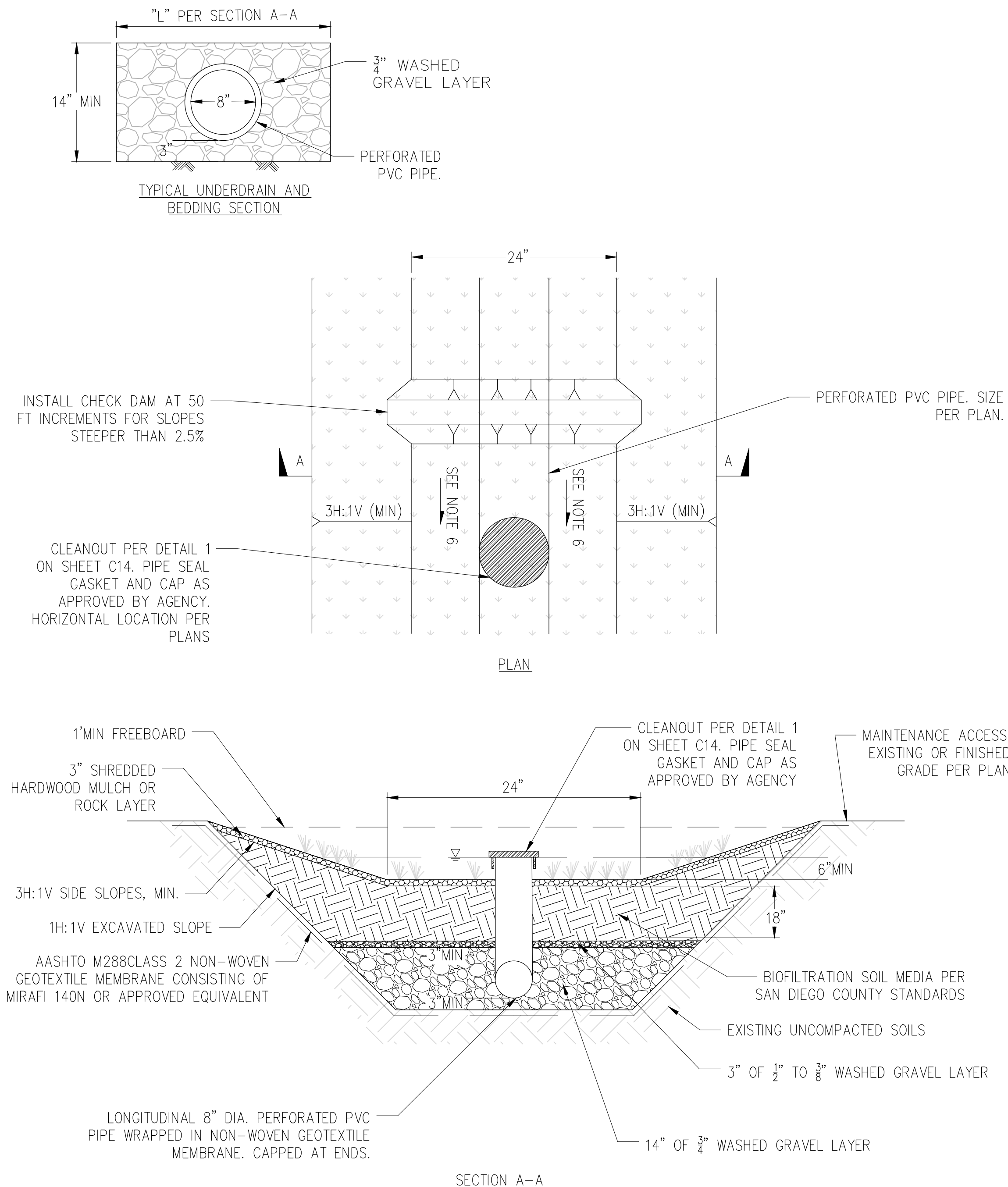


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- NOTES:
- BUILD AND VEGETATE SWALE AS EARLY AS POSSIBLE TO ESTABLISH PLANTINGS BEFORE DIRECTING STORMWATER RUNOFF TO IT OR DIVERT STORMWATER AROUND FACILITY. PREFERABLY THIS PERIOD WOULD LAST A MINIMUM OF 3 MONTHS.
 - DURING INSTALLATION, DISTURB NATIVE SOILS AS LITTLE AS POSSIBLE.
 - REPAIR, SEED, OR RE-PLANT DAMAGED AREAS IMMEDIATELY.
 - VEGETATED SWALES SHALL NOT BE LOCATED ON SLOPES GREATER THAN 6%.
 - THE SWALE SHALL BE VEGETATED WITH A MIX OF EROSION-RESISTANT PLANT SPECIES THAT EFFECTIVELY BIND THE SOIL. PROPOSED VEGETATION SHOULD THE FOLLOWING SPECIFICATIONS:
 - VEGETATION SHALL BE NATIVE OR ADAPTED GRASSES PER COUNTY OF SAN DIEGO BMP DESIGN MANUAL. SUITABLE PLANT TYPES CAN ALSO BE FOUND AT [HTTP://CALFLORA.ORG](http://CALFLORA.ORG).
 - VEGETATIVE COVER SHOULD BE AT LEAST 4" IN HEIGHT, ALTHOUGH 6" IS PREFERRED.
 - PROPOSED SLOPE VARIES, REFER TO DRAWING NO. C8 FOR PROPOSED CONTOURS.

1 | VEGETATED SWALE | N.T.S.

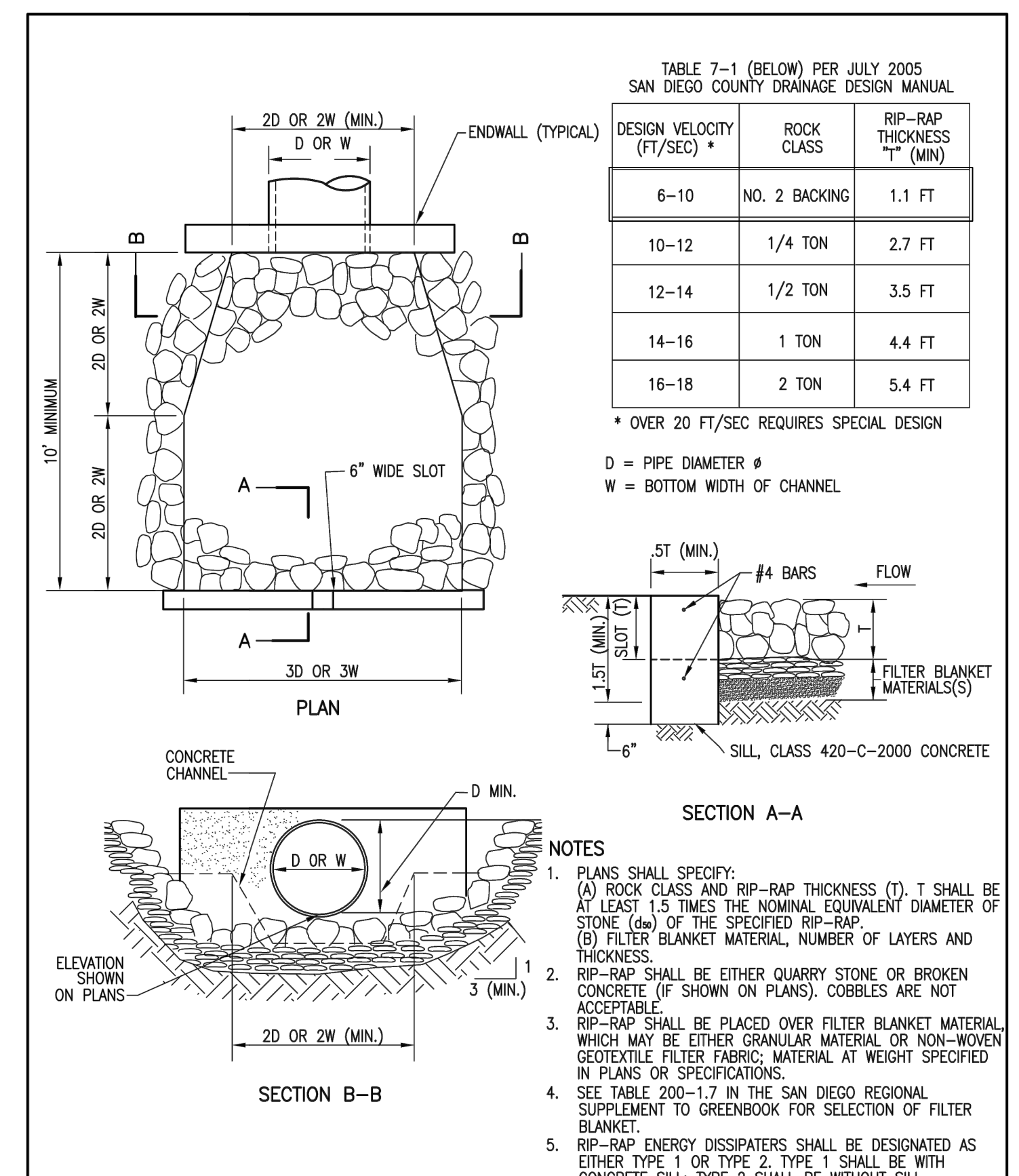


TABLE 7-1 (BELOW) PER JULY 2005 SAN DIEGO COUNTY DRAINAGE DESIGN MANUAL

| DESIGN VELOCITY (FT/SEC) * | ROCK CLASS | RIP-RAP THICKNESS "T" (MIN) |
|----------------------------|---------------|-----------------------------|
| 6-10 | NO. 2 BACKING | 1.1 FT |
| 10-12 | 1/4 TON | 2.7 FT |
| 12-14 | 1/2 TON | 3.5 FT |
| 14-16 | 1 TON | 4.4 FT |
| 16-18 | 2 TON | 5.4 FT |

* OVER 20 FT/SEC REQUIRES SPECIAL DESIGN

D = PIPE DIAMETER #
 W = BOTTOM WIDTH OF CHANNEL

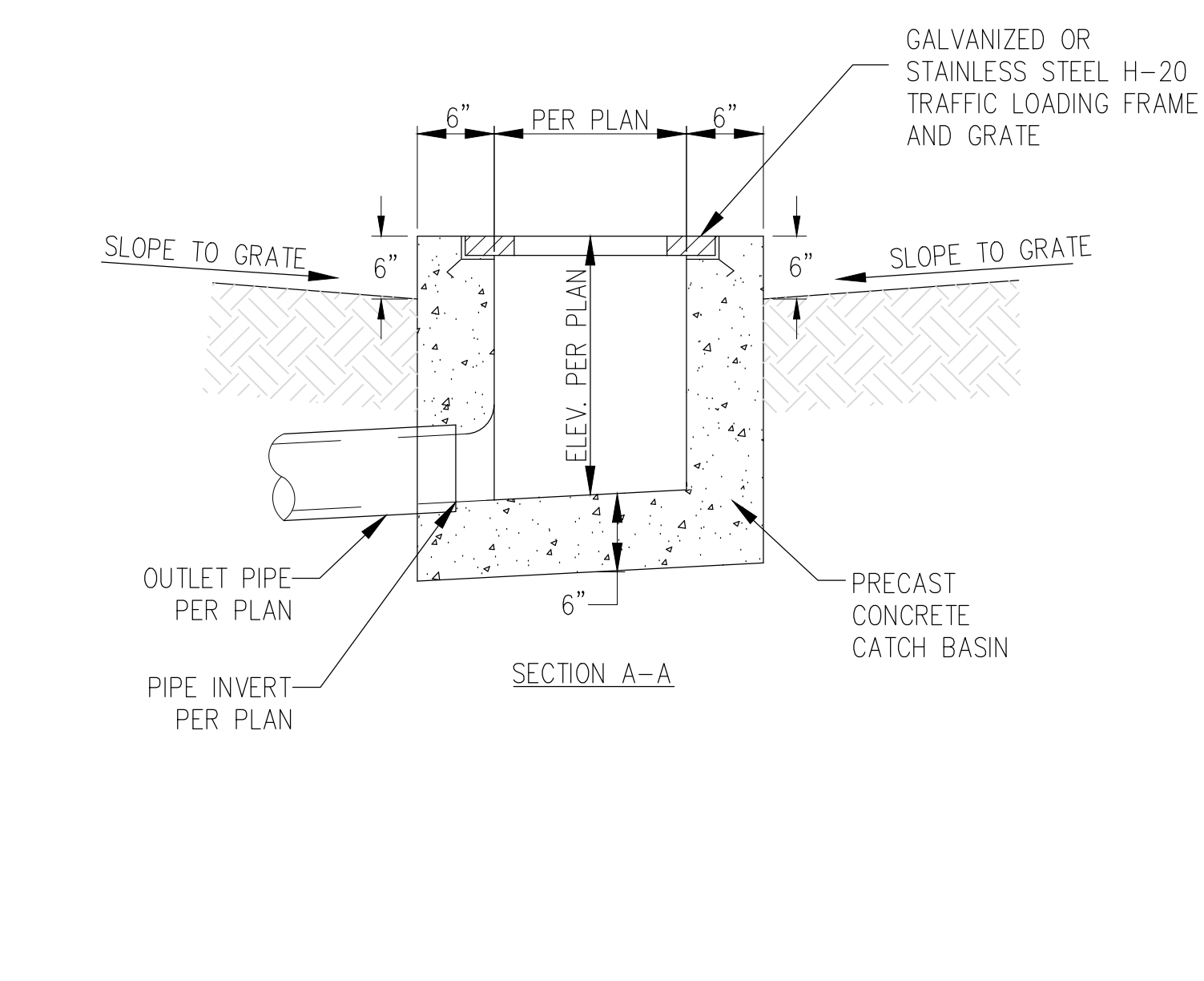
- NOTES
- PLANS SHALL SPECIFY:
 - ROCK CLASS AND RIP-RAP THICKNESS (T). T SHALL BE AT LEAST 1.5 TIMES THE NOMINAL EQUIVALENT DIAMETER OF STONE (d₅₀) OF THE SPECIFIED RIP-RAP.
 - FILTER BLANKET MATERIAL, NUMBER OF LAYERS AND THICKNESS.
 - RIP-RAP SHALL BE EITHER QUARRY STONE OR BROKEN CONCRETE (IF SHOWN ON PLANS). COBBLES ARE NOT ACCEPTABLE.
 - RIP-RAP SHALL BE PLACED OVER FILTER BLANKET MATERIAL WHICH MAY BE EITHER GRANULAR MATERIAL OR NON-WOVEN GEOTEXTILE FILTER FABRIC MATERIAL AT WEIGHT SPECIFIED IN PLANS OR SPECIFICATIONS.
 - SEE TABLE 200-1.7 IN THE SAN DIEGO REGIONAL SUPPLEMENT TO GREENBOOK FOR SELECTION OF FILTER BLANKET.
 - RIP-RAP ENERGY DISSIPATORS SHALL BE DESIGNATED AS EITHER TYPE 1 OR TYPE 2. TYPE 1 SHALL BE WITH CONCRETE SILL; TYPE 2 SHALL BE WITHOUT SILL.

| Revision | By | Approved | Date | SAN DIEGO REGIONAL STANDARD DRAWING | RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE |
|------------------|------------------|-----------|-------|-------------------------------------|---|
| ORIGINAL | | Kercheval | 12/75 | | |
| Add Rip Rap Note | S. Brady | | 04/06 | | |
| Edited | S.S. T. Regello | | 03/11 | | |
| Edited | T.R. T. Regello | | 10/15 | | |
| Edited | M.W. M. Wiselaki | | 10/16 | | |

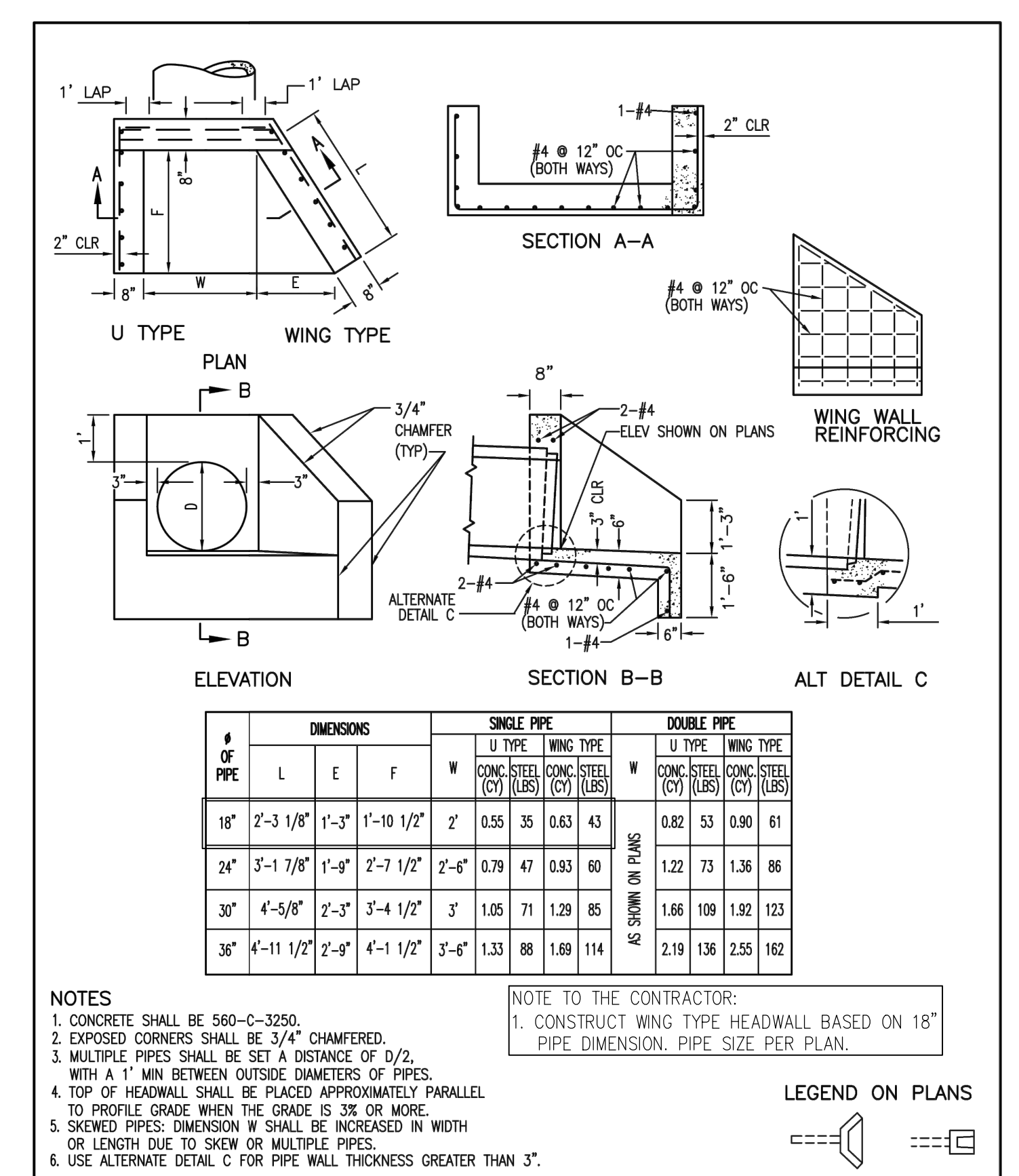
RIP RAP ENERGY DISSIPATER

DRAWING NUMBER **D-40**

2 | RIP RAP ENERGY DISSIPATER | N.T.S.



4 | CAST-IN-PLACE CONCRETE CATCH BASIN | N.T.S.



| # OF PIPE | DIMENSIONS | | | SINGLE PIPE | | DOUBLE PIPE | |
|-----------|------------|-------|------------|-------------|------------------|------------------|------------------|
| | L | E | F | W | CONC. STEEL (CY) | CONC. STEEL (CY) | CONC. STEEL (CY) |
| 18" | 2'-3 1/8" | 1'-3" | 1'-10 1/2" | 2' | 0.55 | 0.63 | 0.43 |
| 24" | 3'-1 7/8" | 1'-9" | 2'-7 1/2" | 2'-6" | 0.79 | 0.93 | 0.60 |
| 30" | 4'-9/8" | 2'-3" | 3'-4 1/2" | 3' | 1.05 | 1.29 | 0.85 |
| 36" | 4'-11 1/2" | 2'-9" | 4'-1 1/2" | 3'-6" | 1.33 | 1.69 | 1.14 |

AS SHOWN ON PLANS

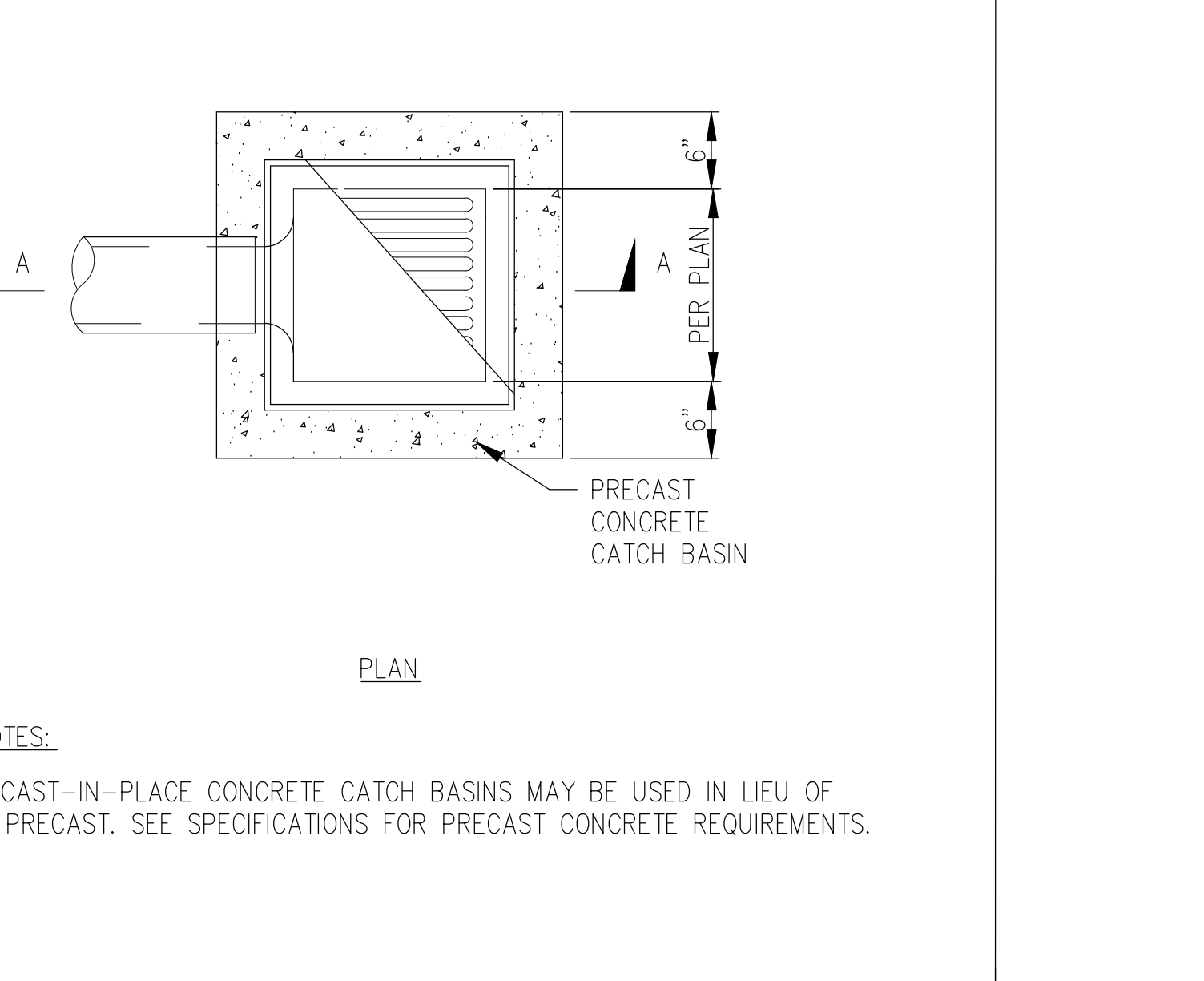
- NOTE TO THE CONTRACTOR:
- CONCRETE SHALL BE 560-C-3250.
 - EXPOSED CORNERS SHALL BE 3/4" CHAMFERED.
 - MULTIPLE PIPES SHALL BE SET A DISTANCE OF 1/2" WITH A 1" MIN BETWEEN OUTSIDE DIAMETERS OF PIPES.
 - TOP OF HEADWALL SHALL BE PLACED APPROXIMATELY PARALLEL TO PROFILE GRADE WHEN THE GRADE IS 3% OR MORE.
 - SKWEED PIPES: DIMENSION W SHALL BE INCREASED IN WIDTH OR LENGTH DUE TO SKEW OR MULTIPLE PIPES.
 - USE ALTERNATE DETAIL C FOR PIPE WALL THICKNESS GREATER THAN 3".

| Revision | By | Approved | Date | SAN DIEGO REGIONAL STANDARD DRAWING | RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE |
|-------------|-----------------|-----------|-------|-------------------------------------|---|
| ORIGINAL | | Kercheval | 12/75 | | |
| Reformatted | T. Stanton | | 04/06 | | |
| Edited | T. Stanton | | 02/09 | | |
| Edited | S.S. T. Regello | | 03/11 | | |
| Edited | T.R. T. Regello | | 10/15 | | |

WING AND U TYPE HEADWALLS FOR 18" TO 36" PIPES

DRAWING NUMBER **D-34**

3 | WING TYPE HEADWALL | N.T.S.



1 | CAST-IN-PLACE CONCRETE CATCH BASINS MAY BE USED IN LIEU OF PRECAST. SEE SPECIFICATIONS FOR PRECAST CONCRETE REQUIREMENTS.



| NO. | DATE | BY | REVISION |
|-----|------|----|----------|
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| NO. | DATE | BY | REVISION |
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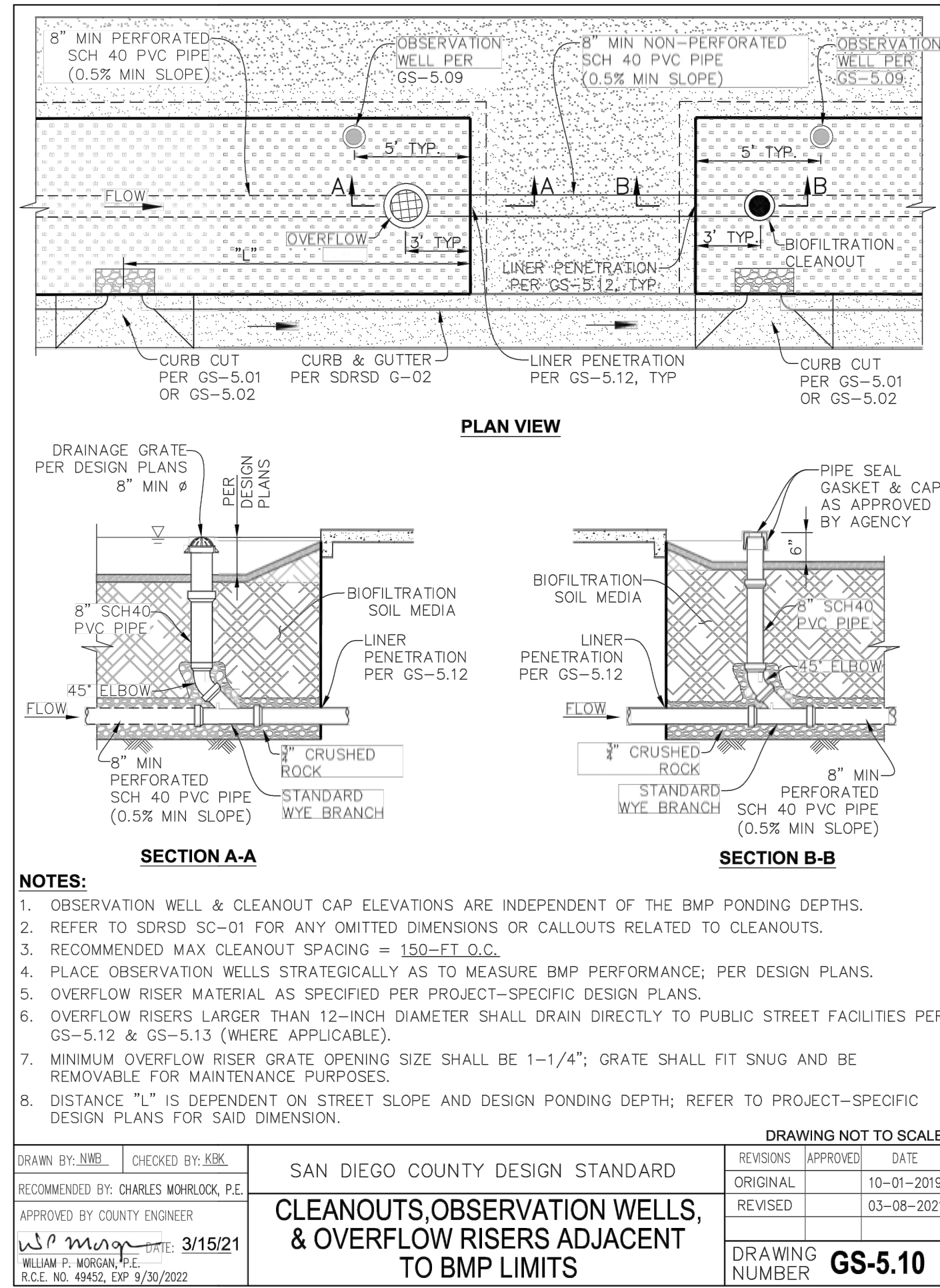
SANDIA CREEK ROAD BRIDGE REPLACEMENT

DETAILS

| | |
|--------------|----------------------|
| DRAWN: XXX | PROJECT NO.: 2000118 |
| DESIGN: XXX | SCALE: AS SHOWN |
| CHECKED: XXX | DATE: 2021-10-08 |
| DRAWING NO. | C13 |
| SHEET NO. | 13 OF 54 |

FIRST IMPROVEMENT PLAN SUBMITTAL - NOT FOR CONSTRUCTION

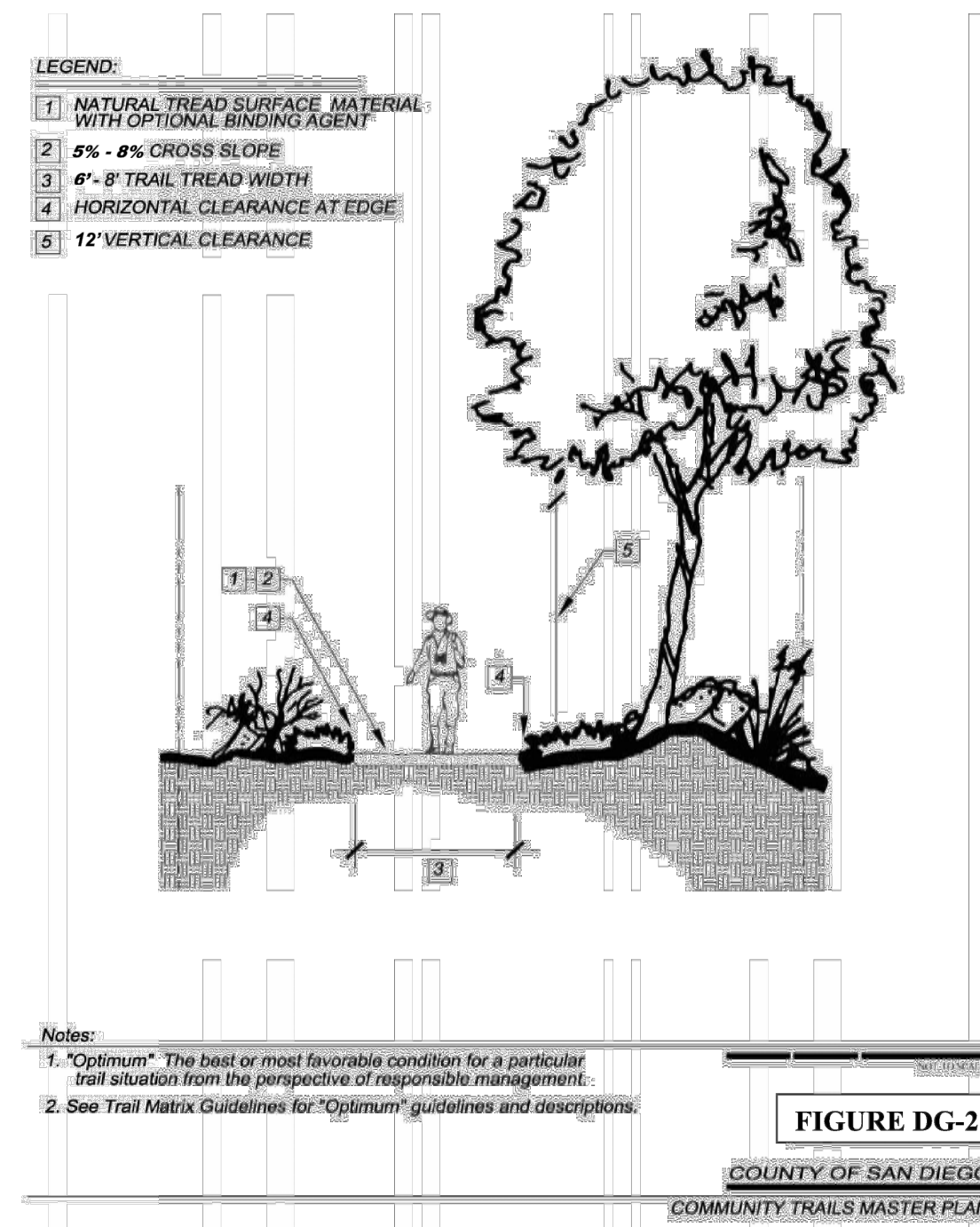
Plotted: Dec 15, 2021 - 12:47pm amunez Layout: C14
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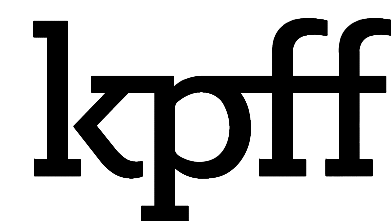
COUNTY TRAILS PROGRAM
 COMMUNITY TRAILS MASTER PLAN

TYPE B – RURAL TRAIL

Trail type intended for medium volume of use generally associated within a rural setting. These trails are intended to function as recreation and transportation facilities. Although accessible to all trail users, some uses may not be practical in steep terrain.



| | | | | | |
|---|----------|--------|---|----------------------|--------|
| 1 | CLEANOUT | N.T.S. | 2 | TYPE B – RURAL TRAIL | N.T.S. |
|---|----------|--------|---|----------------------|--------|



1601 5th Avenue, Suite 1300
 Seattle, Washington 98101
 (206) 382-0600 Fax (206) 382-0500

| NO. | DATE | BY | REVISION |
|-----|------|----|----------|
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| | | | |
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SANDIA CREEK ROAD BRIDGE REPLACEMENT

DETAILS

| | |
|--------------|------------------------|
| DRAWN: XXX | PROJECT NO.: 2000118 |
| DESIGN: XXX | SCALE: AS SHOWN |
| CHECKED: XXX | DATE: 2021-10-08 |
| DRAWING NO. | C14 |
| SHEET NO. | 14 OF 54 |

FIRST IMPROVEMENT PLAN SUBMITTAL - NOT FOR CONSTRUCTION