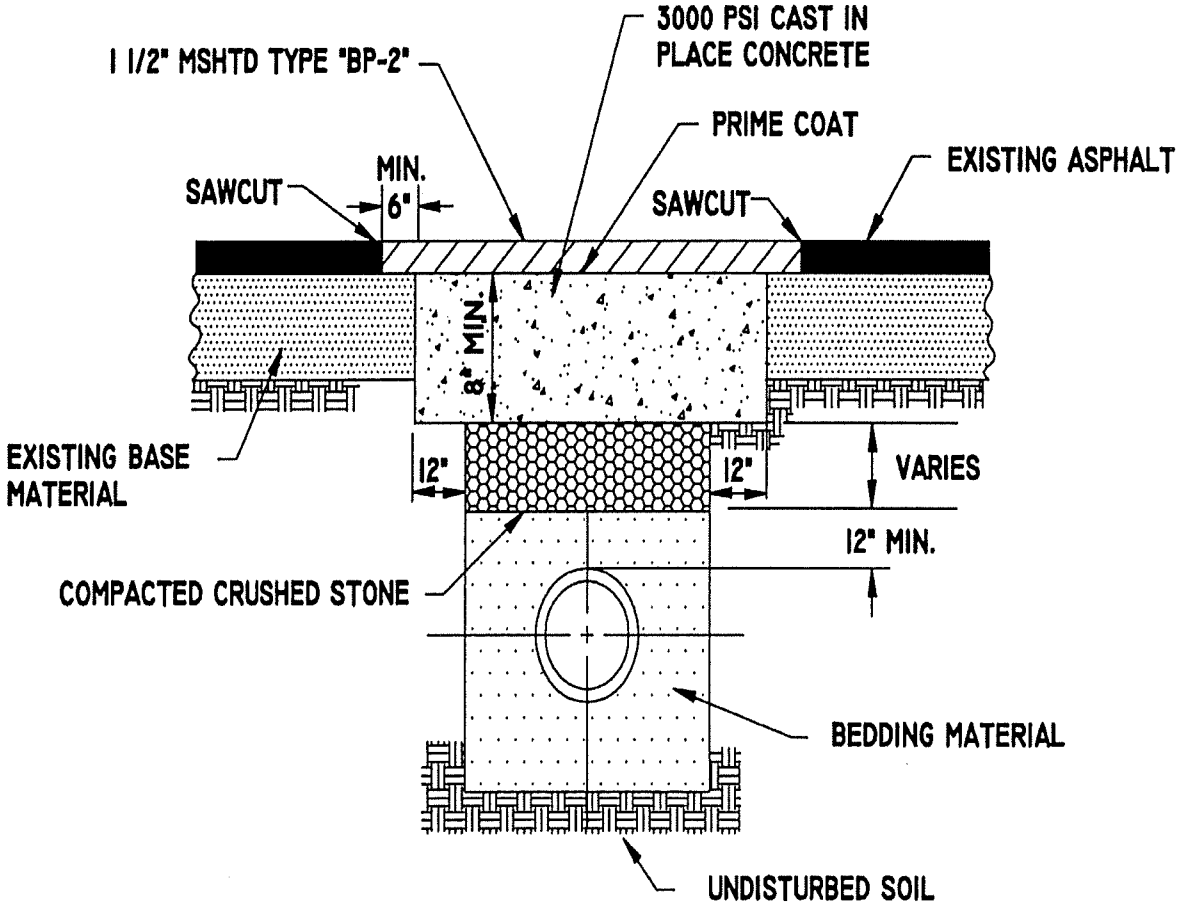
NOTES:

1. EXPANSION JOINS SHALL BE PLACED NOT MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALK AND NOT MROE THAN 100 FEET APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS.

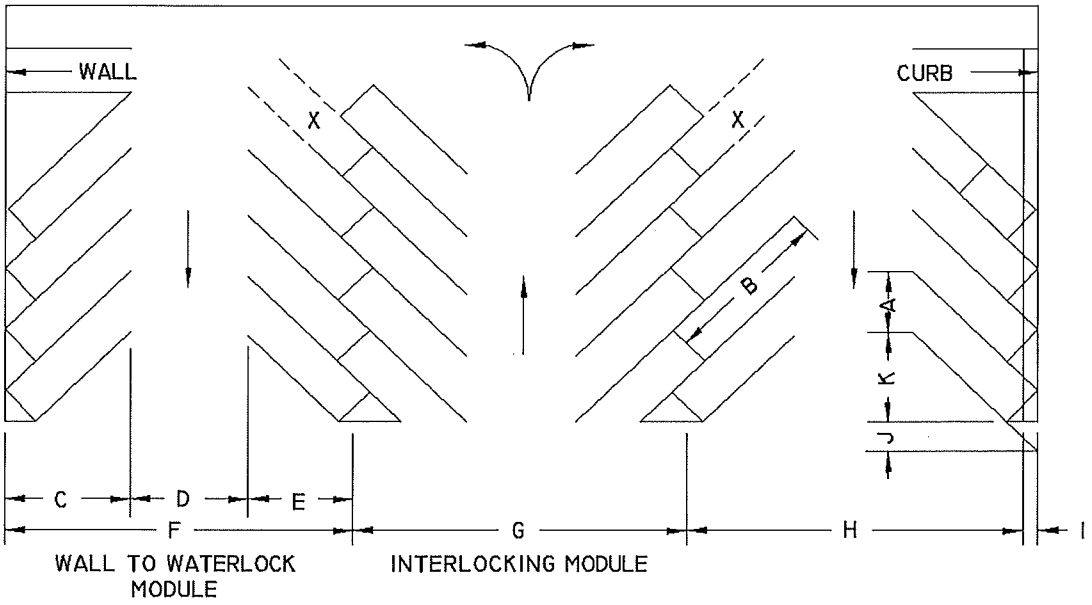
NIXA	CONCRETE SIDEWALK & DRIVEWAY DETAIL	01/31/99
		D11



CITY OF NIXA	CONCRETE STREET REPAIR	DATE: 01/31/99
		DWG: D12



NIXA	ASPHALT STREET REPAIR	01/31/99
		D13



X = STALL NOT ACCESSIBLE IN CERTAIN LAYOUTS

PARKING LAYOUT DIMENSIONS (IN FEET) FOR 9-FT. STALLS AT VARIOUS ANGLES

DIMENSION	ON DIAGRAM	90°	75°	60°	45°	30°
STALL WIDTH, PARALLEL TO AISLE	A	9.0	9.3	10.4	12.7	18.0
STALL LENGTH OF LINE	B	18.5	20.0	22.0	25.0	34.1
STALL DEPTH TO WALL	C	18.5	19.5	19.0	17.5	17.1
AISLE WIDTH BETWEEN STALL LINES	D	26.0	23.0	16.0	12.0	10.0
STALL DEPTH, INTERLOCK	E	18.5	18.8	17.5	15.3	13.2
MODULE, WALL TO INTERLOCK	F	63.0	61.3	52.5	44.8	40.3
MODULE, INTERLOCKING	G	63.0	61.0	51.0	42.6	36.4
MODULE, INTERLOCK TO CURB FACE	H	60.5	58.8	50.2	42.8	38.8
BUMPER OVERHANG (TYPICAL)	I	2.5	2.5	2.3	2.0	1.5
OFFSET	J	0.0	0.5	2.7	6.3	13.5
SETBACK	K	0.0	5.0	8.3	11.0	16.0
CROSS AISLE, ONE-WAY	L	14.0	14.0	14.0	14.0	14.0
CROSS AISLE, TWO-WAY	-	24.0	24.0	24.0	24.0	24.0

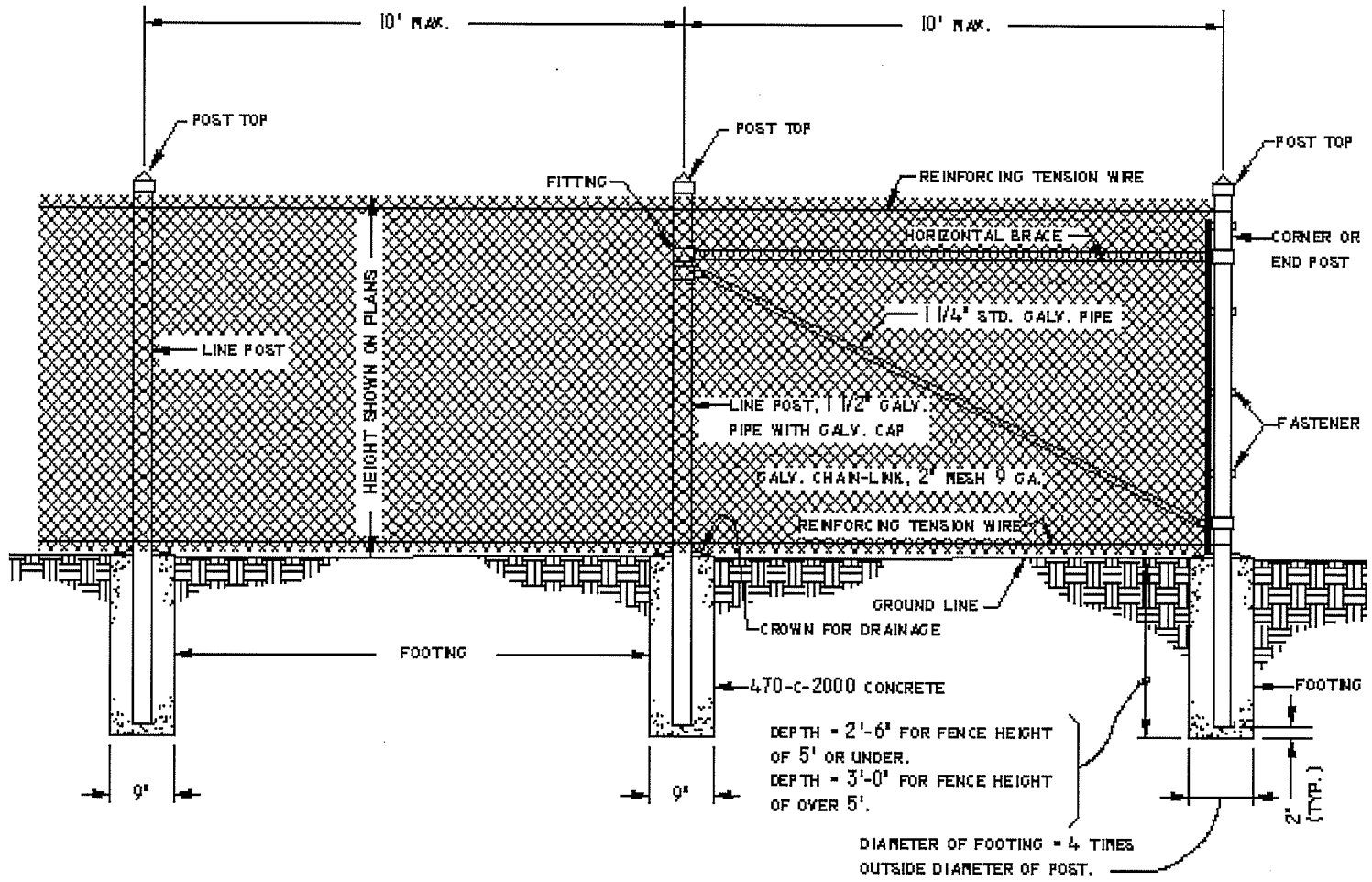
NIXA	PARKING STALL LAYOUT ELEMENTS MINIMUM REQUIREMENTS	01/31/99
		D14

CITY OF DALLAS

CHAIN LINK FENCE DETAIL

DATE: 01/31/99

DWG: E2



SEEDING RATES	BROADCAST	DRILLED SODDED
Tall Fescue	30 lbs./acre	25 lbs./acre solid
Kentucky Bluegrass	3 lbs./acre	2 lbs./acre solid
Red Fescue	10 lbs./acre	7 lbs./acre
Wheat or Rye	120 lbs./acre	100 lbs./acre
Annual Ryegrass	100 lbs./acre	100 lbs./acre

SEEDING DATES

Perennial Grasses:	March 1 to May 15 or August 15 to October 15
Temporary Cover:	May 15 to November 15
Overseeding:	November 15 to March 1

MULCH RATES

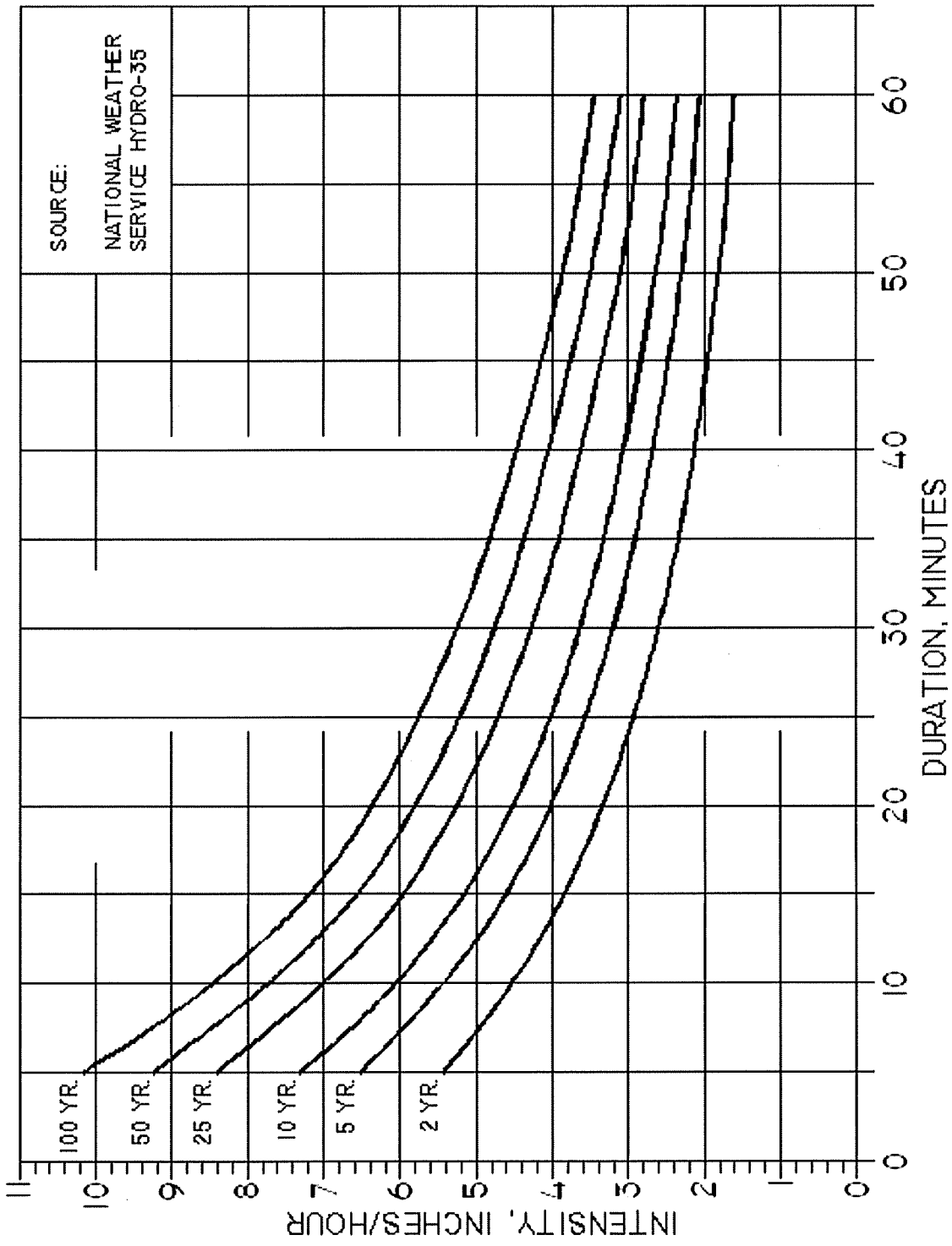
Wheat straw: 100 lbs. Per 1000 square feet (4,500 lbs./acres)

FERTILIZER RATES

Nitrogen:	90 lbs./acre
Phosphate:	90 lbs./acre
Potassium:	90 lbs./acre
Lime:	1500 lbs./acre ENM*

*ENM-Effective Neutralizing Material as per State evaluation of quarried rock.

CITY OF NIXA MISSOURI	SEEDING, MULCH & FERTILIZER	DATE: 7 / 8 / 15 DWG: G1

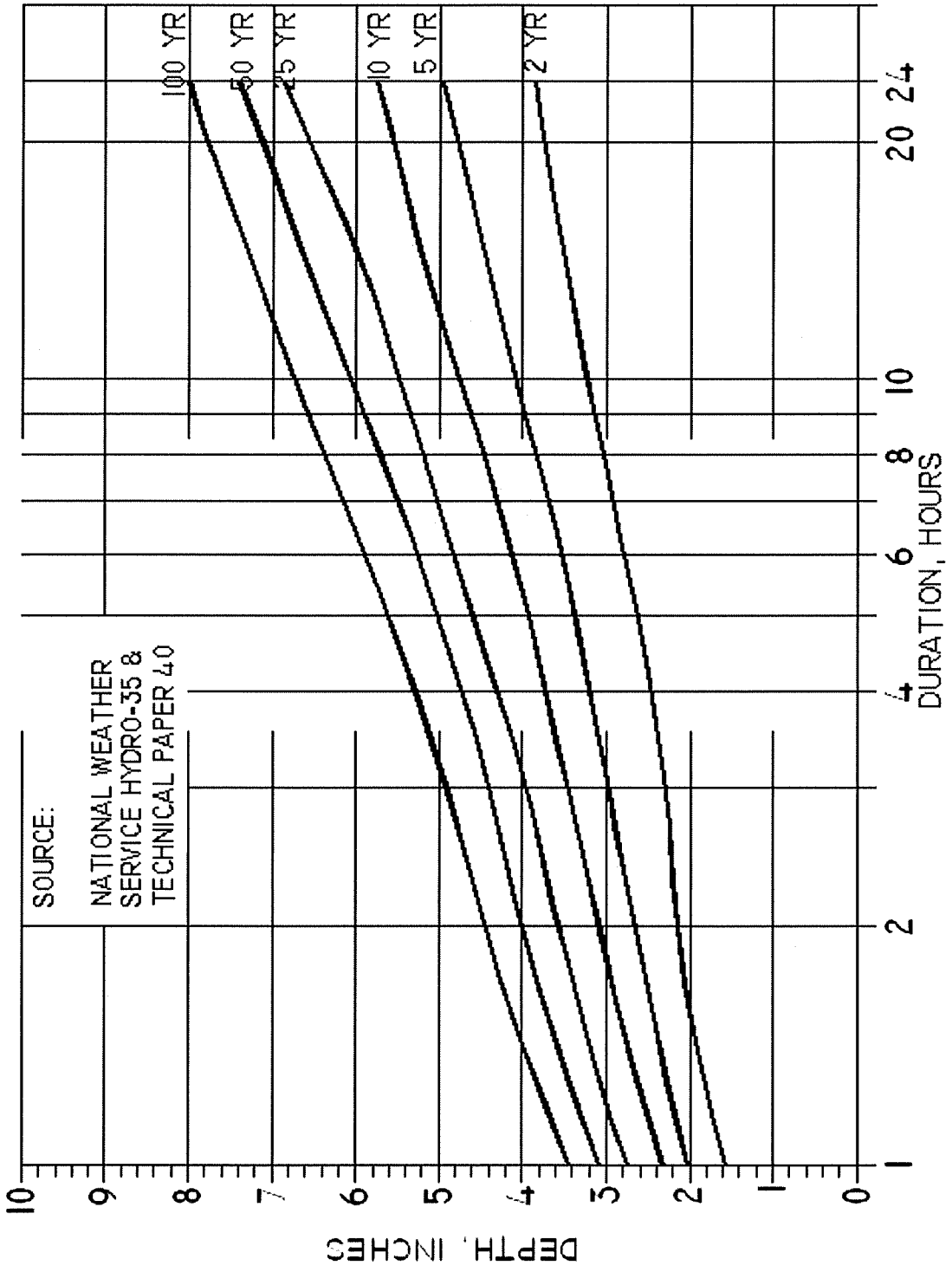


CITY OF NIXA MISSOURI

RAINFALL INTENSITIES FOR DURATION < 60 MINUTES

DATE: 7 / 8 / 15

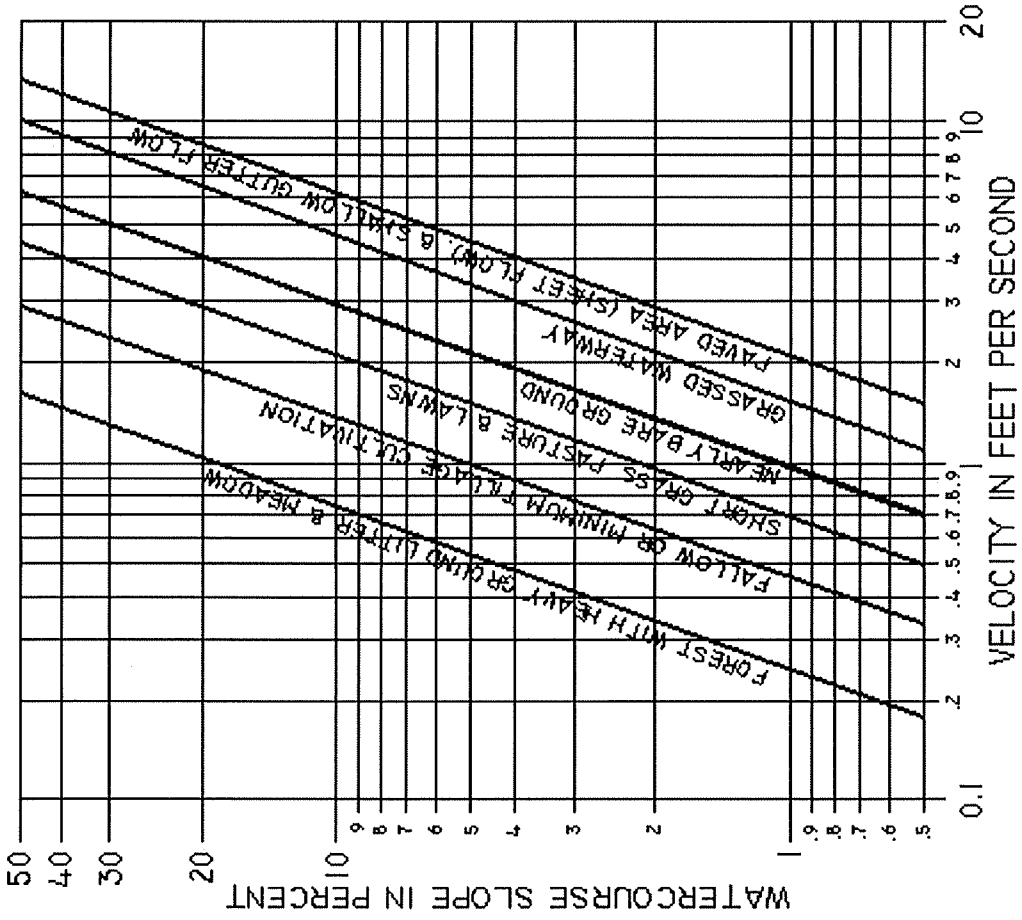
DWG: G2



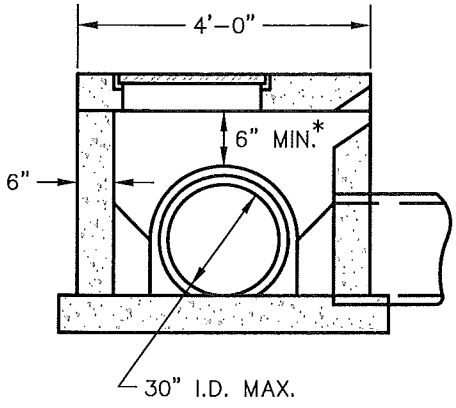
CITY OF NIXA MISSOURI	RAINFALL DEPTHS FOR DURATIONS OF 1 TO 24 HOURS	DATE: 7 / 8 / 15
		DWG: G3

REFERENCE:

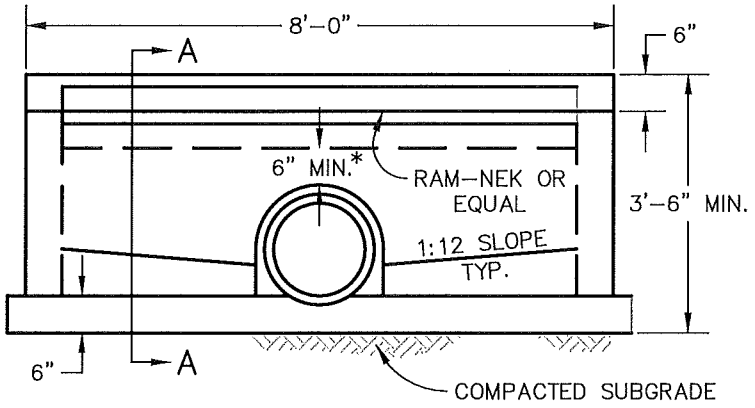
"URBAN HYDROLOGY FOR SMALL WATERSHEDS" TECHNICAL RELEASE NO. 55, USDA, SCS JAN. 1975.



CITY OF NIXA MISSOURI	AVERAGE FLOW VELOCITY	DATE: 7 / 8 / 15
		DWG: G4



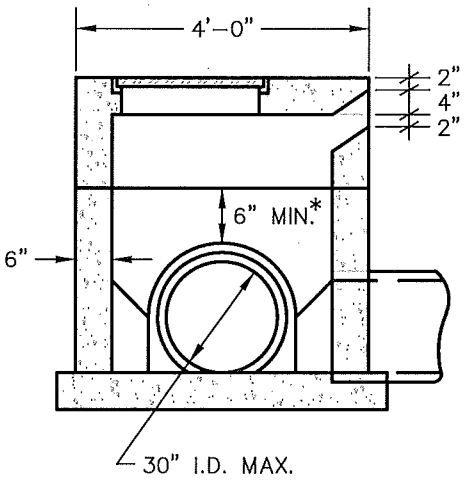
SECTION A–A



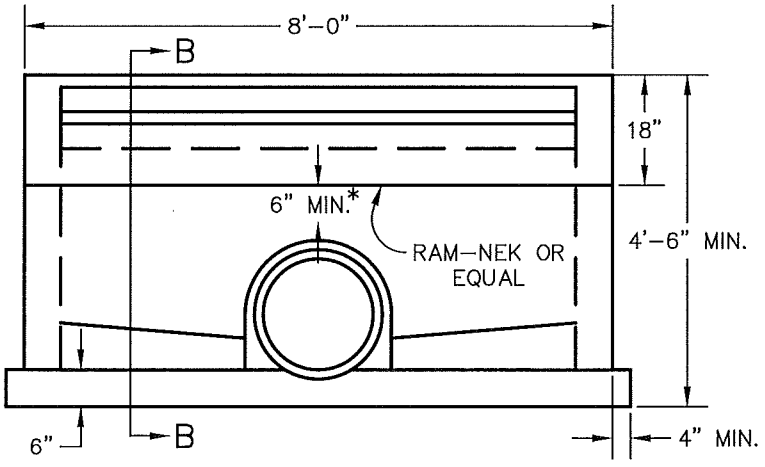
NOTE: #4 ø @ 10" C.C. (ALL WALLS, VERT. & HOR.)
SEE DET. G6 FOR TOP SLAB REINFORCEMENT

6" PRECAST TOP

* NOTE: LESS CLEARANCE MAY BE ALLOWED PROVIDED ADEQUATE STRUCTURAL PROVISIONS ARE MADE TO PREVENT THE UNIT FROM CRACKING DURING DELIVERY AND INSTALLATION.



SECTION B–B



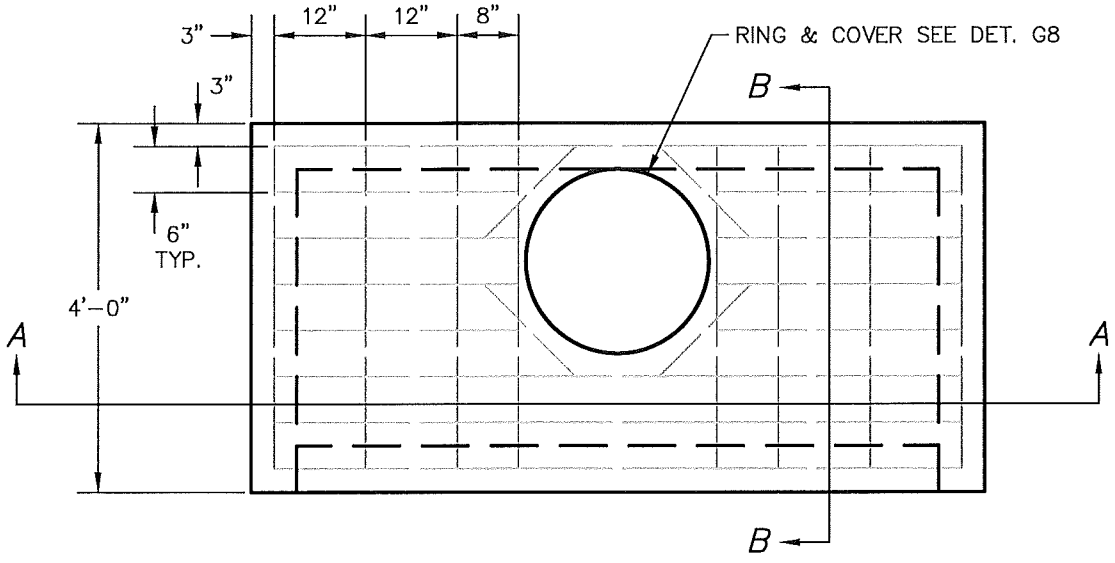
NOTE: #4 ø @ 10" C.C. (ALL WALLS, VERT. & HOR.)
SEE DET. G6 FOR TOP SLAB REINFORCEMENT

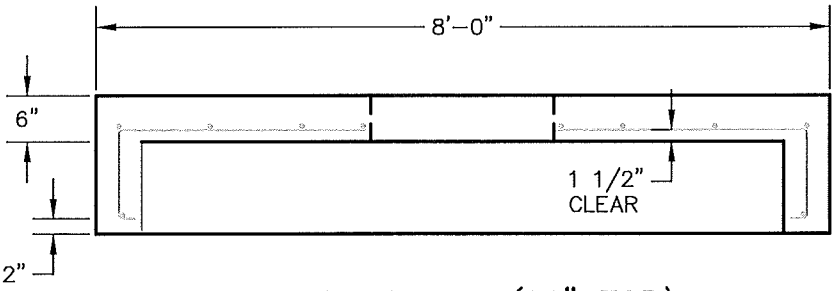
18" PRECAST TOP

NOTES:

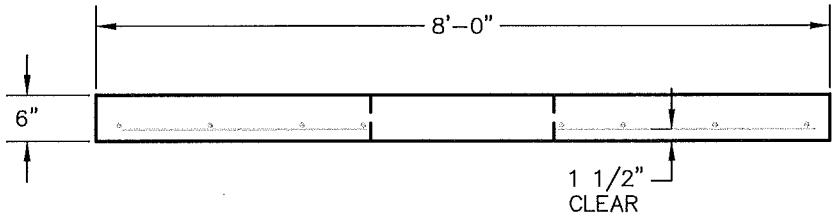
1. BOTTOM TO BE CAST IN PLACE.
2. PIPE TO BE ON GRADE BEFORE BOTTOM IS CONSTRUCTED.
3. TOP SHALL RECEIVE 4 – #4 ø DOWELS; ONE IN EACH CORNER W/ RAM–NEK OR EQUAL.
4. RAM–NEK ALL JOINTS (OR EQUAL).
5. 6" INVERT REQUIRED TO PREVENT SEDIMENTATION.
6. STANDARD CURB AND GUTTER SHALL BE TRANSITIONED TO INLET OPENING AT LEAST 4 FEET ON EACH SIDE OF CURB INLET.

CITY OF NIXA MISSOURI	CURB INLET	DATE: 7 / 8 / 15
		DWG: G5

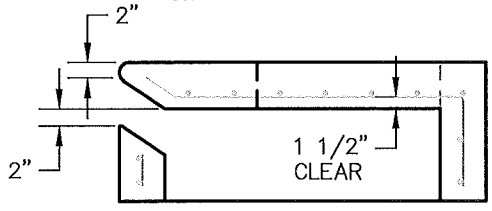




SECTION A–A (18" TOP)



SECTION A–A (6" TOP)

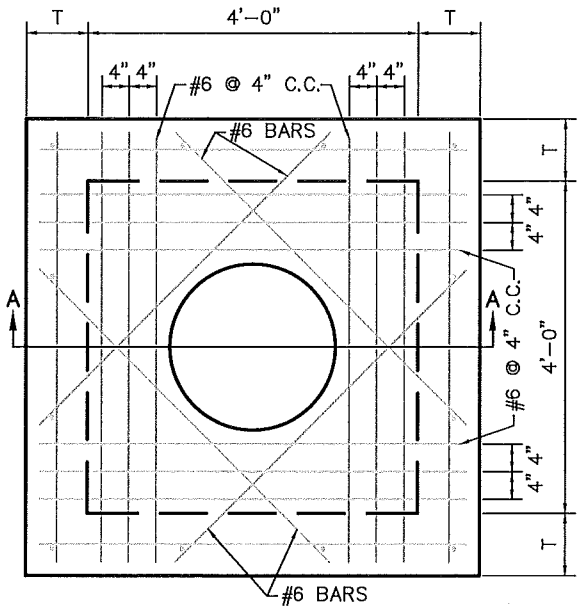


SECTION B–B

NOTES:

1. REINFORCEMENT IS THE SAME IN THE TOP SLAB OF THE 6" AND 18" TOPS.
2. USE NO. 4 REBAR THROUGHOUT.
3. FOR 6" TOP USE 4 – #4 ø DOWELS; ONE IN EACH CORNER W/ RAM–NEK OR EQUAL.
4. RAM–NEK ALL JOINTS (OR EQUAL).

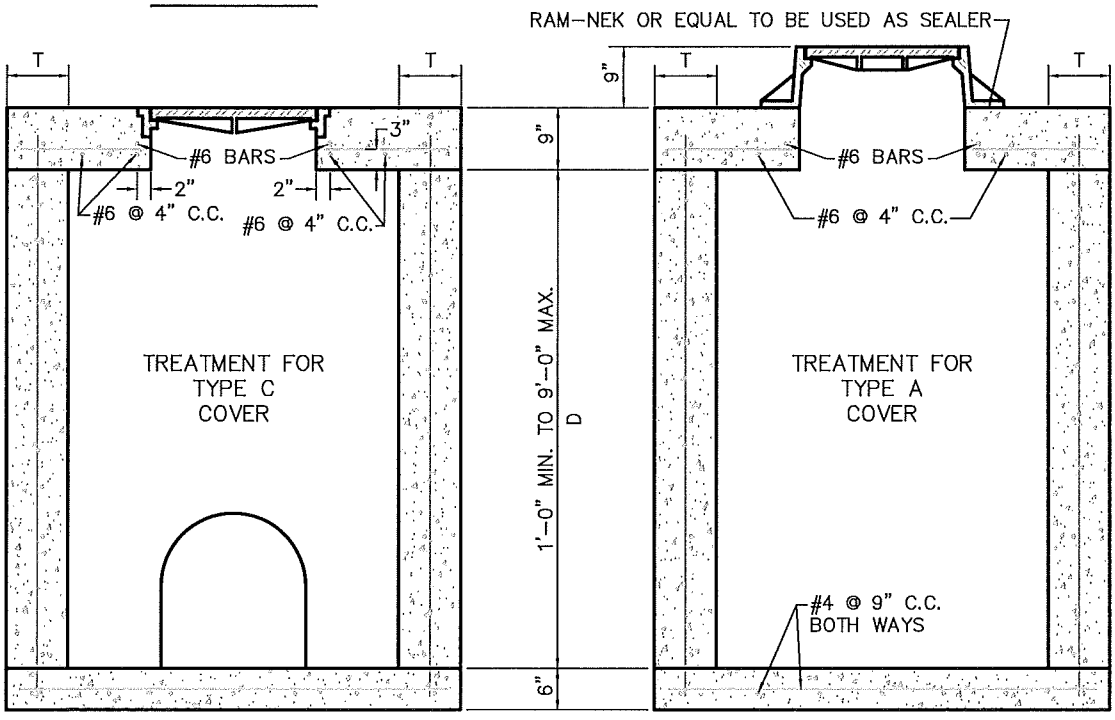
CITY OF NIXA MISSOURI	PRECAST INLET TOPS	DATE: 7 / 8 / 15
		DWG: G6



PLAN

STANDARD JUNCTION BOX				
TABLE OF REINFORCEMENT			WALL THICK.	CONC.
"D"	VERT. BARS	HOR. BARS	"T"	CU. YDS.
1'-0"	NONE	NONE	9"	1.93
2'-0"	"	"	9"	2.45
3'-0"	"	"	9"	2.98
4'-0"	"	"	9"	3.50
5'-0"	12 #5 @ 18" C.C. 5'-11" EACH	20 #4 @ 14" C.C. 5'-2" EACH	9"	4.03
6'-0"	12 #5 @ 18" C.C. 6'-11" EACH	20 #4 @ 17" C.C. 5'-2" EACH	9"	4.55
7'-0"	20 #5 @ 12" C.C. 7'-11" EACH	24 #4 @ 16" C.C. 5'-2" EACH	9"	5.08
8'-0"	20 #5 @ 12" C.C. 8'-11" EACH	28 #4 @ 15" C.C. 5'-2" EACH	9"	5.61
9'-0"	20 #5 @ 12" C.C. 9'-11" EACH	28 #4 @ 17" C.C. 5'-2" EACH	9"	6.14

STEEL IN TOP SLAB 16 #6 5'-2" EACH
4 #6 5'-0" EACH
STEEL IN BOTTOM 14 #4 5'-2" EACH
SEE DRAWINGS FOR STEEL PLACEMENT



SECTION AA

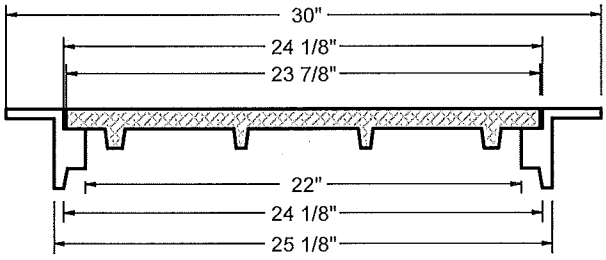
1. DIAGONAL BARS IN TOP SLAB PLACED NEAR BOTTOM OF SLAB.
2. REINFORCING BARS SHALL BE CUT OR BENT AT PIPE OPENINGS.
3. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF BOX.
4. MAXIMUM PIPE SIZE FOR BOX IS 42". FOR LARGER PIPES INCREASE INSIDE BOX DIMENSIONS TO THE INSIDE PIPE DIAMETER PLUS 6". USE GIVEN BAR SPACING FOR LARGER BOXES. MAXIMUM ALLOWABLE BOX SIZE IS 72".
5. BOTTOM OF BOX TO BE FILLED WITH CONCRETE TO MID-DEPTH OF PIPE FORMING CHANNELS TOWARD OUTLET PIPE FROM ALL INLET PIPES.
6. ALL CONCRETE SHALL HAVE 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI
7. ALL REINFORCING BARS TO BE DEFORMED BARS AND MEET REQUIREMENTS OF ASTM A-615 MIN. GRADE 40.
8. 4" BEDDING MATERIAL TO BE USED UNDER BOX.
9. IF BOX IS GREATER THAN 9' DEEP, MUST BE SPECIAL DESIGN.

CITY OF NIXA MISSOURI

JUNCTION BOX

DATE: 7 / 8 / 15

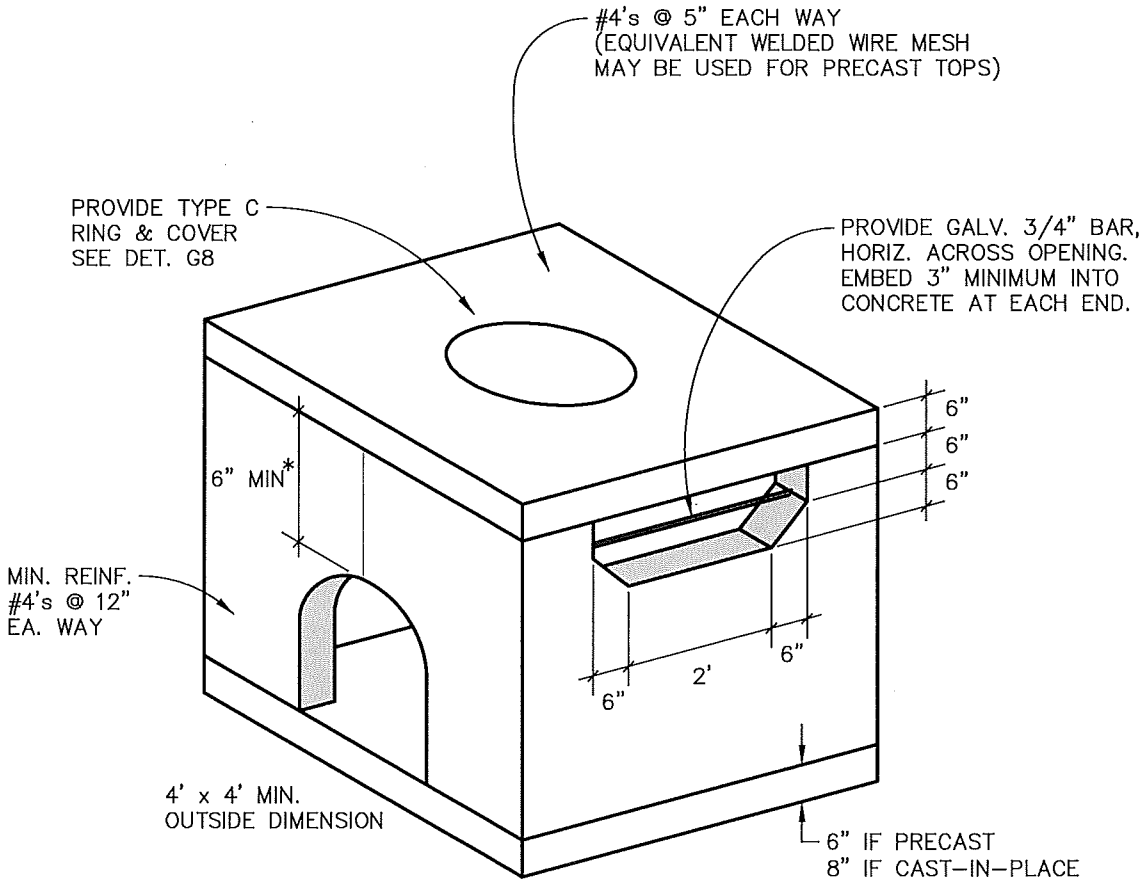
DWG: G7



NOTES:

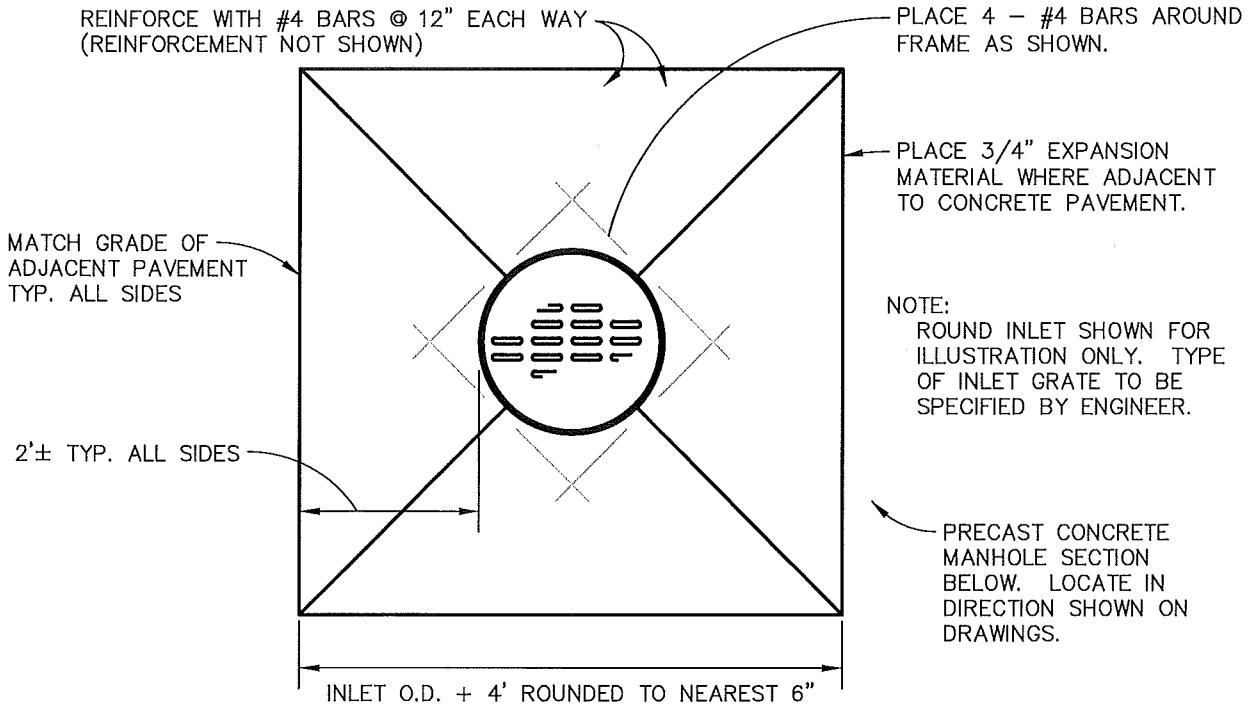
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
2. RING IS REVERSIBLE AND CAN BE INSTALLED WITH FLANGE UP OR DOWN.
3. FOR TYPE C RING AND COVER, USE DEETER #1157 RING W/ #2018–A COVER, OR EAST JORDAN IRON WORKS #2425Z RING W/ 2408A COVER OR APPROVED EQUAL.

CITY OF NIXA MISSOURI	STORMWATER MANHOLE RIM AND COVER	DATE: 7 / 8 / 15
		DWG: G8



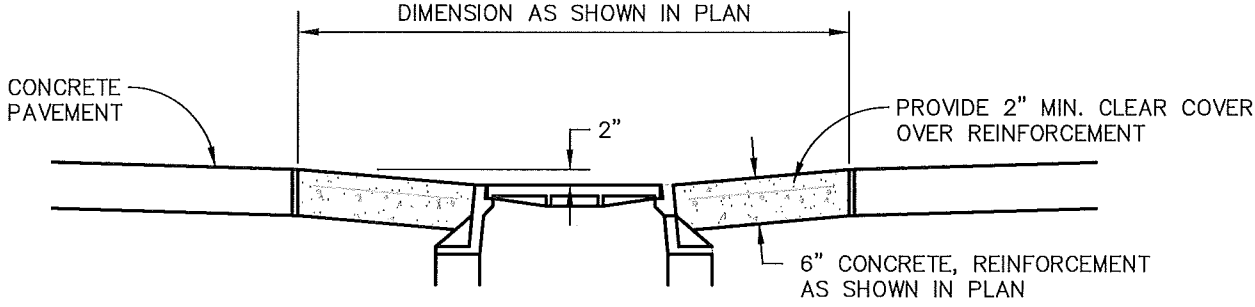
* LESS CLEARANCE MAY BE ALLOWED PROVIDED ADEQUATE STRUCTURAL PROVISIONS ARE MADE TO PREVENT THE UNIT FROM CRACKING DURING DELIVERY AND INSTALLATION.

CITY OF NIXA MISSOURI	YARD INLET	DATE: 7/8/15
		DWG: G9



PLAN VIEW

NOT TO SCALE

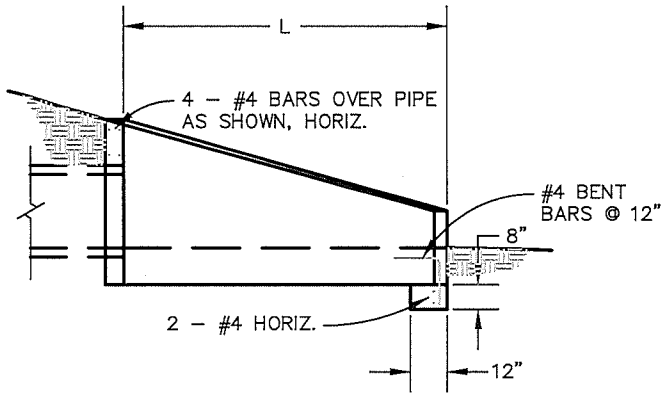


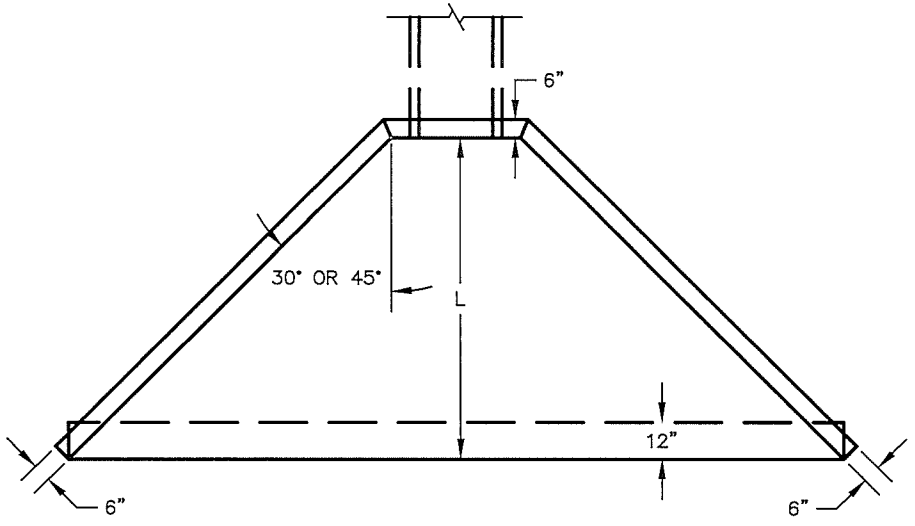
SECTION VIEW

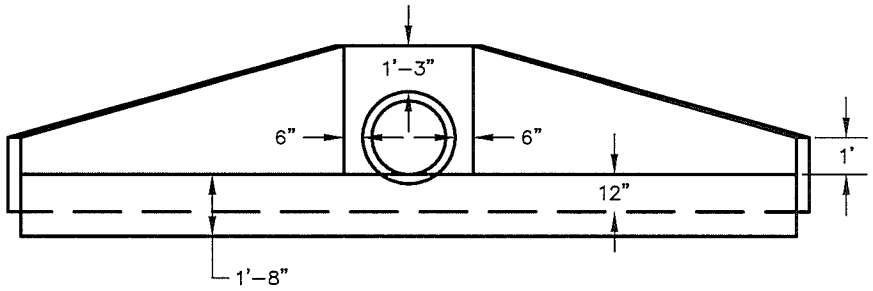
NOT TO SCALE

CITY OF NIXA MISSOURI	AREA INLET DEPRESSION & CONCRETE APRON	DATE: 7 / 8 / 15
		DWG: G10

PIPE HEADWALL AND WINGWALLS 30° & 45°







CULVERT HEIGHT OR DIAMETER	L
15"	6'–9"
18"	7'–6"
21"	8'–3"
24"	8'–9"
27"	9'–3"
30"	10'–3"
36"	11'–6"
42"	13'–0"
48"	14'–3"

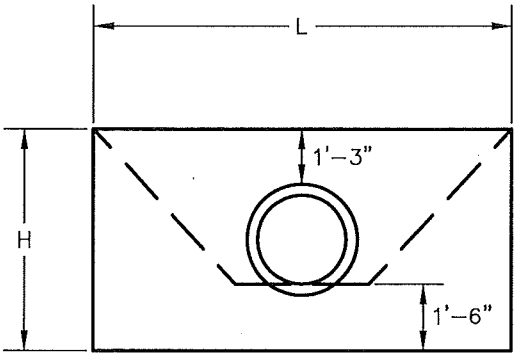
L IS BASED ON A 2.5:1 SLOPE

HEADWALL AND WINGWALLS TO BE CAST IN PLACE AROUND END OF RCP PIPE. STEEL IN HEADWALL TO BE #4 BARS @ 12" O.C. EACH WAY.

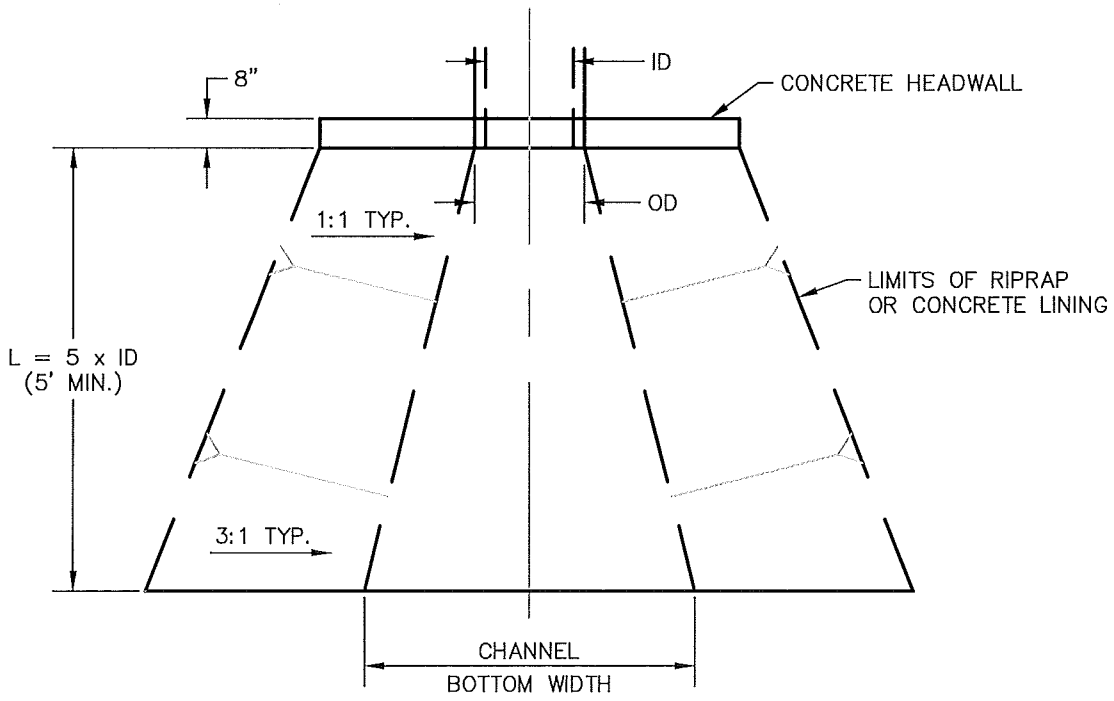
DATE: 7/8/15

DWG: G11

PIPE DIAMETER	L	H
15"	7'–0"	4'–3"
18"	8'–0"	4'–6"
21"	8'–9"	4'–9"
24"	9'–6"	5'–0"
27"	10'–6"	5'–3"
30"	11'–6"	5'–6"
36"	13'–0"	6'–0"
42"	14'–6"	6'–6"
48"	16'–0"	7'–3"



REINFORCEMENT: #4's @ 12", EACH WAY



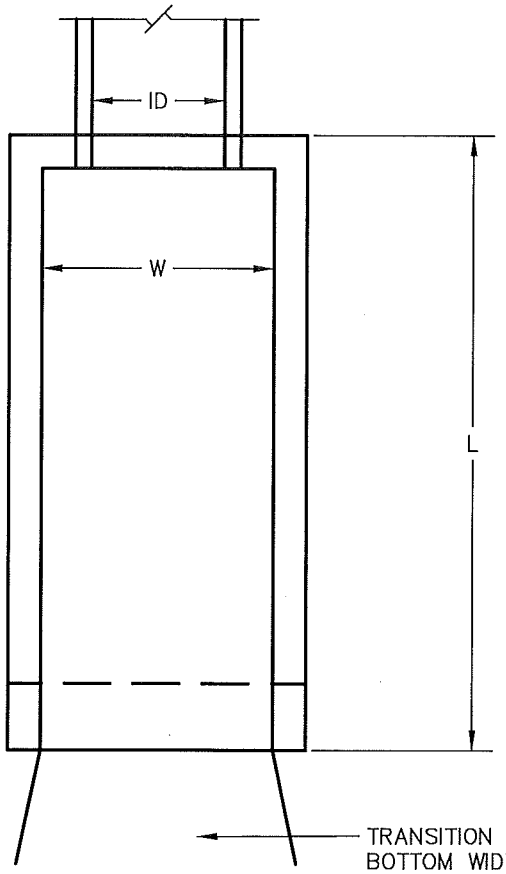
NOMINAL RIP RAP SIZE SHALL BE DESIGNED BY THE ENGINEER ACCORDING TO THE MAXIMUM OUTLET VELOCITIES AND SHEAR STRESSES.
GEOTEXTILE FABRIC SHALL BE INSTALLED UNDERNEATH RIP RAP PAD.

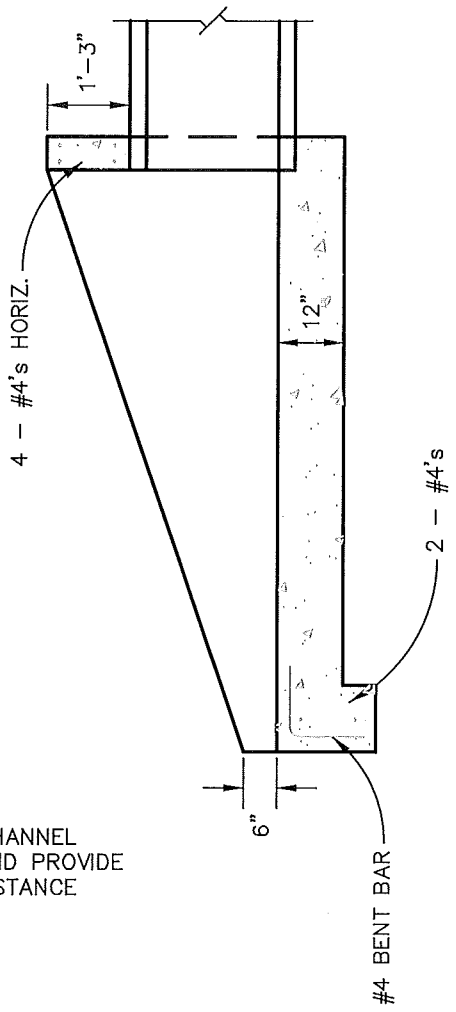
CITY OF NIXA MISSOURI

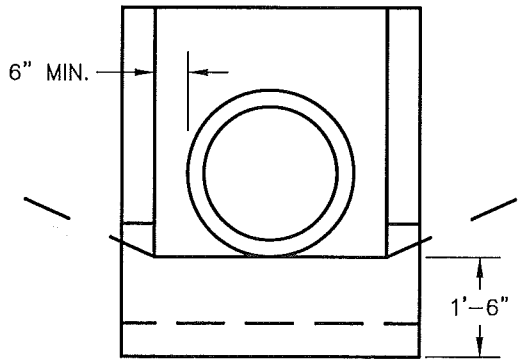
STRAIGHT HEADWALL & RIP RAP PROTECTION

DATE: 7 / 8 / 15

DWG: G12







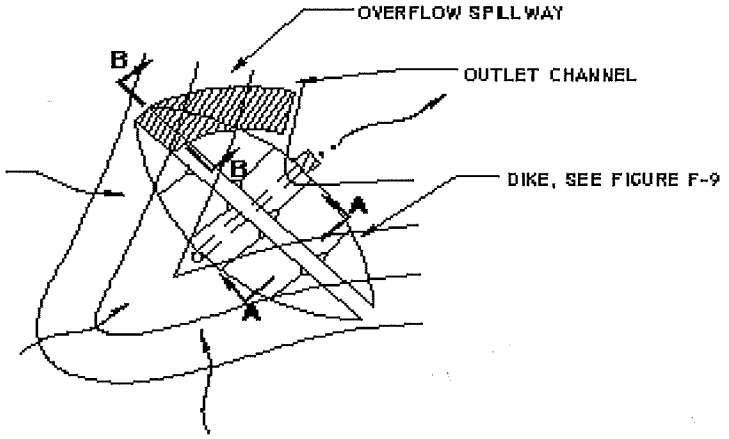
PIPE DIAMETER	L	H
15"	6'-9"	2'-9"
18"	7-6"	3'-0"
21"	8'-3"	3'-3"
24"	8'-9"	3'-6"
27"	9'-3"	3'-9"
30"	10'-3"	4'-3"
36"	11'-6"	4'-9"
42"	13'-0"	5'-3"
48"	14'-3"	6'-0"

CITY OF NIXA MISSOURI

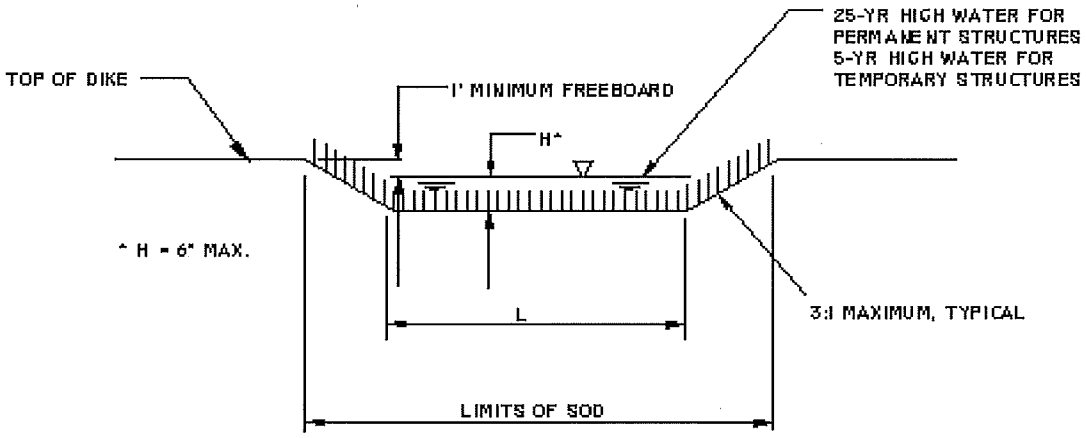
STANDARD U-SHAPED CONCRETE HEADWALL

DATE: 7 / 8 / 15

DWG: G13



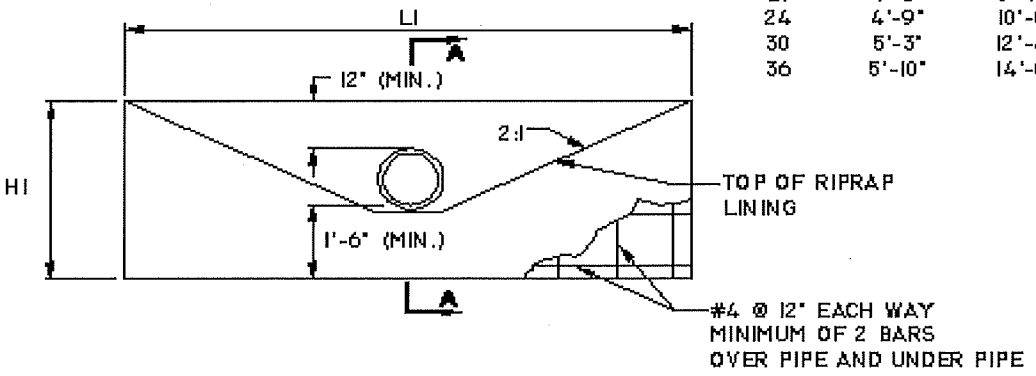
TYPICAL COMPONENTS OF SEDIMENT BASIN PLAN

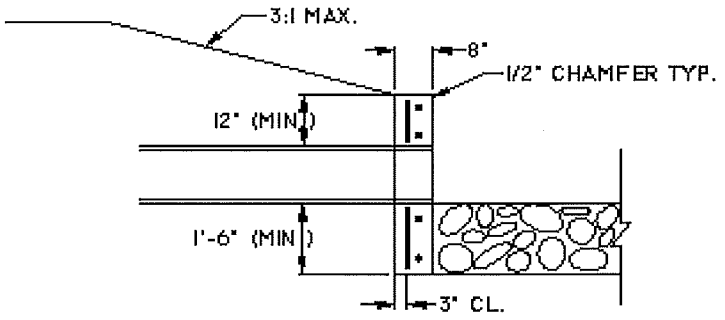


TYPICAL CROSS-SECTION-SODDED OVERFLOW SECTION B-B

CITY OF DXA	SEDIMENT BASIN DETAIL	DATE: 01/31/99 DWG: G14

I.D.	HI	LI
12	3'-9"	5'-4"
15	4'-0"	6'-6"
18	4'-3"	7'-8"
21	4'-6"	8'-10"
24	4'-9"	10'-0"
30	5'-3"	12'-4"
36	5'-10"	14'-8"





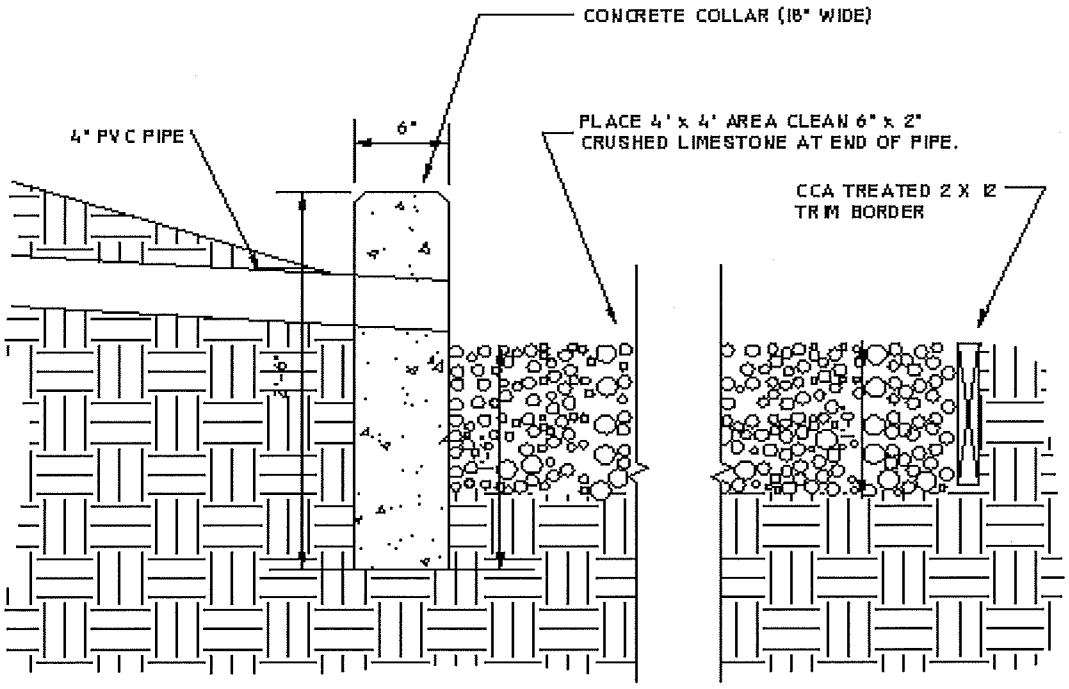
SECTION A-A

CITY OF NIXA

HEADWALL - PIPE I.D. 36" OR LESS

DATE: 01/31/99

DWG: G15



CITY OF NIXA

RIPRAP OUTLET SEDIMENT FILTER

DATE: 01/31/99

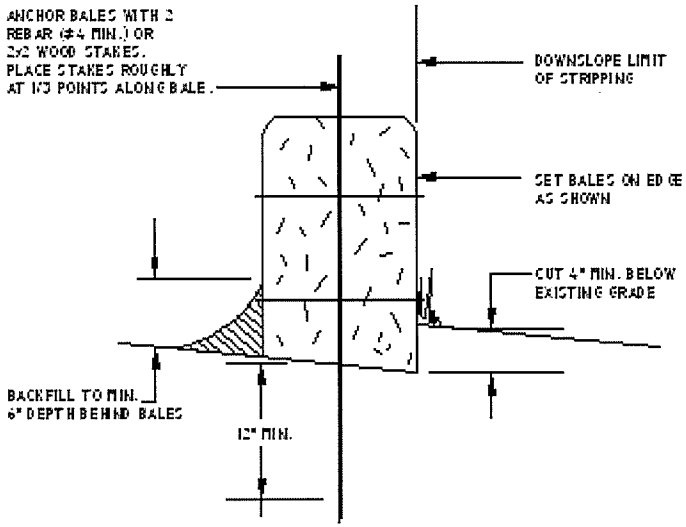
DWG: G16

CITY OF IXA

HAY BALE DIKE AND SILT FENCE DETAILS

DATE: 01/31/99

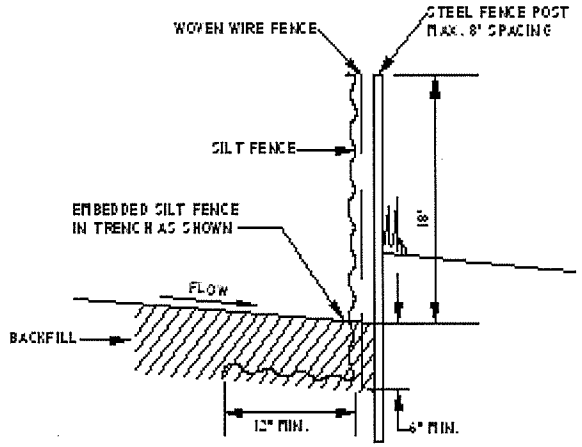
DWG: G17



HAY BALE DIKE

NOTES:

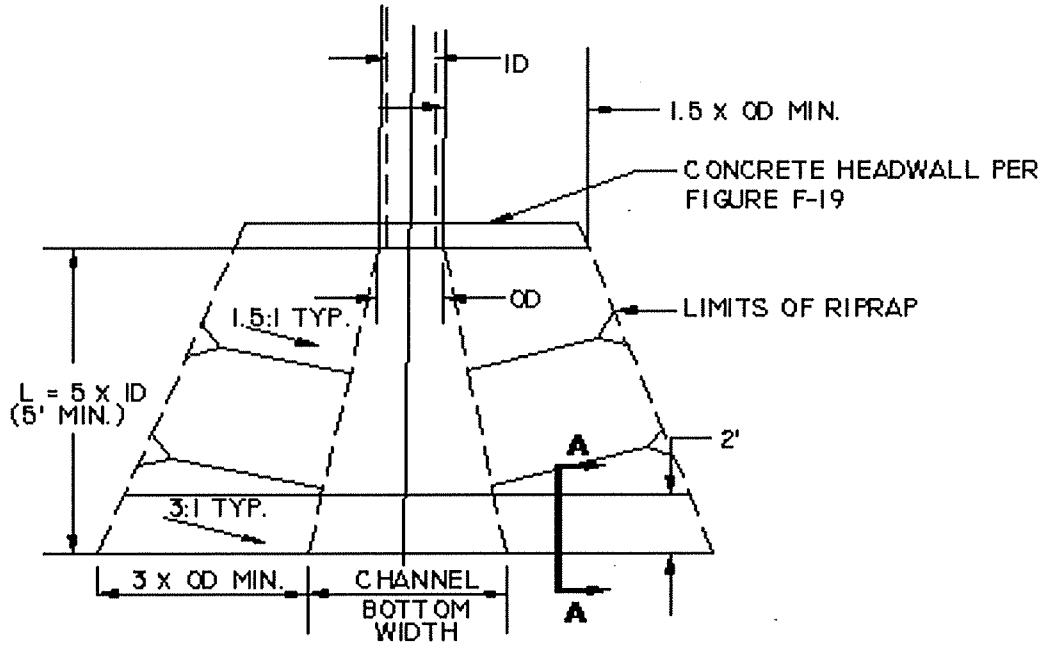
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES, WHERE POSSIBLE.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR RE-PLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULLNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6" INCHES.
7. AT EACH END OF DIKE, TURN DIKE UPSLOPE AND EXTEND UNTIL GROUND SURFACE RISES 18".



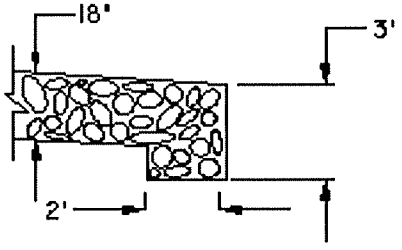
SLIT FENCE

NOTES:

1. PLACE SILT FENCE AT DOWNSLOPE LIMIT OF AREA TO BE GRADED.
2. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POSTS.
3. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
4. SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
5. SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE DISPOSED OF IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSED OF IN AN APPROVED SPOIL SITE OR AS IN NO. 5 ABOVE AT EACH END OF SILT FENCE, TURN FENCE UPSLOPE AND EXTEND UNTIL GROUND SURFACE RISES 18".



PIPE I.D. (INCHES)	L (FEET)
12	5.0
15	6.5
18	7.5
24	10.0
30	12.5
36	15.0
42	17.5
48	20.0
54	22.5
60	25.0



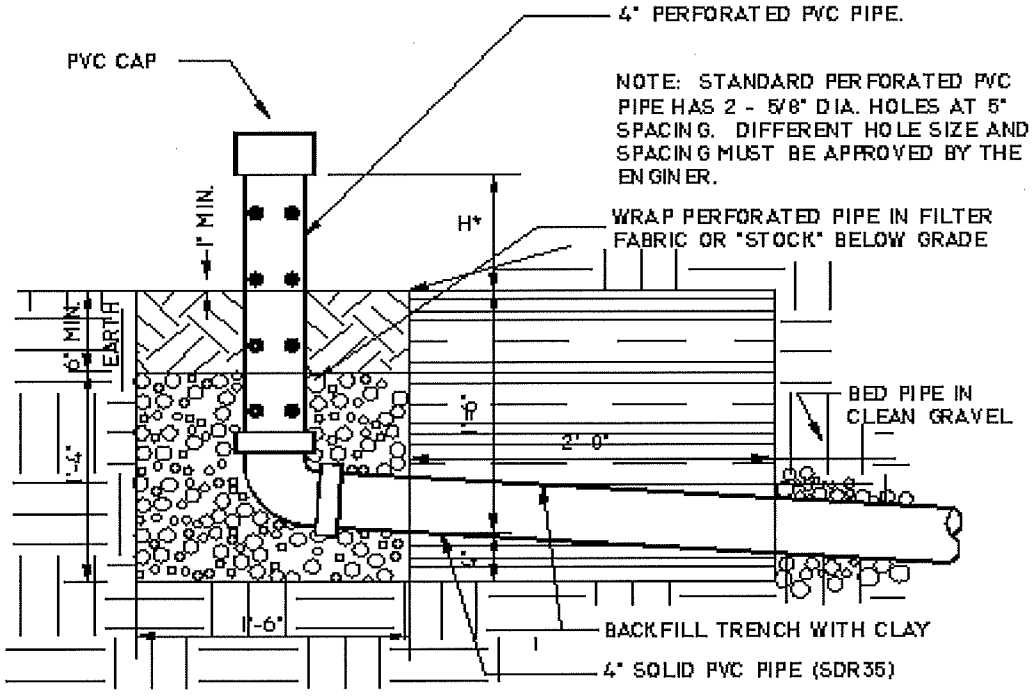
SECTION A-A
TOE WALL

CITY OF NIXA

OUTLET EROSION PROTECTION
CULVERT & STORM SEWER OUTLETS

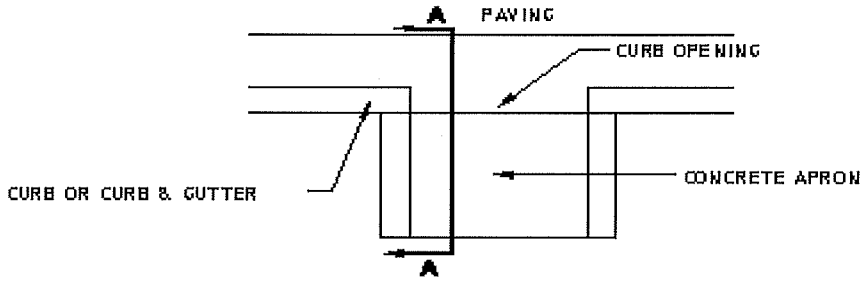
DATE: 01/31/99

DWG: G18

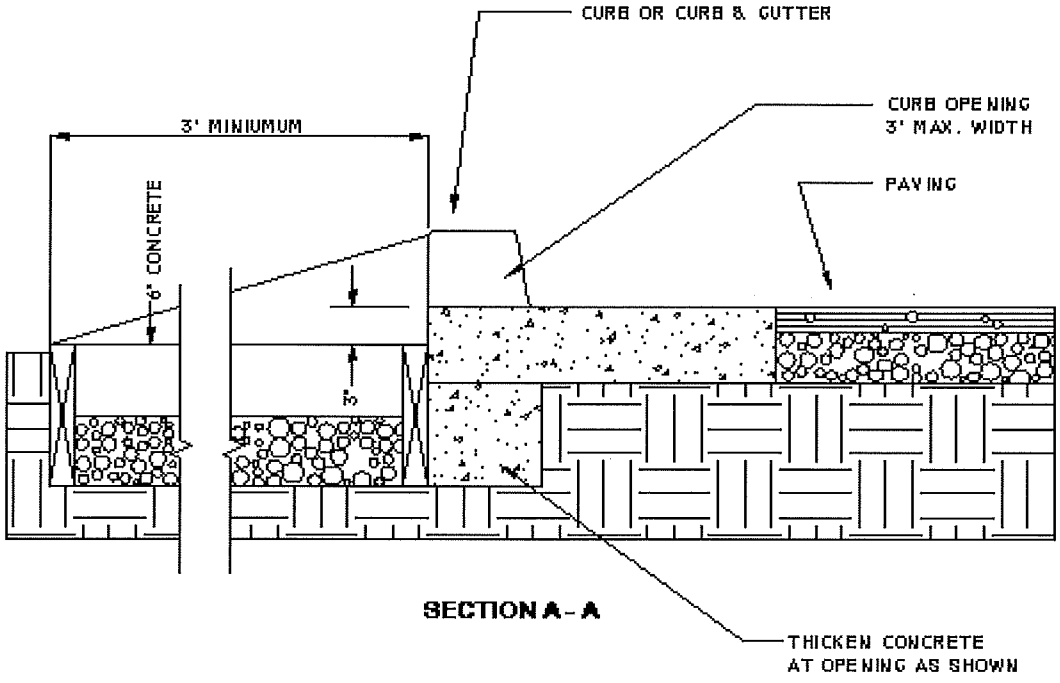


NOTE: PERFORATED RISER HEIGHT, H, TO BE SPECIFIED.

CITY OF ALEXA	SEDIMENT BASIN PERFORATED PIPE OUTLET	DATE: 01/31/99
		DWG: G19



PLAN VIEW



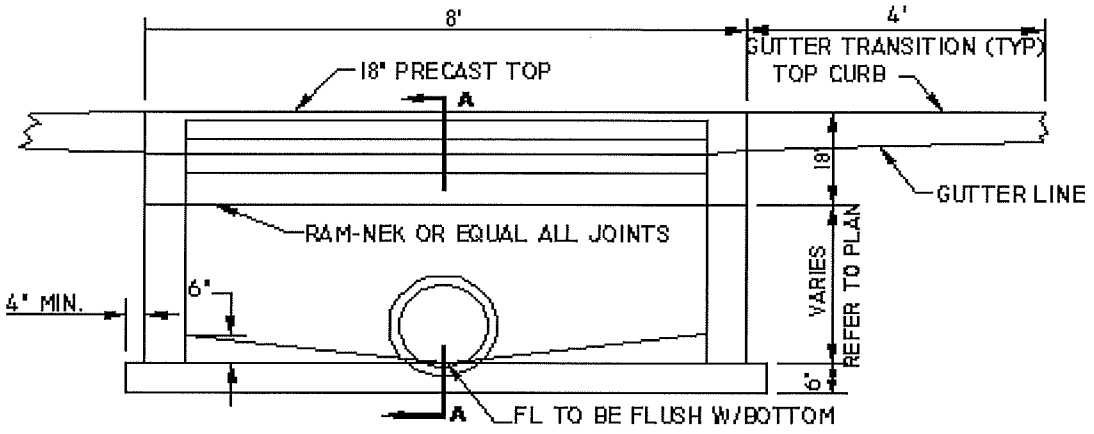
SECTION A - A

CITY OF NIXA

CURB OPENING

DATE: 01/31/99

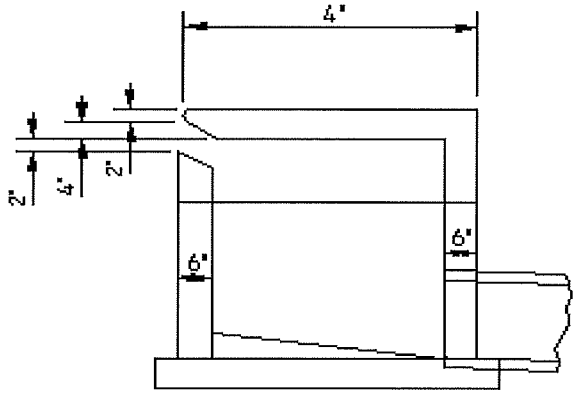
DWG: G20



FRONT ELEVATION

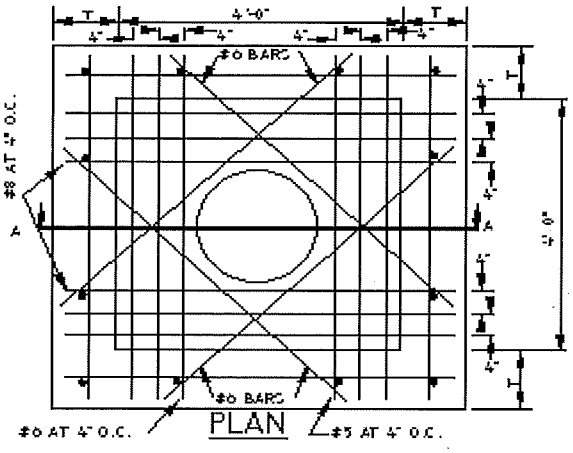
NOTES:

1. BOTTOM SHALL BE CAST IN PLACE.
2. TYPE C RING AND COVER SHALL BE PROVIDED.
3. # 4 BARS @ 10" EA. WAY IN WALLS AND SLAB.

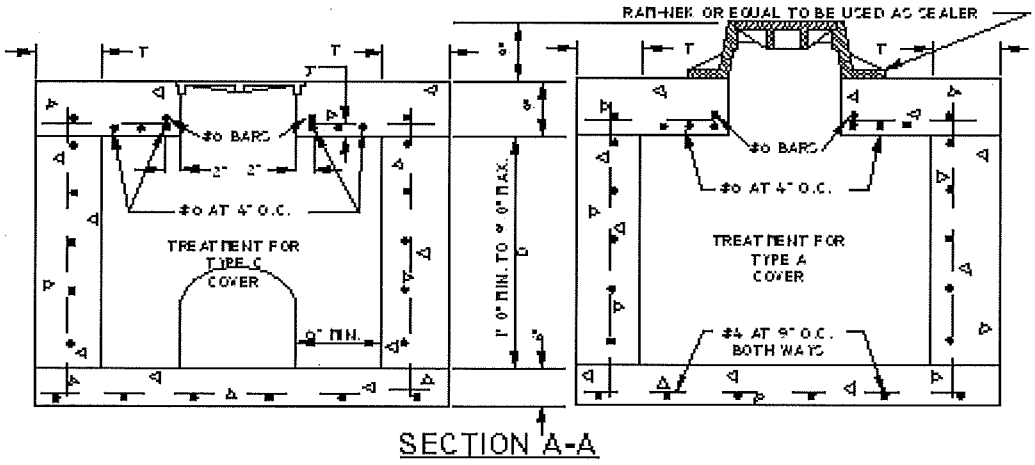


SECTION A-A

CITY OF NIXA	CURB INLET	DATE: 01/31/99 DWG: G21



STANDARD JUNCTION BOX			
TABLE OF REINFORCEMENT			WALL THICK 'T'
'D'	VERT. BARS	HOR. BARS	
1'-6"	NONE	NONE	6"
2'-6"	NONE	NONE	6"
3'-6"	NONE	NONE	6"
4'-6"	NONE	NONE	6"
5'-6"	12-#5 AT 18" O.C. 5'-11" EACH	24-#4 AT 18" O.C. 5'-2" EACH	6"
6'-6"	12-#5 AT 18" O.C. 6'-11" EACH	24-#4 AT 17" O.C. 5'-2" EACH	6"
7'-6"	24-#5 AT 12" O.C. 7'-11" EACH	24-#4 AT 18" O.C. 5'-2" EACH	6"
8'-6"	24-#5 AT 12" O.C. 8'-11" EACH	24-#4 AT 18" O.C. 5'-2" EACH	6"
9'-6"	24-#5 AT 12" O.C. 9'-11" EACH	24-#4 AT 17" O.C. 5'-2" EACH	6"
STEEL IN TOP SLAB		16-#5 - 5'-7" EACH 4-#3 - 5'-4" EACH	
STEEL IN BOTTOM		14-#4 - 5'-7" EACH	
SEE DRAWINGS FOR STEEL PLACEMENT			



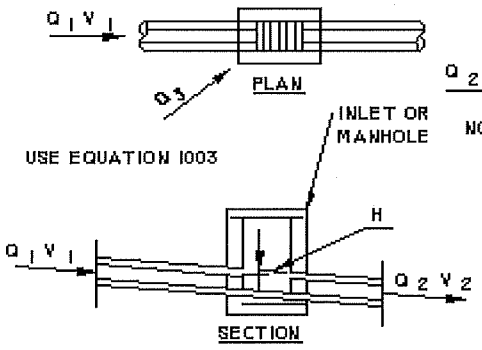
1. DIAGONAL BARS IN TOP SLAB PLACED NEAR BOTTOM OF SLAB.
2. REINFORCING BARS SHALL BE CUT OR BENT AT PIPE OPENINGS.
3. ALL PIPES SHALL FIT FLUSH WITH INSIDE FACE OF BOX.
4. MAXIMUM PIPE SIZE FOR BOX IS 36". FOR LARGER PIPES INCREASE INSIDE BOX DIMENSIONS TO THE INSIDE PIPE DIAMETER PLUS 12". USE GIVEN BAR SPACING FOR LARGER BOXES. MAXIMUM ALLOWABLE BOX SIZE IS 72".
5. BOTTOM OF BOX TO BE FILLED WITH CONCRETE TO MID DEPTH OF PIPE FORMING CHANNELS TOWARD OUTLET PIPE FROM ALL INLET PIPES.
6. IF BOX IS GREATER THAN 9', MUST BE SPECIAL DESIGN.
7. MUST MAINTAIN 6" CLEARANCE BETWEEN THE PIPE AND ALL WALLS (SLAB) FOR PRECOAT BOXES.

CITY OF NIXA

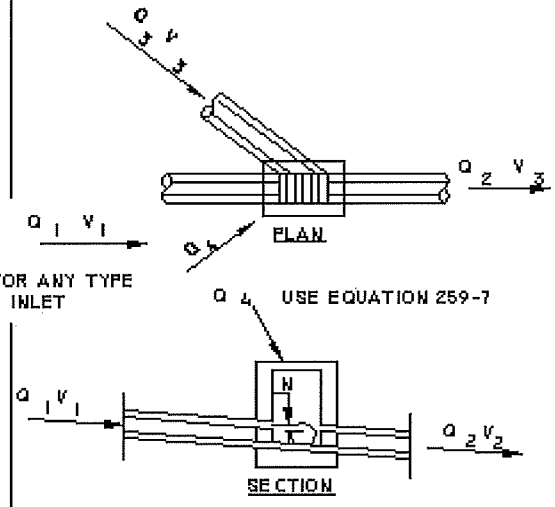
STANDARD JUNCTION BOX

DATE: 01/31/99

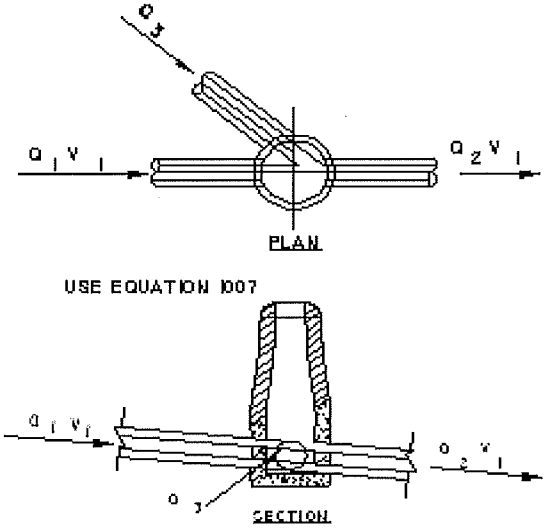
DWG: G22



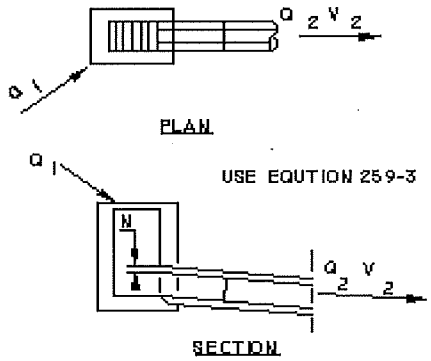
CASE I
INLET OR MANHOLE ON MAIN LINE



CASE II
INLET ON MAIN LINE
WITH BRANCH LATERAL



CASE III
MANHOLE ON MAIN LINE
WITH BRANCH LATERAL



CASE IV
INLET OR MANHOLE AT
BEGINNING OF LINE

JUNCTION LOSS COEFFICIONTS

CASE NO.	CASE I K	CASE I J	∠ (DEG)	CASE II K	CASE II J	CASE III K	CASE III J
I	0.05		22-1/2	0.65		0.75	
IV	1.25		45	0.40		0.50	
			60	0.25		0.35	
			90	0.15		0.25	

CITY OF NIXA

MANHOLE AND JUNCTION LOSSES

DATE: 01/31/99

DWG: G23