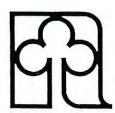


STANDARD DETAILS

FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY



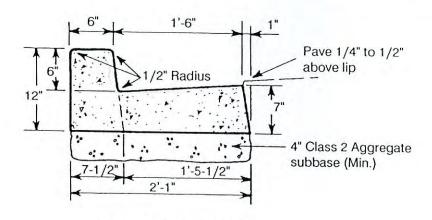
CITY OF NEWARK

STANDARD DETAIL INDEX

Detail	Approval/ Drawing No.	Rev. Date	Rev. No
STREET CONSTRUCTION DETAILS			
CURB & GUTTER	SD-104	D	
EXTRUDED CURB	SD-105	12/03/90	
DRIVEWAY - TYPE R (RESIDENTIAL)	SD-106 - 1	D	
DRIVEWAY - TYPE C (COMMERCIAL)	SD-106 - 2	D	
DRIVEWAY - TYPE M (INDUSTRIAL)	SD-106 - 3	D	
DRIVEWAY - TYPE S (SCHOOL)	SD-106 - 4	Does not	exist
CURB RETURN	SD-107	D	· childe
SIDEWALK	SD-107	D	
TREE WELL DETAILS	SD-109	12/04/90	
ASPHALT PLANING DETAILS	SD-110	D	
PAVEMENT REINFORCING FABRIC DETAILS	SD-111	D	
TIE-IN PAVING	SD-112	D	
STORM WATER INLET (PLAN, SECTIONS)	SD-112 - 1		
STORM WATER INLET (SECTIONS, DETAILS)	SD-113 - 2	12/06/90	
GRATE & FRAME	SD-114	12/21/90	
TYPE I MANHOLE (STANDARD)	SD-115 - 1		
TYPE II MANHOLE (SHALLOW)	SD-115 - 2		
MANHOLE FRAME & COVER	SD-116	12/20/90	
TRENCH BACKFILL - TYPES 1, 2 AND 3	SD-117 - 1	01/31/90	
TRENCH BACKFILL - TYPES 4 AND 5	SD-117 - 2	Condition of the Condit	
SPECIAL TRENCH PAVING - TYPE A	SD-118 - 1		
SPECIAL TRENCH PAVING - TYPE B	SD-118 - 2	02/04/94	
THRU CURB DRAIN	SD-110 - 2	D	
MONUMENT	SD-120	D	
TYPE A BARRICADE (LIGHT WEIGHT)	SD-121 - 1	12/05/90	
ELECTROLIER	SD-121	D	
ELECTROLIER BASE	SD-123	12/07/90	
STREET NAME PLATE	SD-124	12/07/90	
STREET NAME SIGN - TYPE A	SD-125 - 1	12/28/90	
STREET NAME SIGN - TYPE B	SD-125 - 2	Does not	exist
GENERAL SIGNING DETAILS	SD-126 - 1	12/27/90	
A1 SIGN MOUNTING (ELECTROLIER)	SD-126 - 2	12/21/90	
B1 SIGN MOUNTING (4X4 POST)	SD-126 - 3	01/04/91	
B2 SIGN MOUNTING (4X4 POST) B2 SIGN MOUNTING (2" PIPE)	SD-126 - 4	Does not	evict
B4 SIGN MOUNTING (2 FIFE) B4 SIGN MOUNTING (N SIGN)	SD-126 - 6		CAISL
C,D,E & F SIGN MOUNTING	SD-126 - 7	D 01/04/91	
STRIPING DETAILS	SD-120 - 7	D	
TRANSITIONS	SD-127 SD-128	12/05/90	
SIDEWALK GRINDING DETAILS	SD-129	12/15/89	

STANDARD DETAIL INDEX

Detail	Approval/ Drawing No.	Rev. Date	Rev. No.
LANDSCAPING DETAILS			
TREE PLANTING DETAIL	SD-201	04/01/92	REV.3
SHRUB PLANTING DETAIL	SD-202	D	
POP-UP HEAD W/TRIPLE SWING JOINT	SD-203	D	
QUICK COUPLER VALVE	SD-205	D	
REMOTE CONTROL VALVE W/GATE VALVE	SD-206	D	
AUTOMATIC IRRIGATION CONTROLLER	SD-209	D	
ASPHALT CONCRETE PAVING AND HEADERBOARD	SD-210	D	
IRRIGATION TRENCH SECTIONS	SD-211	D	
ROOT PRUNING - NO CONCRETE REPLACEMENT	SD-212 - 1	05/18/89	
ROOT PRUNING W/CONCRETE REPLACEMENT	SD-212 - 2	04/01/92	REV. 1
ROOT PRUNING BOTH SIDES W/CONC. REPL.	SD-212 - 3	D	
ROOT BARRIER INSTALLATION	SD-213	11/17/88	
LONG-RANGE TURF ROTOR HEAD	SD-215	D	
MID-RANGE TURF ROTOR HEAD	SD-216	D	
ISOLATION GATE VALVE (SMALL)	SD-217	D	
ISOLATION GATE VALVE (LARGE)	SD-218	D	



8" Median Curb*

1'-2"

7-1/2"

1'-5-1/2"

*Special Case

9' Median Curb

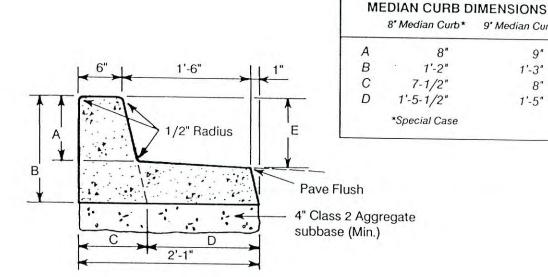
9"

8"

1'-3"

1'-5"

6" CURB AND GUTTER

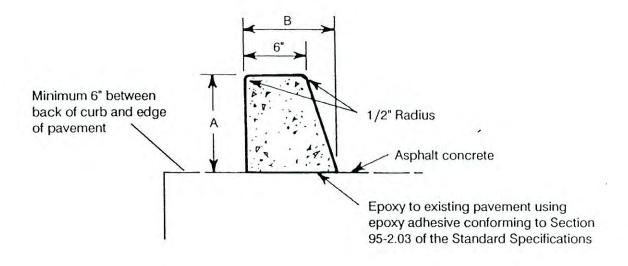


MEDIAN CURB AND GUTTTER

Notes:

- 1. Concrete shall be Class "A", minimum 6 sacks per CY.
- 2. Score curb 8' o.c.
- 3. Casaron or equivalent herbicide shall be placed under all curb and gutter.

CURB AND GUTTER SCALE: NONE DATE: 01/29/90 **STANDARD** APPROVED BY: **DETAILS CITY OF NEWARK** KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 104



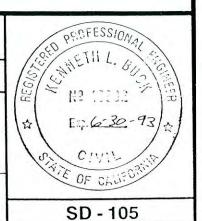
ME	DIAN CURB DI	MENSIONS
	9" Curb	8" Curb
Α	9"	8"
В	8-1/2"	8"
200		

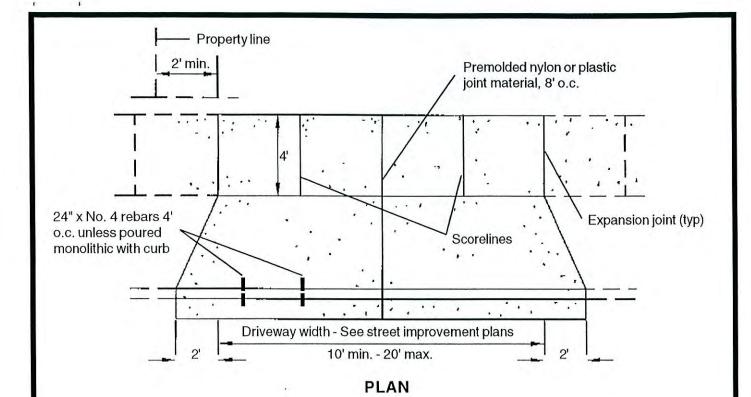
All median curbs shall be 9" unless otherwise shown on the plans

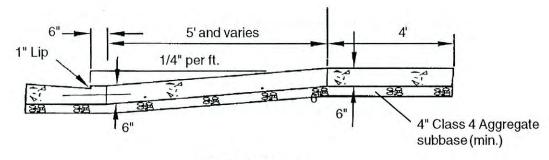
DATE: 12/03/90

- 1. Concrete shall be Class "A", minimum 6 sacks per CY.
- 2. Score curb 8' o.c.

EXTRUDED CURB SCALE: NONE **STANDARD** APPROVED BY: **DETAILS** Kenneth J. Buck **CITY OF NEWARK** KENNETH L. BUCK CITY ENGINEER P.E. 16982

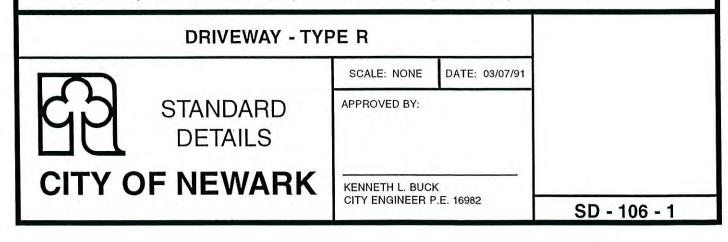


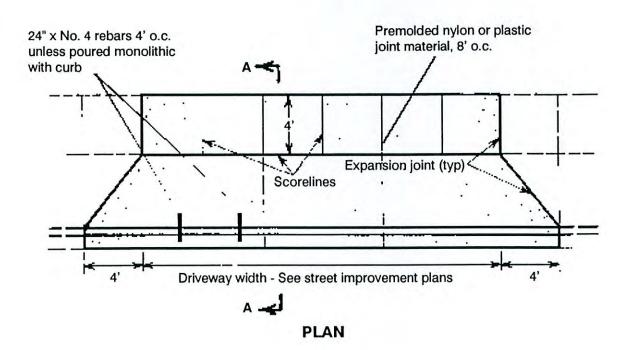


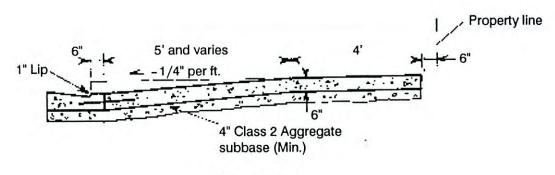


SECTION A-A

- 1. Concrete shall be Class "A", minimum 6 sacks per CY, 1 LB. lamp black per CY.
- 2. Casaron or equivalent herbicide shall be placed under all driveways, curb and gutter and sidewalks.

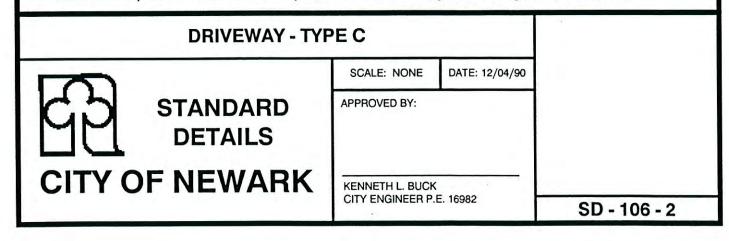


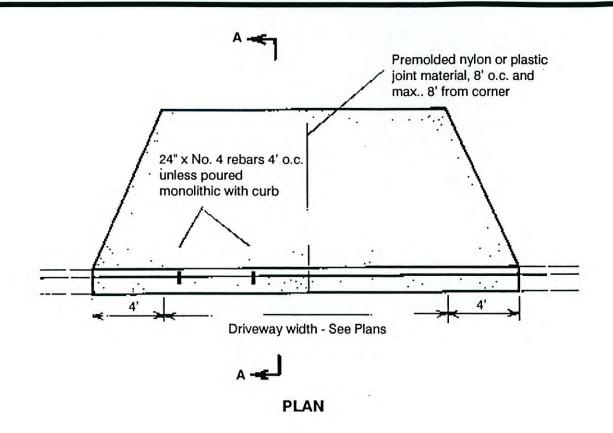


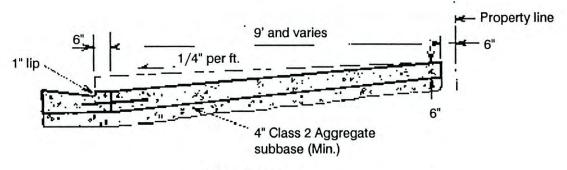


SECTION A-A

- 1. Concrete shall be Class "A", minimum 6 sacks per CY, 1 LB. lamp black per CY.
- 2. Casaron or equivalent herbicide shall be placed under all driveways, curb and gutter and sidewalks.





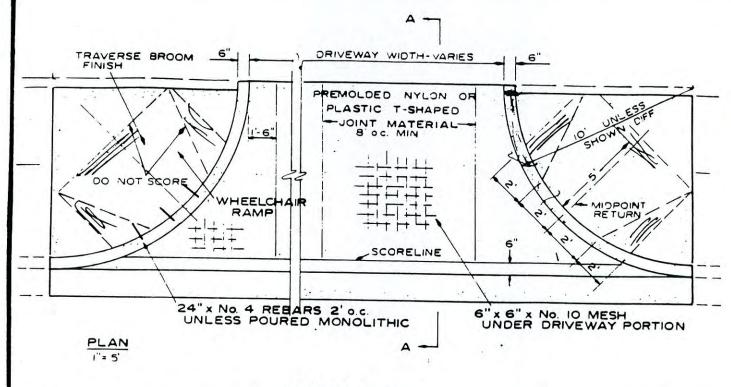


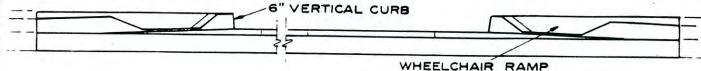
SECTION A-A

Notes:

- 1. Concrete shall be Class "A", minimum 6 sacks per CY, 1 LB. lamp black per CY.
- 2. Casaron or equivalent herbicide shall be placed under all driveways and curb and gutter.

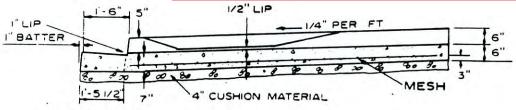
DRIVEWAY - TYPE M SCALE: NONE DATE: 12/04/90 APPROVED BY: KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 106 - 3





ELEVATION

APPLICANT SHALL SUBMIT A DETAILED DESIGN LAYOUT AND GRADING PLAN OF THE DRIVEWAY IF USING TYPE S. DRIVEWAY SHALL INCORPORATE CURRENT CALTRANS CURB RAMP DETAILS.



SECTION A-A

NOTES:

- I. CONCRETE SHALL BE CLASS'A', MIN. 6 SACKS CEMENT PER C.Y., ILB. LAMP BLACK PER CY.
- 2. CUSHION MATERIAL SHALL MEET THE FOLLOWING GRADATION: 100% PASSING 3/4"; MAX. 25% PASSING No. 200 SIEVE.
- 3. INSTALL PREMOLDED JOINT MATERIAL, 8'o.c.

City of Newark

NO. REVISED BY.

DRAWN BY: JAB

CHECKED BY:

SCALE: AS SHOWN

CITY OF NEWAY.

STANDARD DETAILS

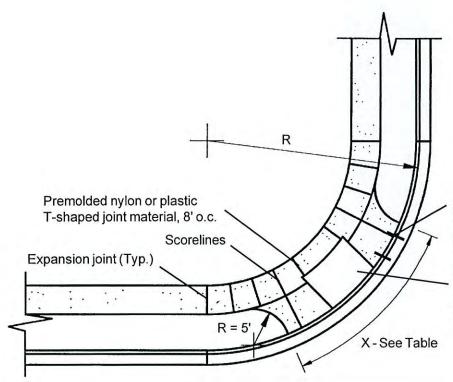
DRIVEWAY. TYPE S

APPROVED BY

CITY ENGR. R.E.13052

DATE: 4-16-76

DRWG. NO.:SD-106-4



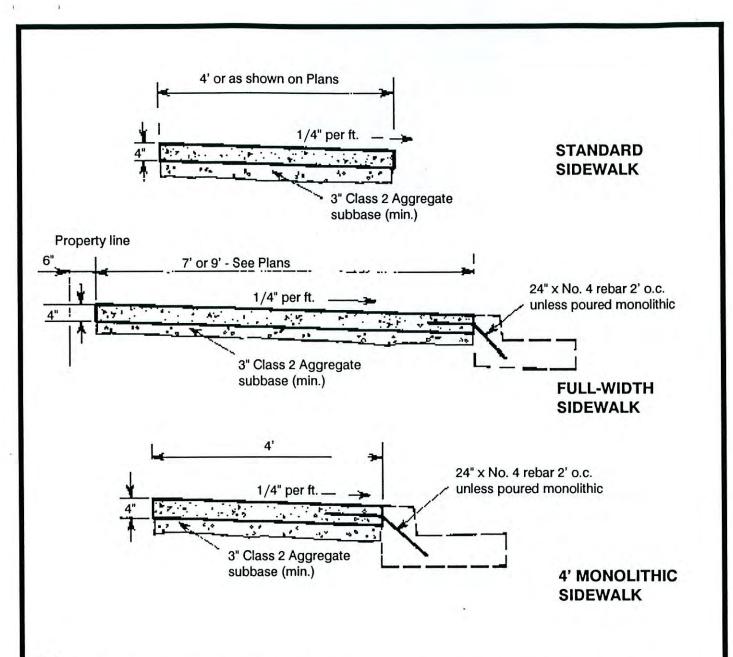
24" No. 4 rebars 4' o.c. unless sidewalk/handicap ramp and curb poured monolithic

Handicap ramp; see California Department of Transportation Standard Plans (Dated July 1997) Case E

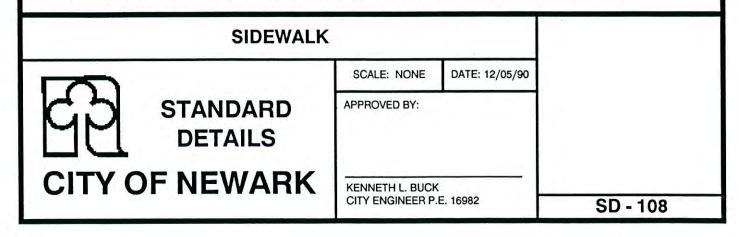
Х	
16'	
22'	
26'	

REV. 1

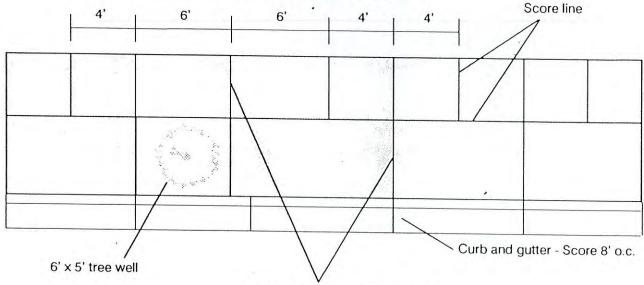
CURB RETURN SCALE: NONE DATE: 03/26/98 APPROVEDBY: CITY OF NEWARK KENNETHL BUCK CITY ENGINEERP.E. 16982 SD - 107



- Concrete shall be Class "A", minimum 6 sacks per CY. Add 1 lb. Lamp Black per C.Y. for all flat work including monolithic sidewalk (adjust quantity of lamp black as required to match adjacent concrete for repair of existing sidewalk).
- 2. Score sidewalk 4' o.c. except at tree wells (see SD-109); premolded joint material 8' o.c.
- 3. Casaron or equivalent herbicide shall be placed under all sidewalk, curb and gutter, and driveways.



Vary score pattern for sidewalk from 4' o.c. to as shown to accomodate 6' wide tree well



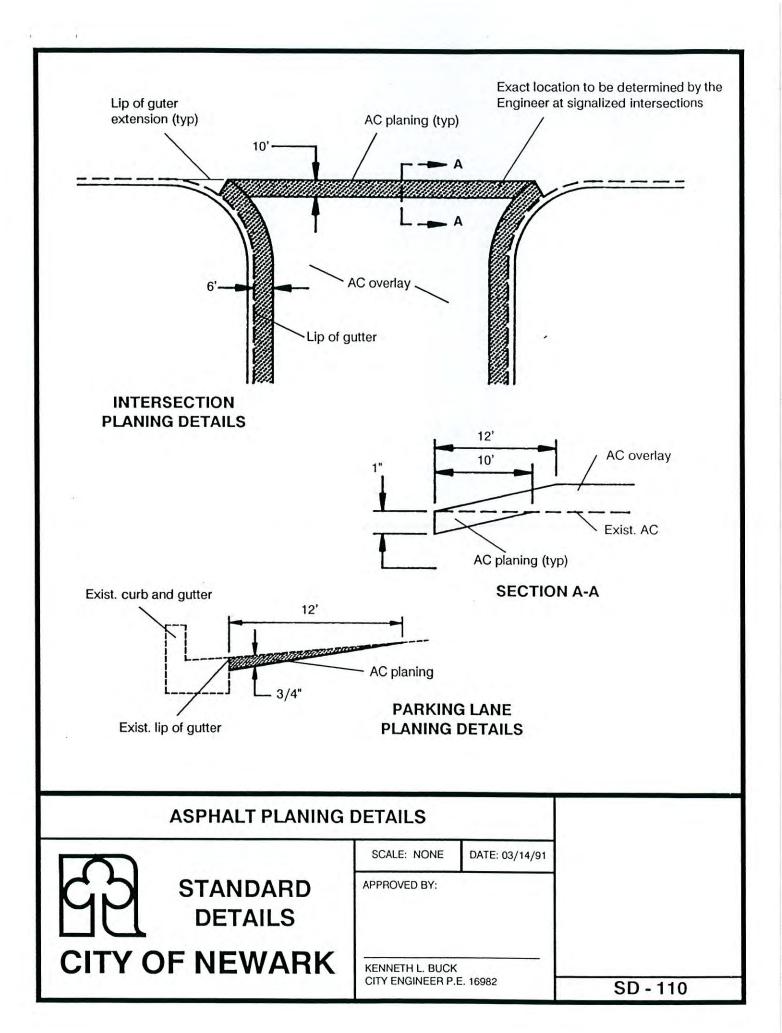
Premolded nylon or plastic T-shaped joint material (typ.)

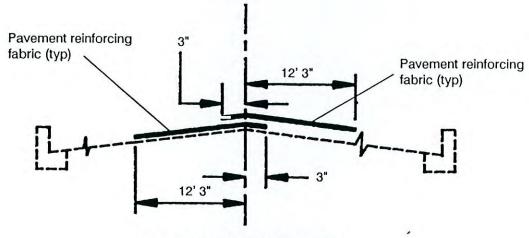
	TION CRITERIA
1.5	Min. distance
Item to center of t	
Water Service Line	8'
Driveway	10'
Storm Drain	10'
Sanitary Sewer	10'
Electrolier	15'
Street Curb Return	45'
Traffic Signal Standard	45'

Notes:

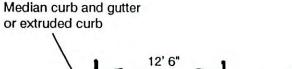
- 1. See SD-108 for sidewalk construction details.
- 2. Tree wells shall be approximately 40' o.c.
- 3. Tree wells shall be free of all construction material and debris and backfilled to within 1" of grade with clean native material.

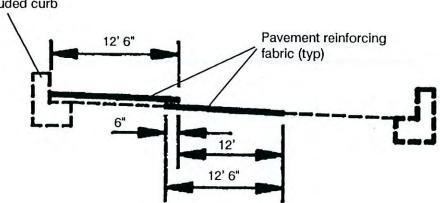
TREE WELL DETAILS SCALE: NONE DATE: 12/04/90 APPROVED BY: APPROVED BY: Xenuelle 1. Buck KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 109





PAVEMENT REINFORCING FABRIC PLACEMENT NO MEDIAN





PAVEMENT REINFORCING FABRIC PLACEMENT WITH MEDIAN

PAVEMENT REINFORCING FABRIC DETAILS



STANDARD DETAILS

CITY OF NEWARK

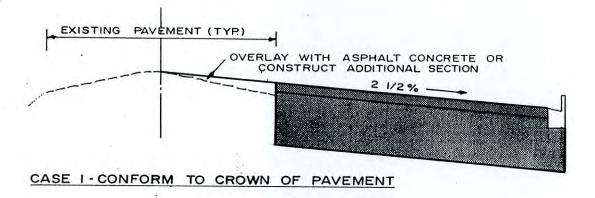
SCALE: NONE

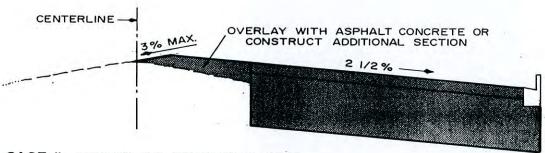
DATE: 03/14/91

APPROVED BY:

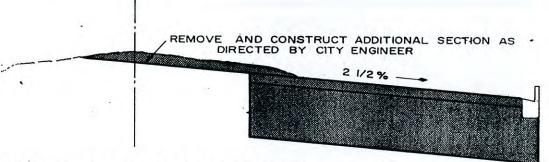
KENNETH L. BUCK CITY ENGINEER P.E. 16982

SD - 111





CASE II - CROWN OF PAVEMENT LOW



CASE III - CROWN OF PAVEMENT HIGH

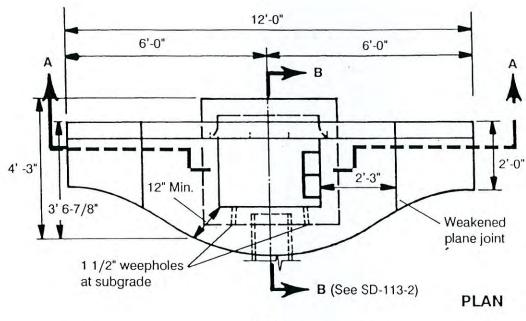
City of Newark APPROVED BY BY. NO. REVISED DRAWN BY: Standard Details JAB CHECKED BY:

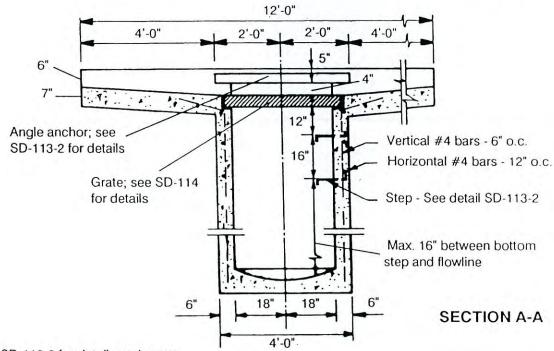
TIE-IN PAVING SCALE: NONE

CITY ENGR. R.E.13052

DATE: 4-20-76

DRWG. NO.: SD-112





- 1. See SD-113-2 for details and notes.
- 2. See SD-114 for frame and grate details.

STORM WATER INLET (PLAN, FRONT SECTION)



SCALE: NONE DATE: 12/20/90
APPROVED BY:

Kenneth L. Buck KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 113 - 1

#4 Bar - 6' long to extend into curb equal distance each side

10"
12"
12"
11/2" R 6"
11/2" weep holes at subgrade

Horizontal #4 bars - 12" o.c.

Depth varies

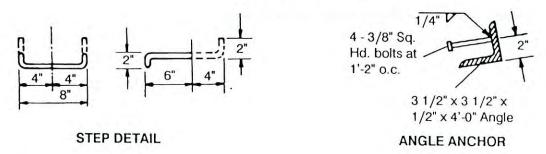
Channelize flowline

3" R 4"

6"
2'-9"
3'-9"
6"

SECTION B-B

(See SD-113-1 for Plan View)



Notes:

- 1. See SD-113-1 for other views and details.
- 2. Concrete shall be Class "A", minimum 6 sacks per CY.
- 3. Steps shall be installed when depth from grate to invert is more than 42".
- 4. At the option of the Contractor, 14" wide steps installed in a straight line can be used in lieu of 8" wide steps as shown.

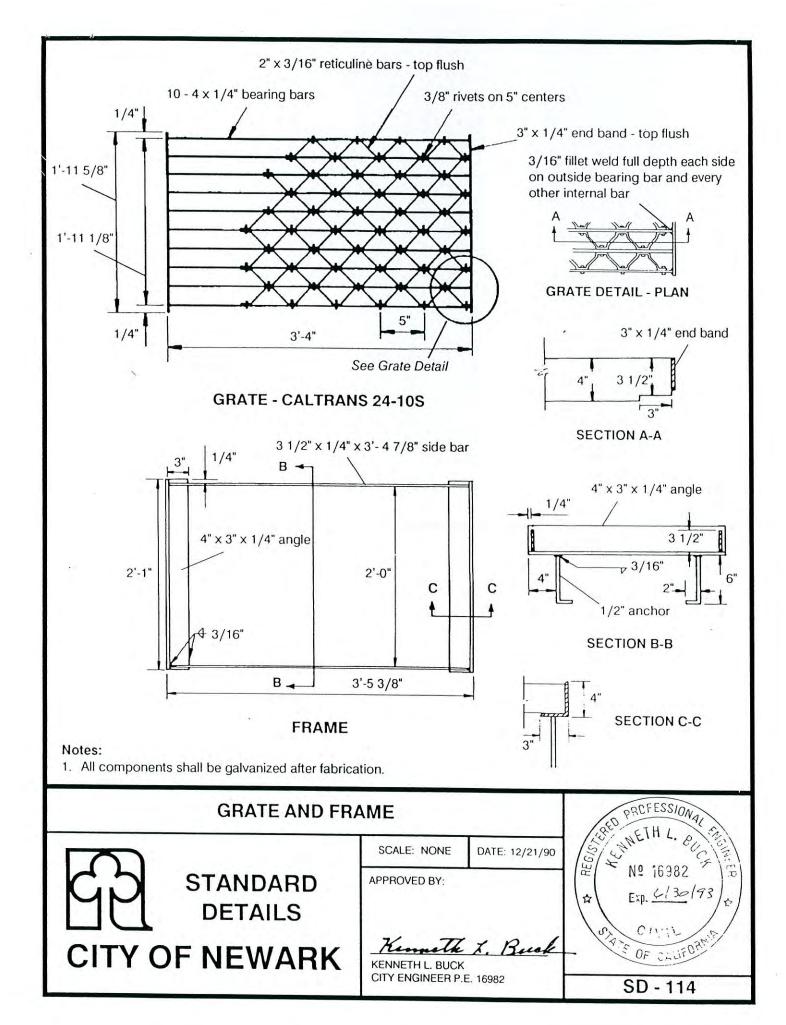
Nº 16982

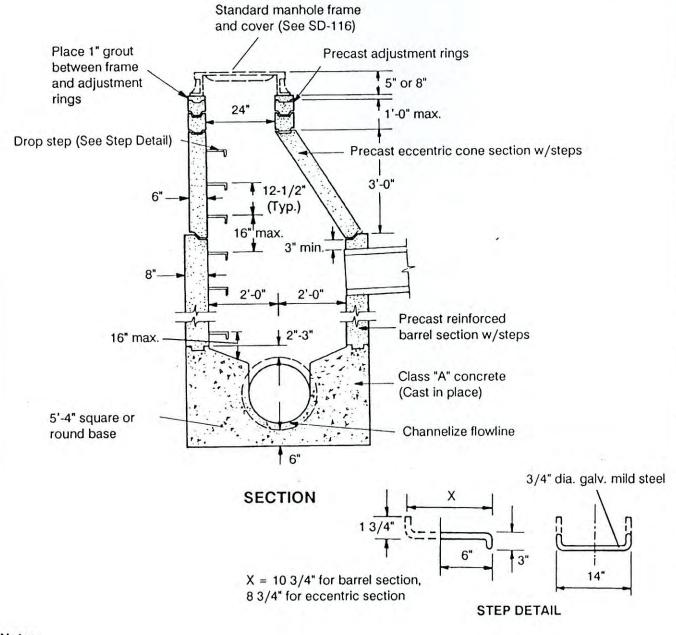
Exp.6/30/93

SD - 113 - 2

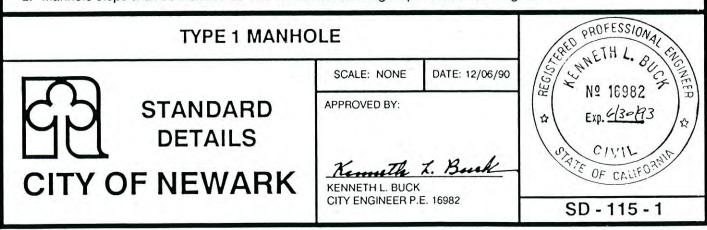
5. Steps shall be galvanized 3/4" dia. rod.

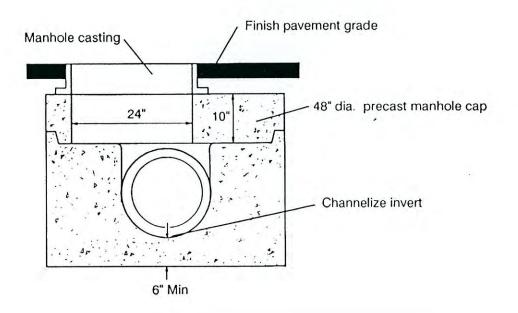






- 1. Manhole shelf height shall be at top of pipe.
- 2. Manhole steps shall be installed so that worker descending steps faces oncoming traffic.





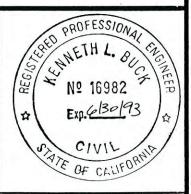
1. Concrete shall be Class "A", minimum 6 sacks per CY.

TYPE II MANHOLE (SHALLOW)

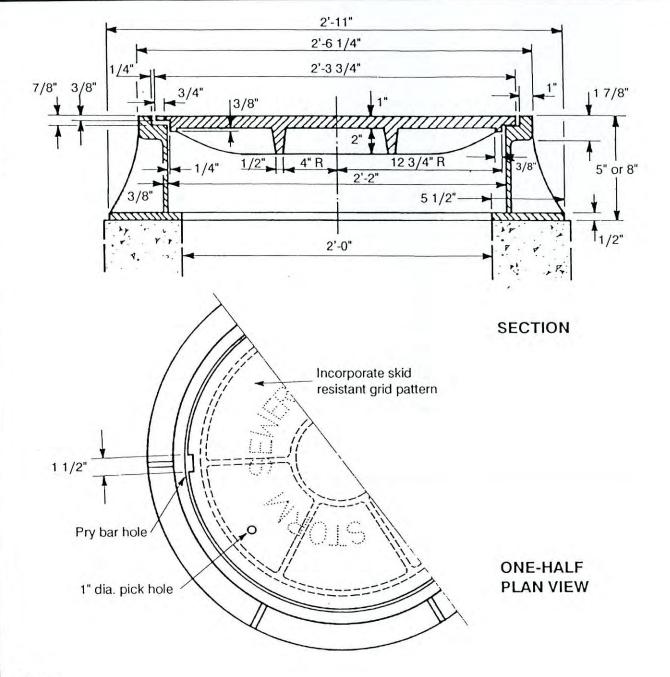


SCALE: NONE DATE: 01/03/91
APPROVED BY:

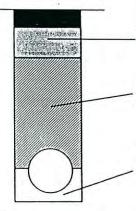
KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 115 - 2



1. Manhole frames and covers shall be match-marked in pairs. Each cover shall be machined or otherwise finished so that it will fit in its frame without rocking.

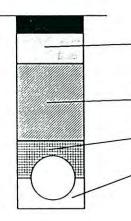


TYPE 1 - For use in future and present street pavement areas

Pavement and structural section as specified on plans or replace in kind plus one additional inch of asphalt concrete

Imported trench backfill material, compacted to 95% min. relative compaction; see SD-117-2 for material specifications

Pipe bedding material (self-compacting) extending from bottom of trench to springline of pipe; pipe bedding material may extend to 6" above pipe at discretion of utility owner. See SD-117-2 for material specifications



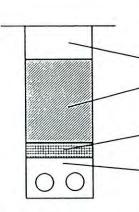
TYPE 2 - Concrete encasement

Pavement and structural section as specified on plans or replace in kind plus one additional inch of asphalt concrete

Imported trench backfill material, compacted to 95% min. relative compaction; see SD-117-2 for material specifications

Class "C" concrete from springline to 6" min. above pipe

Pipe bedding material (self-compacting) extending from bottom of trench to springline of pipe; see SD-117-2 for material specifications



TYPE 3 - Non-PG&E electrical facilities not under sidewalks or pavement

12" native material (max.), compacted to 90% min. relative compaction

Imported trench backfill material, compacted to 90% min. relative compaction; see SD-117-2 for material specifications

4" Class "C" concrete cap

Pipe shading material (self-compacting) extending from bottom of trench to 6" above conduits; shading material may be sand. See SD-117-2 for material specifications

TRENCH BACKFILL - TYPES 1, 2 AND 3



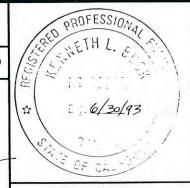
SCALE: NONE

DATE: 01/31/90

APPROVED BY:

Kenneth J. Buck KENNETH L. BUCK

KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 117 - 1

TYPE 4 - Outside pavement areas or sidewalk areas, within landscaped areas

12" native material (max.), compacted to 90% min. relative compaction

Imported trench backfill material, compacted to 90% min. relative compaction

Pipe bedding material (self-compacting) extending from bottom of trench to springline of pipe; pipe bedding material may extend to 6" above pipe at discretion of utility owner

TYPE 5 - Joint trench facilities longitudinally under future and present sidewalks

Future or existing sidewalk and cushion material

Imported trench backfill material, compacted to 90% min. relative compaction

Pipe bedding material (self-compacting) extending from bottom of trench to 6" above pipe or as required by utility owner

PIPE BEDDING/SHADING MATERIAL

1. Gradation:

Passing 3/8" sieve 75-95%
Passing No. 4 sieve 10-25%
Passing No. 200 sieve 0-8%

Pipe bedding/shading material shall be self-compacting; sand may be used to bed plastic pipe.

TRENCH BACKFILL MATERIAL (Washington Township Backfill Material)

- 1. S.E. 20 min.
- 2. Gradation:

 Passing 3" sieve
 100%

 Passing 1" sieve
 90-100%

 Passing No. 4 sieve
 35%-100%

 Passing No. 30 sieve
 5-40%

All material shall consist of unwashed creek or bank run gravel, crushed gravel or rock, bank run rock, sand or a mixture of these and shall be free of roots, vegetable material or other deleterious matter. Native spoils or materials are not permitted to be used for trench backfill.

Rev. 1

TRENCH BACKFILL - TYPE 4 AND 5



STANDARD DETAILS

CITY OF NEWARK

SCALE: NONE

DATE: 02/02/94

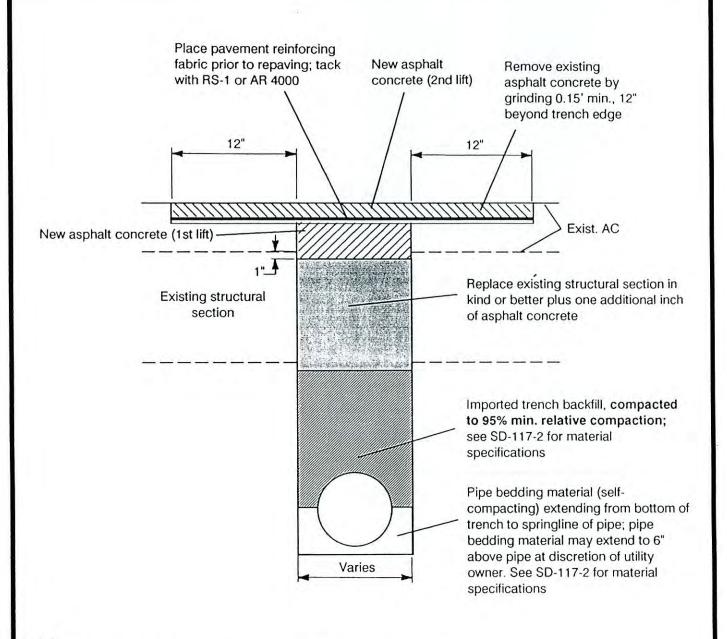
APPROVED BY:

Kenneth J. Buck

KENNETH L. BUCK CITY ENGINEER P.E. 16982

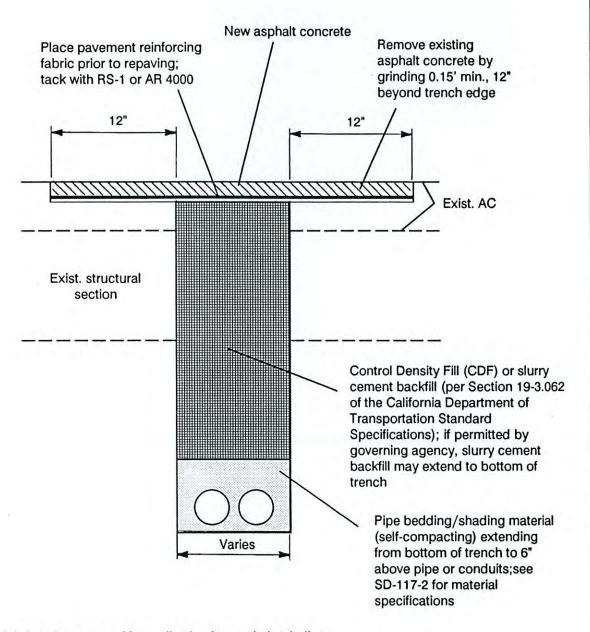


SD - 117 - 2



- 1. All grinding debris to be removed immediately after asphalt grinding.
- 2. Method of placing pavement reinforcing fabric shall be approved by the City prior to installation.
- 3. Minimum 1 ton roller shall be used to compact final lift of asphalt concrete. Hand operated asphalt concrete compaction equipment may be used on first lift of asphalt only.

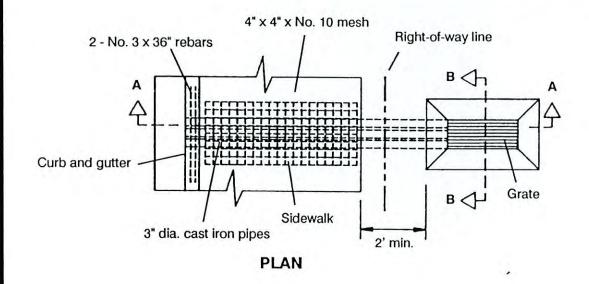
SPECIAL TRENCH PAVING - TYPE A SCALE: NONE DATE: 01/31/90 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SCALE: NONE DATE: 01/31/90 APPROVED BY: SCALE: NONE DATE: 01/31/

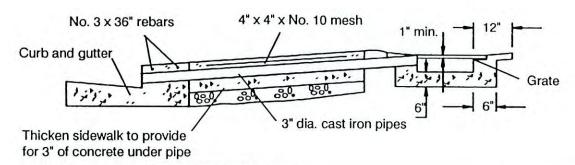


- 1. All grinding debris to be removed immediately after asphalt grinding.
- 2. Method of placing pavement reinforcing fabric shall be approved by the City prior to installation.
- Minimum 1 ton roller shall be used to compact asphalt concrete. Hand operated compaction equipment shall not be used.

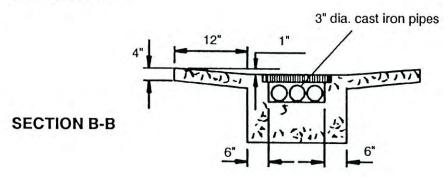
 Rev. 1

SPECIAL TRENCH PAVING - TYPE B SCALE: NONE DATE: 02/02/94 APPROVED BY: SCALE: NONE DATE: 02/02/94 APPROVED BY:

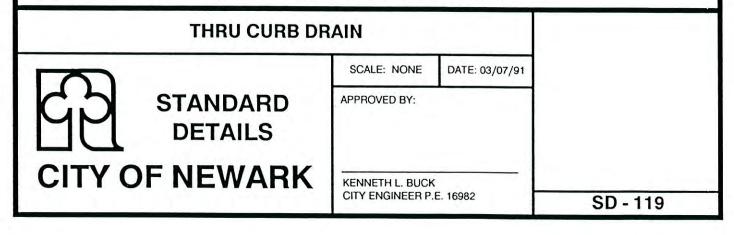


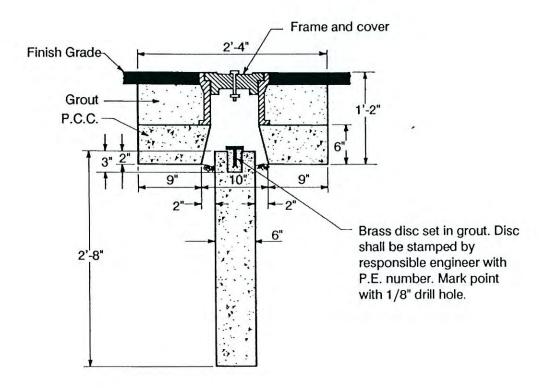


SECTION A-A

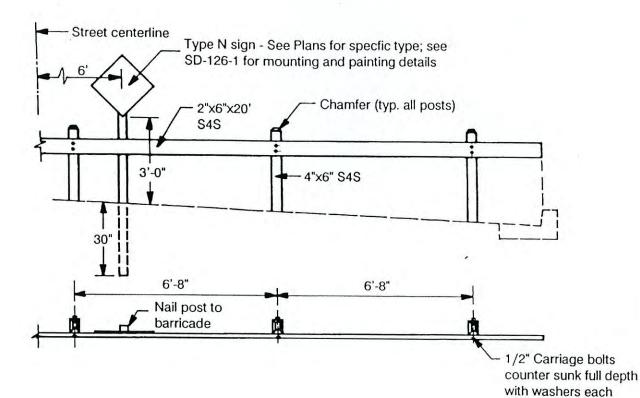


- 1. Concrete shall be Class "A", minimum 6 sacks per CY.
- 2. See Improvement Plans for grate & frame specifications and number of pipes.

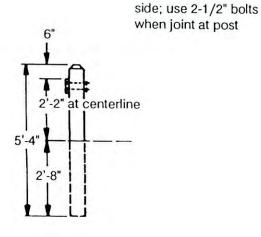




STANDARD CITY MONUMENT SCALE: NONE DATE: 08/19/88 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 120



Street Width	No. Spans
36'	5
40'	5
68'	9
84'	12



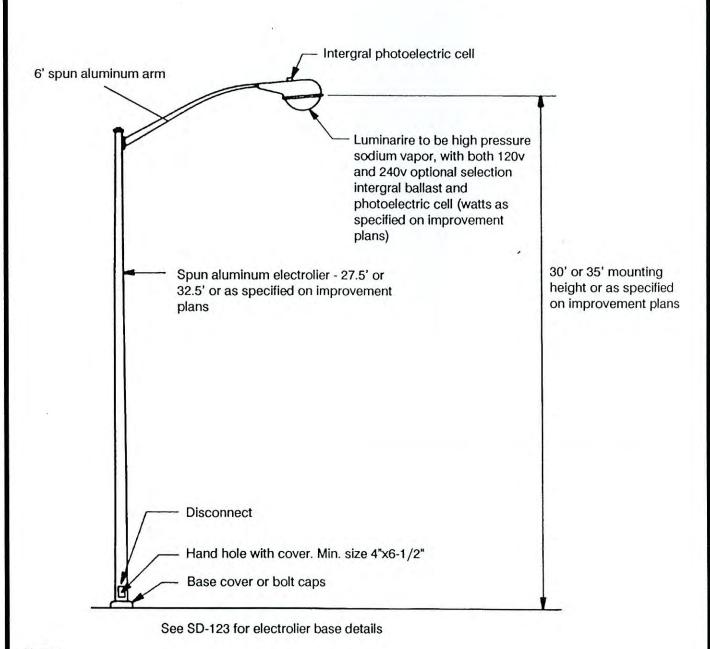
- 1. All bolts shall have cut washers.
- 2. All lumber shall be as follows:

Rails: Douglas Fir, Dense No. 1 Stress Grade or better.

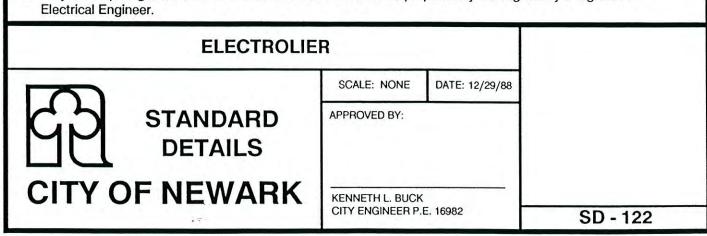
Posts: Treated Douglas Fir, Dense No. 1 Stress Grade or better; or Dense Structural Grade Redwood.

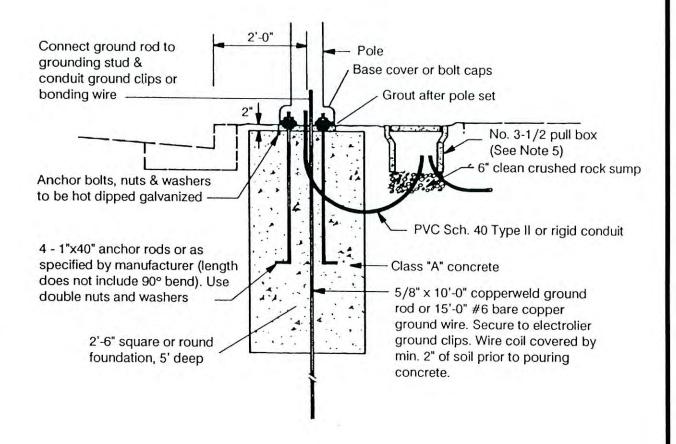
3. Entire barricade shall be painted white (3 coats).

TYPE A BARRICADE SCALE: NONE DATE: 12/05/90 STANDARD DETAILS APPROVED BY: Nº 16982 Exp. 6/30/93 KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 121 - 1

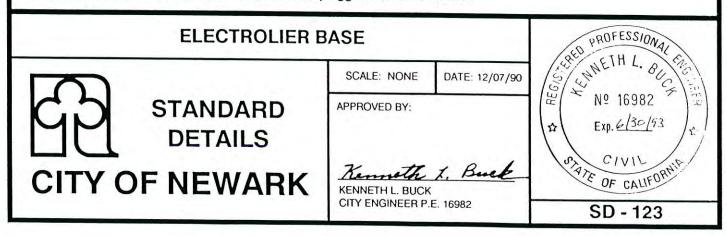


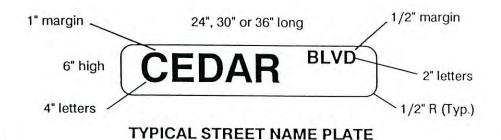
- 1. See improvement plans for pole height, luminarie wattage and distribution.
- 2. Projects requiring installation of 4 or more electroliers shall be prepared by and signed by a registered Electrical Engineer.





- 1. Minimum conduit size shall be 1-1/2".
- 2. Minimum cover over conduit shall be 18" under sidewalks, 24" in planter strips, and 36" under pavement.
- 3. All conduits not under concrete or asphalt concrete shall be protected with a 4" concrete cap. Conduit shall have a 4" sand shading prior to concrete cap.
- 4. Minimum radius of bends shall be 18".
- 5. Junction boxes shall meet the requirements for State Standard No. 3-1/2 pull box.
- 6. Junction box covers shall be secured with two 3/8" brass hold bolts with brass washers and nuts.
- 7. Pull boxes shall be installed only at locations shown on the Plans.
- 8. All conduits terminating in pull boxes shall be plugged with duct sealant.

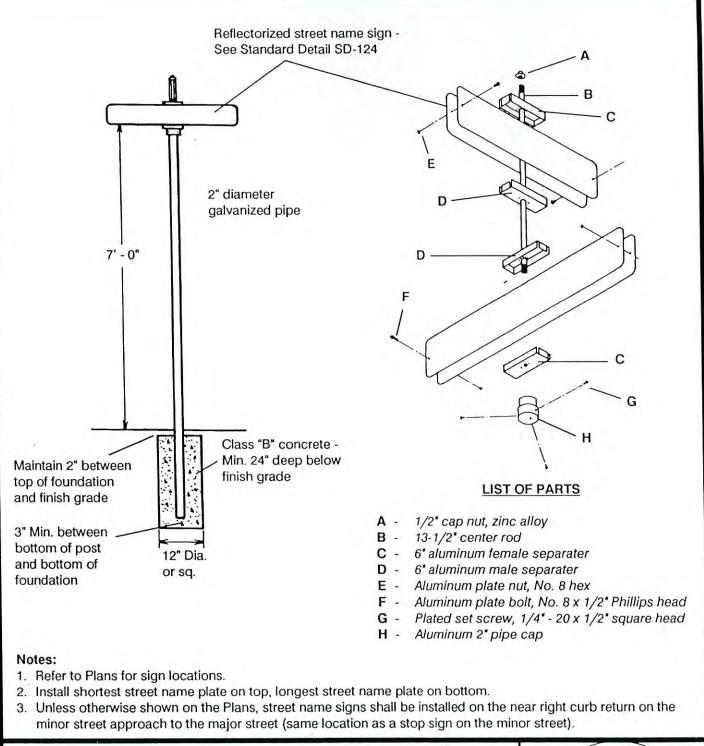




- 1. Sign plates shall be 6" high and 24", 30" or 36" long. Corner radii shall be 1/2" R.
- 2. Sign plates shall be manufactured from 6061 T6 alumium, 0.063" thick for 24" plates and 0.080" thick for 30" and 36" plates.
- Street name lettering shall be 4" high with 1" top and bottom margins. Street
 category abbreviations shall conform to the table on this drawing and shall be 2"
 high with 1/2" top margins.
- 4. Sign plates shall be Engineering grade reflective sheeting. Background shall be green; letters shall be white.
- 5. Lettering for street names shall be A, B, C or D Series capital letters. A Series letters may be used only on 36" signs. The widest letter series possible shall be used in each case. The street category shall be C Series letters in all cases.

STREET CATEGORY	ABBREVIATION
AVENUE	AVE
BOULEVARD	BLVD
COURT	CT
DRIVE	DR
PLACE	PL
STREET	ST

STREET NAME PLATE SCALE: NONE DATE: 12/07/90 APPROVED BY: SCALE: NONE DATE: 12/07/90 APPROVED BY: Nº 16982 EXP. 6/30/93 CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 124



STREET NAME SIGN - TYPE A

STANDARD DETAILS CITY OF NEWARK

SCALE: NONE

DATE: 12/28/90

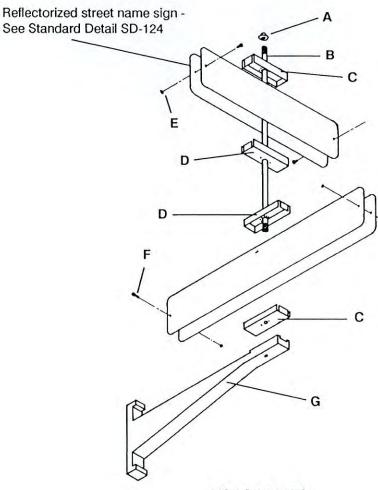
APPROVED BY:

KENNETH L. BUCK

CITY ENGINEER P.E. 16982



SD - 125 - 1



LIST OF PARTS

A - 1/2" Cap nut, zinc alloy

B - 13 - 1/2" Center rod

C - 6" Aluminum female separater

D - 6" Aluminum male separater

E - Aluminum plate nut, No. 8 hex

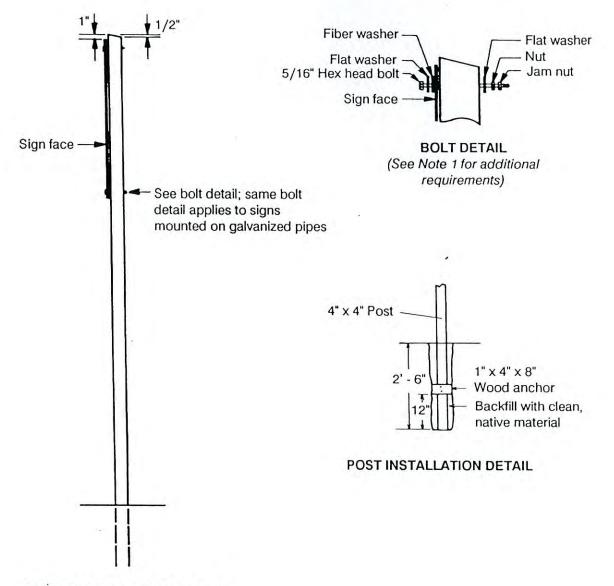
F - Aluminum plate bolt, No. 8 x 1/2" Phillips head

G - Electrolier bracket

Notes:

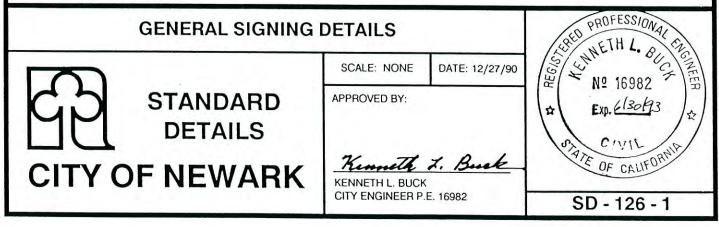
- 1. Refer to Street Improvement plans for sign locations.
- 2. Install shortest plate on top.

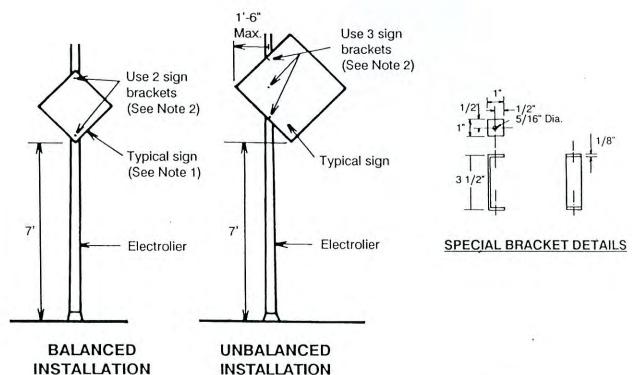
STREET NAME SIGN - TYPE B SCALE: NONE DATE: 10/19/89 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 125 - 2

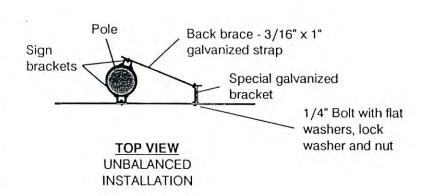


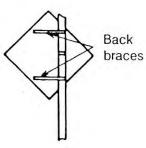
SIGN MOUNTING DETAILS

- 1. All hardware except stainless steel shall be galvanized.
- Wood posts shall be redwood, or preservative treated Douglas fir or Hem-Fir conforming to Section 56-2.02B of the California Department of Transportation Standard Specifications.
- 3. Traffic signs shall be installed at a right angle to the direction of approaching traffic or angled slightly toward traffic (maximum 3°).



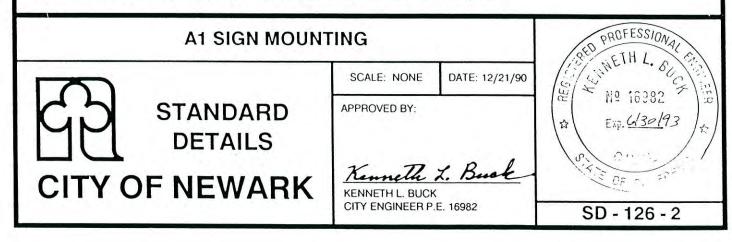


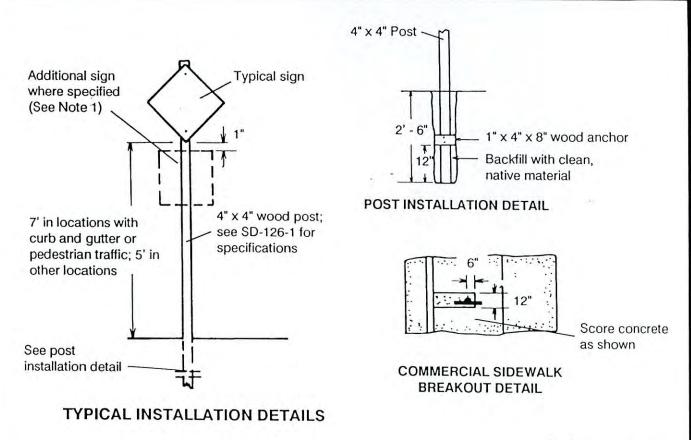


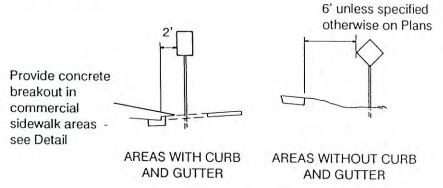


REAR VIEW UNBALANCED INSTALLATION

- 1: Maximum sign size for balanced installation shall be 36" x 36" diamond and 36" wide rectangular signs.
- 2. Sign banding shall be stainless steel; all other hardware shall be galvanized.
- 3. See SD-126-1 for additional requirements regarding installation and hardware.

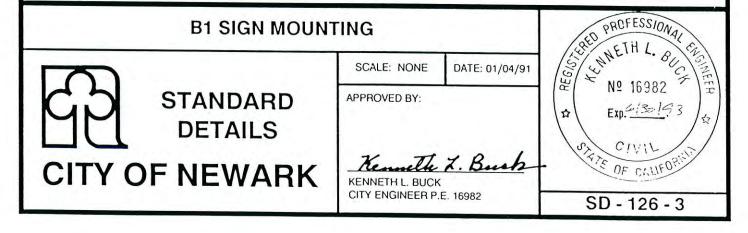


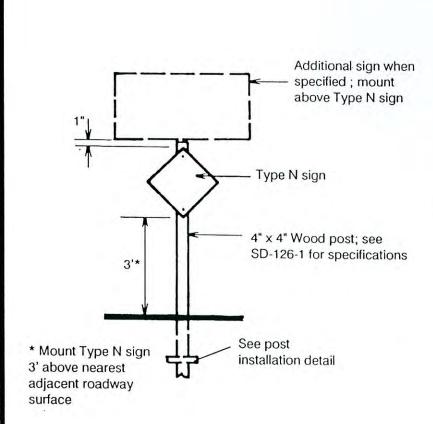


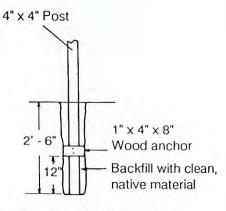


TYPICAL SIGN LOCATIONS

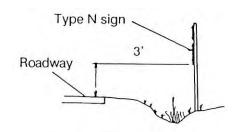
- 1. When two signs are mounted on a single post, clearance from the ground shall be measured from the bottom of lower sign.
- 2. See SD-126-1 for addditional requirements regarding installation and hardware.







POST INSTALLATION DETAIL



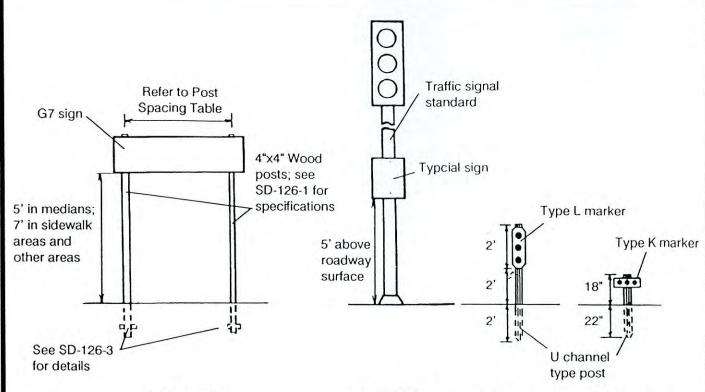
TYPICAL INSTALLATION

TYPICAL INSTALLATION DETAILS

Notes:

- 1. All sheeting shall be reflective engineering grade Scotchlite with black borders where required. Type N sign size shall be 18"x18".
- 2. Yellow background signs shall be used on median noses and locations where traffic moves on each side of the sign. Red background signs shall be used in head on positions such as barricades. Orange background signs shall be used in construction zones. Sign types: N-1 (Yellow background, no reflectors); N-2 (Red background, no reflectors); N-3 (Orange background, no reflectors); N-4 (Yellow background, yellow reflectors); N-5 (Red background, red reflectors)
- 3. See SD-126-1 for addditional requirements regarding installation and hardware.

TYPE N SIGN AND MOUNTING SCALE: NONE DATE: 01/04/91 APPROVED BY: Nº 16982 Exp. C13 - 193 Exp. C13 - 193

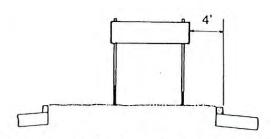


TYPE C SIGN MOUNTING

TYPE D SIGN MOUNTING

TYPE E SIGN MOUNTING

TYPE F SIGN MOUNTING



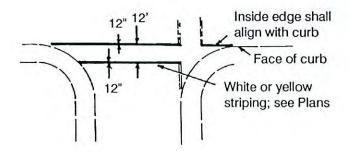
Typical C mounting installation within median; provide similar lateral clearance at other locations. In no case shall posts be installated within the rear 4' of a 10' wide sidewalk.

C MOUNTING	POST SPACIN	G TABLE
SIGN PANEL	SIGN PANEL	POST
LENGTH	OVERHANG	SPACING
4'-8", 5'-0" & 5'-6"	6", 9" & 12"	3'-6"
6'-0" & 6'-6"	12" & 15"	4'-0"
7'-0" & 7'-6"	15" & 18"	4'-6"
8'-0"	18"	5'-0"

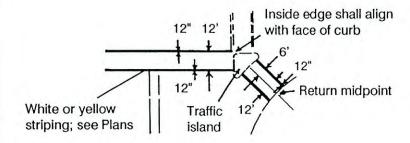
Notes

1. See SD-126-1 for additional requirements regarding installation hardware.

C, D, E & F SIGN MOUNTING SCALE: NONE DATE: 12/27/90 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 126 - 7



STANDARD CROSSWALK

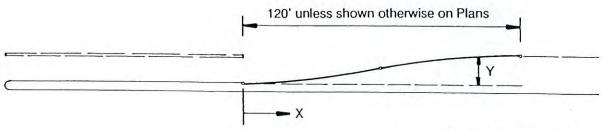


STARD CROSSWALK FROM TRAFFIC ISLAND

Notes

- 1. Pavement legends shall conform to Chapter 16 of the Department of Transportation Maintenance Manual.
- 2. On multi-lane streets, pavement legends shall be painted in each lane.
- 3. City of Newark legend stencils shall be used.

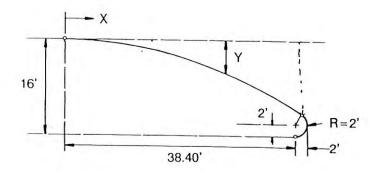
STRIPING DETAILS SCALE: NONE DATE: 10/26/89 APPROVED BY: KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 127



Formula (0' - 6') - Y = 0.0016667X2

STATION - X 10 20 30 50 90 40 60 70 80 100 110 120 OFFSET - Y 0.17 0.67 1.50 2.66 7.83 4.17 6.00 9.34 10.50 11.33 11.83 12.00

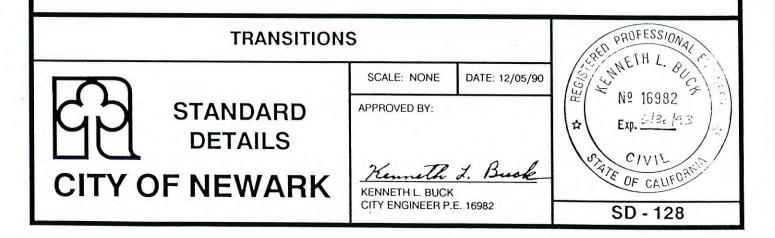
LEFT TURN LANE TRANSITION



Formula - $Y = 0.0079012X^2$

STATION - X	0	10	15	20	25	30	35	39.45	
OFFSET - Y	0	0.79	1.78	3.16	4.94	7.11	9.68	12.30	(Pt of Tangent)

MERGE TRANSITION



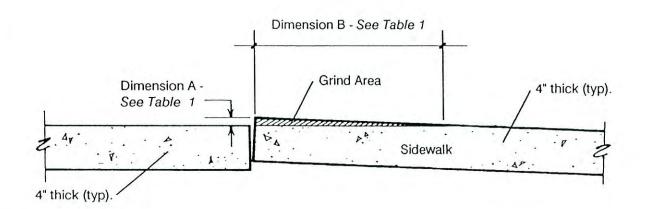


TABLE 1 - GR	INDING WIDTH
Dimension A	Dimension B
1* and less	6° Minimum
1"+ to 2" or more	12" Minimum

SIDEWALK GRINDING DETAILS



STANDARD DETAILS

CITY OF NEWARK

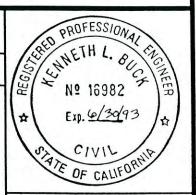
SCALE: NONE

DATE: 12/15/89

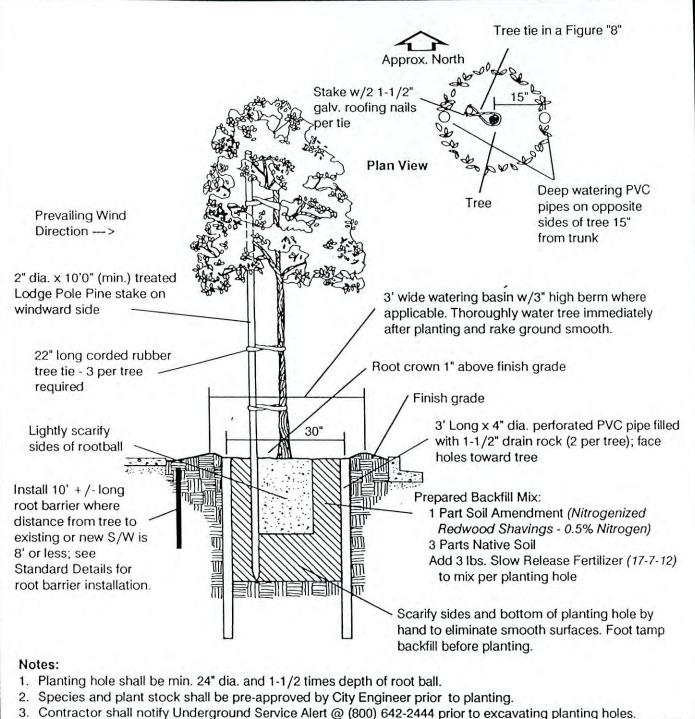
APPROVED BY:

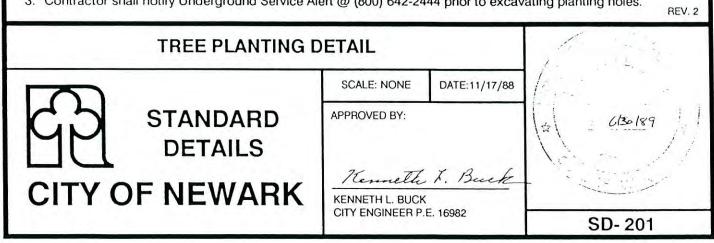
Kenneth J. Buck

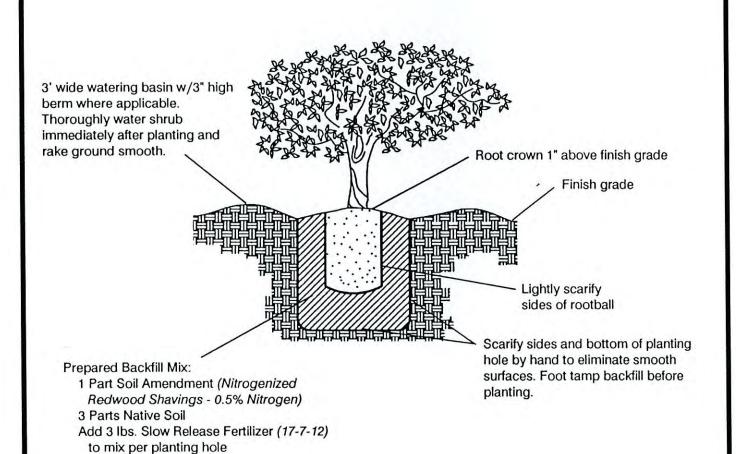
KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 129

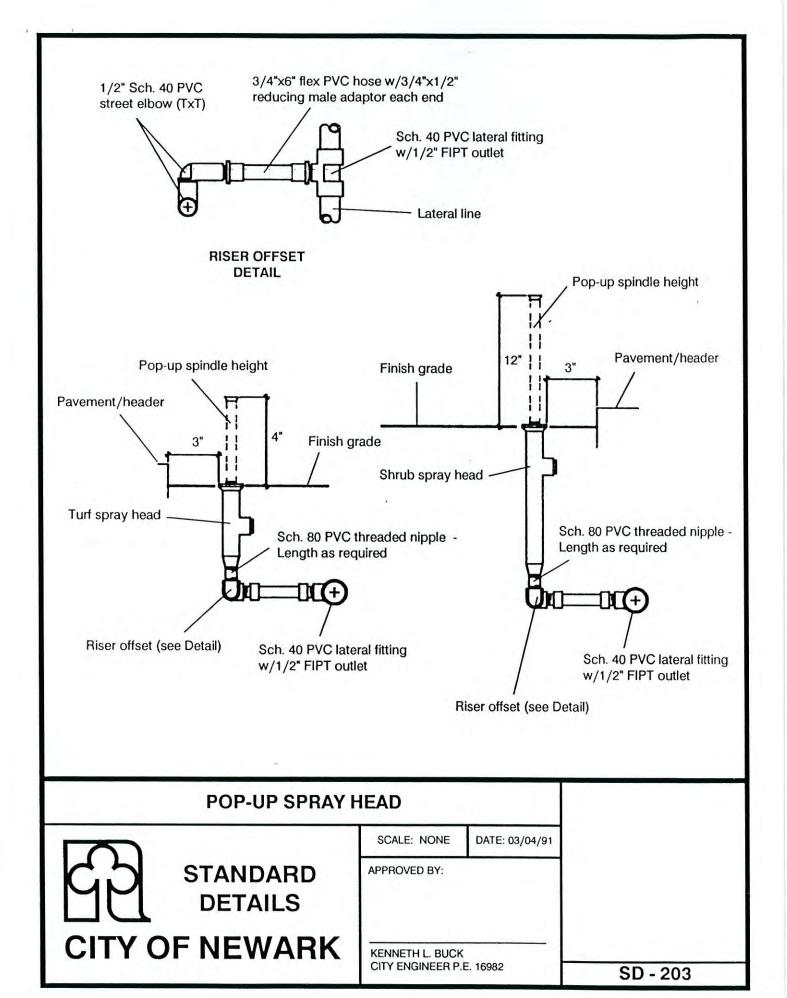


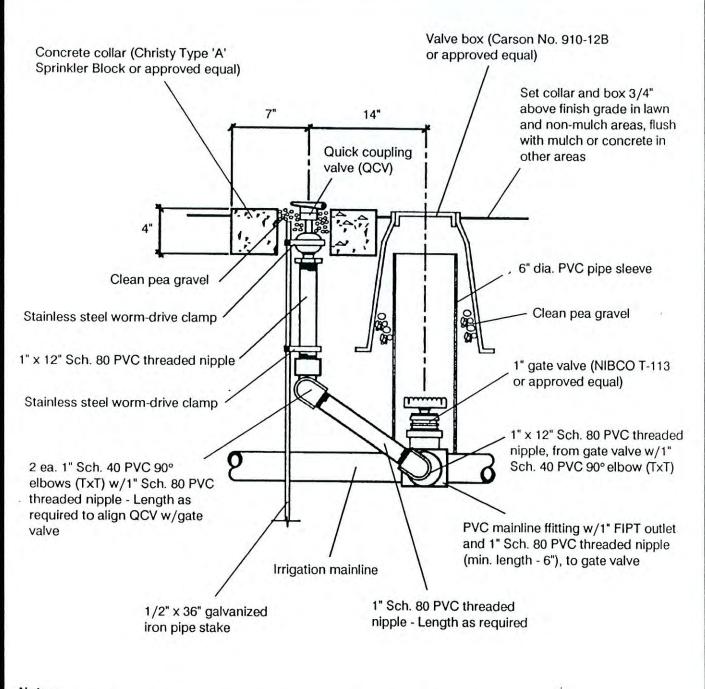




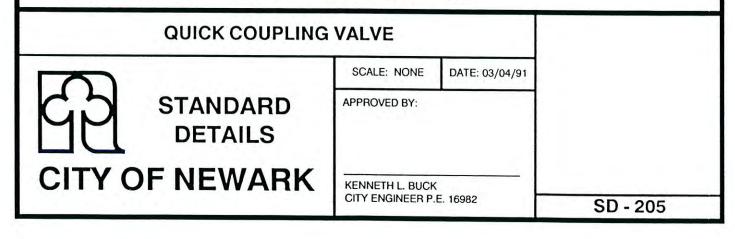
- 1. Planting hole shall be min. 24" dia. and 1-1/2 times depth of root ball.
- 2. Species and plant stock shall be pre-approved by City Engineer prior to planting.

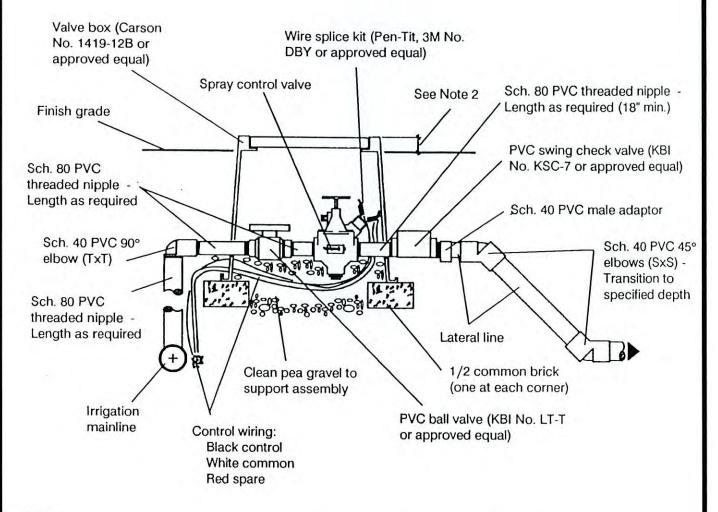
SHRUB PLANTING DETAIL SCALE: NONE DATE:03/06/91 APPROVED BY: KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD- 202



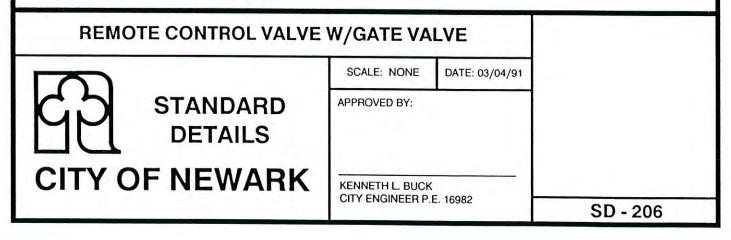


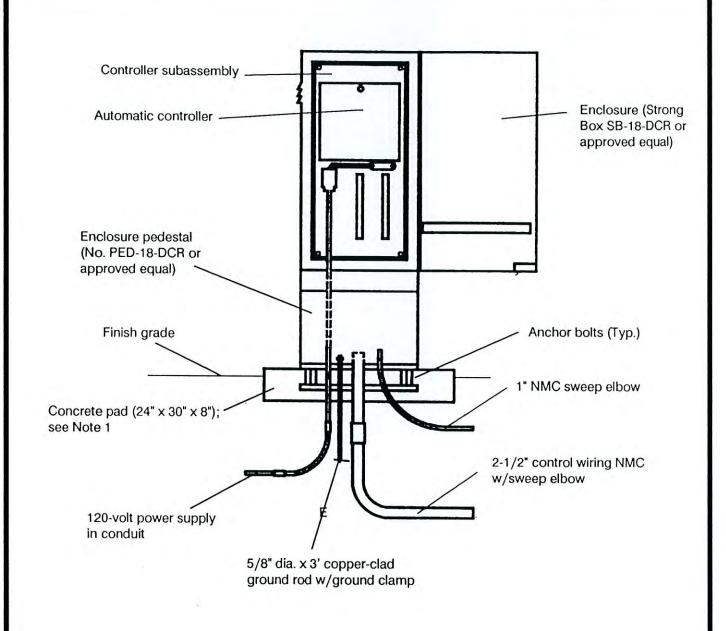
1. Orient quick coupling valve cover to open away from direction of access.



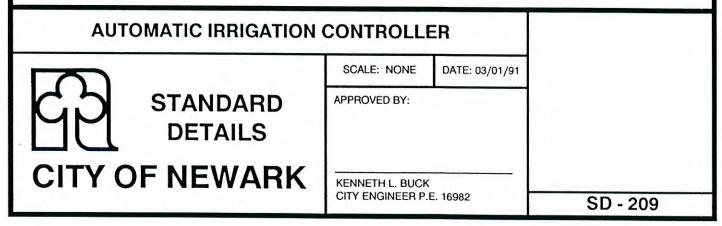


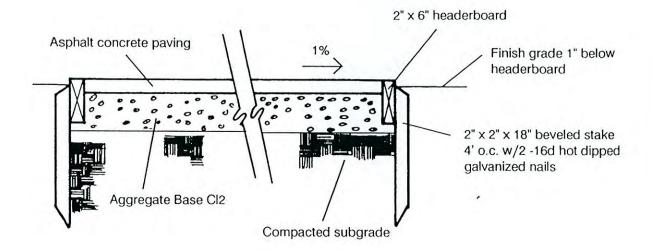
- Remote control valves shall be cast iron body with removable seat, mechanically self-cleaning and automatically self-purging. The solenoid pilot must be corrison proof, molded in epoxy, and encased in brass. Valves shall be by the same manufacturer as the automatic controller.
- 2. Valve boxes shall be concrete with concrete or metal covers within turf areas or fiberglass with glass fiber reinforced plastic covers within groundcover areas. Covers shall be marked with the appropriate controller and valve identification letters and numbers with paint or cover marking plates. Set top of box 3/4" above finish grade in lawn areas and 2" above grade in other areas.
- 3. See Specifications for additional requirements.



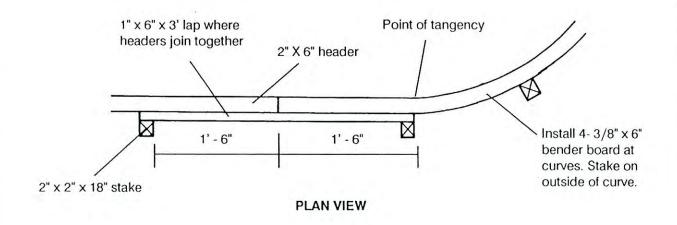


- 1. Concrete shall be Class "A", minimum 6 sacks per CY. Add 1 lb. Lamp Black per C.Y. Foundation shall extend 1" above finish grade and 6" clear on all sides of the controller.
- Seal all openings in enclosure with approved non-hardening sealant, including the base of enclosure at the joint with the concrete pad.

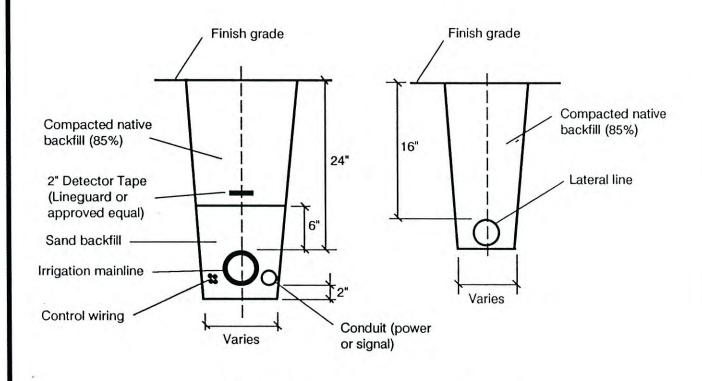




SECTION



ASPHALT CONCRETE PAVING & HEADERBOARD SCALE: NONE DATE: 01/29/90 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 210

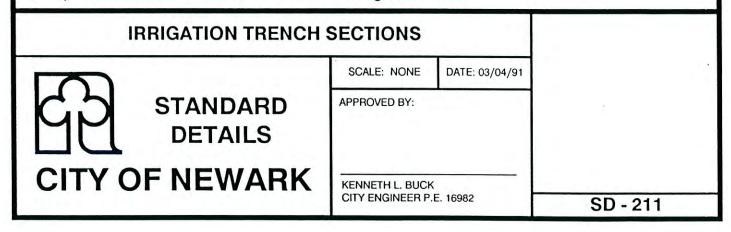


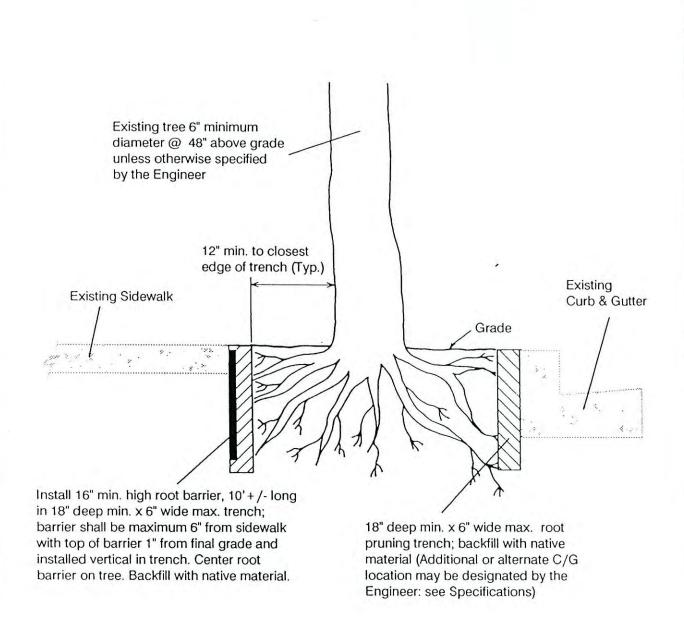
MAINLINE

LATERAL

Notes:

- 1. Trench width to allow proper snaking of pipe(s).
- 2. Provide min. 2" sand bedding beneath and min. 6" sand backfill over all irrigation main lines.
- 3. Tape control wire at 10' intervals, leave slack at all changes of direction.









STANDARD DETAILS

CITY OF NEWARK

SCALE: NONE

DATE: 05/18/89

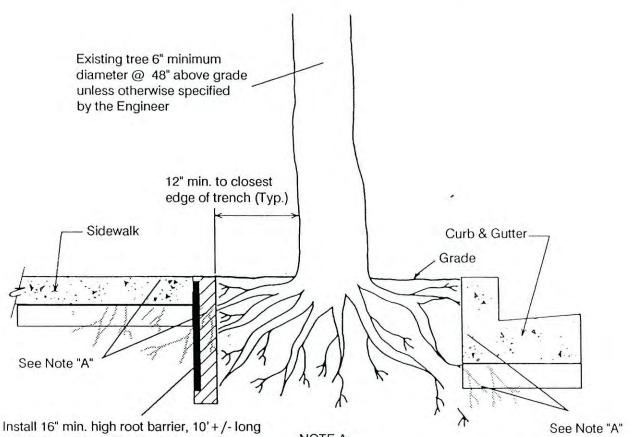
APPROVED BY:

KENNETH L. BUCK

KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 212 - 1



Install 16" min. high root barrier, 10'+/- long in 18" deep min. x 6" wide max. trench; barrier shall be maximum 6" from sidewalk with top of barrier 1" from final grade and installed vertical in trench. Center root barrier on tree. Backfill with native material. [Pay Item - ROOT PRUNING (INCLUDING ROOT BARRIER)]

NOTE A:

After removal of existing sidewalk and/or curb and gutter, excavate and clear the area to subgrade (including root removal and disposal) and place ASB cushion prior to placing new concrete work. All roots necessary to be removed to clear the area to subgrade shall be sawcut, severed with a root cutting machine, or other machine or method approved by the Engineer in order to provide a smooth clean cut of the existing roots. Roots 6" in diameter or larger shall not be cut until approved by the Engineer. [Pay Item - EXCAVATE, CLEAR AND PLACE CUSHION]

ROOT PRUNING w/CONCRETE REPLACEMENT



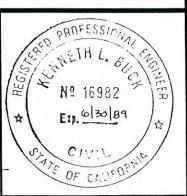
SCALE: NONE

DATE: 05/30/89

APPROVED BY:

Kenneth J. Buck

KENNETH L. BUCK CITY ENGINEER P.E. 16982



SD - 212 - 2

NOTE A:

Root pruning may be done prior to removal of the existing sidewalk unless the resulting trench is closer than 12" to an existing tree trunk. In such cases, root pruning shall be done after removal of the existing sidewalk in order to maintain the 12" min. clearance.

Existing tree 6" minimum diameter @ 48" above grade ~ unless otherwise specified by the Engineer

12" min. to closest edge of trench (Typ.)

See Note

"A"

See Note "B"

Sidewalk

Install 16" min. high root barrier, +/- 10' long in 18" deep min. x 6" wide max. trench; barrier shall be maximum 6" from sidewalk with top of barrier 1" from final grade and installed vertical in trench. Center root barrier on tree. Backfill with native material.

[Pay Item - ROOT PRUNING INCLUDING ROOT BARRIER (SIDEWALK REPAIR)]

NOTEB:

After removal of existing sidewalk and/or curb and gutter, excavate and clear the area to subgrade (including root removal and disposal) and place ASB cushion prior to placing new concrete work. [Pay Item - EXCAVATE, CLEAR AND PLACE ASB CUSHION]

Curb & Gutter

Grade

Prior to curb and gutter removal, construct 18" deep min. x 6" wide max. root pruning trench; backfill with native material (additional or alternate C/G location may be designated by the Engineer; see Specifications.

[Pay Item - ROOT PRUNING (CURB AND GUTTER REPAIR)]

ROOT PRUNING BOTH SIDES w/CONC. REPLACEMENT



STANDARD DETAILS

CITY OF NEWARK

SCALE: NONE

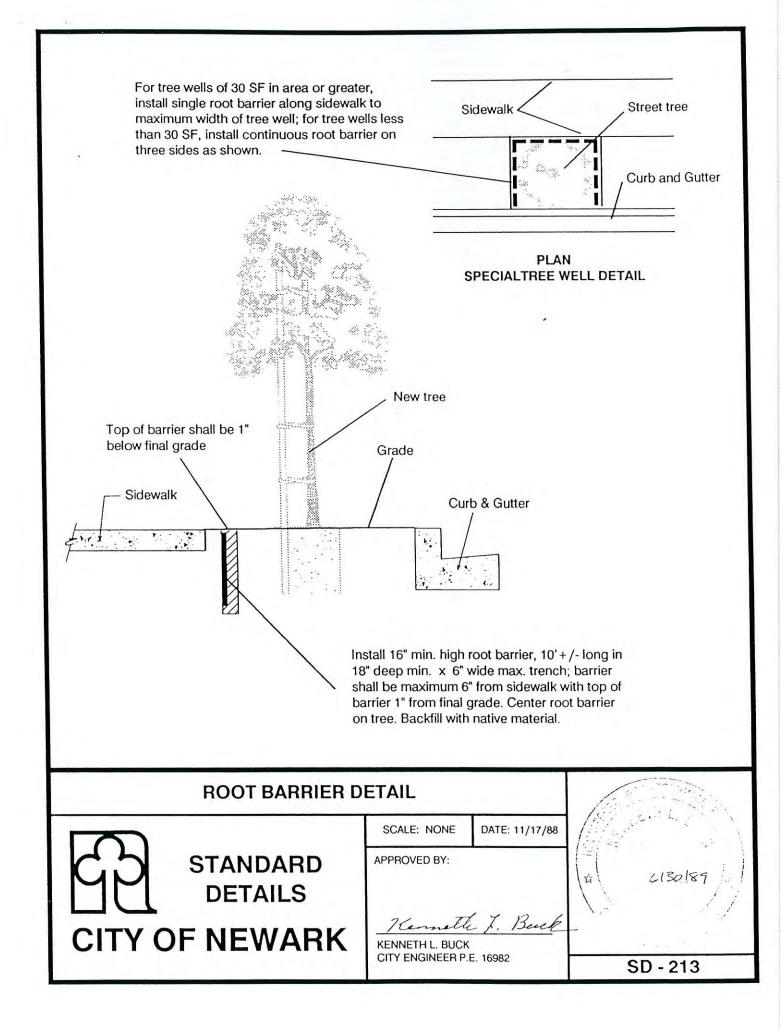
DATE: 01/28/91

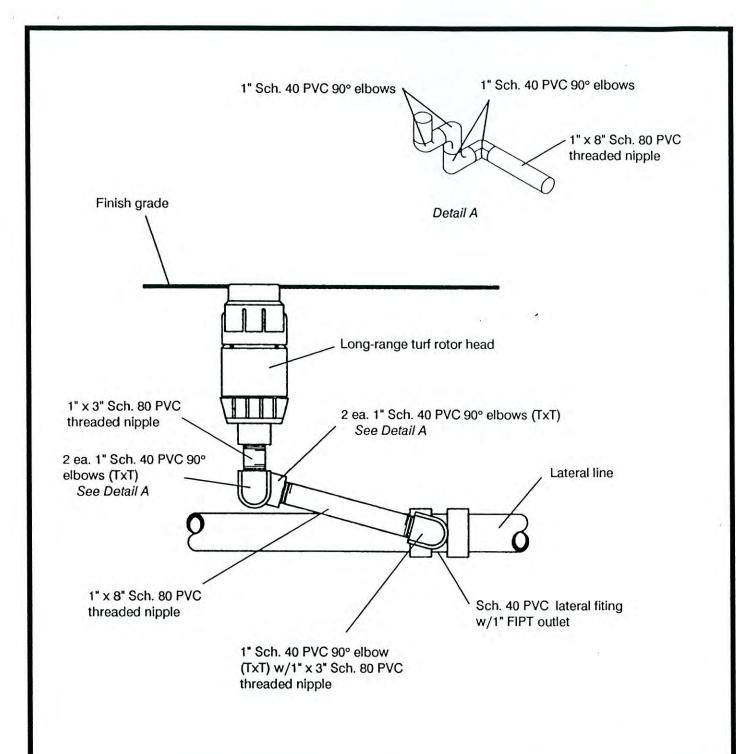
APPROVED BY:

KENNETHL. BUCK CITYENGINEERP.E. 16982

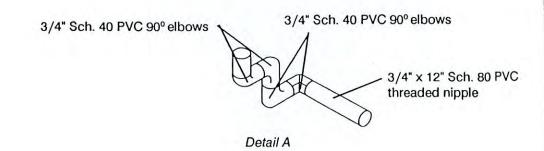
SD - 212 - 3

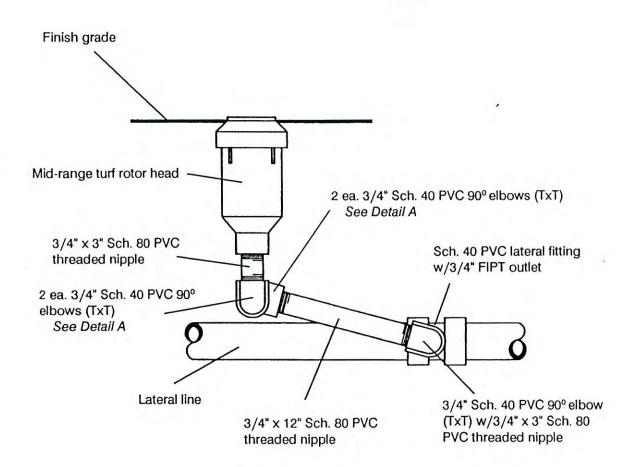
See Note "B"

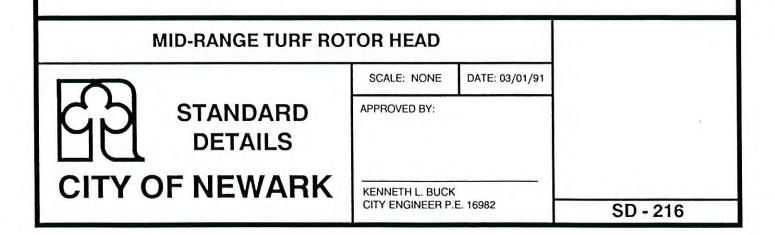


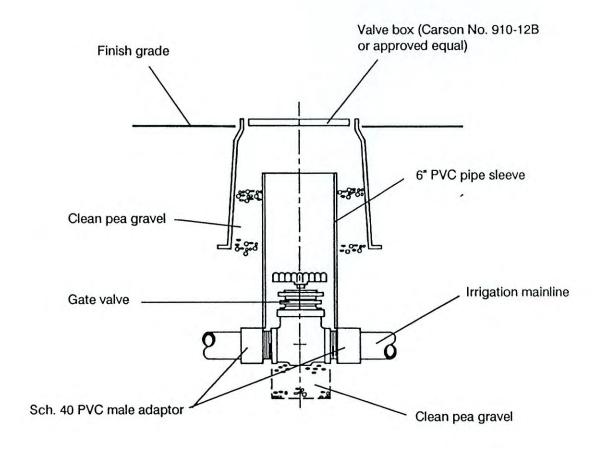


SCALE: NONE DATE: 03/04/91 STANDARD DETAILS CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 215

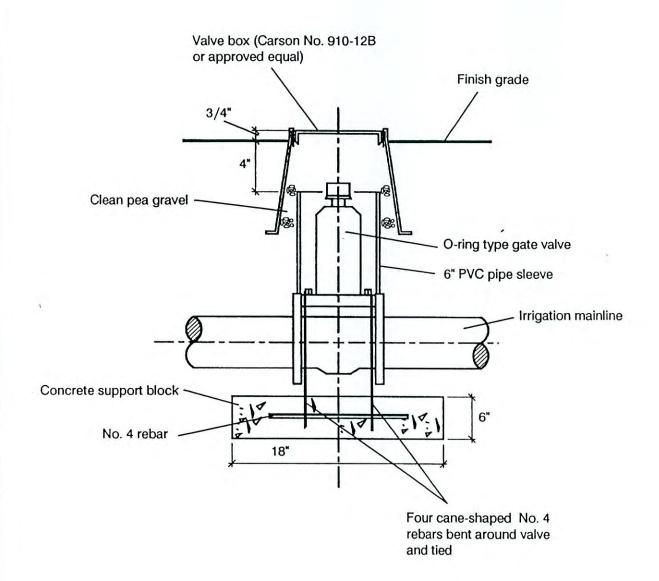


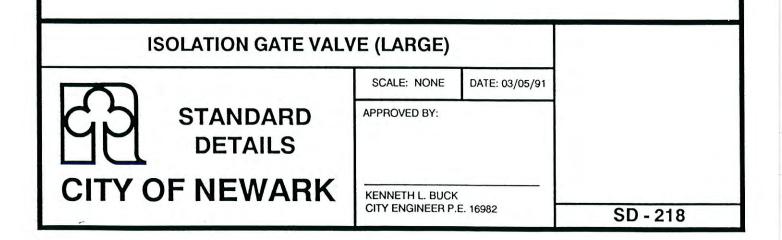






ISOLATION GATE VALVE (SMALL) SCALE: NONE DATE: 03/04/91 APPROVED BY: CITY OF NEWARK KENNETH L. BUCK CITY ENGINEER P.E. 16982 SD - 217





CERTIFICATE OF INSURANCE TO

CITY OF NEWARK

CALIFORNIA ("the City") A Municipal Corporation

This certifies to the City of Newark that the following described policies have been issued to the insured named

Only this Certificate of Insurance form will be accepted

below and are in force at this time. Insured Address Description of operations/locations/products insured (show contract name and/or number, if any): **POLICIES** LIMITS **POLICY EXPIRATION AND INSURERS Bodily Injury Property Damage** NUMBER DATE **Workers Compensation** Employer's Liability \$ (Name of Insurer) Best's Rating Check policy type: "Claims-made" □ "Occurrence" Comprehensive General Liability □ Each Occurrence **Each Occurrence** Or **Commercial General** Liability Aggregate Aggregate (Name of Insurer) Best's Rating or Combined Single Limit \$___ Aggregate \$_ **Business Auto Policy** Each Person **Each Accident** Liability Coverage Symbol **Each Accident** (Name of Insurer) Best's Rating_ Combined Single Limit \$__ "Claims-made" **Umbrella Liability** "Occurrence" Occurrence/ (Name of Insurer) Aggregate \$_ Self-Insured Retention \$ Best's Rating_

The following coverage or conditions are in effect:	Yes	No
The City, its officials and employees are named on all liability policies desc as insureds as respects: (a) activities performed for the City by or on beha named insured, (b) products and completed operations of the Named Insu premises owned, leased or used by the Named Insured.	If of the	
Products and Completed Operations		
The undersigned will mail to the City 30 days written notice of cancellation of coverage or limits.	or reduction	
Cross Liability Clause (or equivalent wording)		
Personal Injury, Perils A, B, and C		
Broad Form Property Damage		
X, C, U Hazards included		
Contractual Liability Coverage applying to this Contract		
Liquor Liability		
Coverage afforded the City, its officials, employees and volunteers as Insu as primary and not excess or contributing to any insurance issued in the n City.		
Waiver of subrogation from Workers' Compensation insurer.		
This certificate is issued as a matter of information. This ceamend, extend or alter the coverage afforded by the policie or condition of any contract or other document with respect may pertain, the insurance afforded by the policies describe conditions of such policies. Agency or Brokerage	s listed herein. Notwithstandin to which this certificate of insur	g any requirement, term rance may be issued or
Address F	Home Office	
Addition F	iome Omee	
Name of Person to be Contacted	Authorized Signature	Date
()		
ii ii	lote: Authorized signatures may be the asurance through an agency agreemer asurance is brokered, authorized signa asurer.	nt with the insurer. If

GENERAL LIABILITY ENDORSEMENT CITY OF NEWARK

ENGINEERING DEPARTMENT 37101 Newark Boulevard Newark, CA 94560

A. POLICY INFORMATION

1.	Insurance Company	Policy Number
2.	Policy Term (<i>From</i>)(<i>To</i>)	Endorsement Effective Date
3.	Named Insured	
4.	Address of Named Insured	
5.	Limit of Liability Any One Occurrence/Aggrega	te \$
6.	Deductible of Self-Insured Retention (Nil unles	s otherwise specified): \$
7.	Coverage is equivalent to:	
	Comprehensive General Liability form	GL 0002 (Ed. 1/73)
	Commercial General Liability "occurrent	nce" form CG 00001
	Commercial General Liability "claims-r	nade" form CG 00002
8.	Bodily Injury and Property Damage Coverage	is:
	"claims made"	
	"occurrence"	
	If claims made, the retroactive date is	
	Note: The City's standard insurance requirem	ents specify "occurrence" coverage. "Claims-made" coverage

B. POLICY AMENDMENTS

requires special approval.

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

- 1. INSURED. The City of Newark, herein referred to as "the City", its elected or appointed officials, employees and volunteers are included as insureds with regard to damages and defense of claims arising from: (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, or (c) premises owned, leased or used by the Named Insured.
- 2. CONTRIBUTION NOT REQUIRED. As respects: (a) work performed by the Named Insured for or on behalf of the City; or (b) products sold by the Named Insured to the City; or (c) premises leased by the Named Insured from the City, the insurance afforded by this policy shall be primary insurance as respects the City, its elected or appointed officials, employees or volunteers; or stand in an unbroken chain of coverage excess of the Named Insured's schedule underlying primary coverage. In either event, any other insurance maintained by the City, its elected or appointed officials, employees or volunteers shall be in excess of this insurance and shall not contribute to it.

- 3. SCOPE OF COVERAGE. This policy, if primary, affords coverage at least as broad as:
 - (1) Insurance Services Office form GL 0002 (Ed. 1/73), Comprehensive General Liability Insurance and Insurance Services Office form GL 0404 Broad Form Comprehensive General Liability endorsement; or
 - (2) Insurance Services Office Commercial General Liability Coverage, "occurrence" form CG 0001 or "claims-made" form CG 0002; or
 - (3) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the proceeding sections (1) and (2).
- 4. SEVERABILITY OF INTEREST. The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respects to the Company's limit of liability.
- 5. PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its elected or appointed officials, employees or volunteers.
- 6. CANCELLATION NOTICE. The insurance afforded under this policy shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days prior written notice has been given to the City by certified mail (return receipt requested). Such notice shall be addressed as shown in the heading of this endorsement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

ncidents and claims are to be	reported to trie ii	isurer at.		
ATTN:	(Title)	(Depar	tment)	
		(Company)		
		*		
	(City)	(State)	(Zip)	
		()		
	(Telephone Number including Area Code)			
D. SIGNATURE OF INS	URER OR AU	THORIZED REPRE	SENTATIVE OF THE INSURE	
	(print/type	e name), warrant that I h	ave authority to bind listed insurance	
ompany and by my signature	hereon do so bir	nd this company.		
		D REPRESENTATIVE (Note: Original signature	
ORGANIZATION:			TITLE:	

AUTOMOBILE LIABILITY ENDORSEMENT CITY OF NEWARK

ENGINEERING DEPARTMENT 37101 Newark Boulevard Newark, CA 94560

A. POLICY INFORMATION

1.	Insurance Company	Policy Number
2.	Policy Term (<i>From</i>)(<i>To</i>)	Endorsement Effective Date
3.	Named Insured	
4.	Address of Named Insured	
5.	Limit of Liability Any One Occurrence/Aggregate	e \$
6.	Deductible of Self-Insured Retention (Nil unless	s otherwise specified): \$

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

- 1. INSURED. The City of Newark, herein referred to as "the City", its elected or appointed officials, employees and volunteers are included as insureds with regard to damages and defense of claims arising from: the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the City, its elected or appointed officials, employees or volunteers.
- 2. CONTRIBUTION NOT REQUIRED. As respects work performed by the Named Insured for or on behalf of the City, the insurance afforded by this policy shall: (a) be primary insurance as respects the City, its elected or appointed officials, employees or volunteers; or (b) stand in an unbroken chain of coverage excess of the Named Insured's primary coverage. In either event, any other insurance maintained by the City, its elected or appointed officials, employees or volunteers shall be in excess of this insurance and shall not contribute to it.
- 3. SCOPE OF COVERAGE. This policy, if primary, affords coverage at least as broad as:
 - (1) Insurance Services Office form CA 0001 (Ed. 1/78), Code 1 ("any auto") and endorsement CA 0025.
 - (2) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding section (1).
- 4. SEVERABILITY OF INTEREST. The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respects to the Company's limit of liability.
- PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply
 with reporting provisions of the policy shall not affect coverage provided to the City, its elected or appointed
 officials, employees or volunteers.
- 6. CANCELLATION NOTICE. The insurance afforded by this policy shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days prior written notice has been given to the City by certified mail (return receipt requested). Such notice shall be addressed as shown in the heading of this endorsement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

Incidents and claims are to be	reported to the	insurer at:	
ATTN:			
	(Title)	(Depar	tment)
		(Company)	
		(Street Address)	
	(City)	(State)	(Zip)
	() (Telephone Number including Area Code)		cluding Area Code)
D. SIGNATURE OF INS	LIDED OD AL	ITUODIZED DEDDE	SENTATIVE OF THE INSURER
D. SIGNATURE OF INS	UKEK UK AL	JINORIZED KEPKE	SENTATIVE OF THE INSURER
I, company and by my signature	(print/type hereon do so b	oe name), warrant that I haid this company.	ave authority to bind listed insurance
			Note: Original signature
requirea on	enaorsement tu	ırnished to the City)	
ORGANIZATION:			TITLE:
ADDRESS:			TELEPHONE: ()

WORKERS' COMPENSATION/EMPLOYERS LIABILITY ENDORSEMENT CITY OF NEWARK

ENGINEERING DEPARTMENT 37101 Newark Boulevard Newark, CA 94560

١.	P	DLICY INFORMATION	
	1.	Insurance Company	("the Company");
		Policy Number	
	2.	Effective Date of This Endorsement	
	3.	Named Insured	
	4.	Employer's Liability Limit (Coverage B)	
3.	P	DLICY AMENDMENTS	
		sideration of the policy premium and notwithstanding ement is attached or any other endorsement attached	g any inconsistent statement in the policy to which this ed thereto, it is agreed as follows:
	rec		nder this policy shall not be suspended, voided, cancelled, days prior written notice has been given to the City by hall be addressed as shown in the heading of this
2.	Cit		ny agrees to waive all rights of subrogation against the loyees for losses paid under the terms of this policy which ne City.
Э.	SI	GNATURE OF INSURER OR AUTHORIZE	ED REPRESENTATIVE OF THE INSURER
· _	nna	(print/type name), wa ny and by my signature hereon do so bind this com	arrant that I have authority to bind listed insurance
,01	lipe	ny and by my signature hereon do so bind this com	odity.
		SIGNATURE OF AUTHORIZED REPRES required on endorsement furnished to	
DF	GA	NIZATION:	TITLE:
10	DD	F00.	TELEPHONE: /