City of Dublin
ENGINEERING

September 14, 2014

STANDARD CONSTRUCTION DRAWINGS

Paul A. Hammersmith, P.E.

Director of Engineering/City Engineer

City of Dublin
ENGINEERING

STANDARD CONSTRUCTION DRAWINGS

NUMBER	TITLE	PGS	DATE
MD - MISCELLANEOUS DETAILS			
MD-01	PLAN SIGNATURES EXAMPLE	1	5/1/2014
MD-02	RESIDENTIAL DRIVEWAY SLOPE	1	5/1/2014
MD-03	MONUMENT BOX DETAIL	1	5/1/2014
MD-04	PLAT SIGNATURE EXAMPLE	2	5/1/2014
MD-05	RESIDENTIAL ROOF DRAIN CONNECTION	1	9/16/2014
PD - PEDESTRIAN DETAILS			
PD-01	TYPICAL LOCATION PLAN FOR SIDEWALK CURB RAMPS	1	5/1/2014
PD-02	CURB RAMP GENERAL NOTES	2	5/1/2014
PD-03	DETECTABLE WARNINGS	1	5/1/2014
PD-04	CURB RAMP TYPE A DIAGONAL IN TREE LAWN	1	5/1/2014
PD-05	CURB RAMP TYPE B DIAGONAL WITH FLARES	1	5/1/2014
PD-06	CURB RAMP TYPE C IN TREE LAWN	1	5/1/2014
PD-07	CURB RAMP TYPE D OBSTRUCTED ONE SIDE	1	5/1/2014
PD-08	CURB RAMP TYPE E ALLEYS AND DRIVEWAYS	1	5/1/2014
PD-09	CURB RAMP TYPE F ALLEYS AND DRIVEWAYS	1	5/1/2014
PD-10	CURB RAMP TYPE G PARALLEL LANDING, 2 RAMPS	1	5/1/2014
PD-11	CURB RAMP TYPE H MEDIAN RAMP WITH LANDING	1	5/1/2014
PD-12	CURB RAMP TYPE I PERPENDICULAR AND PARALLEL	1	5/1/2014
RD - ROADWAY			
RD-01	TYPICAL STREET SECTION	1	5/1/2014
RD-02	COMBINATION CONCRETE CURB AND GUTTER	1	5/1/2014
RD-03	TYPICAL GUTTER SECTION TRANSITIONS	1	5/1/2014
RD-04	TYPICAL PAVEMENT SECTION FOR PRIVATE STREETS	1	5/1/2014
RD-05	CONCRETE SIDEWALK AND SHARED USE PATH	1	5/1/2014
RD-06	SHARED USE PATH: STANDARD AND HEAVY DUTY	1	5/1/2014
RD-07	RESIDENTIAL AND COMMERCIAL DRIVEWAYS	9	5/1/2014
RD-08	CUL-DE-SAC: 300' - 1000'	1	5/1/2014
RD-09	CUL-DE-SAC LESS THAN 300'	1	5/1/2014
RD-10	TYPICAL STREET SIGNS	2	5/1/2014
RD-11	STRAIGHT 18" CONCRETE CURB	1	5/1/2014

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NUMBER	TITLE	PGS	DATE
RD-12	BRICK PAVER SIDEWALK	1	5/1/2014
RD-13	ROUNDABOUT TRUCK APRON DETAIL	1	5/1/2014
RD-14	BRICK PAVER MEDIAN DETAIL	1	5/1/2014
SA - SANITARY SEWER			
SA-01	SANITARY MANHOLE DETAILS	1	5/1/2014
SA-02	SANITARY MANHOLE LID	1	5/1/2014
SA-03	TYPICAL SANITARY RISER DETAIL	1	5/1/2014
SA-04	CONCRETE COLLAR FOR MANHOLES IN PAVEMENT	1	
SL - STREET LIGHTING			
SL-01	LUMINAIRE	2	5/1/2014
SL-02	TRANSFORMER BASE	2	5/1/2014
SL-03	LIGHT POLE	1	5/1/2014
SL-04	POLE FOUNDATION	2	5/1/2014
SL-05	TRENCHES	3	5/1/2014
SL-06	QUICK DISCONNECT	1	5/1/2014
SL-07	SAMPLE LIGHTING QUANTITIES SCHEDULE	1	5/1/2014
SL-08	STREET LIGHT LOCATION	1	5/1/2014
SL-09	DECORATIVE LUMINAIRE	3	5/1/2014
SL-10	DECORATIVE LIGHT POLE - SINGLE HEAD	1	5/1/2014
SL-11	DECORATIVE LIGHT POLE - 12' DOUBLE HEAD	1	5/1/2014
SL-12	DECORATIVE LIGHT POLE FOUNDATION	1	5/1/2014
SL-13	LIGHTING CONTROLLER	4	5/1/2014
ST - STORM SEWER			
ST-01	STONE VENEER FOR CONCRETE STRUCTURES	1	5/1/2014
ST-02	SAFETY GRATE	1	5/1/2014
ST-03	STORM SEWER MANHOLE	1	5/1/2014
ST-04	DRAINS TO RIVER CURB INLET	1	5/1/2014
ST-05	ROCK CHANNEL PROTECTION DETAIL	1	5/1/2014
ST-06	STORM SEWER WITH "O" RINGS RUBBER GASKET JOINTS	1	5/1/2014
WA - WATER			
WA-01	FIRE HYDRANT	1	5/1/2014

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT AND DOES NOT CONSTITUTE ASSURANCE TO OPERATE AS INTENDED. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL CIVIL ENGINEER PREPARING THE PLANS.

APPROVED:

_____ _____

CITY ENGINEER, CITY OF DUBLIN, OHIO
PAUL A. HAMMERSMITH, P.E.

DATE

_____ _____

* DIRECTOR OF LAND USE & LONG RANGE PLANNING, CITY OF DUBLIN, OHIO

DATE

NOTE: APPROVAL ON THE PART OF THE CITY OF COLUMBUS IS GIVEN PURSUANT TO THE PROVISIONS OF THE SEWER (AND/OR WATER) SERVICE AGREEMENT WITH THE CITY OF DUBLIN, OHIO DATED APRIL 13, 1993.

_____ _____

DIRECTOR, DEPARTMENT OF PUBLIC UTILITIES
CITY OF COLUMBUS, OHIO

DATE

_____ _____

ADMINISTRATOR, DIVISION OF SEWERS AND DRAINS (AND/OR WATER)
CITY OF COLUMBUS, OHIO

DATE

* FOR COMMERCIAL PERMITS ONLY

Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

PLAN SIGNATURES EXAMPLE

SHEET 1 OF 1

DRAWING NO. ***MD-01***

TYPICAL FRONT LOAD GARAGE

A = ELEVATION OF THE GARAGE FLOOR

C = ELEVATION AT THE BACK EDGE OF THE PEDESTRIAN PATH

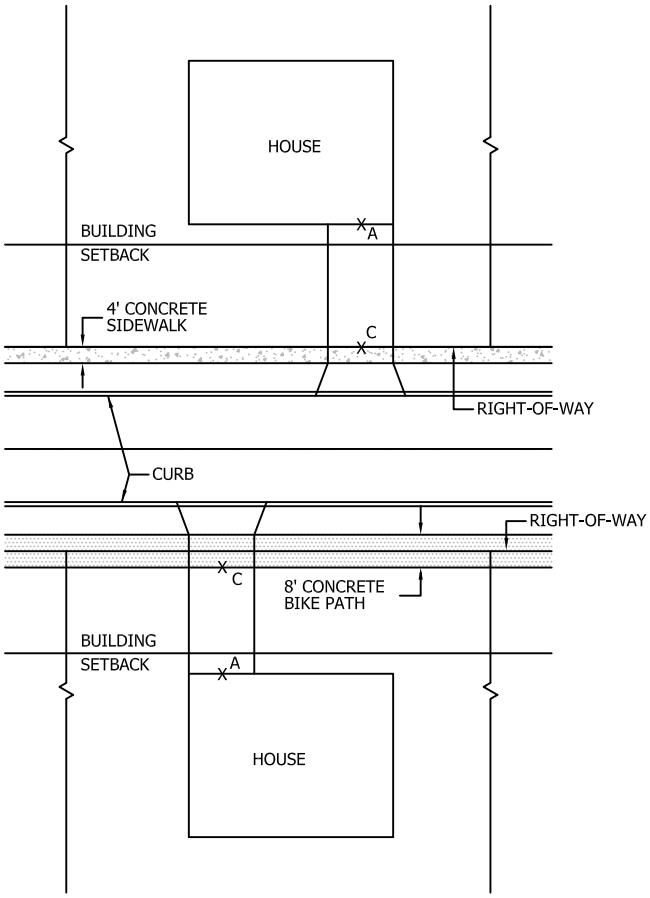
$$\text{SLOPE} = \frac{A - C}{\text{DISTANCE BETWEEN A \& C}} \times 100\% \leq 8.00\%$$

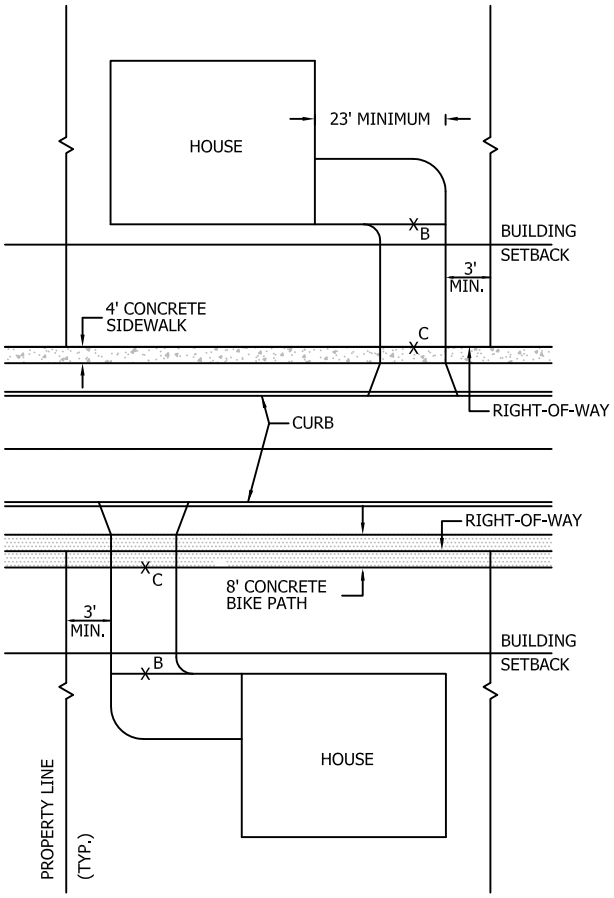
TYPICAL SIDE LOAD GARAGE

B = ELEVATION OF THE DRIVEWAY

C = ELEVATION AT THE BACK EDGE OF THE PEDESTRIAN PATH

$$\text{SLOPE} = \frac{B - C}{\text{DISTANCE BETWEEN B \& C}} \times 100\% \leq 8.00\%$$





NOTES:

1. ELEVATION 'B' SHALL TYPICALLY REFLECT A 2% SLOPE FROM THE GARAGE FLOOR.

2. THESE ARE TYPICAL DRIVEWAY ARRANGEMENTS. OTHER CONFIGURATIONS CAN OCCUR AND WILL BE REVIEWED ON A CASE BY CASE BASIS.

Date: 05/01/2014

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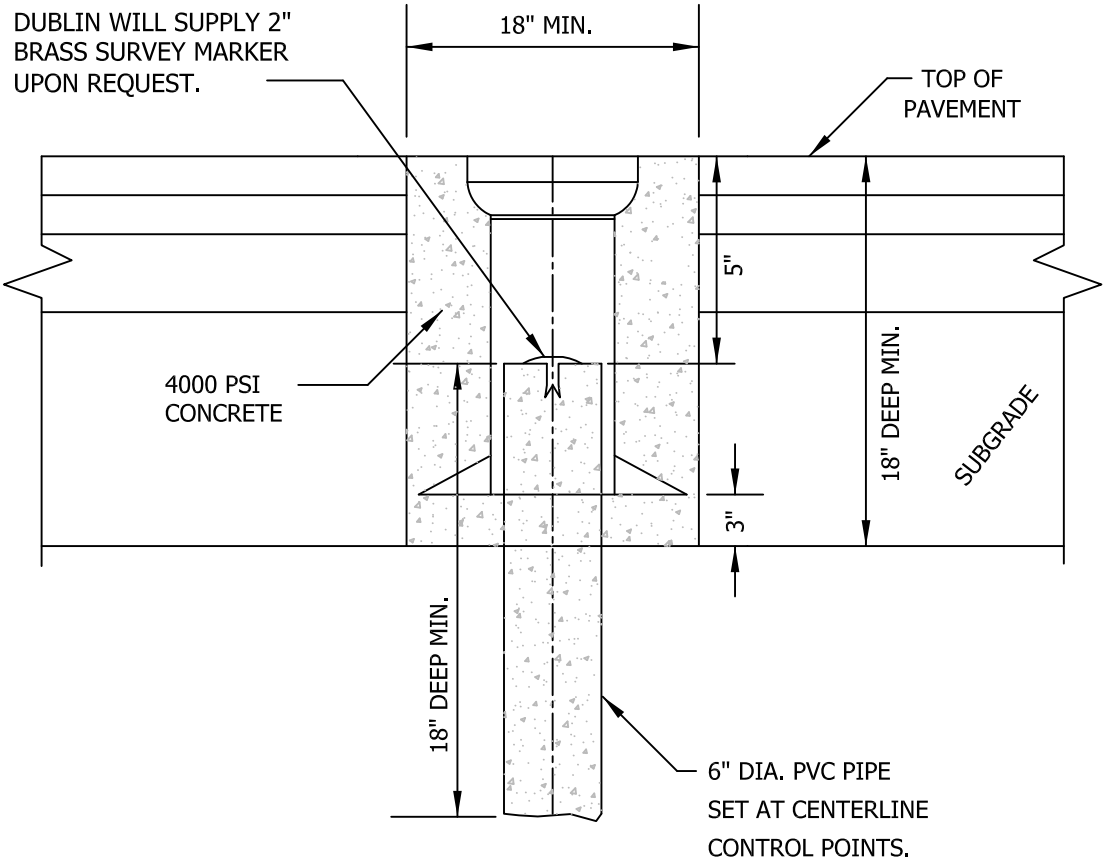
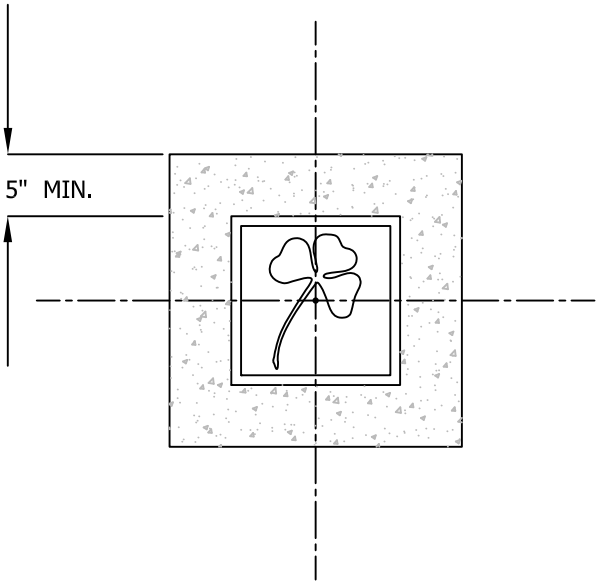
RESIDENTIAL DRIVEWAY SLOPE

SHEET 1 OF 1

DRAWING NO. **MD-02**





NOTES:

APPROVED MONUMENT BOX TYPES

1. NEENAH R-1968 TYPE 36-B (ADJUSTABLE)
2. EAST JORDAN IRON WORKS, INC. 8371 (ADJUSTABLE)

Date: 05/01/2014

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MONUMENT BOX DETAIL

SHEET 1 OF 1

DRAWING NO. **MD-03**

SITUATED IN THE STATE OF OHIO, COUNTY OF FRANKLIN, CITY OF DUBLIN, IN VIRGINIA MILITARY SURVEY NO. 2542 AND BEING ALL OF A _____ ACRES OF LAND, MORE OR LESS, CONVEYED TO _____, BY DEED OF RECORD IN INSTRUMENT OR DEED _____, RECORDER'S OFFICE, FRANKLIN COUNTY, OHIO.

EASEMENTS ARE RESERVED WHERE INDICATED ON THE PLAT FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF ALL PUBLIC AND PRIVATE UTILITIES AND THE CABLE TELEVISION INDUSTRY BOTH ABOVE AND BENEATH THE SURFACE OF THE GROUND AND WHERE NECESSARY ARE FOR THE CONSTRUCTION OPERATION AND MAINTENANCE OF SERVICE CONNECTIONS TO ALL ADJACENT LOTS AND LANDS AND FOR STORM WATER DRAINAGE.

THE UNDERSIGNED, _____ (COMPANY NAME), BY _____ (PERSONS NAME), _____(TITLE), OWNER OF THE LANDS PLATTED HEREIN, DULY AUTHORIZED IN THE PREMISES, DOES HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS ITS "STREET & EASEMENTS DEDICATION PLAT", A PLAT DEDICATING _____ ACRES OF LAND TO THE CITY OF DUBLIN, OHIO, DOES HEREBY ACCEPT THIS PLAT OF SAME AND DOES HEREBY DEDICATE TO PUBLIC USE AS SUCH ALL OR PARTS OF THE STREET SHOWN HEREON AND NOT DEDICATED HERETOFORE.

IN WITNESS THEREOF, _____ (NAME), _____ (TITLE), _____ (COMPANY NAME) HAS HEREUNTO SET HER HAND THIS_____ DAY OF _____ , 20_ _.

SIGNED AND ACKNOWLEDGED
IN THE PRESENCE OF: _____ (COMPANY NAME)

SIGN: _____
PRINT:

BY: _____
_____ (PERSONS NAME)
_____ (TITLE)

SIGN: _____
PRINT:

STATE OF OHIO S.S.

BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED _____ (PERSONS NAME & TITLE) FOREGOING INSTRUMENT TO BE HER FREE AND VOLUNTARY ACT AND DEED AND THE FREE AND VOLUNTARY ACT AND OF DEVELOPMENT, _____ (COMPANY NAME) WHO ACKNOWLEDGED THE SIGNING OF THE DEED OF _____ (COMPANY NAME) FOR THE USE AND PURPOSES THEREIN EXPRESSED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL THIS _____ DAY OF _____ , 20_ _.

MY COMMISSION EXPIRES: _____

_____
NOTARY PUBLIC, STATE OF OHIO

Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

PLAT SIGNATURE EXAMPLE

DRAWING NO. ***MD-04***

APPROVED THIS ____DAY OF _____,
20_ _.

_____
SECRETARY OF PLANNING COMMISSION
CITY OF DUBLIN, OHIO

APPROVED THIS ____DAY OF _____,
20_ _.

_____
CITY ENGINEER
CITY OF DUBLIN, OHIO

APPROVED THIS ____ DAY OF_____, 20_ _, BY VOTE OF COUNCIL, WHEREIN ALL OF THE BOULEVARD, DRIVES, GREEN, LOOP AND ROADS DEDICATED HEREON ARE ACCEPTED AS SUCH BY THE COUNCIL OF THE CITY OF DUBLIN, OHIO.

IN WITNESS THEREOF I HAVE HEREUNTO
SET MY HAND AND AFFIXED MY SEAL THIS
____DAY OF _____ , 20_ _.

_____
CLERK OF COUNCIL, DUBLIN, OHIO

TRANSFERRED THIS ____DAY OF _____ , 20_ _.

_____
AUDITOR, _____ COUNTY, OHIO

FILED FOR RECORD THIS ____DAY OF _____,
20_ _ AT ____ M. FEE $ _____
FILE NO. _____

_____
DEPUTY AUDITOR, _____ COUNTY, OHIO

_____
RECORDER, _____ COUNTY, OHIO

RECORDED THIS _____ DAY OF _____ ,
20_ _.

PLAT BOOK _____ PAGES _____

_____
DEPUTY RECORDER, _____ COUNTY, OHIO

MORE THAN ONE COUNTY

TRANSFERRED THIS ____DAY OF _____ , 20_ _.

_____
AUDITOR, _____ COUNTY, OHIO

FILED FOR RECORD THIS ____DAY OF _____,
20_ _ AT ____ M. FEE $ _____
FILE NO. _____

_____
RECORDER, _____ COUNTY, OHIO

RECORDED THIS _____ DAY OF _____ ,
20_ _.

PLAT BOOK _____ PAGES _____

Date: 05/01/2014

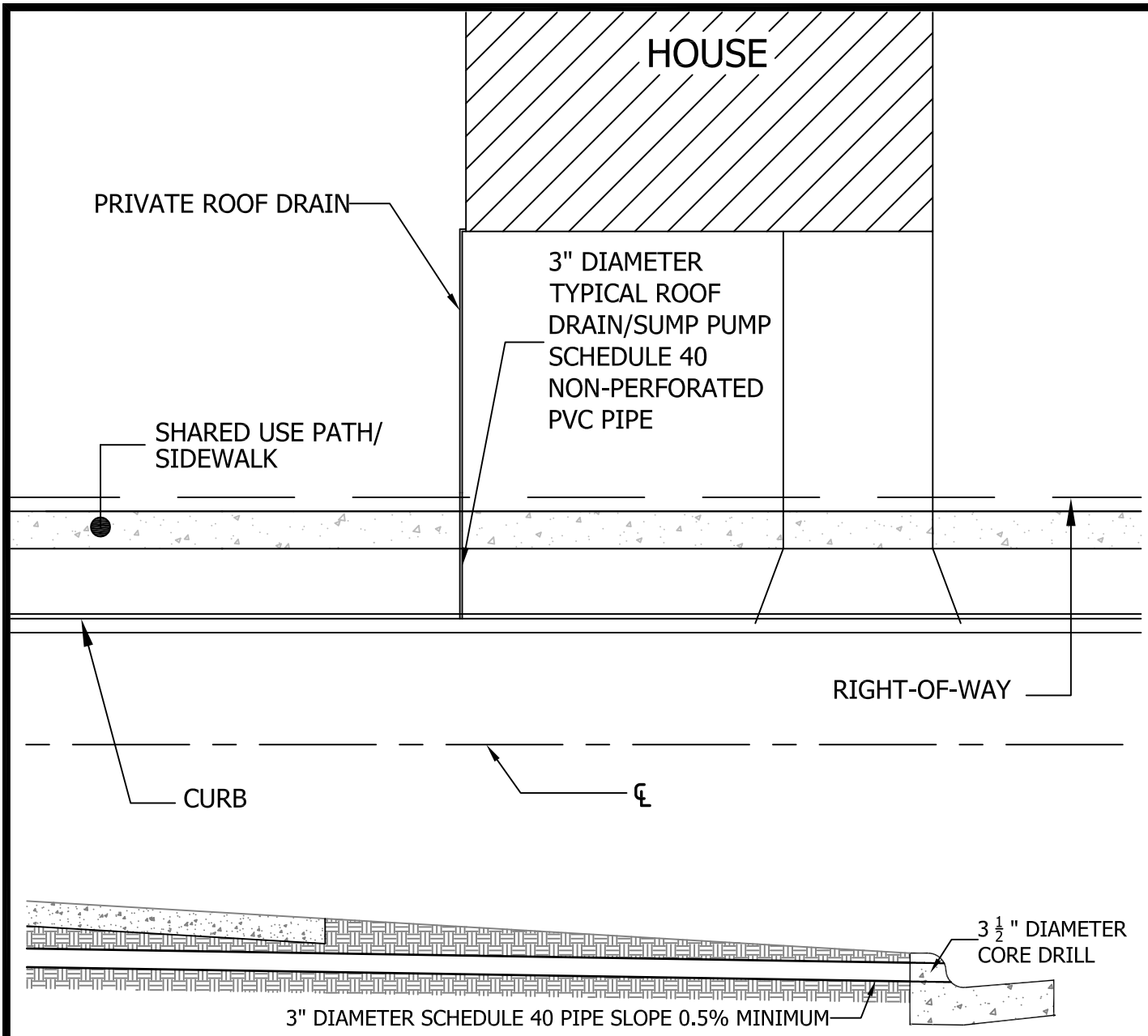
City of Dublin
ENGINEERING

STANDARD DRAWING

PLAT SIGNATURE EXAMPLE

SHEET 2 OF 2

DRAWING NO. ***MD-04***



CURB CONNECTION DETAIL

NOTES:

1. ALL SUMP PUMP/DOWNSPOUT DRAIN TILE SHALL BE SCHEDULE 40 SOLID WALL (NON-PERFORATED) PIPE WITHIN THE PUBLIC RIGHT-OF-WAY (R/W).
2. TYPICAL RESIDENTIAL TYPE CONNECTIONS WILL BE 3" IN DIAMETER.
3. THE CONNECTION AT THE CURB SHALL BE CORE DRILLED.
4. THE PIPE SHALL EXTEND AT LEAST TWO FEET BEYOND THE SIDEWALK OR SHARED USE PATH LOCATION.
5. PIPE SLOPE TO BE 0.5% MINIMUM TOWARDS STREET.
6. ROOF DRAIN/SUMP PUMP PIPE SHALL BE PRIVATELY OWNED AND MAINTAINED, INCLUDING IN THE R/W.

Date: 09/16/2014

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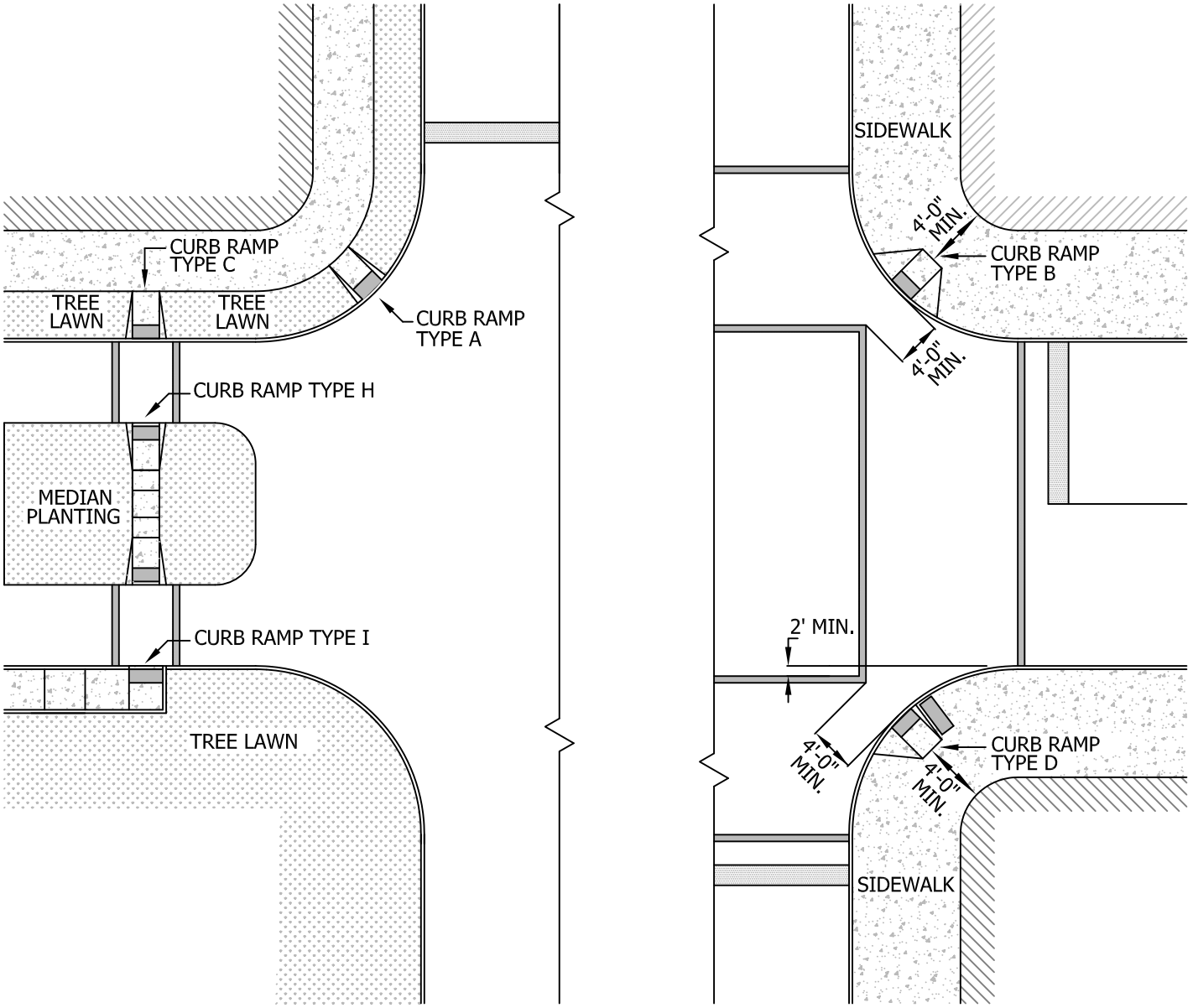
RESIDENTIAL ROOF DRAIN CONNECTION

SHEET 1 OF 1

DRAWING NO. ***MD-05***



Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

TYPICAL LOCATION PLAN FOR SIDEWALK CURB RAMPS

SHEET 1 OF 1

DRAWING NO. **PD-01**

GENERAL NOTES, SIDEWALK CURB RAMPS

1. CURB RAMP COMPONENTS ASSEMBLY - THE CURB RAMP INCLUDES THE RAMPS, FLARED SIDES, LANDINGS AND ROLLED EDGES.

2. CURB RAMP TYPE - CURB RAMPS SHALL BE SPECIFIED BY THE APPROPRIATE TYPE AND SHALL BE PERPENDICULAR TO THE CURB EXCEPT TYPES E & F.

   TYPE A - DIAGONAL RAMP WITH FLARES IN TREE LAWN.

   TYPE B - DIAGONAL RAMP WITH FLARES.
   TYPE C - PERPENDICULAR RAMP IN TREE LAWN.
   TYPE D - PERPENDICULAR RAMP OBSTRUCTED ON ONE SIDE (WITH PRIOR WRITTEN CITY APPROVAL ONLY)
   TYPE E - RAMP WITH RECESSED LOWER LANDING FOR ALLEYS AND DRIVEWAYS (WITH TREE LAWN).
   TYPE F - RAMP WITH RECESSED LOWER LANDING FOR ALLEYS AND DRIVEWAYS (NO TREE LAWN).
   TYPE G - PARALLEL (OFF-STREET LANDING) WITH 2 TRANSITION RAMPS (WITH PRIOR WRITTEN CITY APPROVAL ONLY).
   TYPE H - MEDIAN RAMP WITH CENTER LANDING.
   TYPE I - COMBINED PERPENDICULAR AND PARALLEL RAMP ONE DIRECTION.

3. RAMP RUNNING SLOPE - THE RAMP RUNNING SLOPE SHALL BE 5% (1:20) TO 7.7% (1:13).

4. RAMP CROSS SLOPE - THE MAXIMUM CROSS SLOPE SHALL BE 1.56% (1:64, 3/16 INCH PER FOOT).

5. PERPENDICULAR RAMP WIDTH - THE MINIMUM WIDTH OF A SIDEWALK RAMP SHALL BE 4-FEET AND OF A BIKE PATH RAMP SHALL BE 8-FEET. THE WIDTH MAY BE REDUCED TO A MINIMUM OF 3-FEET WITH PRIOR WRITTEN CITY APPROVAL IF CLEARANCE RESTRICTIONS EXIST.

6. PARALLEL RAMP WIDTH - TYPE H RAMP SHALL BE A MINIMUM OF 4-FEET BY 5-FEET & 5-FEET BY 5-FEET RESPECTIVELY, PER STANDARD DRAWINGS.

7. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.

8. FLARES - THE LENGTH OF THE FLARE AT THE FACE OF CURB SHALL BE A MAXIMUM OF 10% OR 10 TIMES THE CURB HEIGHT, WHICHEVER IS LESS.

9. LANDINGS - LANDINGS SHALL BE A MINIMUM OF 4-FEET BY 4-FEET WITH A 1.56% (1:64) CROSS SLOPE FOR ALL CURB RAMP TYPES EXCEPT PARALLEL CURB RAMPS. OFF STREET LANDINGS FOR PARALLEL CURB RAMPS SHALL BE A MINIMUM OF 4-FEET BY 5-FEET AS INDICATED IN THE STANDARD DRAWINGS. LANDINGS ARE REQUIRED AS FOLLOWS:

   A. TOP LANDING - CURB RAMP TYPES A, B, C AND G SHALL HAVE LANDINGS AT THE TOP OF THE RAMP.

   B. LOWER RECESSED LANDING - CURB RAMP TYPE E AND F SHALL HAVE A RECESSED LANDING AT THE BOTTOM OF THE RAMP WHERE IT INTERSECTS THE CURB LINE.

   C. LANDING AT INTERSECTING SIDEWALKS - WHEREVER SIDEWALKS INTERSECT THERE SHALL BE A LANDING MEETING THE ABOVE REQUIREMENTS.

(GENERAL NOTES CONTINUED ON SHEET 2)

Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

CURB RAMP GENERAL NOTES

DRAWING NO. **PD-02**

GENERAL NOTES, SIDEWALK CURB RAMPS (CONTINUED)

10. STREET COUNTER SLOPE - THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 1:20 OR 5% FOR A MINIMUM OF 2-FEET.

11. MAXIMUM DIFFERENTIAL BETWEEN RAMP RUNNING SLOPE AND GUTTER PAN SHALL BE 13 %, THE PREFERRED DIFFERENTIAL IS 11%..

12. SURFACES - RAMP AND FLARE SURFACES MUST BE STABLE AND SLIP RESISTANT. RAMPS SHALL BE MEDIUM BROOMED TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP, LANDING, OR TRANSITION AREAS.

13. DETECTABLE WARNINGS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF DUBLIN STANDARD DRAWING PD-03. DETCTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A PUBLIC VEHICULAR WAY.

14. THE PEDESTRIAN WALKWAY WITHIN THE STREET PAVEMENT, AT LEAST 7-FEET WIDE, BETWEEN OPPOSING RAMPS SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) OF NO GREATER THAN 2%. VERTICAL STREET CURVES SHALL BE INSTALLED AS NEEDED.

15. GRAVEL BEDDING SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHOULD NOT EXCEED A DEPTH OF 6 INCHES.

Date: 05/01/2014

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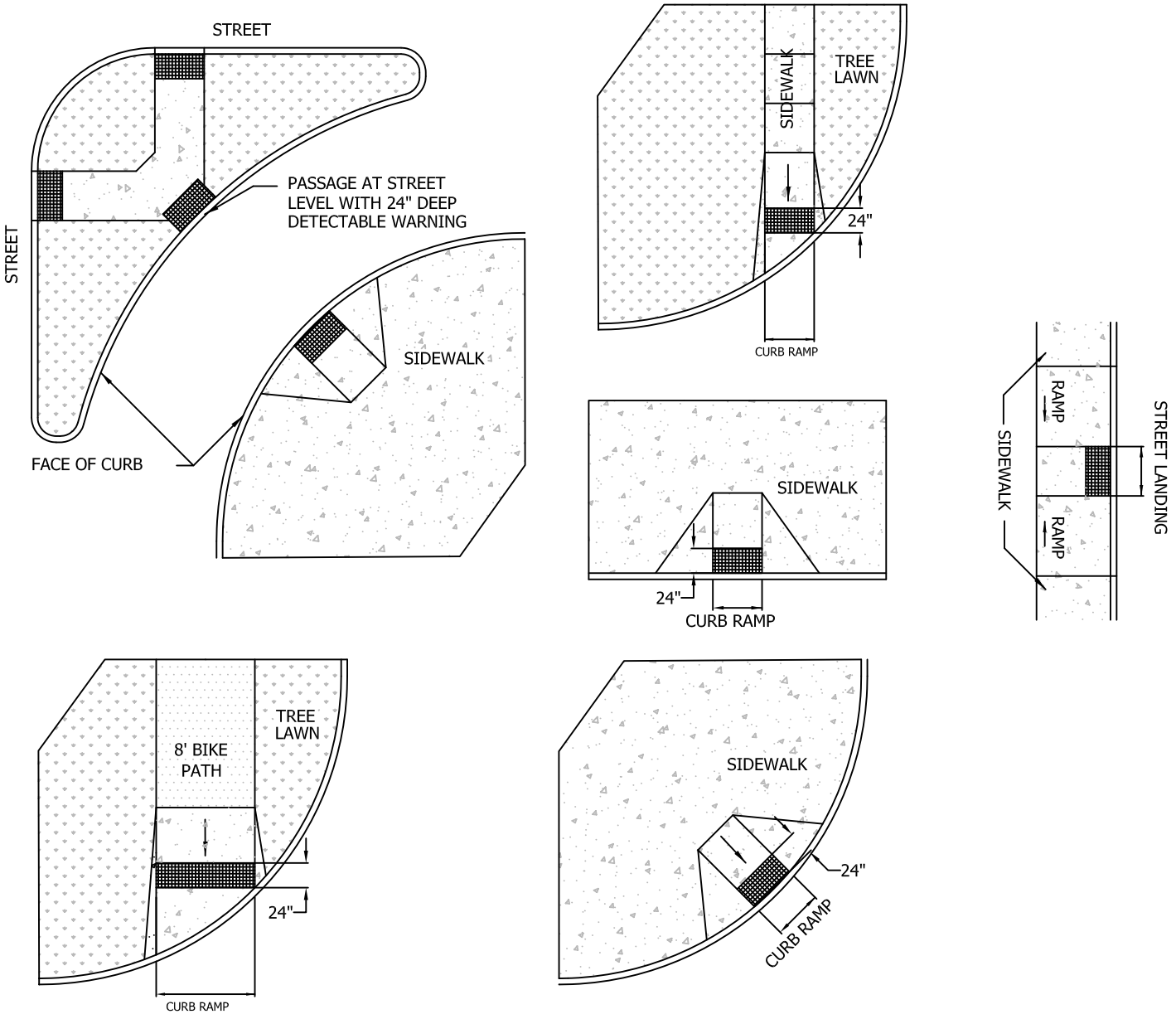
STANDARD DRAWING

CURB RAMP GENERAL NOTES

DRAWING NO. ***PD-02***



NOTES:

1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.

2. DETECTABLE WARNINGS SHALL BE PROVIDED 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.

3. DETECTABLE WARNINGS SHALL BE PLACED 2" BEHIND THE BACK OF CURB.

4. DETECTABLE WARNINGS SHALL BE ADA SOLUTIONS, CAST IN PLACE REPLACEABLE TILE OR APPROVED EQUAL. BRICK RED IN COLOR FOR USE ON CONCRETE RAMPS AND BLACK IN COLOR FOR USE ON BRICK PAVER RAMPS.

Date: 05/01/2014

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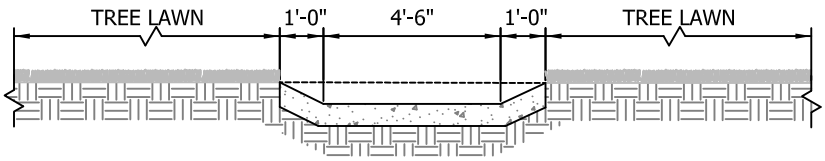
STANDARD DRAWING

DETECTABLE WARNINGS

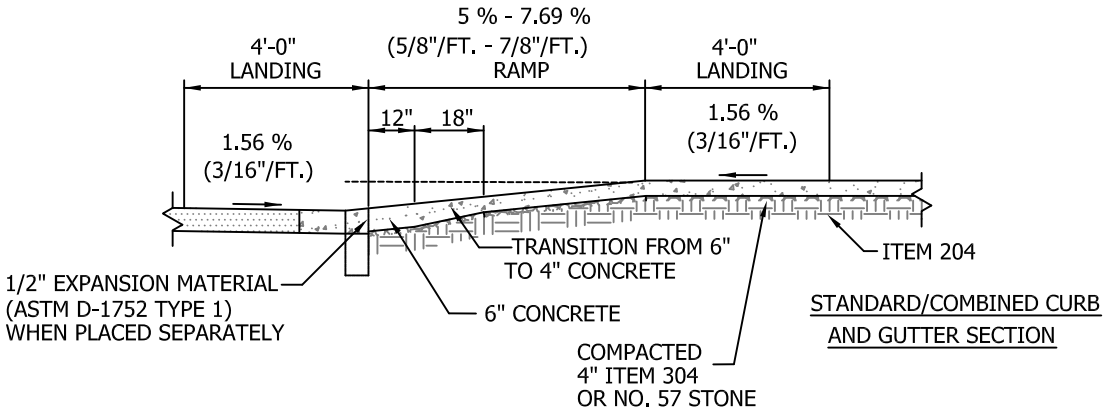
SHEET 1 OF 1

DRAWING NO. **PD-03**



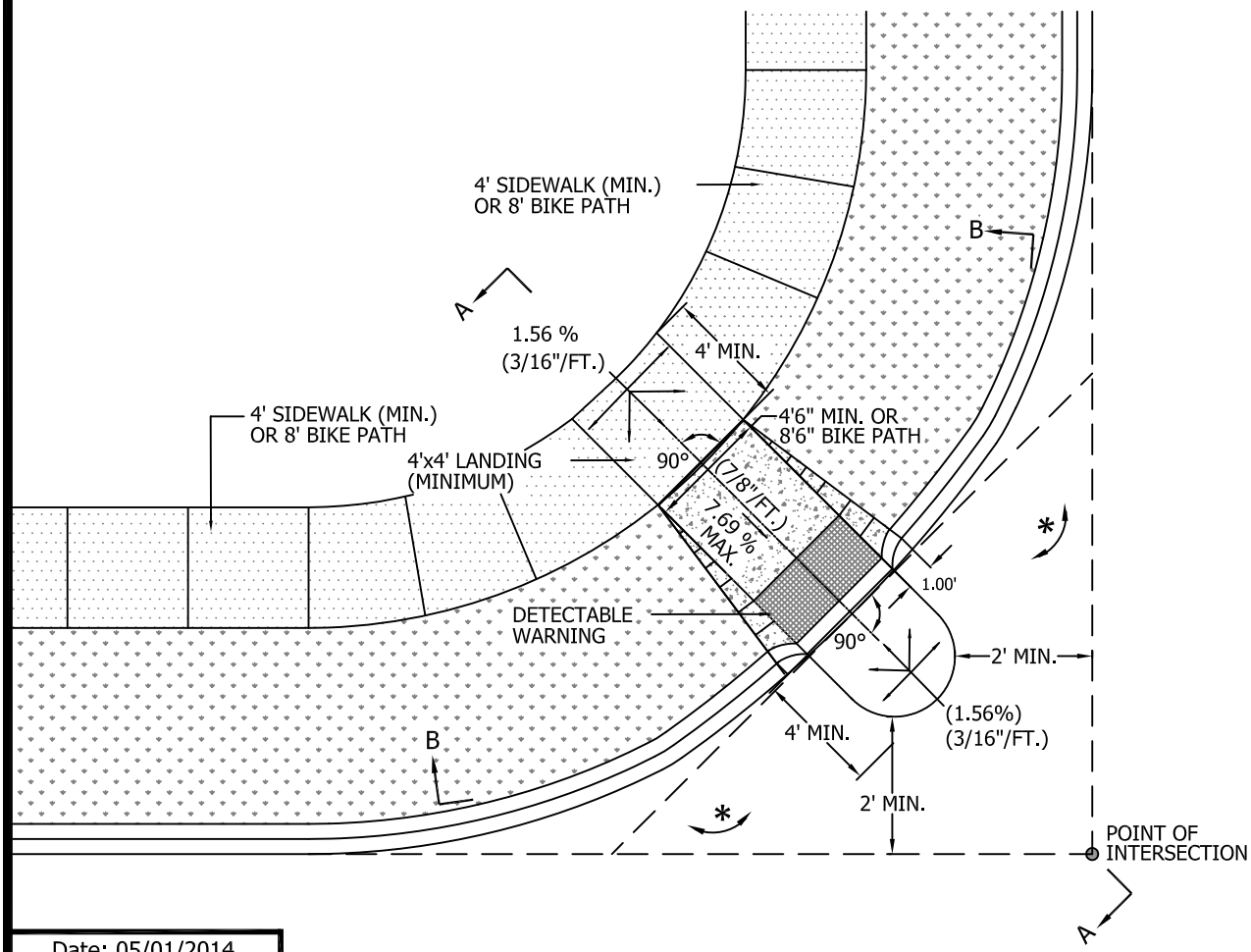
SECTION B-B

NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS



STANDARD/COMBINED CURB AND GUTTER SECTION

SECTION A-A



Date: 05/01/2014

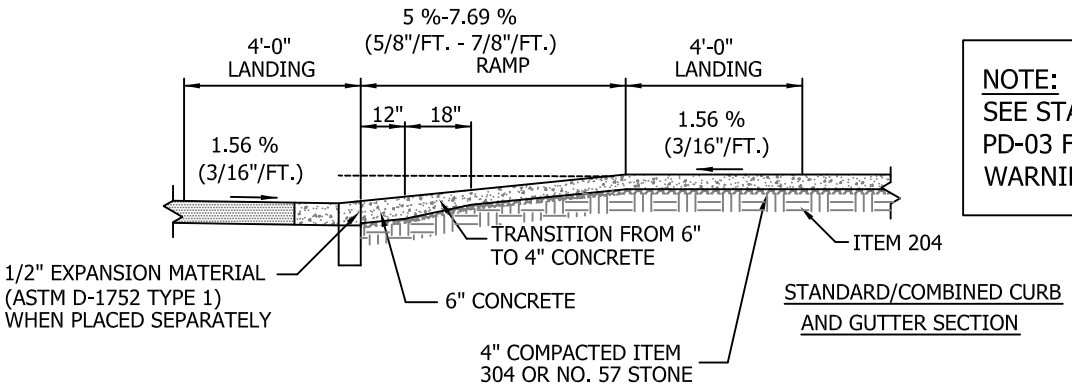
City of Dublin
ENGINEERING

STANDARD DRAWING

CURB RAMP TYPE A DIAGONAL IN TREE LAWN

SHEET 1 OF 1

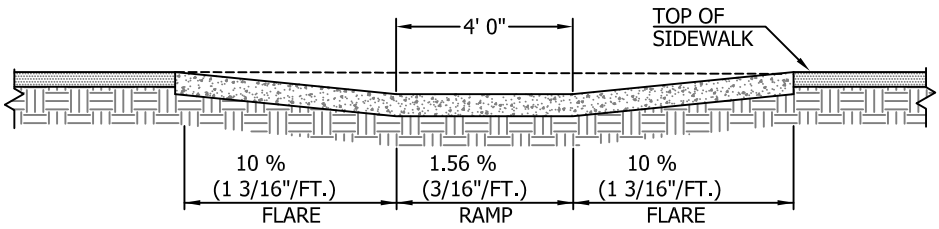
DRAWING NO. **PD-04**



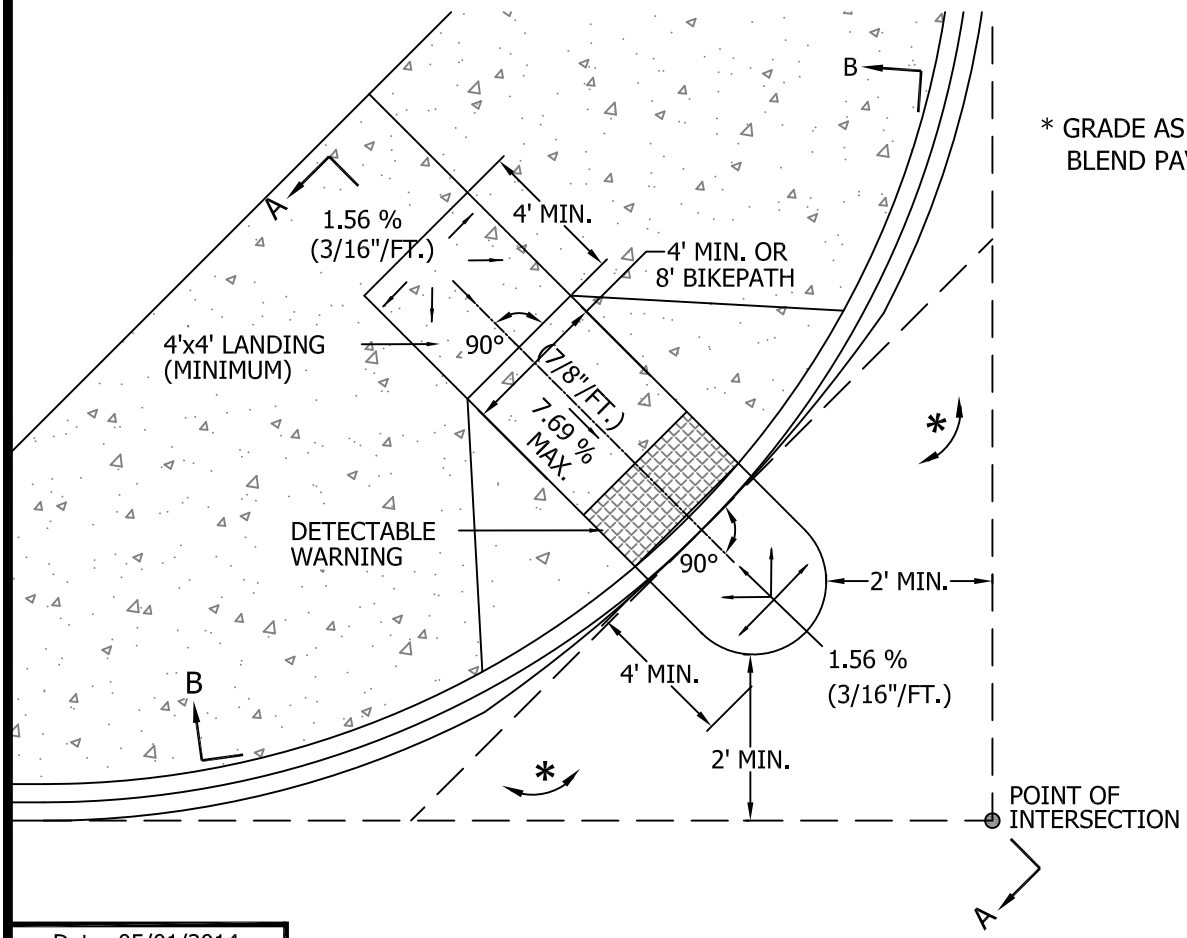
STANDARD/COMBINED CURB AND GUTTER SECTION

SECTION A-A

NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS



SECTION B-B



* GRADE AS REQUIRED TO BLEND PAVEMENT GRADES

Date: 05/01/2014

City of Dublin
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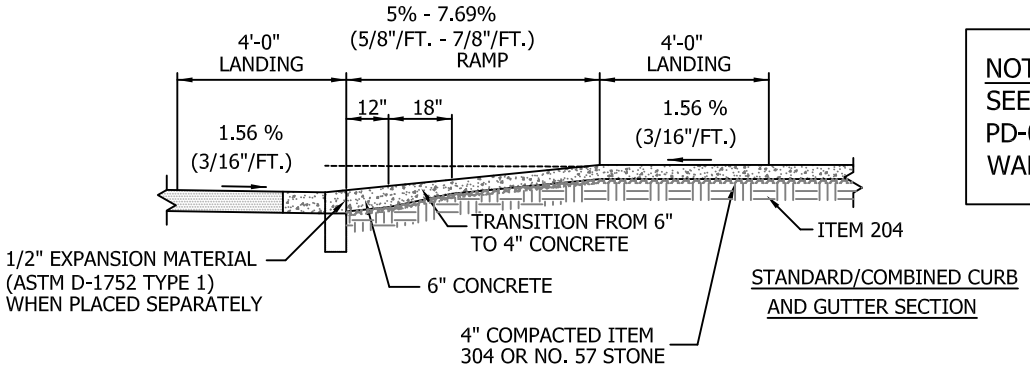
CURB RAMP TYPE B DIAGONAL WITH FLARES

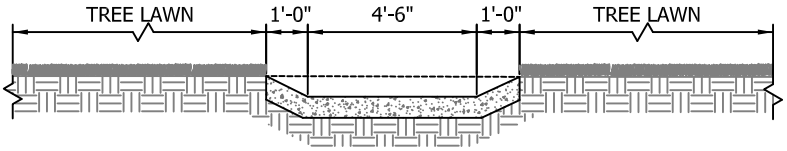
SHEET 1 OF 1

DRAWING NO. **PD-05**

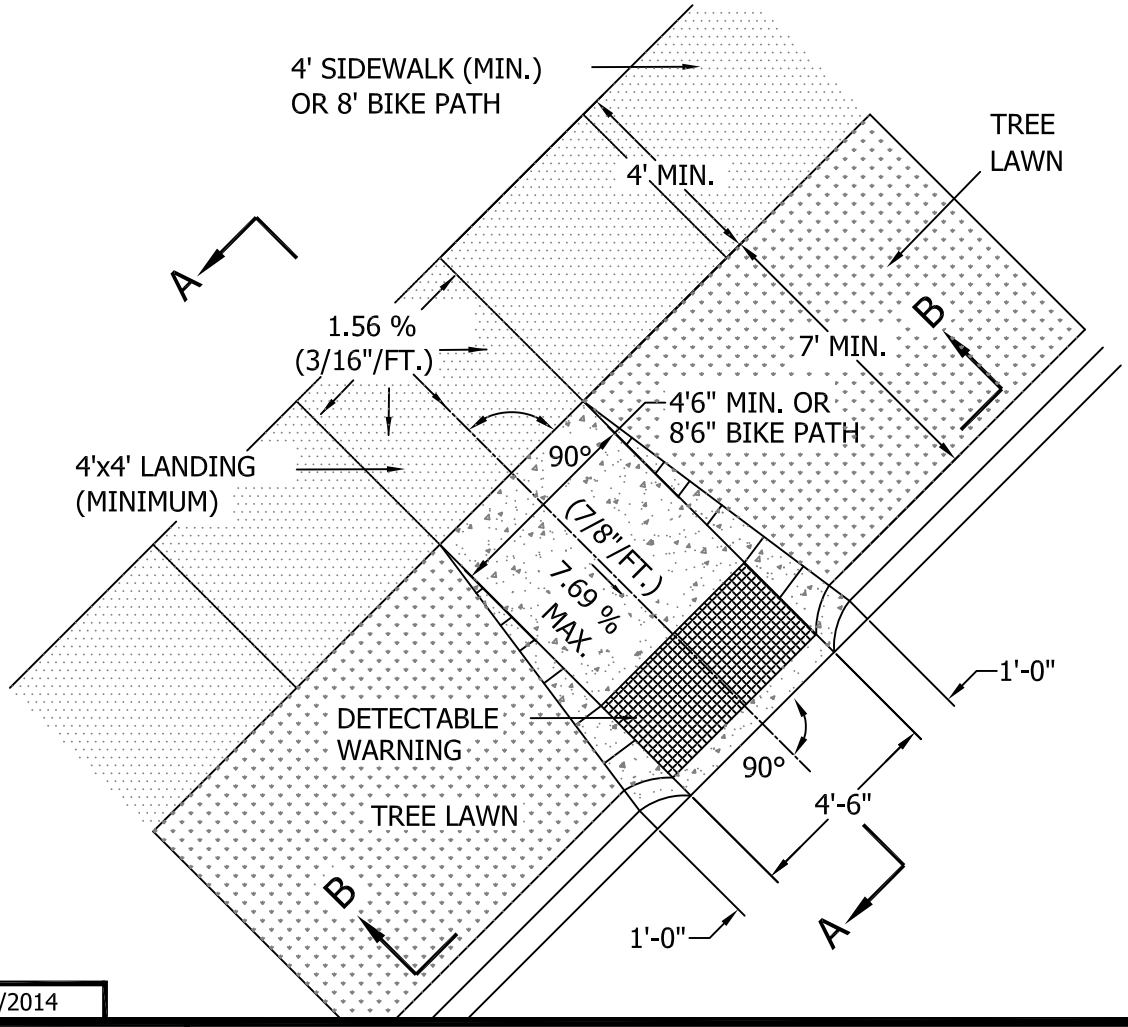


NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS

SECTION A-A



SECTION B-B



Date: 05/01/2014

City of Dublin
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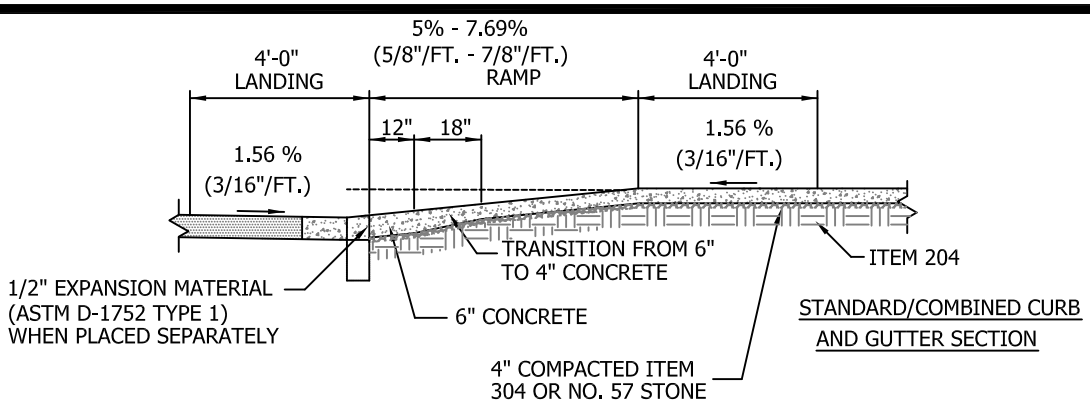
STANDARD DRAWING

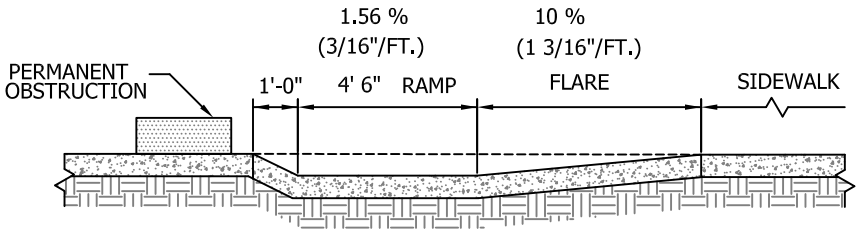
CURB RAMP TYPE C IN TREE LAWN

SHEET 1 OF 1

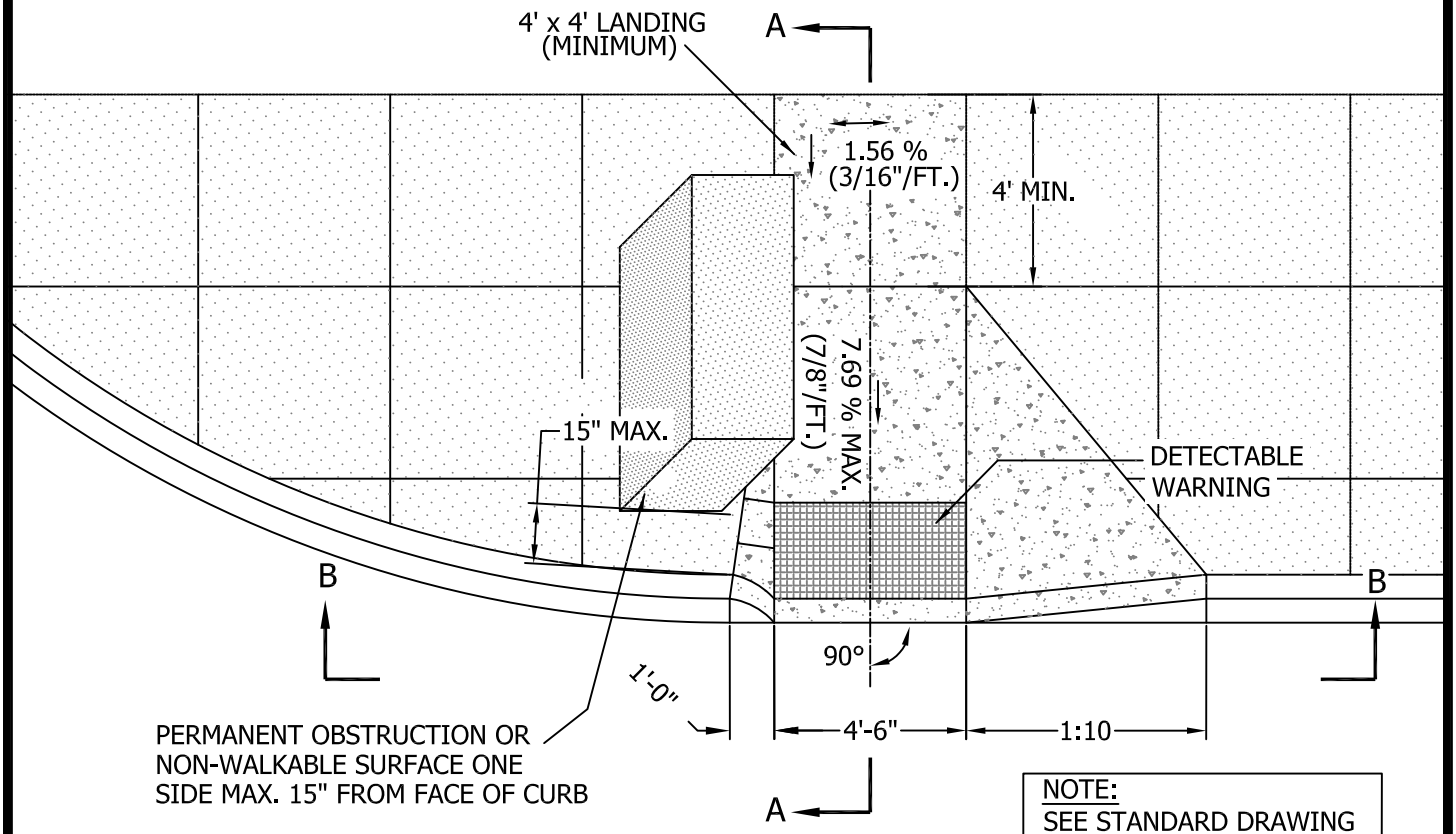
DRAWING NO. **PD-06**



SECTION A-A



SECTION B-B



NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS

Date: 05/01/2014

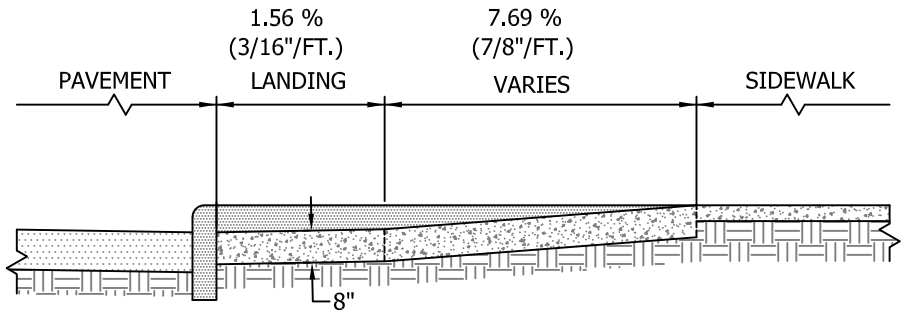
City of Dublin
ENGINEERING

STANDARD DRAWING

CURB RAMP TYPE D OBSTRUCTED ONE SIDE

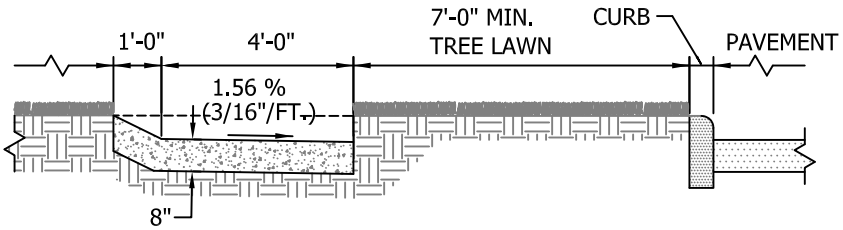
SHEET 1 OF 1

DRAWING NO. **PD-07**

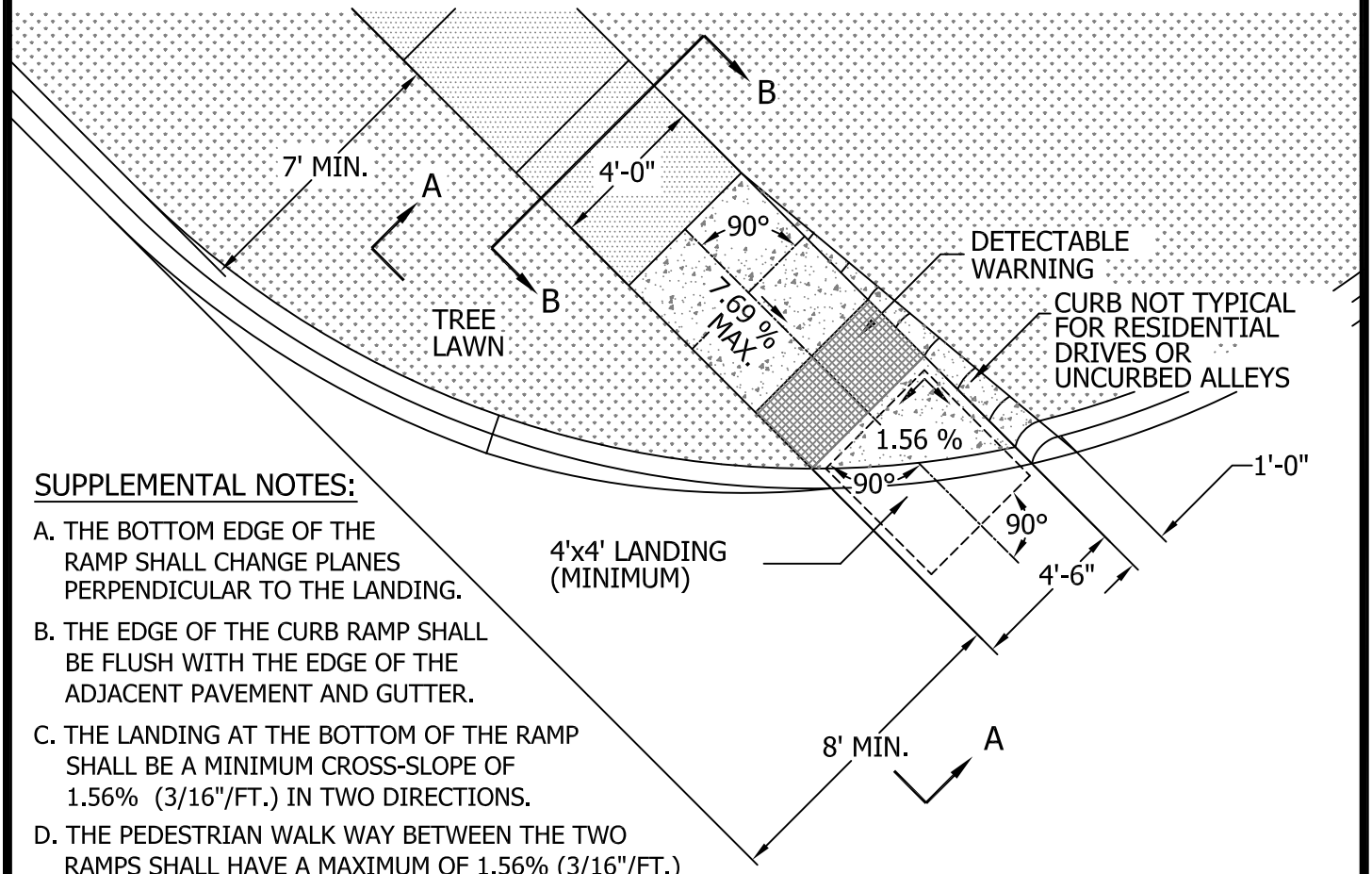


SECTION A-A

NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS



SECTION B-B



SUPPLEMENTAL NOTES:

A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.

B. THE EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE A MINIMUM CROSS-SLOPE OF 1.56% (3/16"/FT.) IN TWO DIRECTIONS.

D. THE PEDESTRIAN WALK WAY BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56% (3/16"/FT.) CROSS-SLOPE WITH A 5% MAXIMUM RUNNING SLOPE (5/8"/FT.).

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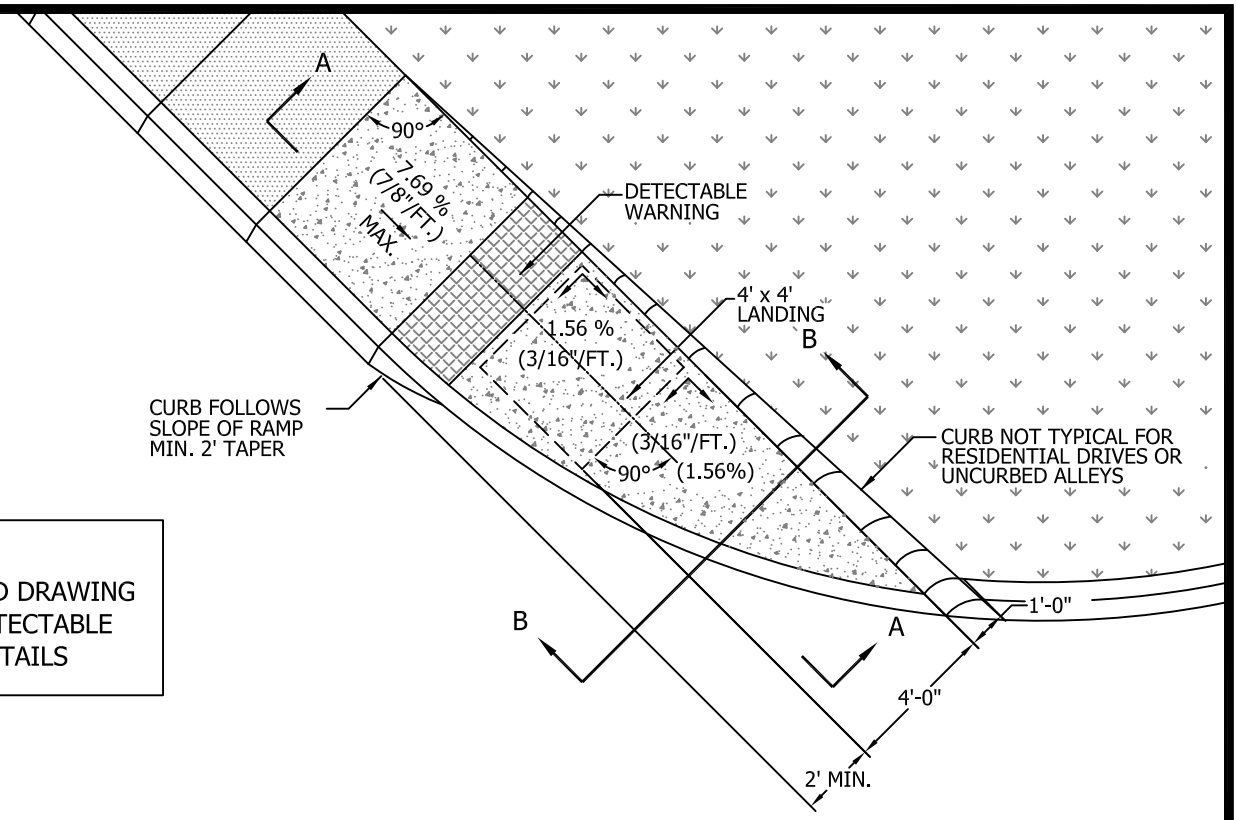
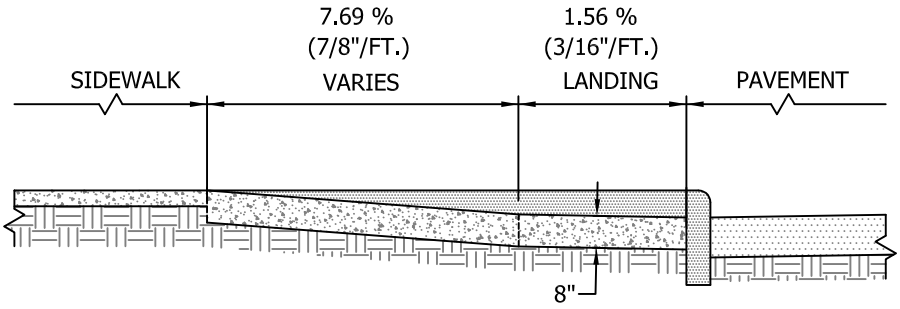
CURB RAMP TYPE E ALLEYS AND DRIVEWAYS

SHEET 1 OF 1

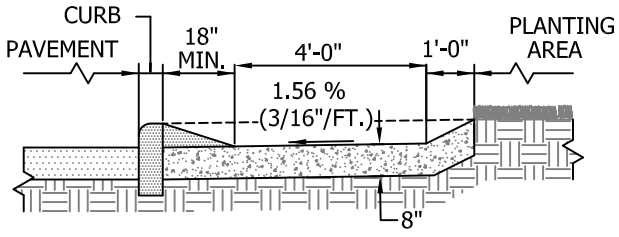
DRAWING NO. **PD-08**



NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS



SECTION A-A



SECTION B-B

SUPPLEMENTAL NOTES:

A. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.

B. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

C. THE LANDING AT THE BOTTOM OF THE RAMP SHALL BE 4'X4' WITH A MAXIMUM CROSS SLOPE OF 1.56 % (3/16"/FT) IN TWO DIRECTIONS.

D. THE PEDESTRIAN WALK WAY BETWEEN THE TWO RAMPS SHALL HAVE A MAXIMUM OF 1.56 % (3/16"/FT.) CROSS - SLOPE WITH A 5 % (5/8"/FT.) MAXIMUM RUNNING SLOPE.

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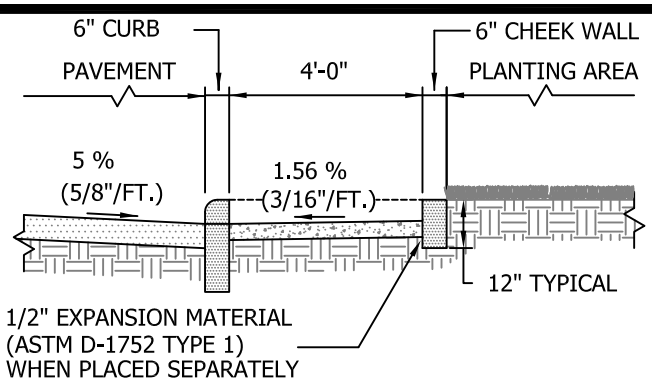
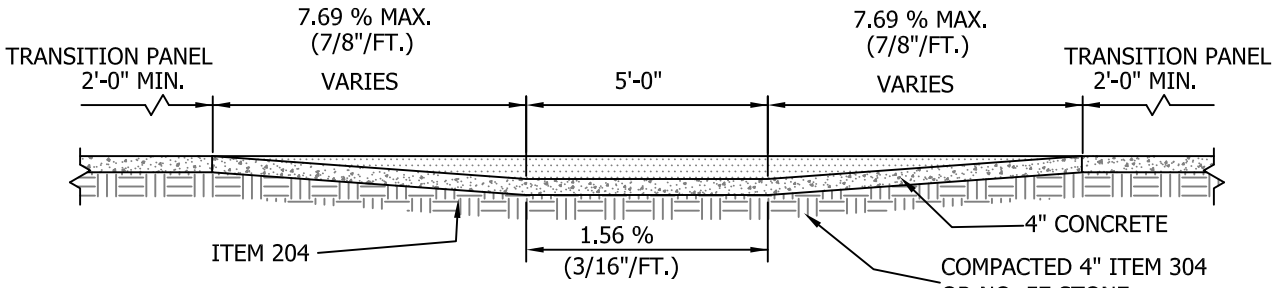
CURB RAMP TYPE F ALLEY AND DRIVEWAYS

SHEET 1 OF 1

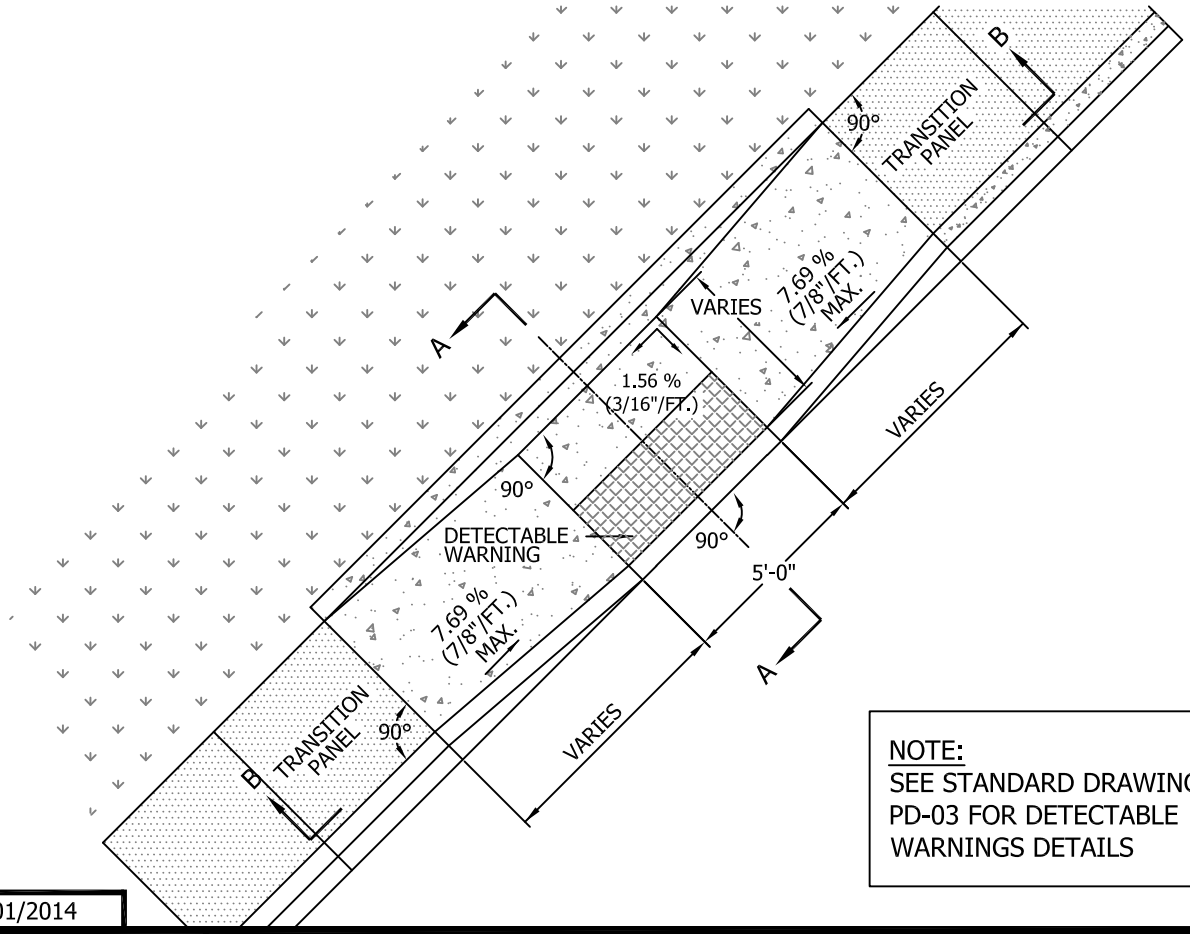
DRAWING NO. **PD-09**



SECTION A-A



SECTION B-B



NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS

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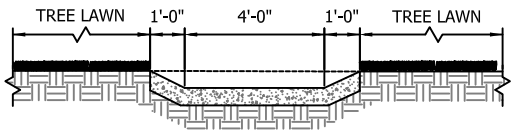
City of Dublin
ENGINEERING

STANDARD DRAWING

CURB RAMP TYPE G PARALLEL LANDING, 2 RAMPS

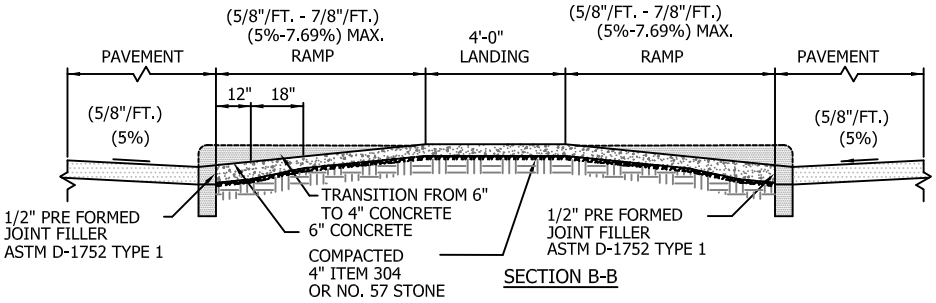
SHEET 1 OF 1

DRAWING NO. **PD-10**

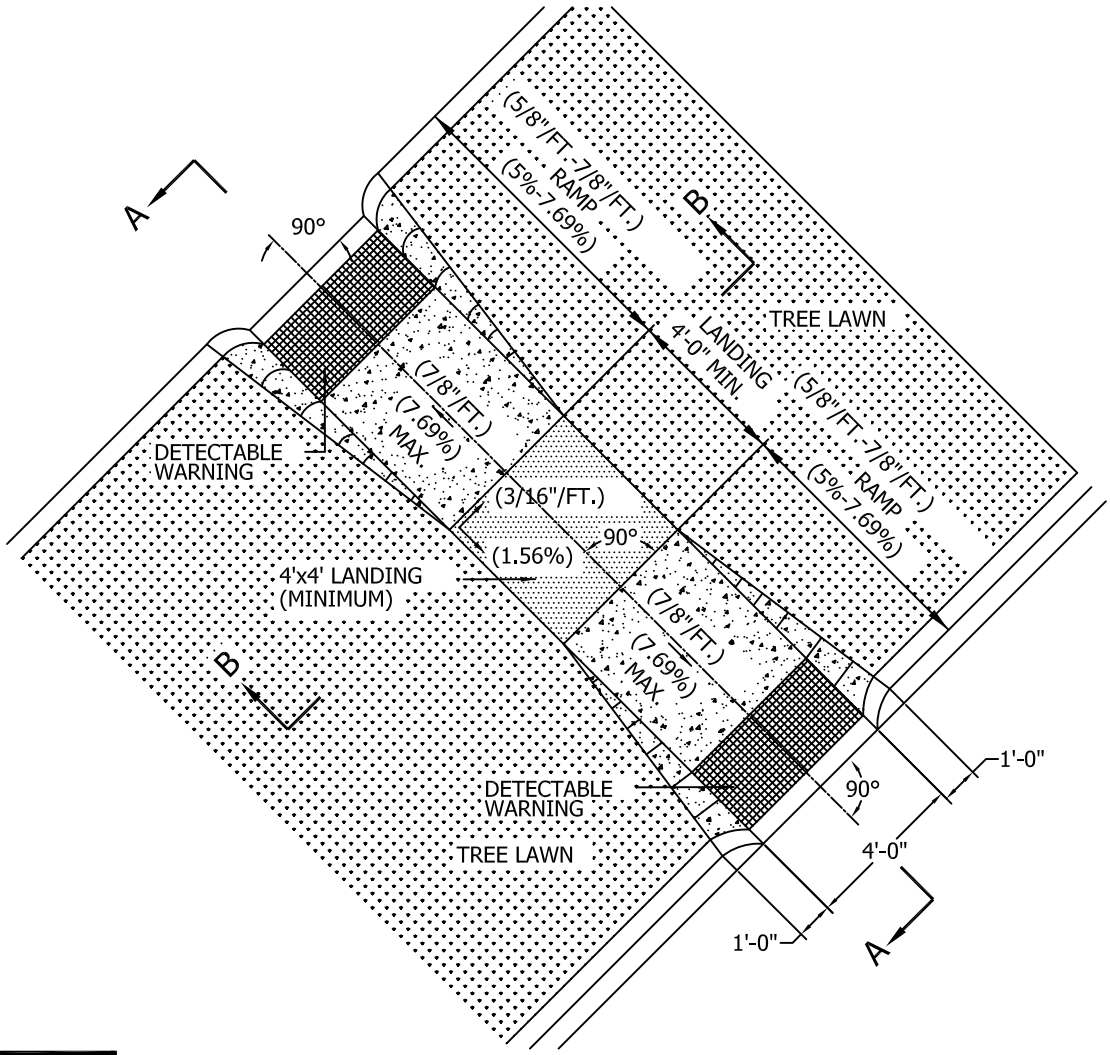


SECTION A-A

NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS



SECTION B-B



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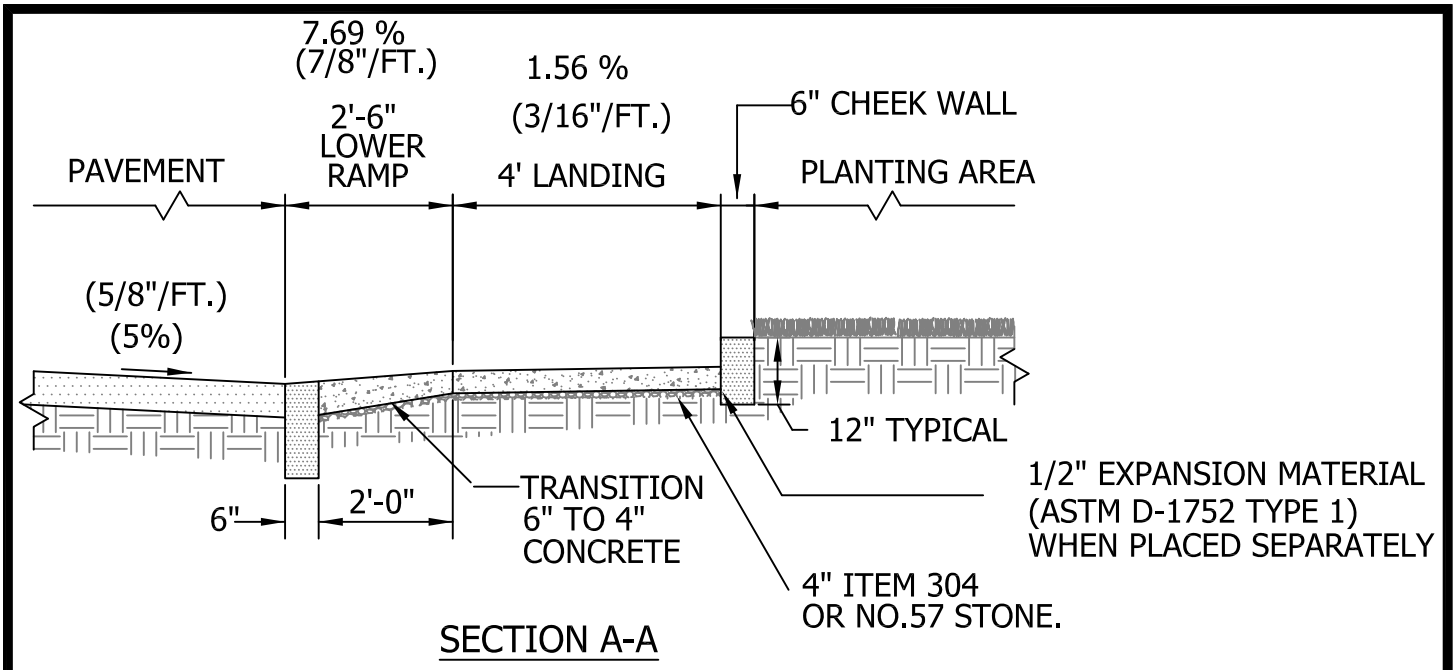
City of Dublin
ENGINEERING

STANDARD DRAWING

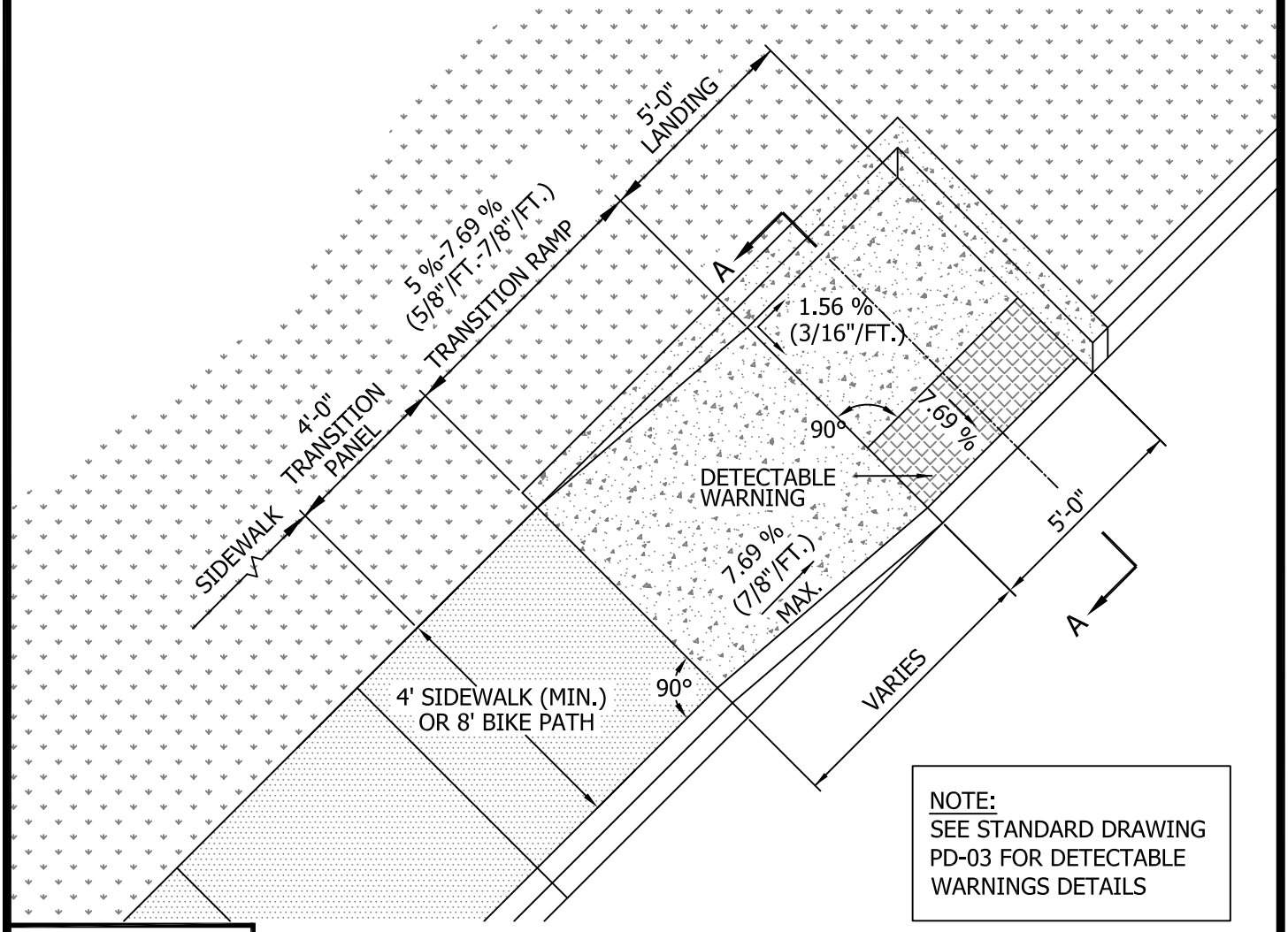
CURB RAMP TYPE H MEDIAN RAMP WITH LANDING

SHEET 1 OF 1

DRAWING NO. **PD-11**



SECTION A-A



NOTE:
SEE STANDARD DRAWING PD-03 FOR DETECTABLE WARNINGS DETAILS

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City of Dublin
ENGINEERING

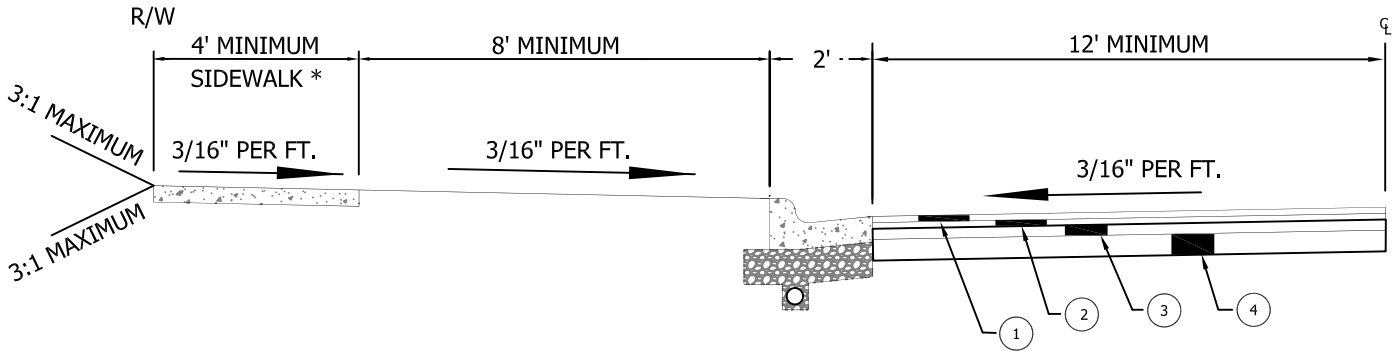
STANDARD DRAWING

CURB RAMP TYPE I PERPENDICULAR & PARALLEL

SHEET 1 OF 1

DRAWING NO. **PD-12**

NOTE: SEE RD-02 FOR CURB & GUTTER DETAIL



* 5'-0" SIDEWALK (WHERE REQUIRED)
8'-0" BIKE PATH (WHERE REQUIRED)

MINOR AND LOCAL STREETS	(MINIMUM PAVEMENT DEPTH*)	ALTERNATIVE ***
(1) ASPHALT CONCRETE SURFACE COURSE TYPE 1 PG. 64-22 MEDIUM TRAFFIC ITEM 448 ----	1 1/4"	1 1/4"
(2) ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 PG. 64-22 MEDIUM TRAFFIC ITEM 448-----	1 3/4"	1 3/4"
(3) BITUMINOUS AGGREGATE BASE ITEM 301 ---- (TWO COURSES OF 3")	3"	6"
(4) AGGREGATE BASE ITEM 304 ----------	6"	N/A

* NOTE: MINIMUM PAVEMENT DEPTH ARE TYPICAL FOR RESIDENTIAL APPLICATIONS. ROADWAYS IN INDUSTRIAL AND COMMERCIAL AREAS MAY BE REQUIRED TO HAVE DEPTHS DESIGNED FOR ACTUAL TRAFFIC LOADINGS USING AASHTO METHODS AS DIRECTED BY THE CITY ENGINEER.

COLLECTOR AND ARTERIAL STREETS **	(MINIMUM PAVEMENT DEPTH*)	ALTERNATIVE ***
(1) ASPHALT CONCRETE SURFACE COURSE TYPE 1 PG. 64-22 MEDIUM TRAFFIC ITEM 448 ----	1 1/4"	1 1/4"
(2) ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 PG. 64-22 MEDIUM TRAFFIC ITEM 448-----	1 3/4"	1 3/4"
(3) BITUMINOUS AGGREGATE BASE ITEM 301 ---- (TWO COURSES OF 3")	6"	9"
(4) AGGREGATE BASE ITEM 304 ----------	6"	N/A

** NOTE: COLLECTOR AND ARTERIAL STREET PAVEMENT DEPTHS SHALL BE DESIGNED TO ACTUAL TRAFFIC LOADINGS USING THE AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES. SHOULD CALCULATED DEPTHS BE LESS THAN THE MINIMUM DEPTHS, THE MINIMUM DEPTHS SHALL BE USED.

*** NOTE: ALTERNATIVE PAVEMENT SECTION REQUIRES CITY ENGINEER'S APPROVAL PRIOR TO INSTALLATION.

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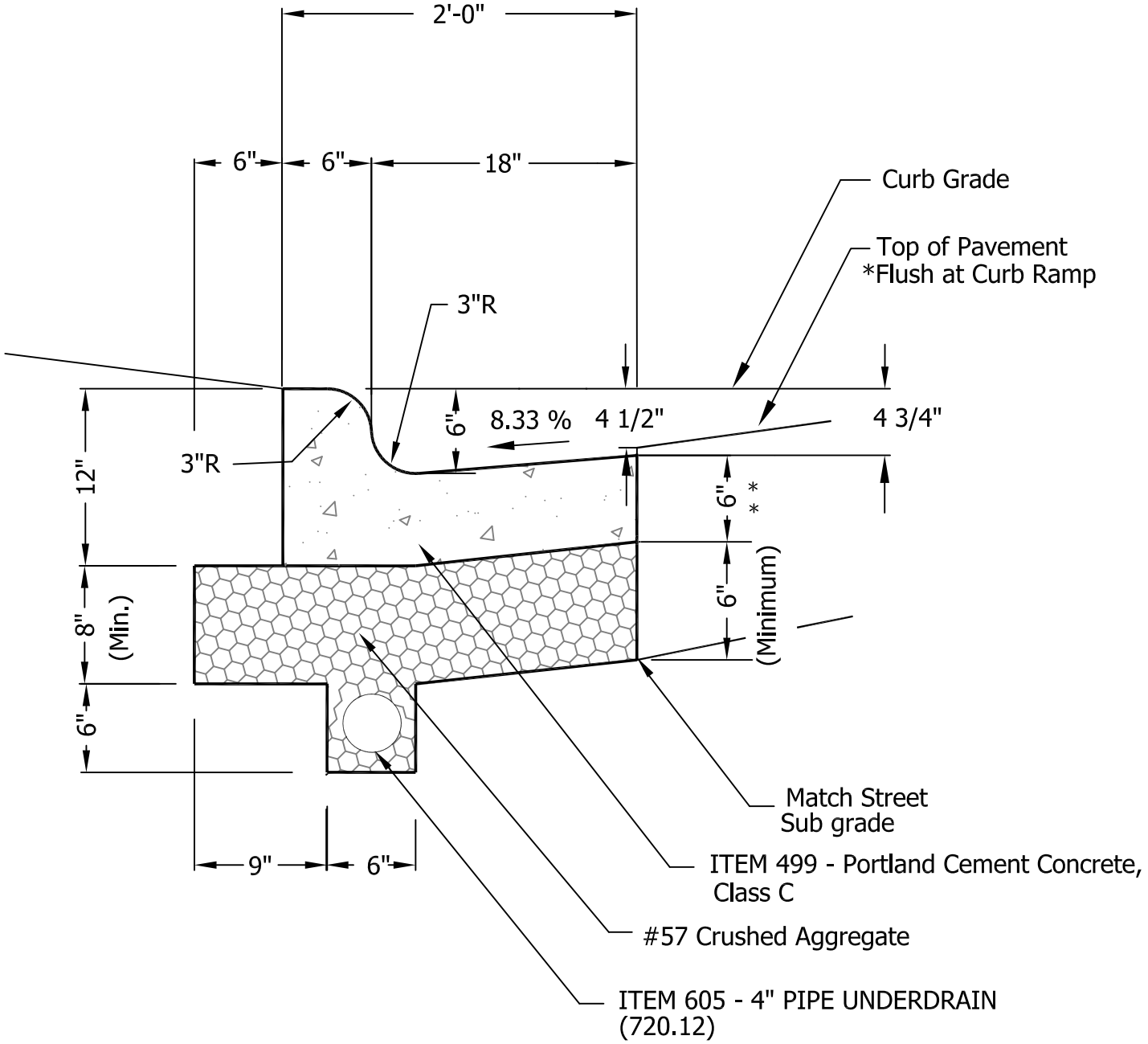
ENGINEERING

STANDARD DRAWING

TYPICAL STREET SECTIONS

SHEET 1 OF 1

DRAWING NO. **RD-01**



* SEE DRAWING RD-03 FOR GUTTER TRANSITION AT CURB RAMP.

** 10" AT COMMERCIAL DRIVE ENTRANCES/HEAVY DUTY CURB AND GUTTER

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C:\Users\stanca\Desktop\2-color-3.jpg

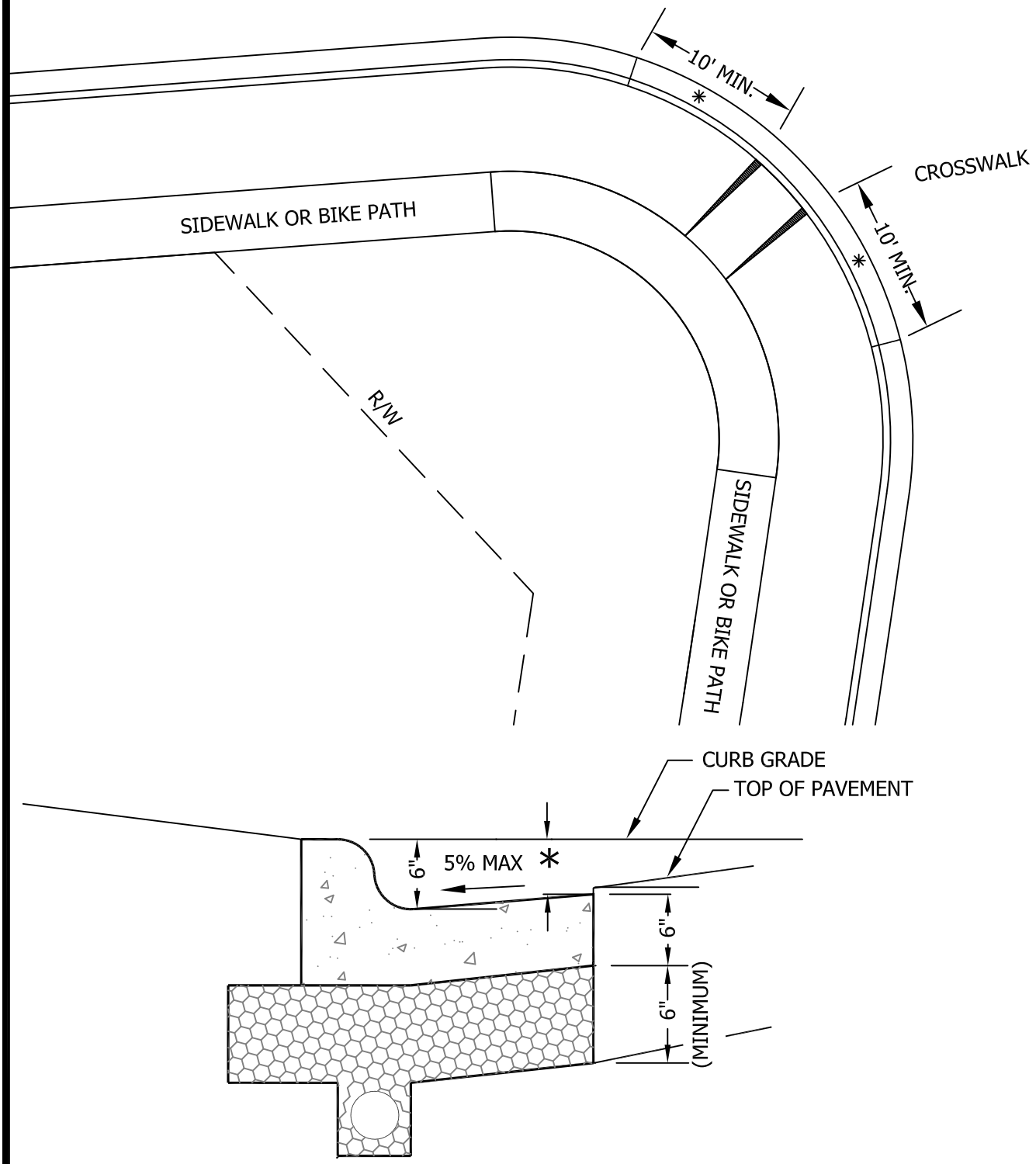
ENGINEERING

STANDARD DRAWING

COMBINATION CONCRETE CURB AND GUTTER

SHEET 1 OF 1

DRAWING NO. ***RD-02***



* TRANSITION GUTTER LIP FROM 4 1/2"-INCH TYPICAL DEPTH TO 5 5/8-INCH DEPTH WITHIN AT LEAST 10-FEET OF THE CURB RAMP. THE 5 5/8-INCH DEPTH IS TO BE MAINTAINED THROUGH THE CURB RAMP. THE TRANSITION LENGTH MAY BE ADJUSTED PER THE DIRECTION OF THE CITY ENGINEER.

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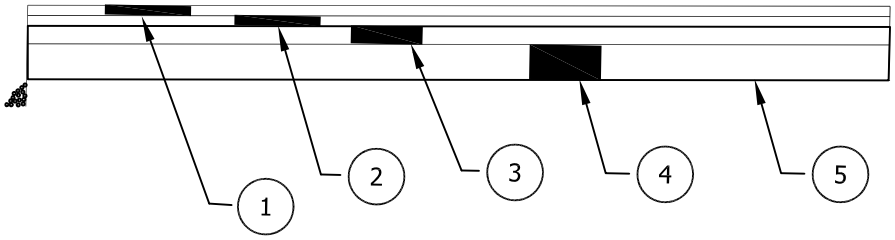
STANDARD DRAWING

TYPICAL GUTTER SECTION TRANSITIONS

SHEET 1 OF 1

DRAWING NO. **RD-03**



✱ PRIVATE STREET OR ALLEY (MINIMUM PAVEMENT DEPTH)

Option 1

1. ASPHALT CONCRETE SURFACE COURSE TYPE 1 PG. 64-22 MEDIUM TRAFFIC ITEM 448 --------1 1/4"
2. ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 PG. 64-22 MEDIUM TRAFFIC ITEM 448 --------1 3/4"
3. BITUMINOUS AGGREGATE BASE ITEM 301 --- 3"
4. AGGREGATE BASE ITEM 304 ----------6"
5. SUBGRADE COMPACTION ITEM 204

PARKING LOT (MINIMUM PAVEMENT DEPTH)

Option 1

1. ASPHALT CONCRETE SURFACE COURSE TYPE 1 PG. 64-22 MEDIUM TRAFFIC ITEM 448 --------1 1/4"
2. ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 PG. 64-22 MEDIUM TRAFFIC ITEM 448 --------1 3/4"
4. AGGREGATE BASE ITEM 304 ----------6"
5. SUBGRADE COMPACTION ITEM 204

ROADWAYS IN INDUSTRIAL AND COMMERCIAL AREAS MAY BE REQUIRED TO HAVE DEPTHS DESIGNED FOR PROJECTED TRAFFIC LOADINGS USING AASHTO METHODS AS DIRECTED BY THE CITY ENGINEER.

✱ NOTE: MINIMUM PAVEMENT WIDTH FOR PRIVATE STREETS SHALL BE 22'.

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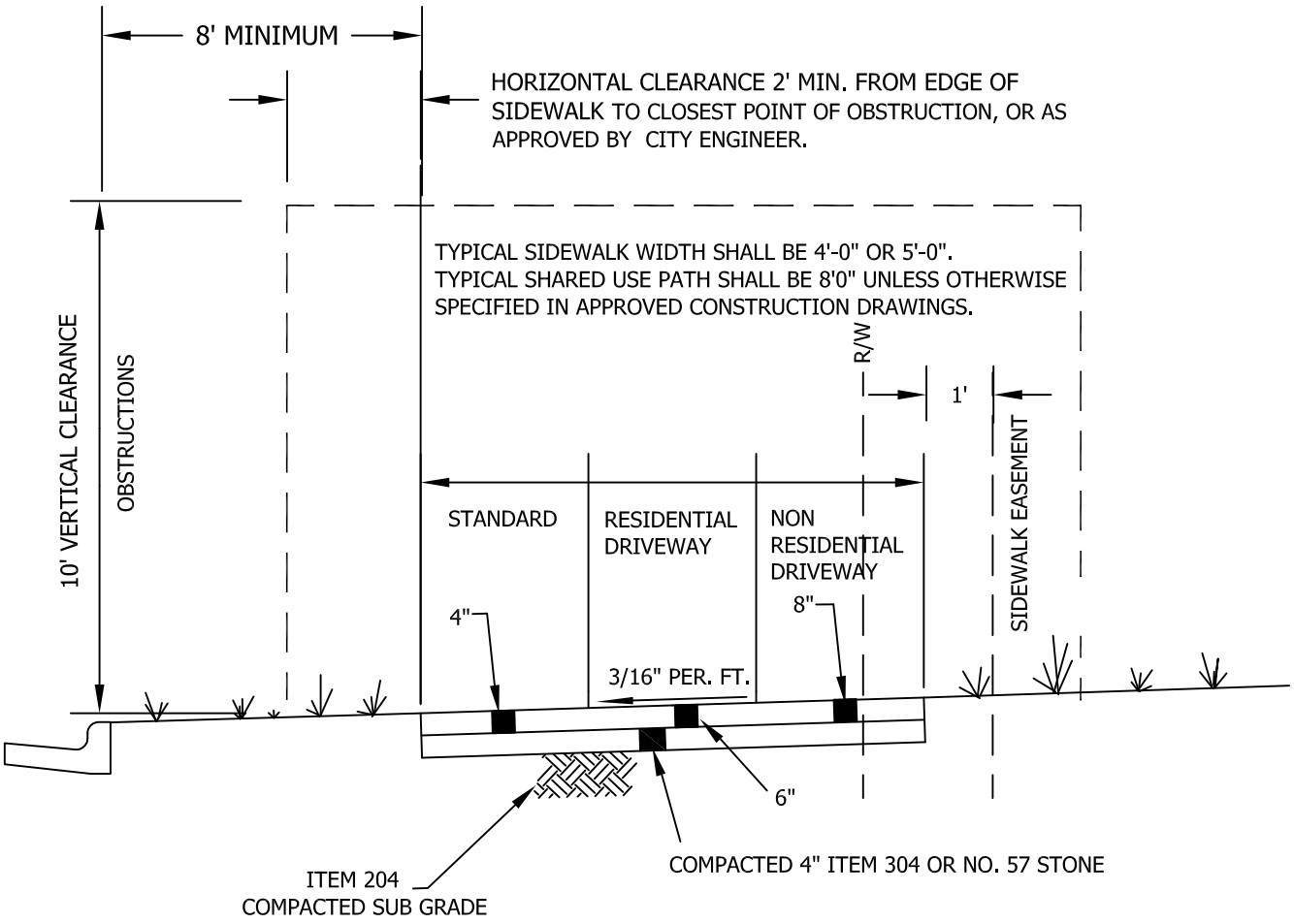
STANDARD DRAWING

TYPICAL PAVEMENT SECTION FOR PRIVATE STREETS

SHEET 1 OF 1

DRAWING NO. ***RD-04***



1. ALL WALKWAYS SHALL BE CONSTRUCTED PER CCMS ITEM 608 OR AS DIRECTED BY CITY ENGINEER.
2. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED. SEED MIXTURE SHALL BE APPROVED BY THE CITY ENGINEER.
3. CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITIONS, AND ANY OTHER SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS UNLESS OTHERWISE NOTED.
4. SIDEWALKS/BIKE PATHS CROSSING RESIDENTIAL DRIVEWAYS SHALL BE 6" CLASS C CONCRETE ITEM 499. SIDEWALKSSHARED USE PATHS CROSSING NON-RESIDENTIAL DRIVEWAY APPROACHES SHALL BE MINIMUM 8" CLASS C CONCRETE,ITEM 499 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. ALL COMMERCIAL DRIVES SHALL HAVE 6" OF ITEM 304.
6. INSPECTION SCHEDULING SHALL BE MADE WITH THE BUILDING DIVISION WHEN CONCRETE FORMS ARE READY FOR INSPECTION, AT LEAST 48 HOURS BEFORE CONCRETE IS TO BE PLACED AT (614) 410-4600.
7. ALL SHARED USE PATH JOINTS ARE TO BE SAWCUT.
8. SIDEWALKS/FLATWORK SHALL BE TOOL CUT & RETRACED.
9. FULL DEPTH EXPANSION MATERIAL (1/2" THICK) SHALL BE PLACED ADJOINING ALL EXISTING CONCRETE CONFORMING TO ASTM D-1752 TYPE 1.

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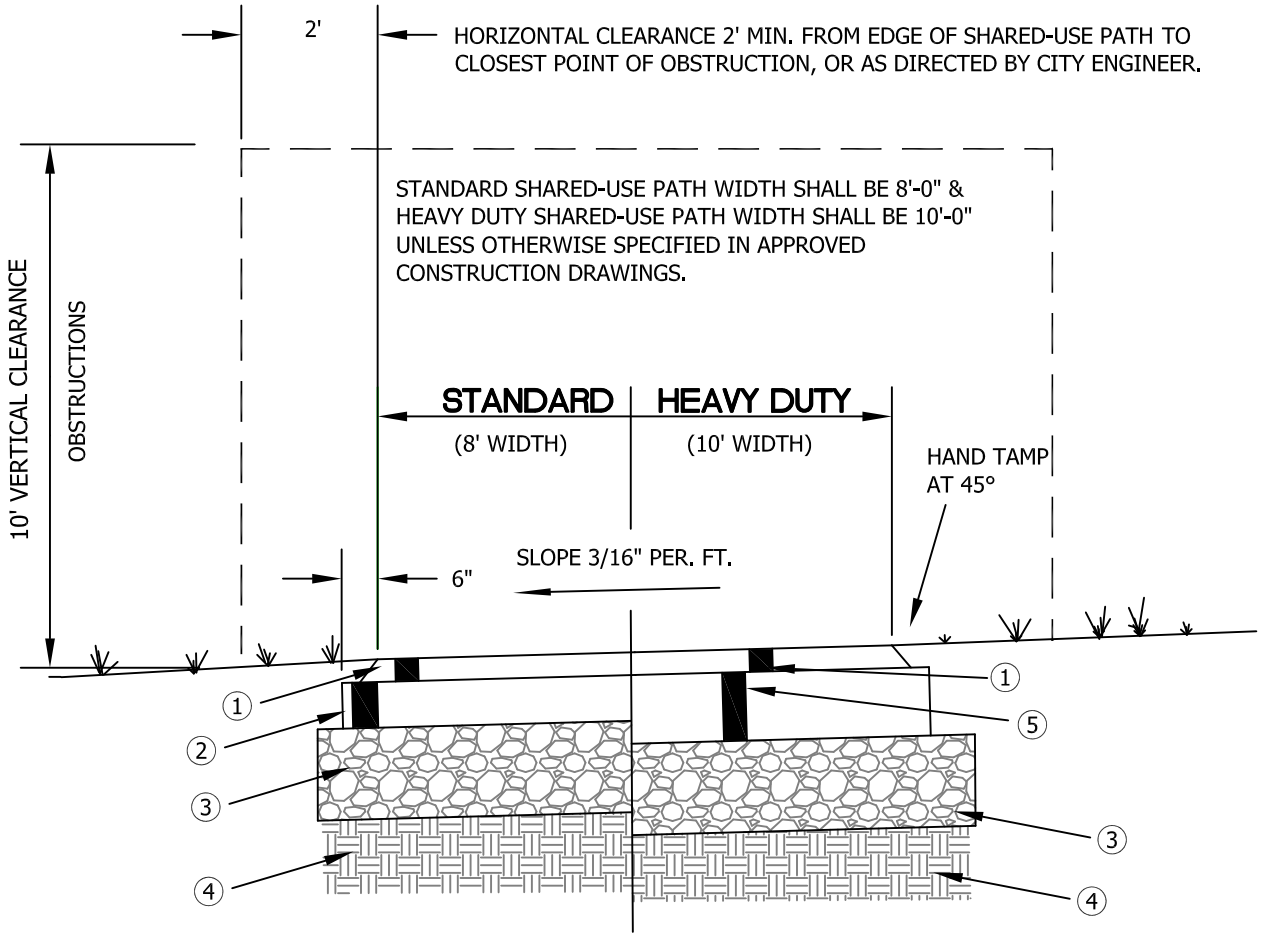
ENGINEERING

STANDARD DRAWING

CONCRETE SIDEWALK AND SHARED USE PATH

SHEET 1 OF 1

DRAWING NO. **RD-05**



① 1-1/2" ITEM 448, ASPHALT CONCRETE, SURFACE COURSE TYPE 1 (MEDIUM TRAFFIC), PG. 64-22

② 3" ITEM 301, ASPHALT CONCRETE BASE

③ 6" ITEM 304, AGGREGATE BASE

④ ITEM 204, SUBGRADE COMPACTION

⑤ 4 1/2" ITEM 301, ASPHALT CONCRETE BASE

1. ALL TOPSOIL SHALL BE REMOVED FROM SUB GRADE AREAS. ITEM 204 SHALL BE COMPACTED TO NO LESS THAN 98% OF MAX. DRY DENSITY. EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
2. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED. SEED MIXTURE REQUIRES THE APPROVAL OF THE CITY ENGINEER.
3. PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO OHIO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. SHARED-USE PATHS CROSSING CONCRETE RESIDENTIAL DRIVEWAY APPROACHES SHALL BE 6" PC CONCRETE ACROSS THE WIDTH OF THE DRIVEWAY APPROACH, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. SHARED-USE PATHS CROSSING RESIDENTIAL DRIVEWAY APPROACHES SHALL MATCH THE THICKNESS AND CROSS-SECTION OF THE DRIVEWAY APPROACH OR 8" PC CONCRETE, WHICHEVER IS GREATER, AS APPROVED BY THE CITY ENGINEER.
5. FOR GEOMETRIC STANDARDS FOR CURB RAMP REFER TO DUBLIN STD. DWG. PD-01.

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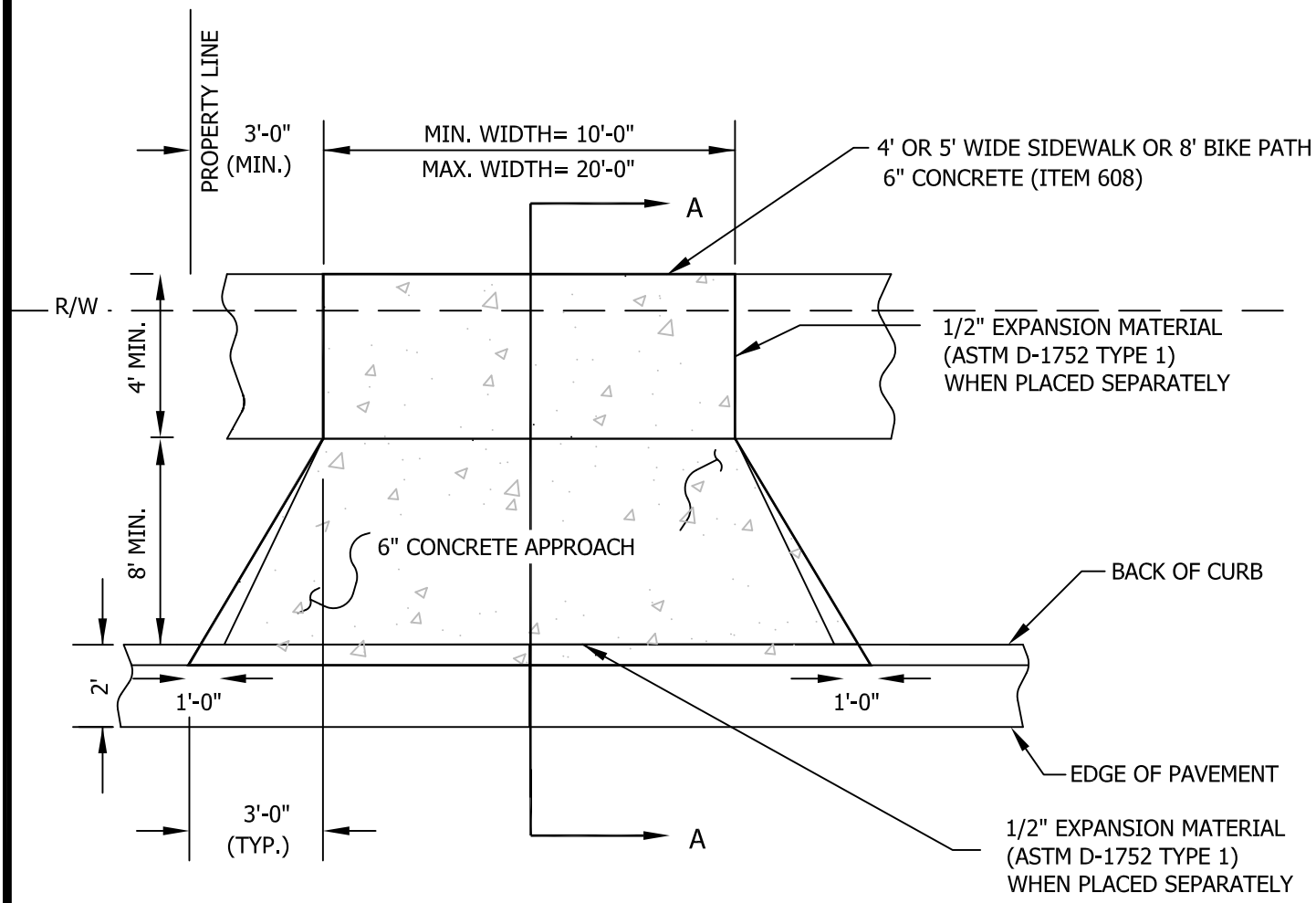
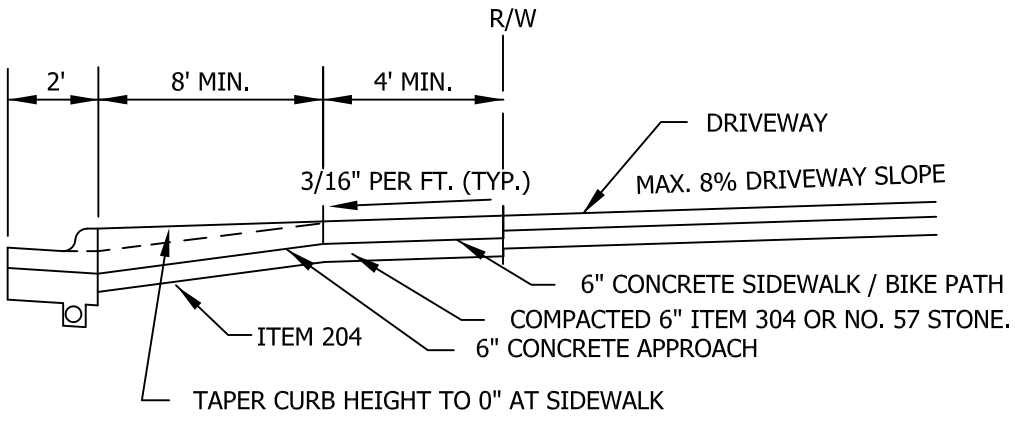
SHARED-USE PATH: STANDARD AND HEAVY DUTY

SHEET 1 OF 1

DRAWING NO. ***RD-06***





SECTION A-A

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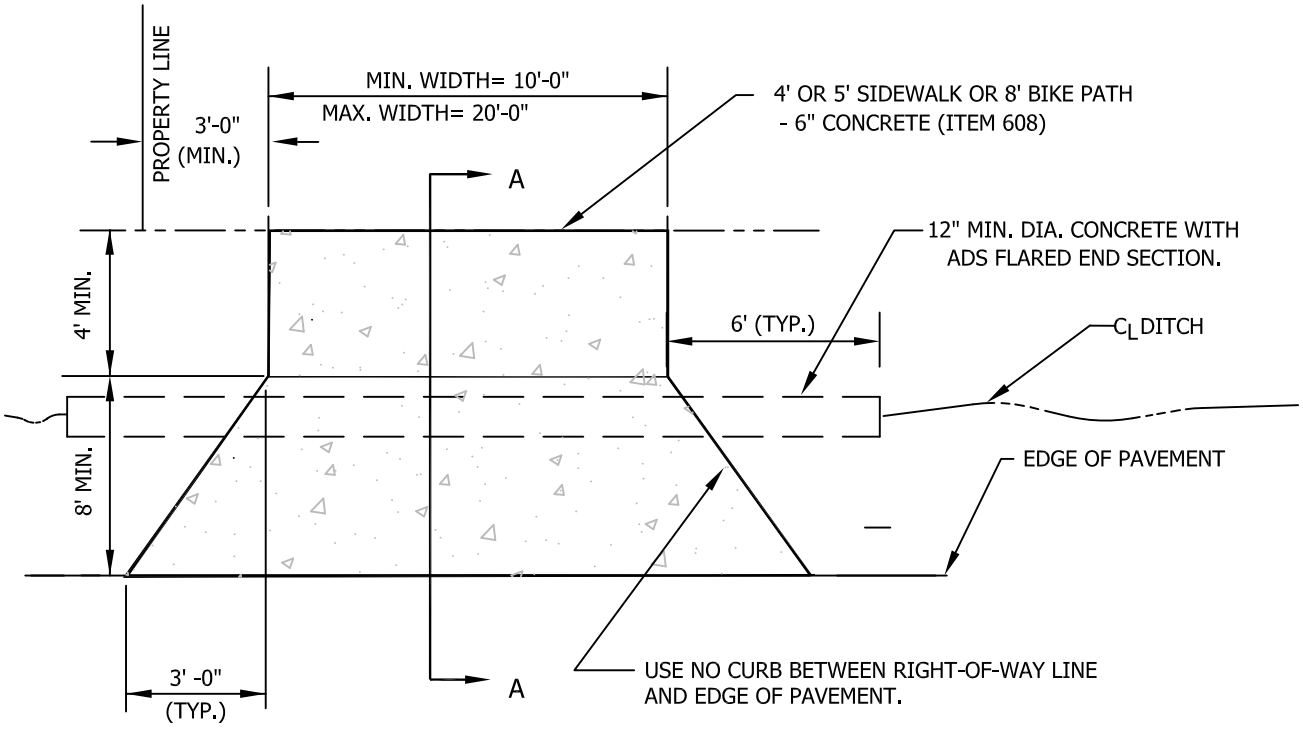
City of Dublin
ENGINEERING

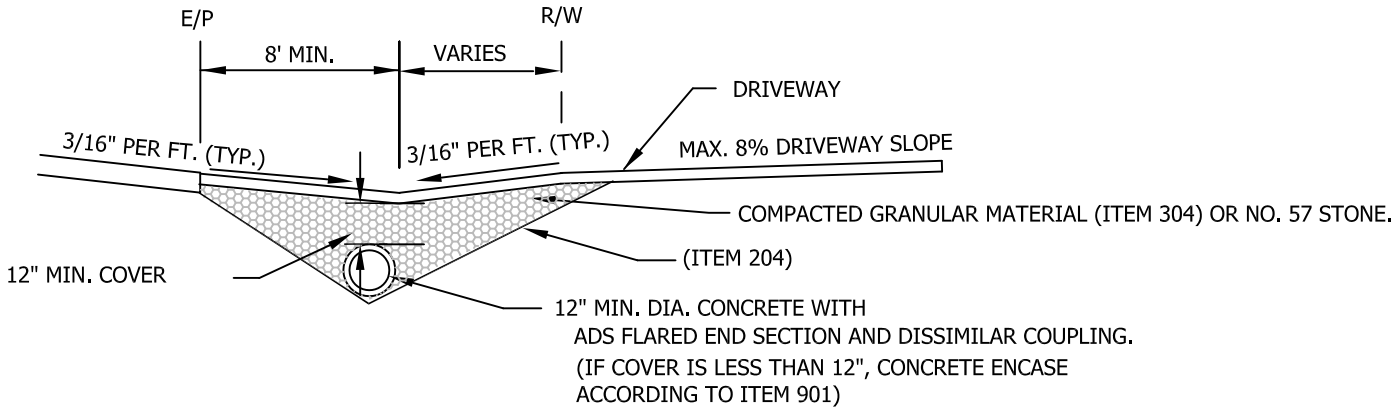
STANDARD DRAWING

RESIDENTIAL DRIVEWAY APPROACH FOR STREETS WITH CURB AND GUTTER

SHEET 1 OF 9

DRAWING NO. **RD-07**





SECTION A-A

NOTE:

1. THE CITY ENGINEER MAY REQUIRE LARGER PIPE TO BE INSTALLED. MINIMUM SLOPE OF PIPE SHALL BE 1 % UNLESS OTHERWISE APPROVED.

2. DRIVE APPROACH SHALL BE 6" CONCRETE OR ALTERNATE ASPHALT AS REQUIRED.
   6" AGGREGATE BASE ITEM 304
   1 1/4" ASPHALT ITEM 402
   1 3/4" ASPHALT ITEM 404

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City of Dublin
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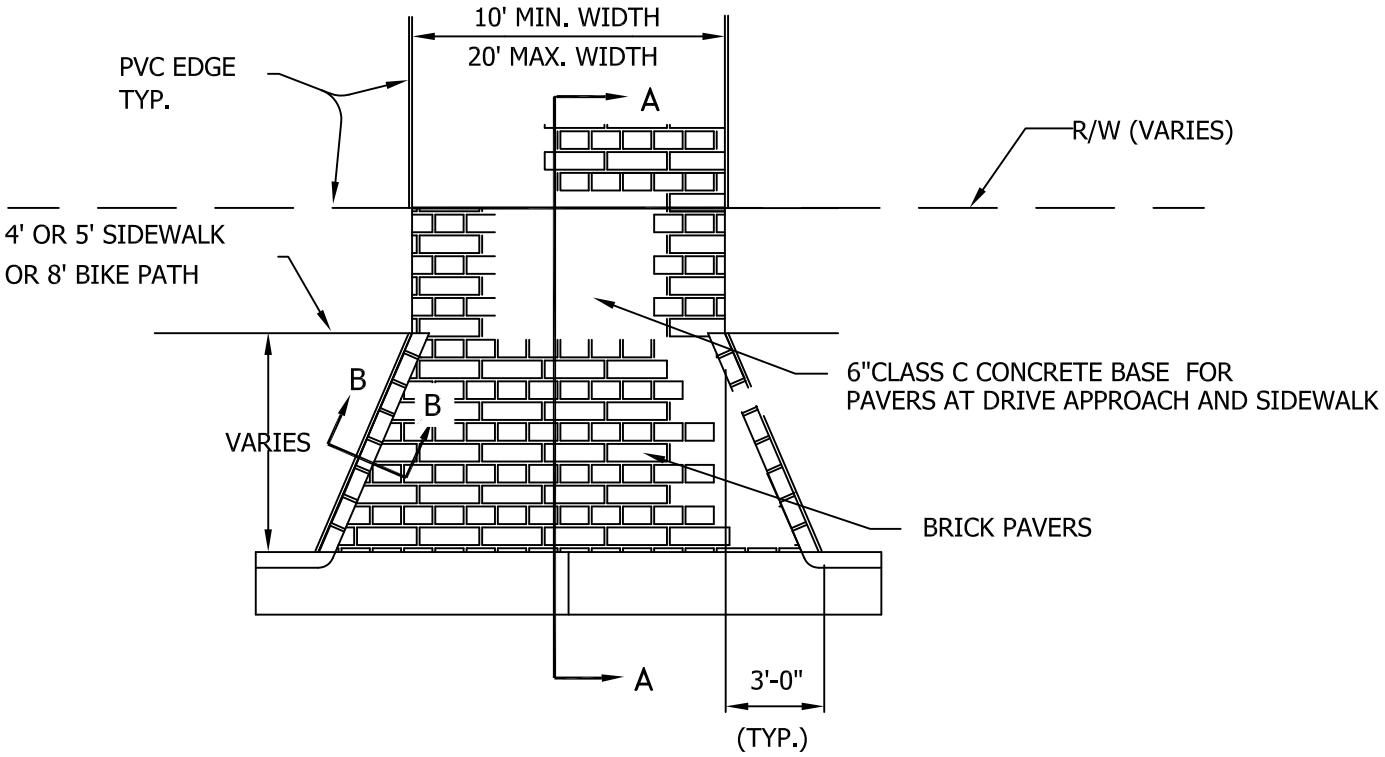
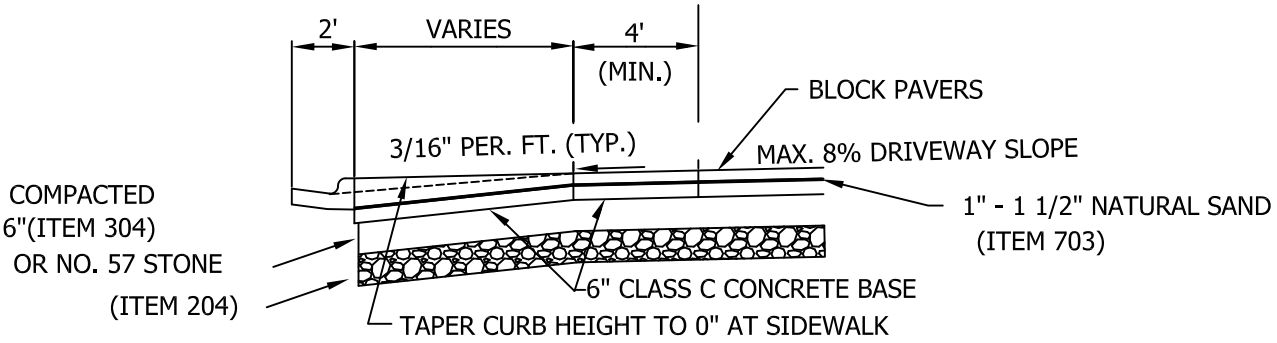
STANDARD DRAWING

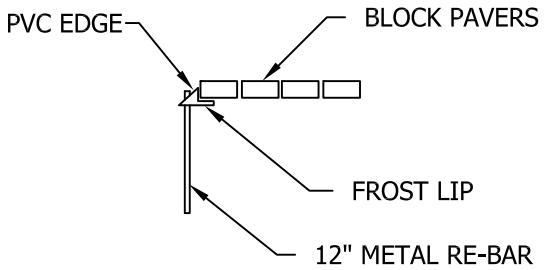
RESIDENTIAL DRIVEWAY APPROACH FOR STREETS WITHOUT CURB AND GUTTER

DRAWING NO. **RD-07**





SECTION A-A



SECTION B-B

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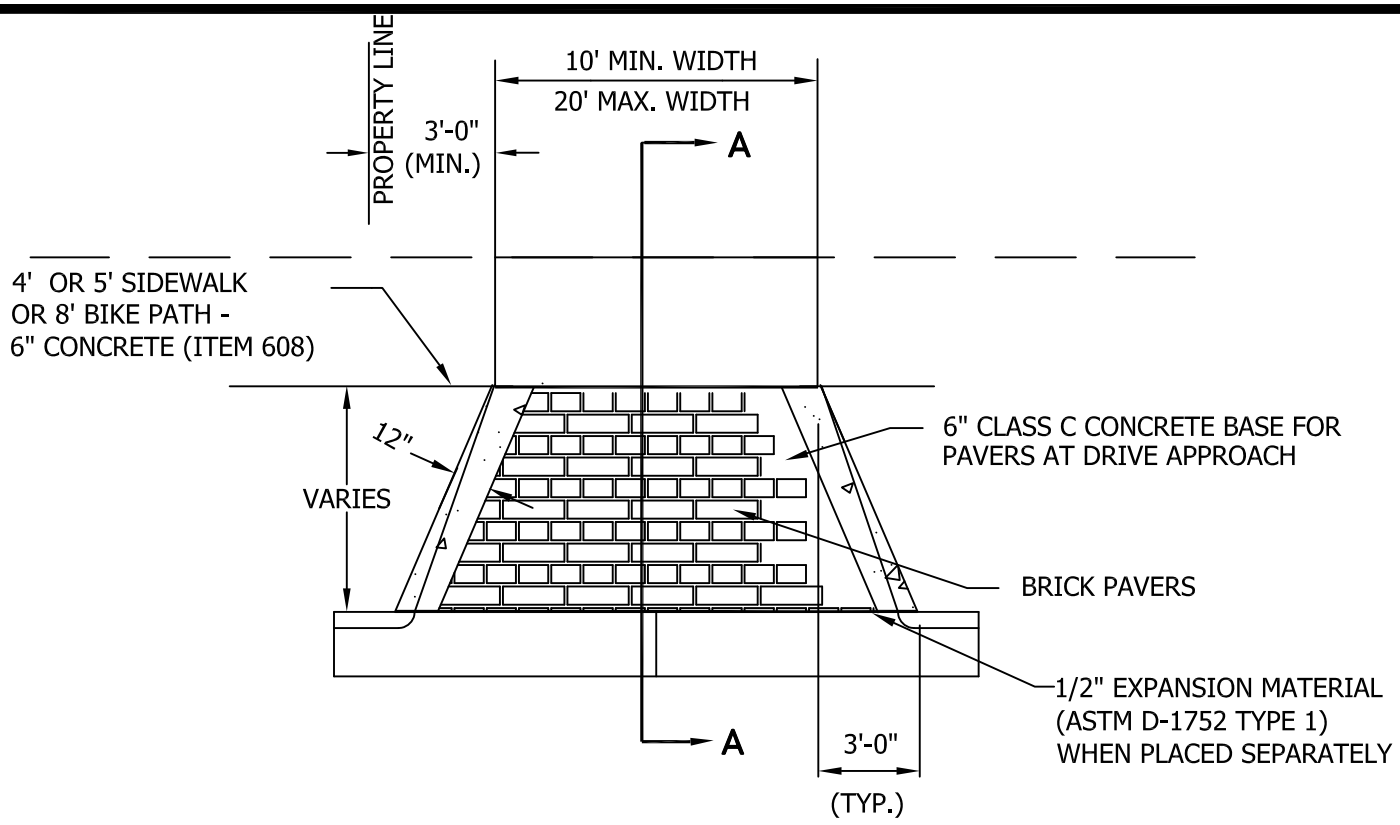
City of Dublin
ENGINEERING

STANDARD DRAWING

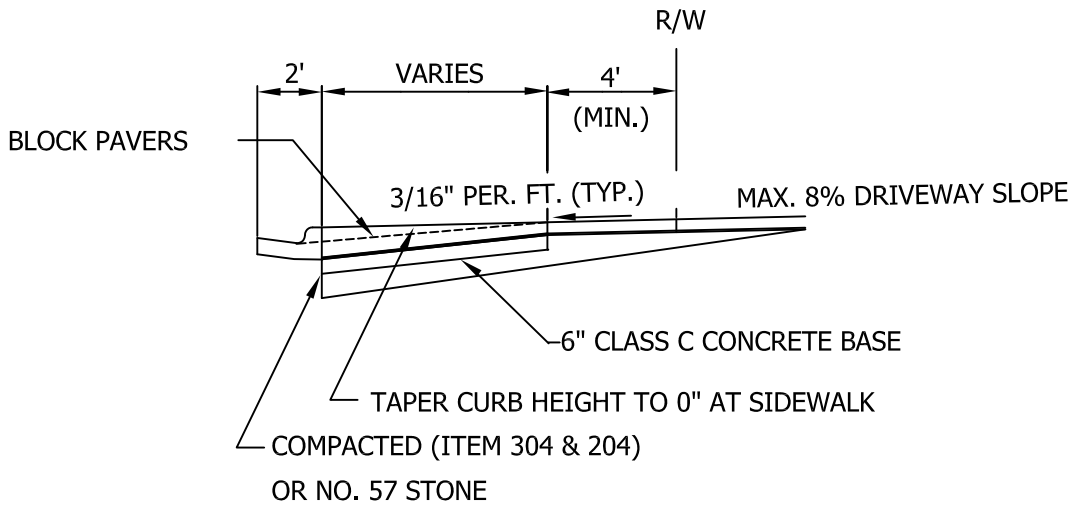
RESIDENTIAL DRIVEWAY AND APPROACH WITH BRICK PAVERS

SHEET 3 OF 9

DRAWING NO. **RD-07**



SEE SHEET 5 OF 9 OF CITY OF DUBLIN STANDARD DRAWING
RD-07 FOR ADDITIONAL REQUIREMENTS FOR BRICK PAVERS.



SECTION A–A

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City of Dublin
ENGINEERING

STANDARD DRAWING

RESIDENTIAL DRIVEWAY APPROACH FOR COMBINATION CONCRETE AND BRICK PAVERS

DRAWING NO. **RD-07**

1. THE FOLLOWING ARE SPECIFICATIONS WHICH APPLY TO THE SUBSTITUTION OF APPROVED BRICK PAVERS FOR CONCRETE DRIVEWAYS AND DRIVEWAY APPROACHES.

2. PAGES 3 AND 4 OF 9 OF CITY OF DUBLIN STANDARD DRAWING RD-07 DETAIL THE APPROVED PLACEMENT OF BRICK PAVERS.

3. THE WORK SHALL BE INSPECTED PRIOR TO PLACEMENT BY CITY OF DUBLIN CITY ENGINEER OR DESIGNEE(S).

4. THE BRICK PAVERS ON THE GRANULAR BASE SHALL HAVE A PVC FROST LIP/EDGE OR APPROVED EQUIVALENT TO SERVE AS A FORM FOR THE PAVERS.

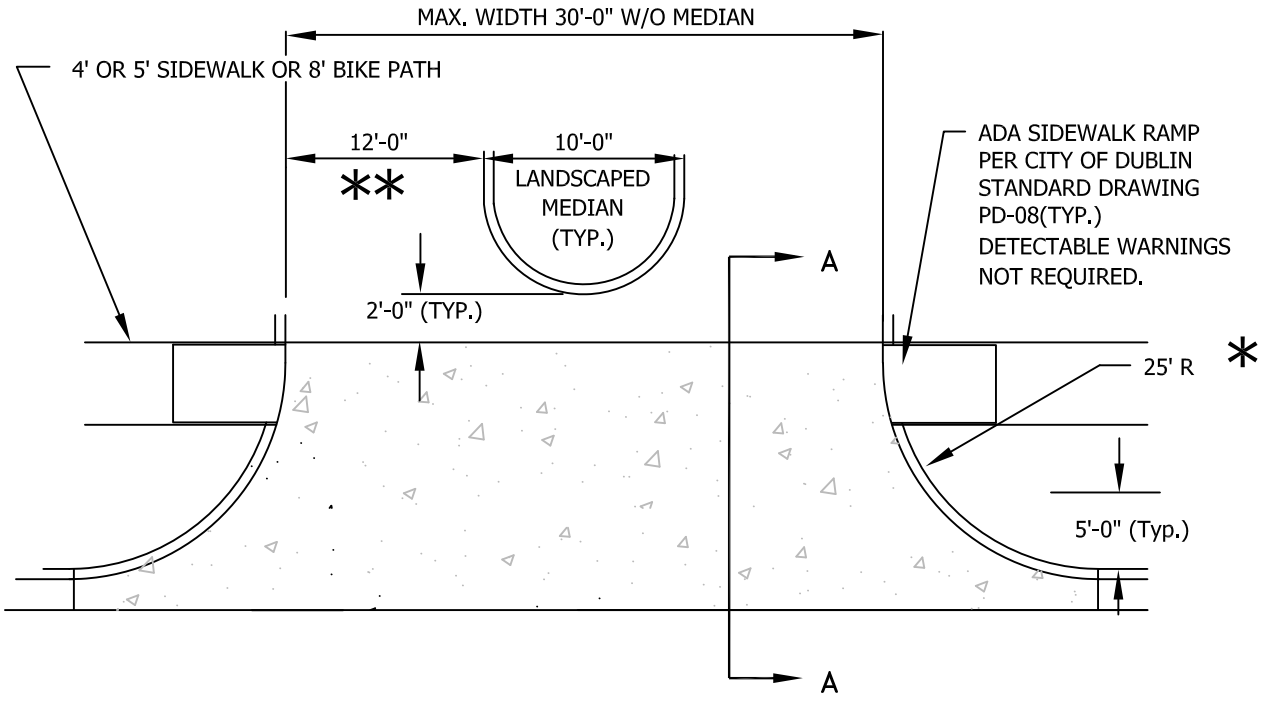
5. THE CLASS C CONCRETE BASE SHALL BE PROVIDED ACCORDING TO CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CCMS).

6. THE GRANULAR BASE SHALL BE PLACED ACCORDING TO CCMS. PAVING SHALL BE PROVIDED ONLY WITH ACCEPTABLE BASE CONDITIONS, AS DETERMINED BY THE CITY OF DUBLIN CITY ENGINEER OR DESIGNEE(S). THIS INCLUDES, BUT IS NOT LIMITED TO, SOFT, WATER SATURATED, FROZEN OR FROST-AFFECTED MATERIAL. UNACCEPTABLE MATERIAL SHALL BE STABILIZED OR REMOVED PRIOR TO PAVING.

7. THE FOLLOWING PAVING MATERIALS HAVE BEEN ACCEPTED FOR USE AS SUBSTITUTES FOR CONCRETE DRIVEWAYS AND DRIVEWAY APPROACHES. ACCEPTANCE IS SUBJECT TO A REVIEW OF MANUFACTURER'S SPECIFICATIONS AND FIELD PERFORMANCE BY THE CITY ENGINEER. ACCEPTANCE OF ALTERNATE MATERIALS IS SUBJECT TO CONTINUAL REVIEW AND MAY BE WITHDRAWN AT THE DISCRETION OF THE CITY ENGINEER.

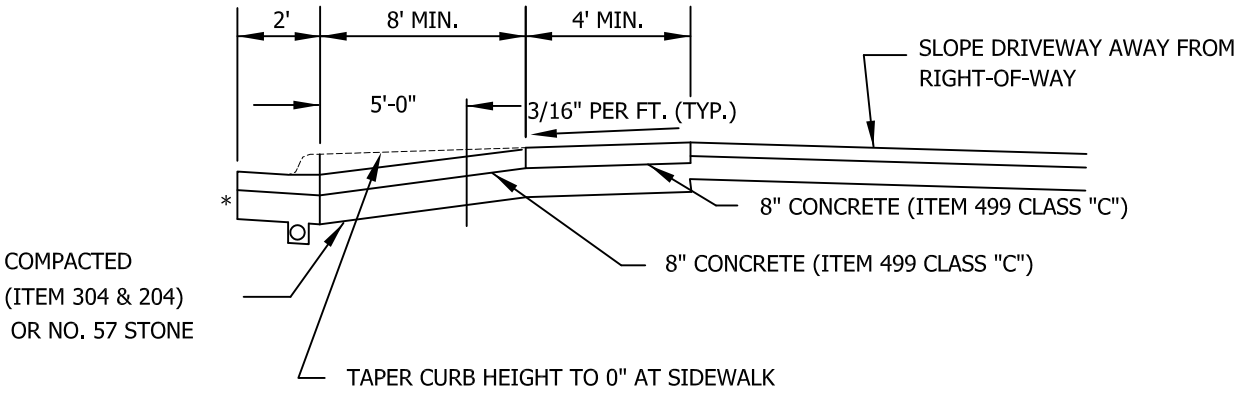
ACCEPTED MATERIALS:

UNI-STONE PAVING STONES
INTER PAVE CORPORATION
8479 BROADWELL ROAD
CINCINNATI, OHIO 43224
(513) 474-3783



* MINIMUM RADIUS IS 25 FEET UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

** MINIMUM LANE WIDTH SHALL BE 12'-0". NUMBER OF LANES REQUIRES APPROVAL BY THE CITY ENGINEER.



SECTION A-A

DRIVEWAY APPROACH SHALL BE 8" PORTLAND CEMENT CONCRETE OR STRUCTURAL EQUIVALENT AS APPROVED BY THE CITY ENGINEER.

EXISTING CURB AND GUTTER TO BE REMOVED WITHIN THE LIMITS OF DRIVEWAY. APPROACH AND GUTTER TO BE POURED INTEGRAL. MAINTAIN GUTTER SLOPE AND UNDER DRAIN THROUGH THE DRIVEWAY.

* SEE DRAWING RD-02 FOR COMBINATION CONCRETE CURB & GUTTER.

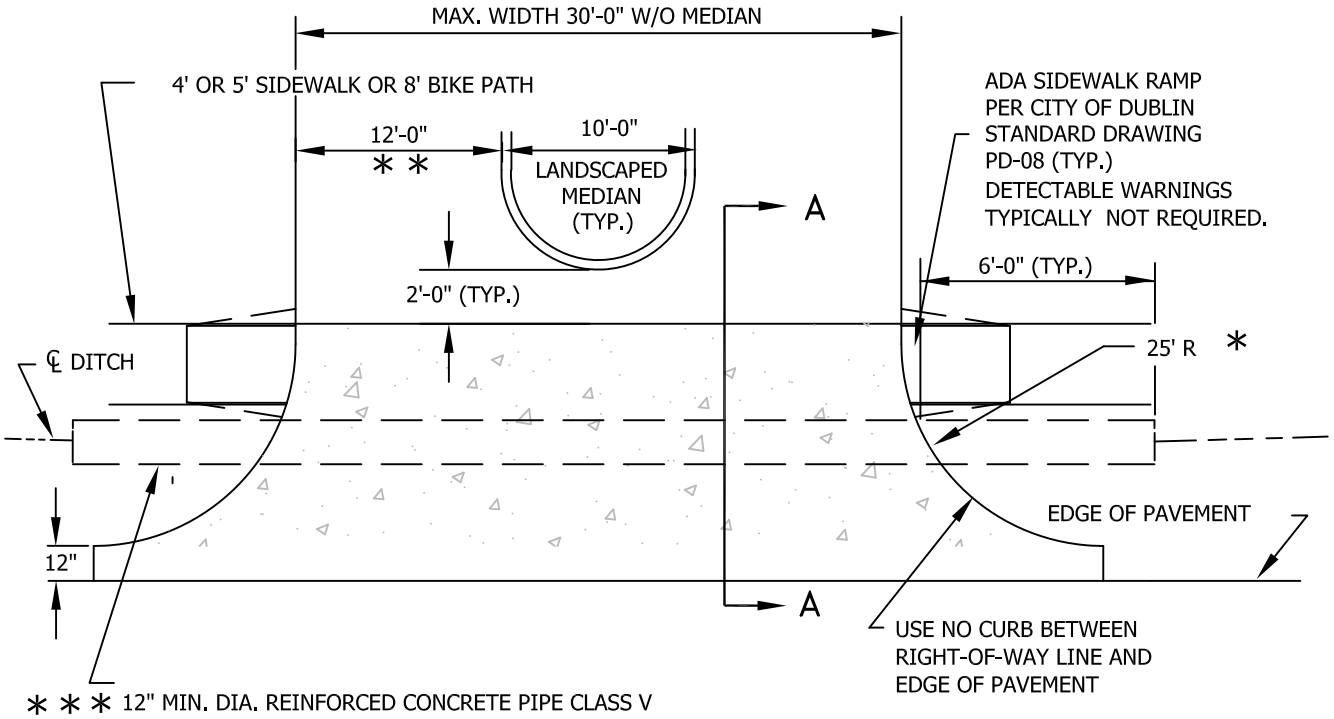
Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

DIVIDED COMMERCIAL DRIVEWAY APPROACH FOR STREETS WITH CURB & GUTTER

DRAWING NO. **RD-07**

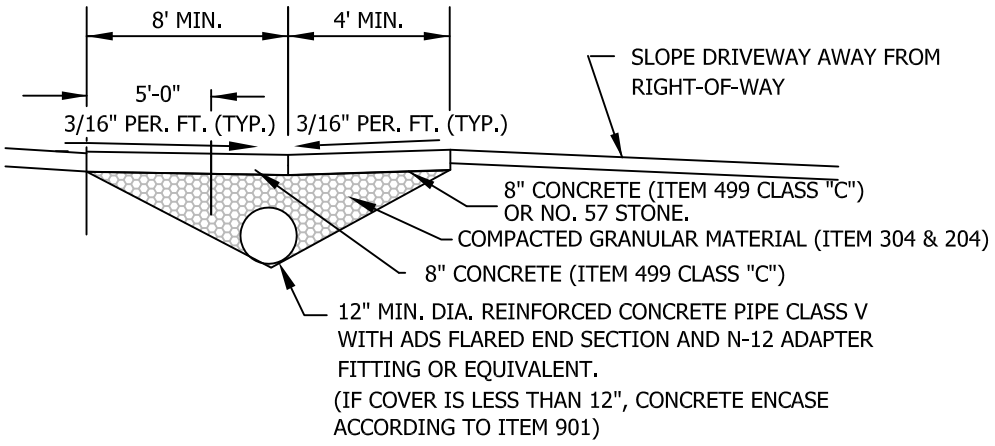


* * * 12" MIN. DIA. REINFORCED CONCRETE PIPE CLASS V WITH ADS FLARED END SECTION AND N-12 ADAPTER FITTING OR EQUIVALENT.

* * * NOTE: THE CITY ENGINEER MAY REQUIRE LARGER PIPE TO BE INSTALLED. MINIMUM SLOPE SHALL BE 1 % UNLESS OTHERWISE APPROVED.

* MINIMUM RADIUS IS 25 FEET UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

* * MINIMUM LANE WIDTH SHALL BE 12'-0". NUMBER OF LANES REQUIRES APPROVAL BY THE CITY ENGINEER.



SECTION A-A

DRIVEWAY APPROACH SHALL BE 8" PORTLAND CEMENT CONCRETE OR STRUCTURAL EQUIVALENT AS APPROVED BY THE CITY ENGINEER.

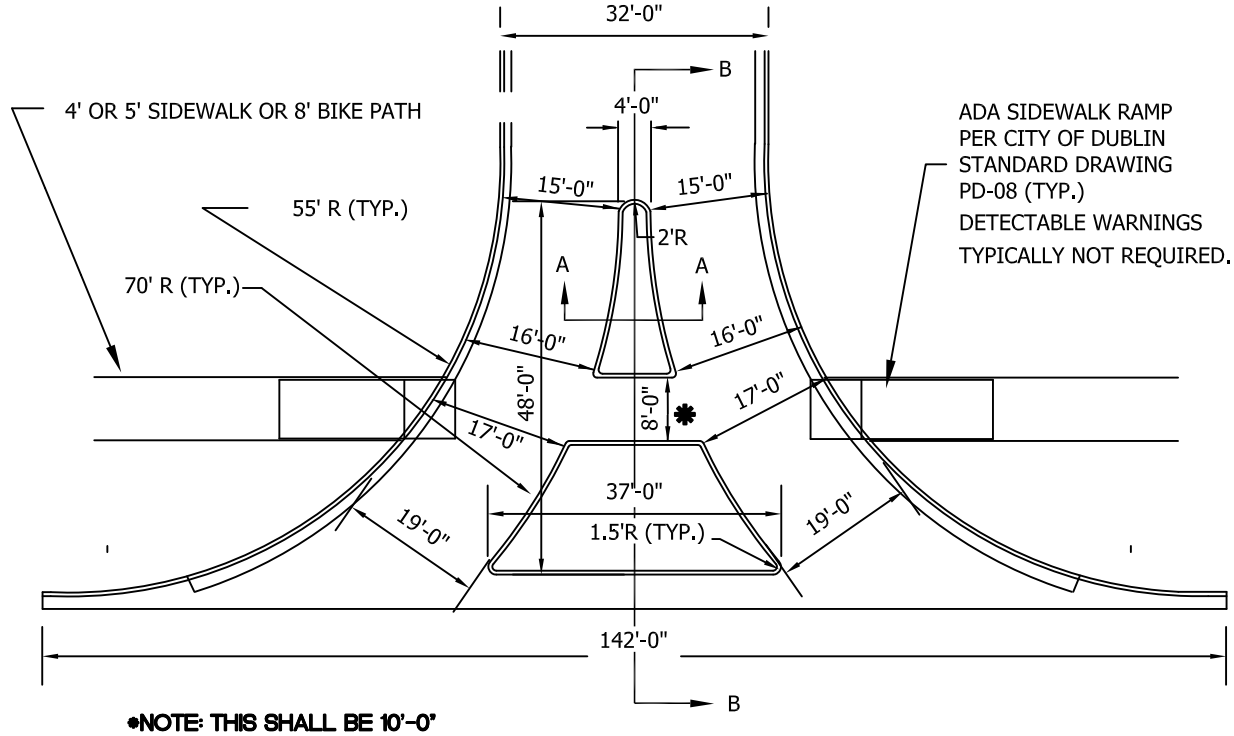
Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

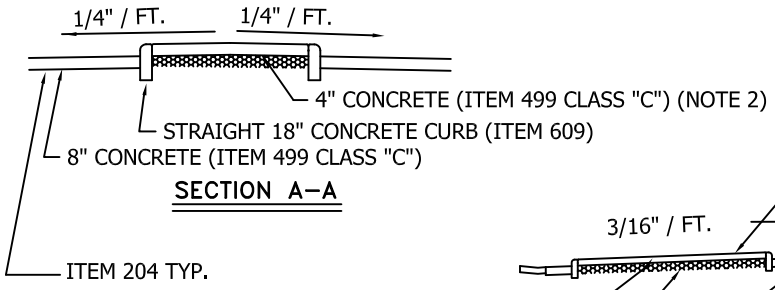
DIVIDED COMMERCIAL DRIVEWAY APPROACH FOR STREETS WITHOUT CURB & GUTTER

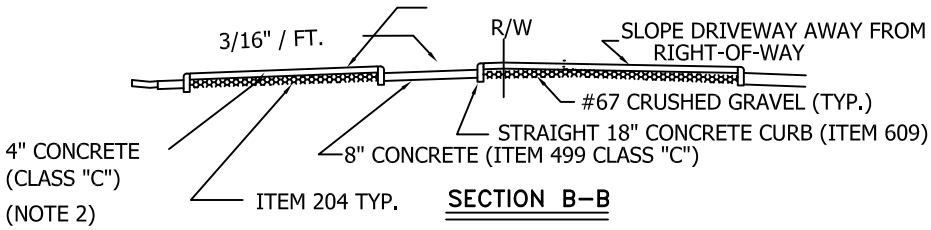
DRAWING NO. **RD-07**



***NOTE: THIS SHALL BE 10'-0" FOR A BIKEPATH CROSSING CROSS SLOPE 1.56%.**

THIS DESIGN ACCOMMODATES WB-40 VEHICLES, AS PRESCRIBED BY AASHTO. IF A LARGER VEHICLE NEEDS ACCOMMODATED A SPECIFIC DESIGN WILL BE REQUIRED.





1. DRIVEWAY APPROACH SHALL BE 8" PC CONCRETE OR STRUCTURAL EQUIVALENT AS APPROVED BY THE CITY ENGINEER.
2. ISLAND SURFACE IN DRIVEWAY APPROACH MAY BE EITHER 4" PC CONCRETE OR LANDSCAPING VEGETATION WITH A HEIGHT NO GREATER THAN 3 FEET ABOVE THE TOP OF CURB. LANDSCAPING MATERIALS SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY OF DUBLIN DIVISION OF PLANNING. MAINTENANCE OF LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
3. EXISTING CURB AND GUTTER TO BE REMOVED WITHIN THE LIMITS OF DRIVEWAY. APPROACH AND GUTTER TO BE POURED INTEGRAL. MAINTAIN GUTTER SLOPE AND UNDER DRAIN THROUGH DRIVEWAY.

* SEE DRAWING RD-02 FOR COMBINATION CONCRETE CURB & GUTTER.

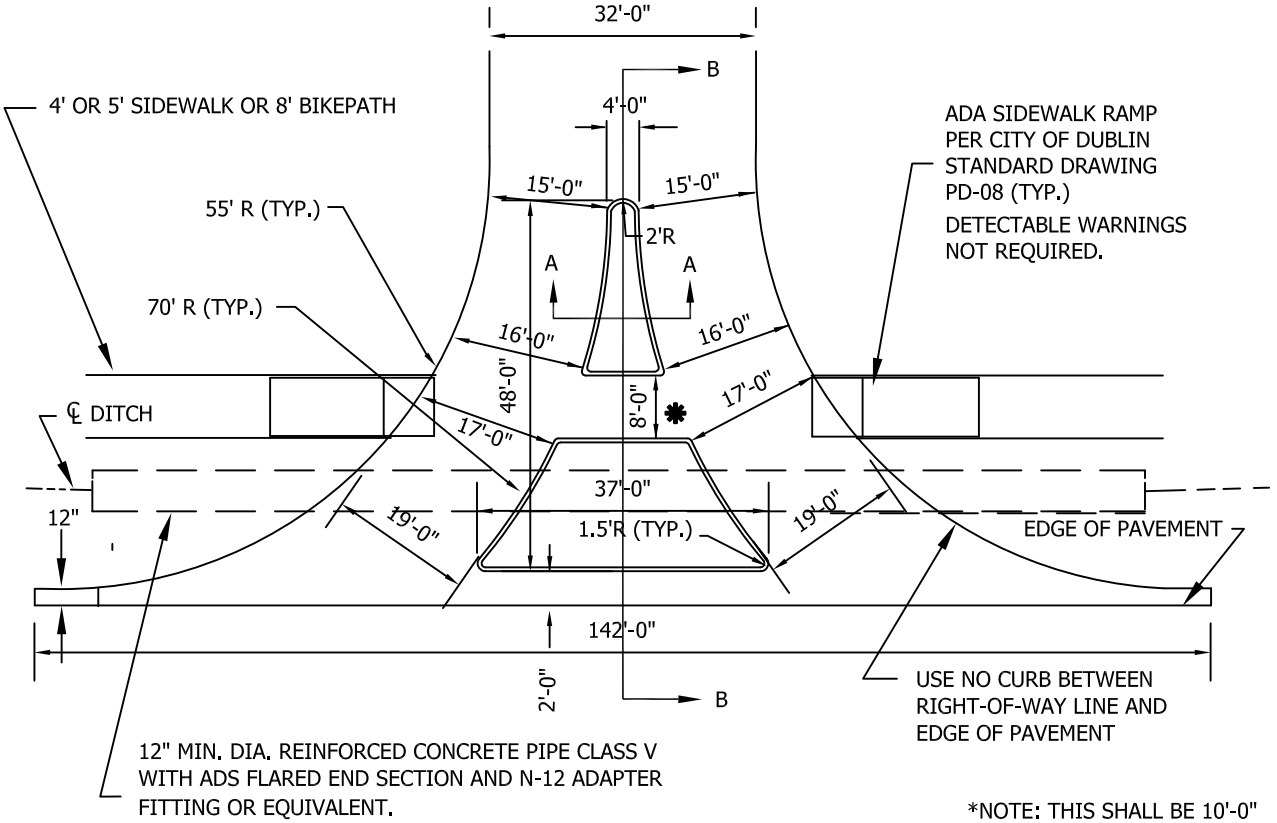
Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

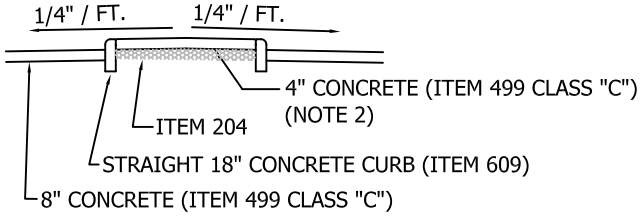
RIGHT IN, RIGHT OUT COMMERCIAL APPROACH

DRAWING NO. **RD-07**

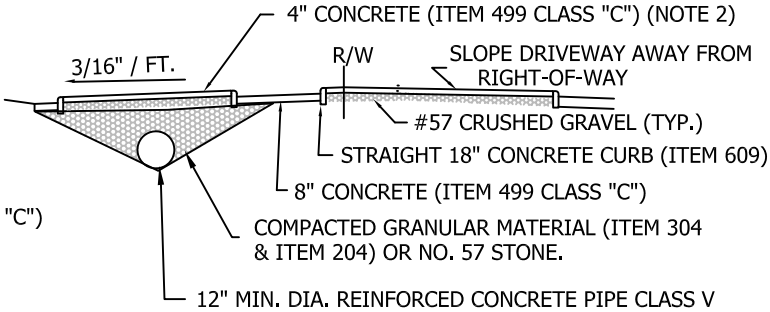


*NOTE: THIS SHALL BE 10'-0" FOR A BIKEPATH CROSSING CROSS SLOPE 1.56%.

THIS DESIGN ACCOMMODATES WB-40 VEHICLES, AS PRESCRIBED BY AASHTO. IF A LARGER VEHICLE NEEDS TO BE ACCOMMODATED A SPECIFIC DESIGN WILL BE REQUIRED.



SECTION A-A



SECTION B-B

1. DRIVEWAY APPROACH SHALL BE 8" PC CONCRETE OR STRUCTURAL EQUIVALENT AS APPROVED BY THE CITY ENGINEER.
2. ISLAND SURFACE IN DRIVEWAY APPROACH MAY BE EITHER 4" PC CONCRETE OR LANDSCAPING VEGETATION WITH A HEIGHT NO GREATER THAN 3 FEET ABOVE THE TOP OF CURB. LANDSCAPING MATERIALS SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY OF DUBLIN DIVISION OF PLANNING. MAINTENANCE OF LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

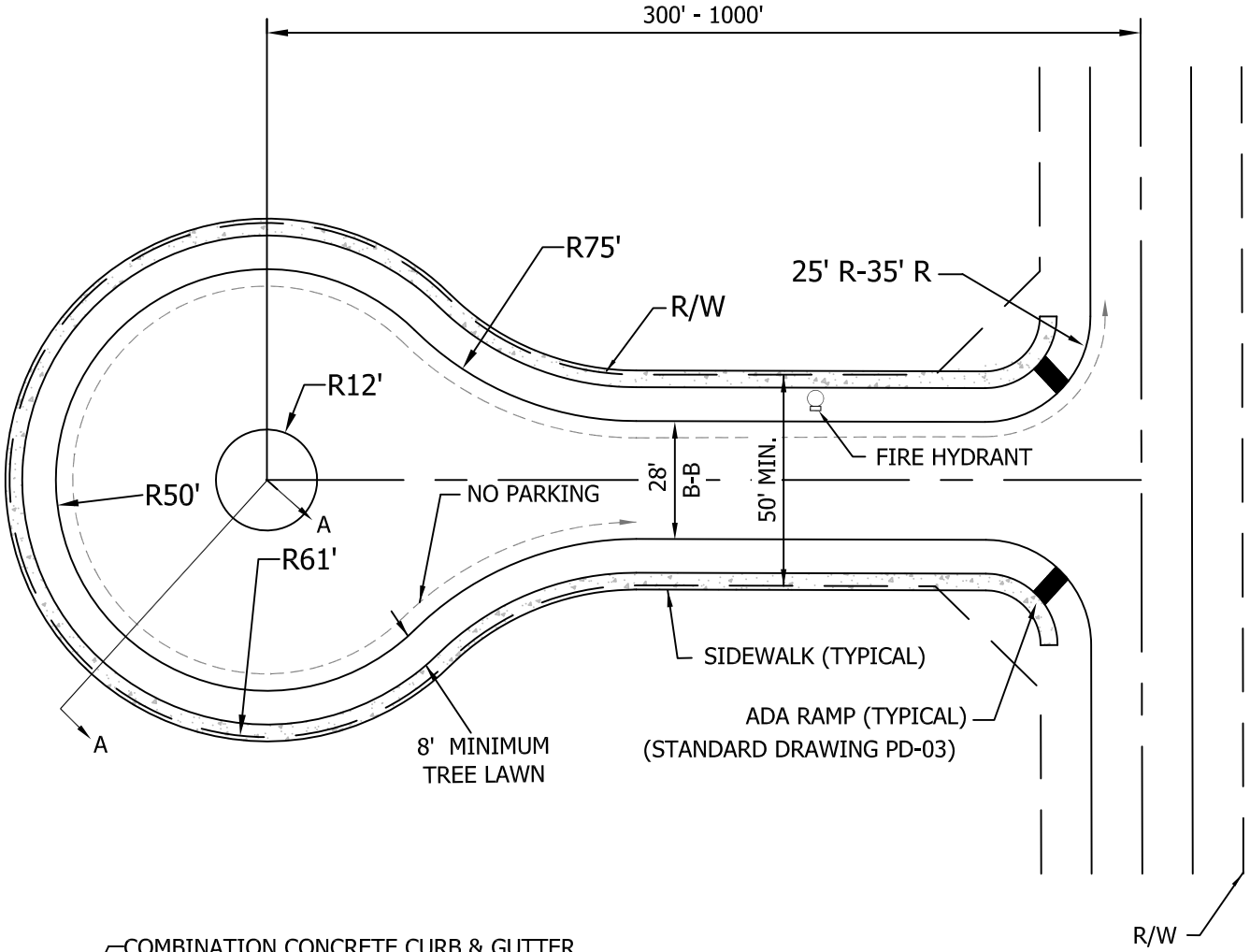
Date: 05/01/2014

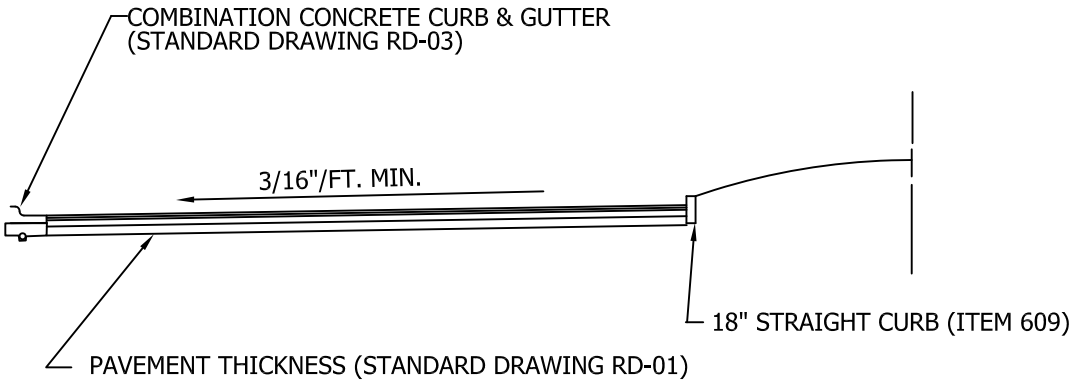
City of Dublin
ENGINEERING

STANDARD DRAWING

RIGHT IN, RIGHT OUT COMMERCIAL APPROACH WITHOUT CURB & GUTTER

DRAWING NO. **RD-07**





SECTION A-A

NOTES:

1. NO PARKING WILL BE PERMITTED WITHIN THE CIRCULAR TURNAROUND AND ALONG THE SIDE OF STREETS WITH FIRE HYDRANT.
2. **ALL PAVEMENT DIMENSIONS SHOWN ARE TO BACK OF CURB.**
3. A 3/4" WATER SERVICE TAP SHALL BE PROVIDED TO THE LANDSCAPE ISLAND.

Date: 05/01/2014

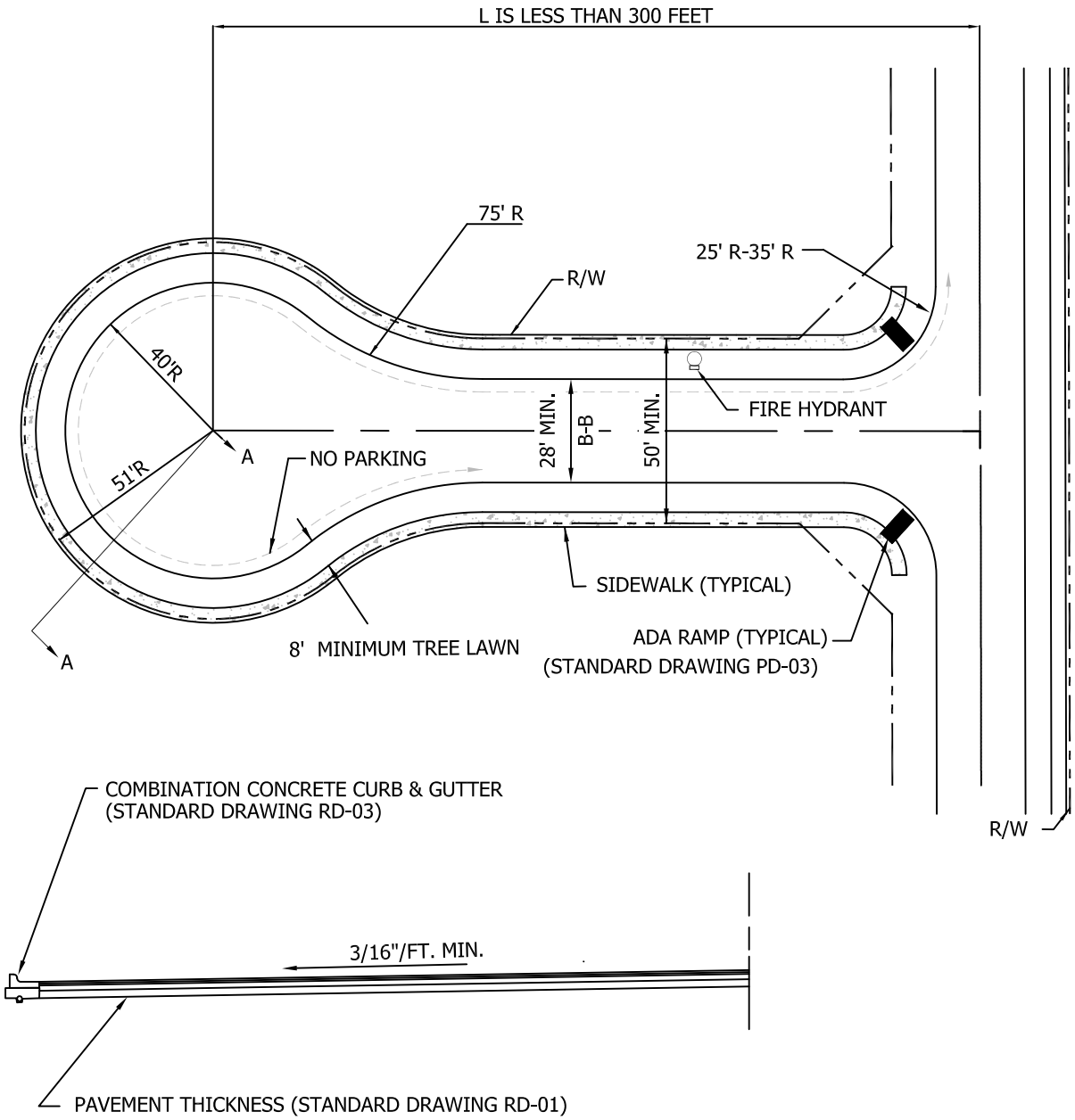
City of Dublin
ENGINEERING

STANDARD DRAWING

CUL-DE-SAC: 300' - 1000'

SHEET 1 OF 1

DRAWING NO. **RD-08**



SECTION A-A

NOTES:

1. ALL PAVEMENT DIMENSIONS SHOWN ARE TO BACK OF CURB.
2. NO PARKING WILL BE PERMITTED WITHIN THE CIRCULAR TURNAROUND AND ALONG THE SIDE OF STREETS WITH FIRE HYDRANTS.

Date: 05/01/2014

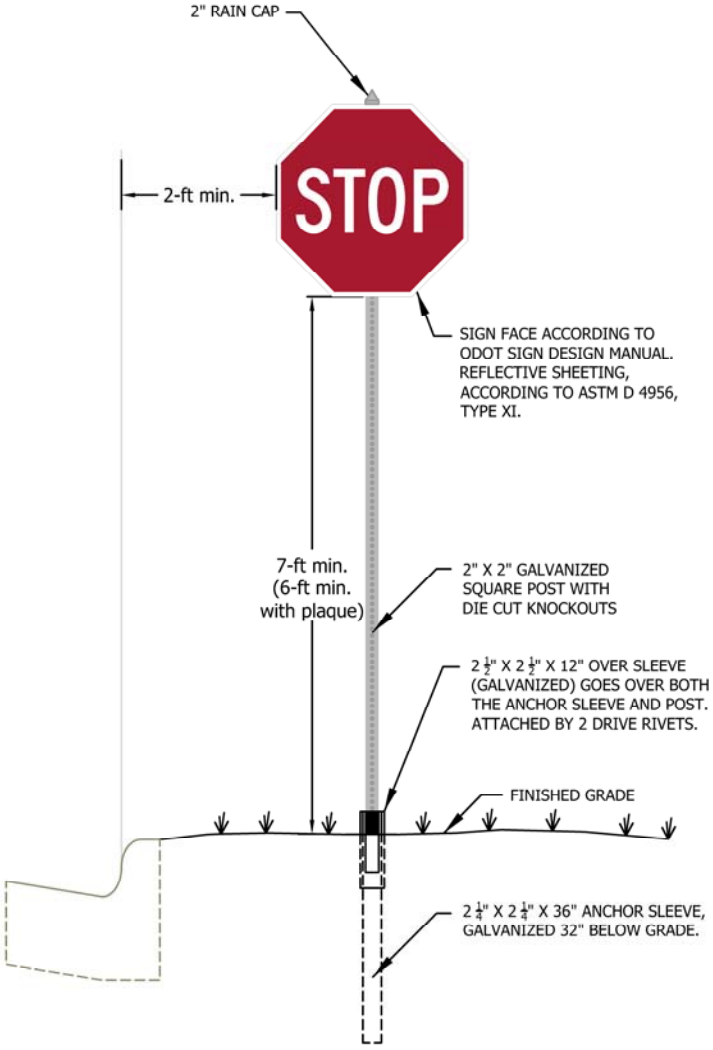
City of Dublin
ENGINEERING

STANDARD DRAWING

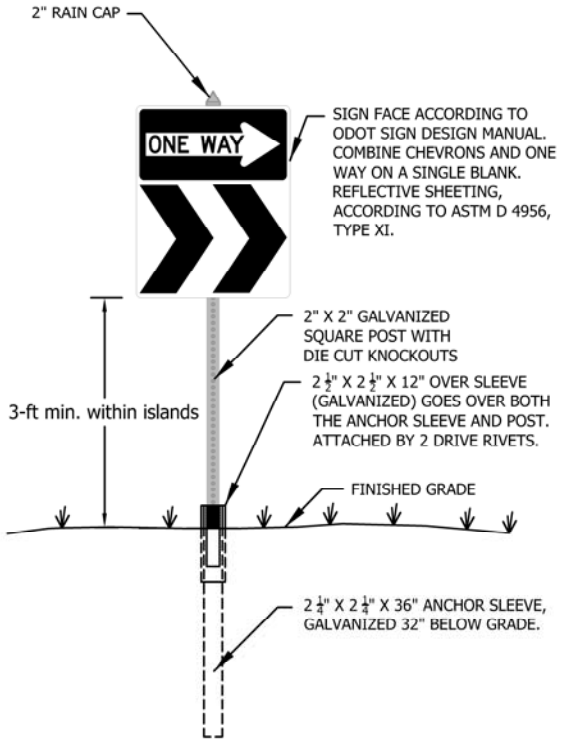
CUL-DE-SAC LESS THAN 300'

SHEET 1 OF 1

DRAWING NO. **RD-09**



STANDARD SIGN



STANDARD SIGN WITHIN ISLAND

Date: 04/10/2015

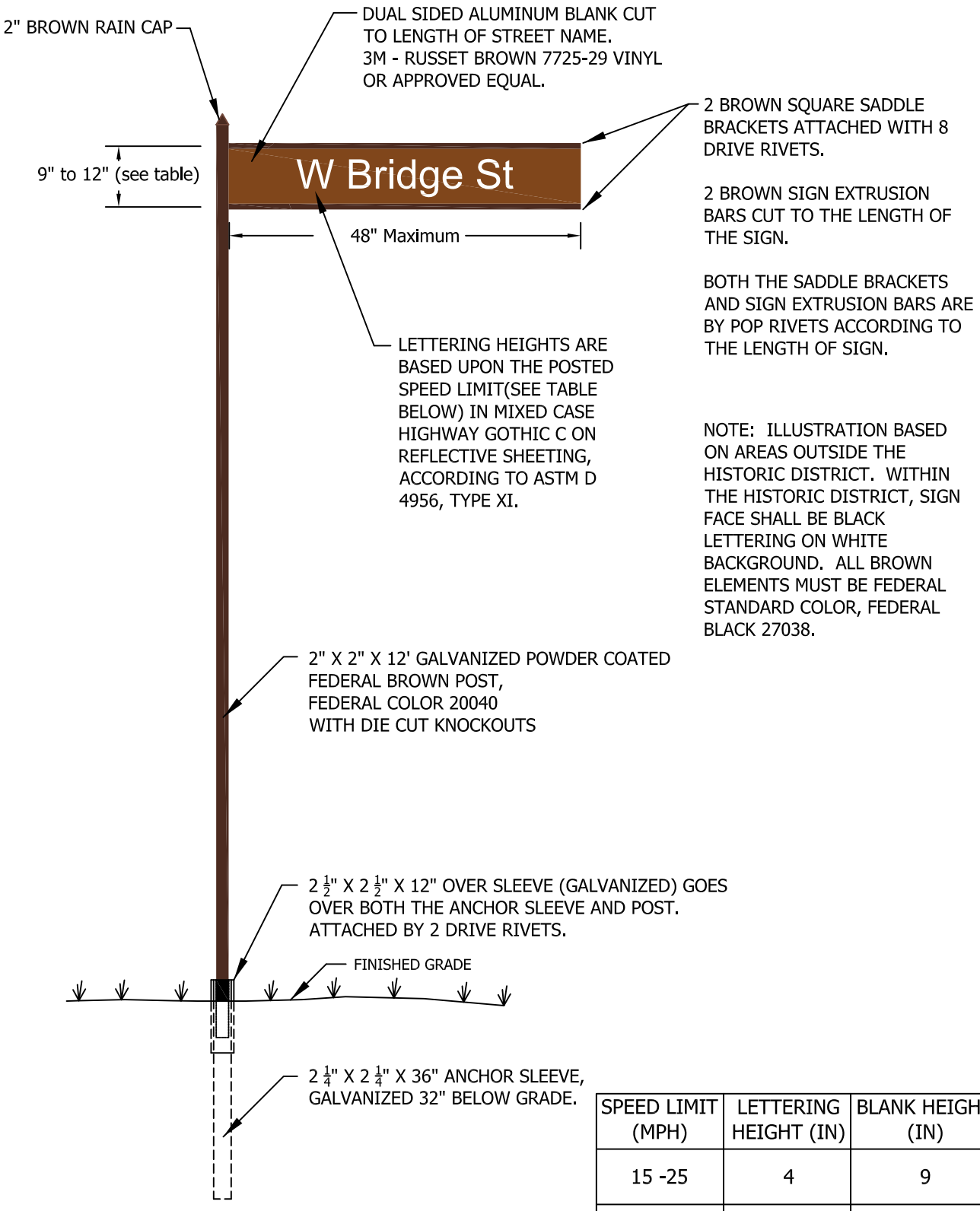
City of Dublin
ENGINEERING

STANDARD DRAWING

TYPICAL STREET SIGNS

SHEET 1 OF 2

DRAWING NO. **RD-10**



STANDARD STREET NAME SIGN

SPEED LIMIT (MPH)	LETTERING HEIGHT (IN)	BLANK HEIGHT (IN)
15 -25	4	9
30 -40	6	12
45+	8	12

Date: 04/10/2015

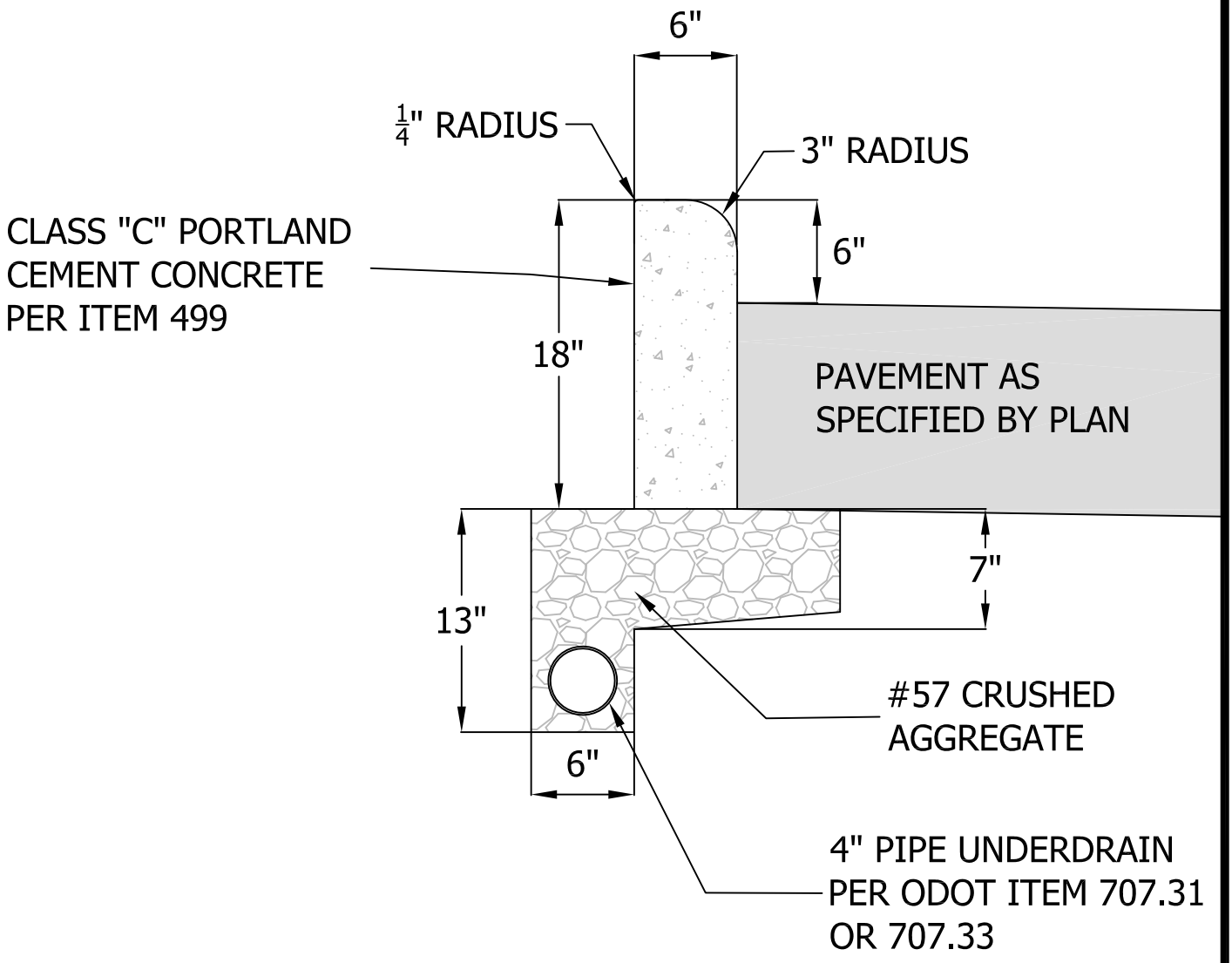
City of Dublin
ENGINEERING

STANDARD DRAWING

TYPICAL STREET SIGNS

SHEET 2 OF 2

DRAWING NO. **RD-10**



Date: 05/01/2014

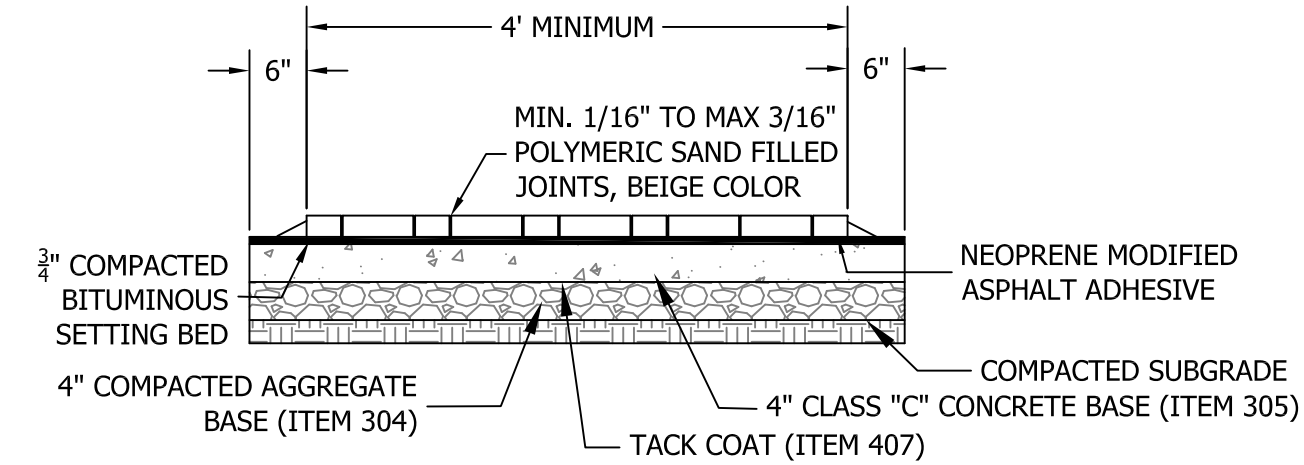
City of Dublin
ENGINEERING

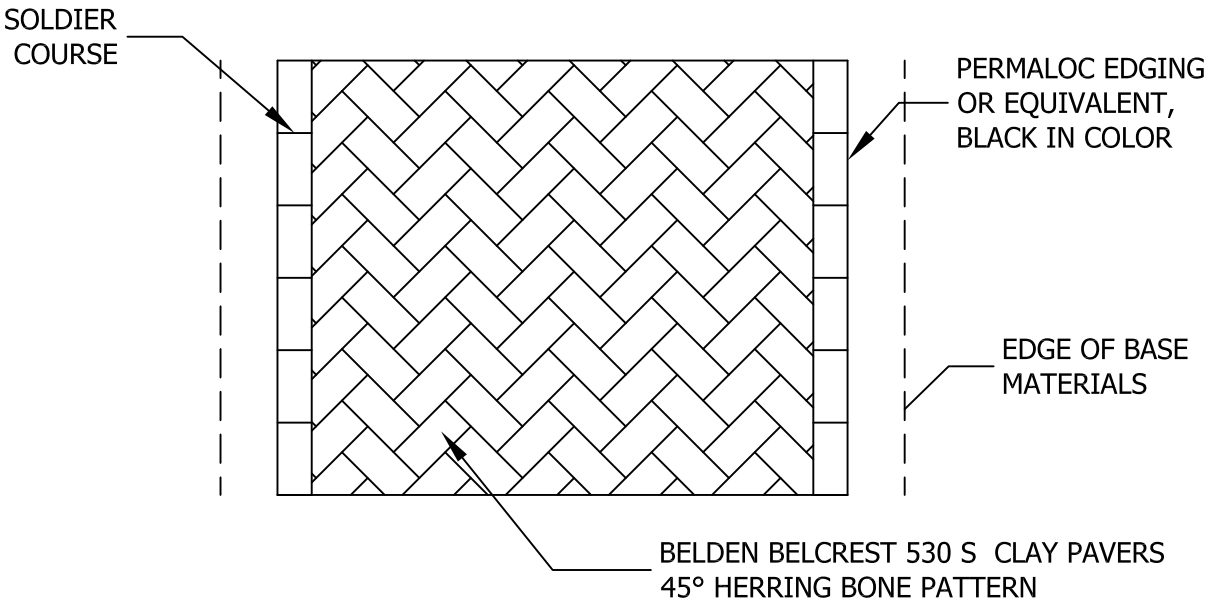
STANDARD DRAWING

STRAIGHT 18" CONCRETE CURB

SHEET 1 OF 1

DRAWING NO. **RD-11**





NOTES:

1.) THE PAVERS SHALL BE BELDEN BELCREST 530 S CLAY PAVERS, 2 1/4" x 3 5/8" x 7 5/8", MADE BY BELDEN BRICK COMPANY, CANTON, OHIO, LAID IN A 45 ° HERRINGBONE PATTERN.

2.) ALL JOINTS SHALL BE FILLED WITH A POLYMERIC SAND. SAND SHALL BE ALLIANCE GATOR MAXX POLYMERIC SAND FOR OVERLAYS AND BEIGE IN COLOR OR AN APPROVED EQUAL.

3.) FURNISH NEOPRENE MODIFIED ASPHALT ADHESIVE THAT CONTAINS 2% GRADE WM1 NEOPRENE, OXIDIZED ASPHALT WITH A 150 DEGREE SOFTENING POINT (77 PENETRATION), AND 10% LONG-FIBERED INERT MATERIAL, AS SUPPLIED BY SEIDEL COMPANY, INC., NEWBURYPORT, MA, (617) 649-6740; HASTINGS PAVEMENT COMPANY, INC., LAKE SUCCESS, NY, (516) 379-3500; OR APPROVED EQUAL.

4.) FURNISH ASPHALT CEMENT CONFORMING TO ASTM D 3381, PG64-22. FINE AGGREGATE SHALL BE NATURAL SAND AND/OR STONE SAND COMPOSED OF HARD, DURABLE, UNCOATED PARTICLES, FREE FROM CLAY, SILT, ORGANIC MATERIAL, OR OTHER DELETERIOUS SUBSTANCES. ALL SAND SHALL BE UNIFORMLY GRADED AND PASS A NO. 4 SIEVE, MEETING THE REQUIREMENTS OF ASTM C 136. THE DRIED FINE AGGREGATE SHALL BE MIXED WITH HOT ASPHALT CEMENT AT THE PLANT AND HEATED TO APPROXIMATELY 300 DEGREES (F). APPROXIMATE MATERIAL PROPORTIONS SHALL BE 7% ASPHALT CEMENT AND 93% FINE AGGREGATE; OR 140 LBS ASPHALT TO 1,860 LBS FINE AGGREGATE PER TON.

Date: 05/01/2014

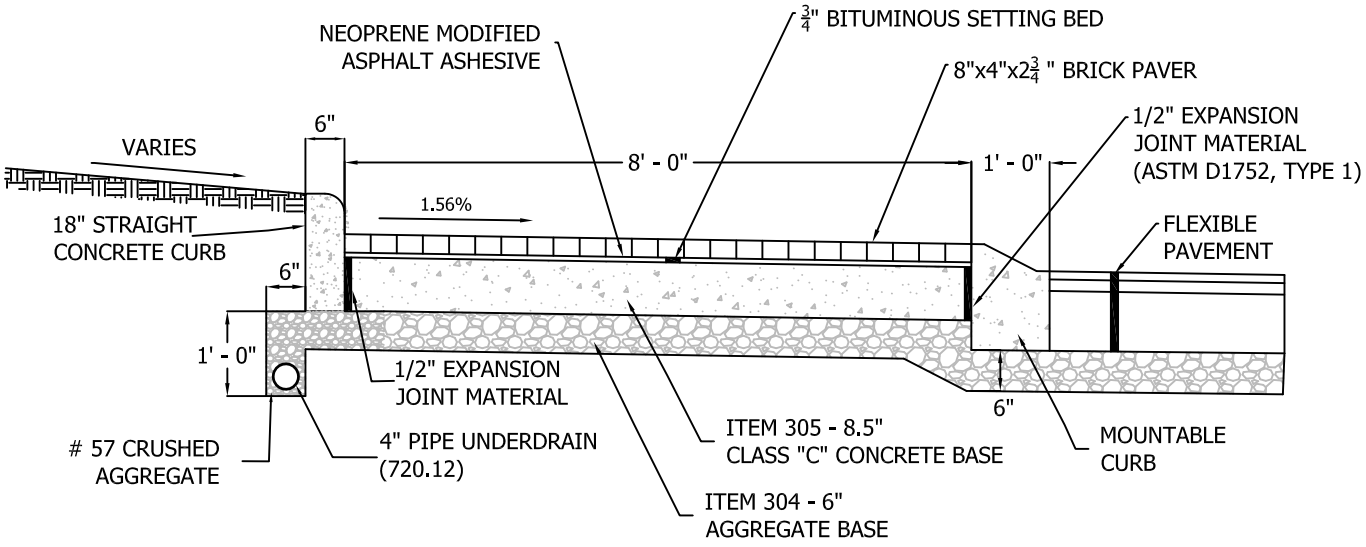
City of Dublin
ENGINEERING

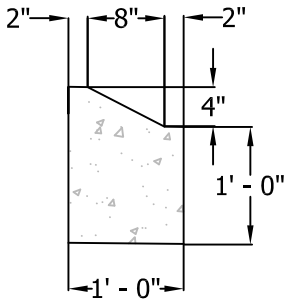
STANDARD DRAWING

BRICK PAVER SIDEWALK

SHEET 1 OF 1

DRAWING NO. **RD-12**





MOUNTABLE CURB DETAIL

NOTES:

1.) THE PAVERS SHALL BE REGIMENTAL FULL RANGE WITH A CHAMFERED EDGE AND SPACER LUGS, 8" x 4" x 2 ¾", MADE BY BELDEN BRICK COMPANY, CANTON, OHIO, LAID IN A RUNNING BOND PATTERN.

2.) ALL JOINTS SHALL BE FILLED WITH A POLYMERIC SAND. SAND SHALL BE ALLIANCE GATOR MAXX POLYMERIC SAND FOR OVERLAYS AND SLATE GREY IN COLOR OR AN APPROVED EQUAL.

3.) FURNISH NEOPRENE MODIFIED ASPHALT ADHESIVE THAT CONTAINS 2% GRADE WM1 NEOPRENE, OXIDIZED ASPHALT WITH A 150 DEGREE SOFTENING POINT (77 PENETRATION), AND 10% LONG-FIBERED INERT MATERIAL, AS SUPPLIED BY SEIDEL COMPANY, INC., NEWBURYPORT, MA, (617) 649-6740; HASTINGS PAVEMENT COMPANY, INC., LAKE SUCCESS, NY, (516) 379-3500; OR APPROVED EQUAL.

4.) FURNISH ASPHALT CEMENT CONFORMING TO ASTM D 3381, PG64-22. FINE AGGREGATE SHALL BE NATURAL SAND AND/OR STONE SAND COMPOSED OF HARD, DURABLE, UNCOATED PARTICLES, FREE FROM CLAY, SILT, ORGANIC MATERIAL, OR OTHER DELETERIOUS SUBSTANCES. ALL SAND SHALL BE UNIFORMLY GRADED AND PASS A NO. 4 SIEVE, MEETING THE REQUIREMENTS OF ASTM C 136. THE DRIED FINE AGGREGATE SHALL BE MIXED WITH HOT ASPHALT CEMENT AT THE PLANT AND HEATED TO APPROXIMATELY 300 DEGREES (F). APPROXIMATE MATERIAL PROPORTIONS SHALL BE 7% ASPHALT CEMENT AND 93% FINE AGGREGATE; OR 140 LBS ASPHALT TO 1,860 LBS FINE AGGREGATE PER TON.

Date: 05/01/2014

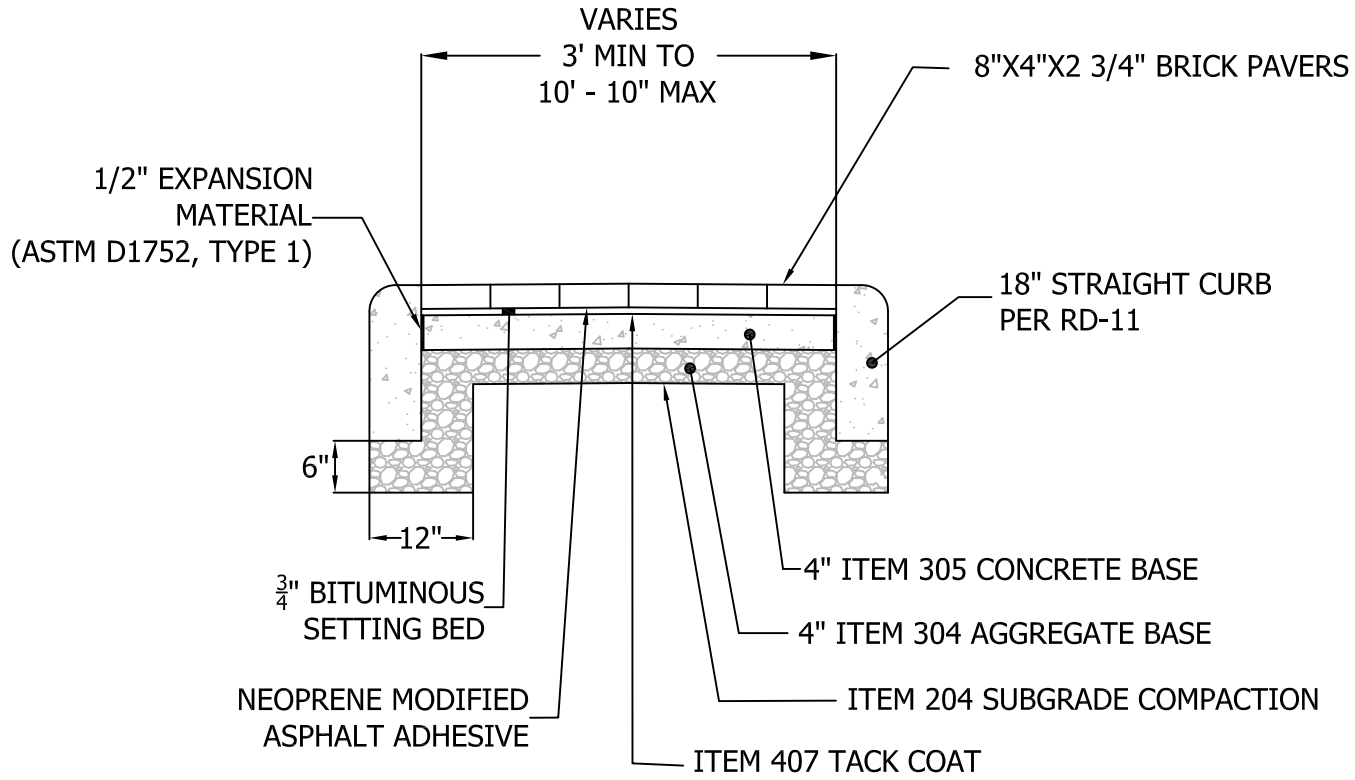
City of Dublin
ENGINEERING

STANDARD DRAWING

ROUNDABOUT TRUCK APRON DETAIL

SHEET 1 OF 1

DRAWING NO. **RD-13**



NOTES:

1.) THE PAVERS SHALL BE REGIMENTAL FULL RANGE WITH A CHAMFERED EDGE AND SPACER LUGS, 8" x 4" x 2 ¾", MADE BY BELDEN BRICK COMPANY, CANTON, OHIO, LAID IN A RUNNING BOND PATTERN.

2.) ALL JOINTS SHALL BE FILLED WITH A POLYMERIC SAND. SAND SHALL BE ALLIANCE GATOR MAXX POLYMERIC SAND FOR OVERLAYS AND SLATE GREY IN COLOR OR AN APPROVED EQUAL.

3.) FURNISH NEOPRENE MODIFIED ASPHALT ADHESIVE THAT CONTAINS 2% GRADE WM1 NEOPRENE, OXIDIZED ASPHALT WITH A 150 DEGREE SOFTENING POINT (77 PENETRATION), AND 10% LONG-FIBERED INERT MATERIAL, AS SUPPLIED BY SEIDEL COMPANY, INC., NEWBURYPORT, MA, (617) 649-6740; HASTINGS PAVEMENT COMPANY, INC., LAKE SUCCESS, NY, (516) 379-3500; OR APPROVED EQUAL.

4.) FURNISH ASPHALT CEMENT CONFORMING TO ASTM D 3381, PG64-22. FINE AGGREGATE SHALL BE NATURAL SAND AND/OR STONE SAND COMPOSED OF HARD, DURABLE, UNCOATED PARTICLES, FREE FROM CLAY, SILT, ORGANIC MATERIAL, OR OTHER DELETERIOUS SUBSTANCES. ALL SAND SHALL BE UNIFORMLY GRADED AND PASS A NO. 4 SIEVE, MEETING THE REQUIREMENTS OF ASTM C 136. THE DRIED FINE AGGREGATE SHALL BE MIXED WITH HOT ASPHALT CEMENT AT THE PLANT AND HEATED TO APPROXIMATELY 300 DEGREES (F). APPROXIMATE MATERIAL PROPORTIONS SHALL BE 7% ASPHALT CEMENT AND 93% FINE AGGREGATE; OR 140 LBS ASPHALT TO 1,860 LBS FINE AGGREGATE PER TON.

Date: 05/01/2014

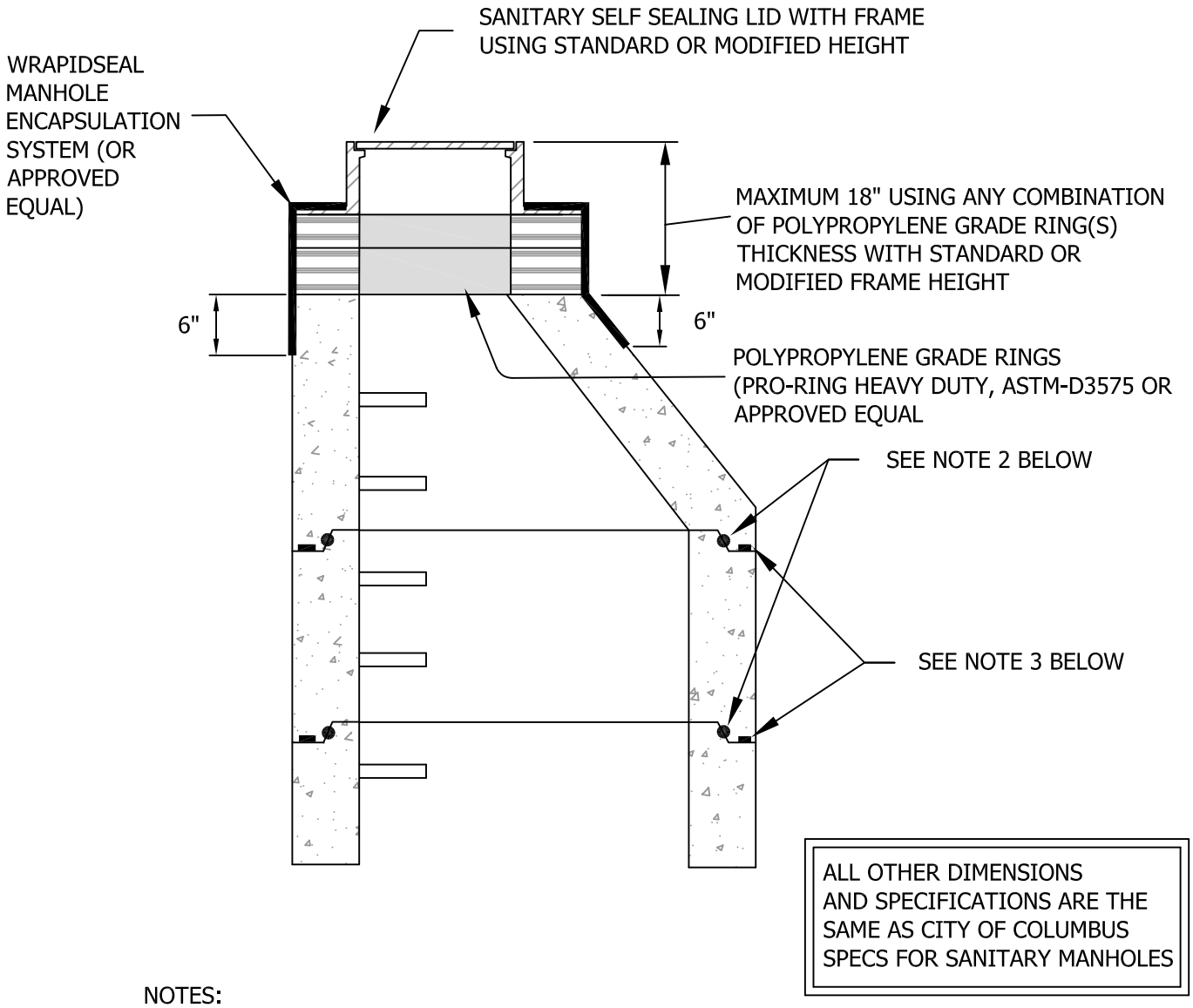
City of Dublin
ENGINEERING

STANDARD DRAWING

BRICK PAVER MEDIAN DETAIL

SHEET 1 OF 1

DRAWING NO. **RD-14**



ALL OTHER DIMENSIONS AND SPECIFICATIONS ARE THE SAME AS CITY OF COLUMBUS SPECS FOR SANITARY MANHOLES

NOTES:

1. CLEAN EACH SURFACE BY WIRE BRUSHING ALL LOOSE CONCRETE DUST AND DIRT. PLACE SEALANT IN A CIRCULAR CONFIGURATION ON EACH CONCRETE SURFACE AND OVERLAP A MINIMUM OF 1/4" AND KNEAD ENDS.

2. CLEAN BELL AND SPIGOT JOINT, APPLY APPROVED LUBRICATION TO JOINT SURFACE AND TO "O" RING; THEN EQUALIZE GASKET TO GROOVE.

3. PLACE 1/2" DIAMETER SEALANT AS MANUFACTURED BY CONCRETE SEALANTS INC., "CONSEAL" OR APPROVED EQUAL ON RISER TOP LEDGE.

Date: 5/1/2014

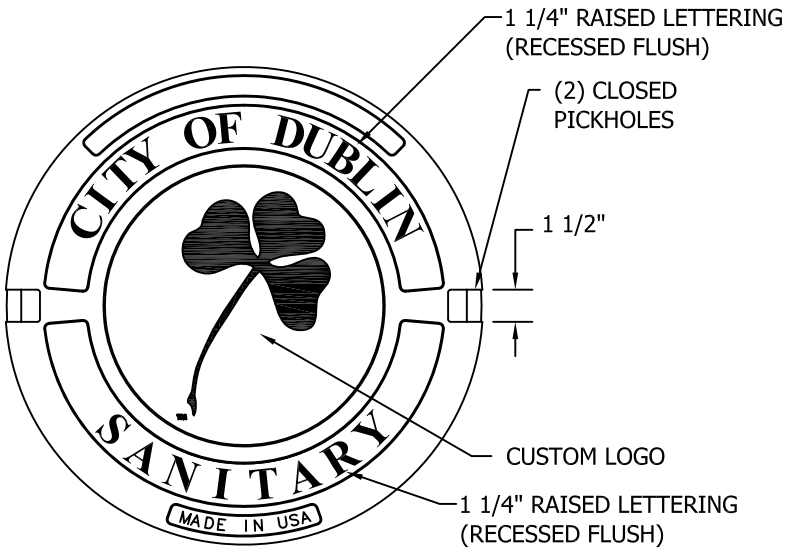
City of Dublin
ENGINEERING

STANDARD DRAWING

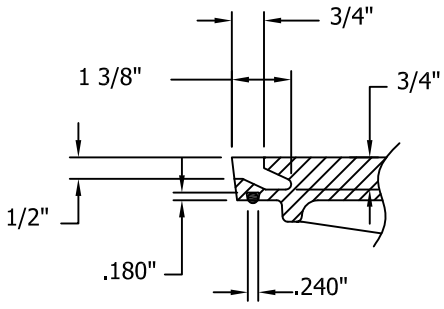
SANITARY MANHOLE DETAILS

SHEET 1 OF 1

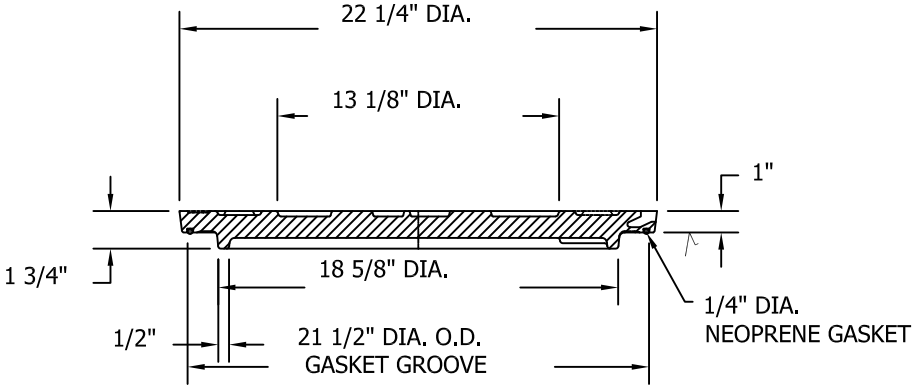
DRAWING NO. **SA-01**



COVER FACE



PICK SLOT DETAIL



COVER SECTION

Date: 5/1/2014

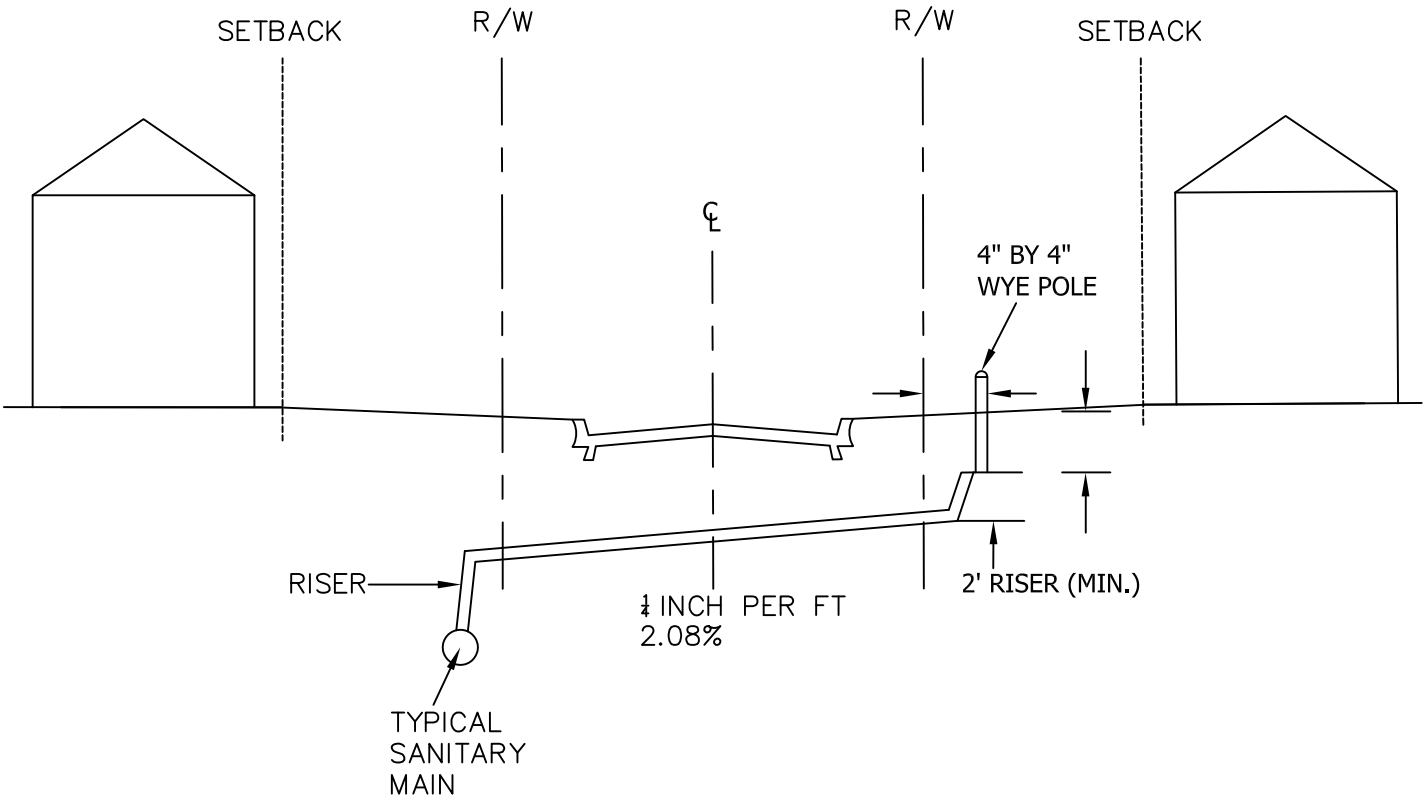
City of Dublin
ENGINEERING

STANDARD DRAWING

SANITARY MANHOLE LID

SHEET 1 OF 1

DRAWING NO. ***SA-02***



NOTES:
1. FOR LONG SERVICE LATERALS THAT HAVE 4 FEET OF RISER OR GREATER.
2. LATERAL TO BE DESIGNED TO SERVE BASEMENT.

Date: 5/1/2014

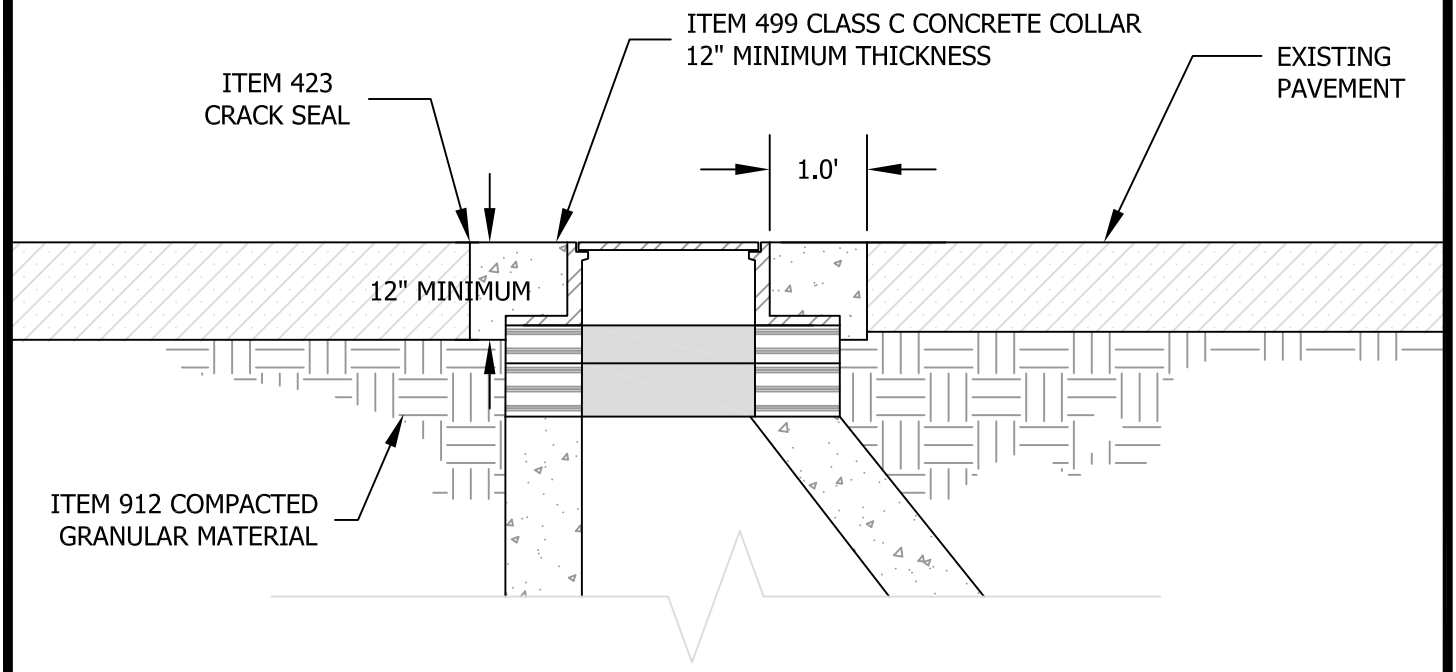
City of Dublin
ENGINEERING

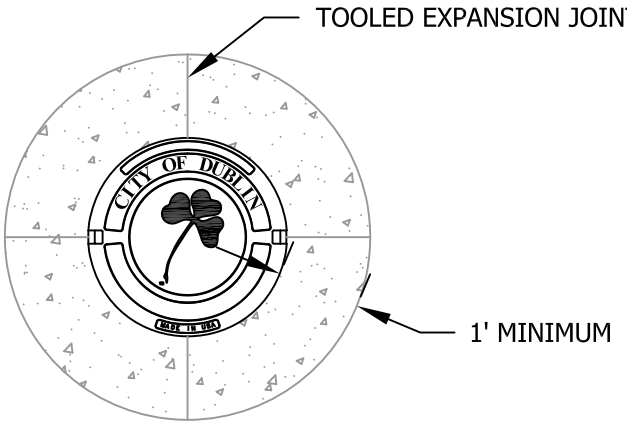
STANDARD DRAWING

TYPICAL SANITARY RISER DETAIL

SHEET 1 OF 1

DRAWING NO. ***SA-03***





Date: 5/1/2014

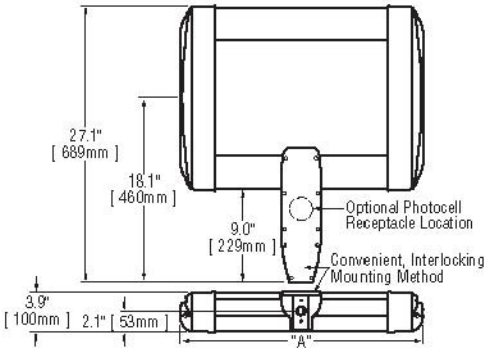
City of Dublin
ENGINEERING

STANDARD DRAWING

CONCRETE COLLAR FOR MANHOLES IN PAVEMENT

SHEET 1 OF 1

DRAWING NO. **SA-04**



# of LEDs	Dim. "A"
20	12.06"
40	12.06"
60	14.06"
80	16.06"
100	18.06"
120	20.06"
140	22.06"
160	24.06"
180	26.06"
200	28.06"
220	30.06"
240	32.06"

LIGHTING DESIGN CRITERIA
MIN = 0.4 fc
AVG/MIN RATIO = 3:1
MAX/MIN RATIO = 6:1
CROSSWALK AREA = 1.1-1.3 fc

GENERAL DESCRIPTION - LIGHT EMITTING DIODE (LED), TYPE II, III, IV OR V CUTOFF (AS SPECIFIED ON THE CONSTRUCTION DRAWINGS), ONE-PIECE EXTRUDED ARM. OPERATING VOLTAGE SHALL BE ** VOLTS, SINGLE PHASE.

** VOLTAGE REQUIREMENTS ARE TO BE SPECIFIED ON PLANS.

DISTRIBUTION - IES NEMA TYPE II, III, IV OR V CUTOFF.

APPROVED MANUFACTURER
- Cree LED: ARE-EDG-2M-DA-##-D-**-BZ-525-40K
- Cree LED: ARE-EDG-3M-DA-##-D-**-BZ-525-40K
- Cree LED: ARE-EDG-4M-DA-##-D-**-BZ-525-40K
- Cree LED: ARE-EDG-5M-DA-##-D-**-BZ-525-40K

NUMBER OF LED's TO BE SPECIFIED ON PLANS.
** VOLTAGE REQUIREMENTS ARE TO BE SPECIFIED ON PLANS.

CABLE – PROVIDE #10 XHHW, STRANDED COPPER 600V, 90 DEGREES CELSIUS CONDUCTORS. WIRE TO LUMINAIRE. SECURE TO LUMINAIRE ARM WITH CABLE GRIP PROVIDED WITH LUMINAIRE. PROVIDE ADEQUATE LENGTH TO EXTEND MIN. 2 FEET OUT OF HAND HOLE.

EXECUTION – ALL LUMINAIRES SHALL BE PLUMB AND LEVEL. ALL LAMPS SHALL BE OPERATIONAL PRIOR TO INSPECTION. ALL SURFACES SHALL BE CLEANED OF DIRT, DEBRIS, ETC. FREE OF SCRATCHES, DENTS, ETC.

METHOD OF MEASUREMENT - SEE ODOT SPECIFICATIONS SECTION 625.

BASIS OF PAYMENT – SEE ODOT SPECIFICATIONS SECTION 625.

Date: 5/1/2014

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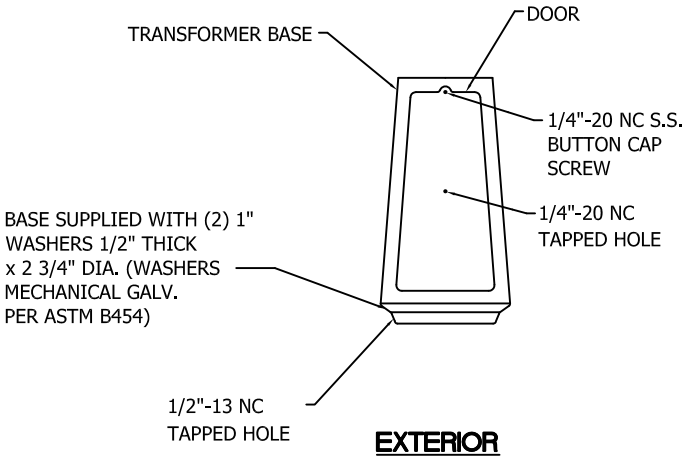
ENGINEERING

STANDARD DRAWING

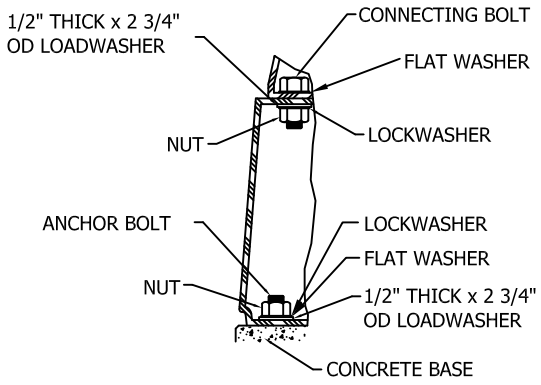
LUMINAIRE

SHEET 1 OF 1

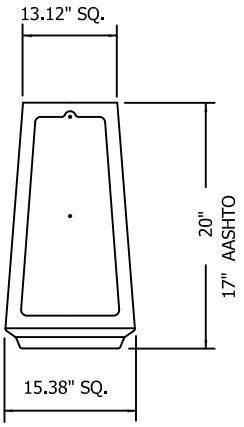
DRAWING NO. **SL-01**

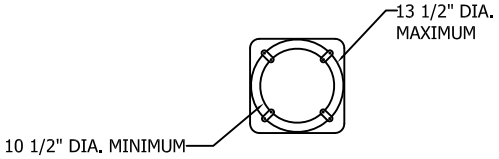


EXTERIOR

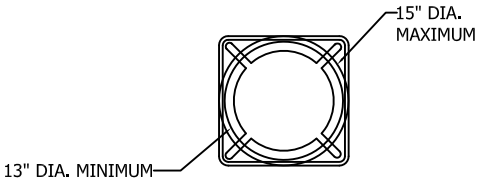


INTERIOR





TOP VIEW



BOTTOM VIEW

TRANSFORMER BASE - PROVIDE A ONE-PIECE CAST ALUMINUM ALLOY 356 BREAKAWAY TRANSFORMER BASE. MINIMUM 20" HIGH WITH A REMOVABLE MATCHING ACCESS DOOR HELD IN PLACE WITH STAINLESS STEEL SCREWS. THE DOOR SHALL BE A MINIMUM OF 13" HIGH, 8" WIDE AT TOP AND 9" AT BOTTOM. DOOR SHALL BE FIELD POSITIONED ON SIDE AWAY FROM ROADWAY. THE BASE SHALL BE DESIGNED TO BE ATTACHED WITH ANCHOR BOLTS PROVIDED WITH A TEMPLATE FOR MOUNTING IN A CONCRETE BASE. PROVIDE A GALVANIZED STEEL HEX-HEAD MACHINE BOLT WITH NUTS AND LOCKWASHERS TO ATTACH POLE BASE FLANGE TO TRANSFORMER BASE. PROVIDE LOAD DISTRIBUTION NON-CORROSIVE WASHERS TO EQUALIZE BOLT FORCES AT FLANGE MATING SURFACES.

GROUNDING - EACH TRANSFORMER BASE SHALL CONTAIN AN INTERNAL LUG WITH DRILLED HOLE FOR ATTACHING A GROUND CONDUCTOR.

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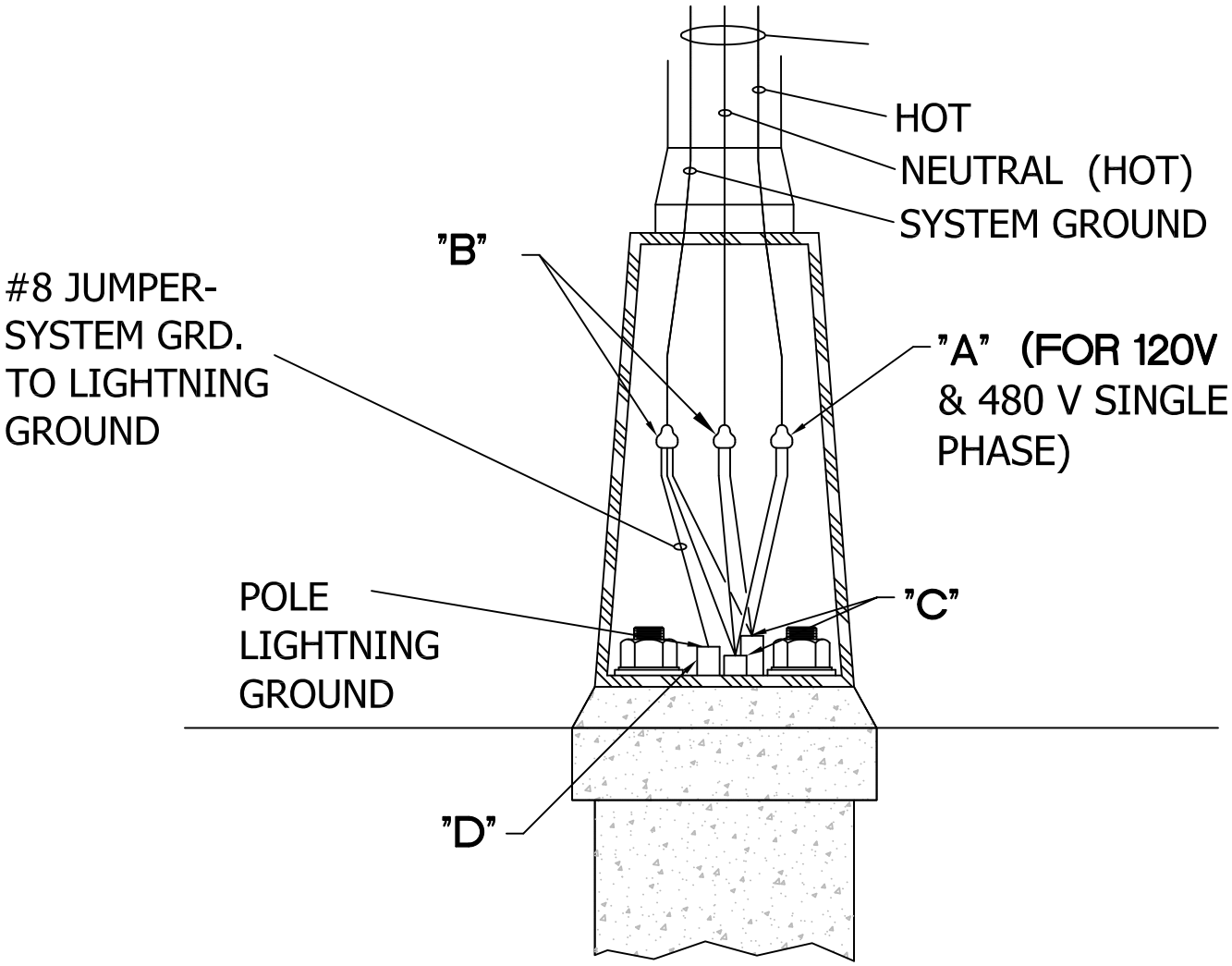
City of Dublin
ENGINEERING

STANDARD DRAWING

TRANSFORMER BASE

SHEET 1 OF 2

DRAWING NO. **SL-02**



CONNECTIONS

"A" FUSED - INLINE Y CONNECTOR KIT TYPE II WITH WATERPROOF BOOTS AND BREAKAWAY RECEPTACLE. FUSE AT 5 AMPS, ELASTIMOLD STYLE 82 SERIES OR HOMAC FY SERIES, BUSS KTK-R FUSE. (SINGLE PHASE =1, DOUBLE PHASE = 2 PER POLE)

"B" UNFUSED-INLINE 7 CONNECTOR KIT TYPE III WITH WATERPROOF BOOTS AND BREAKAWAY RECEPTACLE, ELASTIMOLD 83 SERIES OR HOMAC DY SERIES. (SINGLE PHASE =2, DOUBLE PHASE = 1 PER POLE)

"C" PROVIDE MOLDED PLASTIC OR RUBBER CAPPING DEVICE THAT ONLY PERMITS WIRE PASS THROUGH WHILE PREVENTING DIRT, WATER, ETC. ENTRY.

"D" POLE LIGHTNING GROUND LUG UNINSULATED COPPER COMPRESSION TERMINAL UL LISTED FOR 600V. SIZE FOR WIRE SPECIFIED. DRILL, TAP, AND BOLT TO TRANSFORMER BASE BURNDY YA SERIES. BOND SYSTEM GROUND TO LIGHTNING ROD GROUND.

PROVIDE 2' SLACK IN ALL WIRING TO BRING CONNECTORS AND FUSE HOLDERS OUT THRU HANDHOLE.

Date: 5/1/2014

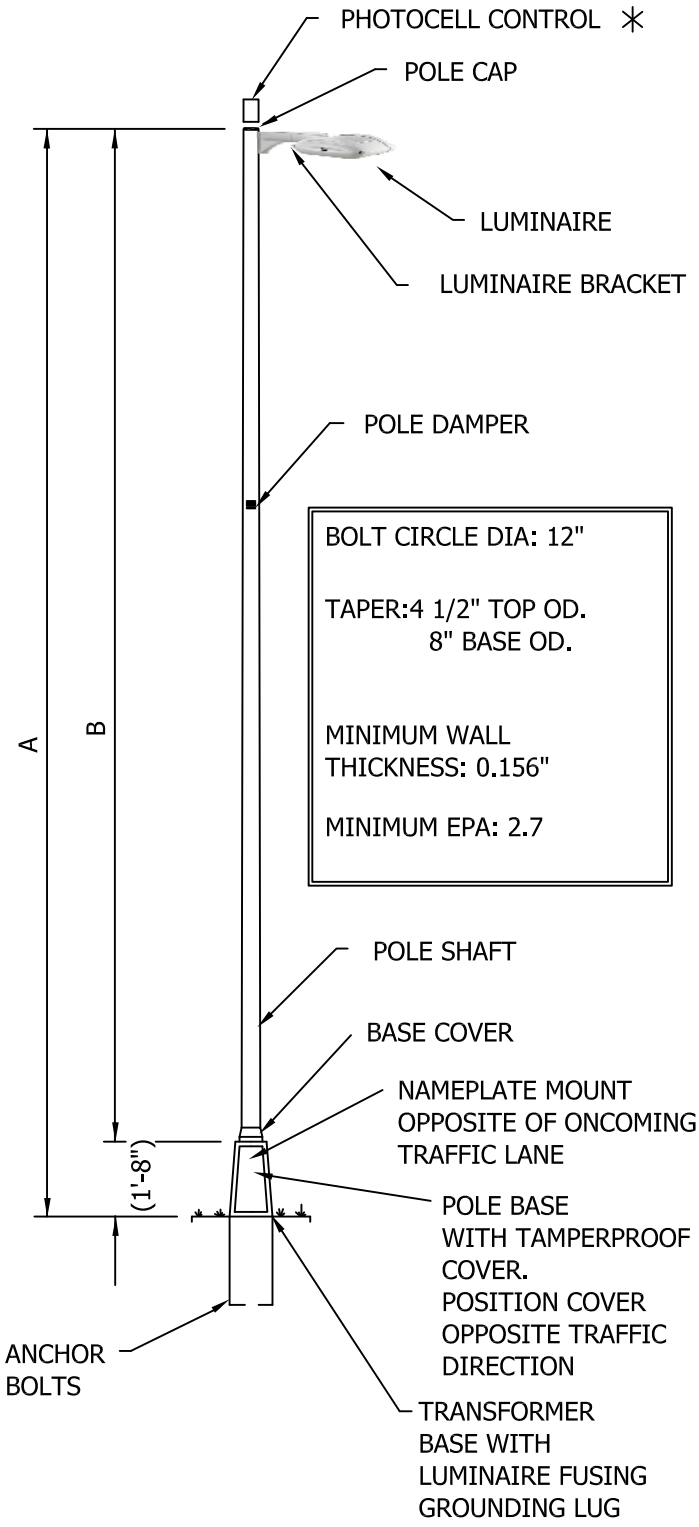
City of Dublin
ENGINEERING

STANDARD DRAWING

TRANSFORMER BASE

SHEET 2 OF 2

DRAWING NO. ***SL-02***



* ONE PHOTOCELL REQUIRED PER CIRCUIT

POLE DIMENSION	A	B
TYPE 1	36'-8"	35'-0"
TYPE 2	31'-8"	30'-0"
TYPE 3	26'-8"	25'-0"

GENERAL DESCRIPTION - ALUMINUM ROUND TAPERED ANCHOR BASE WITH FINISH: COLOR SHALL BE FEDERAL STANDARD #595-C, COLOR 20040 AS APPROVED BY THE CITY ENGINEER. THE PAINT SHALL BE A POWDER PAINT FINISHED TO A GLOSS OF 35% (AT 60 DEGREES) SPUN ALUMINUM FINISH WITH POLE CAP, TRANSFORMER BASE, BASE COVER AND BOLT COVERS.

POLE CAP - PROVIDE AN ORNAMENTAL ALUMINUM ALLOY CAP FASTENED VIA STAINLESS STEEL SCREWS.

POLE DAMPER - PROVIDE A SECOND MODE VIBRATION DAMPER ATTACHED TO MIDPOINT VIA WELDING. LOCATE INSIDE POLE. FACTORY INSTALLED.

BASE FLANGE - PROVIDE A ONE PIECE CAST SOCKET OF ALUMINUM ALLOY 356 THE FLANGE SHALL BE JOINED TO THE SHAFT BY MEANS OF CONTINUOUS WELD EXTERNALLY AND INTERNALLY.

BASE COVER - PROVIDE BOLT COVERS OF ALUMINUM ALLOY 43 AND STAINLESS STEEL SCREWS FOR ATTACHMENT.

MISCELLANEOUS HARDWARE - ALL NUTS, BOLTS, AND WASHERS USED IN THE FABRICATION OF THE POLE SHALL BE GRADE 18-8 STAINLESS STEEL EXCEPT FOR ANCHORAGE HARDWARE.

WRAPPING - EACH POLE SHAFT SHALL BE WRAPPED WITH PROTECTIVE PAPER SECURED IN PLACE. ALL PARTS SHALL BE BOXED AND/OR BANDED.

POLE SHAFT - THE SHAFT SHALL BE ONE-PIECE SEAMLESS WITH A MINIMUM WALL THICKNESS OF 0.156 INCHES, ROUND TAPERED TUBE OF ALLOY 6063 AND SHALL BE FULL-LENGTH TEMPERED AFTER WELDING ON TOP BASE FLANGE TO PRODUCE THE T6 TEMPER. THE ENTIRE POLE ASSEMBLY SHALL BE RATED @ 90 MPH WITH A 30% GUST FACTOR FOR AN EPA. MINIMUM OF 2.7 TEMPLATE CUT FOR LUMINAIRE.

APPROVED MANUFACTURER - HAPCO SERIES 52, LEXINGTON/VALMONT OR APPROVED EQUAL.

Date: 5/1/2014

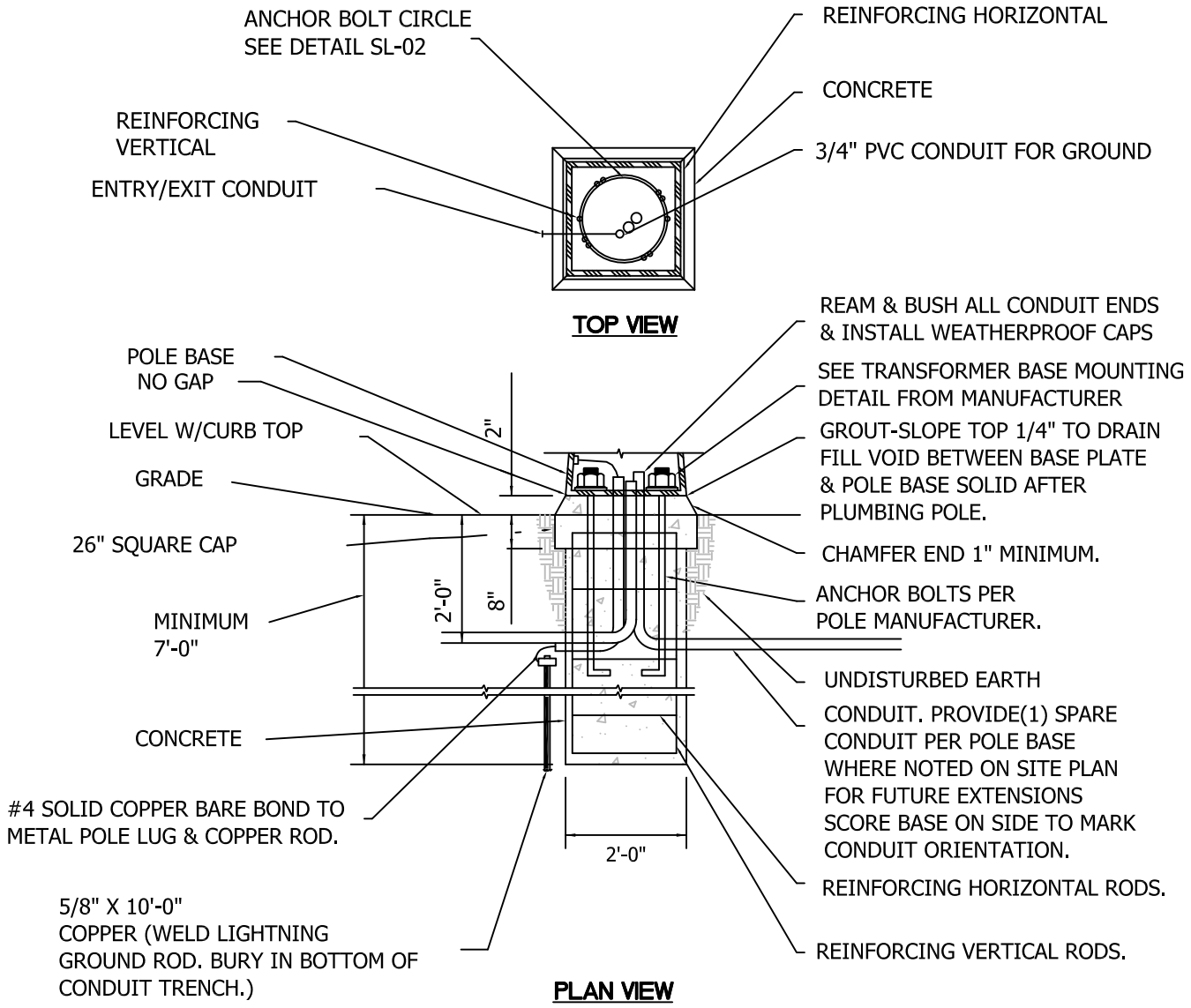
City of Dublin
ENGINEERING

STANDARD DRAWING

LIGHT POLE

SHEET 1 OF 1

DRAWING NO. ***SL-03***



CONCRETE - CLASS C, 4000 PSI, 5-7% AIR ENTRAINED. FILL ALL EXPOSED SURFACE VOIDS. CHAMFER ALL EDGES, SLOPE TOP 1/4" WITH GROUT TO DRAIN WATER (FILL VOID BETWEEN BASE PLATE & POLE BASE SOLID, AFTER PLUMBING POLE), ADJUST SO TRANSFORMER BASE HAS NO GAP TO GROUTED SURFACE. HOT OR COLD WEATHER - FOLLOW ODOT CONSTRUCTION & MATERIAL SPECIFICATIONS SECTION 625.

CONCRETE FINISH - REMOVE ALL FORM MARKS, HAND RUB EXPOSED TOP AND SIDES WITH CARBIDE STONE.

REINFORCING - ASTM A-615 GRADE 60, TYPE S DEFORMED BILLET: #6 VERTICALS, (6 TOTAL), #4 HORIZONTALS 12" O.C., CIRCULAR FORMED. WIRE TIE ALL CONNECTIONS, MAINTAIN 3" MINIMUM CONCRETE COVER.

GROUNDING - PROVIDE 5/8" X 10'-0" COPPER WELD ONE-PIECE GROUND ROD. DRIVE A MINIMUM OF 2'-0" BELOW GRADE. RUN #4 AWG SOLID COPPER GROUNDING ELECTRODE CONDUCTOR IN 3/4" PVC CONDUIT FROM ROD TO ENCLOSURE GROUND BAR. "CAD" WELD WIRE CONNECTION AT ROD.

Date: 5/1/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

POLE FOUNDATION

SHEET 1 OF 2

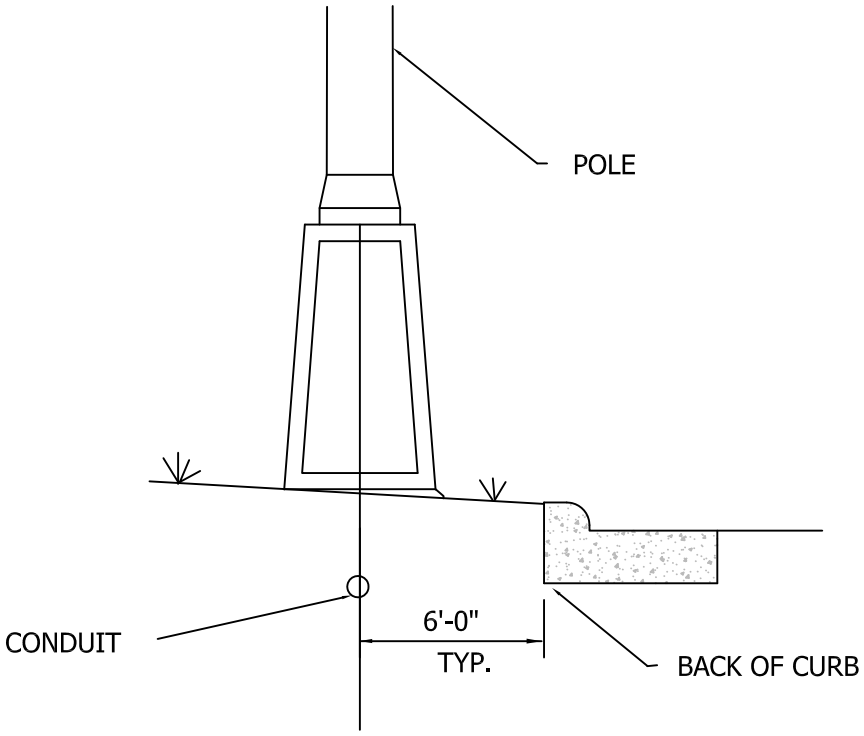
DRAWING NO. ***SL-04***

LUMINAIRE FUSING - REFER TO TRANSFORMER BASE DETAIL SL-02

GROUNDING LEG - REFER TO TRANSFORMER BASE DETAIL SL-02

ANCHORAGE - PROVIDE A SET OF FOUR-50,000 PSI-MIN YIELD STEEL STRENGTH ANCHOR BOLTS, THREADED, HOT-DIPPED GALVANIZED AT THE THREADED END FOR AT LEAST 10". THE BOLTS SHALL INCLUDE A 4" MINIMUM RIGHT ANGLE HOOK AT THE UNTHREADED END. PROVIDE GALVANIZED NUT, LOCKWASHERS AND FLATWASHERS FOR EACH BOLT.

GROUT - 10,000 PSI, HIGH STRENGTH, NON-SHRINK, NON-METALLIC, COMPLY WITH CRD-C-621, PROVIDE SAND COAT FINISH (PROVIDE SONNOGROUT OR APPROVED EQUAL).



TYPICAL FOUNDATION LOCATION

WEATHERPROOFING - PROVIDE PENETRATING SURFACE APPLIED, 1 COAT CONCRETE WATERPROOFING AGENT. MATERIAL SHALL BE CLEAR PENETRATING, WATER BASED, ALKYALKOXYSILANE AND CONTAIN A MINIMUM OF 40% BY WEIGHT SOLIDS AND BE APPLIED PER MANUFACTURER'S DIRECTIONS. COVERAGE SHALL BE 150 SQ. FEET PER GALLON (PROVIDE HYDROZO ENVIROSEAL 40 OR APPROVED EQUAL). APPLY 1 COAT TO ALL CONCRETE EXPOSED SURFACES ABOVE GRADE.

FIELD CONDITIONS - CONSULT ENGINEER FOR ABNORMAL SOIL CONDITIONS SILTS AND CLAY WITH WATER LIMITS GREATER THAN 50%, HIGH ORGANIC SOILS, SHALLOW BEDROCK, ETC.

CONDUIT - SHALL BE HEAVY WALL 2" OR 3/4" PER GRAPHIC. RIGID NON-METALLIC SCHEDULE 40 PVC FOR USE ABOVE & BELOW GROUND OR CONCRETE ENCASED. RATED FOR 90 DEGREES CELSIUS CONDUCTORS AND USE IN DIRECT SUNLIGHT. MATERIAL SHALL BE UL LISTED AND COMPLY WITH NEMA TC2-1978 AND F.S. #WC-1094A. PROVIDE IN 10 FOOT SECTIONS. SEAL ALL JOINTS WATERTIGHT. GLUE JOINTS WITH PVC CEMENT. BUSH ALL ENDS. ALL BENDS SHALL USE LONG RADIUS PREFORMED ELBOWS. EXTEND CONDUIT TO MINIMUM 2'-0" BELOW GRADE. LOCATION TO BE COORDINATED WITH LANDSCAPING AND UTILITIES.

IF UNIT TYPE DUCT CABLE IS UTILIZED IN TRENCHES IN LIEU OF PVC CONDUIT, AT POLE FOUNDATIONS RETAIN THE PVC CONDUIT SPECIFIED ABOVE IT SHALL FUNCTION AS A SLEEVE FOR THE DUCT CABLE. OVERSIZE PVC CONDUIT EITHER 2 1/2" OR 3" AS REQUIRED BASED ON DUCT CABLE OUTSIDE DIAMETER.

CONDUIT CAPS - TERMINAL POINTS OF ALL CONDUIT AND DUCT CABLE SHALL BE SEALED PROMPTLY AFTER INSTALLATION BY MEANS OF A MOLDED PLASTIC OR RUBBER CAPPING DEVICE THAT ONLY PERMITS WIRE PASS THROUGH.

Date: 5/1/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

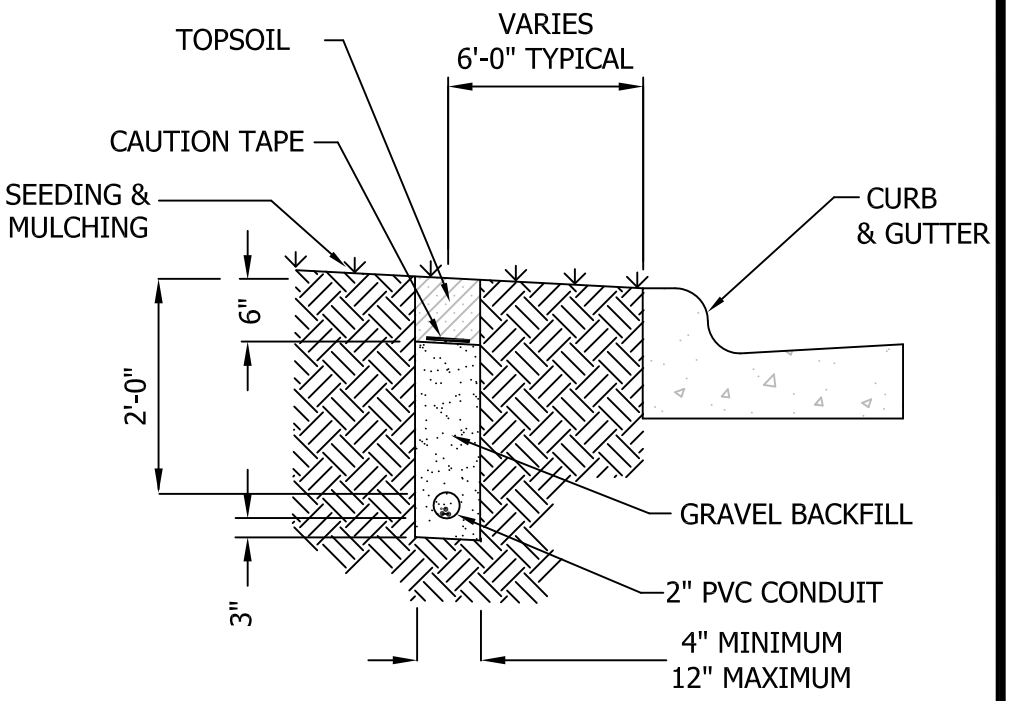
POLE FOUNDATION

SHEET 2 OF 2

DRAWING NO. ***SL-04***

* NO SPLICING OF DISTRIBUTION CABLE LESS THAN 500 FEET IN LENGTH.

TRENCHING - CONDUIT TRENCHES SHALL HAVE VERTICAL WALLS AND BE EXCAVATED TO A DEPTH THAT PERMITS CONDUIT TO BE LAID AT 2'-0" BELOW FINISH GRADE WITH A GRAVEL COVER, ABOVE AND BELOW. BACKFILL GRAVEL TO TOPSOIL LIMIT. TRENCHES SHALL BE LOCATED ADJACENT TO AND PARALLEL WITH CURBS OR PAVEMENTS AND SHALL NOT DEVIATE MORE THAN 6" FROM THE LINES DESIGNATED. TRENCHES SHALL NOT EXCEED 12" IN WIDTH. REMOVE EXCESS SOIL AFTER BACKFILLING.



GRAVEL - SHALL BE UNCRUSHED WASHED GRAVEL AND PASS A 1/2" SIEVE. POUR IN PLACE AND COMPACT TO 95% STANDARD PROCTOR IN LAYERS NOT EXCEEDING 6" EACH.

TOPSOIL - FOR BACKFILLING SHALL BE CLEAN, LOOSE FRIABLE, LOAMY TOPSOIL FREE OF SUBSOIL OR REFUSE. TOPSOIL MAY BE FROM THE SITE OR IMPORTED. TOPSOIL SHALL BE PLACED AND SPREAD OVER THE AREAS DESIGNATED TO A DEPTH SUFFICIENTLY GREATER THAN THAT SHOWN SO THAT AFTER NATURAL SETTLEMENT THE COMPLETED WORK WILL CONFORM TO THE ELEVATIONS SHOWN.

SEEDING AND MULCHING - SHALL COMPLY WITH CITY OF COLUMBUS, OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 659.

CONDUIT - SHALL BE HEAVY WALL RIGID NON-METALLIC SCHEDULE 40 PVC FOR USE ABOVE AND BELOW GROUND OR CONCRETE ENCASED. RATED FOR 90 DEGREES CELSIUS CONDUCTORS AND USE IN DIRECT SUNLIGHT. MATERIAL SHALL BE UL LISTED AND COMPLY WITH NEMA TC2-1978 AND F.S. #WC-1094A. PROVIDE IN 10 FOOT SECTIONS. SEAL ALL JOINTS WATERTIGHT. GLUE JOINTS WITH PVC CEMENT. BUSH ALL ENDS. ALL BENDS SHALL USE LONG RADIUS PREFORMED ELBOWS.

CONDUIT CAPS - PROVIDE MOLDED PLASTIC OR RUBBER CAPPING DEVICE THAT ONLY PERMITS WIRE TO PASS THROUGH WHILE PREVENTING DIRT, WATER, ETC. FROM ENTERING.

PULL WIRE - ALL EMPTY CONDUIT INSTALLED FOR FUTURE LIGHTING SHALL CONTAIN A NO. 10 AWG COPPER-CLAD OR ALUMINUM-CLAD PULL WIRE.

WIRING - DISTRIBUTION CABLE SHALL BE #4 AWG XHHW (WET RATED) STRANDED COPPER 600V, 90 DEGREES CELSIUS CONDUCTORS. USE #6 IN APPROPRIATE CONDITIONS. SYSTEM GROUND CABLE SHALL BE #4 AWG FOR POLE TO POLE APPLICATIONS.

METALIZED CAUTION TAPE - 3" (79mm) WIDE RED PLASTIC TAPE WITH BLACK LETTERS READING "CAUTION BURIED ELECTRIC LINE BELOW". BURY ABOVE CONDUIT 6" (158mm) MAX. BELOW GRADE. RUN CONTINUOUS IN ALL TRENCHES NOT COVERED BY PAVEMENT.

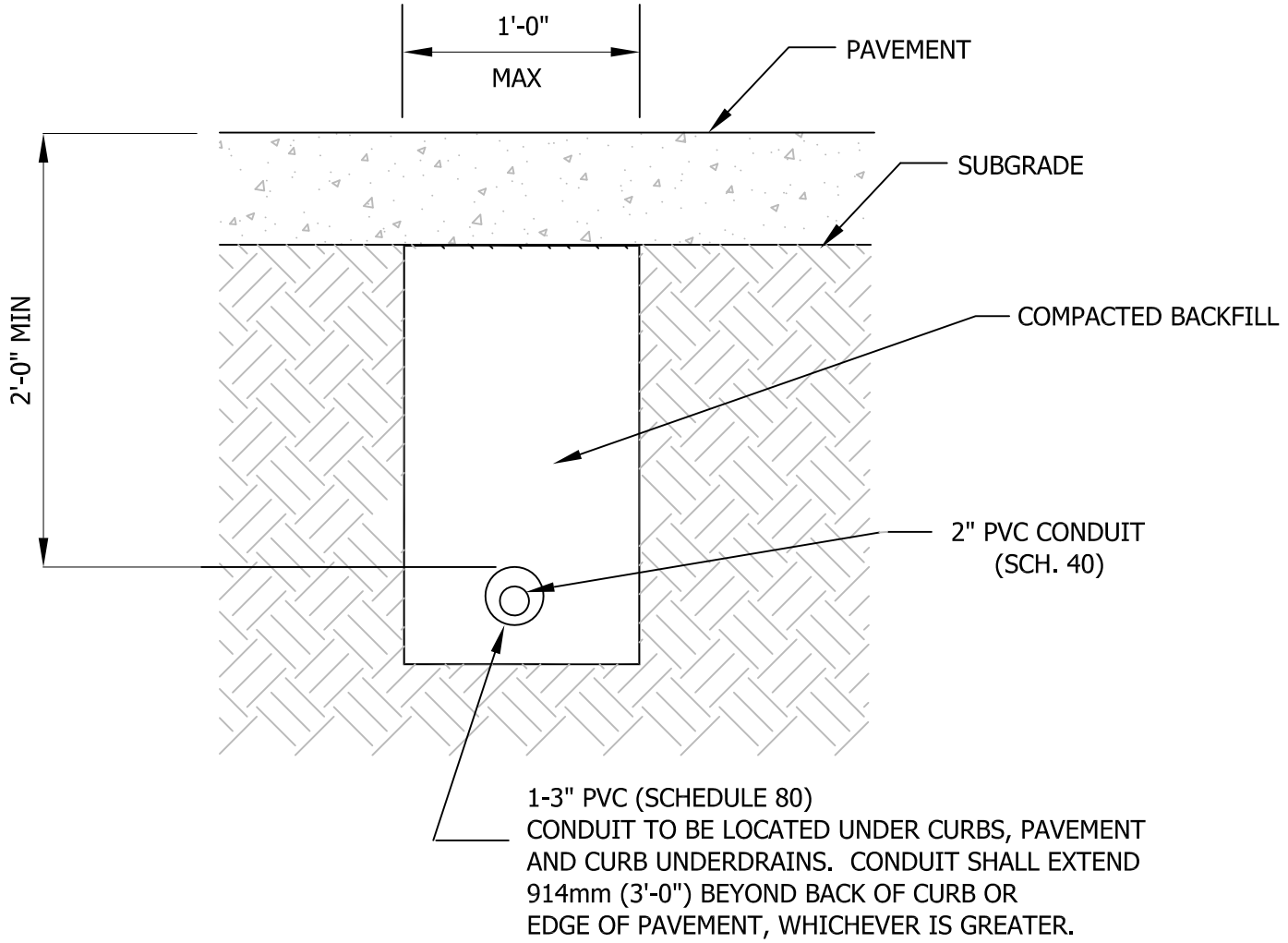
Date: 5/1/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

TRENCHES

DRAWING NO. **SL-05**



CONDUIT SLEEVE CROSSING PROPOSED PUBLIC ROADWAYS AND COMMERCIAL DRIVEWAYS

GENERAL - CONDUIT SLEEVES SHALL BE PROVIDED WHERE STREET LIGHTING CABLES CROSS ROADWAYS. CONDUIT SLEEVES SHALL ALSO BE PROVIDED UNDER ALL PROPOSED COMMERCIAL DRIVEWAYS.

TRENCHING - TRENCHES SHALL HAVE VERTICAL WALLS AND BE EXCAVATED TO A DEPTH THAT PERMITS CONDUIT SLEEVE TO BE PLACED 2'-0" (610mm) BELOW FINISH GRADE. TRENCH SHALL BE LOCATED PERPENDICULAR TO THE CENTERLINE OF ROADWAYS AND COMMERCIAL DRIVEWAYS UNLESS OTHERWISE SPECIFICALLY NOTED. MAINTAIN INLINE WITH CONDUIT SETBACK DIMENSIONS AT INTERSECTIONS AND CURB CUTS.

BACKFILL - SHALL COMPLY WITH CITY OF COLUMBUS, OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 613, TYPE 2 OR ITEM 912 COMPACTED GRANULAR BACKFILL.

MATERIALS - SHALL COMPLY WITH ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 725.05.

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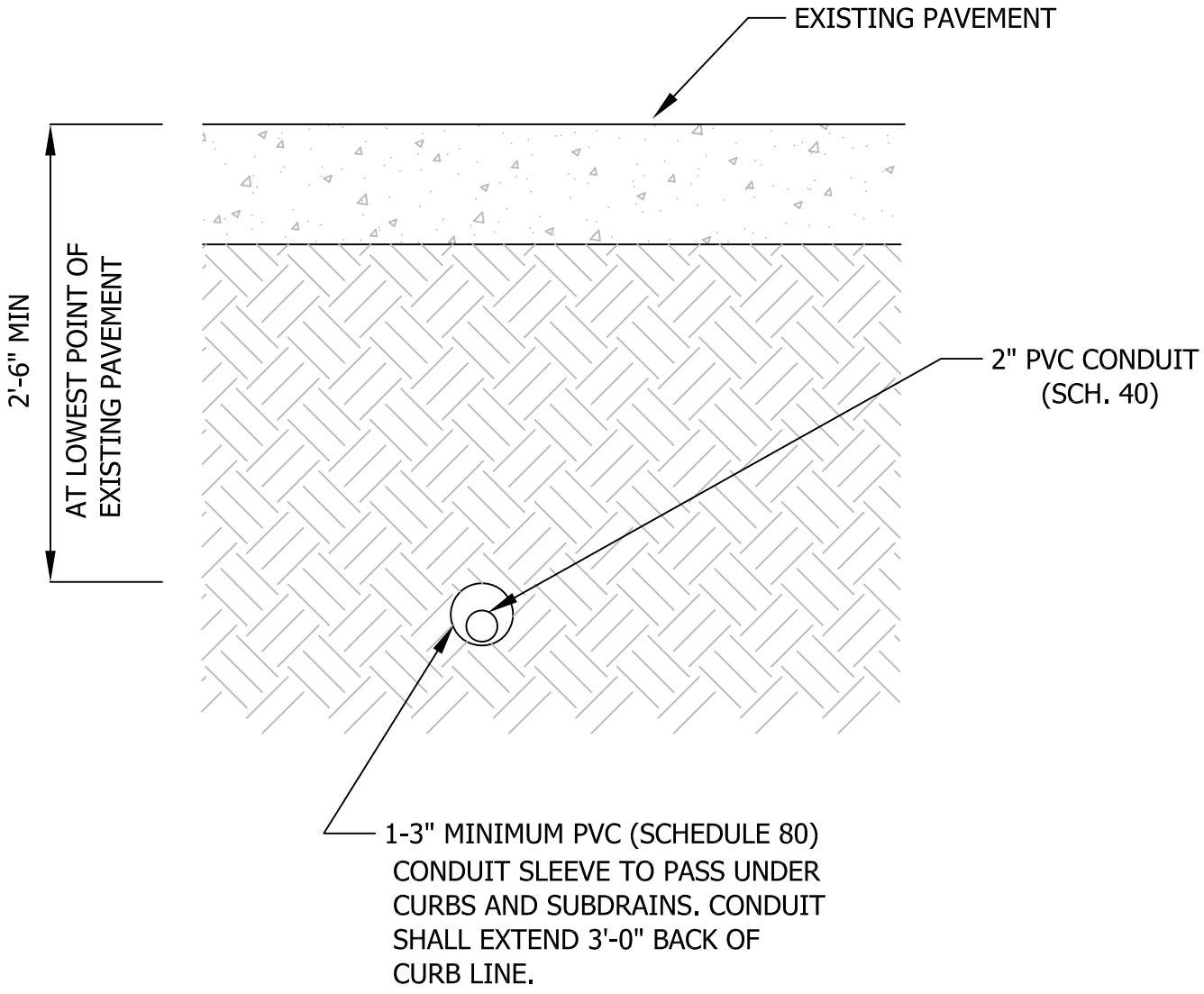
City of Dublin
ENGINEERING

STANDARD DRAWING

TRENCHES

DRAWING NO. ***SL-05***



CONDUIT SLEEVES UNDER EXISTING PAVEMENT

CONDUIT SLEEVES PLACED UNDER EXISTING PAVEMENT OR PAVED SHOULDERS SHALL BE INSTALLED BY DRILLING, SUBJECT TO THE APPROVAL OF THE CITY ENGINEER. IF PLACED BY DRILLING, THE BORE SHALL NOT EXCEED THE CONDUIT DIAMETER BY MORE THAN (5) PERCENT. CONDUIT SHALL BE PLACED WITH A MINIMUM AMOUNT OF DISTURBANCE TO THE ROADWAY. CONDUIT SLEEVES SHALL BE GALVANIZED STEEL CONDUIT SIZED AS SHOWN WITH FITTINGS FURNISHED MEETING THE REQUIREMENTS OF ANSI C 80.1, C80.4, AND UL 6 FOR TYPE 1 RIGID STEEL CONDUIT. EACH LENGTH SHALL BEAR THE UL LABEL. CONTRACTOR WILL OBTAIN A "PERMIT TO WORK IN EXISTING STREET PUBLIC WAY" FROM THE DIVISION OF ENGINEERING, CITY OF DUBLIN.

Date: 5/1/2014

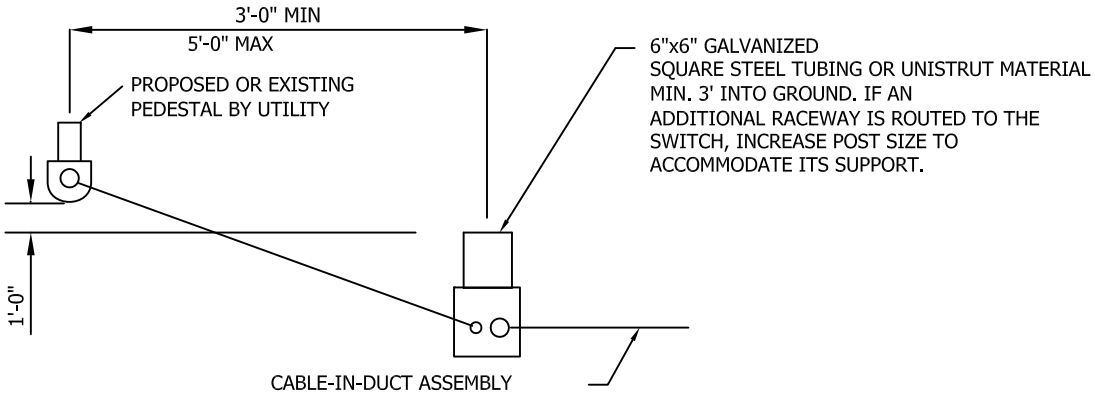
City of Dublin
ENGINEERING

STANDARD DRAWING

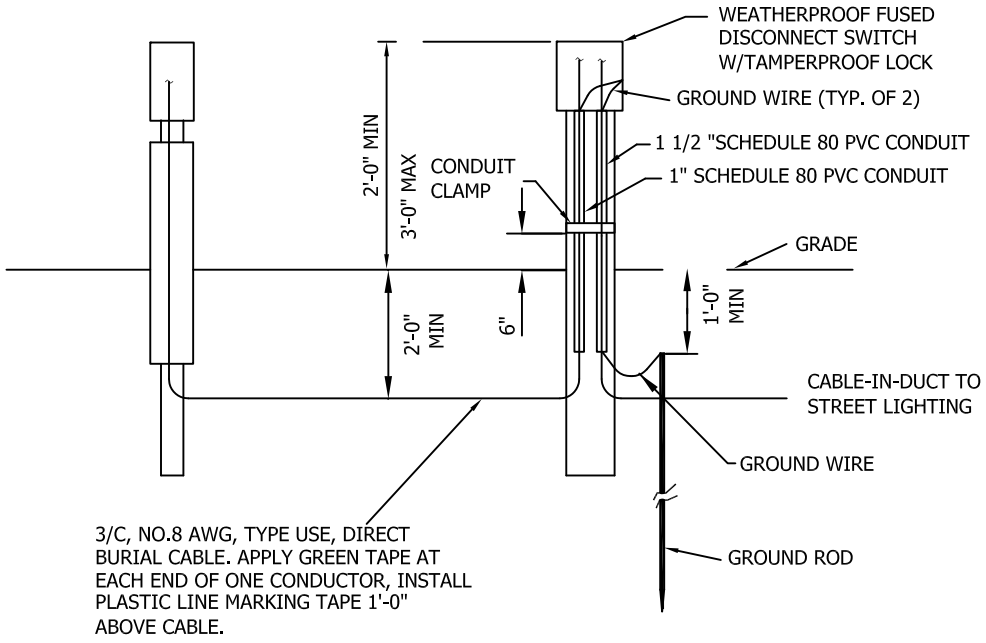
TRENCHES

SHEET 3 OF 3

DRAWING NO. ***SL-05***



PLAN



ELEVATION

THE CIRCUIT DISCONNECT SHALL BE A GENERAL DUTY, FUSIBLE TYPE SWITCH IN A NEMA NO. 4/4X ENCLOSURE.

A. MANUFACTURER: THE SWITCH SHALL BE GENERAL ELECTRIC NO. TH3221SS.

B. SWITCH RATING: THE SWITCH SHALL BE RATED AT 30 AMPS, 240 VOLTS, 3 POLE.

C. FUSES: FUSES SHALL BE UL CLASS RK-1, REJECTION TYPE.

D. LOCKS: EACH SWITCH SHALL BE LOCKABLE AND SHALL BE PROVIDED WITH A FARGO NO. GM-303 TAMPERPROOF LOCK WITH SHEAR OFF LOCKING SCREW.

NOTES:

1. ATTACH NO.6 CONDUCTORS TO LOAD TERMINALS VIA SHORT LENGTHS OF N0.8 CONDUCTORS & APPROPRIATE COMPRESSION CABLE JOINT.

2. NO MORE THAN 2 N0.6 CONDUCTORS SHALL BE CONNECTED TO EACH N0.8 CONDUCTOR.

Date: 5/1/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

QUICK DISCONNECT

SHEET 1 OF 1

DRAWING NO. **SL-06**

SAMPLE SCHEDULE

ITEM	DESCRIPTION	TOTAL	UNIT
625	CONNECTOR KIT, TYPE II, FUSED (1 PER POLE)		EA
625	CONNECTOR KIT, TYPE III, UNFUSED (2 PER POLE)		EA
625	CABLE SPLICE KITS		EA
625	TRANSFORMER BASE		EA
625	LIGHT POLE, 35'-0", GENERAL STREET LIGHT		EA
625	LIGHT POLE FOUNDATION, 24"x7', A.P.P.		EA
625	POLE AND BRACKET CABLE (#10 AWG, 600V)		LF
625	DISTRIBUTION CABLE (#4 AWG, 600V)		LF
625	GROUND CONDUCTOR (#4 AWG, SOLID, CU, XHHW)		LF
625	CONDUIT, 2" PVC, 725.05 (PVC SCH.40)		LF
625	CONDUIT SLEEVE UNDER PAVEMENT, 3" SLEEVE,		LF
	725.05 (SCH 80)		
625	LUMINAIRE, MISC.:100 LED, TYPE III MEDIUM, A.P.P.		EA
625	TRENCH		LF
625	PULL BOX, 725.06 (18"x11"x18")		EA
625	GROUND ROD		EA
625	CADWELD CONNECTION		EA
625	PLASTIC, METALIZED CAUTION TAPE		LF
625	HIGH VOLTAGE TEST, APP		LUMP

Date: 5/1/2014

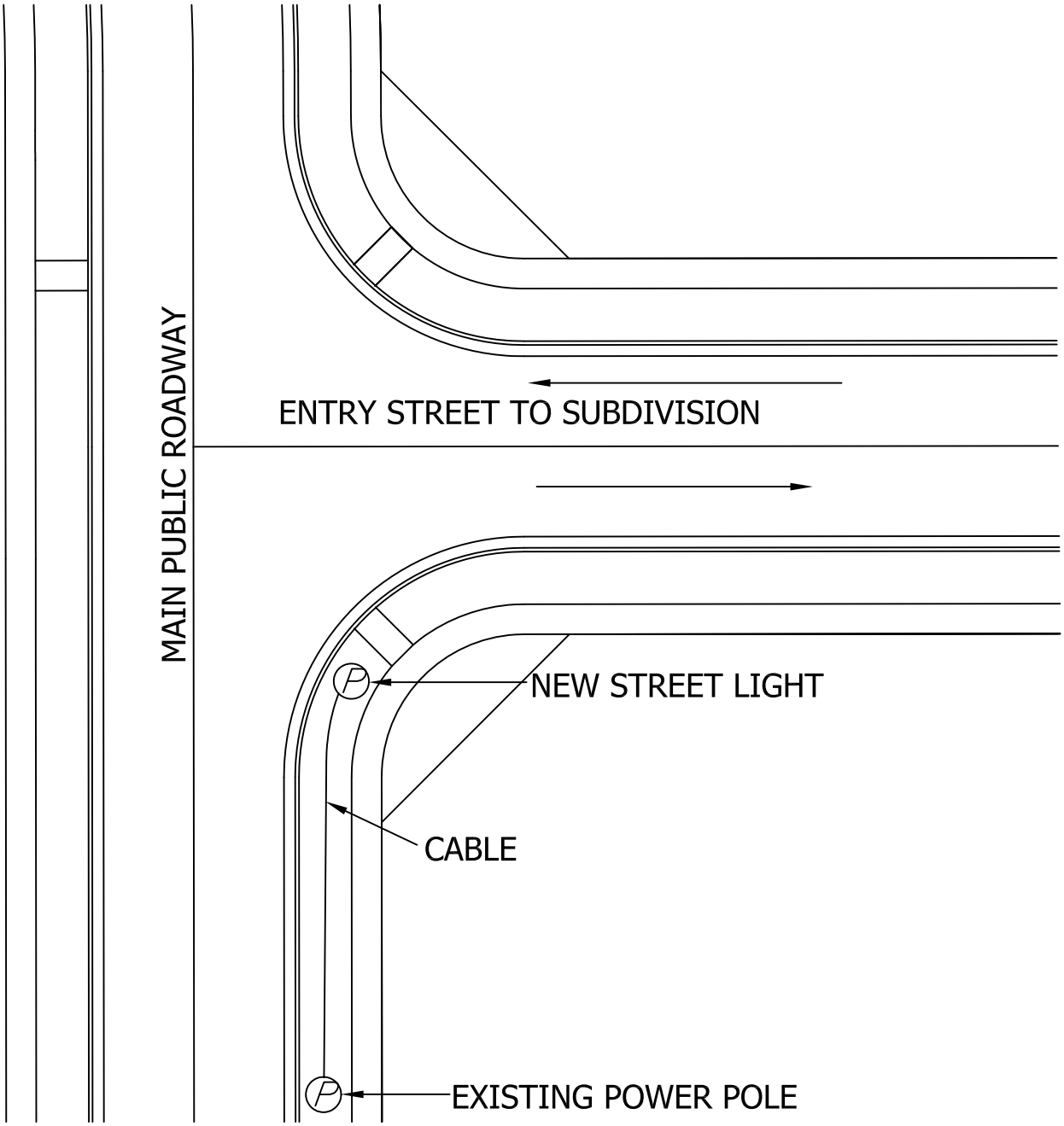
City of Dublin
ENGINEERING

STANDARD DRAWING

SAMPLE LIGHTING QUANTITIES SCHEDULE

SHEET 1 OF 1

DRAWING NO. ***SL-07***



FIELD LOCATION OF STREET LIGHT(S) TO BE APPROVED BY DIVISION OF ENGINEERING PRIOR TO PLACEMENT OF LIGHT POLE FOUNDATION.

DISCONNECT TO BE PLACED WITHIN 5 FEET OF EXISTING POWER SOURCE.

ELECTRICAL PERMIT AND INSPECTION BY CITY OF DUBLIN IS REQUIRED.

Date: 5/1/2014

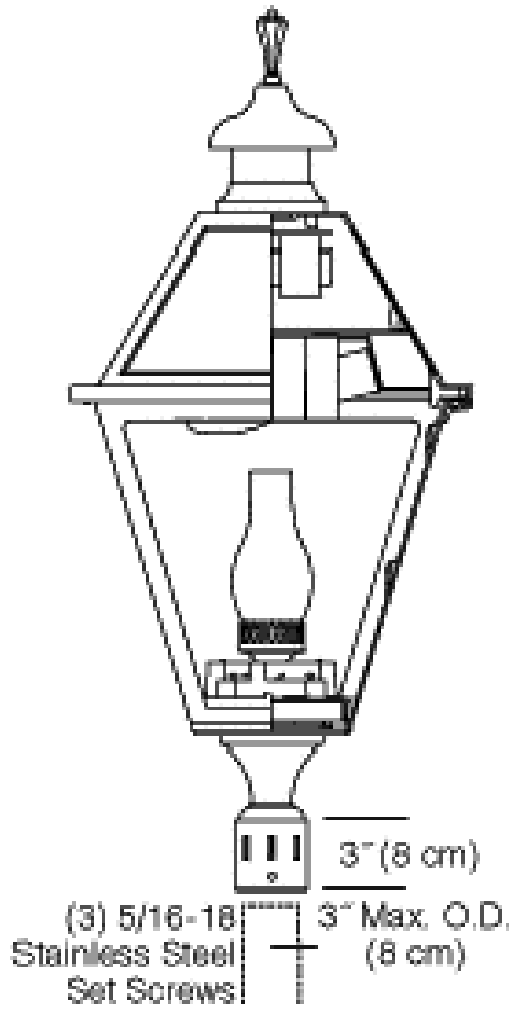
City of Dublin
ENGINEERING

STANDARD DRAWING

STREET LIGHT LOCATION

SHEET 1 OF 1

DRAWING NO. ***SL-08***



GENERAL DESCRIPTION - 66 WATT LED ARRAY, 4500K COLOR TEMPERATURE, IES, HINGED ROOF WITH SOLID SEALED PANELS.

HOUSING - 356 LOW COPPER- DIE CAST ALUMINUM ALLOY. THE PAINT SHALL BE A POWDER COAT BLACK FINISH APPROVED BY THE CITY ENGINEER. TOOL-LESS LAMP ACCESS AND HINGED ROOF WITH STAINLESS STEEL SPRING LATCH. THE PHOTO CONTROL EYE IS LOCATED IN VENT CAP. SLIP FITTER DIMENSIONS: 3" ID X 3" DEEP.

OPTICAL ASSEMBLY - TYPE III CUTOFF PRECISION FORMED, SEGMENTED SPECULAR ALUMINUM INTERNAL CUTOFF REFLECTOR WITH HORIZONTAL LAMP MOUNTING. DECORATIVE FROSTED GLASS CHIMNEY. INJECTED MOLDED CLEAR ACRYLIC PANELS WITH TOOL-LESS REMOVAL.

LABELING - UL LISTED FOR WET LOCATION AND CSA CERTIFIED.

APPROVED MANUFACTURER - STERNBERG 1843 LEDTF/4ARC45T3/ML/OSFG11W35KLED/CSA/BK
STERNBERG 1843 LEDTF/4ARC45T5/ML/OSFG11W35KLED/CSA/BK

NOTE - THIS LUMINAIRE TO BE USED ONLY IN APPROVED LOCATIONS.

Date: 5/1/2014

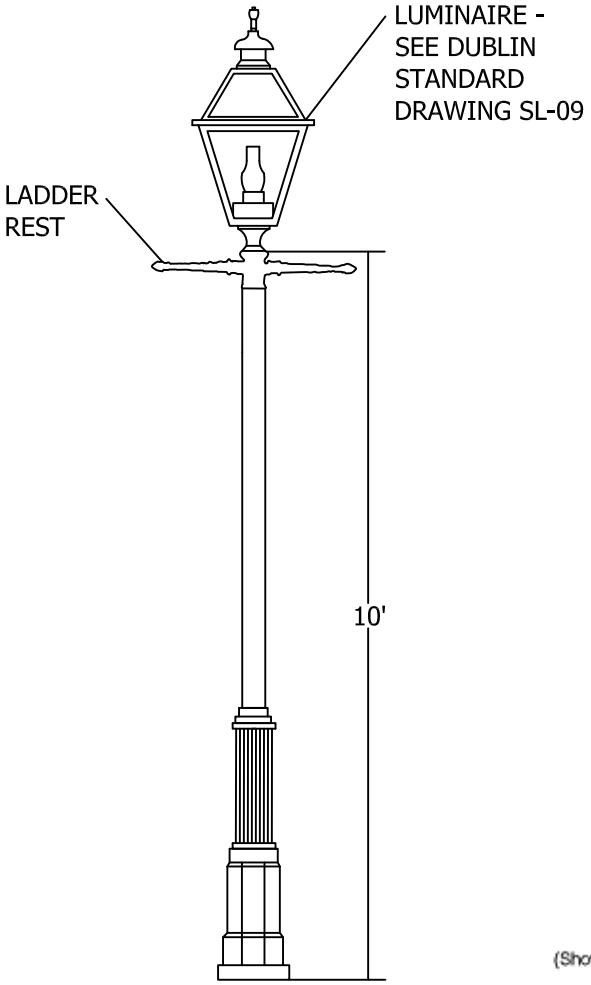
City of Dublin
ENGINEERING

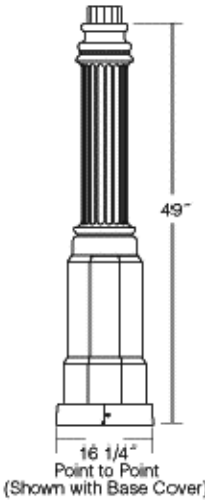
STANDARD DRAWING

DECORATIVE LUMINAIRE

SHEET 1 OF 1

DRAWING NO. ***SL-09***





LADDER REST

TYPE A- SINGLE HEAD LUMINAIRE WITH LADDER REST

GENERAL DESCRIPTION- ALUMINUM ROUND TAPERED WITH BASE COVER BLACK FINISH APPROVED BY THE CITY ENGINEER.

BASE- SHALL BE LOW COPPER CAST ALUMINUM 356 HM HIGH STRENGTH ALLOY. BASE WILL INCLUDE AN ACCESS DOOR WITH SAFETY CHAIN AND TEMPER PROOF SCREWS AND GFI RECEPTACLE.

POLE SHAFT-THE SHAFT SHALL BE ONE PIECE SEAMLESS WITH A MINIMUM WALL THICKNESS OF 0.125 INCHES, ROUND 4" TO 3" TAPERED TUBE OF LOW COPPER 6063 ALUMINUM ALLOY. POLE ASSEMBLY SHALL HAVE AN EPA VALUE OF 8.54 FOR WINDSPEED OF 80 MPH.

WRAPPING- EACH POLE SHAFT SHALL BE WRAPPED WITH PROTECTIVE PAPER SECURED IN PLACE. ALL PARTS SHALL BE BOXED AND/OR BANDED.

LADDER REST- SHALL BE LOW COPPER CAST ALUMINUM 356 HM HIGH STRENGTH ALLOY WITH POWDERCOAT BLACK FINISH.

POLE APPROVED MANUFACTURER- HADCO P1761-10A OR APPROVED EQUAL

LADDER REST APPROVED MANUFACTURER- HADCO M0012A OR APPROVED EQUAL

Date: 5/1/2014

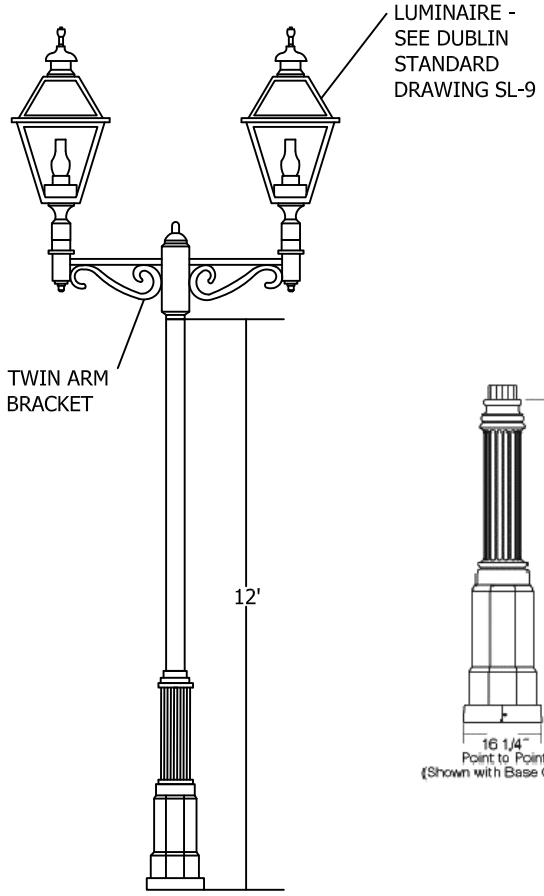
City of Dublin
ENGINEERING

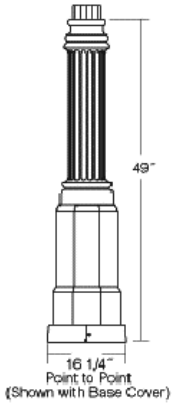
STANDARD DRAWING

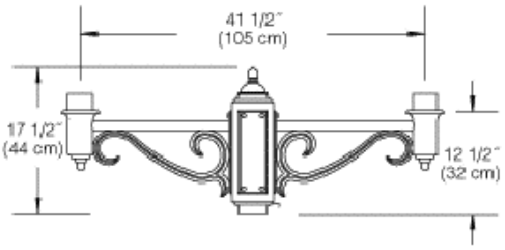
DECORATIVE LIGHT POLE - SINGLE HEAD

SHEET 1 OF 1

DRAWING NO. ***SL-10***







TWIN ARM BRACKET

TYPE B- TWIN HEAD LUMINAIRE

GENERAL DESCRIPTION- ALUMINUM ROUND TAPERED WITH BASE COVER BLACK FINISH APPROVED BY THE CITY ENGINEER.

BASE- SHALL BE LOW COPPER CAST ALUMINUM 356 HM HIGH STRENGTH ALLOY. BASE WILL INCLUDE AN ACCESS DOOR WITH SAFETY CHAIN AND TEMPER PROOF SCREWS AND GFI RECEPTACLE.

POLE SHAFT-THE SHAFT SHALL BE ONE PIECE SEAMLESS WITH A MINIMUM WALL THICKNESS OF 0.125 INCHES, ROUND 4" TO 3" TAPERED TUBE OF LOW COPPER 6063 ALUMINUM ALLOY. POLE ASSEMBLY SHALL HAVE AN EPA VALUE OF 8.54 FOR WINDSPEED OF 80 MPH.

WRAPPING- EACH POLE SHAFT SHALL BE WRAPPED WITH PROTECTIVE PAPER SECURED IN PLACE. ALL PARTS SHALL BE BOXED AND/OR BANDED.

TWIN ARM BRACKET- SHALL BE LOW COPPER CAST ALUMINUM 356 HM HIGH STRENGTH ALLOY WITH CENTER HUB TO ACCOMMODATE 3" POLE TOP.

POLE APPROVED MANUFACTURER- HADCO P1761-12A OR APPROVED EQUAL.

TWIN ARM APPROVED MANUFACTURER- HADCO PTH2120-P3A OR APPROVED EQUAL.

NOTE - TO BE USED ONLY IN APPROVED LOCATIONS.

Date: 5/1/2014

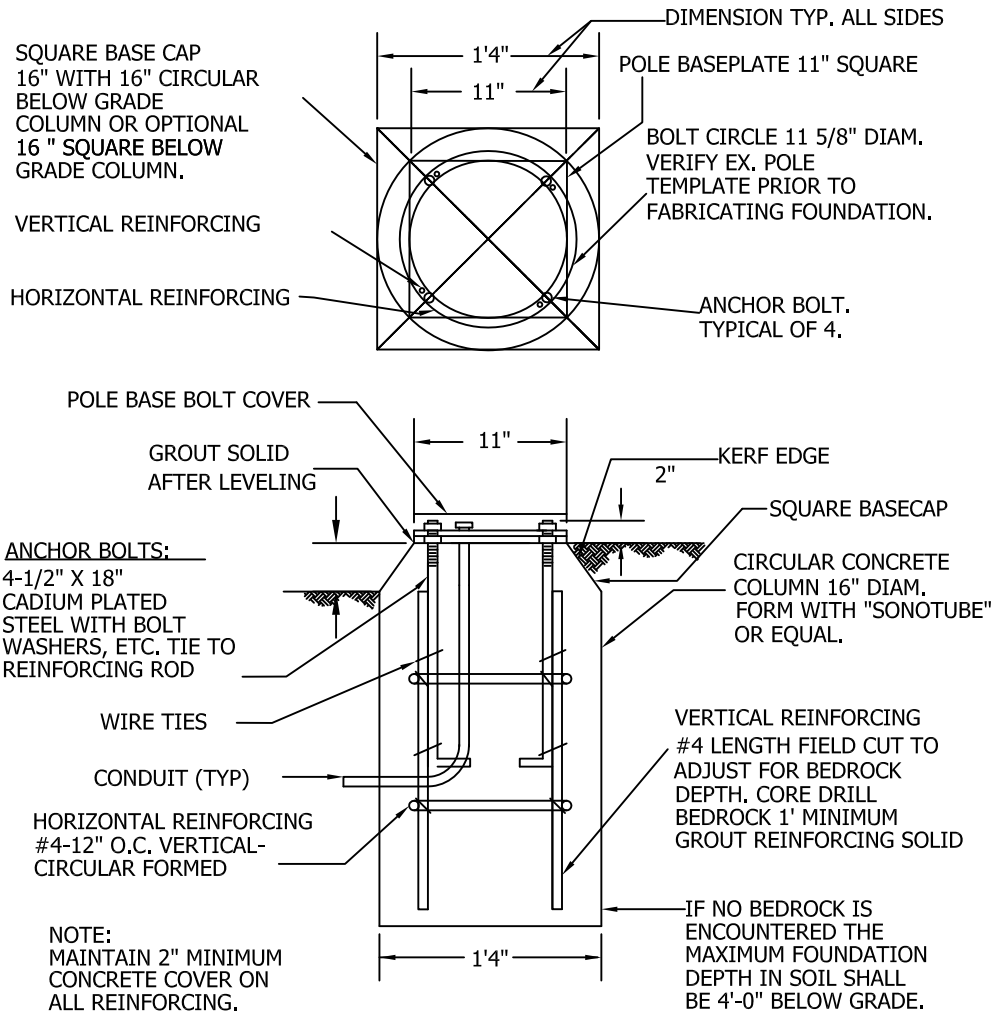
City of Dublin
ENGINEERING

STANDARD DRAWING

DECORATIVE LIGHT POLE - 12' DOUBLE HEAD

SHEET 1 OF 1

DRAWING NO. **SL-11**



CONCRETE- CLASS C, 4,000 PSI, 5-7% AIR ENTRAINED. FILL ALL EXPOSED SURFACE VOIDS. CHAMFER ALL EDGES, SLOPE TO ¼" WITH GROUT TO DRAIN WATER (FILL VOID BETWEEN BASE PLATE & POLE BASE SOLID, AFTER PLUMBING POLE), ADJUST SO BASE HAS NO GAP TO GROUTED SURFACE. HOT OR COLD WEATHER-FOLLOW ODOT CONSTRUCTION & MATERIAL SPECIFICATIONS SECTION 625.

CONCRETE FINISH- REMOVE ALL FORM MARKS, HAND RUB EXPOSED TOP AND SIDES WITH CARBIDE STONE.

REINFORCINNG- ASTM A-615 GRADE 60 , TYPE S DEFORMED BILLET: #4 VERTICALS, 4 TOTAL, #4 HORIZONTALS 12" O.C., CIRCULAR FORMED. WIRE TIE ALL CONNECTIONS, MAINTAIN 2" MINIMUM CONCRETE COVER.

WEATHERPROOFING- PROVIDE PENETRATING SURFACE APPLIED, 1 COAT CONCRETE WATERPROOFING AGENT. MATERIAL SHALL BE CLEAR PENETRATING, WATER BASED, ALKYLALKOXYSILANE AND AND CONTAIN A MINIMUM OF 40% BY WEIGHT SOLIDS AND BE APPLIED PER MANUFACTURER'S DIRECTIONS. APPLY 1 COAT TO ALL CONCRETE SURFACES ABOVE GRADE TO 12" BELOW GRADE PRIOR TO BACKFILLING.

GROUNDING- PROVIDE ⅝" X 10' COPPER WELD ONE-PIECE GROUND ROD. DRIVE A MINIMUM OF 2' BELOW GRADE. RUN #4 AWG SOLID COPPER GROUNDING ELECTRODE CONDUTOR IN ¾" PVC CONDUIT FROM ROD TO ENCLOSURE GROUND BAR. "CAD" WELD WIRE CONNECTION AT ROD.

Date: 5/1/2014

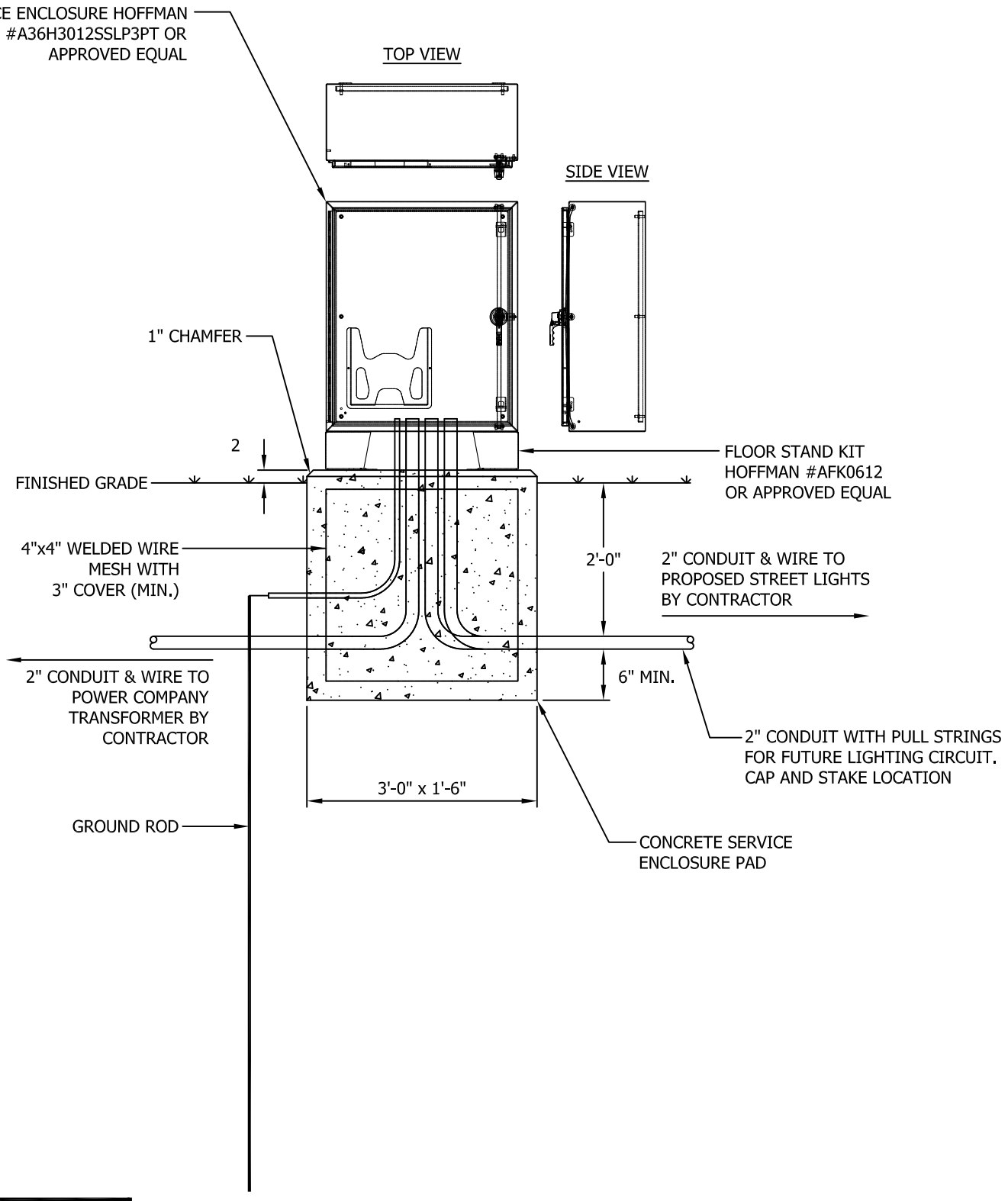
City of Dublin
ENGINEERING

STANDARD DRAWING

DECORATIVE LIGHT POLE FOUNDATION

SHEET 1 OF 1

DRAWING NO. **SL-12**



Date: 5/1/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

LIGHTING CONTROLLER

SHEET 1 OF 4

DRAWING NO. **SL-13**

COORDINATION - COORDINATE LOCATION OF TRANSFORMER AND PAD GRADING WITH AEP AND THE CITY ENGINEER.

SERVICE TRANSFORMER - PROVIDED, INSTALLED AND WIRED BY AEP.

TRANSFORMER PAD GRADING - INSTALL PER AEP REQUIREMENTS FOR SIZE AND LOCATION. REFER TO SERVICE ENCLOSURE PAD FOR MATERIAL SPECIFICATIONS.

SERVICE ENCLOSURE PAD - STRUCTURE SHALL BE SET CLOSE TO THE AEP POWER COMPANY TRANSFORMER PAD. LOCATION OF THE TRANSFORMER PAD IN RELATIONSHIP TO THE ENCLOSURE PAD SHALL BE COORDINATED WITH THE CITY ENGINEER. CONCRETE SHALL BE CLASS C. FILL ALL EXPOSED SURFACE VOIDS. CHAMFER ALL EDGES 3/4-INCH OR 1-INCH. SLOPE TOP 1/4" TO DRAIN WATER. FINISH - REMOVE ALL FORM MARKS, PROVIDE FLOATED AND STEEL TROWELED FINISH.

SERVICE ENCLOSURE - PROVIDE A NEMA WATERTIGHT STAINLESS STEEL ENCLOSURE. SIZE - 36"H X 30"W X 12"D; HAVING A SINGLE CONTINUOUS HINGED LOCKING DOOR, INTERIOR MOUNTING PANEL WITH A 6" MINIMUM STAINLESS STEEL MATCHING FLOOR STAND. CONCRETE AND OR BOLT TYPE ANCHOR AND LEVEL TO PAD VIA STAINLESS STEEL MACHINE BOLT, NUTS & LOCK WASHERS. DRILL BOTTOM OF ENCLOSURE WITH 6MM (1/4") WEEP HOLE AT LOW POINT. CONCRETE PAD SHALL NOT EXTEND ABOVE PROPOSED GRADE MORE THAN 2-INCHES.

SERVICE ENCLOSURE FINISH - A DARK BRONZE APPROVED BY THE CITY ENGINEER. THE PAINT SHALL BE A POWDER PAINT FINISHED TO A GLOSS OF 35% (AT 60 DEGREES).

SERVICE ENCLOSURE LOCK - THREE POINT MECHANISM WITH LOCKABLE HANDLE. PADLOCK PROVIDED BY THE CITY.

PHOTOCELL CONTROLLER - PROVIDE AN ON-OFF PHOTO INITIATED CONTROLLER WITH SEALED CADMIUM SULFIDE PHOTOCELL TO OPERATE IN -30 DEGREES F TO +140 DEGREES F TEMPERATURES, THERMAL INERTIA OF 15 SECONDS MINIMUM, THREADED PIPE NIPPLE, RATED 16 AMPS 2000 WATTS AT 120V, AND SINGLE POLE SINGLE THROW SWITCH. LIGHT SHALL BE 2 FOOT CANDLES FOR TURN ON AND 10 FOOT CANDLES FOR TURN OFF. PROVIDE IN WEATHERPROOF ENCLOSURE. LOAD SHALL REMAIN "ON" IN CASE OF CELL FAILURE. MOUNT ATOP FIRST POLE FROM SERVICE ENCLOSURE.

APPROVED MANUFACTURER - PARAGON #PJ201-00

GROUNDING - PROVIDE 5/8" X 10' COPPER WELD ONE PIECE GROUND ROD. DRIVE A MINIMUM OF 2'-0" BELOW GRADE. PROVIDE #8 AWG SOLID COPPER GROUNDING ELECTRODE CONDUCTOR IN 3/4" PVC CONDUIT FROM ROD TO ENCLOSURE GROUND BAR. CADWELD WIRE CONNECTION TO ROD.

FUSING - SERVICE ENTRANCE - PROVIDE DUAL ELEMENT, TIME DELAY FUSES, UL CLASS RK-1, 600 V, REJECTION TYPE.

APPROVED MANUFACTURER - BUSS #LP-RK

CONTROL CIRCUIT - PROVIDE SINGLE ELEMENT, FAST ACTING TYPE FUSE, UL CLASS CC, 120 V, REJECTION TYPE.

APPROVED MANUFACTURER - BUSS #KTK-R

CONDUIT - SHALL BE HEAVY WALL 2" OR 3/4" PER GRAPHIC. RIGID NON METALLIC SCHEDULE 40 PVC FOR USE ABOVE AND BELOW GROUND OR CONCRETE ENCASE. RATED FOR 90 DEGREES CELSIUS CONDUCTORS AND USE IN DIRECT SUNLIGHT. MATERIAL SHALL BE UL LISTED AND COMPLY WITH NEMA TC2-1978 AND F.S. #WC-1094A. PROVIDE IN 10' SECTIONS. SEAL ALL JOINTS WATERTIGHT. GLUE JOINTS WITH PVC CEMENT AND BUSH ALL ENDS. ALL BENDS SHALL USE LONG RADIUS PRE FORMED ELBOWS. EXTEND CONDUIT TO MINIMUM 2'-0" BELOW GRADE. LOCATION TO BE COORDINATED WITH LANDSCAPING AND UTILITIES.

IF UNIT TYPE DUCT CABLE IS UTILIZED IN TRENCHES IN LIEU OF PVC CONDUIT, AT POLE FOUNDATIONS RETAIN THE PVC CONDUIT SPECIFIED ABOVE IT SHALL FUNCTION AS A SLEEVE FOR THE DUCT CABLE. OVERSIZE PVC CONDUIT EITHER 2 1/2" OR 3" AS REQUIRED BASED ON DUCT CABLE OUTSIDE DIAMETER.

WIRING - REFER TO GENERAL SPECIFICATIONS.

LIGHTING CONTROLLER - A CLASS R FUSIBLE COMBINATION LIGHTING CONTACTOR TYPE CONTROLLER ASSEMBLY RATED 600V, 60A-2P, 60HZ WITH SOLID NEUTRAL, ELECTRICALLY HELD WITH CONTROL FUSE, 120V CONTROL VOLTAGE 3 POSITION HAND - OFF - AUTO SELECTOR SWITCH AND PHOTOCELL CONTROL. MOUNT ALL DEVICES IN A SERVICE ENCLOSURE LESS PHOTO CONTROL.

APPROVED MANUFACTURER - SQUARE "D" NIGHT-MASTER SPC-61 (OR APPROVED EQUAL).

480V SYSTEM
CLASS 8903 NIGHTMASTER LIGHTING CONTACTOR 8903SPC61V81CFF4G102TY1
CONTACTOR RATING - 60 AMPS
FUSED COMBINATION STARTER WITH CLASS R FUSE CLIPS (FUSES NOT INCLUDED)
3 POLE DEVICE
TYPE 3R ENCLOSURE SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.
SPECIFIED FOR 480 VOLTS, 60 HZ POWER SYSTEM
FUSED CONTROL TRANSFORMER SELECTED WITH 120V, 60 HZ COIL
- T - STANDARD CAPACITY
- 480 VOLT PRIMARY
- 120 VOLT SECONDARY

FUSING
- F4 - 2 PRIMARY CONTROL FUSES
- F - 1 SECONDARY CONTROL FUSE

CONTROL UNITS SUPPLIED
- C - HAND-OFF-AUTO SELECTOR SWITCH
- G102 - WIRED FOR REMOTE PHOTOCELL
- N - ADDITION OF SOLID NEUTRAL
- Y1 - UL PANEL LABEL

277V SYSTEM

CLASS 8903 NIGHTMASTER LIGHTING CONTACTOR 8903SPC61V85CFF4G102TY1
CONTACTOR RATING - 60 AMPS
FUSED COMBINATION STARTER WITH CLASS R FUSE CLIPS (FUSES NOT INCLUDED)
3 POLE DEVICE
TYPE 3R ENCLOSURE SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.
SPECIFIED FOR 277 VOLTS, 60 HZ POWER SYSTEM
FUSED CONTROL TRANSFORMER SELECTED WITH 120V, 60 HZ COIL
- T - STANDARD CAPACITY
- 277 VOLT PRIMARY
- 120 VOLT SECONDARY

FUSING
- F4 - 2 PRIMARY CONTROL FUSES
- F - 1 SECONDARY CONTROL FUSE

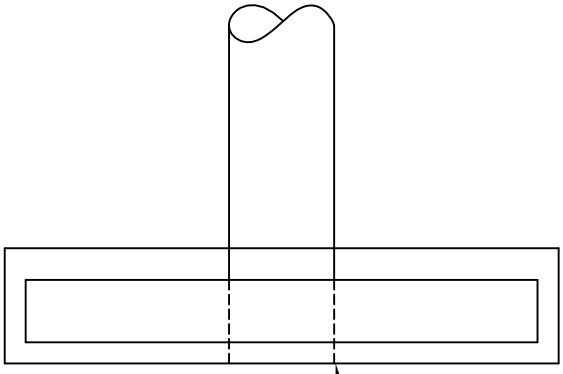
CONTROL UNITS SUPPLIED
- C - HAND-OFF-AUTO SELECTOR SWITCH
- G102 - WIRED FOR REMOTE PHOTOCELL
- N - ADDITION OF SOLID NEUTRAL
- Y1 - UL PANEL LABEL

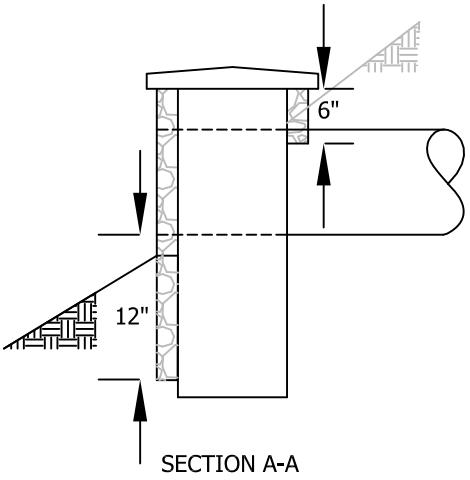
240V SYSTEM

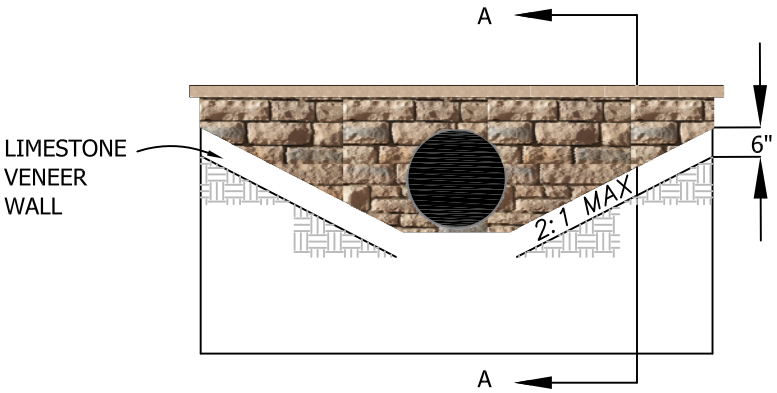
CLASS 8903 NIGHTMASTER LIGHTING CONTACTOR 8903SPC62V80CFF4G102TY1
CONTACTOR RATING - 60 AMPS
FUSED COMBINATION STARTER WITH CLASS R FUSE CLIPS (FUSES NOT INCLUDED)
3 POLE DEVICE
TYPE 3R ENCLOSURE SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.
SPECIFIED FOR 240 VOLTS, 60 HZ POWER SYSTEM
FUSED CONTROL TRANSFORMER SELECTED WITH 120V, 60 HZ COIL
- T - STANDARD CAPACITY
- 240 VOLT PRIMARY
- 120 VOLT SECONDARY

FUSING
- F4 - 2 PRIMARY CONTROL FUSES
- F - 1 SECONDARY CONTROL FUSE

CONTROL UNITS SUPPLIED
- C - HAND-OFF-AUTO SELECTOR SWITCH
- G102 - WIRED FOR REMOTE PHOTOCELL
- N - ADDITION OF SOLID NEUTRAL
- Y1 - UL PANEL LABEL







ELEVATION

STONE VENEER

NO SCALE

16 " WALL CAP

NOTES:

1.STONE VENEER:
MANUFACTURED SYNTHETIC STONE VENEER SHALL BE GREAT LAKE LIMESTONE AS MANUFACTURED BY DUTCH QUALITY STONE, INC. (1-330-359-7866) OR AN APPROVED ALTERNATIVE. MORTAR COLOR SHALL APPROXIMATE THE STONE COLOR. MORTAR AND GROUTING TYPE S PER MANUFACTURES INSTRUCTIONS. STONE SHALL BE PLACED IN A RANDOM PATTERN SIMILAR TO AVERY/MUIRFIELD BRIDGE OVER US 33/SR 161.

2.ALL EXPOSED CONCRETE STRUCTURES SHALL COMPLY WITH THE STONE VENEER AS SHOWN ON THIS DETAIL.

THE TOP OF ALL HEADWALLS THAT ARE TO BE STONE FACED SHALL HAVE A STONE WALL CAP.

THE WALL CAP SHALL BE 16" IN WIDTH AND TAN IN COLOR AS MANUFACTURED BY DUTCH QUALITY STONE OR APPROVED EQUAL.

MORTAR AND GROUTING TYPE SHALL BE PER THE MAUFACTURER'S SPECIFICATIONS.

Date: 05/01/2014

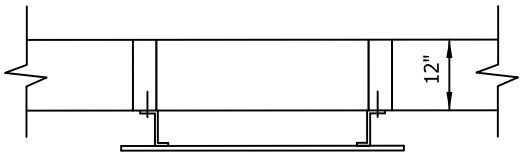
City of Dublin
ENGINEERING

STANDARD DRAWING

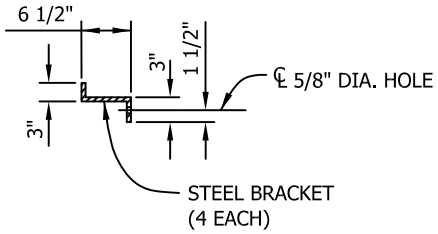
STONE VENEER AND WALL CAP FOR HEADWALLS

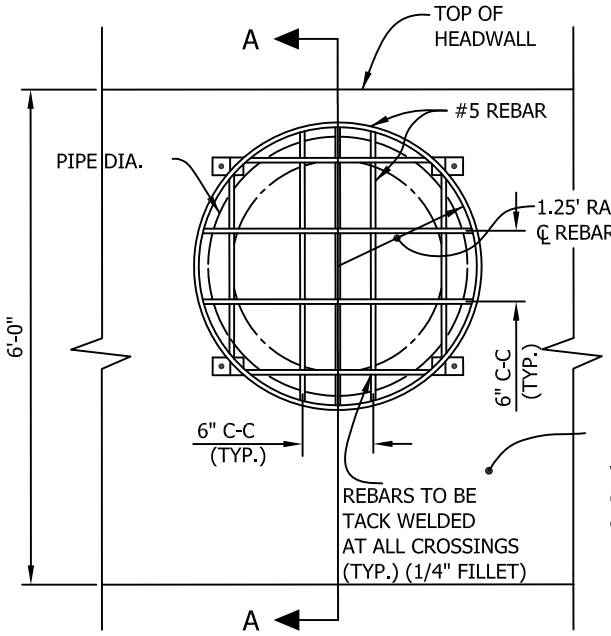
SHEET 1 OF 1

DRAWING NO. **ST-01**

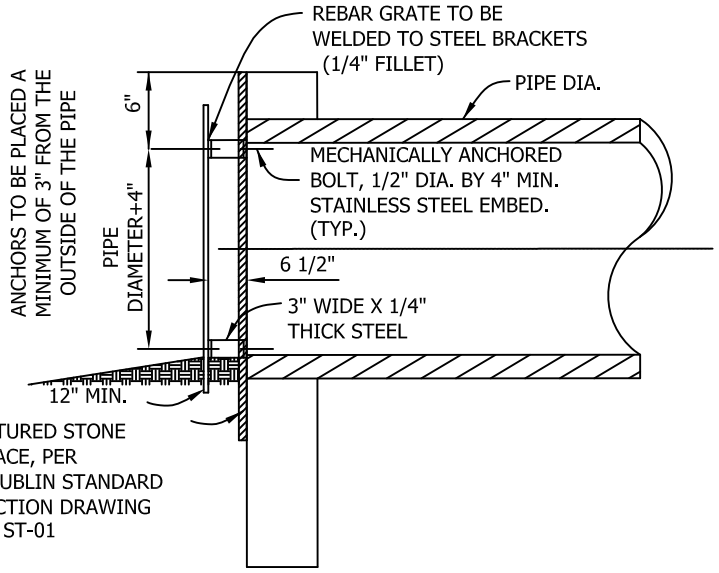


TOP VIEW





END SECTION



SECTION A-A

NOTES :

1. GRATES AND BRACKETS SHALL BE GALVANIZED IN ACCORDANCE WITH CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS 711.02.

2. TO BE USED ON 21" AND LARGER DIAMETER PIPES

3. ONLY TO BE PLACED ON STORMWATER FACILITY OUTLETS

Date: 05/01/2014

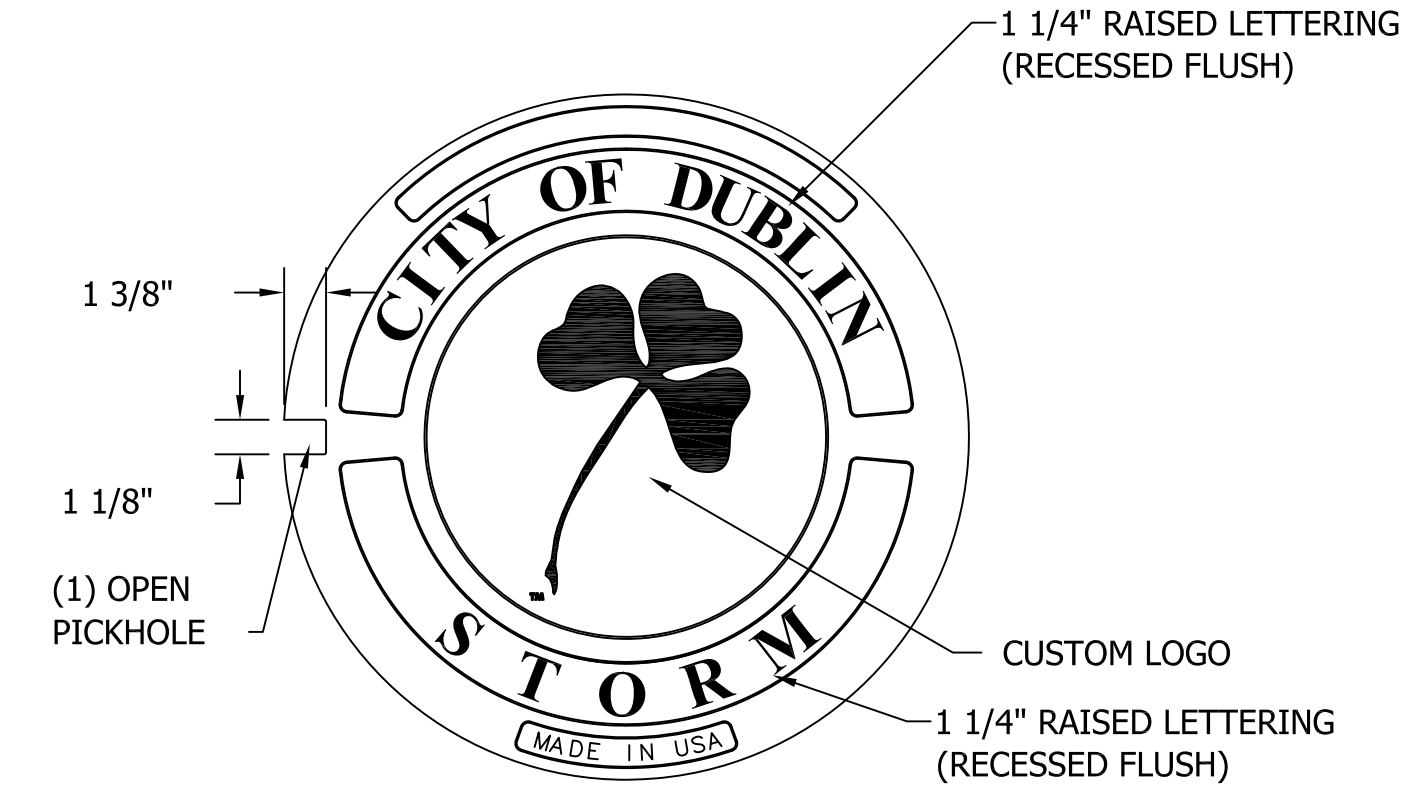
City of Dublin
ENGINEERING

STANDARD DRAWING

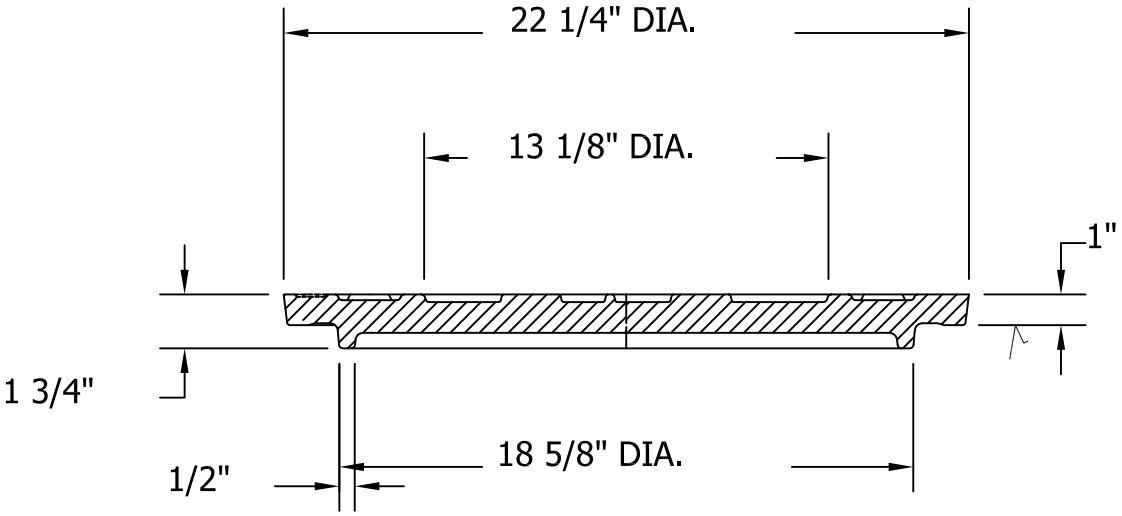
SAFETY GRATE

SHEET 1 OF 1

DRAWING NO. **ST-02**



COVER FACE



COVER SECTION

Date: 05/01/2014

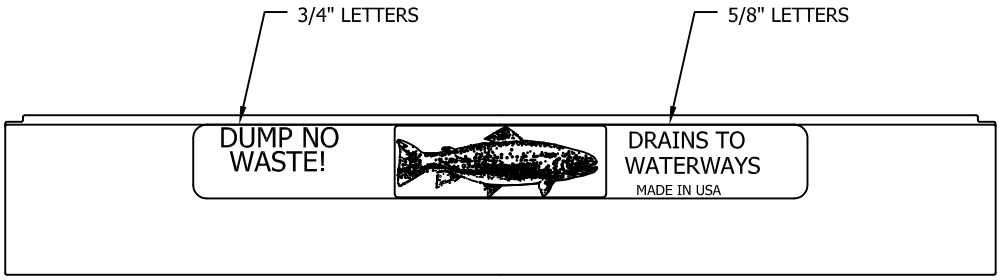
City of Dublin
ENGINEERING

STANDARD DRAWING

STORM SEWER MANHOLE LID

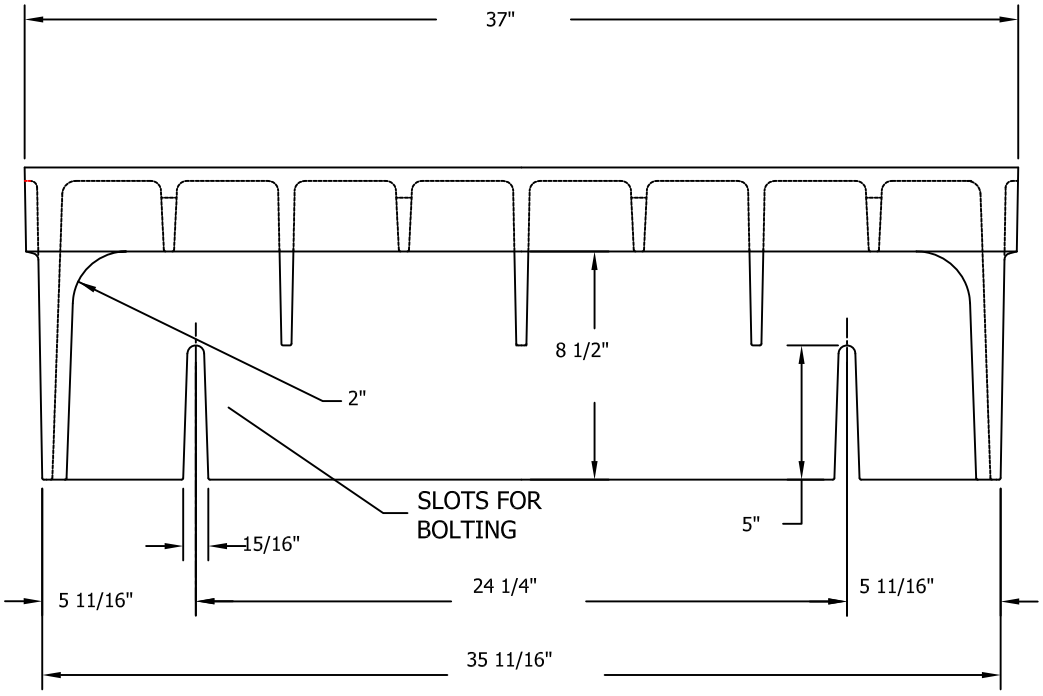
SHEET 1 OF 1

DRAWING NO. **ST-03**

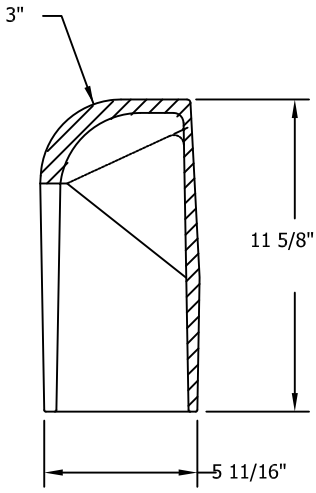


TOP VIEW

CURB ADJUSTMENT
6" TO 10"



FRONT VIEW



SECTION

Date: 05/01/2014

City of Dublin
ENGINEERING

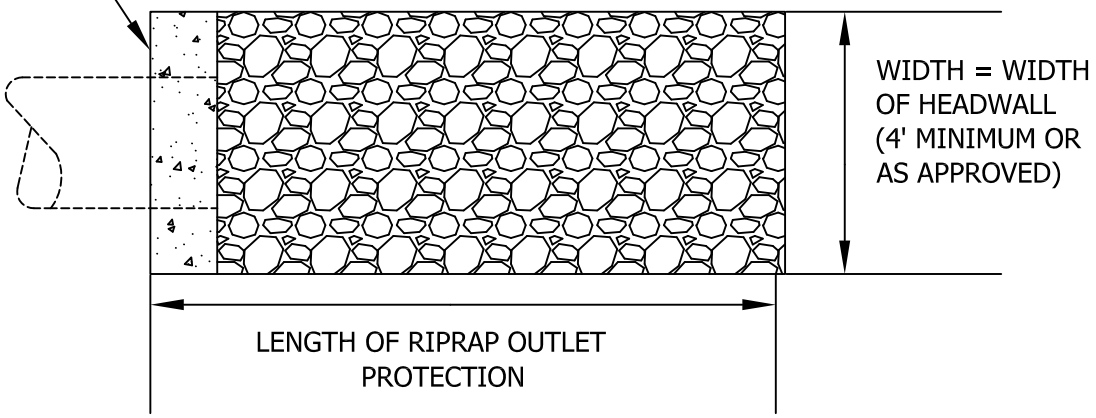
STANDARD DRAWING

DRAINS TO RIVER CURB INLET

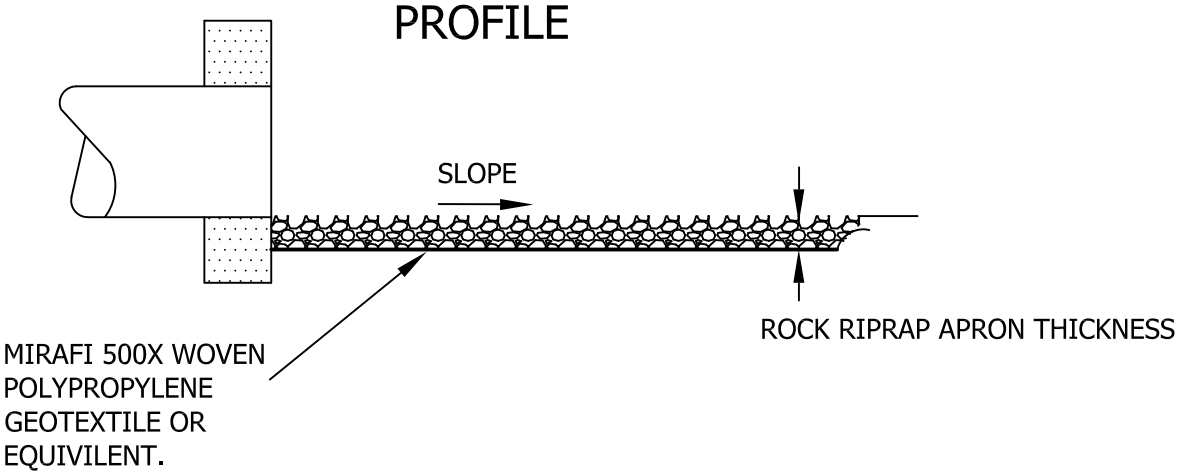
SHEET 1 OF 1

DRAWING NO. **ST-04**

PLAN VIEW



PROFILE



NOTES:
1. MINIMUM LENGTH TO BE 8 FEET, 5 FEET IF PIPE IS SUBMERGED.
2. MINIMUM THICKNESS OF 18 INCHES.
3. RIP-RAP SIZE TO BE DETERMINED BY OUTLET FLOW VELOCITY

Date: 05/01/2014

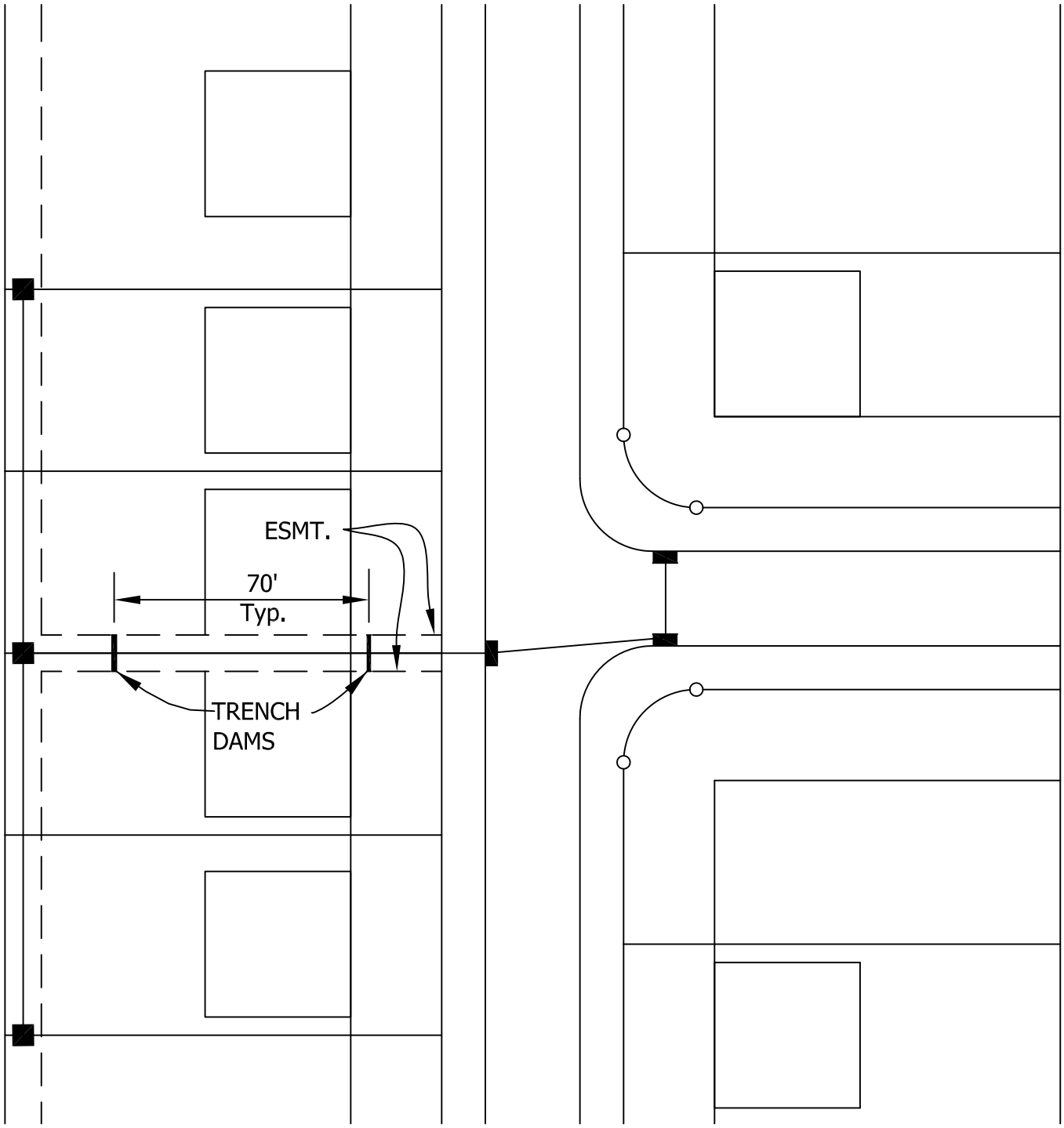
City of Dublin
ENGINEERING

STANDARD DRAWING

ROCK CHANNEL PROTECTION DETAIL

SHEET 1 OF 1

DRAWING NO. ***ST-05***



NOT TO SCALE

NOTE:
FOR ALL STORM SEWER PIPE ALONG THE SIDE YARD OF A LOT, CONTRACTOR SHALL USE REINFORCED CONCRETE PIPE (ASTM C-76) WITH "O" RING RUBBER GASKET JOINTS (ASTM C-136) WITH NO AGGREGATE BACKFILL.

Date: 05/01/2014

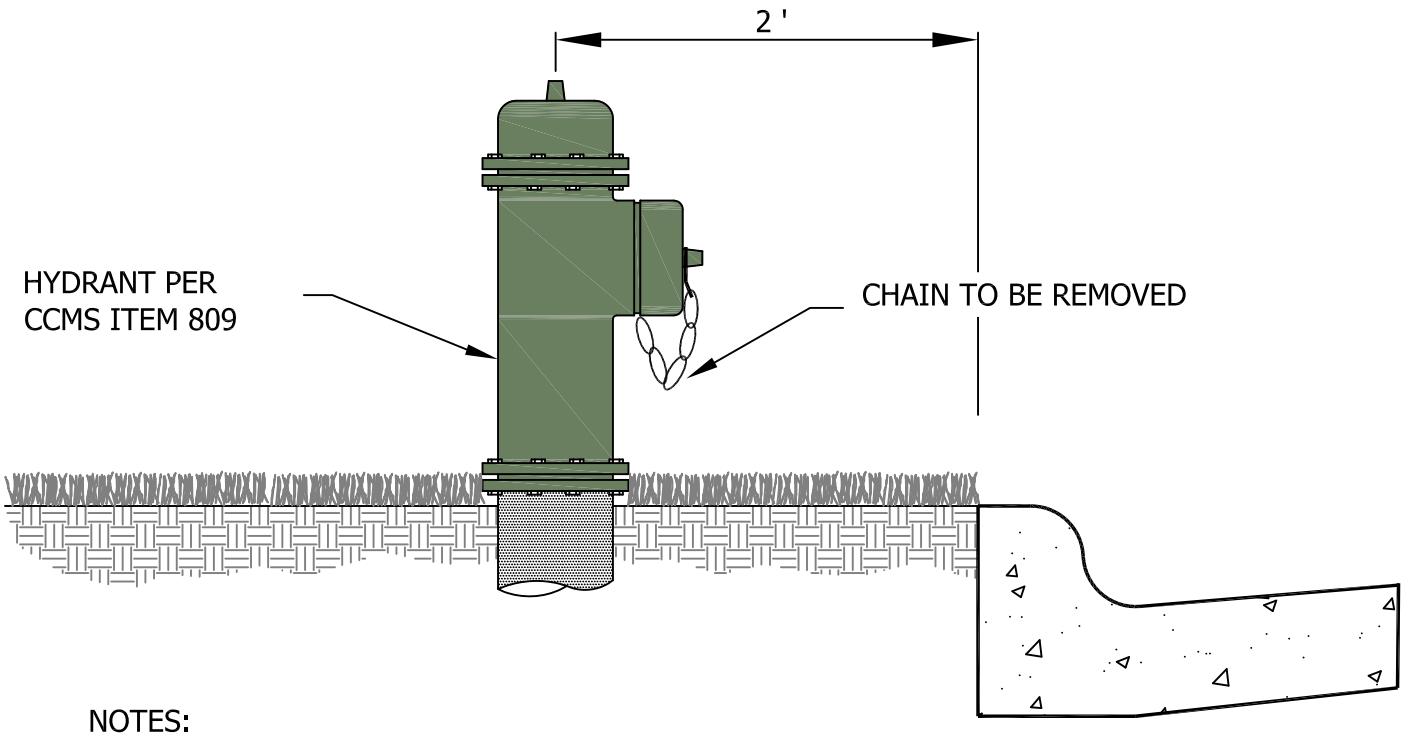
City of Dublin
ENGINEERING

STANDARD DRAWING

STORM SEWER WITH "O" RING RUBBER GASKET JOINTS

SHEET 1 OF 1

DRAWING NO. ***ST-06***



NOTES:

PAINT AND PRIMER TO BE SHOP APPLIED.

PAINT: SHERWIN WILLIAMS - POLANE SP POLYURETHANE ENAMEL, OR APPROVED EQUAL

PAINT COLOR: VISTA GREEN NO. 80-105 (RGB#: 106,127,96), OR APPROVED EQUAL

PRIMER: AS SPECIFIED BY THE MANUFACTURER

PRIVATE HYDRANTS SHALL BE WHITE NO. D876967-31-1 OR 80-1 WITH VISTA GREEN TOP AND CAP

ALL HYDRANTS WILL COME EQUIPPED WITH A STORZ NOZZLE.

MANUFACTURER	PRODUCT NO.	COMMENTS
AMERICAN FLOW CONTROL	MARK 73 SERIES	"NO DRAIN" ONLY
CLOW CORPORATION	EDDY "F2641"	
MUELLER CO.	SUPER CENTURION 200	
KENNEDY	K-81A	
AMERICAN AVK	NO. 2760	

Date: 05/01/2014

City of Dublin
ENGINEERING

STANDARD DRAWING

FIRE HYDRANT

SHEET 1 OF 1

DRAWING NO. **WA-01**