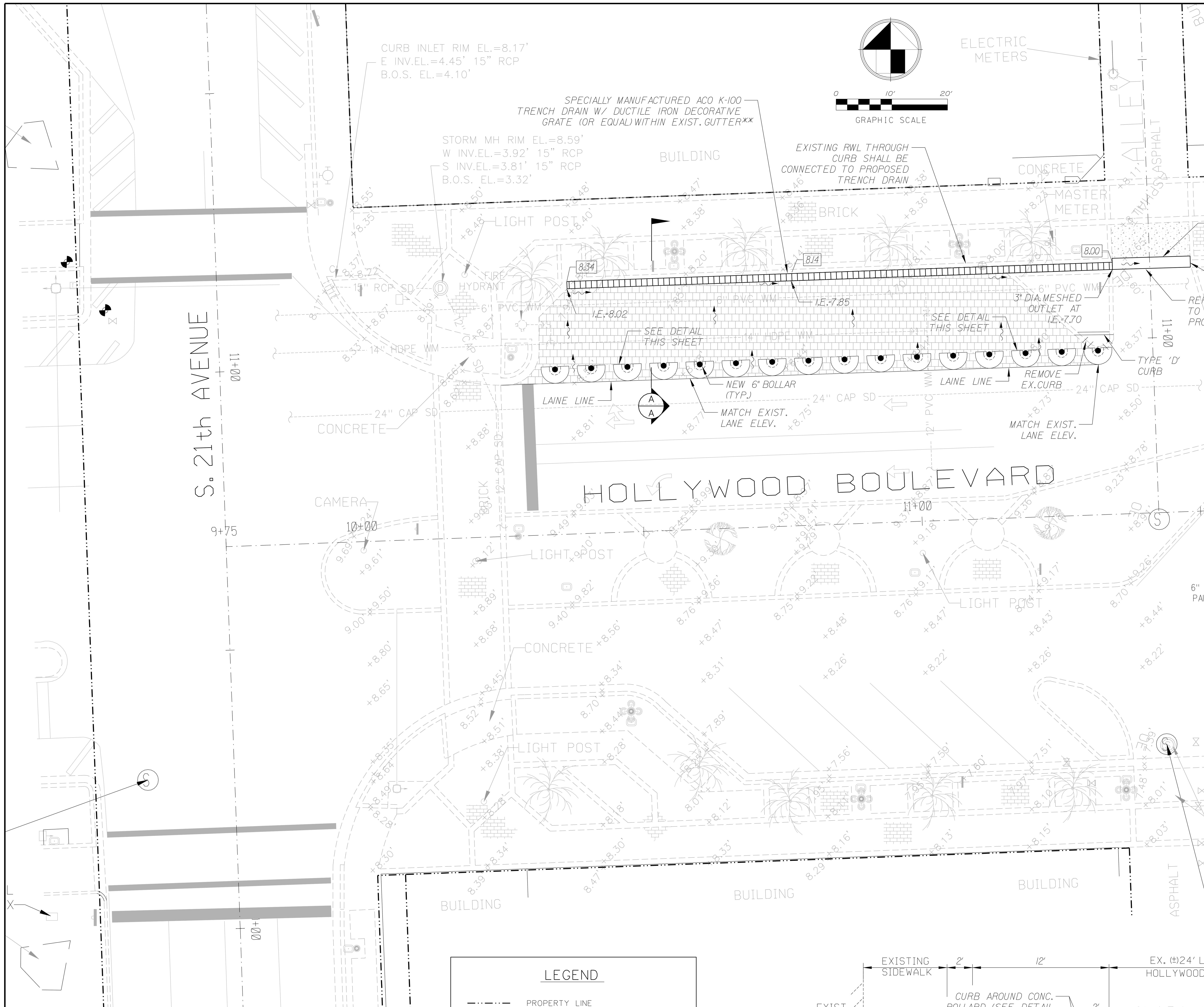
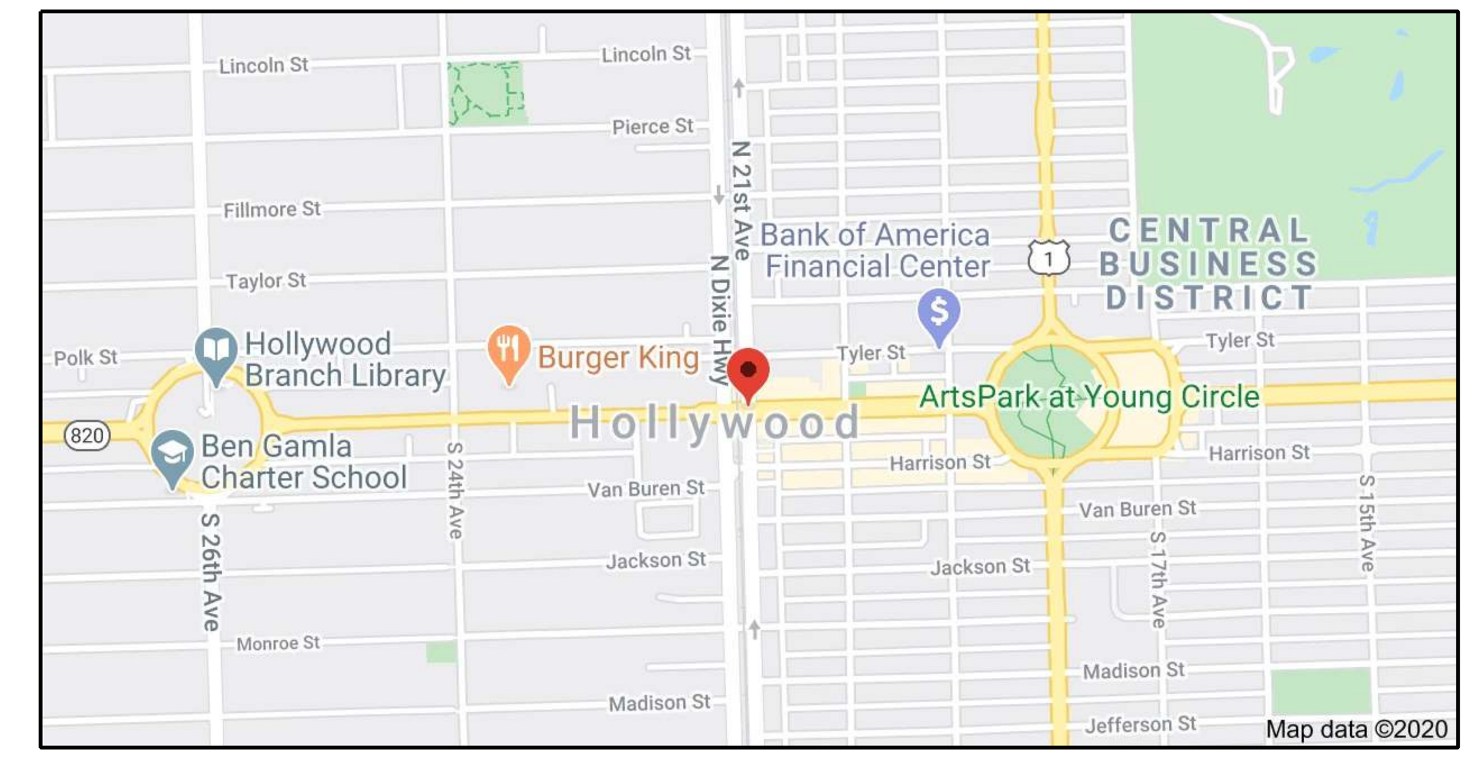
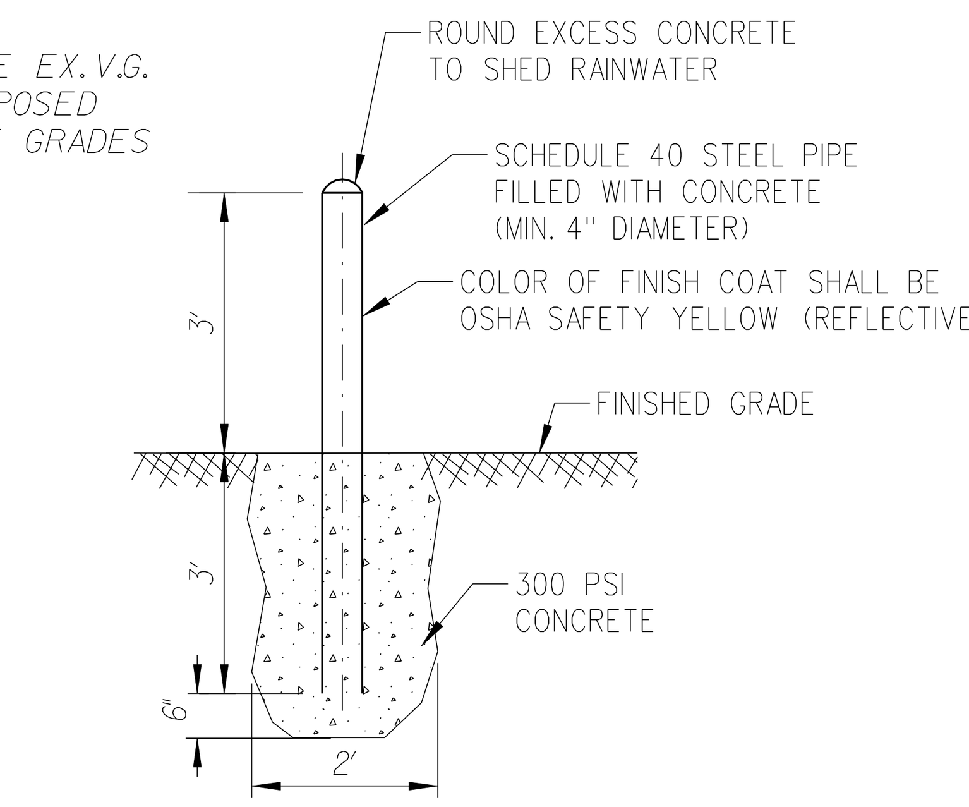
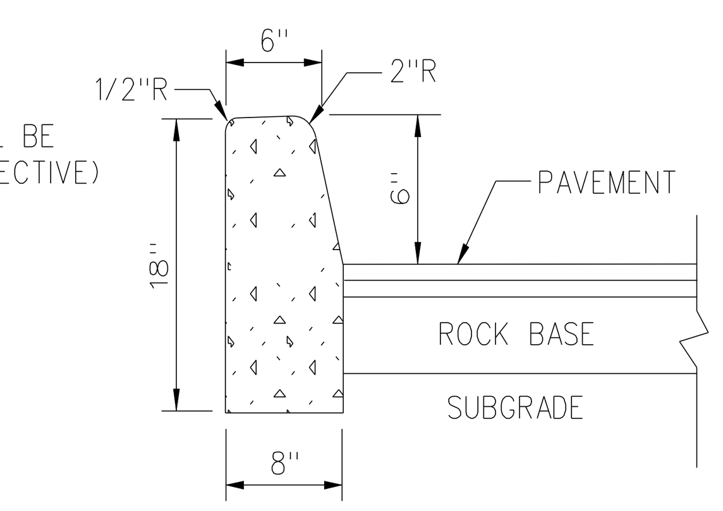




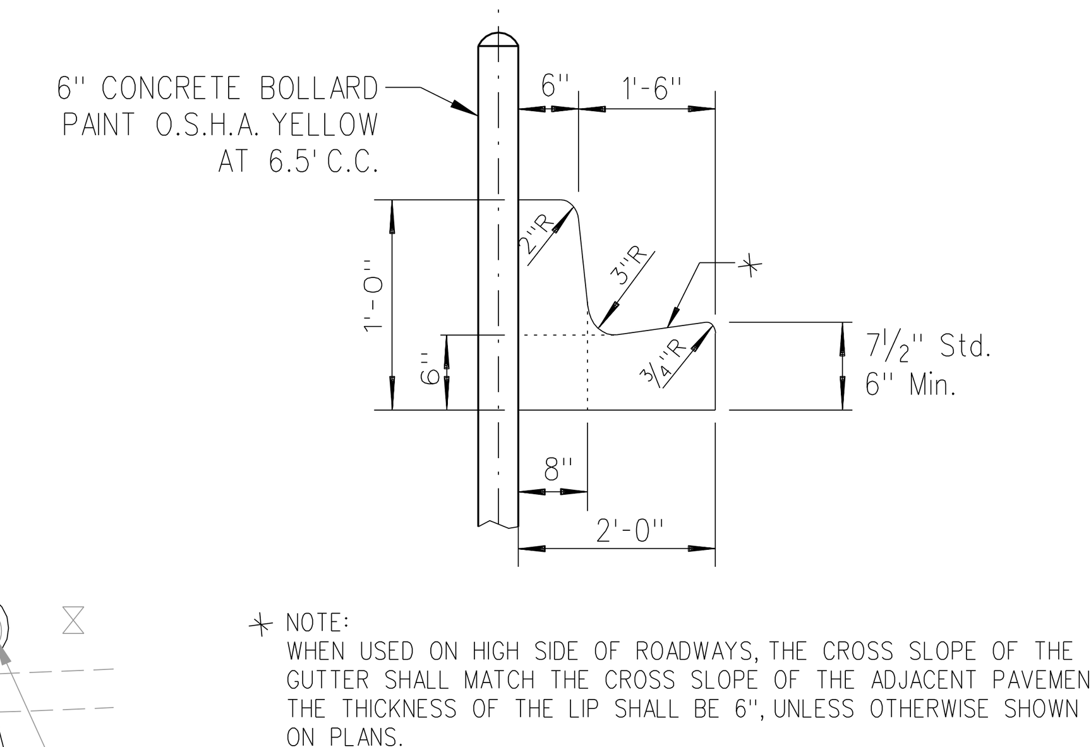
LOCATION MAP
N.T.S.



BOLLARD DETAIL
N.T.S.

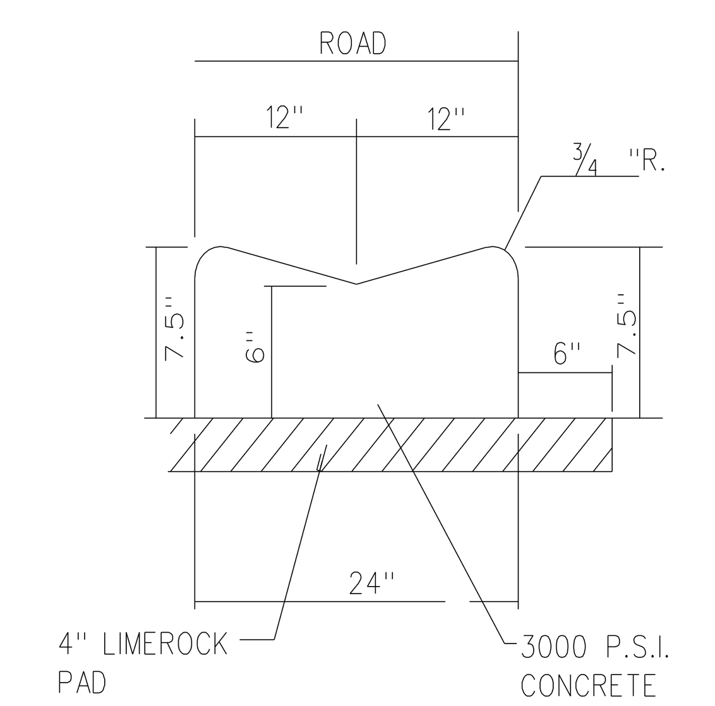


TYPE "D" CURB
N.T.S.

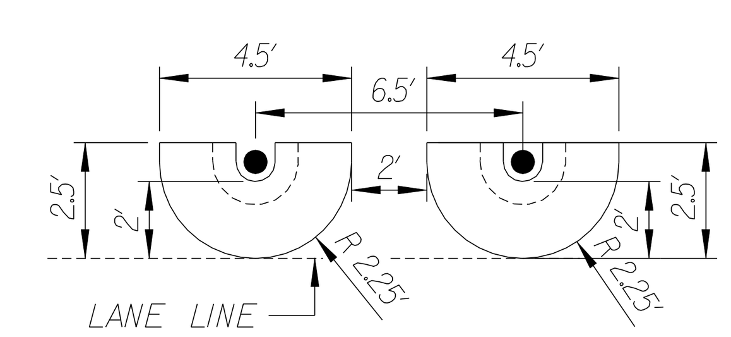


* NOTE:
WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

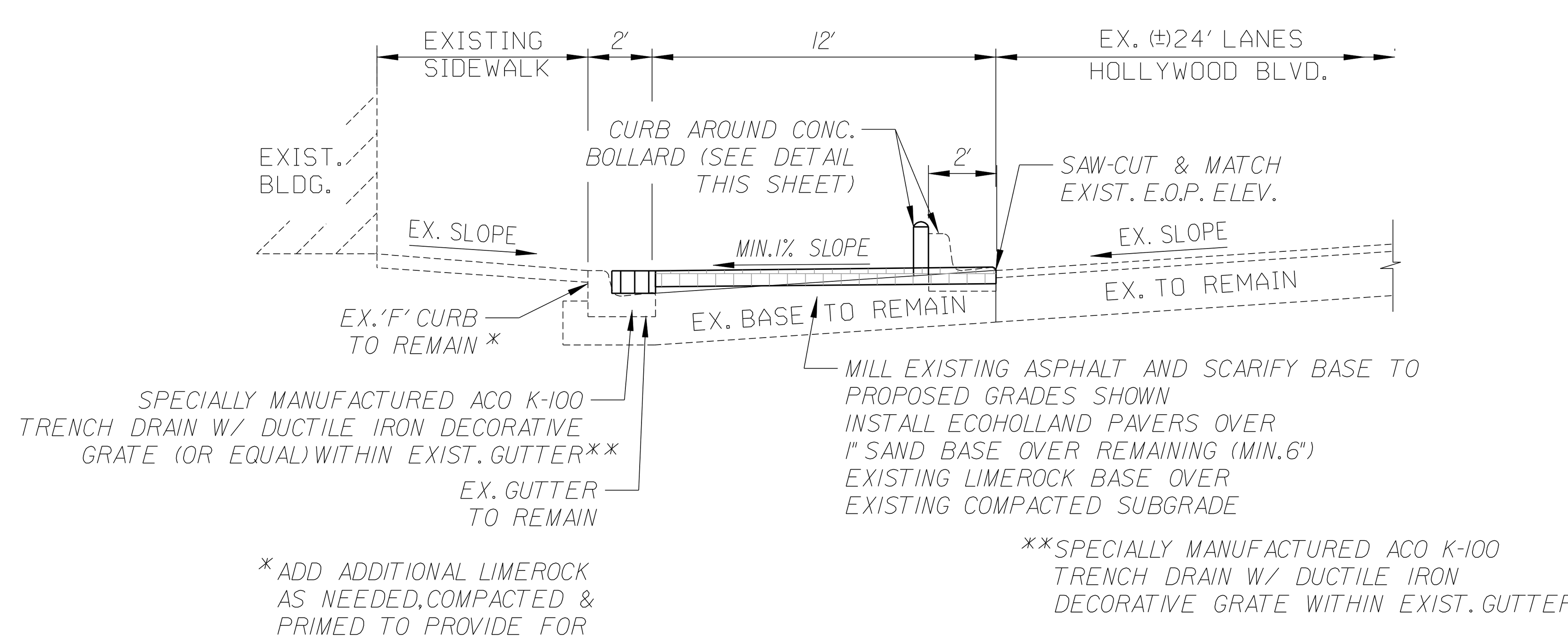
TYPE "F" CURB DETAIL
N.T.S.



VALLEY GUTTER DETAIL
N.T.S.



CURB AROUND BOLLARD DETAIL
N.T.S.



* ADD ADDITIONAL LIMEROCK AS NEEDED, COMPACTED & PRIMED TO PROVIDE FOR PROPOSED GRADES SHOWN

** SPECIALLY MANUFACTURED ACO K-100 TRENCH DRAIN W/ DUCTILE IRON DECORATIVE GRATE WITHIN EXIST. GUTTER

SECTION "A–A"
N.T.S.

NOTES

1. All water generated on this property must be retained on said property.
2. Minimum horizontal clearance is 5 feet from the outside of City's pipe/structure to the outside/edge of the proposed conduit, ductbank, cabinet pad, handhole, handhole boxes, etc. And minimum vertical clearance is 3 feet from outside of City's pipe/structure to the proposed conduit/ductbank, etc. With conduit/ductbank, etc. Installed below City's utilities.
3. Contractor to field adjusts actual location of the proposed work to meet the minimum separation requirements.
4. Contractor to verify locations of utilities via soft dig.
5. Trench drain can be maintained by grade removal and vacuum cleaning and does not requie a clanout for maintenance.

LEGEND

Symbol	Description
—··—··—	PROPERTY LINE
~►	DIRECTION OF OVERLAND FLOW
— — —	EXISTING INFORMATION
	EXISTING FIRE HYDRANT
	EXISTING GATE VALVE
PVC WM	EXISTING WATER MAIN
RCP SD	EXISTING STORM DRAINAGE PIPE
———	PROPOSED INFORMATION
+8.47'	EXISTING GRADE
(8.00)	PROPOSED GRADE - NGVD
[8.12]	PROPOSED CONCRETE GRADE - NGVD
	NEW PERMEABLE PAVERS

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY Gary G. Bloom, PE on 4/13/20 using a SHA authentication code. Printed copies of this ducument are not considered signed and sealed and the SHA Authentication code must be verified on any electronic copies.

gary g bloom

Digitally signed by gary g bloom
DN: cn=gary g bloom c=US o=ggb engineering ou=A01427E000 00165BFA1107C 000077ED
Reason: I am the author of this document
Location:
Date: 2020-04-13 13:41-04:00

GARY GABRIEL BLOOM LICENSE No. 19832 STATE OF FLORIDA PROFESSIONAL ENGINEER

REVISIONS:
1.
2.
3.
4.
5.
6.
7.
8.

CLIENT:
Hollywood Community Development Agency
1948 Harrison Street
Hollywood, FL 33020

PROJECT:
HOLLYWOOD PARKLET
HOLLYWOOD FLORIDA 33020

TASK:
ROADWAY IMPROVEMENTS

GGB Engineering, Inc.
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS • CONSTRUCTION MANAGERS
FLORIDA REGISTRATION No. 8118
2699 Stirling Road, Suite C-202
Fort Lauderdale, Florida 33312
Phone: (954) 986-9899
Fax: (954) 986-6655

DATE:	SCALE:
3/10/20	1"=10'
DESIGNED BY:	DRAWN BY:
G.G.B.	M.M.
PROJECT NO.	
20-0224	
SHEET	
C - 1	

GENERAL NOTES

1. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY HAVE BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL UTILITIES, BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED WITH THE ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS.

2. UNDER FLORIDA STATUTES, THE CONTRACTOR MUST PROVIDE A 48 HOUR NOTIFICATION PRIOR TO ANY OPERATION WHICH WOULD "PIERCE THE EARTH'S SURFACE" WITH THE WORK STARTED WITHIN FIVE WORKING DAYS AFTER ALL UNDERGROUND UTILITIES HAVE BEEN IDENTIFIED. THE NOTIFICATION NUMBER IS A ONE CALL SYSTEM STATEWIDE AT (800) 432-4770 . FAILURE TO COMPLY COULD RESULT IN FINES AND DAMAGES.

UNIVERSAL COLOR CODE FOR MARKING
UNDERGROUND UTILITY LINES

RED	ELECTRIC
YELLOW	GAS-OIL
ORANGE	COMMUNICATION, CATV
BLUE	WATER
GREEN	SEWER
PINK	SURVEY MARKINGS
WHITE	PROPOSED EXCAVATION

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES:

   FLORIDA POWER AND LIGHT COMPANY
   BELL SOUTH
   COMCAST CATV
   CITY OF HOLLYWOOD

4. ALL ELEVATIONS ARE BASED UPON THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929.

5. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF SHOP DRAWINGS FOR APPROVAL TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR CONSTRUCTION FOR ALL MATERIALS USED ON THE PROJECT. APPROVED SHOP DRAWINGS FROM THE ENGINEER SHALL THEN BE SUBMITTED TO CITY OF HOLLYWOOD FOR THEIR APPROVAL. NO CONSTRUCTION SHALL COMMENCE UNTIL THE APPROVED SHOP DRAWINGS HAVE BEEN OBTAINED BY THE CONTRACTOR FROM THE ENGINEER.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY.

7. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND CONDUIT REQUIRED FOR FP&L, BELL SOUTH, IRRIGATION SYSTEM, ETC. PRIOR TO BEGINNING SUBGRADE. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.

8. ALL EXISTING UTILITIES SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED.

9. THE CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY CASTINGS, INCLUDING VALVE BOXES, JUNCTION BOXES, MANHOLES, HAND HOLES, PULL BOXES, INLETS AND SIMILAR STRUCTURES IN AREAS OF CONSTRUCTION. ALL ADJUSTMENTS TO BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY.

10. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY TREE REMOVAL PERMITS FROM THE CITY OF HOLLYWOOD PRIOR TO COMMENCING WORK.

11. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUPPLY THE ENGINEER OF RECORD WITH THE CERTIFICATION THAT ALL CONSTRUCTION AND MATERIALS MEET OR EXCEEDS THE DESIGN AND HAS BEEN INSTALLED PER THE DRAWINGS AND/OR AS-BUILT DRAWINGS.

12. COMPLIANCE WITH THE "TRENCH SAFETY ACT" IS REQUIRED FOR ALL EXCAVATIONS IN EXCESS OF 5 FOOT DEPTHS.

PAVEMENT MARKING AND SIGNING NOTES

1. THERMOPLASTIC SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SEE SECTION 711-MINIMUM THICKNESS 90 MILS (ALKYD ONLY).

2. ALL MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVISED FOR STREETS AND HIGHWAYS, AND FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS..

3. THERMOPLASTIC SHALL BE USED IN THE PUBLIC RIGHT-OF-WAY UNLESS OTHERWISE APPROVED BY CITY OF HOLLYWOOD. ALL ON-SITE PAVEMENT MARKINGS SHALL BE REFLECTORIZED PAINT.

4. THESE INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.

5. ALL REFLECTIVE PAVEMENT MARKERS SHALL BE APPROVED BY CITY OF HOLLYWOOD BEFORE INSTALLATION.

6. REFLECTORS SHALL BE EQUALLY SPACED BUT NO MORE THAN 3 FEET APART.

7. THREE BLUE REFLECTORS SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS.

PAVING, GRADING AND DRAINAGE NOTES

1. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, HARDPAN, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M-145, FOUND WITHIN THE ROAD AND PARKING LOT AREA SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 1' LIFTS COMPACTED TO NOT LESS THAN 100% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-99. THICKNESS OF LAYERS MAY BE INCREASED PROVIDED THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING TO BE CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.

3. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1 FOOT. ITEMS DESIGNATED TO REMAIN OR TO BE RELOCATED OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.

4. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, or A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.

6. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.

7. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.

8. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.

9. SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1 FOOT OF THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.

10. ALL SUBGRADE SHALL HAVE AN LBR OF 40, UNLESS OTHERWISE NOTED, AND SHALL BE COMPACTED TO 100% MAXIMUM DRY DENSITY PER AASHTO T-99.

11. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 60% OF CARBONATES OF CALCIUM AND MAGNESIUM, UNLESS OTHERWISE DESIGNATED. ALL LIMEROCK SHALL BE PRIMED.

12. ASPHALT SHALL BE OF THE TYPE DESIGNATED ON THE DRAWINGS.

13. PLASTIC FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.

14. CONCRETE SIDEWALK SHALL BE 4 INCHES THICK ON COMPACTED SUBGRADE, WITH 1/2 INCH EXPANSION JOINTS PLACED AT A MAXIMUM OF 75 FEET. CRACK CONTROL JOINTS SHALL BE 5 FEET ON CENTER. THE BACK OF SIDEWALK ELEVATION SHALL EQUAL THE CROWN OF ROADWAY, UNLESS OTHERWISE SPECIFIED BY LOCAL CODES, OR SHOWN ON THE DRAWINGS. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6 INCHES THICK WITH 6" X 6" (10G.) WELDED WIRE MESH REINFORCEMENT.

15. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:

RCP	•	REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, CLASS III, WALL THICKNESS "B", LATEST EDITION.
CMP	•	CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196
CMP (SMOOTH LINED)	•	CORRUGATED METAL ALUMINUM PIPE (SMOOTH LINES), ASTM DESIGNATION M-196
SCP	•	SLOTTED CONCRETE PIPE, FDOT SECTIONS 941 AND 942.
PVC	•	POLYVINYLCHLORIDE PIPE
PCMP	•	PERFORATED CMP, FDOT SECTION 945
DIP	•	DUCTILE IRON PIPE
HDPEP	•	SMOOTH LINED HIGH DENSITY POLYETHYLENE, AASHTO M 294 TYPE S

16. ASPHALTIC CONCRETE TYPE S-III SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 331-1 THROUGH 331-6 OF F.D.O.T. STANDARD SPECIFICATIONS. ASPHALTIC CONCRETE TYPE S-1 SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 333-1 THROUGH 333-6 OF F.D.O.T. STANDARD SPECIFICATIONS.

17. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.

18. CONCRETE FOR PRECAST MANHOLE AND CATCH BASINS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.

19. REINFORCING STEEL FOR MANHOLES AND CATCH BASINS SHALL CONFORM TO ASTM SPECIFICATION A-615 AND A-305, LATEST REVISION.

20. ALL RE-BAR SPLICES IN CONCRETE STRUCTURES SHALL HAVE A MINIMUM LAP OF 24 BAR DIAMETERS.

21. ALL JOINTS IN CONCRETE STRUCTURES SHALL BE FINISHED WATER TIGHT.

22. ALL SPACES AROUND PIPING ENTERING OR LEAVING MANHOLES AND CATCH BASINS SHALL BE COMPLETELY FILLED WITH 2:1 CEMENT MORTAR.

23. JOINTS IN CORRUGATED ALUMINUM PIPE SHALL EMPLOY CORRUGATED METAL BANDS OF SIMILAR METAL AND CORRUGATIONS WITH NEOPRENE, RAM-NEK, OR BITUMASTIC GASKETS INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

24. REINFORCED CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION, AND AS MODIFIED BY SECTION 941 OF THE FLORIDA DOT STANDARD SPECIFICATIONS, LATEST REVISION.

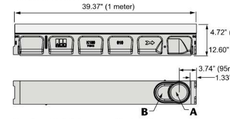
26. ALL HANDICAP SPACES, RAMPS, AND ACCESS AREAS SHALL COMPLY IN STRICT ACCORDANCE WITH THE "AMERICAN DISABILITY ACT" (ADA) (28 CFR PART 36), AND "ACCESSIBILITY BY HANDICAPPED PERSONS", CHAPTER 553, PART V, FLORIDA STATUTES. ANY DISCREPANCY SHALL BE CALLED TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.

27. JOINTS IN HDPE PIPE SHALL BE ADS PRO LINK ST, HANCOR SURE-LOK OR APPROVED EQUAL.

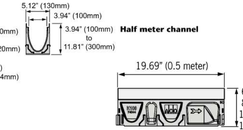
ACO DRAIN

KlassikDrain - K100 Galvanized steel edge rail channel system

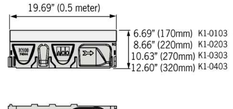
One meter channel



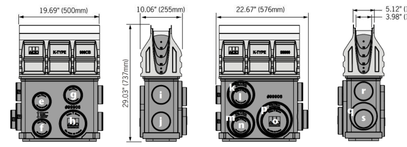
Knock-outs included on every 5th channel



Half meter channel



Type K901G In-line catch basin



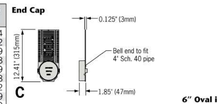
Total capacity = 10.49 gallons

Outlet flow rates

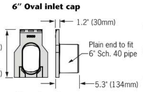
Outlet	Product	Outlet size (Sch. 40)	Invert Depth	GPM	CFS
A	Bottom outlet - K00	4" round	3.94"	108	0.24
A	Bottom outlet - K40	4" round	11.81"	187	0.42
B	Bottom outlet - K00	6" oval	3.94"	177	0.39
B	Bottom outlet - K40	6" oval	11.81"	306	0.68
C	End outlet - K20	4" round	7.87"	132	0.29
C	End outlet - K40	4" round	11.81"	171	0.38
D	K1-3086 6" outlet cap	6" oval	9.84"	233	0.52
E	K1-4086 6" outlet cap	6" oval	11.81"	264	0.59
F	Type K1-901G	4" round	19.30"	226	0.50
G	Type K1-901G	4" round	25.67"	265	0.59
H	Type K1-901G	4" round	25.30"	263	0.59
I	Type K1-901G	4" round	18.56"	222	0.49
J	Type K1-901G	6" round	25.85"	586	1.30
K	Type K1-901G	4" round	26.43"	269	0.60
L	Type K1-901G	4" round	19.36"	227	0.51
M	Type K1-901G	6" round	27.30"	604	1.35
N	Type K1-901G	6" round	19.99"	505	1.12
O	Type K1-901G	8" round	27.30"	1051	2.34
P	Type K1-901G	6" round	26.43"	593	1.32
Q	Type K1-901G	4" round	27.17"	273	0.61
R	Type K1-901G	4" round	20.68"	235	0.52
S	Type K1-901G	4" round	18.99"	224	0.50
T	Type K1-901G	6" round	27.17"	6.02	1.34

Note: These are the pipe flow rates at the specified outlet. **NOT** channel flow rates. Catch basin flow rates are without trash bucket - using trash bucket reduces flow.

End Cap



6" Oval inlet cap



6" Oval outlet cap

April 2018

www.ACODrain.us

ACO Specification Information

ACO Specification Information

ACO DRAIN

KlassikDrain - K100 Galvanized steel edge rail channel system

Description	Part No.	Invert Inches²	Invert mm²	Weight Lbs.
K1-00 Neutral channel - 39.37" (1m)²	**74041**	**3.94**	**100**	**28.1**
K1-1 Sloped channel - 39.37" (1m)	74001	4.13	105	28.1
K1-2 Sloped channel - 39.37" (1m)	74002	4.33	110	28.9
K1-3 Sloped channel - 39.37" (1m)	74003	4.53	115	29.7
K1-4 Sloped channel - 39.37" (1m)	74004	4.72	120	30.5
K1-5 Sloped channel - 39.37" (1m)¹²	74005	4.92	125	31.3
K1-6 Sloped channel - 39.37" (1m)	74006	5.12	130	32.1
K1-7 Sloped channel - 39.37" (1m)	74007	5.31	135	32.9
K1-8 Sloped channel - 39.37" (1m)	74008	5.51	140	33.7
K1-9 Sloped channel - 39.37" (1m)	74009	5.71	145	34.5
K1-10 Sloped channel - 39.37" (1m)²	74010	5.91	150	35.3
K1-010 Neutral channel - 39.37" (1m)²	**74043**	**5.91**	**150**	**35.3**
K1-0103 Neutral channel - 19.69" (0.5m)²	**74044**	**5.91**	**150**	**17.0**
K1-11 Sloped channel - 39.37" (1m)	74011	6.10	155	36.1
K1-12 Sloped channel - 39.37" (1m)	74012	6.30	160	36.9
K1-13 Sloped channel - 39.37" (1m)	74013	6.50	165	37.7
K1-14 Sloped channel - 39.37" (1m)	74014	6.69	170	38.5
K1-15 Sloped channel - 39.37" (1m)²	74015	6.89	175	39.3
K1-16 Sloped channel - 39.37" (1m)	74016	7.09	180	40.1
K1-17 Sloped channel - 39.37" (1m)	74017	7.28	185	40.9
K1-18 Sloped channel - 39.37" (1m)	74018	7.48	190	41.7
K1-19 Sloped channel - 39.37" (1m)	74019	7.68	195	42.5
K1-20 Sloped channel - 39.37" (1m)²	74020	7.87	200	43.4
K1-020 Neutral channel - 39.37" (1m)²	**74045**	**7.87**	**200**	**43.4**
K1-0203 Neutral channel - 19.69" (0.5m)²	**74046**	**7.87**	**200**	**20.5**
K1-21 Sloped channel - 39.37" (1m)	74021	8.07	205	44.2
K1-22 Sloped channel - 39.37" (1m)	74022	8.27	210	45.0
K1-23 Sloped channel - 39.37" (1m)	74023	8.46	215	45.8
K1-24 Sloped channel - 39.37" (1m)	74024	8.66	220	46.6
K1-25 Sloped channel - 39.37" (1m)²	74025	8.86	225	47.4
K1-26 Sloped channel - 39.37" (1m)	74026	9.06	230	48.2
K1-27 Sloped channel - 39.37" (1m)	74027	9.25	235	49.0

Description	Part No.	Invert Inches²	Invert mm²	Weight Lbs.
K1-28 Sloped channel - 39.37" (1m)	74028	9.45	240	49.8
K1-29 Sloped channel - 39.37" (1m)	74029	9.65	245	50.6
K1-30 Sloped channel - 39.37" (1m)²	74030	9.84	250	51.4
K1-030 Neutral channel - 39.37" (1m)²	**74047**	**9.84**	**250**	**51.4**
K1-0303 Neutral channel - 19.69" (0.5m)²	**74048**	**9.84**	**250**	**24.0**
K1-31 Sloped channel - 39.37" (1m)	74031	10.04	255	52.2
K1-32 Sloped channel - 39.37" (1m)	74032	10.24	260	53.0
K1-33 Sloped channel - 39.37" (1m)	74033	10.43	265	53.8
K1-34 Sloped channel - 39.37" (1m)	74034	10.63	270	54.6
K1-35 Sloped channel - 39.37" (1m)²	74035	10.83	275	55.4
K1-36 Sloped channel - 39.37" (1m)	74036	11.02	280	56.2
K1-37 Sloped channel - 39.37" (1m)²	74037	11.22	285	57.0
K1-38 Sloped channel - 39.37" (1m)	74038	11.42	290	57.9
K1-39 Sloped channel - 39.37" (1m)²	74039	11.61	295	58.7
K1-40 Sloped channel - 39.37" (1m)²	74040	11.81	300	59.5
K1-040 Neutral channel - 39.37" (1m)²	**74049**	**11.81**	**300**	**59.5**
K1-0403 Neutral channel - 19.69" (0.5m)²	**74050**	**11.81**	**300**	**27.5**
K1-901G In-line catch basin - 19.69" (0.5m)²	94608	28.81	701.9	52.6
K1-621G catch basin - 19.69" (0.5m)²	94617	28.84	732.5	55.8
K1-631G catch basin - 19.69" (0.5m)²	94631	40.84	1037.4	65.8
K1-Series 600 Optional plastic riser	99902	-	-	10.0
Foul air trap - fits both 900 & 600 series basins	90854	-	-	1.2
K1-3044-6' Inlet Cap	96839	9.84	250	5.2
K1-3086-6' Outlet Cap	96840	9.84	250	5.0
K1-4044-6' Inlet Cap	96834	11.81	300	6.0
K1-4086-6' Outlet Cap	96836	11.81	300	5.8
Universal end cap	96822	11.81	300	0.4
Debris strainer for 4" bottom knockout	93488	-	-	0.2
4" Oval to 6" round outlet adapter	95140	-	-	1.1
K1-Installation device	97477	-	-	2.8
Grate removal tool	01318	-	-	0.3
K1-QuickLok locking bar	02899	-	-	0.1

Notes:
1. This channel offers a bottom knockout feature; 4" round/6" oval.
2. Inverts shown are for the male end; for female invert depth subtract 5mm (–0.2") from the male invert (except for neutral channels, where it will be same as male invert). To calculate the overall channel depth add 20mm (–0.8") to invert depth.
3. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, trash bucket and plastic base. Select an appropriate grate.
4. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, deep trash bucket, plastic riser and plastic base. Select an appropriate grate.

Specifications

General
The surface drainage system shall be ACO Drain K100 complete with gratings secured with 'QuickLok' locking as manufactured by ACO, Inc. or approved equal.

Materials
The trench system bodies shall be manufactured from polyester polymer concrete with the minimum properties as follows:

Compressive strength:	14,000 psi
Flexural strength:	4,000 psi
Water absorption	0.07%
Frost proof	YES
Salt proof	YES
Dilute acid and alkali resistant	YES

The nominal clear opening shall be 4" (100mm) with overall width of 5.12" (130mm). Pre-cast units shall be manufactured with either an invert slope of 0.5% or with neutral invert and have a wall thickness of at least 0.50" (13mm). Each unit will feature a partial radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring keys on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface. The galvanized steel edge rail will be integrally cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 3/32" (2.5mm) thick.

Grates
Grates shall be specified. See separate ACO Spec Info grate sheets for details. After removal of grates and 'QuickLok' bar there shall be uninterrupted access to the trench to aid maintenance.

Installation
The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations.

ACO, Inc.
Northeast Sales Office
9470 Pinecone Drive
Mentor, OH 44060
Tel: (440) 639-7230
Toll free: (800) 543-4764
Fax: (440) 639-7235

West Sales Office
825 W. Beechcraft St.
Casa Grande, AZ 85122
Tel: (520) 421-9988
Toll Free: (888) 490-9552
Fax: (520) 421-9899

Southeast Sales Office
4211 Pleasant Road
Fort Mill, SC 29708
Toll free: (800) 543-4764
Fax: (803) 802-1063

Electronic Contact:
info@ACODrain.us
www.ACODrain.us

April 2018

www.ACODrain.us

SPEC INFO

THIS ITEM HAS BEEN
ELECTRONICALLY SIGNED AND SEALED
BY Gary G. Bloom, PE on 4/13/20
using a SHA authentication code.
Printed copies of this document are not
considered signed and sealed and
the SHA Authentication code must be
verified on any electronic copies.

REVISIONS: 1. 2. 3. 4. 5. 6. 7. 8.

CLIENT:
Hollywood Community Development Agency
1948 Harrison Street
Hollywood, FL 33020

PROJECT:
HOLLYWOOD PARKLET
HOLLYWOOD FLORIDA 33020

TASK:
GENERAL NOTES AND CONSTRUCTION DETAILS

GGB Engineering, Inc.
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS
CONSTRUCTION MANAGERS
FLORIDA REGISTRATION No. 5118
2699 Stirling Road, Suite C-202
Fort Lauderdale, Florida 33312
Phone: (954) 986-9899
Fax: (954) 986-8535

DATE:	SCALE:
3/10/20	N.T.S.
DESIGNED BY: G.G.B.	DRAWN BY: M.M.

PROJECT NO. 20-0224

SHEET C-2

GARY GABRIEL BLOOM LICENSE No. 19532 STATE OF FLORIDA PROFESSIONAL ENGINEER