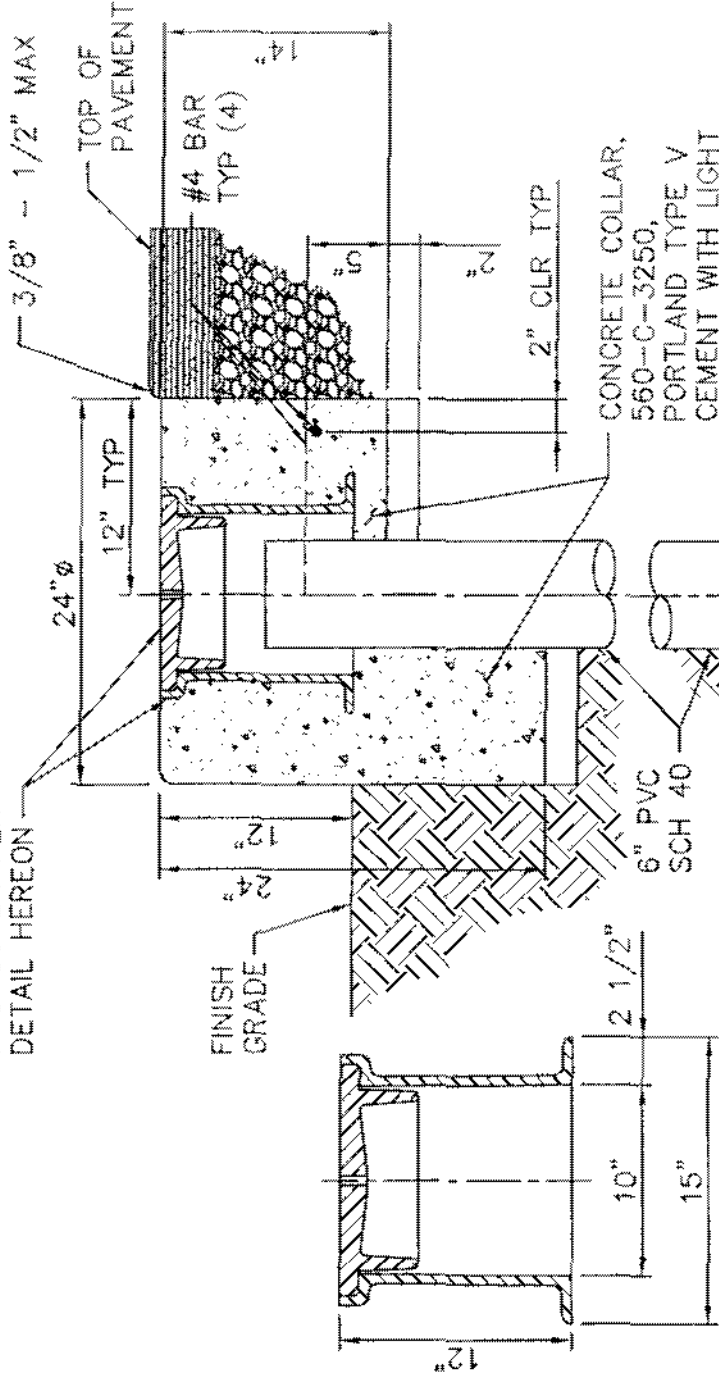


CITY OF COACHELLA
INFRASTRUCTURE DEVELOPMENT STANDARDS

DESCRIPTION	SEWER	STD. NO.
Mainline Sewer Cleanout		D-1
48" Diameter Standard Manhole		D-2
60" Diameter Manhole		D-3
Standard Sewer Pipe Installation		D-4
Concrete Encasement for Sewer Pipe		D-5
36" Manhole Frame and 2-Piece Cover		D-6
Standard Manhole Frame and Covers		D-7
Standard Precast Concrete Drop Manhole		D-8
Standard Grease Interceptor		D-9
Concrete Manhole Collar		D-10
New Installation PVC Sewer Lateral		D-11
Pipeline Separation Requirements		D-12

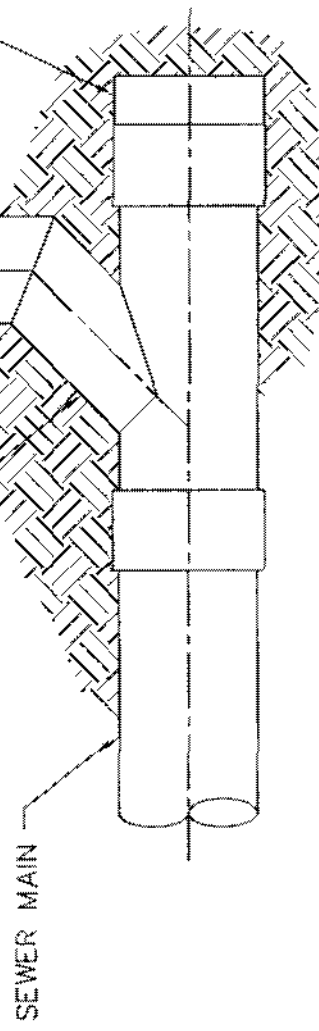
CAST IRON FRAME
AND COVER PER
DETAIL HEREON



NOTES:

1. THE SEWER MAIN SHALL BE LAID FOR THE FULL LENGTH AND DEPTH SHOWN ON THE PLAN AND PROFILE TO THE POINT MARKED CLEANOUT.
2. THE TRENCH FOR A CLEANOUT SHALL BE EXCAVATED ONLY TO SUBGRADE, WHICH IS THE BOTTOM OF THE SLOPING PIPE AND FITTINGS. SHOULD THE EXCAVATION FOR ANY REASON BE CARRIED BELOW SUBGRADE, IT SHALL BE REFILLED TO SUBGRADE WITH ROCK OR GRAVEL WHICH SHALL BE TAMPED UNTIL FIRM AND UNYIELDING. SHOULD A FIRM AND UNYIELDING FOUNDATION BE UNOBTAINABLE BY THIS METHOD, A CONCRETE PIPE CRADLE SHALL BE USED.
3. CLEANOUT COLLAR SHALL BE CENTERED IN CONCRETE COLLAR.

ELEVATION



CITY OF COACHELLA

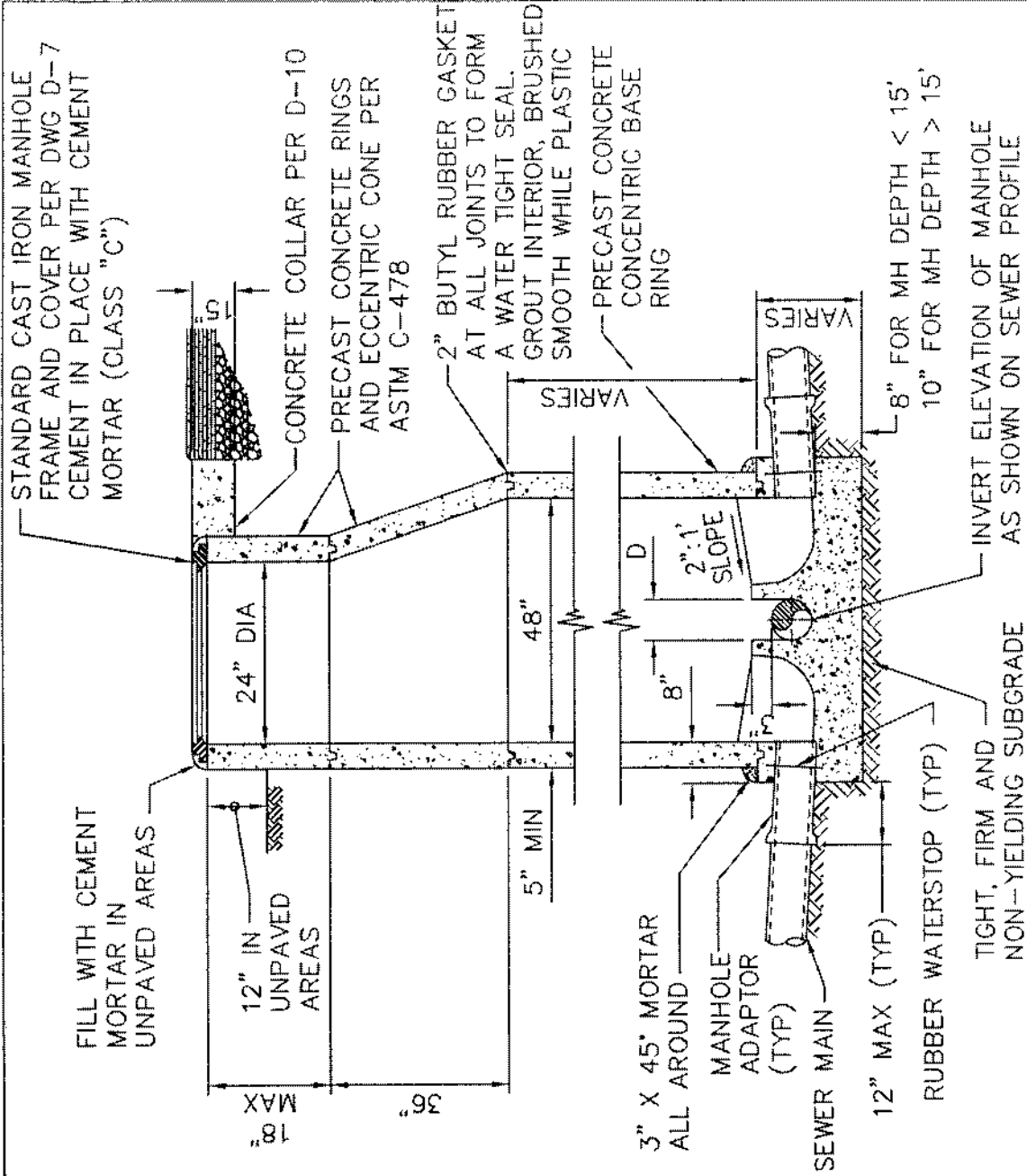
APPROVED:

[Signature]

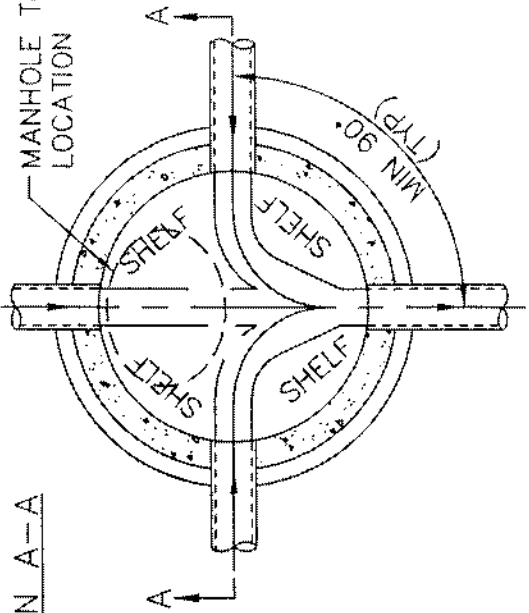
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REVISION	APPROVED	DATE

STANDARD DRAWING NO.	D-1
MAINLINE SEWER CLEANOUT	
JUNE 2007	



SECTION A-A



NOTES:

1. CONCRETE TO BE 660-C-4000, TYPE V CEMENT, AIR ENTRAINED (7-SACK)
2. LAY PIPE THROUGH MANHOLE WHEN POSSIBLE.
3. A MINIMUM DROP OF 0.05 FEET SHALL BE PROVIDED FOR STRAIGHT THROUGH LINES AND LINES LESS THAN 45' FROM MAIN FLOW.
4. A MINIMUM DROP OF 0.10 FEET SHALL BE PROVIDED FOR LINES FROM 45' TO 90' FROM MAIN FLOW.
5. MATCH CROWNS IF PIPE DIMENSION DIFFERS.

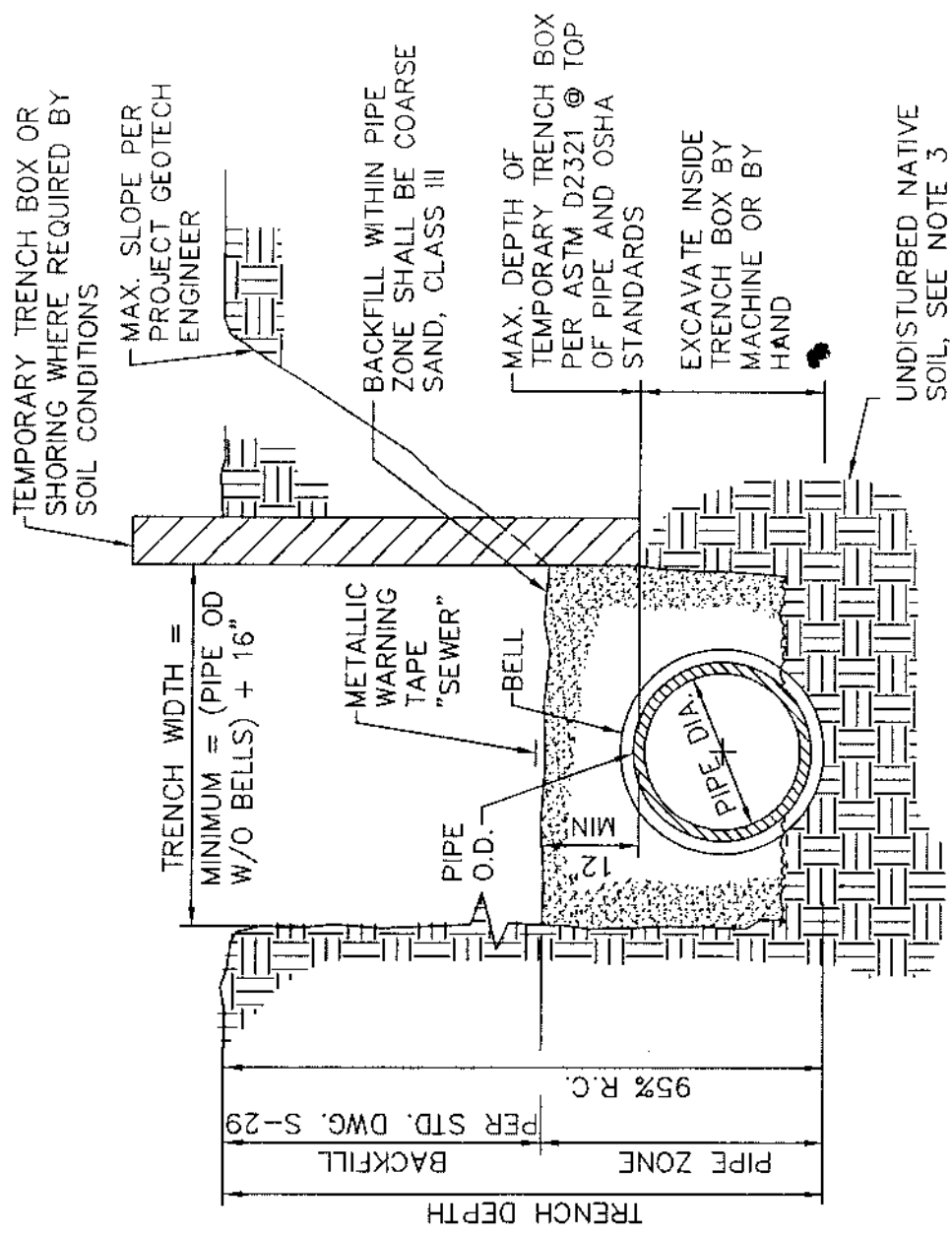
CITY OF COACHELLA

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RCE 24818	EXP 12/31/07
REVISION	APPROVED DATE

STANDARD DRAWING NO.	D-2

JUNE 2007



NOTES:

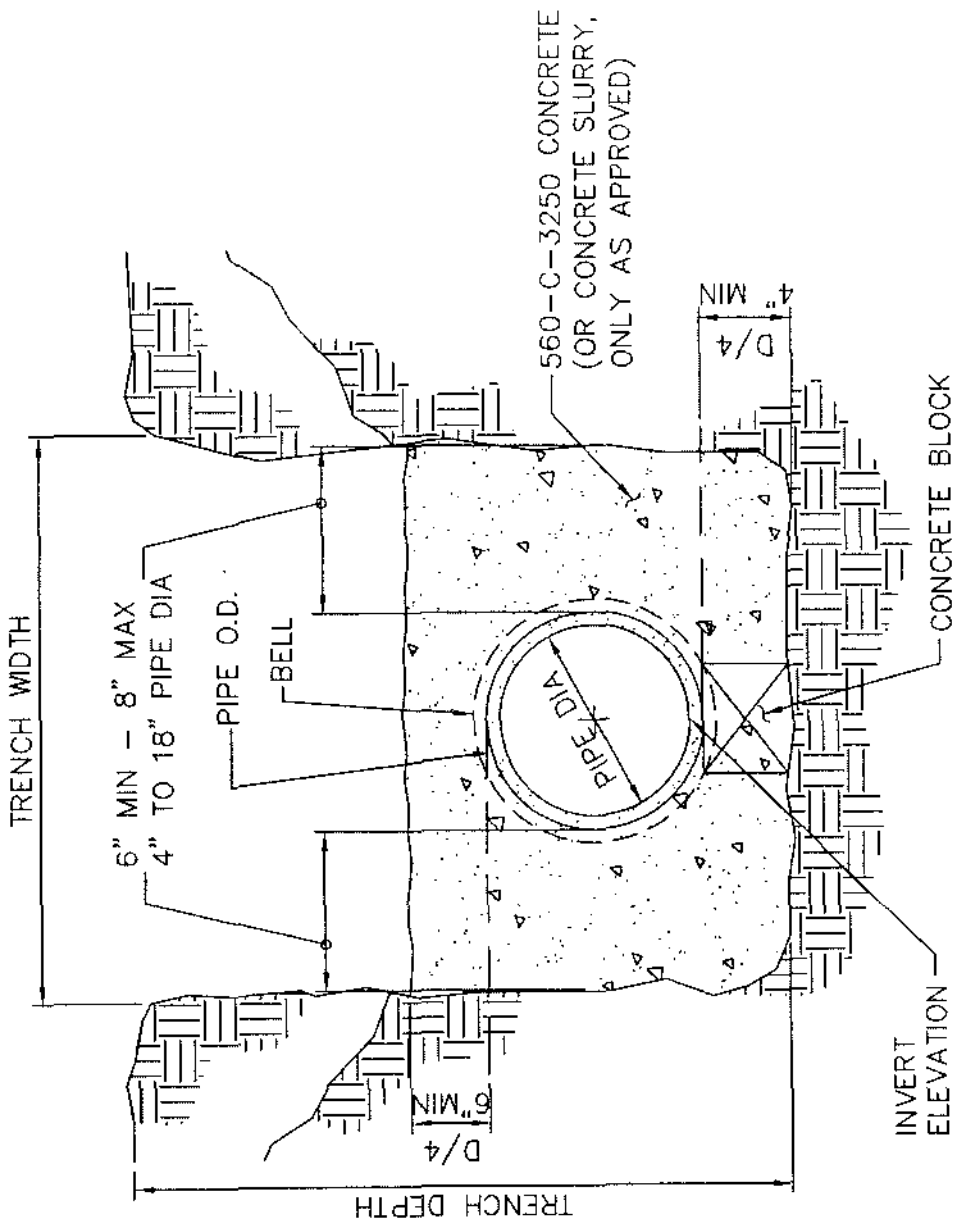
1. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH GREENBOOK, SECTION 306.
2. ANY SHORING REQUIRED BELOW TOP OF PIPE SHALL BE PERMANENT AND ONLY AS ALLOWED BY THE DISTRICT ENGINEER.
3. TRENCH SHALL BE EXCAVATED TO SUBGRADE AND PIPE SHALL BE INSTALLED ON FIRM UNYIELDING TRENCH BOTTOM. OVEREXCAVATION SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSUITABLE. ALL OVER EXCAVATION SHALL BE BRIDGED WITH A MINIMUM 4" OF 1/2" CRUSHED ROCK.
4. SEE STD. DWG. D-5 FOR CONCRETE ENCASEMENT, WHEN REQUIRED.
5. OVEREXCAVATED TRENCH SHALL BE BACKFILL AND COMPACTED TO 90% BEFORE LAYING PIPE.

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**STANDARD SEWER PIPE
INSTALLATION**

STANDARD DRAWING NO.	D-4
	JUNE 2007



NOTES:

1. ENCASE PIPE TO NEAREST FLEXIBLE JOINT.
2. PROVIDE ADEQUATE PIPE SUPPORT TO PREVENT SAGGING OR FLOATING DURING ENCASEMENT.
3. SEE STD. DWG. D--4 FOR PIPE INSTALLATION REQUIREMENTS.

CITY OF COACHELLA

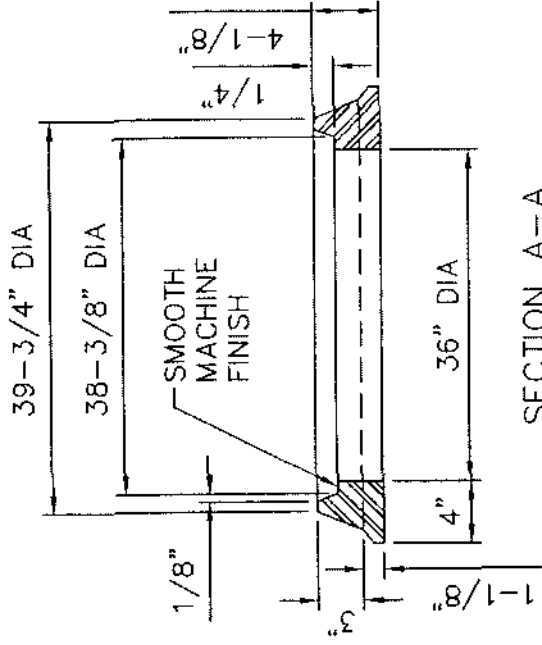
APPROVED:	
<i>Ray J. Juarez</i>	
RCE 24070	EXP. 12/31/07
REVISION	APPROVED DATE

**CONCRETE
ENCASEMENT
FOR SEWER PIPE**

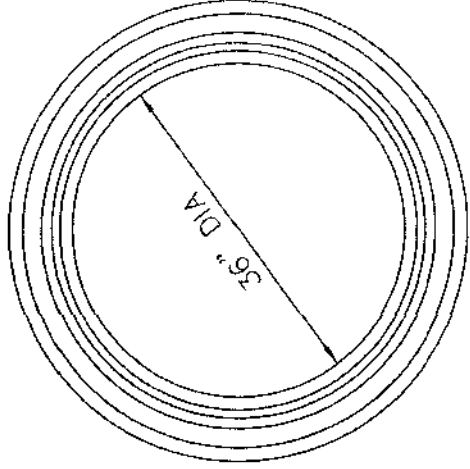
STANDARD DRAWING NO.

D-5

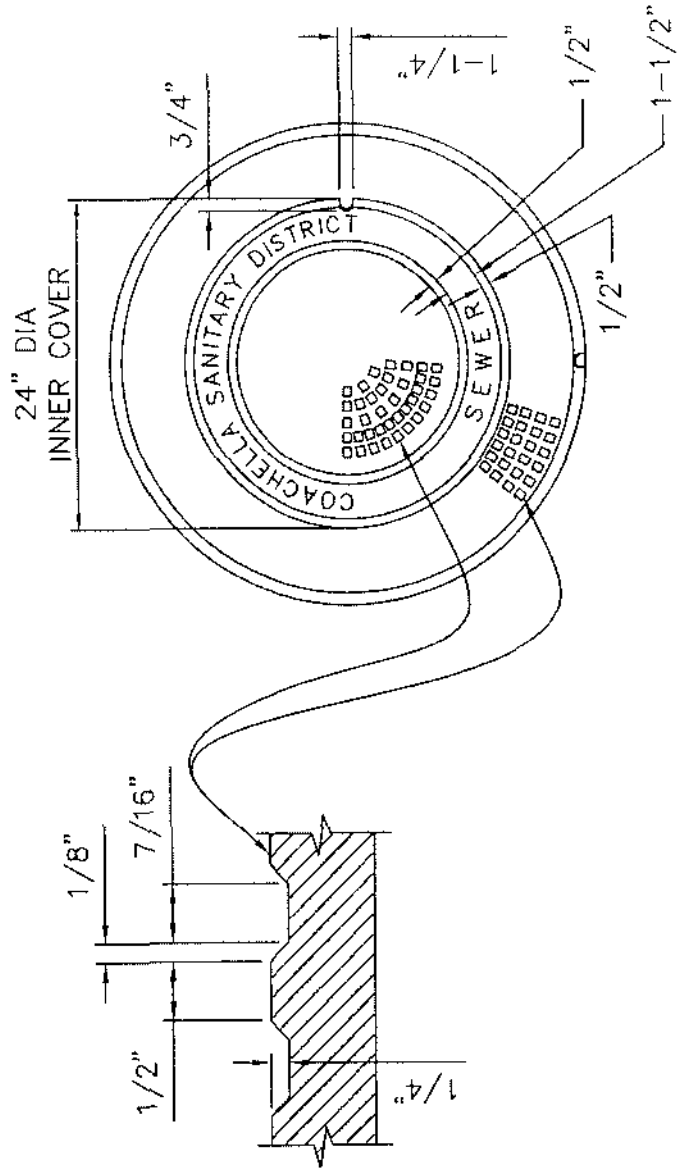
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SECTION A-A



FRAME



COVER

FRAME AND COVER TO BE MANUFACTURED BY:
 -RIVERSIDE FOUNDRY
 -SOUTHBAY FOUNDRY

CITY OF COACHELLA

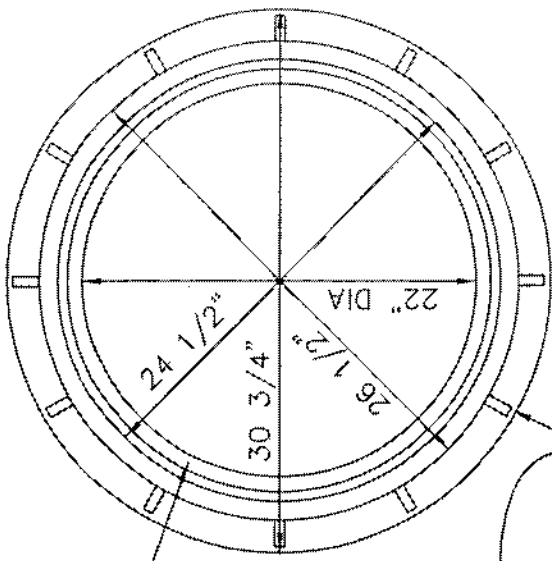
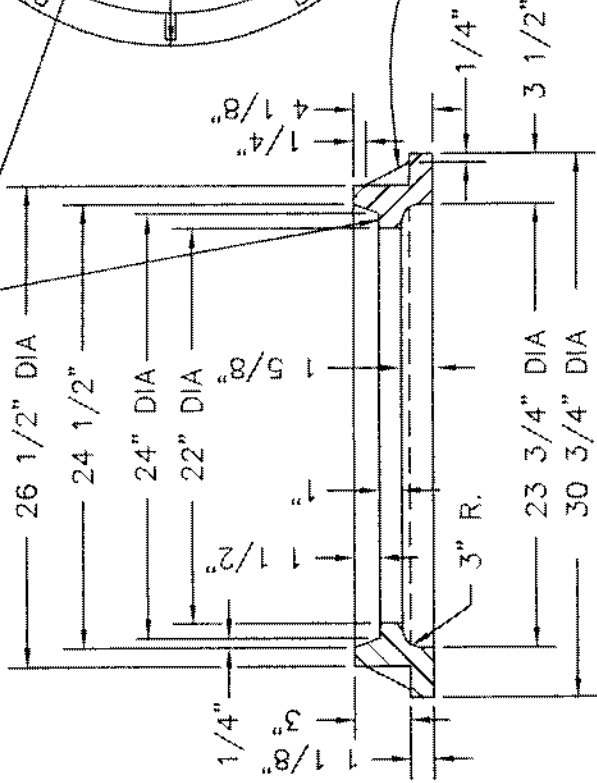
APPROVED: *[Signature]*

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REVISION	APPROVED DATE

36" MANHOLE FRAME AND
 2-PIECE COVER

STANDARD DRAWING NO.	D-6
	JUNE 2007

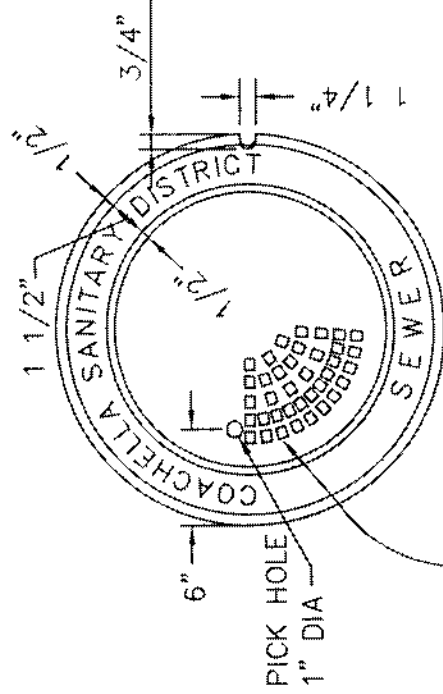
SMOOTH MACHINE FINISH



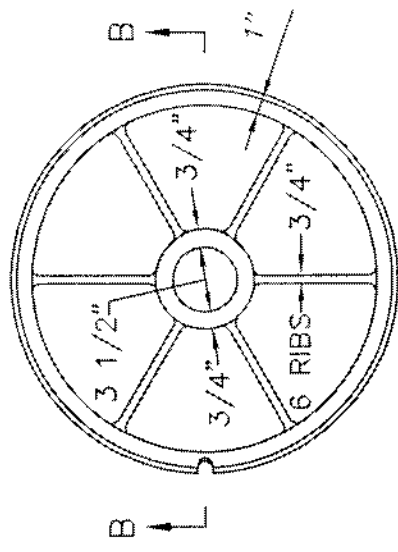
FRAME

12 RIBS, EQUALLY SPACED

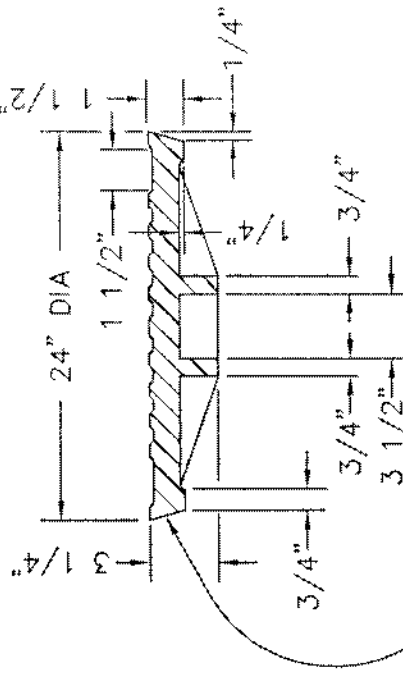
SECTION A-A



PICK HOLE
1" DIA

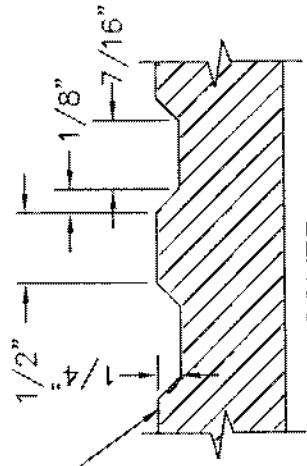


COVER BOTTOM



SECTION B-B

MIN COVER WEIGHT - 155 LBS



COVER

FRAME AND COVER TO BE MANUFACTURED BY:

- RIVERSIDE FOUNDRY
- SOUTHBAY FOUNDRY

CITY OF COACHELLA

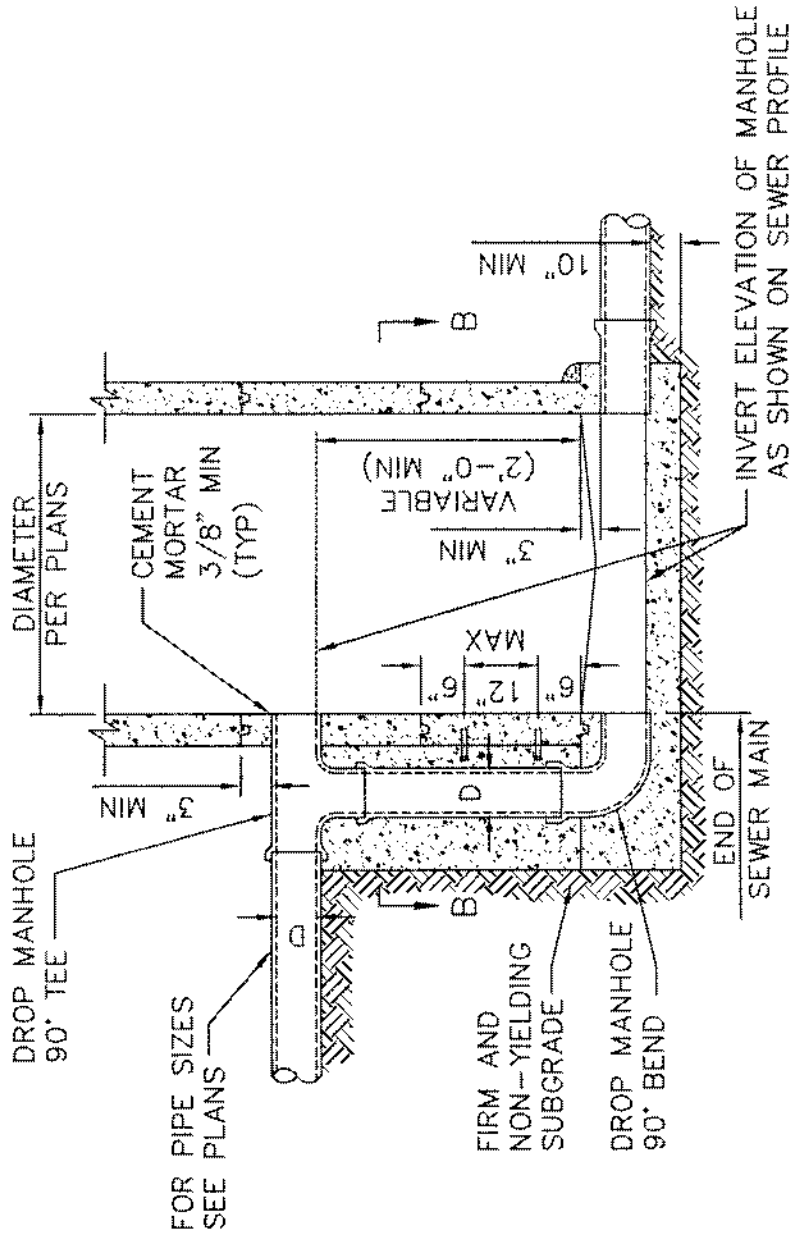
APPROVED:	<i>Long A. Lucero</i>
RCE 24870	EXP. 12/31/07
REVISION	APPROVED DATE

STANDARD MANHOLE FRAME AND COVERS

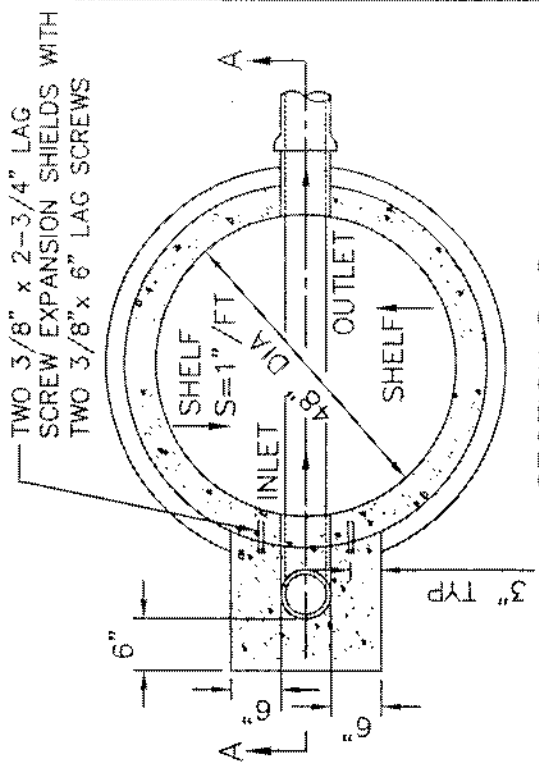
STANDARD DRAWING NO.

D-7

JUNE 2007



SECTION A-A



SECTION B-B

NOTES:

1. DROP MANHOLE SHALL BE IDENTICAL TO STANDARD CONCRETE MANHOLE, EXCEPT FOR PIPE DETAILS AS SHOWN.
2. THE DROP MANHOLE TEE SHALL ENTER THE 4' DIA. RING. CLEAN AND ROUGHEN OUTSIDE SURFACE OF RINGS AND APPLY BONDING AGENT CEMENT PRIOR TO POURING SUPPORT FOR DROP SECTION.
3. NO MANHOLE STEPS ALLOWED.
4. CONCRETE SHALL BE 4000 PSI, TYPE V PORTLAND CEMENT (CLASS 660-C-4000)

CITY OF COACHELLA

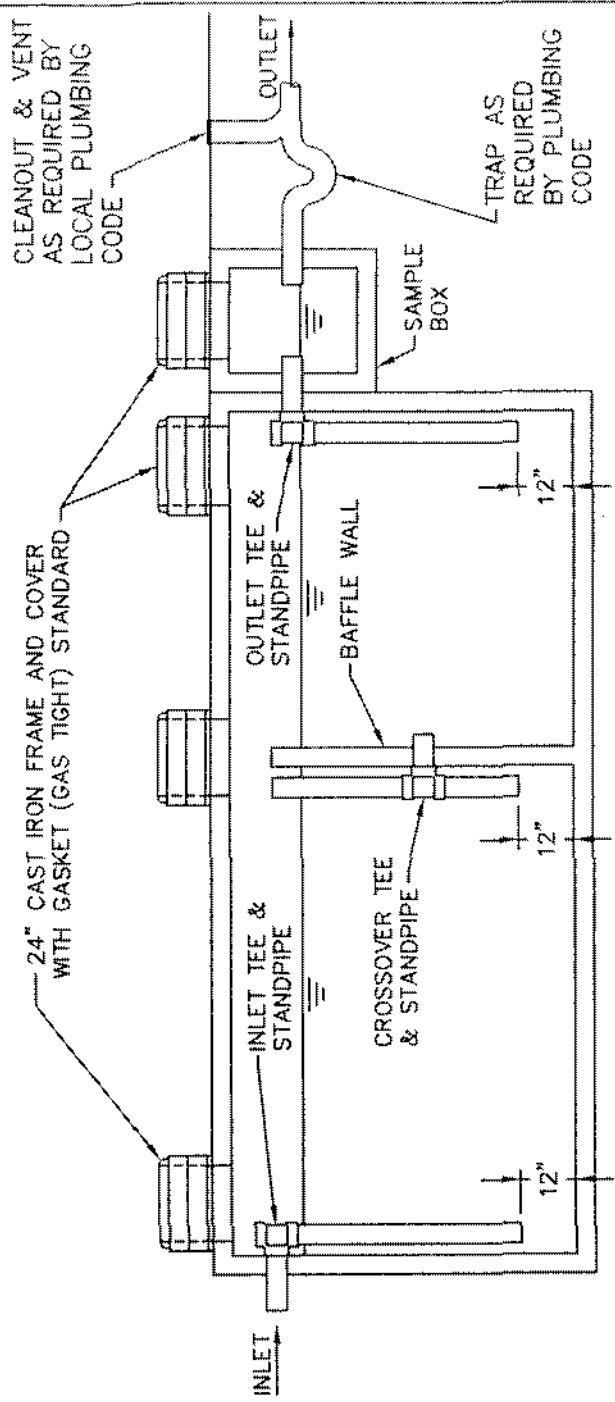
APPROVED:

RCE 246970 EXP. 12/31/07

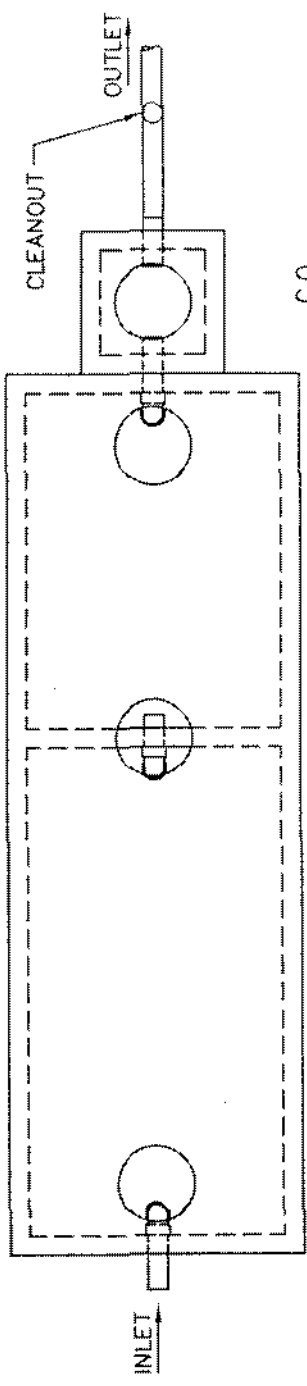
REVISION	APPROVED	DATE

STANDARD
PRECAST CONCRETE
DROP MANHOLE

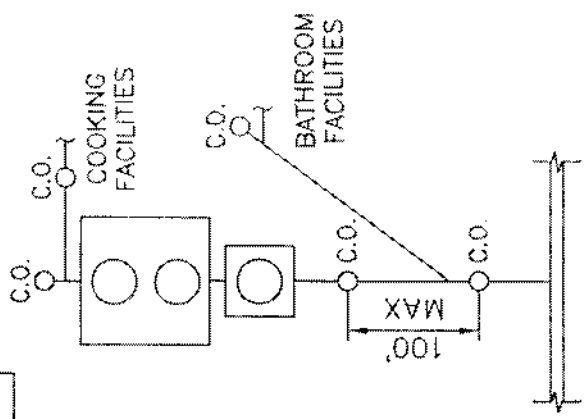
STANDARD DRAWING NO.	D-8
	JUNE 2007



SIDE VIEW CUTAWAY
NO SCALE



TOP VIEW (LIDS REMOVED)
NO SCALE



PLAN OUTLAY OF TYPICAL CONNECTION TO SEWER MAIN

NOTES:

- GREASE INTERCEPTOR SIZE SHALL BE IN ACCORDANCE WITH THE 2006 EDITION UNIFORM PLUMBING CODE (UPC) REQUIREMENTS. MINIMUM SIZE SHALL BE 1,500 GALLONS, UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
- GREASE INTERCEPTORS SHALL BE DESIGNED, CONSTRUCTED, TESTED, AND MARKED IN ACCORDANCE WITH THE IAPMO PS-118-2000 PROPERTY STANDARD FOR FOG DISPOSAL SYSTEMS. SUBMIT SHOP DRAWINGS SHOWING COMPLIANCE.
- ALL GREASE INTERCEPTORS SHALL BE PROVIDED WITH SAMPLE BOX, AS SHOWN.

CITY OF COACHELLA

APPROVED:

Ray J. Traverso

RCE 24870 EXP. 12/31/07

REVISION	APPROVED	DATE

STANDARD DRAWING NO.	D-9
	JUNE 2007

STANDARD GREASE INTERCEPTOR

UNPAVED AREAS

PAVED AREAS

APPROVED MANHOLE
FRAME AND COVER SET
IN CLASS "C" MORTAR

12" MIN. - 18" MAX.
SEE NOTE 1

FINISHED GRADE
IN PAVED AREA

2" (TYP)

R=1 1/2

12" (TYP)

FINISHED
GRADE

24" (TYP)

MH PRECAST
CONCRETE RINGS

560-C-3250
CONCRETE
FOR COLLAR
(TYP)

MH PRECAST
CONCRETE

2" (TYP)

15" MIN

3/8"-1/2" LP

#4 HOOP
HORIZONTAL @ 6"
O.C., #4 VERTICAL
@ 18" O.C. (TYP)

90% COMPACTION
ALL AROUND

NOTES:

1. UNIFORM RADIUS AROUND CENTER OF MANHOLE LID. VARIANCE IN RADIUS BY MORE THAN 1/2" WILL BE UNACCEPTABLE.

CITY OF COACHELLA

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CONCRETE
MANHOLE COLLAR

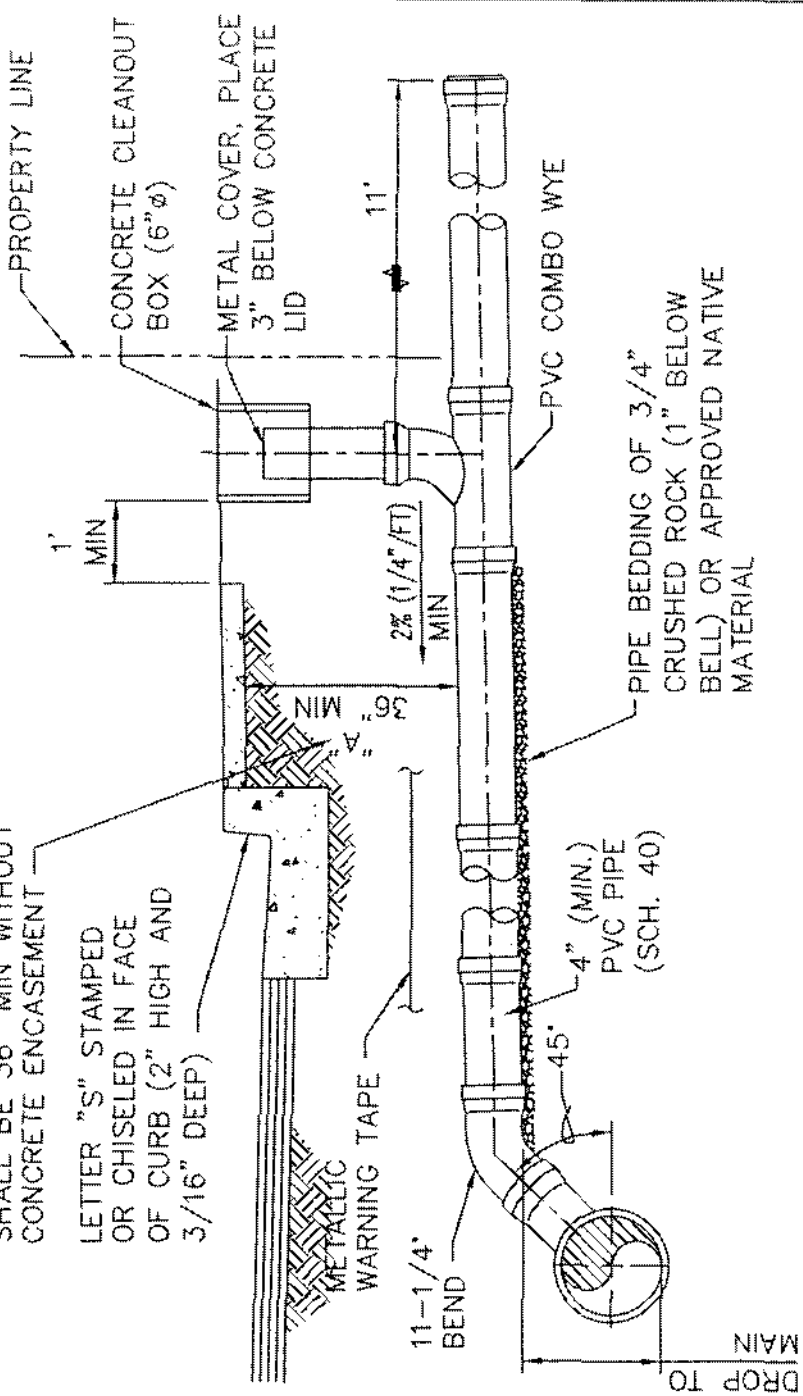
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D-10

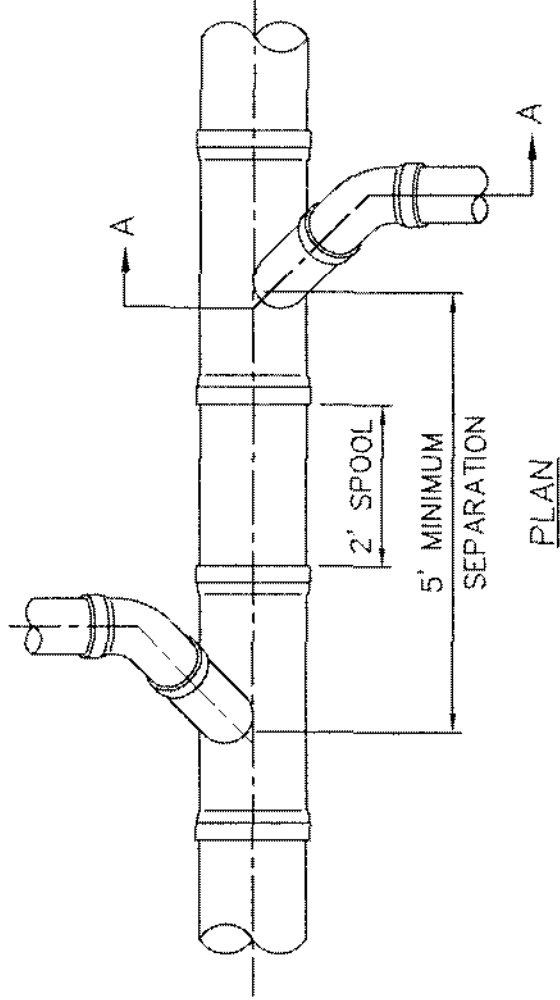
JUNE 2007

DISTANCE "A" TO BE SHOWN ON IMPROVEMENT PLANS. DEPTH SHALL BE 36" MIN WITHOUT CONCRETE ENCASEMENT

LETTER "S" STAMPED OR CHISELED IN FACE OF CURB (2" HIGH AND 3/16" DEEP)



SECTION A-A



PLAN

CITY OF COACHELLA

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 REVISION APPROVED DATE

NEW INSTALLATION
 PVC SEWER LATERAL

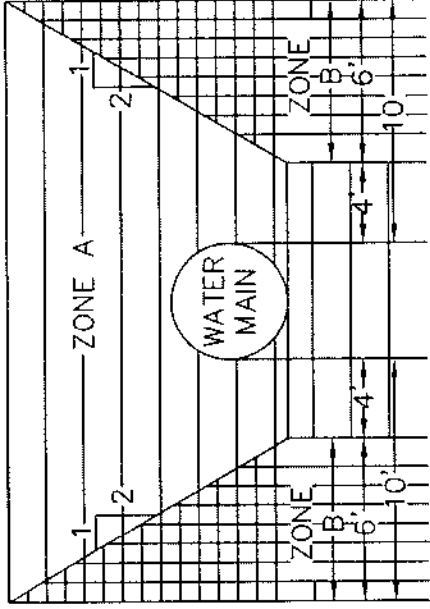
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D-11

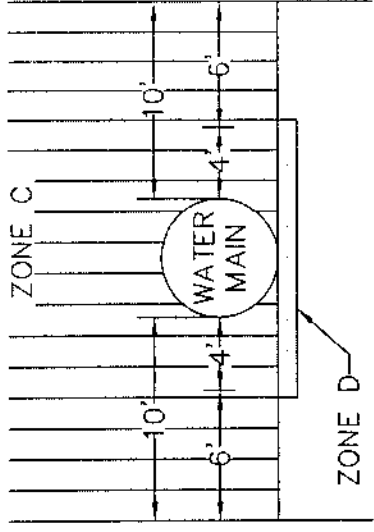
JUNE 2007

WATER & SEWER MAINS SHALL BE INSTALLED IN SEPARATE TRENCHES. SEWERS SHALL BE INSTALLED AT LEAST 10-FOOT HORIZONTALLY FROM EXISTING OR NEW WATER MAINS.

PARALLEL CONSTRUCTION



PERPENDICULAR CONSTRUCTION



NOTES: DIMENSIONS ARE FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF SEWER

SANITARY SEWERS ARE NOT PERMITTED WITHIN ANY OF THE ABOVE INDICATED ZONES UNLESS CONSTRUCTED IN CONFORMANCE WITH THE SPECIAL REQUIREMENTS AS SHOWN BELOW.

ZONE	SPECIAL SEWER CONSTRUCTION REQUIREMENTS
	SEWER LINES WILL NOT BE PERMITTED IN THIS ZONE WITHOUT SPECIAL WRITTEN PERMISSION FROM THE DEPARTMENT OF HEALTH.
	EXTRA-STRENGTH VITRIFIED CLAY WITH COMPRESSION JOINT; OR RUBBER GASKETED PLASTIC PIPE.
	SEWER PIPE WITHIN A CONTINUOUS STEEL CASING, WHICH CASING SHALL HAVE A THICKNESS OF NOT LESS THAN ONE-FOURTH INCH AND WITH ALL VOIDS BETWEEN SEWER PIPE AND CASING PRESSURE GROUTED WITH SAND CEMENT GROUT.

CITY OF COACHELLA

PIPELINE SEPERATION REQUIREMENTS

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RCE 24870 EXP. 12/31/07	D-12
REVISION APPROVED DATE	JUNE 2007