CITY OF STAMFORD

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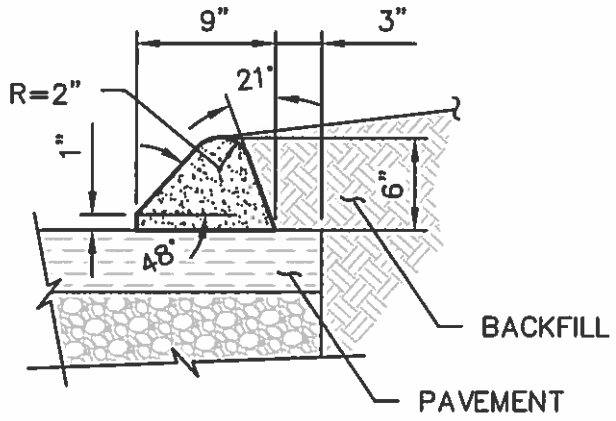


BITUMINOUS CONCRETE LIP CURBING

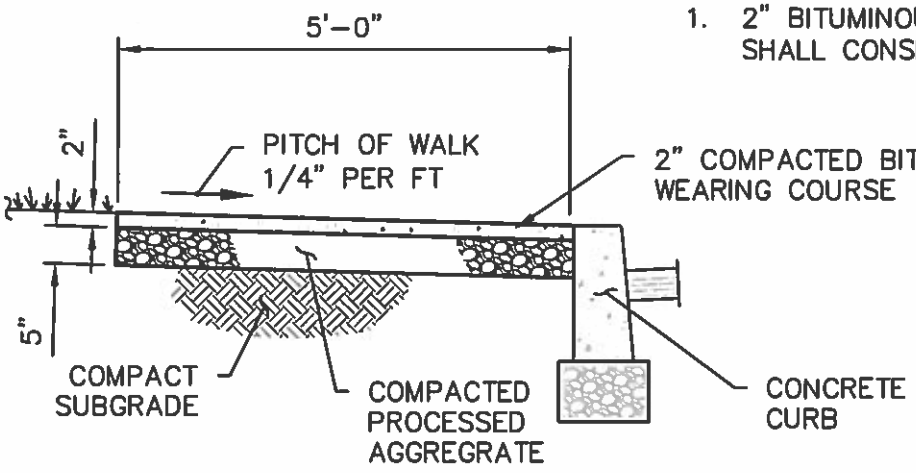
SCALE: 1" = 1'-0"

CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

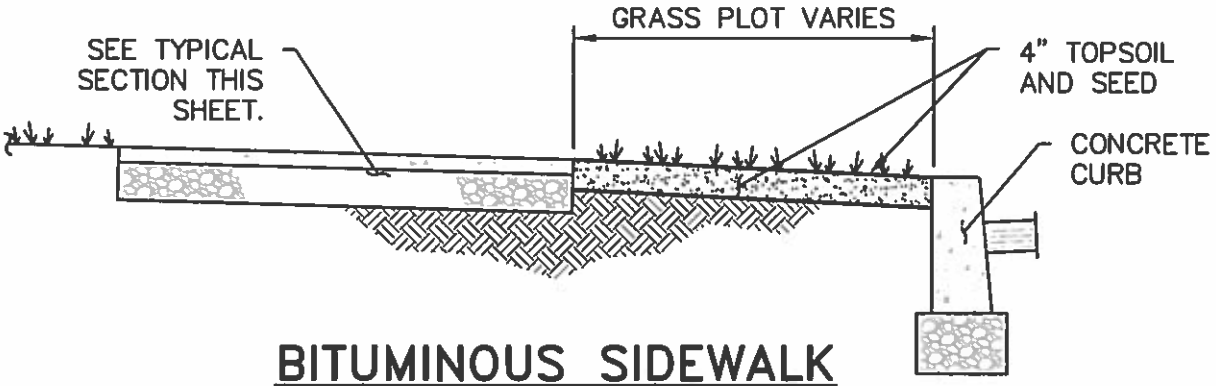
Project No. & Name: CITY STANDARDS
Subject: BITUMINOUS CONCRETE CURBING DETAILS
Made by: PG Date: 3/21/14 Rev. ____
Chk. by: AC Date: 3/21/14
Sheet No. 1 of 1

NOTES

1. 2" BITUMINOUS WEARING COURSE SHALL CONSIST OF HMA S0.375.



TYPICAL SECTION



BITUMINOUS SIDEWALK WITH GRASS PLOT

TYPICAL BITUMINOUS SIDEWALK DETAILS

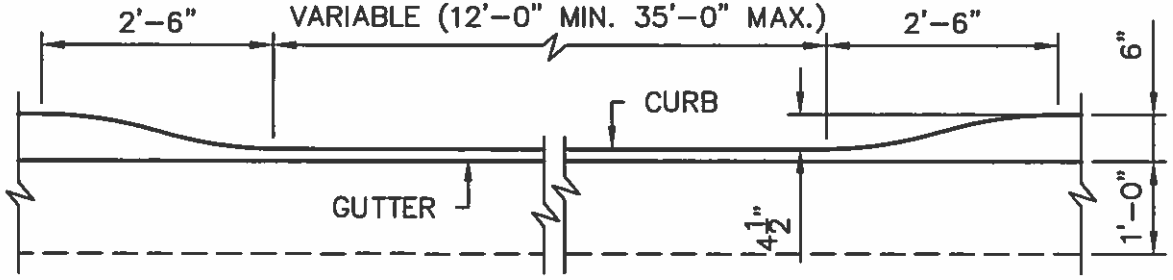
SCALE: 1/2" = 1'-0"

CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

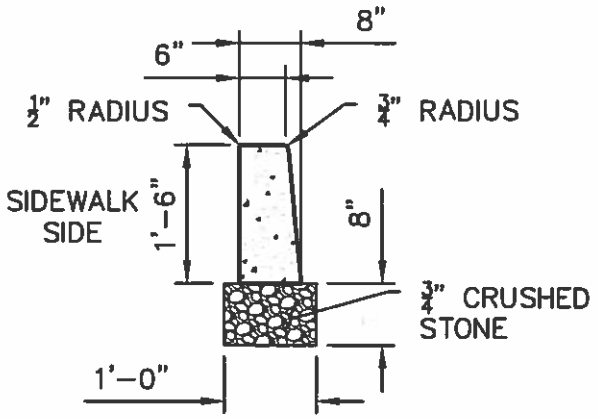
Project No. & Name: CITY STANDARDS
Subject: BITUMINOUS SIDEWALK DETAILS
Made by: AC Date: 2/17/15 Rev.
Chk. by: PG Date: 2/17/15
Sheet No. 1 of 1

NOTES

1. ALL CURBING TO BE CAST-IN-PLACE.
2. APPROVED ½" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED AT A MAX. SPACING OF 10 FEET COINCIDING WITH EXPANSION JOINTS IN SIDEWALK.



CURB DROP AT DRIVEWAYS



TYPICAL SECTION

CONCRETE CURB DETAILS

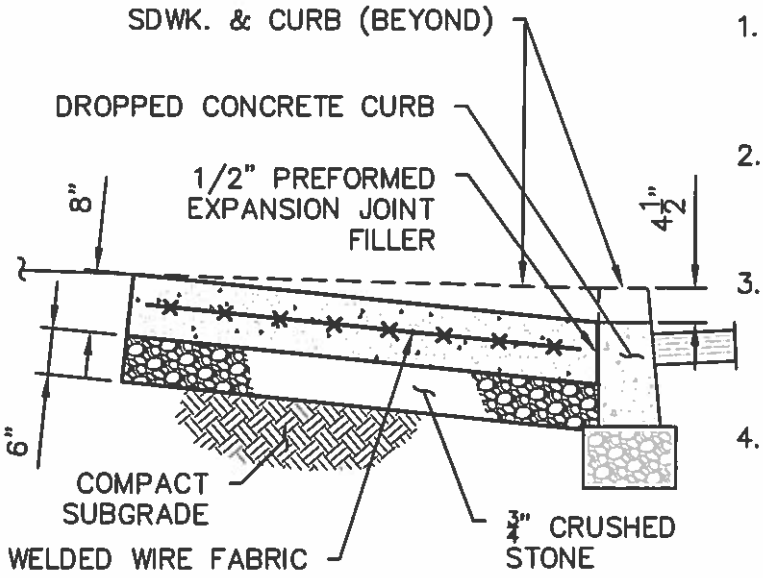
SCALE: 1/2" = 1'-0"

CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

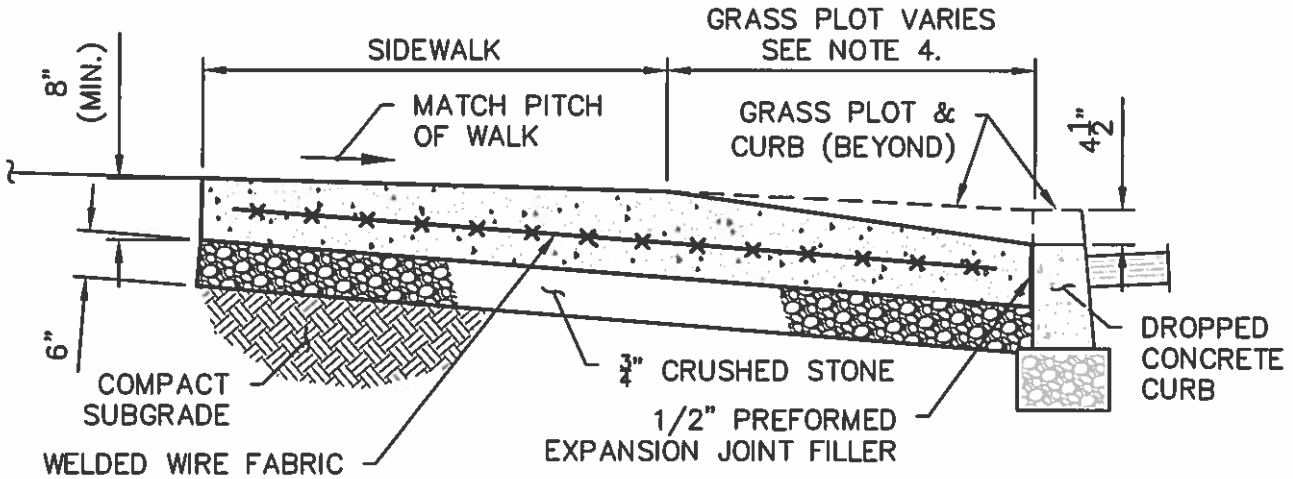
Project No. & Name: CITY STANDARDS
Subject: CONCRETE CURBING DETAILS
Made by: PG Date: 3/21/14 Rev.
Chk. by: AC Date: 3/21/14
Sheet No. 1 of 1

NOTES

1. IN AREAS WITH NO SIDEWALKS, DRIVEWAY RAMPS SHALL EXTEND A MINIMUM OF 4'–0" FROM BACK OF CURB.
2. WELDED WIRE FABRIC (WWF): 4x4–W4.0xW4.0 (SHEETS ONLY). DISCONTINUE AT EXPANSION JOINTS.
3. WWF SHALL BE INSTALLED MID DEPTH OF RAMP AND SHALL BE SUPPORTED ON CONCRETE BLOCK OR OTHER APPROVED MATERIAL.
4. WHERE GRASS PLOT IS LESS THAN 4'–0" WIDE, RAMP CONSTRUCTION IS TO BE AS DIRECTED BY THE ENGINEER.



NO SIDEWALK OR SIDEWALK WITHOUT GRASS PLOT



SIDEWALK WITH GRASS PLOT

TYPICAL DRIVEWAY APRON DETAILS

SCALE: 1/2" = 1'–0"

CITY OF STAMFORD
ENGINEERING BUREAU
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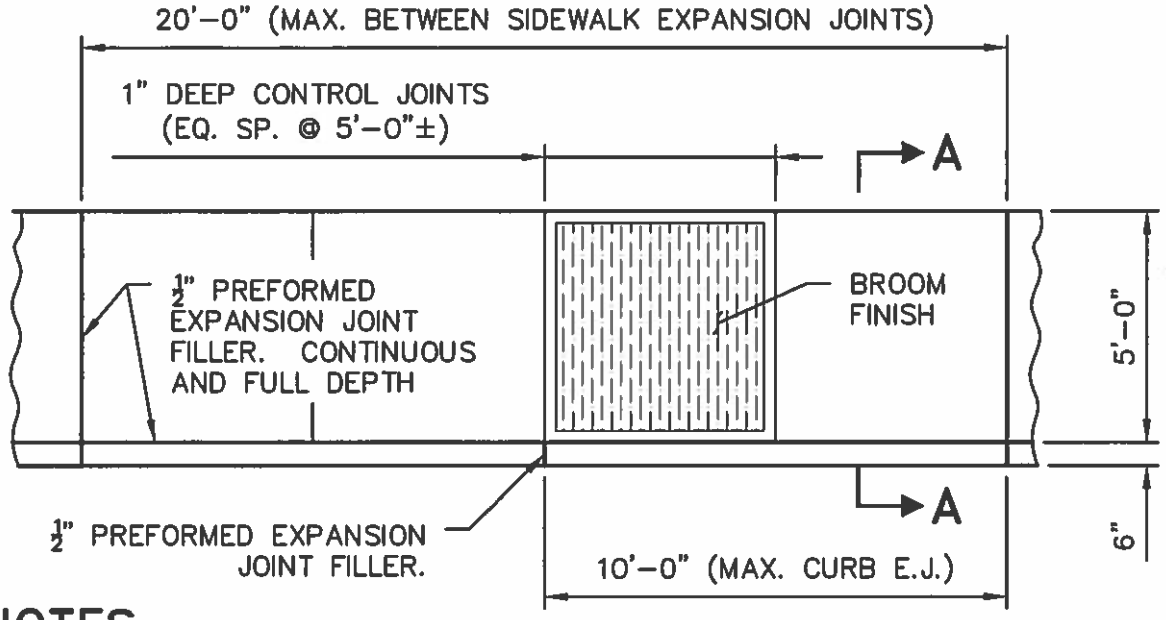
Project No. & Name: CITY STANDARDS
Subject: DRIVEWAY APRON DETAILS
Made by: PG Date: 3/21/14 Rev.
Chk. by: AC Date: 3/21/14
Sheet No. 1 of 1



NOTES

1. SIDEWALK CONCRETE SHALL BE POURED TO A UNIFORM DEPTH ON APPROVED BASE.
2. CONCRETE SHALL BE ConnDOT CLASS "C" (3000 PSI MIN.) UTILIZING TYPE II CEMENT, AND SHALL HAVE BETWEEN 6–7% AIR ENTRAINMENT.
3. ½" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED BETWEEN NEW SIDEWALK WORK AND ALL RIGID STRUCTURES SUCH AS SANITARY AND DRAINAGE STRUCTURES AND BUILDINGS AND STONE AND CONCRETE MASONRY WALLS.
4. EDGES SHALL BE ROUNDED TO A RADIUS OF ¼".
5. ADDITIONAL CONTROL JOINTS SHALL BE PLACED AS REQUIRED TO ELIMINATE ANY CONDITION WHICH WILL CAUSE STRESS CONCENTRATIONS (EXAMPLE AT CORNERS OF STRUCTURES). JOINTS SHALL BE ORIENTED AS DIRECTED BY THE ENGINEER.
6. SURFACE SHALL BE GIVEN A BROOM FINISH ORIENTED PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC FLOW.

PLAN – CONCRETE SIDEWALK

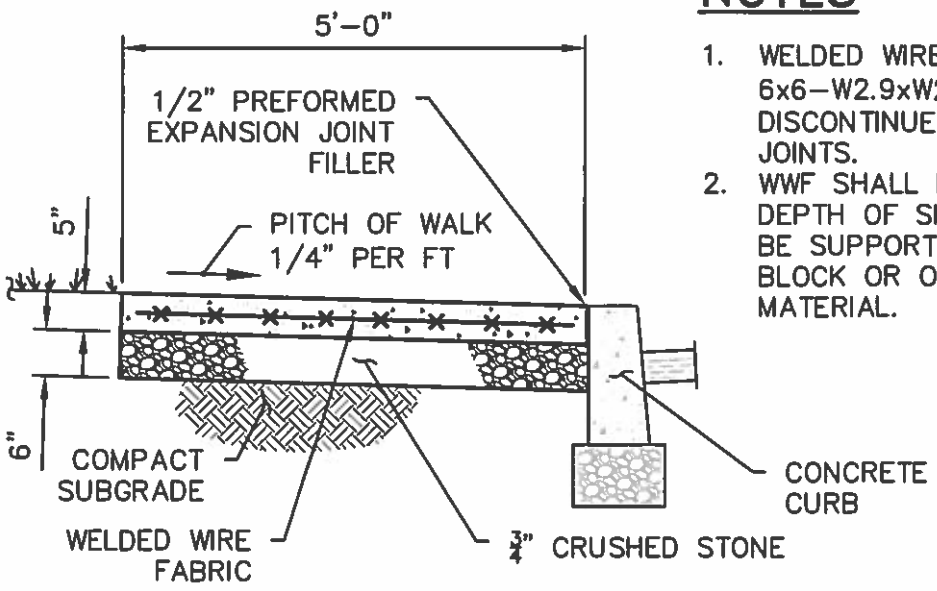
SCALE: 1/4" = 1'–0"

CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

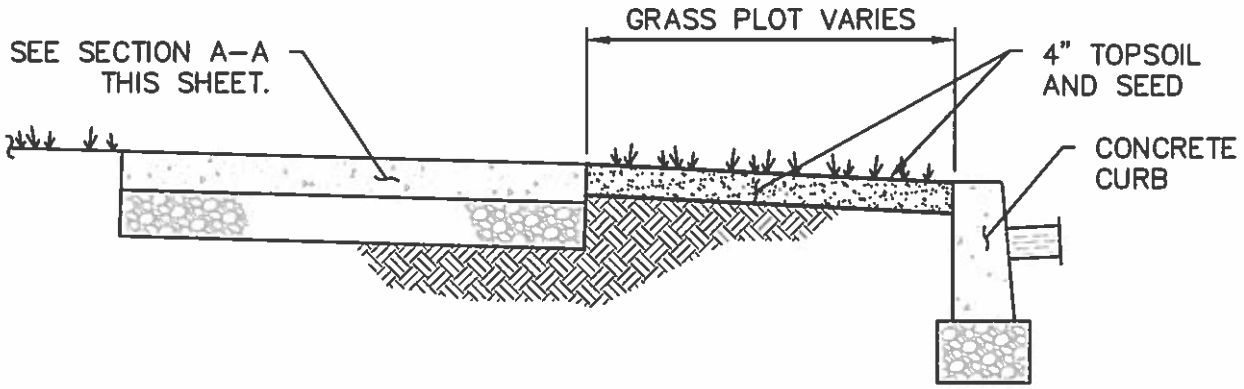
Project No. & Name: CITY STANDARDS
Subject: CONCRETE SIDEWALK DETAILS
Made by: PG Date: 3/21/14 Rev.
Chk. by: AC Date: 3/21/14
Sheet No. 1 of 2

NOTES

1. WELDED WIRE FABRIC (WWF): 6x6–W2.9xW2.9 (SHEETS ONLY). DISCONTINUE AT EXPANSION JOINTS.
2. WWF SHALL BE INSTALLED MID DEPTH OF SIDEWALK AND SHALL BE SUPPORTED ON CONCRETE BLOCK OR OTHER APPROVED MATERIAL.



SECTION A–A



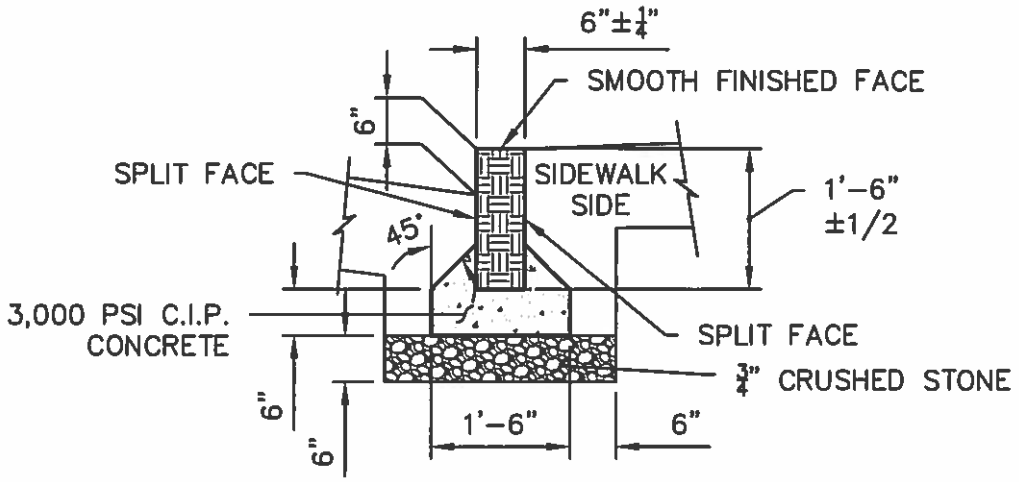
SIDEWALK WITH GRASS PLOT

TYPICAL SIDEWALK DETAILS

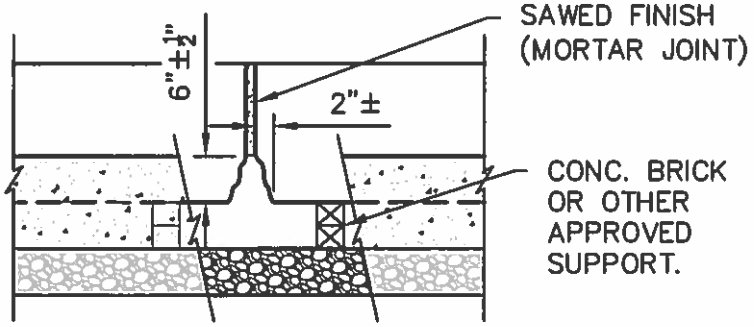
SCALE: 1/2" = 1'–0"

CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

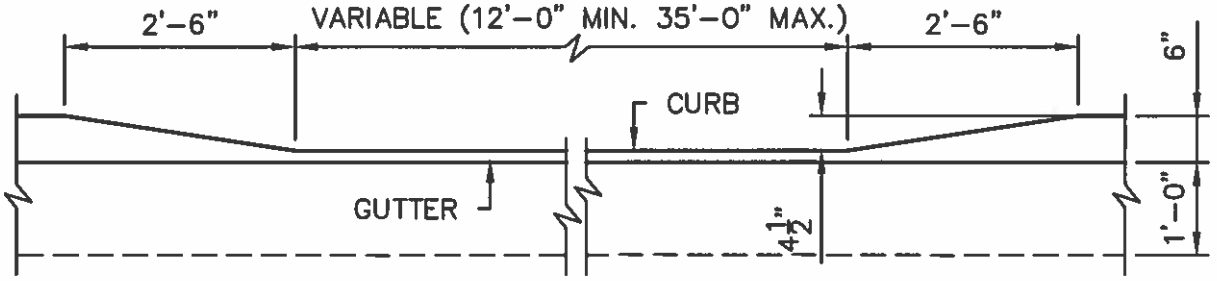
Project No. & Name: CITY STANDARDS
Subject: CONCRETE SIDEWALK DETAILS
Made by: PG Date: 3/21/14 Rev.
Chk. by: AC Date: 3/21/14
Sheet No. 2 of 2



TYPICAL SECTION



TYPICAL ELEVATION



CURB DROP AT DRIVEWAYS
GRANITE STONE CURB DETAILS

SCALE: 1/2" = 1'–0"

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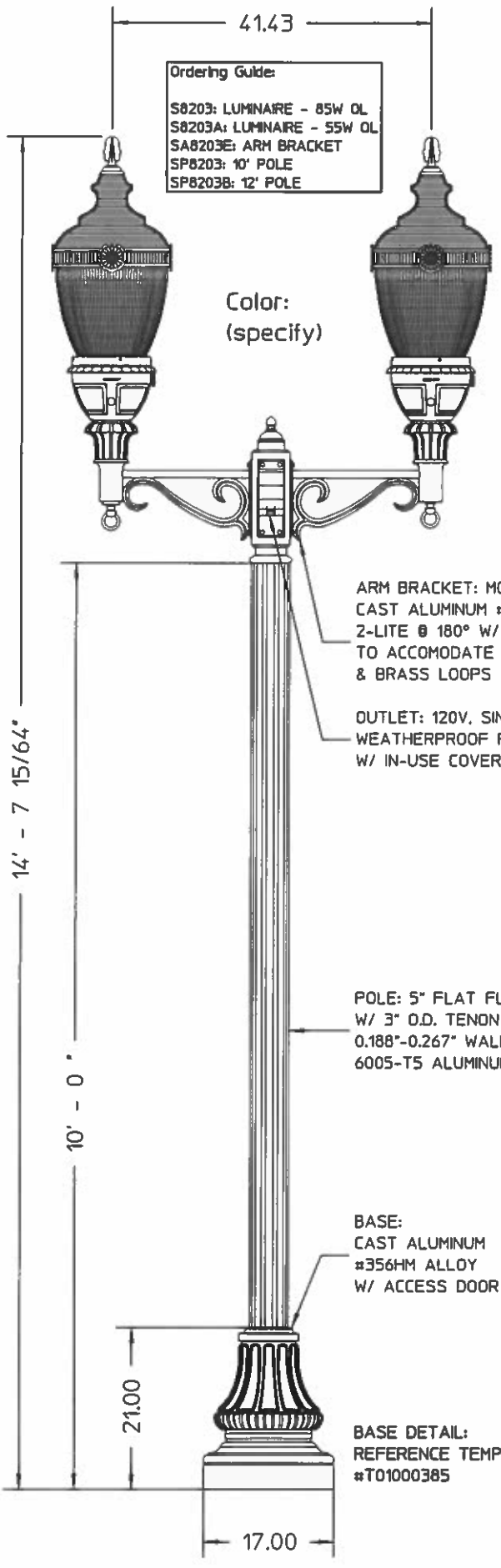
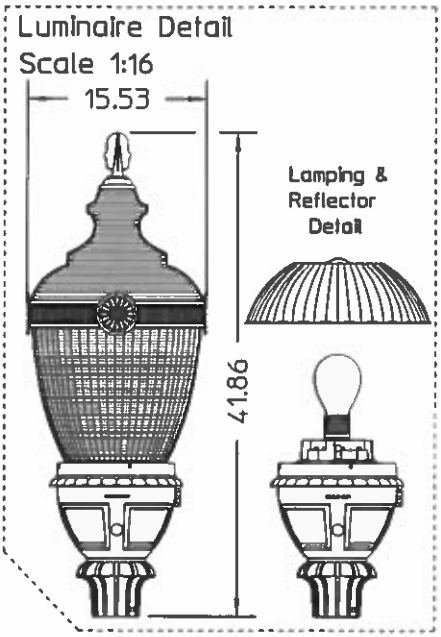
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

Project No. & Name: CITY STANDARDS
Subject: GRANITE STONE CURBING DETAILS
Made by: PG Date: 3/21/14 Rev.
Chk. by: AC Date: 3/21/14
Sheet No. 1 of 1





Luminaire Matrix

GLOBE:
X ACRYLIC TYPE V

FASTENERS:
X HEX
_ ALLEN

COLOR: (specify)
_ BLACK
_ WHITE
_ VERDE
_ BRONZE
_ GREEN
_ SILVER

REFLECTOR:
_ SM REFLECTOR
_ SM REFLECTOR W/ H.S.S.
_ FULL TOP W/ H.S.S.
_ H.S.S.
X FULL TOP
_ NONE

PHOTO CONTROL:
_ BUTTON-EYE
X TWIST-LOCK RECEPT.
_ NONE

SOCKET:
_ MEDIUM
_ MOGUL
X INDUCTIVE

WATTAGE: (specify)
_ 70W MH
_ 100W MH
_ 150W MH
_ 175W MH
_ 200W MH
_ 250W MH
_ 70W HPS
_ 100W HPS
_ 150W HPS
_ 200W HPS
_ 250W HPS
_ 165W INDUCTION
_ 85W INDUCTION
_ 55W INDUCTION

VOLTAGE:
X 120V
_ 208V
_ 240V
_ 277V
_ 347V

PRODUCT APPROVALS

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Phone 717-359-7131
Fax 717-359-9515
www.hadco.com

JOB NAME: **City of Stamford**

REP. TERRITORY:	DRAWN BY:
27	RSB

SCALE:	DATE:
1:20	08/27/03

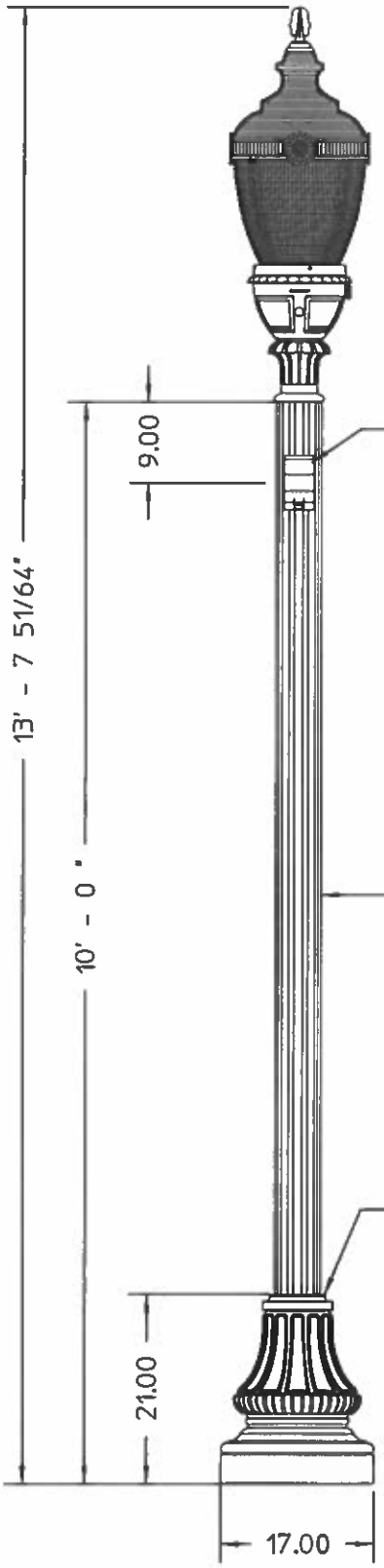
DRAWING NUMBER: **S8203C**

REP: **Lightoller–Connecticut**

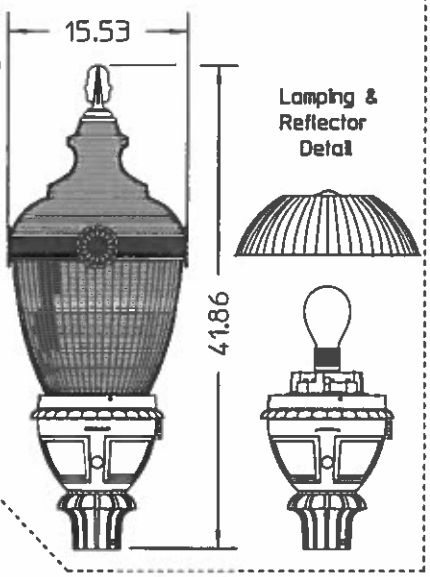
REV: I	PCN: 08-081
BY: TAG	DATE: 10/09/08

Ordering Guide:

S8203: LUMINAIRE - 85W QL
S8203A: LUMINAIRE - 55W QL
SP8203J: 10' POLE
SP8203K: 12' POLE



Luminaire Detail
Scale 1:16



Luminaire Matrix

GLOBE:
X ACRYLIC TYPE V

FASTENERS:
X HEX
_ ALLEN

COLOR: (specify)
_ BLACK
_ WHITE
_ VERDE
_ BRONZE
_ GREEN
_ SILVER

REFLECTOR:
_ SM REFLECTOR
_ SM REFLECTOR W/ H.S.S.
_ FULL TOP W/ H.S.S.
_ H.S.S.
X FULL TOP
_ NONE

PHOTO CONTROL:
_ BUTTON-EYE
X TWIST-LOCK RECEPT.
_ NONE

SOCKET:
_ MEDIUM
_ MOGUL
X INDUCTIVE

WATTAGE: (specify)
_ 70W MH
_ 100W MH
_ 150W MH
_ 175W MH
_ 200W MH
_ 250W MH
_ 70W HPS
_ 100W HPS
_ 150W HPS
_ 200W HPS
_ 250W HPS
_ 165W INDUCTION
_ 85W INDUCTION
_ 55W INDUCTION

VOLTAGE:
X 120V
_ 208V
_ 240V
_ 277V
_ 347V

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JOB NAME: **City of Stamford**

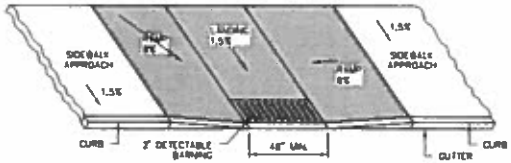
REP. TERRITORY:	DRAWN BY:
27	TAG

SCALE:	DATE:
1:20	10.22.02

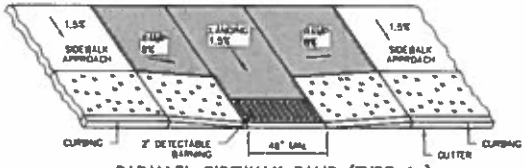
DRAWING NUMBER: **S8203B**

REP: **Lightoller-CT**

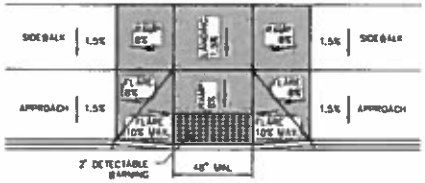
REV: H	PO#: 08-043
BY: JRS	DATE: 07.21.08



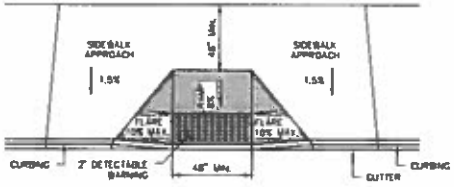
PARALLEL SIDEWALK RAMP (TYPE 1) NO UTILITY STRIP



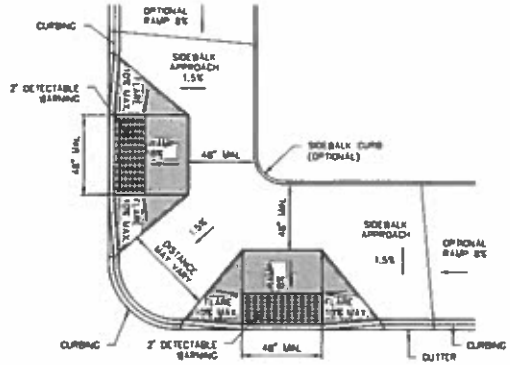
PARALLEL SIDEWALK RAMP (TYPE 1a)
WITH UTILITY GRASS STRIP



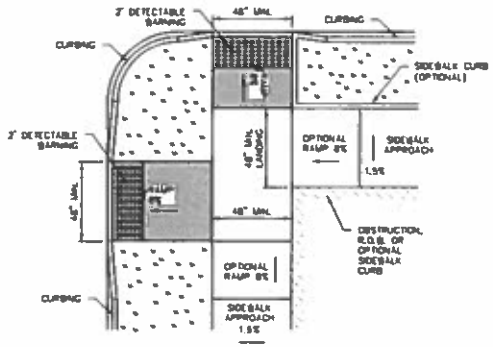
PARALLEL/PERPENDICULAR SIDEWALK RAMP
NO WITH UTILITY/GRASS STRIP (TYPE 1b)



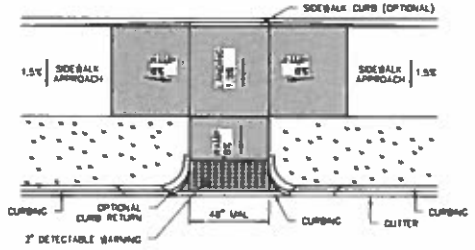
PERPENDICULAR SIDEWALK RAMP
WITH 48" MIN. PASS LANDING (TYPE 2)



DUAL PERPENDICULAR
SIDEWALK RAMPS (TYPE 3)



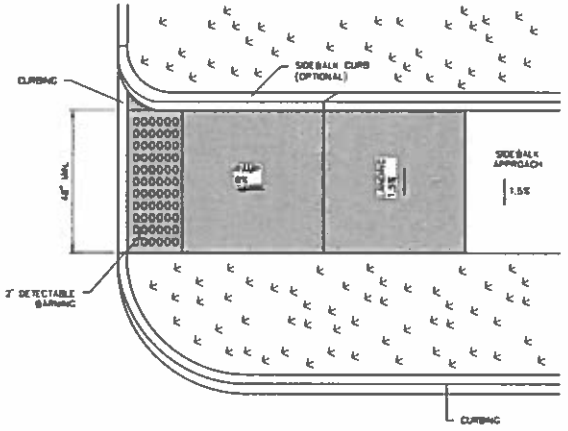
DUAL PERPENDICULAR SIDEWALK RAMPS (TYPE 3a)
WITH UTILITY/GRASS STRIP



PARALLEL/PERPENDICULAR SIDEWALK RAMP
COMBINATION WITH CURB RETURN (TYPE 2a)

GENERAL NOTES

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR PEDESTRIAN ACCESS ROUTE SHOULD NOT EXCEED 5%. THE MAXIMUM GRADE DIFFERENCE BETWEEN THE GUTTER AND CURB RAMP SHALL NOT EXCEED 13%.
2. RAMP GRADE SHALL BE UNIFORM, FREE OF SAGS AND ABRUPT GRADE CHANGES. RUNNING SLOPES OF RAMPS SHALL NOT EXCEED 8.3%.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CLASS "C" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS. PLEASE REFER TO ITEM "CONCRETE SIDEWALK" FOR TECHNICAL SPECIFICATIONS.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE OF ALL SIDEWALK RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. SURFACE DISCONTINUITIES SHALL NOT EXCEED ¼" MAX. VERTICAL DISCONTINUITIES BETWEEN ¼" AND ½" MAX. SHALL BE BEVELED 1:2 MINIMUM APPLIED ACROSS THE ENTIRE LEVEL CHANGE.
5. DIAGONAL SIDEWALK RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES. DIAGONAL AND PERPENDICULAR RAMPS SHALL HAVE THE RAMP RUN PERPENDICULAR TO THE TANGENT OF THE CURB RADIUS FOR THE DESIGNATED ACCESSIBLE ROUTE. BOTH LONGITUDINAL SIDES OF THE RAMP SHOULD BE THE SAME LENGTH. SKEWED RAMPS SHOULD BE AVOIDED. FLARES ARE NOT CONSIDERED PART OF PEDESTRIAN ACCESS ROUTE.
6. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 20' IN SIDEWALKS AND 10' IN CURBING.
7. SIDEWALK RAMPS, SHALL BE PAID FOR UNDER THE ITEM "PEDESTRIAN RAMPS".
8. PREFERRED LOCATION TO INSTALL DETECTABLE WARNING STRIP SHALL BE 6" FROM THE EDGE OF ROAD ALONG THE FULL WIDTH OF THE RAMP.
9. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, AUGN DOMES ON A SQUARE GRID IN THE DIRECTION OF RUNNING SLOPE (PERPENDICULAR TO CURB OR SLOPE BREAK). THE TRANSITION FROM RAMP TO GUTTER SHALL BE FLUSH WITHOUT A LIP.
10. FOR SIDEWALKS CONTINUOUS THROUGH DRIVEWAYS, RAMPS AND DETECTABLE WARNING SURFACES ARE NOT REQUIRED. CONSTRUCT A SIDEWALK CURB BEHIND THE SIDEWALK WHEN THERE IS INSUFFICIENT BUFFER AVAILABLE OR WHEN CALLED FOR IN PLANS. SIDEWALK CURB SHALL BE PAID FOR AS PART OF THE ITEM "CONCRETE CURBING".
11. THE TOP AND BOTTOM OF RAMPS SHOULD BE PROVIDED WITH A 4' x 4' MINIMUM LEVEL LANDING AREA WITH A CROSS SLOPE LESS THAN OR EQUAL TO 2% IN ANY DIRECTION.
12. UTILITY POLES, LUMINAIRES, PEDESTRIAN OR SIGNAL POLES, CRATES, ACCESS COVERS, AND OTHER APPURTENANCES SHALL NOT BE LOCATED ON RAMPS, LANDINGS, BLENDED TRANSITIONS, FLARES, AND AT GUTTERS WITHIN THE PEDESTRIAN ACCESS ROUTE.
13. APPROACH SIDEWALK WIDTHS, GRASS STRIP OR UTILITY STRIP WIDTHS MAY VARY.
14. APPROACH SIDEWALK AND LANDING CROSS SLOPE SHALL NOT EXCEED 2%.
15. FOR PERPENDICULAR CURB RAMPS A MIN. 4' x 4' TURNING SPACE SHALL BE PROVIDED AT THE TOP OF CURB RAMP. WHERE THE TURNING SPACE IS RESTRICTED AT THE BACK OF SIDEWALK THE TURNING SPACE SHALL BE 4' x 5' WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.
16. FOR PARALLEL CURB RAMPS, A MIN. 4' x 4' TURNING SPACE SHALL BE PROVIDED AT THE BOTTOM OF CURB RAMP. IF THE TURNING SPACE IS RESTRICTED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL BE 4' x 5' WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
17. SHADED AREAS ARE TYPICAL PAY LIMITS FOR "PEDESTRIAN RAMPS" BUT, MAY VARY AS DIRECTED BY THE ENGINEER.
18. IF A SITUATION ARISES WHERE ANY OF THE PROVIDED RAMP DETAILS DO NOT CORRELATE WITH ACTUAL ON-SITE SITUATIONS PLEASE NOTIFY THE ENGINEER.



SINGLE DIRECTION
PERPENDICULAR SIDEWALK RAMP
WITH UTILITY GRASS STRIP (TYPE 4)

NO.	DATE	REVISIONS	CK. BY
1	2/17/15	REVISE NOTES	

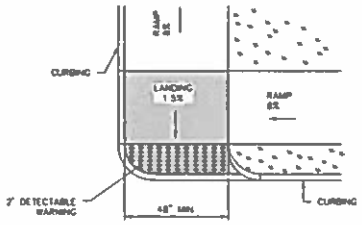
FILE NO.:

CONSULTANT:

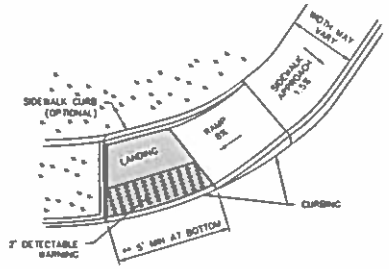
SEAL:

CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

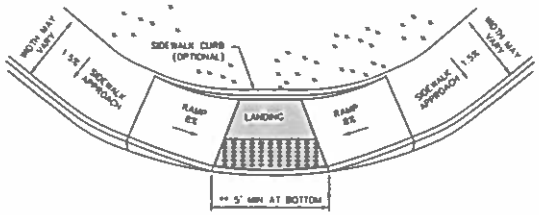
SURVEYED BY:	DATE:	DESIGNED BY:	DATE:	PROJECT TITLE:	SCALE:
		CDM/DOT	3/6/14	CITY STANDARDS	NOT TO SCALE
DRAWN BY:	DATE:	CHECKED BY:	DATE:	DRAWING TITLE:	PROJECT NO.:
PC	3/24/14	AC	"	PEDESTRIAN RAMPS SHEET 1	CX XXXX
					DRAWING NO.: PR-1
					SHEET NO.: X OF X



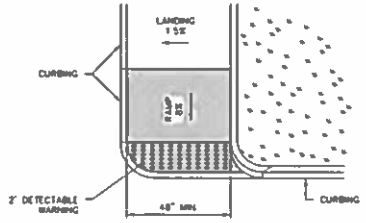
SINGLE DIRECTION
PARALLEL SIDEWALK RAMP
NO UTILITY GRASS STRIP
(TYPE 4a)



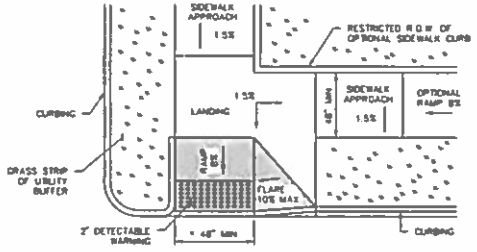
SINGLE PARALLEL SIDEWALK RAMP
W/LANDING AT BOTTOM ON
CORNER (TYPE 5a)
** SEE NOTE 18



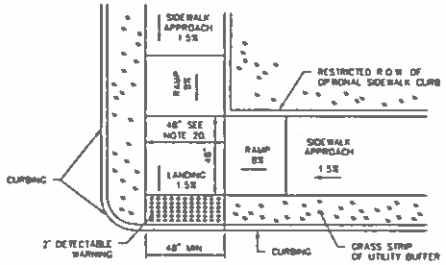
DOUBLE SIDEWALK RAMP
W/LANDING AT BOTTOM (TYPE 5b)
** SEE NOTE 18



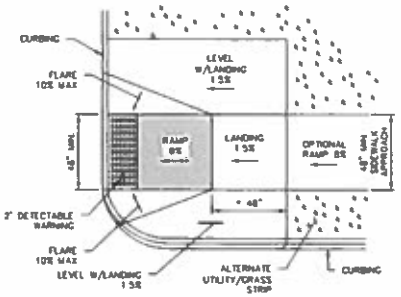
SINGLE DIRECTION
PERPENDICULAR SIDEWALK RAMP
NO UTILITY GRASS STRIP
(TYPE 4b)



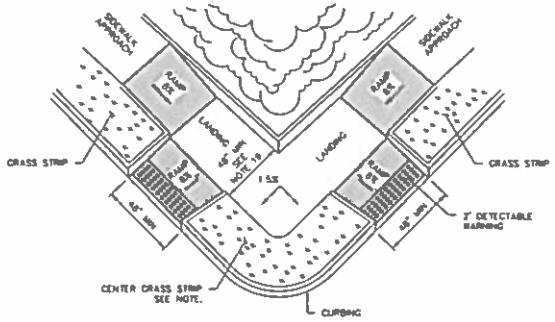
RESTRICTED CORNER PERPENDICULAR SIDEWALK RAMP
(TYPE 6)
* SEE NOTE 15



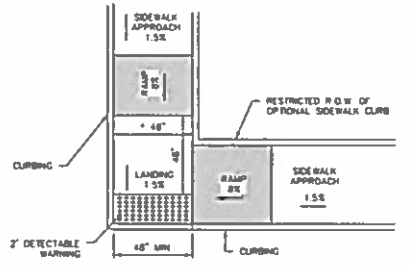
RESTRICTED CORNER PARALLEL DOUBLE SIDEWALK RAMPS
W/CENTER LANDING AND UTILITY GRASS STRIP
(TYPE 6b)



PERPENDICULAR SIDEWALK RAMP
ONE DIRECTION ON CORNER
(TYPE 4)
* SEE NOTE 15



COMBINATION SIDEWALK RAMP (TYPE 6a)
NOTE: CENTER GRASS STRIP MAY BE CONCRETE



RESTRICTED CORNER PARALLEL SIDEWALK RAMPS
W/CENTER LANDING NO GRASS STRIP
(TYPE 6c)

NO.	DATE	DESCRIPTION	CH BY
		REVISIONS	

FILE NO:

CONSULTANT:

SEAL:

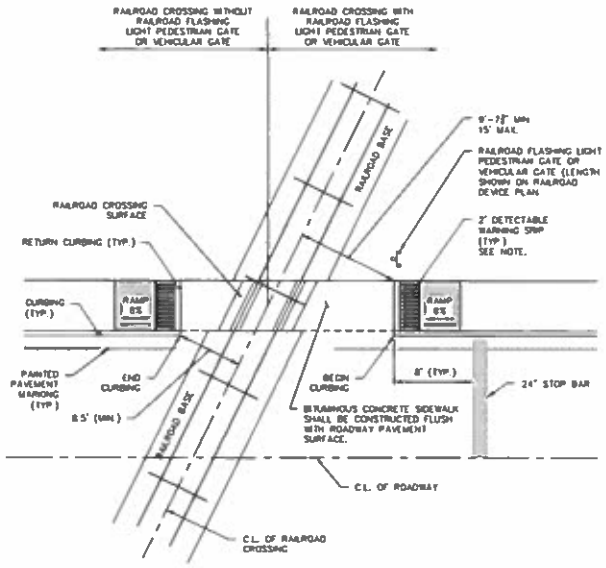
CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

SURVEYED BY:	DATE:	DESIGNED BY:	DATE:
		CONNDOT	3/6/14
DRAWN BY:	DATE:	CHECKED BY:	DATE:
PC	3/24/14	AC	X

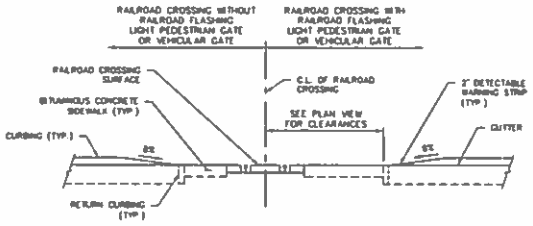
PROJECT TITLE: CITY STANDARDS

DRAWING TITLE: PEDESTRIAN RAMPS SHEET 2

SCALE:	NOT TO SCALE
PROJECT NO:	CX XXXX
DRAWING NO:	PR-2
SHEET NO:	X OF X



PLAN VIEW

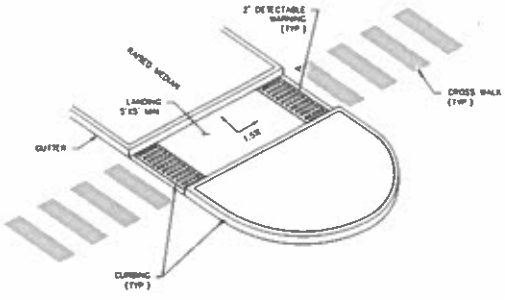


ELEVATION VIEW

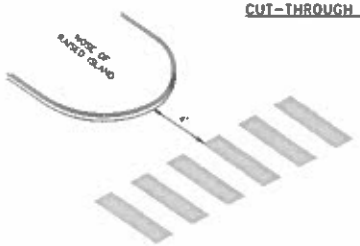
DETECTABLE WARNINGS AT RAILROAD CROSSING

NOTE

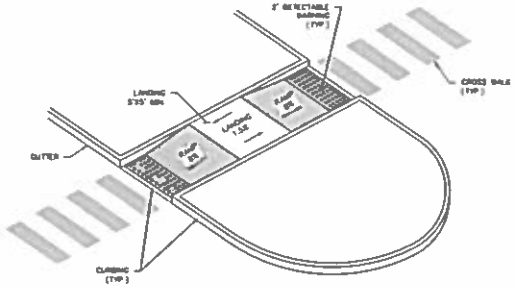
WHEN NO GATE IS PRESENT, INSTALL DETECTABLE WARNING SURFACE 12' FROM NEAREST RAIL. IF GATE IS PRESENT, INSTALL DETECTABLE WARNING 2' PRIOR TO GATE. THE ROWS OF TRUNCATED DOMES IN DETECTABLE WARNING SURFACE SHALL BE INSTALLED PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL.



CUT-THROUGH RAISED WITH LANDING



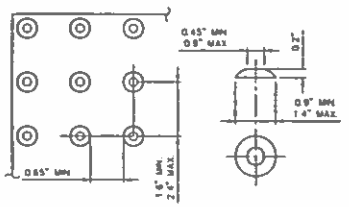
ALTERNATE CROSSWALK WITH MEDIAN ISLAND PULLED BACK



RAMP RAISED MEDIAN WITH LANDING

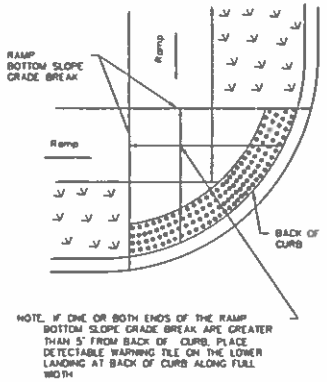
GENERAL NOTES

1. RAMPED MEDIANS SHALL HAVE A CURB RAMP AT EITHER END AND LEVEL LANDING A MINIMUM OF 5' x 5' (1.5m x 1.5 m) IN BETWEEN. CUT-THROUGH MEDIANS SHALL BE A MINIMUM OF 6' (1.8m) LONG AND 5' (1.5m) WIDE. FOR ALL MEDIANS, CUT-THROUGH OR RAMPED, A 2' (610) STRIP OF DETECTABLE WARNINGS SHALL BE INSTALLED AT THE ENTRANCE AND EXIT
2. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES ON SHEET 1.

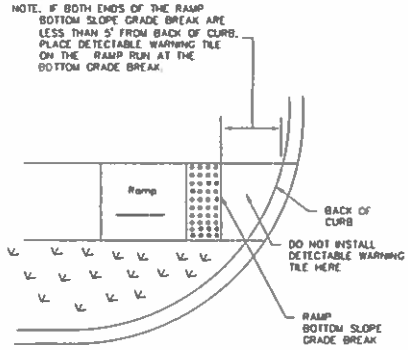


DOME SPACING DOME SECTION

STANDARD DOME ON DETECTABLE WARNING TILES



DETECTABLE WARNING PLACEMENT DETAIL 1



DETECTABLE WARNING PLACEMENT DETAIL 2

NO.	DATE	DESCRIPTION	CK. BY
1	2/17/15	ADD DETECTABLE WARNING PLACEMENT DETAIL 1 & 2	

REVISIONS

FILE NO.:

CONSULTANT:

SEAL:

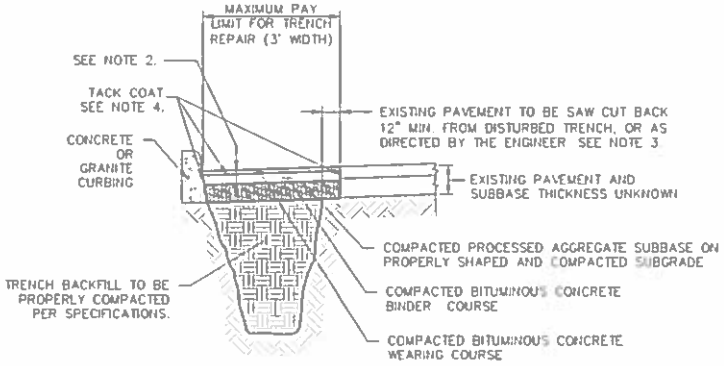
CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

SURVEYED BY:	DATE:	DESIGNED BY:	DATE:
		CONNDOT	3/6/14
DRAWN BY	DATE:	CHECKED BY:	DATE:
PG	3/24/14	AC	x

PROJECT TITLE: CITY STANDARDS

DRAWING TITLE: PEDESTRIAN RAMPS SHEET 3

SCALE:	NOT TO SCALE
PROJECT NO.:	CX XXXX
DRAWING NO.:	PR-3
SHEET NO.:	X OF X

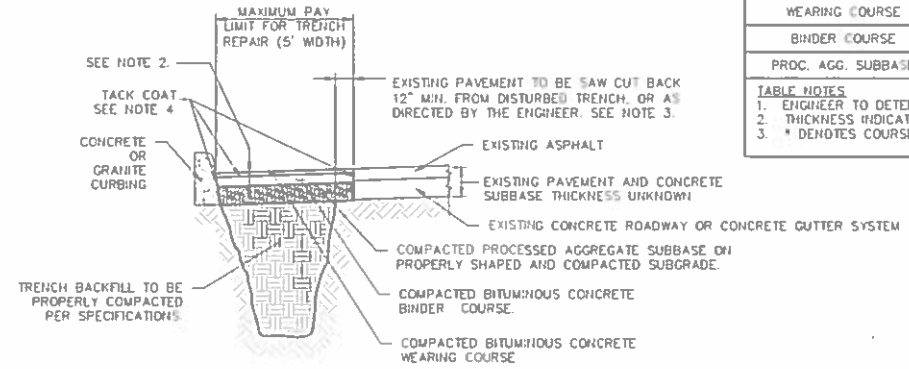


PERMANENT TRENCH REPAIR

NOT TO SCALE

PERMANENT TRENCH REPAIR NOTES

1. ALL WORK TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, LATEST EDITION OR AS DIRECTED BY THE ENGINEER
2. SHOULD THE TOTAL THICKNESS OF EXISTING PAVEMENT EXCEED THICKNESS OF PROPOSED BINDER PLUS WEARING COURSE, THE THICKNESS OF BINDER COURSE SHALL BE INCREASED SUCH THAT THE TOTAL THICKNESS OF REPAIR BITUMINOUS PAVEMENT MATCHES EXISTING.
3. CUTBACKS SHALL BE MADE IMMEDIATELY PRIOR TO TRENCH REPAIR AND NOT WHEN TRENCH IS EXCAVATED. CUTBACKS SHALL BE STRAIGHT AND EVEN TO ELIMINATE IRREGULAR EDGES.
4. TACK COAT SHALL BE APPLIED TO THE FULL DEPTH OF EXISTING PAVEMENT ALONG THE PERIMETER EDGES OF THE TRENCH AND ALL CONTACT SURFACES SUCH AS CURBING AND STRUCTURES (MANHOLES AND CATCH BASINS). TACK COAT SHALL BE APPLIED BETWEEN LIFTS/COURSES THAT HAVE BEEN IN PLACE LONGER THAN FIVE (5) DAYS
5. HMA S0.50 BINDER COURSE SHALL NOT BE PLACED IN LIFTS GREATER THAN 2 1/2" COMPACTED THICKNESS.



PERMANENT TRENCH REPAIR W/ CONCRETE

NOT TO SCALE

PAVEMENT COMPOSTION

ROADWAY CLASSIFICATION	COLLECTOR	ARTERIAL
WEARING COURSE	1 1/2" HMA S0.375	1 1/2" HMA S0.375
BINDER COURSE	2 1/2" HMA S0.50	4 1/2" HMA S0.50 *
PROC. AGG. SUBBASE	8"	8"

TABLE NOTES
1. ENGINEER TO DETERMINE ROADWAY CLASSIFICATION.
2. THICKNESS INDICATED IS THAT OF COMPACTED MATERIAL
3. * DENOTES COURSES REQUIRING MULTIPLE LIFTS.

NO.	DATE	DESCRIPTION	CP BY
1	2/17/15	REVISE PAVEMENT COMPOSITION & NOTES	

REVISIONS

FILE NO.

CONSULTANT

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OFFICE OF OPERATIONS
ENGINEERING BUREAU

SURVEYED BY	DATE	DESIGNED BY	DATE
x	x	x	x
DRAWN BY	DATE	CHECKED BY	DATE
x	x	x	x

PROJECT TITLE: CITY STANDARD

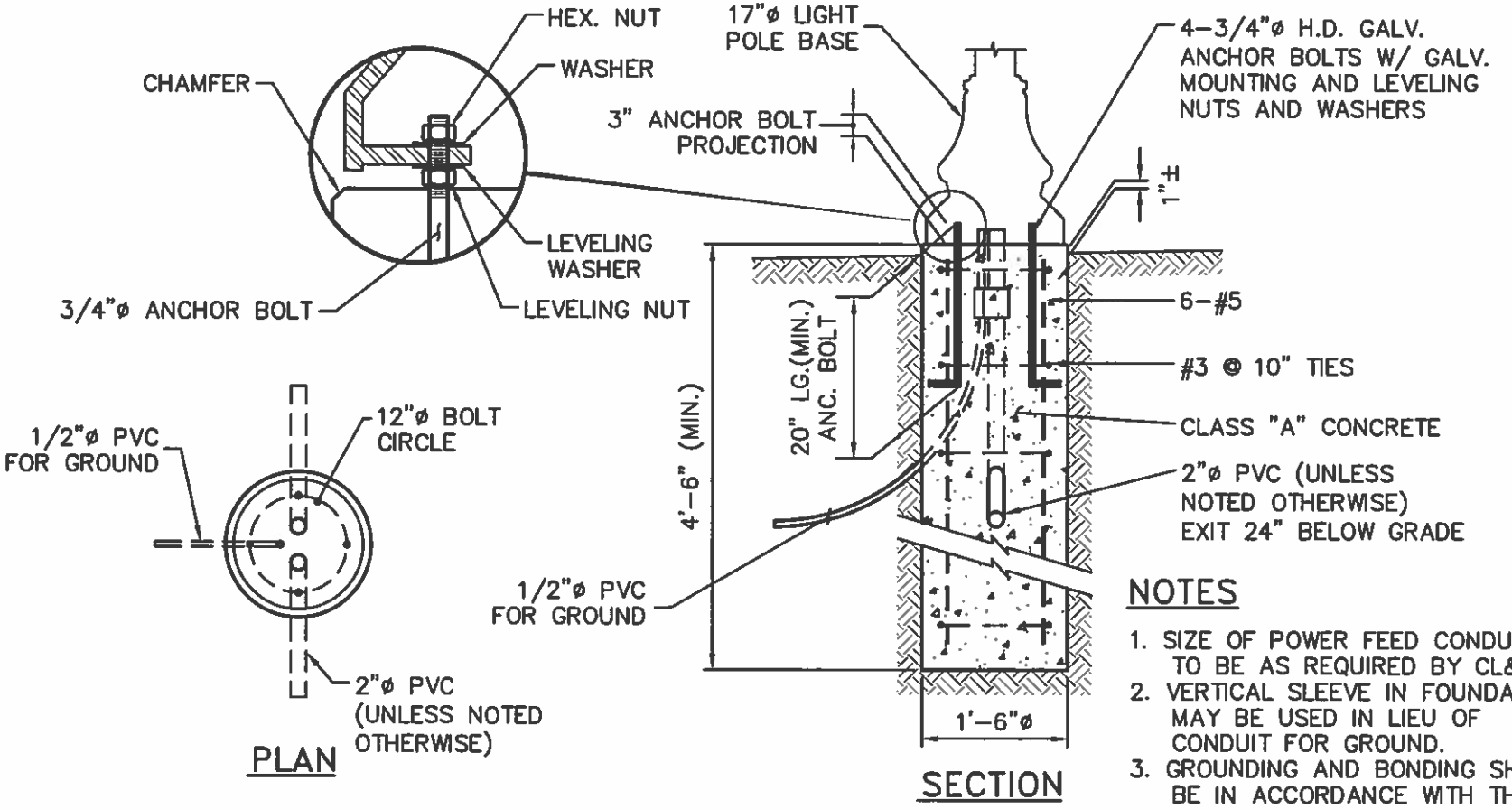
DRAWING TITLE: PERMANENT TRENCH REPAIR DETAIL

SCALE: X

PROJECT NO.: CP 2220

DRAWING NO.: X

SHEET NO.: X OF X



NOTES

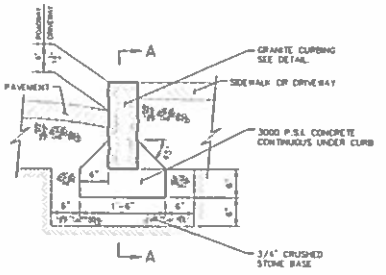
1. SIZE OF POWER FEED CONDUIT TO BE AS REQUIRED BY CL&P.
2. VERTICAL SLEEVE IN FOUNDATION MAY BE USED IN LIEU OF CONDUIT FOR GROUND.
3. GROUNDING AND BONDING SHALL BE IN ACCORDANCE WITH THE NEC.
4. VERIFY ANCHOR BOLT LAYOUT SUCH THAT ACCESS DOOR IN BASE OF POLE FACES SIDEWALK.

LIGHT POLE FOUNDATION DETAILS

NOT TO SCALE

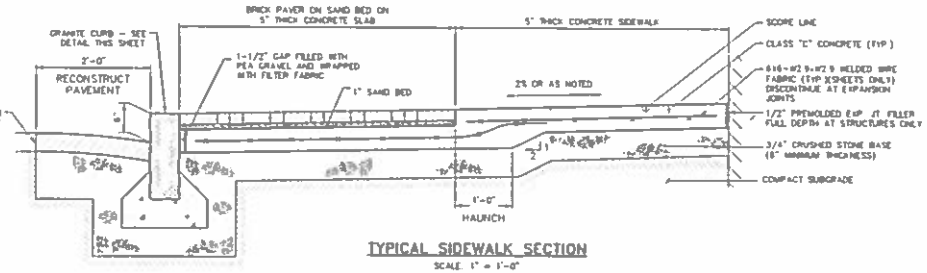
CITY OF STAMFORD
ENGINEERING BUREAU
SKETCHES & CALCULATIONS

Project No. & Name: COS Ornamental Streetlight Foundation
Subject:
Made by: PDG Date: 4/1/08 REV 3 2/7/11
Chk. by: Date:
Sheet No. 1 of 1



GRANITE STONE CURB

SCALE 1" = 1'-0"



TYPICAL SIDEWALK SECTION

SCALE 1" = 1'-0"

MISCELLANEOUS NOTES

1) BRICK PAVERS TO BE 4" × 8" × 2 1/4", CAMBRIDGE PAVER, AS MANUFACTURED BY GLEN GARY PAVERS, MD ATLANTIC PLANT, REPRESENTED BY SPAULDING BRICK, BOSTON, MA. TEL: (617) 666-3200 OR APPROVED EQUAL. PAVERS SHALL BE LAYED ONTO AN APPROVED SAND BED AND SHALL BE INSTALLED HAND TIGHT. SAW CUTS SHALL BE DONE IN A WORKMANLIKE MANNER THAT WILL RESULT IN STRAIGHT AND EVEN JOINT LINES. AFTER INSTALLATION, SAND SHALL BE SWEPT INTO JOINTS, BETWEEN PAVERS FIELD TAMPED INTO SAND BED TO SET. SWEEP ADDITIONAL SAND INTO JOINTS TO FILL AS NECESSARY.

2) GRANITE FOR CURBING SHALL BE MOUNT AIRY LIGHT GRAY CURBING AS SUPPLIED BY NORTH CAROLINA GRANITE CORP. MT AIRY, NC TEL: (800) 227-6242, OR APPROVED EQUAL.

3) CONCRETE. CLASS "A" CONCRETE SHALL BE 3000 PSI CONCRETE HAVING A NOMINAL MAXIMUM COURSE AGGREGATE SIZE OF 1-1/2" (NO.4). CLASS "C" CONCRETE SHALL BE 3000 PSI CONCRETE MADE WITH TYPE II CEMENT, HAVING A NOMINAL MAXIMUM COURSE AGGREGATE SIZE OF 3/4" (NO.6) AND SHALL CONTAIN AIR ENTRAINMENT BETWEEN 6-7% AT THE TIME OF PLACEMENT. CONCRETE FOR EXPOSED SIDEWALKS SHALL BE FROM A SINGLE SOURCE PROVIDER FOR UNIFORMITY IN COLOR.

4) BASE FOR SIDEWALK TO BE 3/4" CRUSHED STONE. COMPACT BASE TO NOT LESS THAN 95% OF MAXIMUM DRY UNIT WEIGHT TO ASTM D 1557.

5) CONCRETE WALKS TO BE SCORED CONCRETE USING AN 18" TO 24" SQUARE SCORING PATTERN AS NECESSITATED BY SIDEWALK WIDTH REQUIREMENTS. COLOR TO BE LIGHT GREY AS USED IN CITY OF STAMFORD STANDARD CONCRETE SPEC. EACH SQUARE FINISHED WITH A SMOOTH 1/2" DEEP TOOLED EDGE AND DEEP BROOM SURFACE.

6) 1/2" THICK APPROVED PREMOLDED BITUMINOUS EXPANSION JOINTS SHALL BE PLACED FULL DEPTH OF JOINT EVERY 20' OR AS DIRECTED BY THE ENGINEER.

7) STREET LIGHTING. CONTACT CITY OF STAMFORD ENGINEERING BUREAU FOR SPECIFIC LIGHTING REQUIREMENTS PRIOR TO ORDERING ANY MATERIALS. STREET LIGHTING MANUFACTURED BY HADCO.

TWIN FIXTURE STREET LIGHT: SA203C LUMINAIRE, SA82038 TWIN ARM WITH 120V DUPLEX WATERPROOF RECEPTACLE AND PLANTER RINGS, SP8203C 16'-POLE, FINISH: BRONZE OR AS DIRECTED BY ENGINEER.

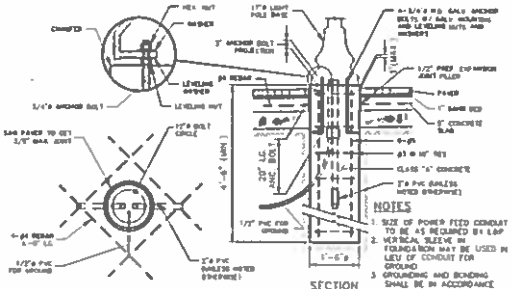
SINGLE FIXTURE STREET LIGHT: SA2038 LUMINAIRE; SP8203B 15' POLE WITH 120V DUPLEX WATERPROOF RECEPTACLE, FINISH: BRONZE OR AS DIRECTED BY ENGINEER.

8) STREET TREE GRATES TO BE 4' × 8' CAST IRON TREE GRATE, TYPE U FRAME, R-8802-A, RECTANGULAR WITH CAST IRON FRAME BY NEENAH FOUNDRY COMPANY AS AVAILABLE THROUGH NEL GRANT ASSOCIATES, NEEDHAM, MA. TEL. (800) 345-1432) OR APPROVED EQUAL. INSTALL FRAMES AND GRATES AS PER MANUFACTURER'S INSTRUCTIONS OR AS DIRECTED BY ENGINEER.

9) STREET TREES SHALL BE OF THE TYPE AND SIZE APPROVED BY CITY OF STAMFORD LAND USE BUREAU.

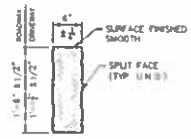
10) PAVEMENT RECONSTRUCTION SHALL MATCH EXISTING, BUT IN NO CASE SHALL BE LESS THAN 1-1/2" OF MIX SO 375 BITUMINOUS CONCRETE ON 2-1/2" OF MIX SO.5 BITUMINOUS CONCRETE ON 8" OF PROCESSED AGGREGATE BASE. PAVEMENT COMPOSITION SHALL BE APPROVED BY ENGINEERING BUREAU.

11) THIS DRAWING IS INTENDED TO DEPICT ONLY TYPICAL STREETSCAPE SIDEWALK DETAILS. THERE MIGHT BE SOME CASES WHERE THE "TYPICAL DETAILS" ARE NOT OBTAINABLE DUE TO RESTRICTED SIDEWALK WIDTHS ETC. PLEASE ADJUST DIMENSIONS ACCORDINGLY OR AS DIRECTED BY THE ENGINEER.



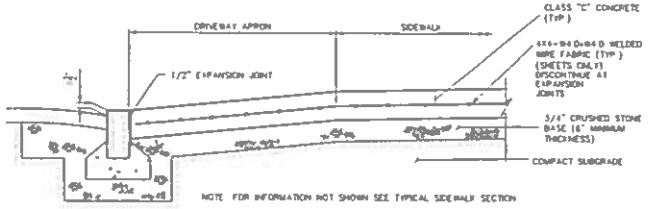
LIGHT POLE FOUNDATION DETAILS

NOT TO SCALE



CURBING DETAIL

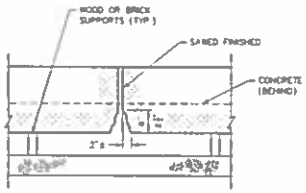
SCALE 1" = 1'-0"



NOTE: FOR INFORMATION NOT SHOWN SEE TYPICAL SIDEWALK SECTION

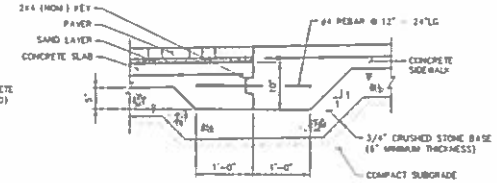
TYPICAL DRIVEWAY SECTION

SCALE 3/4" = 1'-0"



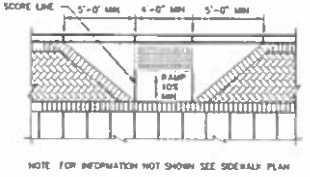
SECTION A-A

NOT TO SCALE



ALTERNATE HAUNCH DETAIL (CONSTRUCTION JOINT)

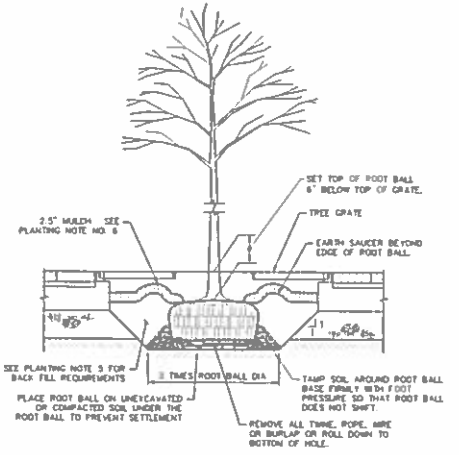
SCALE 1" = 1'-0"



NOTE: FOR INFORMATION NOT SHOWN SEE SIDEWALK PLAN

PEDESTRIAN RAMP PLAN

NOT TO SCALE



TREE PLANTING DETAIL

NOT TO SCALE

PLANTING NOTES:

1) EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

2) DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

3) STAKE TREE BASED ON CRITERIA BELOW OR AS REQUESTED BY THE LANDSCAPE ARCHITECT.

4) WRAP TREE TRUNKS ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

5) BACK FILL WITH SOIL EXCAVATED TO MAKE HOLE. IN SANDY LOAM SOILS ADD CLEAN COMPOSTED ORGANIC MATERIAL (20% MAX BY VOLUME) TO THE EXISTING SOIL.

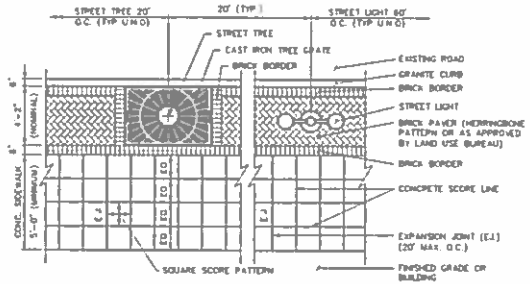
6) DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH FREE OF WEEDS.

STAKING NOTES:

1) STAKING SHALL ONLY BE DONE IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF AND REMAIN STRAIGHT. STAKE TREES FOR THE FOLLOWING REASONS:

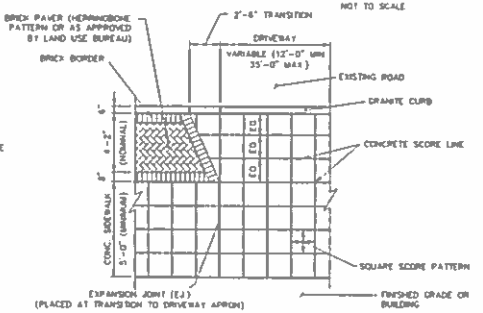
A. THE TREE IS INSTALLED WITHIN VERY SANDY SOIL OR VERTNET CLAY SOIL.
B. THE TREE IS LOCATED IN A PLACE OF EXTREMELY WINDY CONDITIONS.

2) CONTACT THE PROJECT LANDSCAPE ARCHITECT FOR STAKING DETAIL IF NEEDED.



SIDEWALK PLAN

NOT TO SCALE



DRIVEWAY PLAN

NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
8	7/16/15	REVISE NOTES, ADD PEDESTRIAN RAMP & DRIVEWAY DETAIL	
6-5	10/8/14	REVISE FOUNDATION ANCHORAGE AND NOTES	
3	7/11/06	REVISE FOUNDATION	
2	1/13/06	GRANITE CURBING - CONCRETE CLARIFICATION	
1	5/8/08	REVISE FOUNDATION DEPTH	

REVISIONS

FILE NO. CDS Streetscape details Rev 8 2-12-15.dwg | PLOT DATE

SURVEYED BY	DATE	DESIGNED BY	DATE
		PDG	3/2007
DRAWN BY	DATE	CHECKED BY	DATE
PDG	3/2007		

Louis Cosola, Jr., P.E.
City Engineer

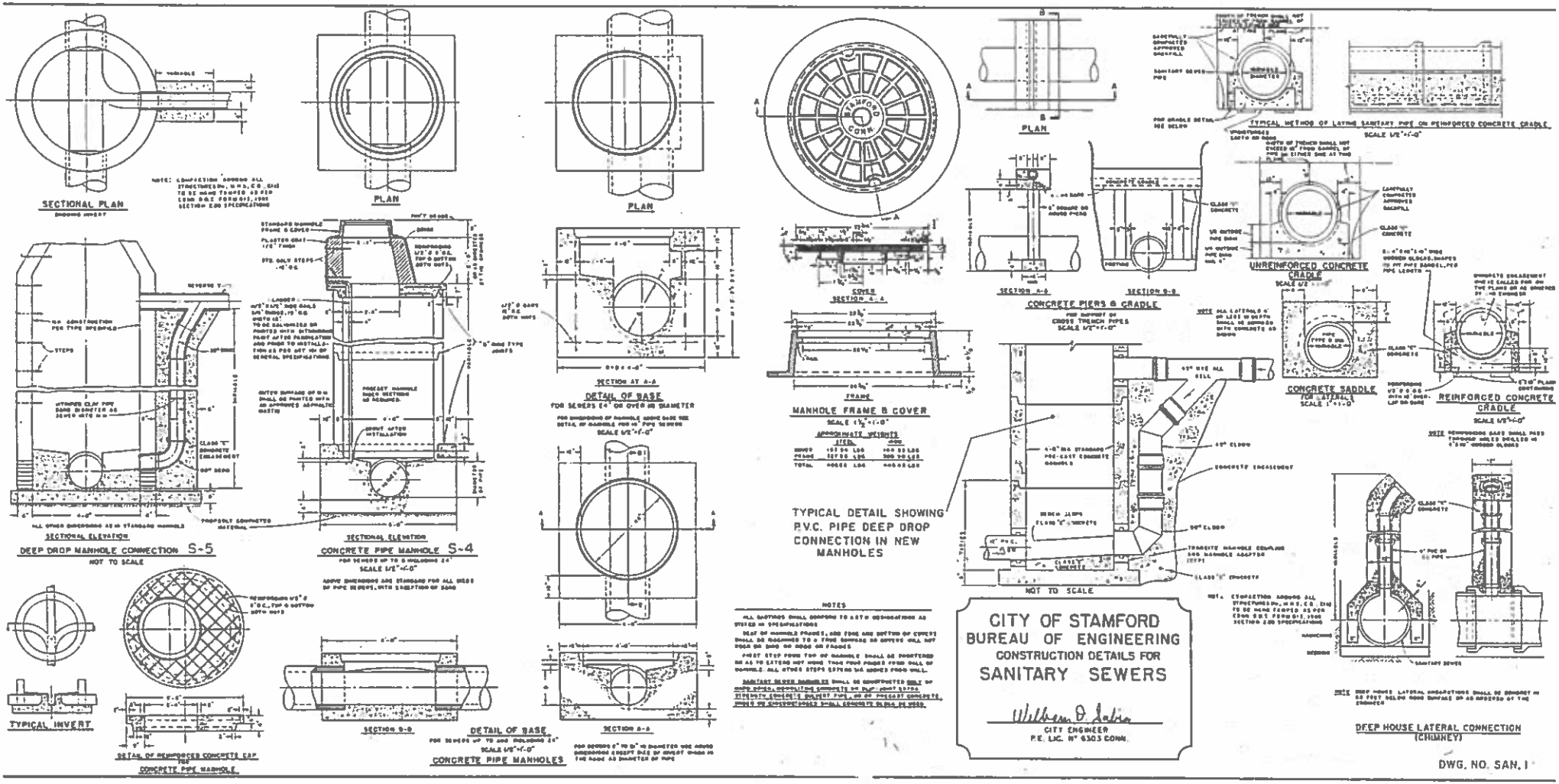
SEAL

CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

PROJECT TITLE
X
X

DRAWING TITLE
CITY OF STAMFORD STREETSCAPE DETAILS

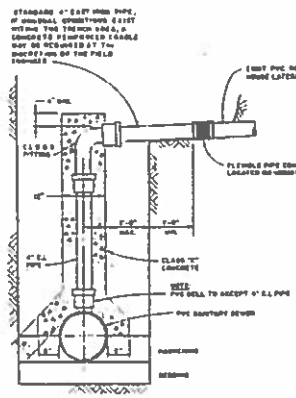
SCALE:	AS NOTED
PROJECT NO	
DRAWING NO	SSD-1
SHEET NO	X OF X



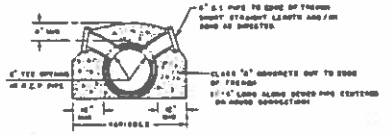
CITY OF STAMFORD
BUREAU OF ENGINEERING
CONSTRUCTION DETAILS FOR
SANITARY SEWERS

William D. Soltis
CITY ENGINEER
P.E. LIC. N° 6303 CONN.

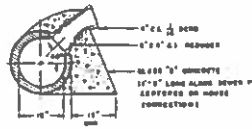
DWG. NO. SAN. 1



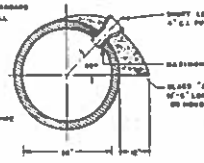
SANITARY SEWER CONNECTION DETAIL TO EXISTING HOUSE LATERALS (N.T.S.)



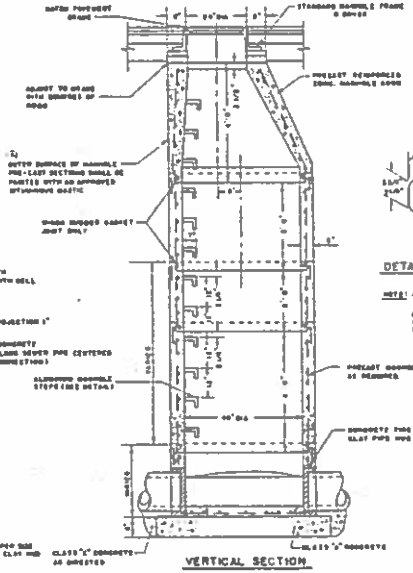
CROSS SECTION
TYPICAL 6" BRANCH FOR REINFORCED CONCRETE FOR SEWER
SCALE 1/2"=1'-0"



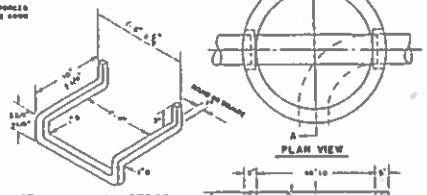
CROSS SECTION
TYPICAL 4"C.I. BRANCH FOR
SCALE 3/4"=1'-0"



CROSS SECTION
TYPICAL 4"C.I. BRANCH FOR
SCALE 3/4"=1'-0"

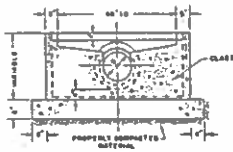


VERTICAL SECTION

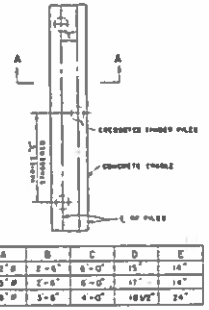


DETAIL-ALUMINUM STEPS
N. T. S.

PLAN VIEW

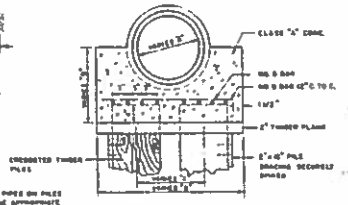


SECTION A-A
PRECAST MANHOLE BASE



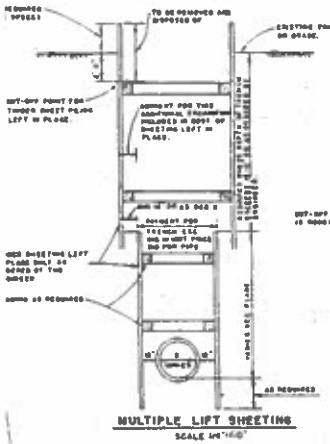
A	B	C	D	E
12'-0"	2'-6"	6'-0"	15"	18"
13'-0"	2'-6"	6'-0"	17"	18"
14'-0"	3'-6"	6'-0"	18 1/2"	24"

PLAN

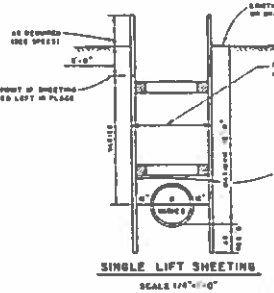


SECTION A-A
SEWER PIPE ON PILES

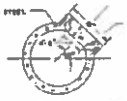
S-2
48" PRECAST CONCRETE MANHOLE WITH 48"X24" CONE SECTION AND PRECAST BASE
SCALE 1"=1'-0"



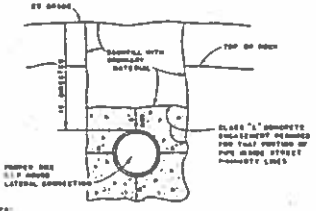
MULTIPLE LIFT SHEETING
SCALE 1/4"=1'-0"



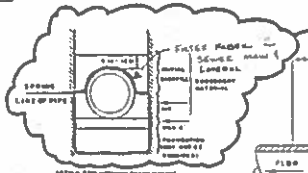
SINGLE LIFT SHEETING
SCALE 1/4"=1'-0"



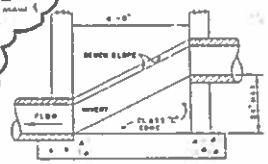
CROSS SECTION
TYPICAL "T" BRANCH ON RCP



HOUSE CONNECTION LAID ON STEEP GRADE 115% OR OVER IN ROCK TRENCH



BEDDING FOR P.V.C PIPE

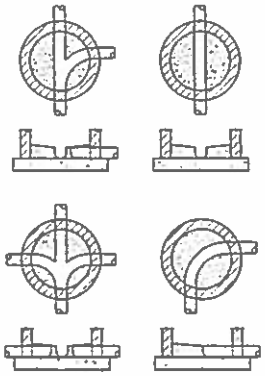


MANHOLE INVERT DETAIL

CITY OF STAMFORD
BUREAU OF ENGINEERING
CONSTRUCTION DETAILS OF
SANITARY SEWERS

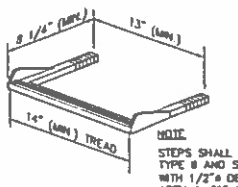
William D. Lehr
CITY ENGINEER
P.E. LIC. Nº 6303 CONN

DWG. Nº SAN. 2



TYPICAL INVERTS

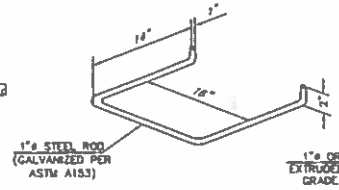
SCALE: 1/4" = 1'-0"



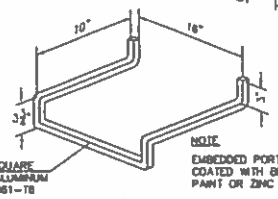
NOTE

STEPS SHALL MEET ASTM D-4101 TYPE II AND SHALL BE REINFORCED WITH 1/2"ø DEFORMED STEEL BAR ASTM A-615 GR. 60.

COPOLYMER POLYPROPYLENE PLASTIC



GALVANIZED STEEL



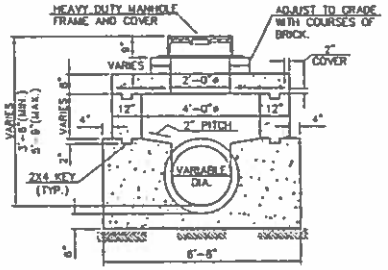
NOTE

EMBEDDED PORTION TO BE COATED WITH BITUMINOUS PAINT OR ZINC CHROMATE.

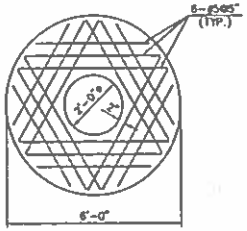
ALUMINUM

MANHOLE STEPS

NOT TO SCALE



SECTION



PLAN-TOP SLAB

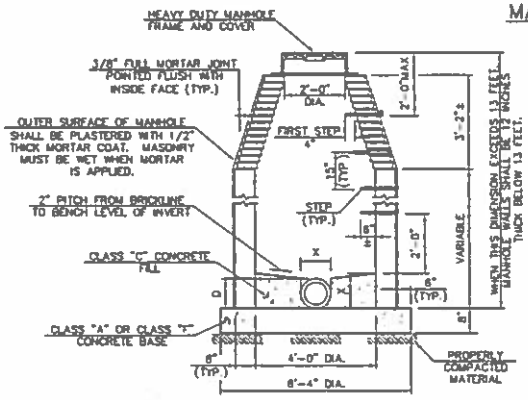
NOTE: ALL CONCRETE TO BE CLASS "A" OR CLASS "F" CONCRETE.

SHALLOW MANHOLE (SW-2)

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

NOTES

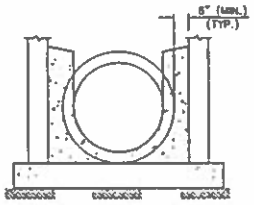
1. CASTINGS DESIGNATED AS "HEAVY DUTY" SHALL SAFELY WITHSTAND AASHTO HS20 HIGHWAY LOADING.
2. ALL STEEL TO BE STRUCTURAL GRADE CONFORMING TO ASTM A36.
3. CAST IRON SHALL CONFORM TO ASTM A48 CLASS 30.
4. SEAT OF MANHOLE FRAMES, EDGES AND BOTTOM OF COVERS SHALL BE MACHINED TO A TRUE SURFACE SO COVERS WILL NOT RIND OR ROCK ON FRAMES.
5. FIRST STEP FROM TOP OF MANHOLE SHALL BE SHORTENED SO AS TO EXTEND NOT MORE THAN 4" FROM WALL OF MANHOLE. ALL OTHER STEPS SHALL EXTEND 6" FROM WALL.
6. APPROVED CONCRETE BLOCK MAY BE USED IN LIEU OF BRICK IN THE CONSTRUCTION OF CATCH BASINS AND STORM MANHOLES.
7. WHERE SHOWN, STEEL ITEMS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 FOR STEEL SHAPES AND PLATES, OR ASTM A153 FOR HARDWARE.
8. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING:
   BAR REINFORCEMENT - ASTM A615 GRADE 60
   WELDED WIRE FABRIC - ASTM A184
   WELDED DEFORMED WIRE FABRIC - ASTM A497
9. UNREINFORCED PIPES SHALL BE CUT FLUSH WITH INSIDE FACE OF C.B. WALL. REINFORCED PIPES SHALL BE CUT TO PROVIDE 1" RECESS INTO FACE OF C.B. WALL. CUT END SHALL THEN BE PATCHED WITH MORTAR FLUSH WITH WALL.
10. ALL UNUSED KNOCK-OUTS SHALL BE BRICKED UP WHERE DIRECTED BY THE ENGINEER.



NOTES

1. DIMENSIONS "X" VARY ACCORDING TO SIZE OF PIPE.
2. "D" DENOTES OUTSIDE DIAMETER OF PIPE.
3. WHERE 5 FT. & 8 FT. DIA. MANHOLES ARE SHOWN ON THE PLANS, THEY SHALL BE CONSTRUCTED USING PRECAST CONCRETE UNITS.

STANDARD MANHOLE (LESS THAN 36" PIPE) (MASONRY CONSTRUCTION)

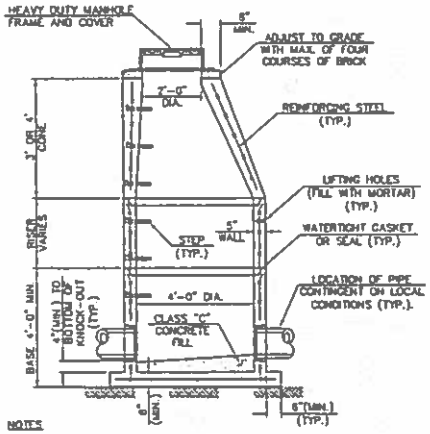


NOTE: FOR ADDITIONAL INFORMATION, SEE "STANDARD MANHOLE (LESS THAN 36" PIPE)" DETAIL, THIS SHEET.

STANDARD MANHOLE (FOR 36" AND LARGER PIPES)

STANDARD MANHOLE (SW-1)

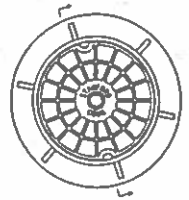
SCALE: 1/2" = 1'-0"



NOTES

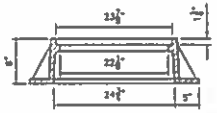
1. 5 FT. & 8 FT. DIA. PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' AND 8' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1 INCH FOR EACH 1 FOOT OF INSIDE DIAMETER INCREASE.
2. FOR ADDITIONAL INFORMATION, SEE "STANDARD MANHOLE (LESS THAN 36" PIPE)" DETAIL, THIS SHEET.

STANDARD MANHOLE (PRECAST CONCRETE UNITS)



PLAN

COVER - SECTION



FRAME - SECTION

HEAVY DUTY HIGHWAY MANHOLE FRAME & COVER

SCALE: 1" = 1'-0"

NOTE: MANHOLE FRAME AND COVER TO SHALL BE CAMPBELL FOUNDRY PATTERN NO. 1027 (STAMFORD) OR ENGINEER APPROVED EQUAL.

NO.	DATE	DESCRIPTION
2	11/16	ADD CLASS "F" CONC. CHG. TO SHEET
1	7/08	REVISE MANHOLE STEPS

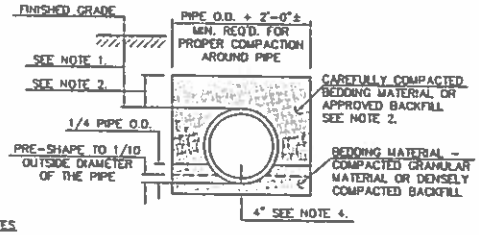
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED UNDERGROUND AND B.O.R. INVESTIGATIONS AND IS IN NO WAY WARRANTED TO INDICATE THE

DESIGNED: ENGINEERING BUREAU
DRAWN: ENGINEERING BUREAU
CHECKED BY:

CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

DRAWING TITLE: STORM DRAINAGE DETAILS

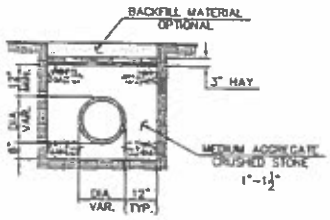
DRAWING NO.: SD-1



NOTES

1. ALL PIPE IN A VEHICULAR TRAVELWAY, HAVING LESS THAN THREE FEET OF COVER OVER PIPE SHALL BE SADDLED USING CLASS "C" CONCRETE AS SHOWN. PIPES TO BE LAYED TO LINE AND GRADE IN A BED OF CONCRETE.
2. PIPES HAVING AN INSIDE DIAMETER UP TO AND INCLUDING 48 INCHES SHALL BE BACKFILLED WITH APPROVED BACKFILL MATERIAL. PIPES HAVING AN INSIDE DIAMETER GREATER THAN 48 INCHES SHALL HAVE BEDDING MATERIAL EXTEND TO 12 INCHES ABOVE THE PIPE. ABOVE THAT LEVEL APPROVED BACKFILL MAY BE USED.
3. PVC PLASTIC PIPE CONFORMING TO ASTM D-3034 SDR 35 CAN BE SUBSTITUTED FOR RCP AND BACKFILLED ENTIRELY WITH BEDDING MATERIAL PER NOTE 2 ABOVE AT NO ADDITIONAL COST TO THE CITY.
4. BEDDING UNDER PIPE SHALL BE INCREASED TO 12 INCHES MIN. IN ROCK.

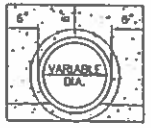
REINFORCED CONCRETE PIPE



POROUS PIPE - SECTION

PIPE IN TRENCH DETAILS

NOT TO SCALE

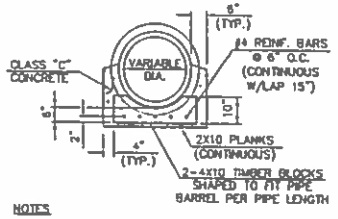


NOTES

1. ALL LATERALS HAVING LESS THAN THREE FEET OF FILL OVER PIPE SHALL BE SADDLED USING CLASS "C" CONCRETE AS SHOWN.
2. LATERALS SHALL BE LAYED TO LINE AND GRADE IN A BED OF CONCRETE AND IMMEDIATELY ENCASED AS SHOWN.

CONCRETE SADDLE FOR LATERALS

NOT TO SCALE



NOTES

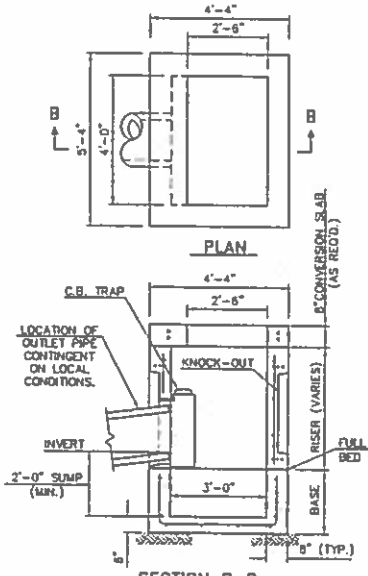
1. REINFORCED CONCRETE CRADLE SHALL BE USED ONLY IF ORDERED BY THE ENGINEER.
2. REINFORCING BARS SHALL PASS THROUGH 1"ø HOLES DRILLED IN 4"X10" TIMBER BLOCKS.

REINFORCED CONCRETE CRADLE

NOT TO SCALE

NOTES

1. ALL PRECAST SECTIONS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE, INCLUDING THE SUMP. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 40 OR BETTER. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
2. COMPACTION AROUND ALL STRUCTURES TO BE HAND TAMPED IN ACCORDANCE WITH SECTION 2.08 OF CONNDOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, LATEST EDITION.
3. UNREINFORCED PIPES SHALL BE CUT FLUSH WITH INSIDE FACE OF C.B. WALL. REINFORCED PIPES SHALL BE CUT TO PROVIDE 1" RECESS INTO FACE OF C.B. WALL. CUT END SHALL THEN BE PATCHED WITH MORTAR FLUSH WITH WALL.
4. ALL UNUSED KNOCK-OUTS SHALL BE BRICKED UP WHERE DIRECTED BY THE ENGINEER.
5. TYPE "C" CATCH BASIN HEAVY DUTY FRAME AND GRATE TO BE CAMPBELL FOUNDRY CO. NO. 2817 OR ENGINEER APPROVED EQUAL.
6. TYPE "C-L" CATCH BASIN HEAVY DUTY FRAME AND GRATE TO BE CAMPBELL FOUNDRY CO. NO. 3408 OR ENGINEER APPROVED EQUAL.
7. FOR OUTLET PIPES 18"I.D. OR SMALLER C.B. TRAPS TO BE CAMPBELL FOUNDRY NO. 2546 OR ENGINEER APPROVED EQUAL. FOR LARGER PIPES, LARGER TRAPS SHALL BE USED, SUBJECT TO THE APPROVAL OF THE ENGINEER. TRAPS SHALL BE HUNG FROM TWO 1/2" SQUARE STAINLESS STEEL HANGER HOOKS EMBEDDED IN WALL OF C.B.
8. AS DIRECTED, THE CONTRACTOR SHALL ADHERE THE APPROPRIATE "DON'T DUMP" PLAQUE FURNISHED BY THE CITY, TO TOPS OF CATCH BASIN FRAMES, AS SHOWN. IN ADDITION TO THE PEEL AND STICK BACKING, CONTRACTOR SHALL BOND PLAQUE TO SUBSTRATE USING EXTERIOR GRADE CONSTRUCTION ADHESIVE. COST OF THIS SHALL BE INCLUDED IN THE COST OF CATCH BASIN WORK.

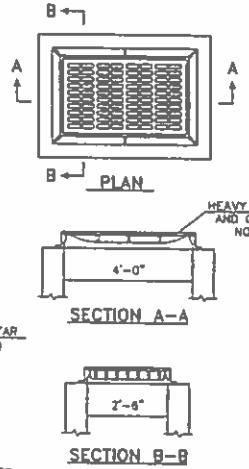


NOTES

1. APPLICABLE FOR TYPE "C" AND TYPE "C-L" CATCH BASINS.
2. HEAVY DUTY GRATE AND FRAME NOT SHOWN.

TYPICAL PRECAST CATCH BASIN (STANDARD)

NOT TO SCALE

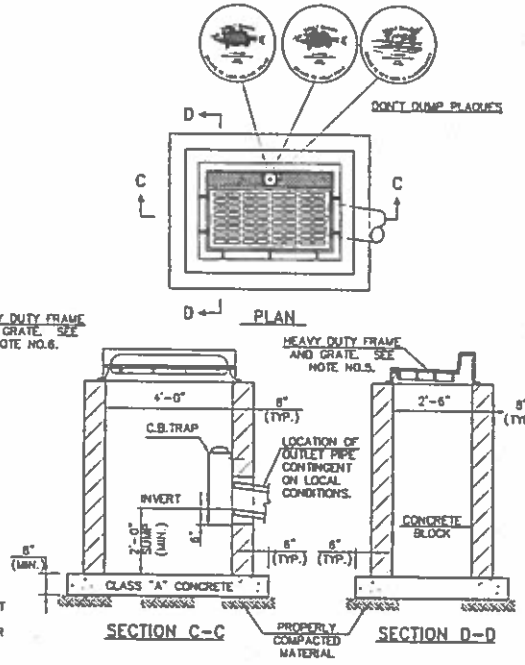


NOTES

1. MASONRY CATCH BASIN SHOWN, PRECAST CATCH BASIN SIMILAR.
2. SEE STANDARD CATCH BASIN DETAIL FOR ADDITIONAL INFORMATION.

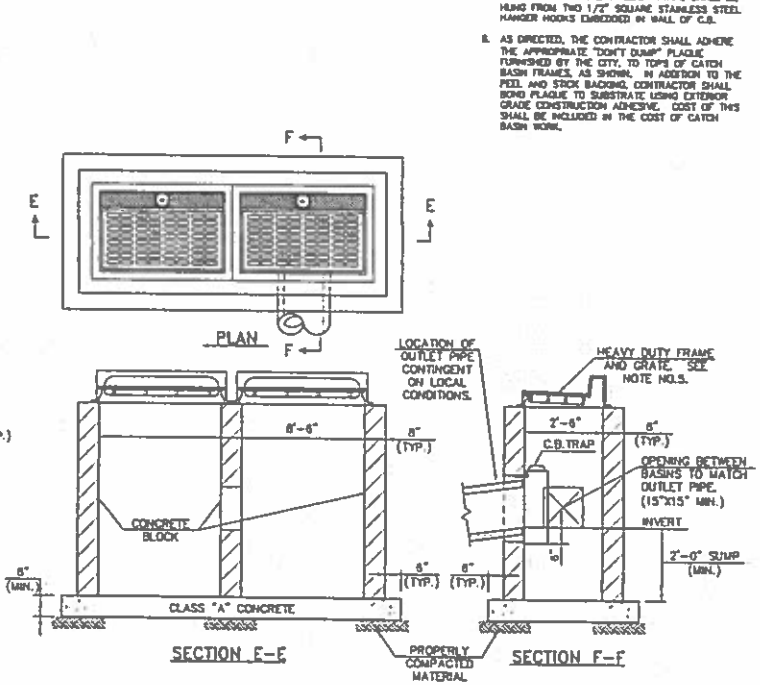
C-L CATCH BASIN FRAME AND GRATE

NOT TO SCALE



STANDARD CATCH BASIN (MASONRY) TYPE B-1 AND TYPE "C"

NOT TO SCALE



DOUBLE CATCH BASIN (MASONRY) TYPE B-2 AND TYPE "C"

NOT TO SCALE

REV.	DATE	DESCRIPTION	SHT. NO.
2	11/14	ADD CLASS "F" CONC. CHG. TO 22X24 SHEET	
1	7/08	REVISE MANHOLE STEPS	

REVISION

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS AND IS IN NO WAY GUARANTEED TO INDICATE THE CONDITIONS OR ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED

DESIGNED: ENGINEERING BUREAU
DRAFTED: ENGINEERING BUREAU
CHECKED BY:
DATE CHECKED:

CITY OF STAMFORD
OFFICE OF OPERATIONS
ENGINEERING BUREAU

APPROVED BY: DATE:

DRAWING TITLE: STORM DRAINAGE DETAILS

DRAWING NO.: SD-2

GENERAL NOTES

1) SIDEWALK RAMPS SHALL BE CONSTRUCTED AT ALL PEDESTRIAN CROSSWALK TO ALL NEW DESIGNS AND AT PEDESTRIAN CROSSWALK LOCATIONS WHERE AN EXISTING CURB OR WALL IS TO BE REMOVED BY CONSTRUCTION.

2) DRAINAGE DESIGN IN THE VICINITY OF SIDEWALK RAMPS SHALL BE CONSIDERED AN INTEGRAL PART OF THE DESIGN OF THESE RAMPS. NO DRAINAGE STRUCTURES SHALL BE PLACED WITHIN THE LIMITS OF A SIDEWALK RAMPS OR GUTTER.

3) NO RAMPS SHALL BE OF THE TYPE OF PAVEMENT OR ADJACENT SIDEWALK. ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.

4) ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS FOR 5" THICK CONCRETE SIDEWALK, EXCEPT THAT THE FINAL TEXTURE OF THE CONCRETE SURFACE BE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.

5) CARE SHALL BE TAKEN TO ASSURE A SMOOTH GRADE ON THE RAMP, FREE OF EDGE AND GRADE CHANGES.

6) MINIMUM WIDTH OF SIDEWALK RAMP SHALL BE 4 FEET.

7) THE BOTTOM OF THE RAMP (WITHIN THE LINES) SHALL BE BEVELED.

8) A GREEN COLORED DRY SHAKE SHALL BE APPLIED TO BE FREELY FLOATED CONCRETE, ONE-THIRD TO ONE-HALF POUNDS PER SQUARE FOOT.

9) AMERICAN CONCRETE INSTITUTE STANDARDS ACI-318 (LATEST EDITION)

PLAN — SECTION A-A

SIDEWALK RAMP TYPE 1

SECTION B-B

SIDEWALK RAMP TYPE 2

SUGGESTED TREATMENTS FOR SIDEWALK RAMPS

SIDEWALK RAMP TYPE 3

REINFORCED CONCRETE REPAIR

BRICK REPAIR

BITUMINOUS PAVEMENT GRADE A

BITUMINOUS PAVEMENT GRADE B

GRAVEL & DIRT ROADS

TYPICAL TRENCH REPAIRS
SCALE 3/4" = 1'-0"

WELDED WIRE FABRIC 6 x 6 x 2.9 x 2.9 SHEETS ONLY. DISCONTINUE AT EXPANSION JOINTS.

SCALE 1/2" = 1'-0"

GRANITE STONE CURB
SCALE 3/4" = 1'-0"

STANDARD DRIVEWAY
HEAVY DUTY DRIVEWAY
SCALE 1/8" = 1'-0"

SECTION A-A

TYPICAL CONSTRUCTION OF CURB AT DRIVEWAY
SCALE 1/2" = 1'-0"

CONCRETE GUTTER
SCALE 3/4" = 1'-0"

BITUMINOUS CONCRETE LIP CURBING
MACHINE FORMED

LONGITUDINAL JOINT

EXPANSION JOINT

TYPICAL CONTRACTION JOINT

EXPANSION JOINT

TRANSLODE CONTRACTION JOINT

TRANSLODE EXPANSION JOINT

TYPICAL PAVEMENT JOINTS
SCALE 1 1/2" = 1'-0"

PLAN

SECTION
CUT-OFF WALL DETAIL

PLAN

PLAN

E-SECTION
DETAIL SHOWING METHOD OF RAISING MANHOLE FRAME & COVERS
IN GRAVEL OR TRAP ROCK BASED BITUMINOUS PAVEMENTS TO NEW GRADE
SCALE 1/2" = 1'-0"

E-SECTION
DETAIL SHOWING METHOD OF RAISING MANHOLE FRAMES & COVERS
IN CONCRETE BASED PAVEMENTS TO NEW GRADE
SCALE 1/2" = 1'-0"

PLAN OF A SECTION OF CONCRETE SIDEWALK
SCALE 1/4" = 1'-0"

NOTES
1) A 1/2" PREMOLDED EXPANSION JOINT SHALL BE UTILIZED BETWEEN ALL CURB STRUCTURES (CBCS, CURB WALLS) AND NEW SIDEWALK WORK.
2) ADDITIONAL CONTROL JOINTS SHALL BE PLACED AS REQUIRED TO ELIMINATE ANY CONDITION WHICH WILL CAUSE STRESS WITH CRACKING IN CORNERS OF STRUCTURES.
3) ALL REINFORCING SHALL BE SUPPORTED ON CHAIRS OR OTHER POSITIVE TYPE SUPPORTS SPACED ONE PER 25 SQ. FT.
4) CONCRETE SHALL BE CLASS "C" CEMENT TYPE II, 3000 PSI.

BALED HAY OR STRAW SILTATION CONTROL DETAIL

ALL PIPES UP TO AND INCLUDING 18" I.D.

ALL PIPES OVER 18" I.D.

CULVERTS ALL SIZES

MANHOLES ALL SIZES

TYPICAL ROCK EXCAVATION PAY LINES

DETAIL COMPACTION STANDARDS

NOTE
ZONE 1 COMPACTION 95% STANDARD PROCTOR REQUIRED
ZONE 2 COMPACTION 90% STANDARD PROCTOR REQUIRED OR MIN. RELATIVE DENSITY-70%

NO.	DATE	DESCRIPTION	CK
1	11/1/99	VARIOUS CHANGES, 30" and 36" I.D. MANHOLES	
2	11/1/99	CONC. AND MAS CRADLES 1-2-4 MIX	
3	11/1/99	4 1/2" TO 5" DROP CURB	
4	11/1/99	30" and 36" MHS & 24" MAS and OTHER CHANGES	
5	11/1/99	REVISED EXPANSION JOINT FROM 3/4" TO 1"	

SEAL

CITY OF STAMFORD CONN.

BUREAU OF ENGINEERING

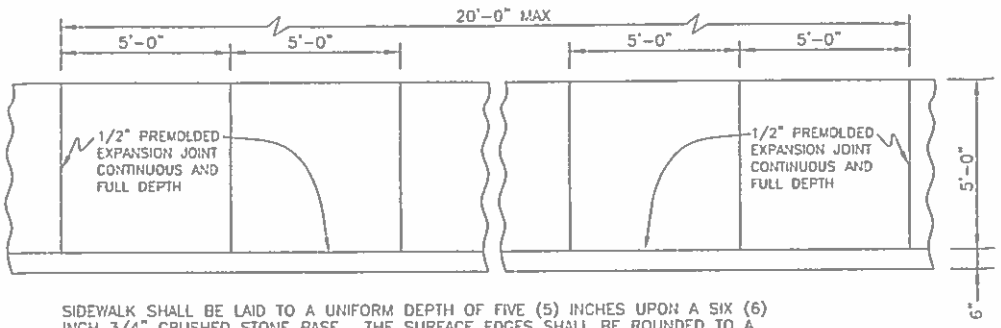
SURVEYED BY	DATE	DRAWN BY	DATE
		R. TRELLO & SIMAT	
DESIGNED BY	DATE	CHECKED BY	DATE
DES. SUPV.	DATE	APPR. BY	DATE

TITLE: STANDARDS

SCALE AS NOTED

PROJECT NO.

DESCRIPTION

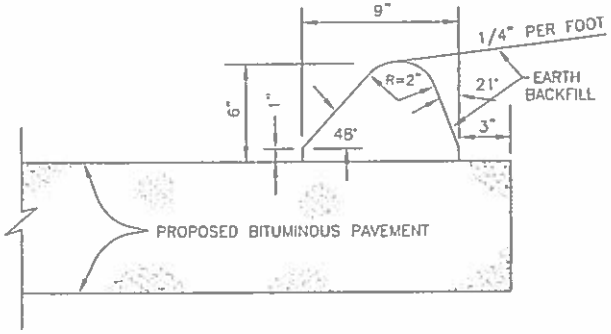


SIDEWALK SHALL BE LAID TO A UNIFORM DEPTH OF FIVE (5) INCHES UPON A SIX (6) INCH 3/4" CRUSHED STONE BASE. THE SURFACE EDGES SHALL BE ROUNDED TO A RADIUS OF 3/32 INCH.
A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED TRANSVERSELY EVERY 20 FT. MAX. AND BETWEEN NEW CONCRETE CURBING AND SIDEWALKS. A CONTROL JOINT SHALL BE MADE AT 5' INTERVALS BETWEEN BITUMINOUS JOINTS. ANY CHANGES REQUIRED BY LOCAL CONDITIONS SHALL BE MADE ONLY BY ORDER OF THE CITY ENGINEER. CONTROL JOINTS SHALL BE A MIN. DEPTH OF 1" OR D/4

PLAN OF A SECTION OF CONCRETE SIDEWALK

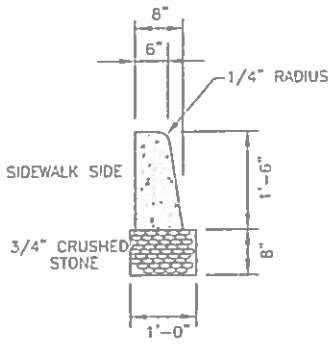
SCALE: 1/4" = 1'-0"

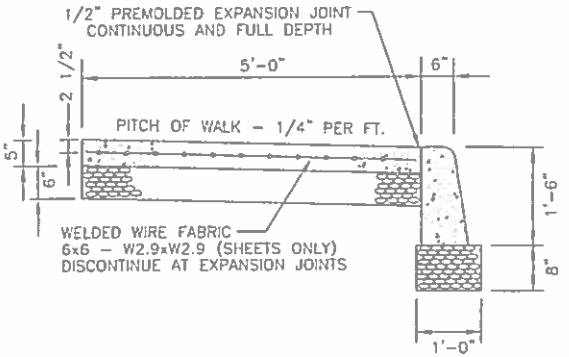
NOTES:
1) A 1/2" PREMOLDED EXPANSION JOINT SHALL BE UTILIZED BETWEEN ALL RIGID STRUCTURES (INCLUDING WALLS) AND NEW SIDEWALK WORK.
2) ADDITIONAL CONTROL JOINTS SHALL BE PLACED AS REQUIRED TO ELIMINATE ANY CONDITION WHICH WILL CAUSE STRESS VERTICES (EXAMPLE AT CORNERS OF STRUCTURES)
3) CONCRETE SHALL BE CLASS "C" CEMENT TYPE II (3000 PSI MIN.)
4) AIR ENTRAINMENT SHALL BE BETWEEN 6-7%



BITUMINOUS CONCRETE LIP CURBING

MACHINED FORMED

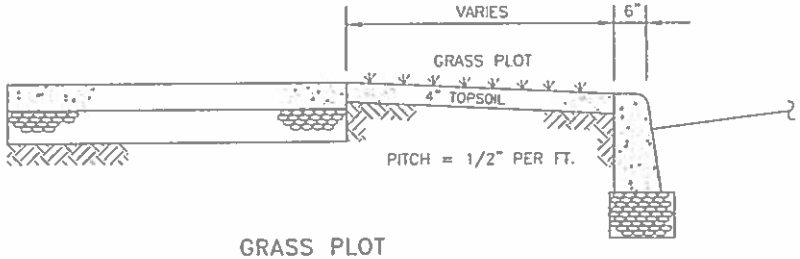




NOTES:
1) ALL CURBING TO BE CAST-IN-PLACE.
2) A 1/8" STEEL DIVISION PLATE SHALL BE PLACED AT EVERY 10 FEET OF CURBING & REMOVED AFTER CONCRETE HAS SET, A 1/2" APPROVED BITUMINOUS JOINT SHALL BE PLACED AT A MAX. OF EVERY 20 FEET COINCIDING WITH EXPANSION JOINT IN SIDEWALK
3) CONTRACTOR TO CONSTRUCT 2" BATTER ON CONCRETE CURBING (STREET SIDE ONLY)

STANDARD CURB & SIDEWALK

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



GRASS PLOT

NO.	DATE	DESCRIPTION	CK.
1	1/11	Rev. Notes C.I.P. Curb	

REVISIONS

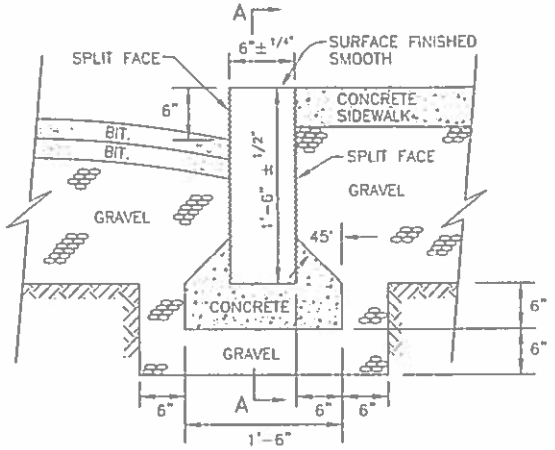
FILE NO.

CITY OF STAMFORD

ENGINEERING BUREAU

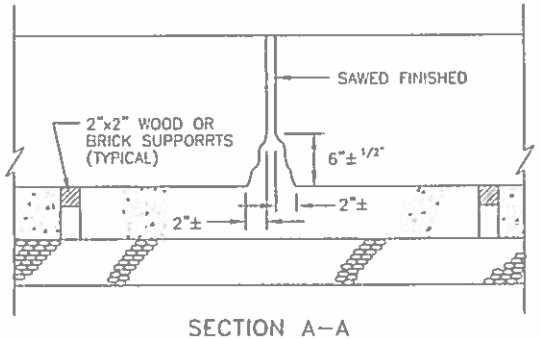
SKETCHES & CALCULATIONS

Project No. & Name STANDARDS
Subject SIDEWALKS & CURBING
Made by ELG Date 6/16/99
Chk. by AI Date 6/16/99
SW-1 Sheet No. 1 of 2

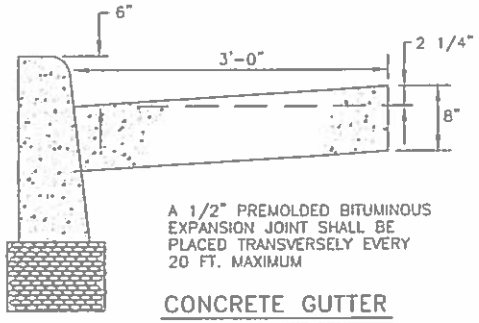


GRANITE STONE CURB

SCALE: 3/4" = 1'-0"



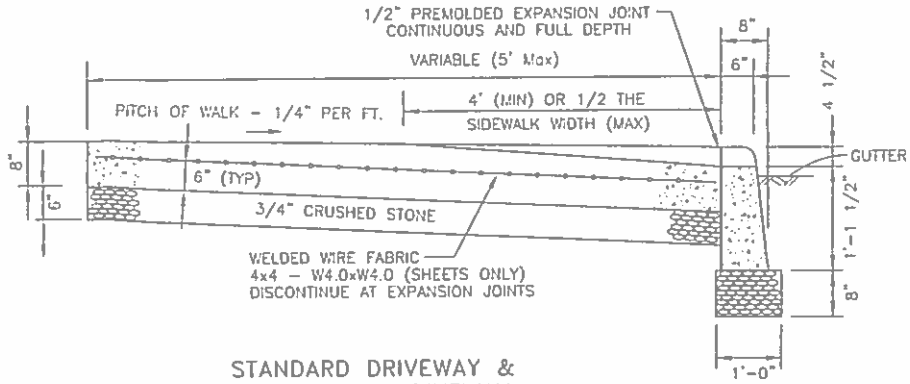
SECTION A-A



A 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT SHALL BE PLACED TRANSVERSELY EVERY 20 FT. MAXIMUM

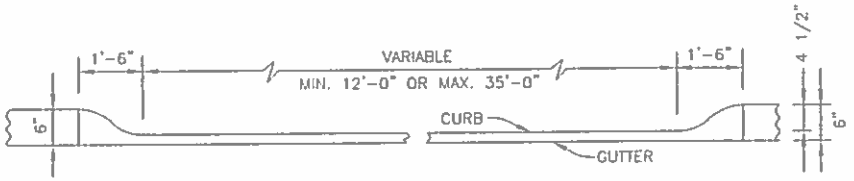
CONCRETE GUTTER

SCALE: 3/4" = 1'-0"



STANDARD DRIVEWAY & HEAVY DUTY DRIVEWAY

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



TYPICAL CONSTRUCTION OF CURB AT DRIVEWAY

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

NOTES:

1. ALL REINFORCING SHALL BE SUPPORTED ON CHAIRS OR OTHER POSITIVE TYPE SUPPORTS APPROXIMATELY ONE PER 25 SQ.FT.
2. CONCRETE SHALL BE CLASS "C" CEMENT TYPE II, 3000 PSI
3. AIR ENTRAINMENT SHALL BE BETWEEN 6 - 7%.
4. ALL CURBING TO BE CAST-IN-PLACE.

NO.	DATE	DESCIPTION	CK.
2	1/11	Rev. Notes C.I.P. Curb	
1	8/99	Rev. Driveway X-Sect.	

REVISIONS

FILE NO.

CITY OF STAMFORD

ENGINEERING BUREAU

SKETCHES & CALCULATIONS

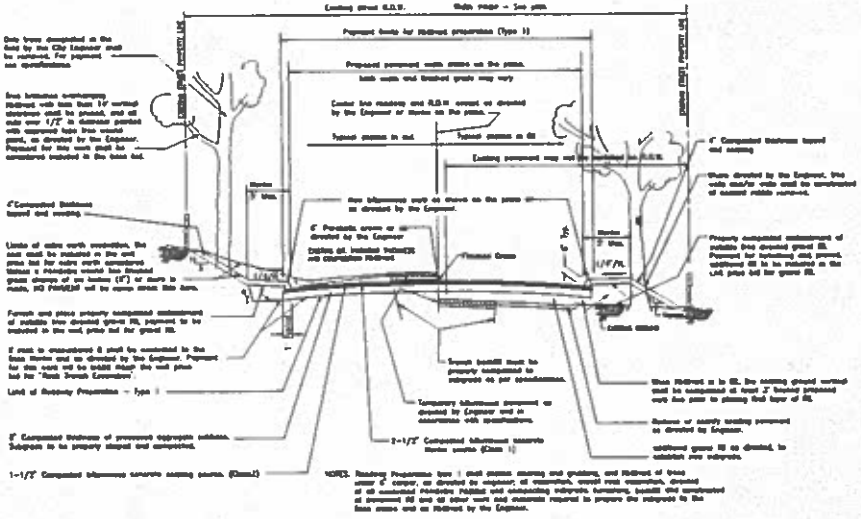
Project No. & Name STANDARDS

Subject SIDEWALKS & CURBING

Made by ELG Date 6/16/99

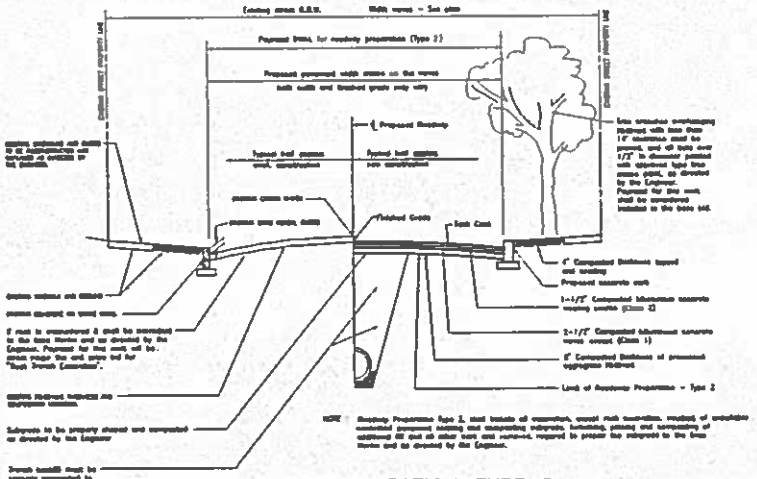
Chk. by AI Date 6/16/99

SW-2 Sheet No. 2 of 2



TYPICAL ROADWAY SECTION - TYPE 1

NOT TO SCALE



TYPICAL ROADWAY SECTION-TYPE 2

NOT TO SCALE

NO	DATE	DESCRIPTION	CK
		REVISIONS	
FILE NO			

SEAL

CITY OF STAMFORD CONN.

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS

SURVEYED BY	DATE	DRAWN BY	DATE
DESIGNED BY	DATE	CHECKED BY	DATE
DES. SUPV.	DATE	MISP SUPV	DATE

CITY ENGINEER

TITLE

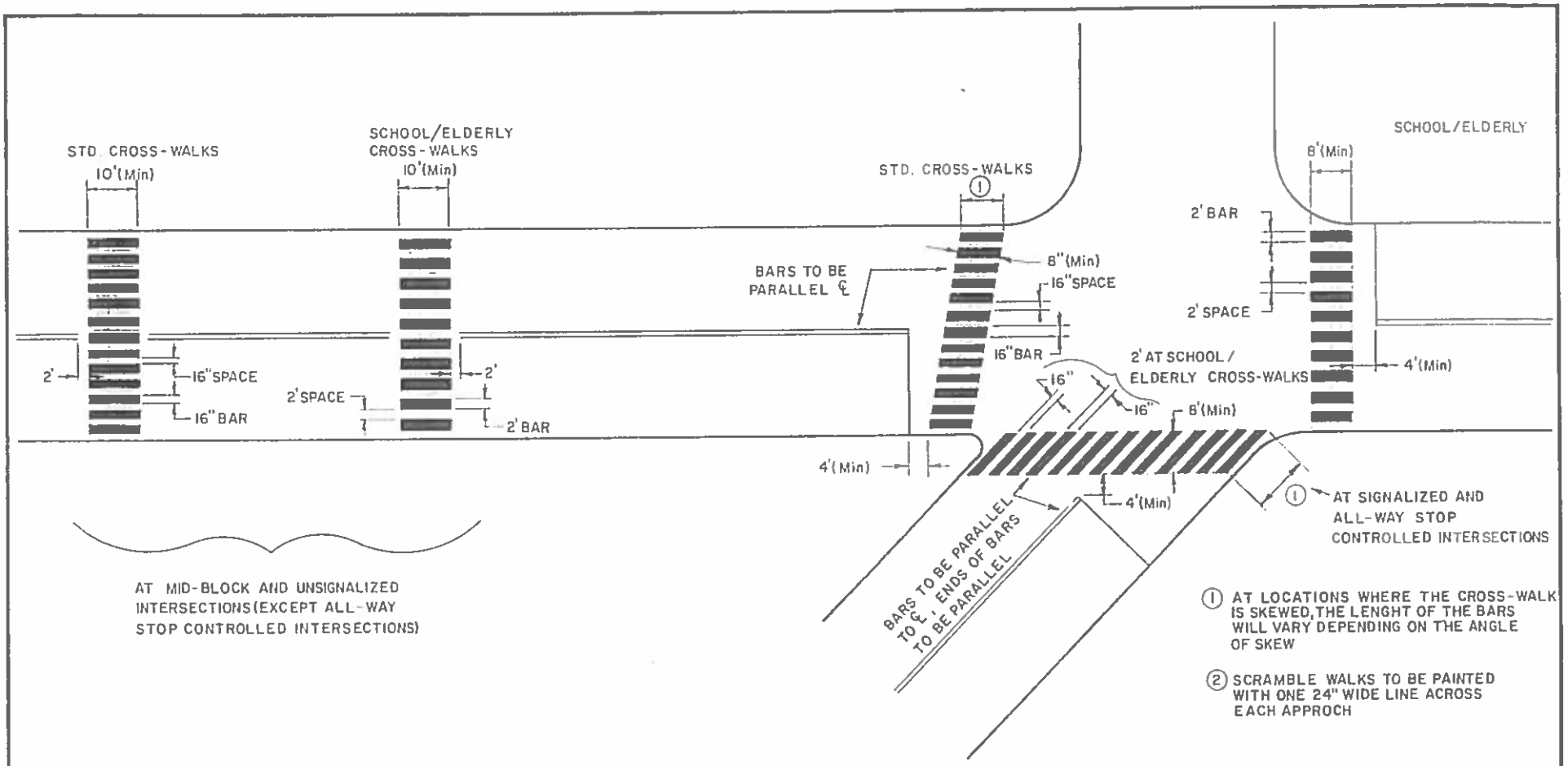
DESCRIPTION

SCALE

PROJECT NO.

SHEET NO.

OF



CITY OF STAMFORD

ENGINEERING BUREAU

SKETCHES & CALCULATIONS

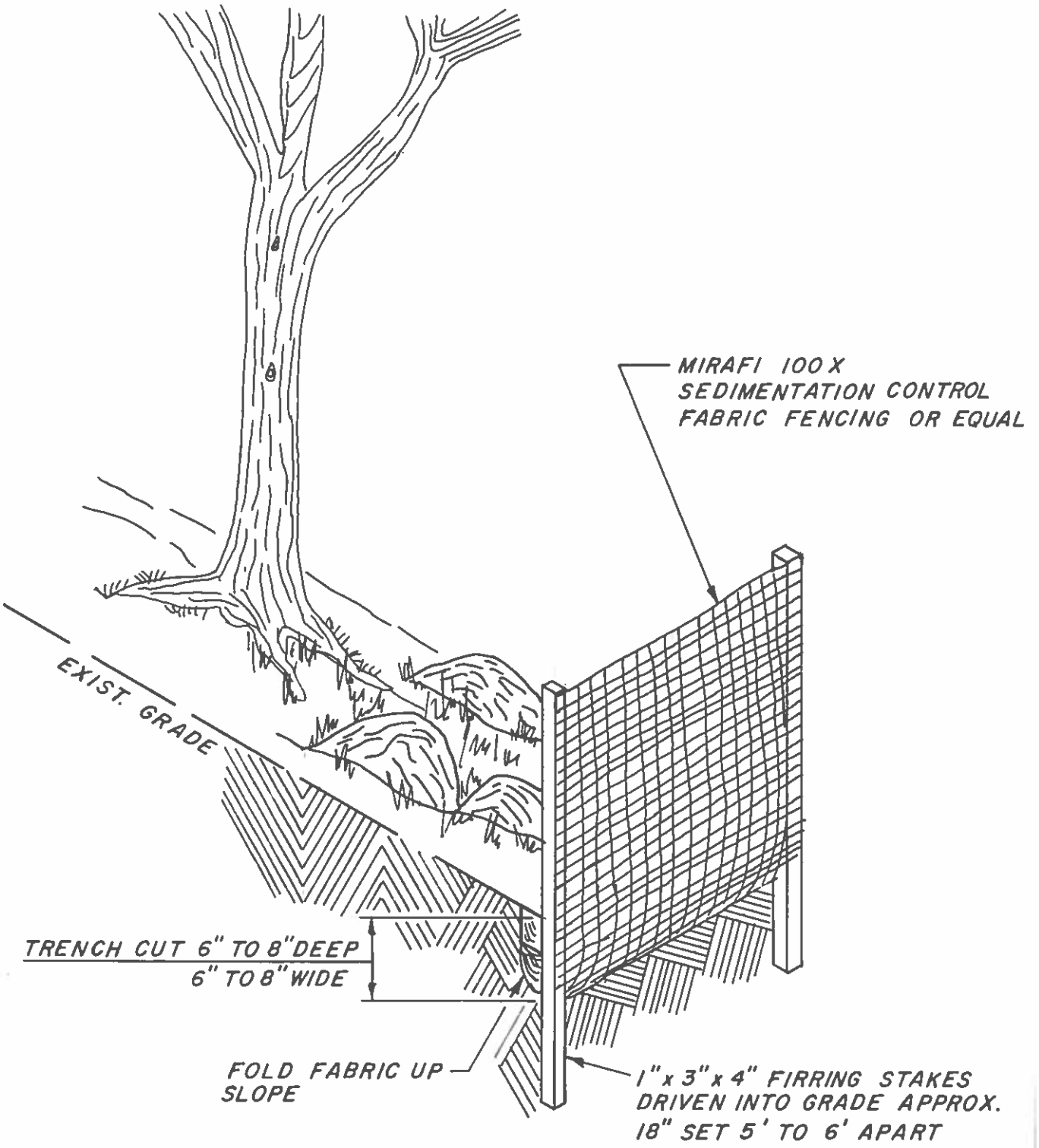
Project No & Name _____

Subject TYPICAL CROSSWALK DIAGRAM

Made by R. TOZZOLI Date 8/1/95

Chk. by _____ Date _____

Sheet No. 1 of 1



NOTE:
AFTER FOLDING FABRIC EDGE BACKFILL
TRENCH WITH ORIGINAL SOIL AND BUTTRESS
THE SPLAY WITH MULCH OF LEAF LITTER

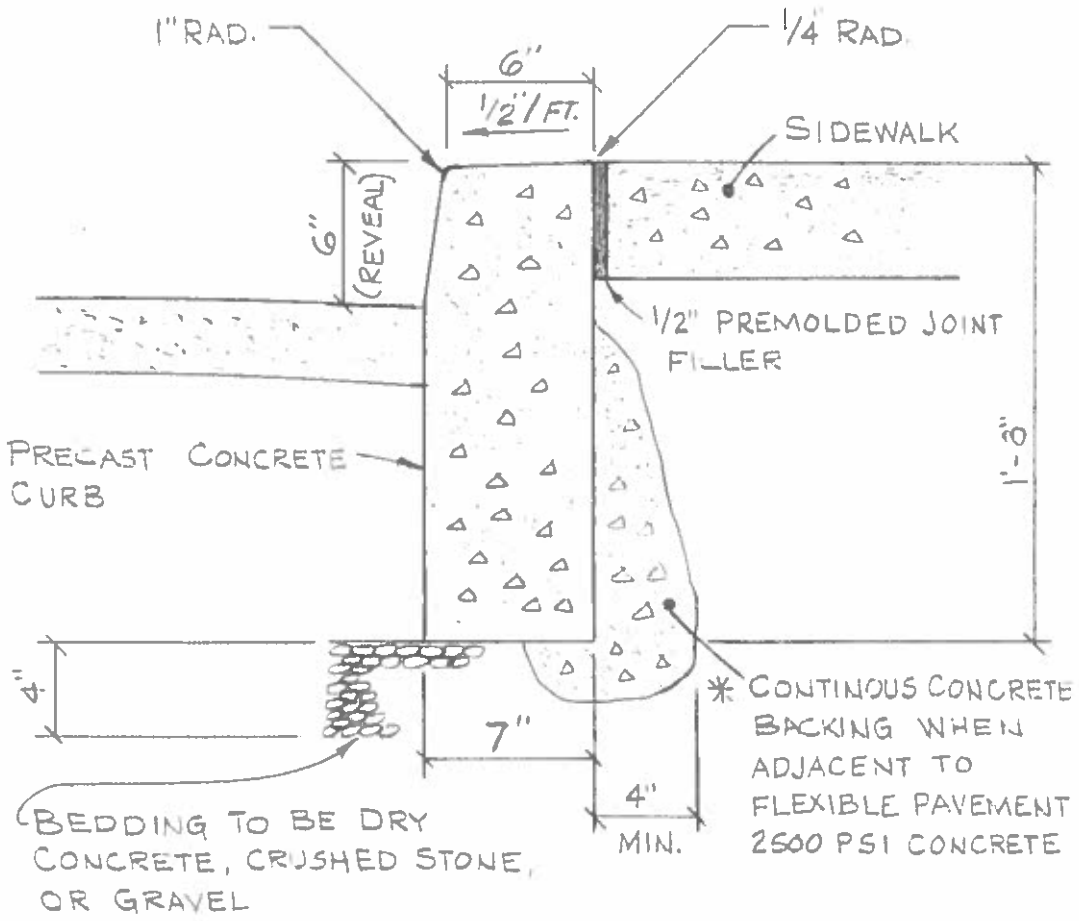
DETAIL
FILTER FENCE
N.T.S.

CITY OF STAMFORD

ENGINEERING BUREAU

SKETCHES & CALCULATIONS

Project No. & Name :	Made: R.T.	Date 2-3-94	Sht. 1 of 1
Subject: PRE-CAST CONCRETE CURB	Chk.: P.B.	Date 2-4-94	COMMENTS



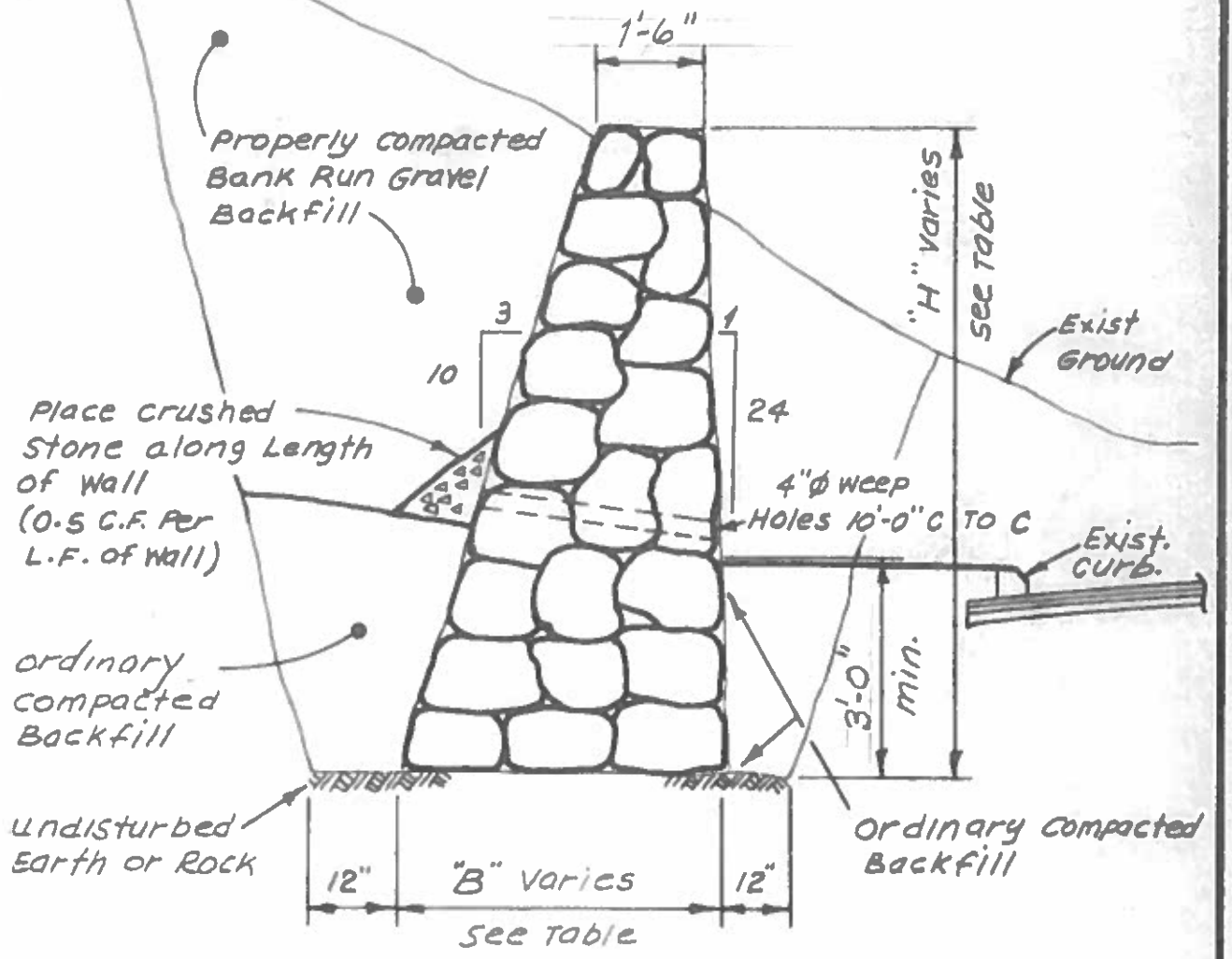
TYPICAL DETAIL PRE-CAST CONCRETE CURB

(N.T.S.)

* WHEN CURBING IS INSTALLED ADJACENT TO RIDGED PAVEMENT CONCRETE BACKING SHALL BE PLACED BEHIND CURB JOINTS FOR A MIN. OF 12 INCHES EACH SIDE OF JOINT

TABLE FOR WALL DIMENSIONS

B	H
3'-7"	6'
4'-3"	8'
4'-11"	10'
5'-7"	12'
6'-3"	14'



TYPICAL DETAIL

CEMENT RUBBLE MASONARY WALL

(N.T. S.)

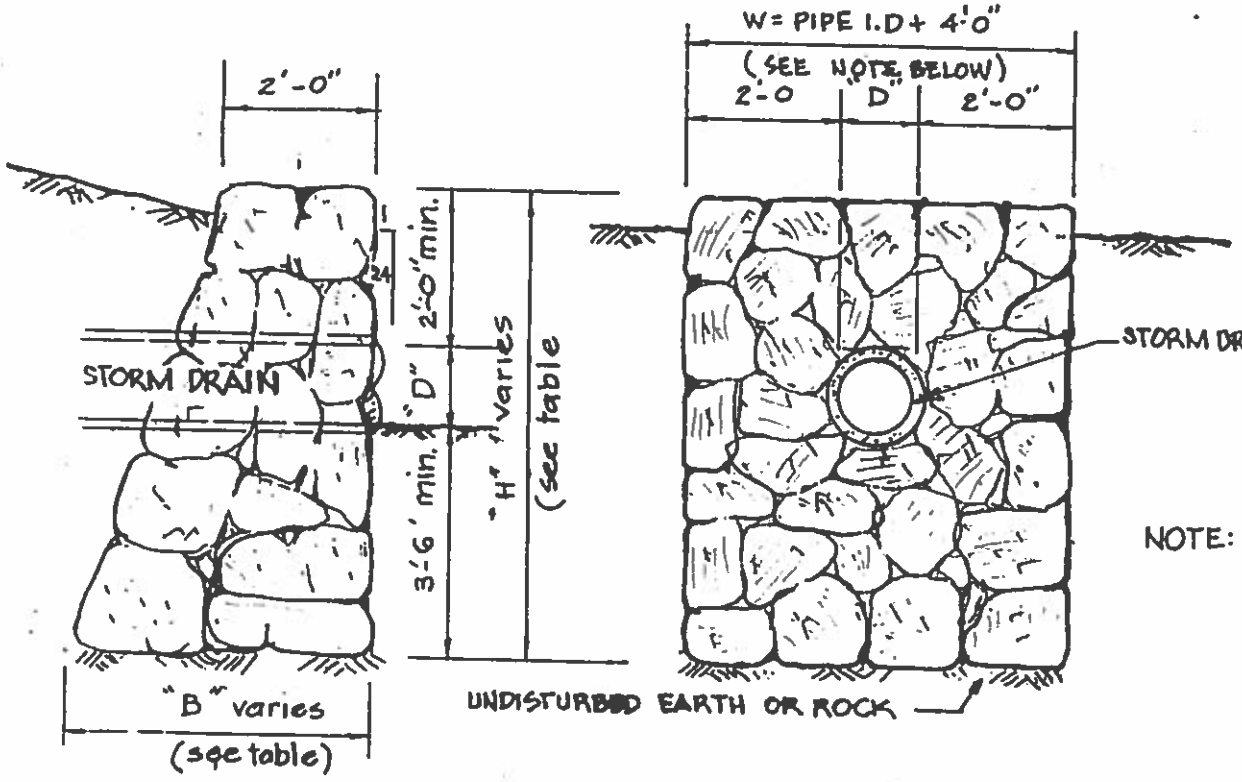


TABLE FOR WALL DIMENSIONS

H	B
6	4
8	5
10	6
12	7
14	8

NOTE: Should there be more than one line of pipes, the total width of headwall/endwall will be equal to the sum of pipe diameters and spacing (s) between pipes and 4'-0".

CEMENT RUBBLE MASONRY HEADWALL/ENDWALL

n. t. s.

CITY OF STAMFORD

ENGINEERING BUREAU

SKETCHES & CALCULATIONS

Project No. & Name _____

Subject _____

Made by C. Boxall Date _____

Chk. by _____ Date _____

Sheet No. _____ of _____