

CITY OF ASPEN, COLORADO ENGINEERING DEPARTMENT

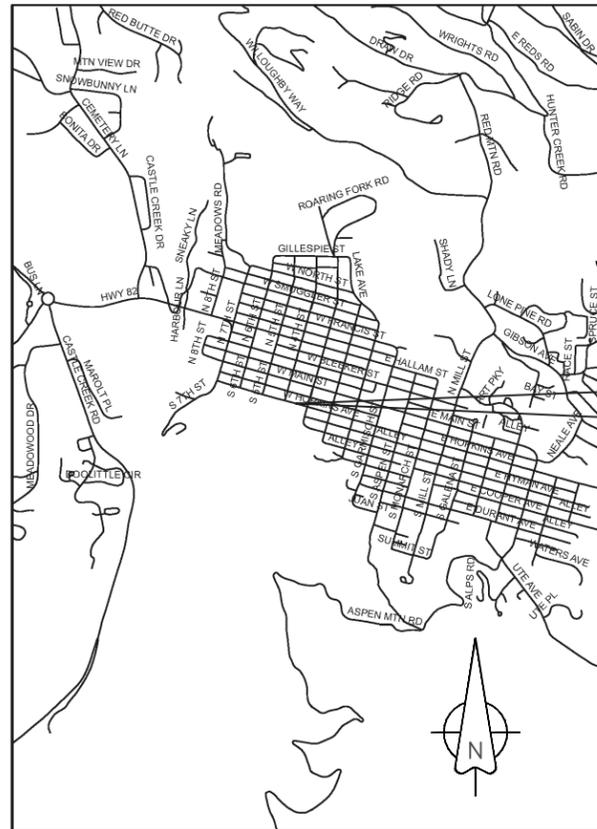


PLANS OF PROPOSED HOPKINS PEDESTRIAN CONNECTIVITY IMPROVEMENTS

HOPKINS AVENUE
PITKIN COUNTY
PROJECT #: 2013-107

LIMITS: SEE LAYOUT SHEET FOR DETAILS

FOR THE CONSTRUCTION OF: ASPHALT ROADWAY, SIDEWALK, CURB AND GUTTER,
ADA COMPLIANT RAMPS, AND ONE RESIDENTIAL CONCRETE DRIVE.



THIS PLAN SET WAS DERIVED FROM
FIELD SURVEY AND GIS DATA AND
SHOULD NOT BE USED FOR ANY
CONSTRUCTION OR ENGINEERING
PURPOSE.

PROJECT LOCATION
HOPKINS AVENUE
ASPEN, CO



PREPARED BY:
CITY OF ASPEN ENGINEERING DEPARTMENT
CONTACT: GARRETT SABOURIN (970) 429-2738

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	PLAN SHEET
4	CROSS SECTIONS
5-14	STANDARDS



THE CITY OF ASPEN

CITY OF ASPEN, COLORADO
ENGINEERING DEPARTMENT
CONTACT: GARRETT SABOURIN
PHONE: (970) 429-2738

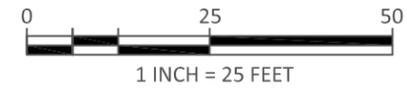
ASPEN ENGINEERING DEPARTMENT
PEDESTRIAN IMPROVEMENT PLAN
HOPKINS AVENUE
PITKIN COUNTY, CO

QUANTITIES

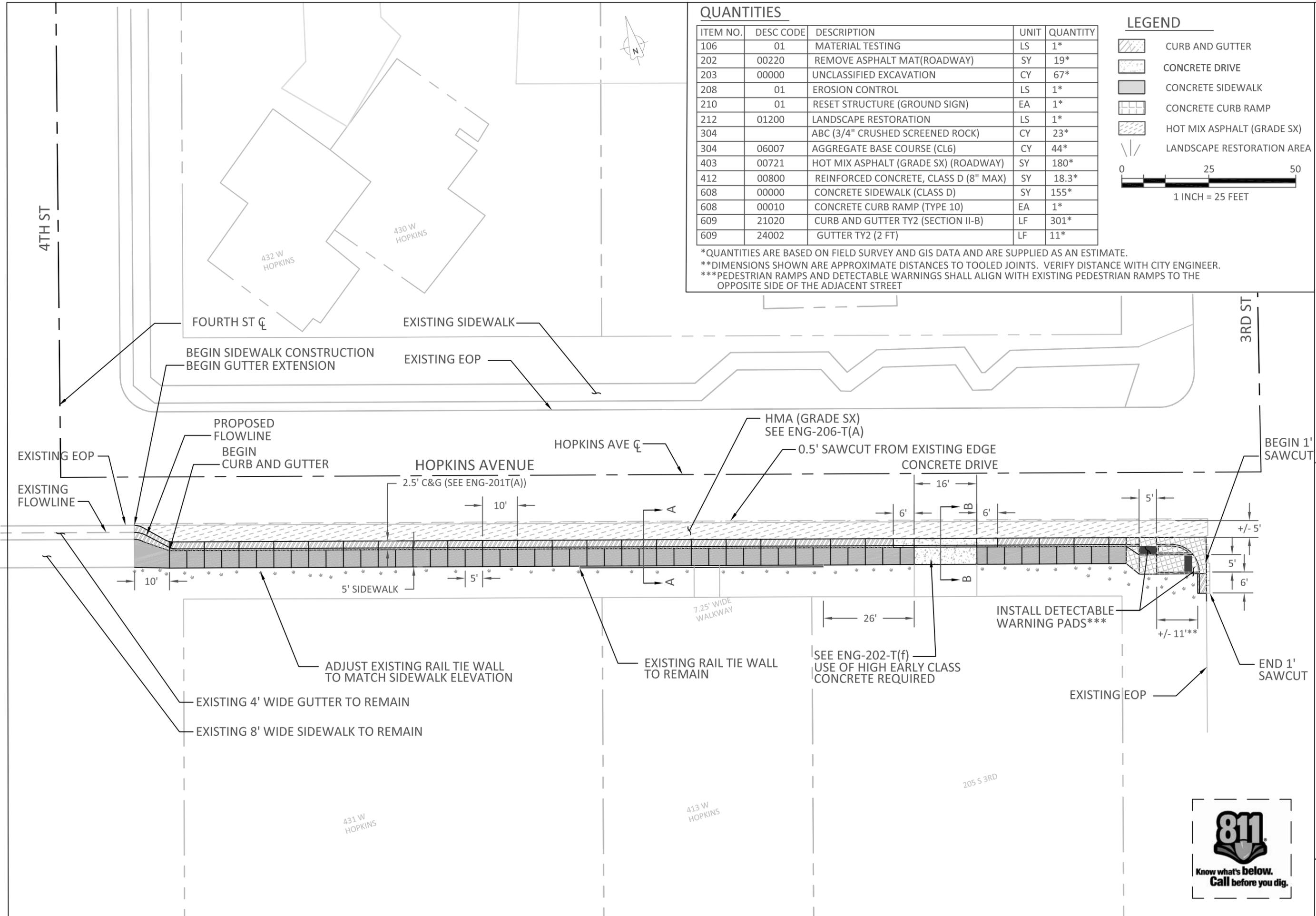
ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY
106	01	MATERIAL TESTING	LS	1*
202	00220	REMOVE ASPHALT MAT(ROADWAY)	SY	19*
203	00000	UNCLASSIFIED EXCAVATION	CY	67*
208	01	EROSION CONTROL	LS	1*
210	01	RESET STRUCTURE (GROUND SIGN)	EA	1*
212	01200	LANDSCAPE RESTORATION	LS	1*
304		ABC (3/4" CRUSHED SCREENED ROCK)	CY	23*
304	06007	AGGREGATE BASE COURSE (CL6)	CY	44*
403	00721	HOT MIX ASPHALT (GRADE SX) (ROADWAY)	SY	180*
412	00800	REINFORCED CONCRETE, CLASS D (8" MAX)	SY	18.3*
608	00000	CONCRETE SIDEWALK (CLASS D)	SY	155*
608	00010	CONCRETE CURB RAMP (TYPE 10)	EA	1*
609	21020	CURB AND GUTTER TY2 (SECTION II-B)	LF	301*
609	24002	GUTTER TY2 (2 FT)	LF	11*

LEGEND

- CURB AND GUTTER
- CONCRETE DRIVE
- CONCRETE SIDEWALK
- CONCRETE CURB RAMP
- HOT MIX ASPHALT (GRADE SX)
- LANDSCAPE RESTORATION AREA



*QUANTITIES ARE BASED ON FIELD SURVEY AND GIS DATA AND ARE SUPPLIED AS AN ESTIMATE.
 **DIMENSIONS SHOWN ARE APPROXIMATE DISTANCES TO TOOLED JOINTS. VERIFY DISTANCE WITH CITY ENGINEER.
 ***PEDESTRIAN RAMPS AND DETECTABLE WARNINGS SHALL ALIGN WITH EXISTING PEDESTRIAN RAMPS TO THE OPPOSITE SIDE OF THE ADJACENT STREET





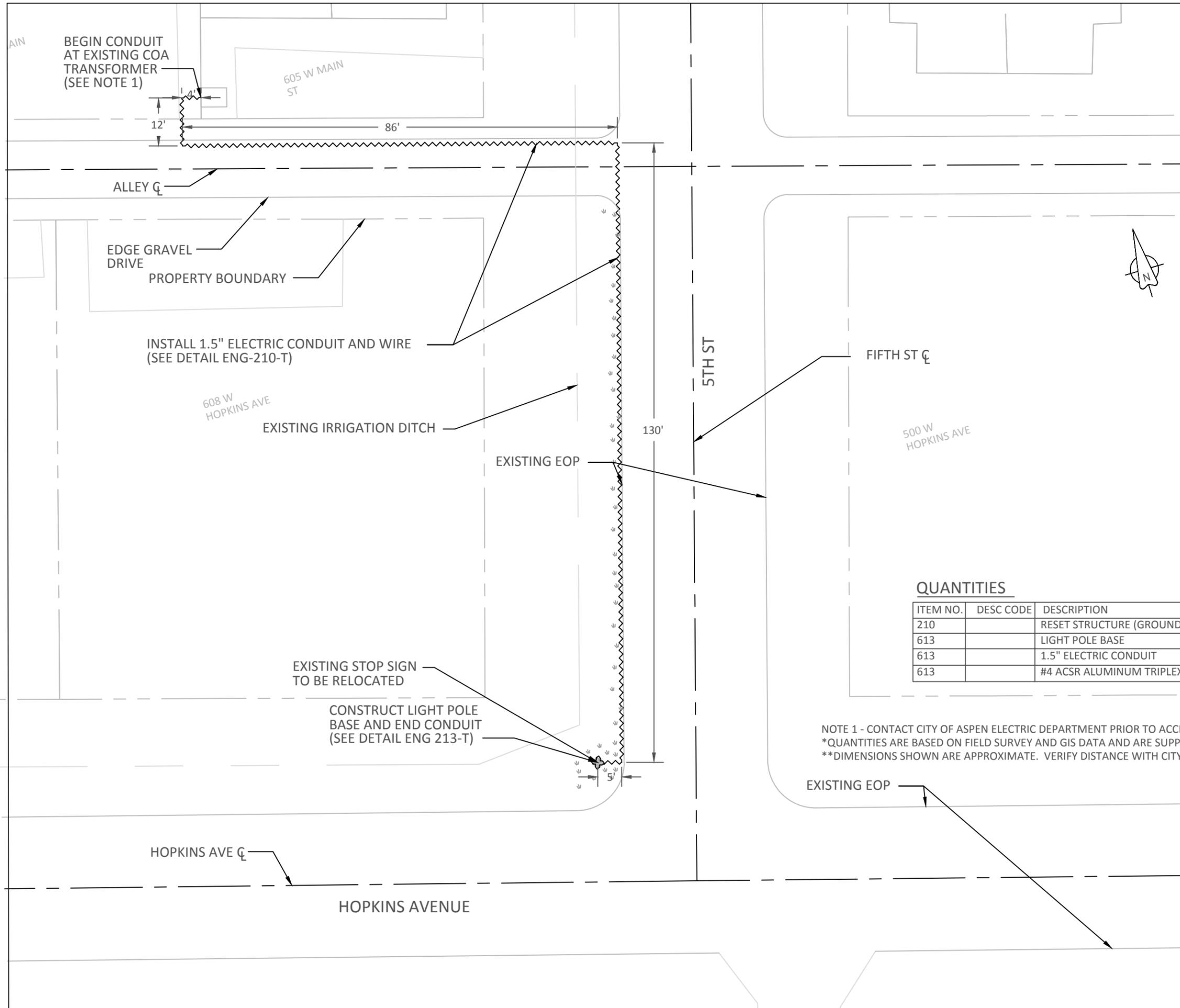
THE CITY OF ASPEN

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ENGINEERING DEPARTMENT
CONTACT: GARRETT SABOURIN
PHONE: (970) 429-2738**

**ASPEN ENGINEERING DEPARTMENT
VISIBILITY IMPROVEMENT PLAN
HOPKINS AVENUE
PITKIN COUNTY, CO**

LEGEND

— PROPOSED CONDUIT AND WIRING
 LANDSCAPE RESTORATION AREA



QUANTITIES

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY
210		RESET STRUCTURE (GROUND SIGN)	EA	1*
613		LIGHT POLE BASE	LS	1*
613		1.5" ELECTRIC CONDUIT	LF	337*
613		#4 ACSR ALUMINUM TRIPLEX U/C	LF	350*

NOTE 1 - CONTACT CITY OF ASPEN ELECTRIC DEPARTMENT PRIOR TO ACCESSING SUBGRADE TRANSFORMER. (970) 920-5148
 *QUANTITIES ARE BASED ON FIELD SURVEY AND GIS DATA AND ARE SUPPLIED AS AN ESTIMATE.
 **DIMENSIONS SHOWN ARE APPROXIMATE. VERIFY DISTANCE WITH CITY ENGINEER.





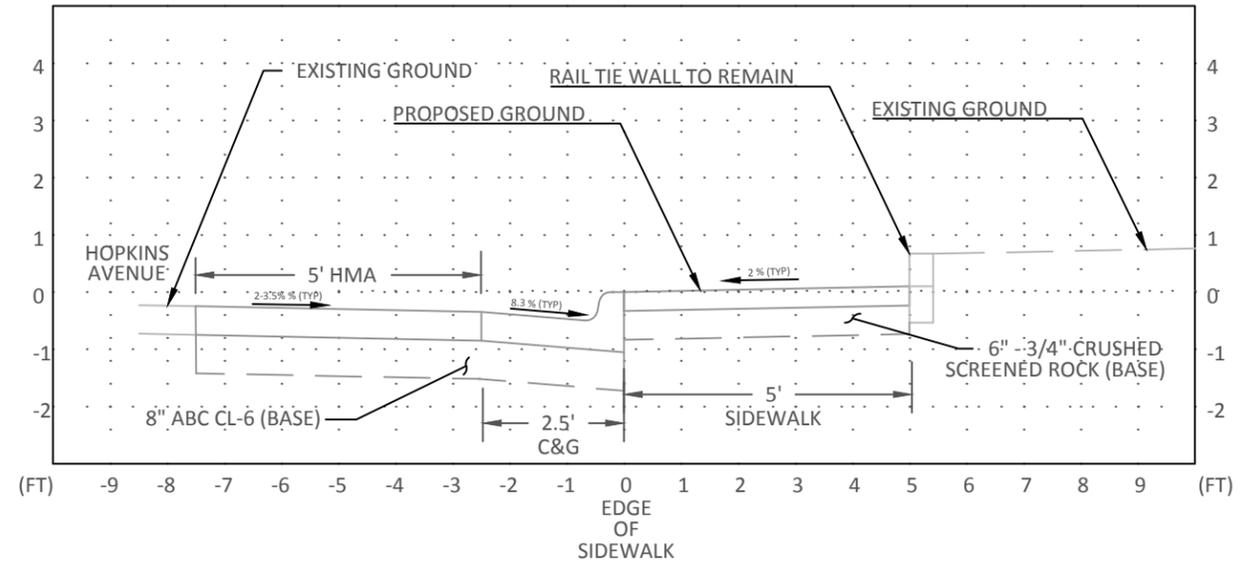
THE CITY OF ASPEN

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ASPEN ENGINEERING DEPARTMENT
CROSS SECTIONS
HOPKINS AVENUE
PITKIN COUNTY, CO

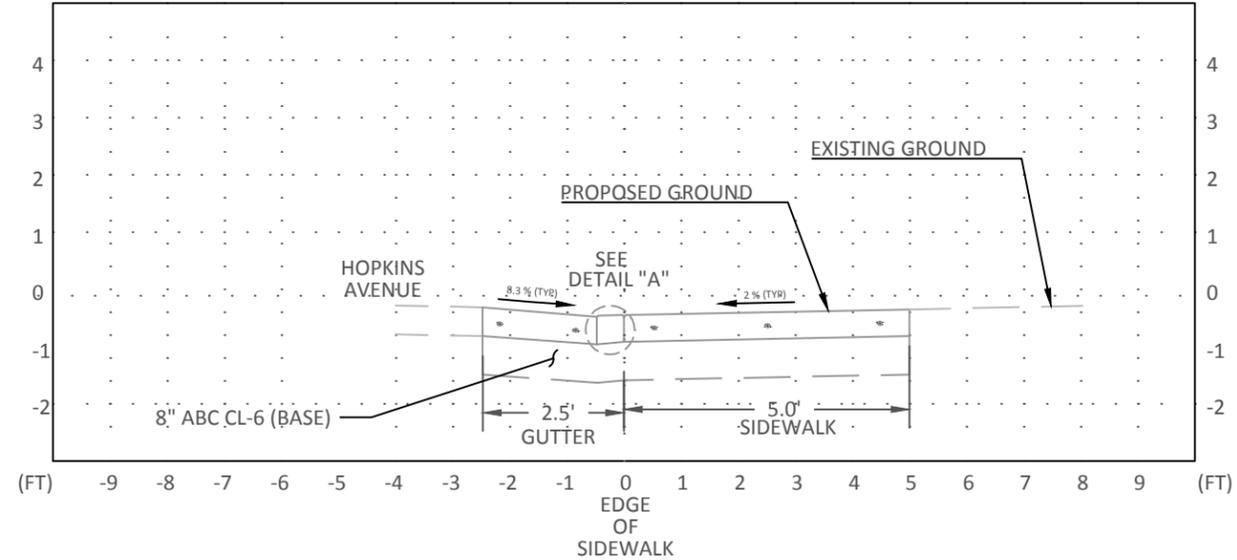
SECTION A-A

(SEE CITY OF ASPEN ENGINEERING STANDARD: ENG 203-T)

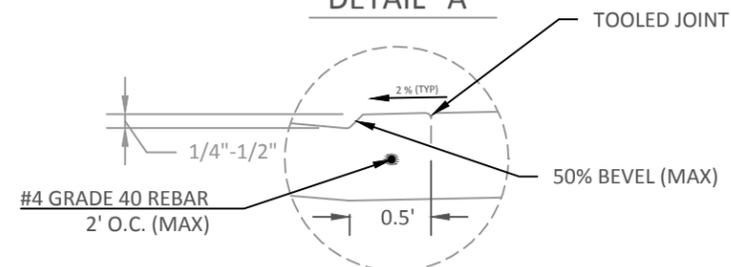


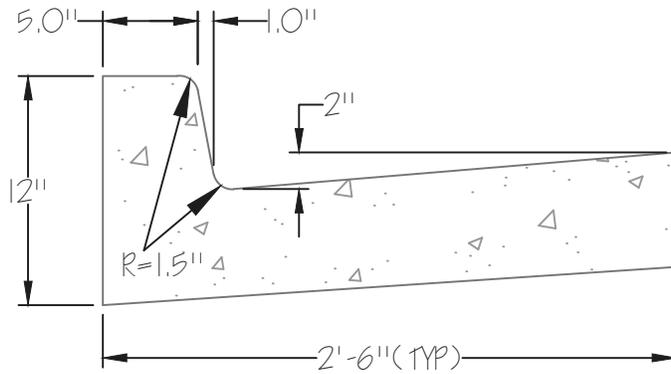
SECTION B-B

(SEE CITY OF ASPEN ENGINEERING STANDARD: ENG 202-T)



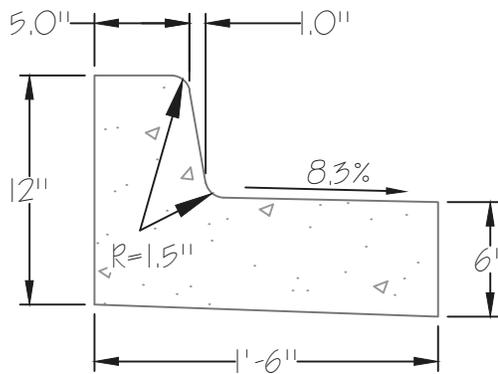
DETAIL "A"





CURB & GUTTER TYII - SECTION IIB

(Catch Type for Typical Edge of Street)



CURB & GUTTER TYII - SECTION IB

(Spill Type for Raised Medians)

Note: Concrete must conform to CDOT Class "D" (minimum 28-day compressive strength of 4500 psi). 80% of this strength must be gained in the first 7 days.

BARRIER CURB AND GUTTER DETAILS

Sheet 6 of 15

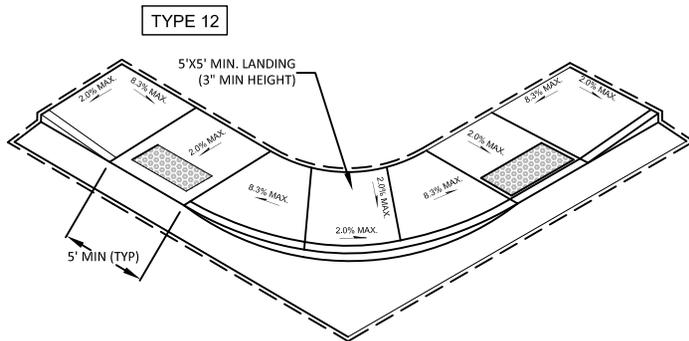
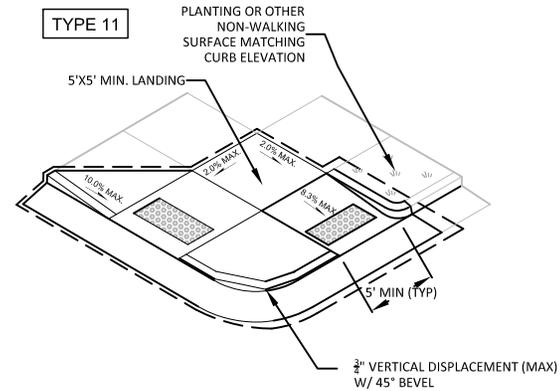
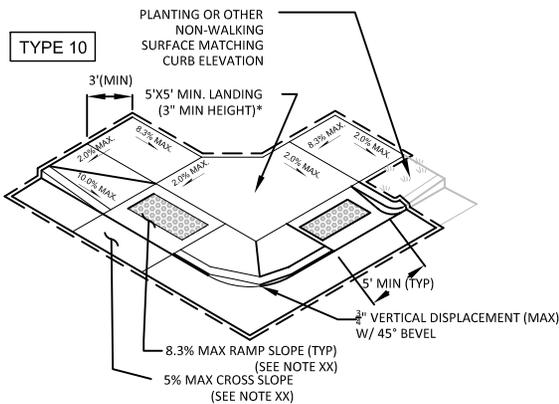


THE CITY OF ASPEN

ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO
PHONE: (970) 920-5080

STANDARD DETAILS
DATE CREATED: 05/30/13
DATE REVISED:
REVISION #:

STANDARD
DETAIL #:
ENG - 201T(a)



NOTES:

1. THE RATE OF CHANGE OF GRADE BETWEEN THE GUTTER AND THE RAMP SHALL NOT EXCEED 11% OVER A 2 FOOT INTERVAL
 2. BOLD DASHED LINE DEPICTS RAMP LIMITS OF PAYMENT
 3. CROSS SLOPE SHALL NOT EXCEED 2% AND ADEQUATE DRAINAGE SHALL BE MAINTAINED
 4. ATTACHED RAMP DETAILS MAY ONLY BE USED WHERE ATTACHED SIDEWALK CURRENTLY EXISTS OR WHERE DETACHED RAMPS ARE UNFEASIBLE (TO BE DETERMINED BY THE CITY ENGINEER)
 5. STREET LIGHT INSTALLATION LOCATIONS SHALL BE CONFIRMED WITH COA ELECTRIC AND STREETS DEPARTMENT PRIOR TO INSTALLATION
 6. DETECTABLE WARNING PAD SHALL BE PLACED 0-2 INCHES BEHIND BACK OF CURB
 7. CONCRETE CONFORMING TO CDOT CLASS "D" SHALL BE USED FOR ALL FLATWORK CONSTRUCTION. ALL SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4 INCHES
 8. BASE FOR FLATWORK SHALL BE A MINIMUM OF 6 INCHES CDOT ABC CL-6, COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY WITHIN 2% OF OPTIMUM MOISTURE USING ASTM D-1557 METHOD "C" 3/4" CRUSHED SCREENED ROCK. SUB BASE SHALL BE SCARIFIED AND COMPACTED
 9. COARSE BROOM FINISH SHALL BE PROVIDED PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL ON SIDEWALK AND RAMPS AND PERPENDICULAR TO THE DIRECTION OF WATER FLOW ON CURB AND GUTTER
 10. CITY OF ASPEN ENGINEERING DEPARTMENT TO DETERMINE IF CONSTRUCTION OF INLET(S) ADJACENT TO PEDESTRIAN RAMP(S) MAY BE NECESSARY
 11. SEE STANDARD DETAILS #201T(A) - 202T(D) FOR DETAILS ASSOCIATED WITH SIDEWALK AND CURB AND GUTTER INSTALLATION
 12. SEE STANDARD DETAIL #202T(G) FOR DETAILS ASSOCIATED WITH THE DETECTABLE WARNING
- *MEASURED PERPENDICULARLY FROM LANDING AREA EDGE TO FLOWLINE

ALTERNATIVE BI-DIRECTIONAL CURB RAMPS



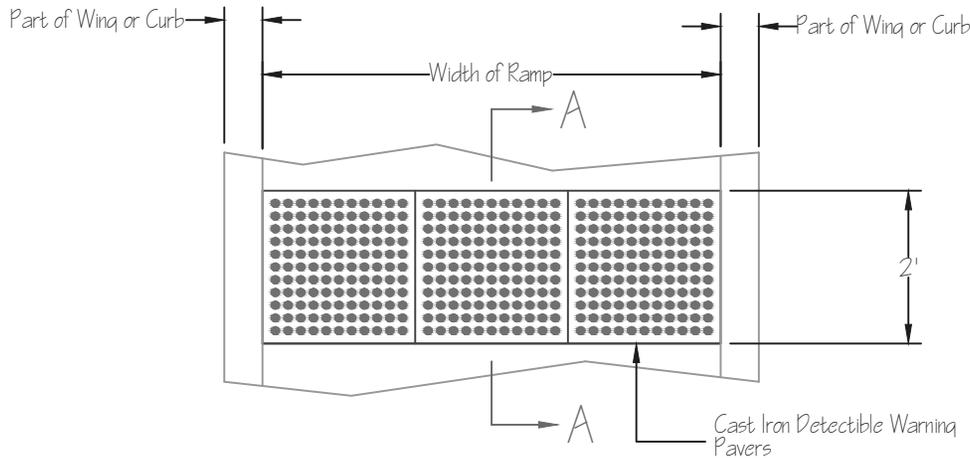
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ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO
PHONE: (970) 920-5080

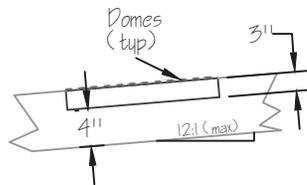
STANDARD DETAILS
DATE CREATED: 05/30/13
DATE REVISED:
REVISION #:

STANDARD
DETAIL #:
ENG - 207-T(F)

Plan:

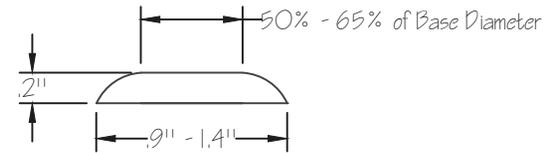


Section A - A:

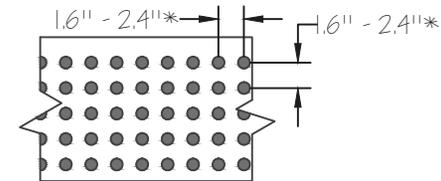


Dome and Layout Details:

Elevation View:



Plan View:



* Shall be equal in both directions

Notes:

1. Detectible warning pad shall be installed at all curb ramps. It shall be located 6-8" behind back of curb.
2. Detectible warning pad shall be two feet in length and shall cover the width of the ramp. Pad shall be cast iron, with a truncated dome surface and dimensions and layout as shown.
3. Longitudinal ramp slopes (including detectible warning pad) shall not be steeper than 12:1. Cross slopes may not be steeper than 2% .

Detectable Warning Pad Details



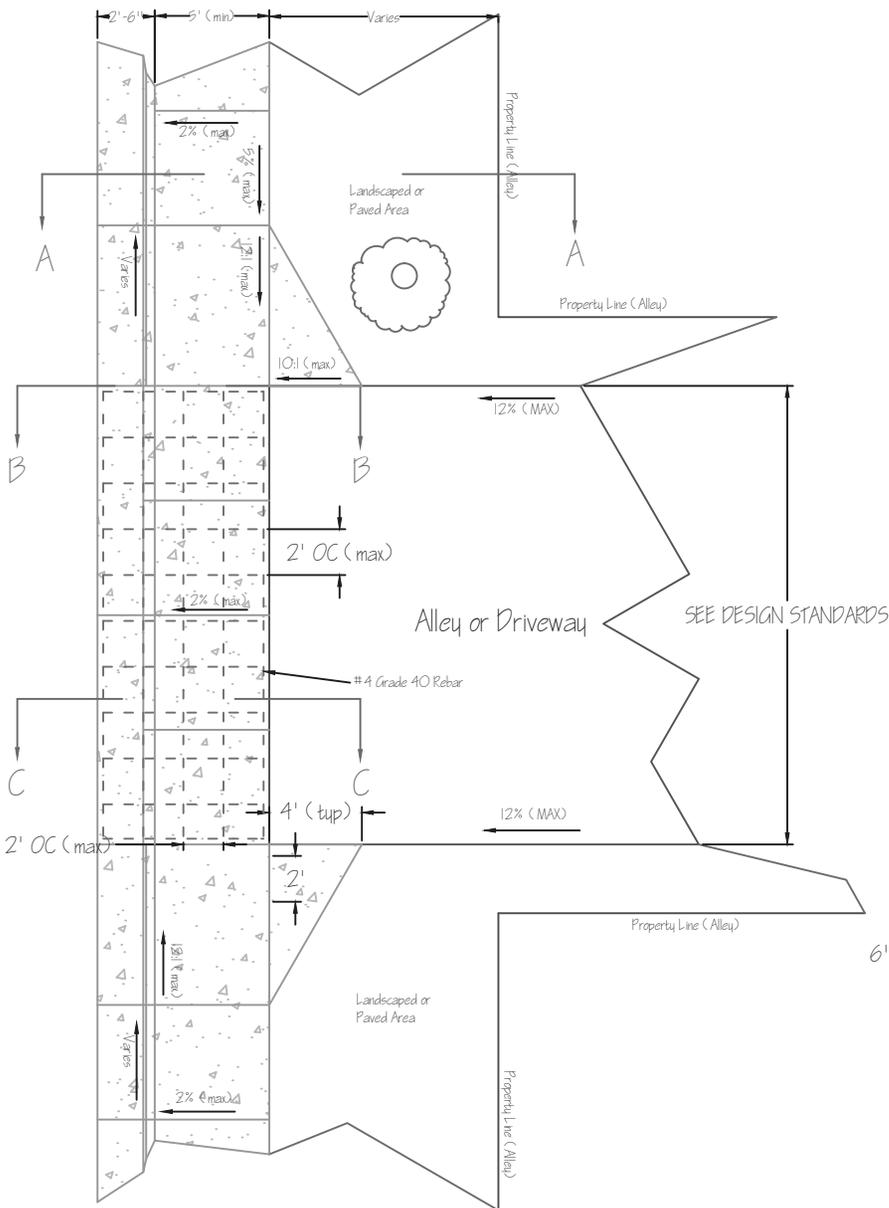
THE CITY OF ASPEN

ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO
PHONE: (970) 920-5080

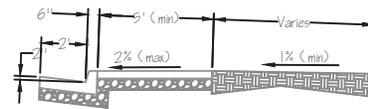
STANDARD DETAILS
DATE CREATED: 05/30/13
DATE REVISED:
REVISION #:

STANDARD
DETAIL #:
ENG - 202-T(e)

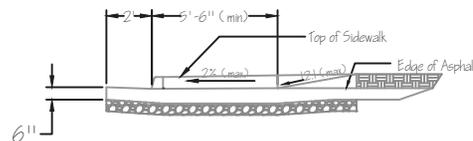
Plan:



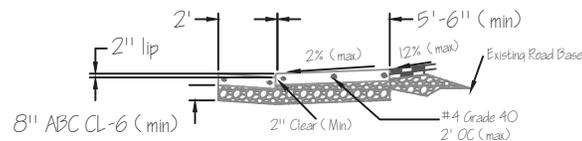
Sections:



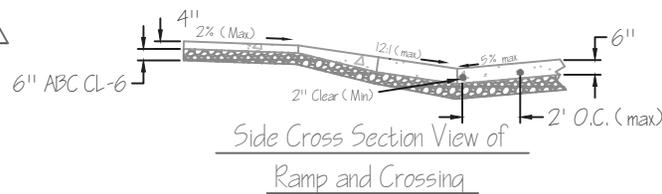
Section A - A



Section B - B



Section C - C



Side Cross Section View of Ramp and Crossing

Notes:

1. This detail is to be used only where site conditions prohibit installation of detached sidewalk. Prohibitive site conditions must be verified by City Engineering Staff.
2. Reinforcement is to consist of #4 Grade 40 rebar placed a maximum of 24" O.C. Rebar shall be placed a minimum of 3" above bottom of slab and minimum of 2" below top of slab.
3. Base for sidewalk out of vehicle travel path is to consist of 6" (min) of ABC CL-6 over scarified and compacted subbase. Base for reinforced section is to consist of 8" (min) of ABC CL-6 over scarified and compacted subbase. Base is to be compacted to 95% of modified proctor density as defined by ASTM D-1557 method "C" or 3/4" crushed screened rock.
4. The minimum slope necessary to maintain drainage is to be used throughout. Ramp longitudinal slope is not to exceed 12:1. Sidewalk cross slope is not to exceed 2%. Street slope is not to exceed 10%.
5. Concrete conforming to CDOT class "1D" is to be used for all flatwork construction. Minimum thickness shall be 4" for sidewalk, 6" for ramp and reinforced section.
6. Rebar splices shall have a minimum 12" overlap.
7. There must be a minimum of 12" vertical rise between flowline of gutter and lowest point on any adjacent structure.
8. Landscaping features shall be located outside the sight triangle, as described within the City of Aspen Design Standards.

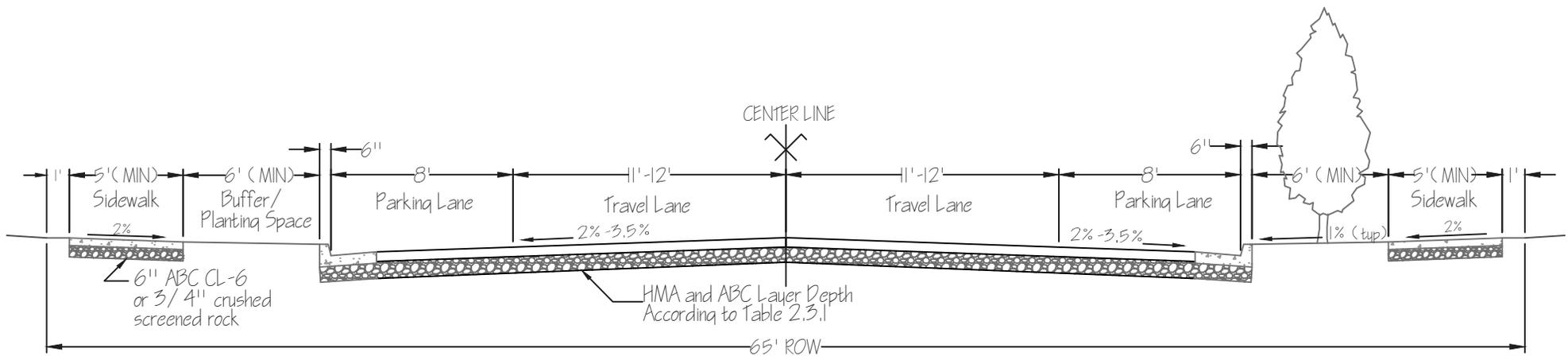
ALLEY/DRIVEWAY RAMP DESIGN FOR ATTACHED SIDEWALK



ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO
PHONE: (970) 920-5080

STANDARD DETAILS
DATE CREATED: 05/30/13
DATE REVISED:
REVISION #:

STANDARD
DETAIL #:
ENG - 202-T(f)



Notes:

1. This design is to be used on residential streets where an urban design is appropriate.
2. Materials and finishing are to be governed by COA Engineering Design and Construction Standards, most recent edition.
3. Travel lane width dependent on existing lane widths and site conditions.

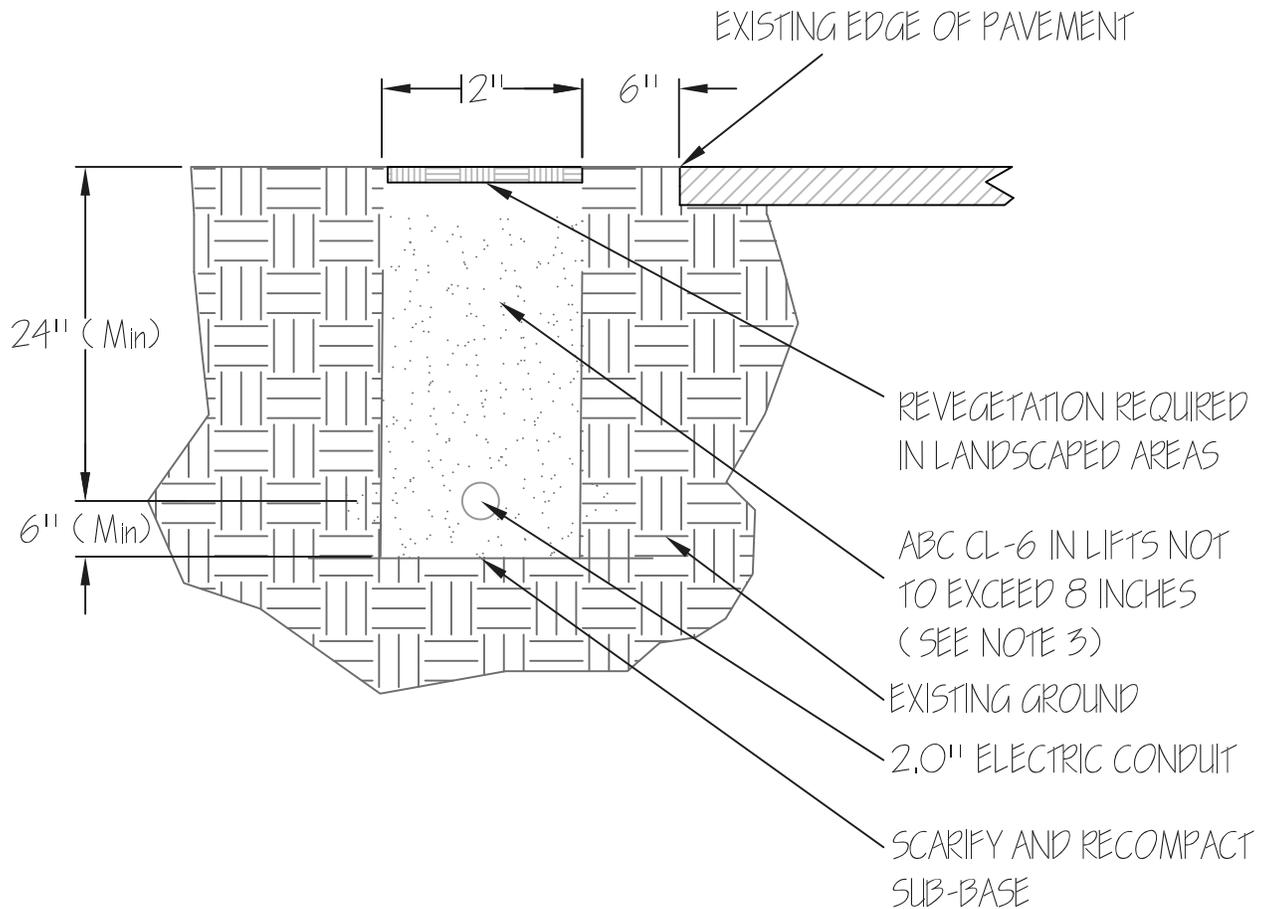
RESIDENTIAL/COLLECTOR STREET CROSS SECTION (URBAN)



ENGINEERING DEPARTMENT
 CITY OF ASPEN, COLORADO
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STANDARD DETAILS
 DATE CREATED: 05/30/13
 DATE REVISED:
 REVISION #:

STANDARD
 DETAIL #:
 ENG - 206-T(a)



Notes:

1. Bedding for flexible lines shall be $\frac{3}{4}$ " crushed screened rock, free of fines.
2. Trench bottom must be scarified and recompacted after excavation or after any dewatering action to ensure adequate support of utility bedding.
3. Backfill must extend a minimum 6" above conduit. Remaining backfill may be native material in areas which do not currently experience vehicular loading.

TRENCH AND PATCHING DETAILS

Sheet 10 of 15

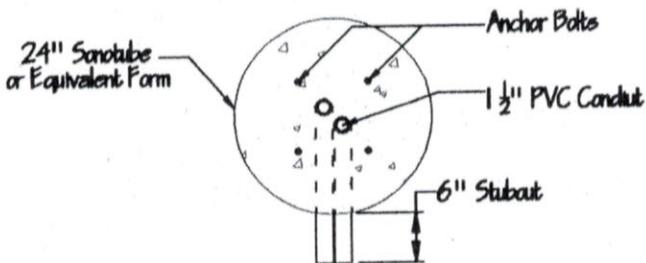


THE CITY OF ASPEN

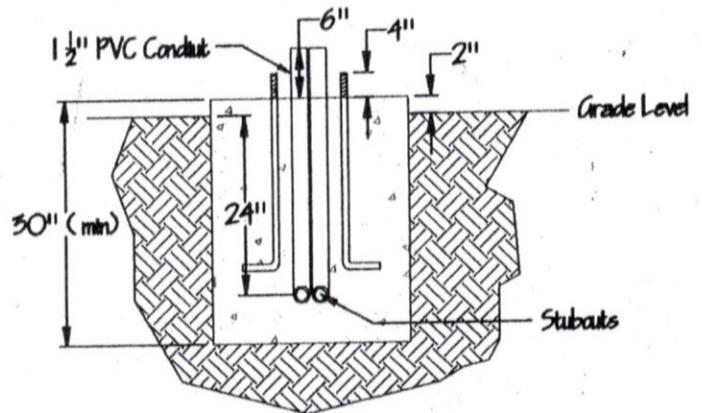
ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO
PHONE: (970) 920-5080

STANDARD DETAILS
DATE CREATED: 01/30/13
DATE REVISED:
REVISION #:

STANDARD
DETAIL #:
ENG - 210-T



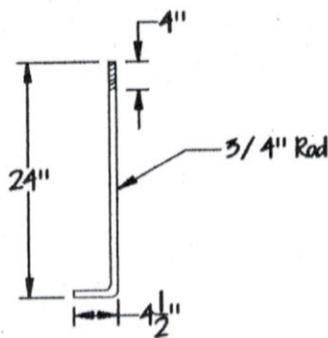
Plan View



Section View

Notes:

1. Bolts will be provided with pole.
2. Concrete for base shall conform to CDOT's Class "D" (minimum 28-day compressive strength of 4500 psi).
3. Stubouts are 6" in length and are made 24" below grade



Anchor Bolt Detail

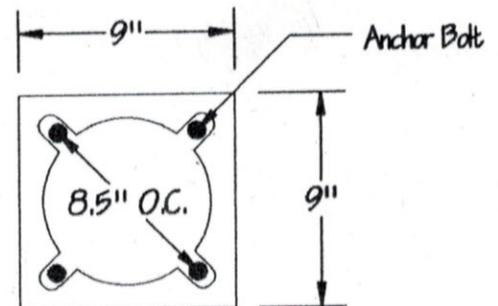


Plate Detail

Drawn by: CAT

Approved by:

Sheet 11 of 15

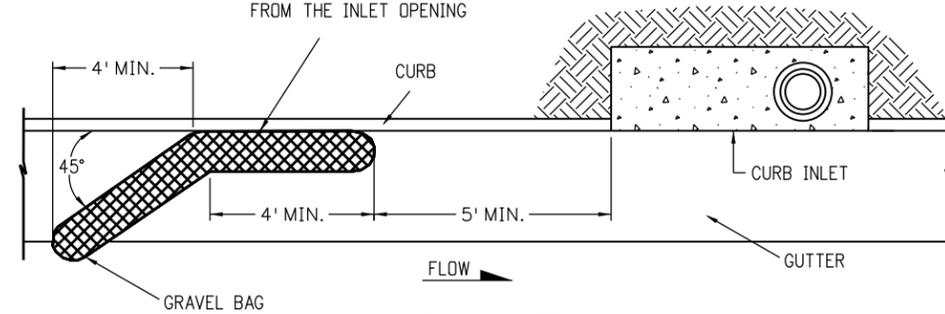
ENGINEERING DEPARTMENT
CITY OF ASPEN, COLORADO



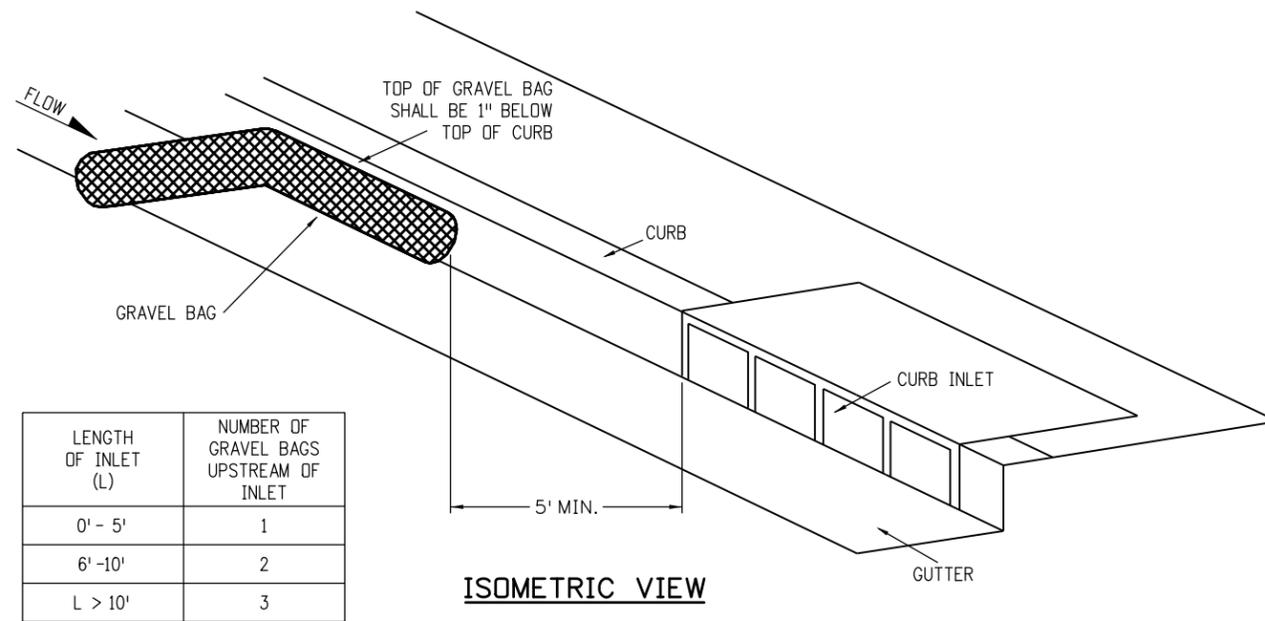
Base For Single Fixture Light Pole
(Not to Scale)

ENG 213-1
August 2007

GRAVEL BAG SHALL BE PLACED TIGHTLY AGAINST CURB FACE AND SHALL BE PLACED 5' UPSTREAM FROM THE INLET OPENING

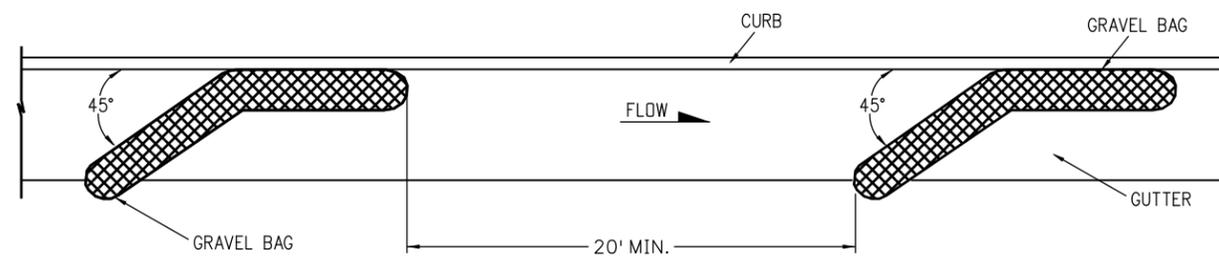


PLAN VIEW



ISOMETRIC VIEW

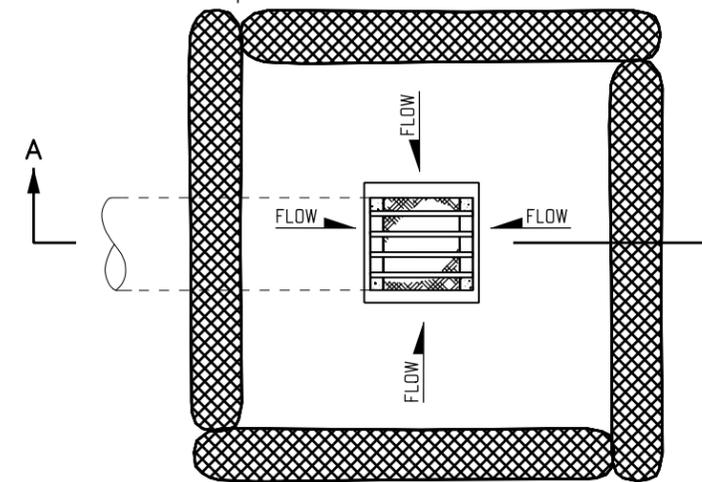
LENGTH OF INLET (L)	NUMBER OF GRAVEL BAGS UPSTREAM OF INLET
0' - 5'	1
6' - 10'	2
L > 10'	3



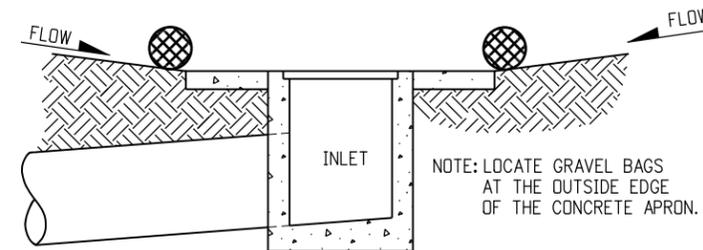
PLAN VIEW FOR MULTIPLE GRAVEL BAGS

GRAVEL BAG CURB CHECK

GRAVEL BAGS SHALL BE TIGHTLY ABUTTED WITH NO GAPS (TYP.)



PLAN VIEW



SECTION A-A

GRAVEL BAG FILTER AT DROP INLET

GRAVEL BAG APPLICATIONS

Computer File Information

Creation Date: 07/04/06 Initials: DD
 Last Modification Date: 07/29/11 Initials: LTA
 Full Path: www.dot.state.co.us/DesignSupport/
 Drawing File Name: 2080106012.dgn
 CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English

Sheet Revisions

Date:	Comments
08/26/10	Revised to meet new water quality standards.
	Revised sheets 1-7.
	Added sheets 8-12.

Colorado Department of Transportation



4201 East Arkansas Avenue
 Denver, Colorado 80222
 Phone: (303) 757-9083
 Fax: (303) 757-9820

Project Development Branch DD/LTA

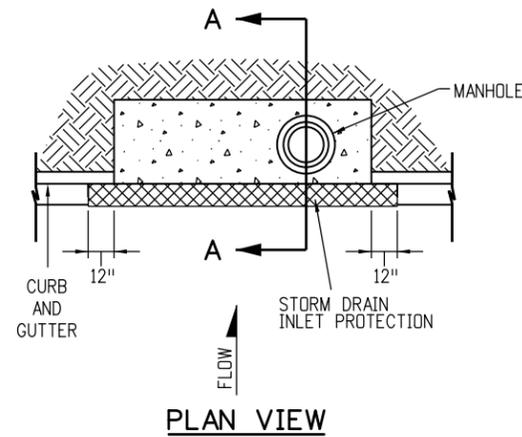
TEMPORARY
 EROSION CONTROL

Issued By: Project Development Branch on July 04, 2006

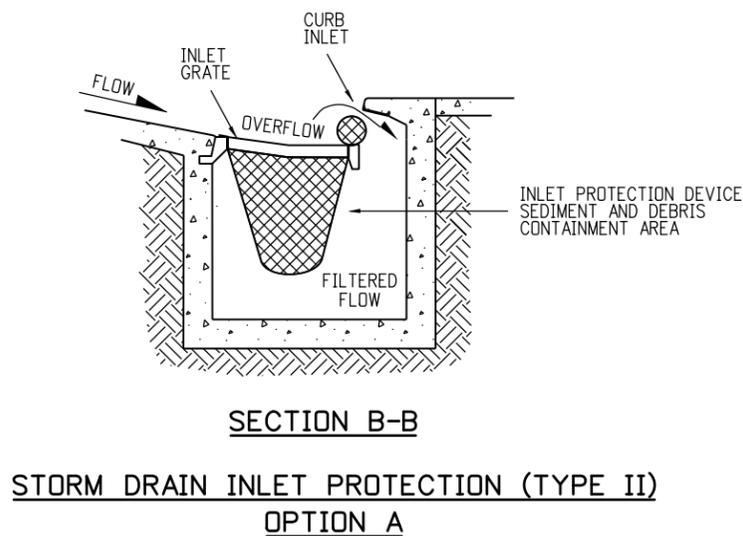
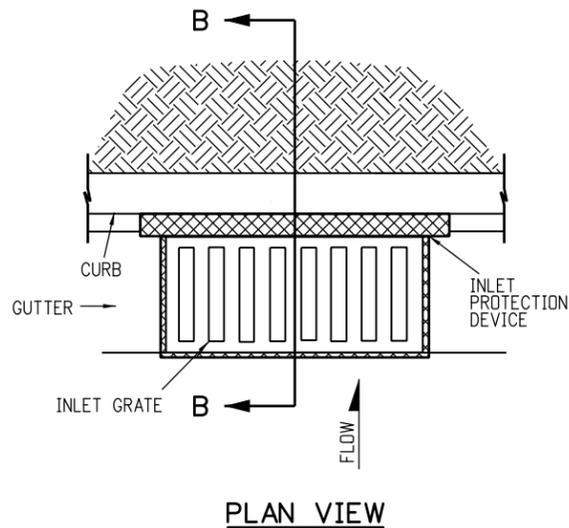
STANDARD PLAN NO.

M-208-1

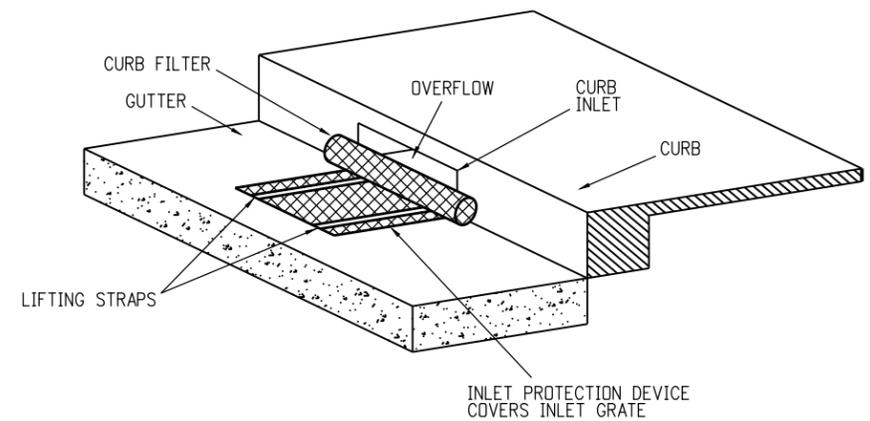
SHEET 12 OF 15



SECTION A-A
STORM DRAIN INLET PROTECTION (TYPE I)
 INLET PROTECTION SHALL EXTEND 12 IN. PAST EACH END OF THE INLET.



SECTION B-B
STORM DRAIN INLET PROTECTION (TYPE II)
OPTION A



ISOMETRIC VIEW
STORM DRAIN INLET PROTECTION (TYPE II)
OPTION B

STORM DRAIN INLET PROTECTION

Computer File Information	
Creation Date: 07/04/06	Initials: DD
Last Modification Date: 07/29/11	Initials: LTA
Full Path: www.dot.state.co.us/DesignSupport/	
Drawing File Name: 2080107012.dgn	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	

Sheet Revisions	
Date:	Comments
08/26/10	Revised to meet new water quality standards.
	Revised sheets 1-7.
	Added sheets 8-12.

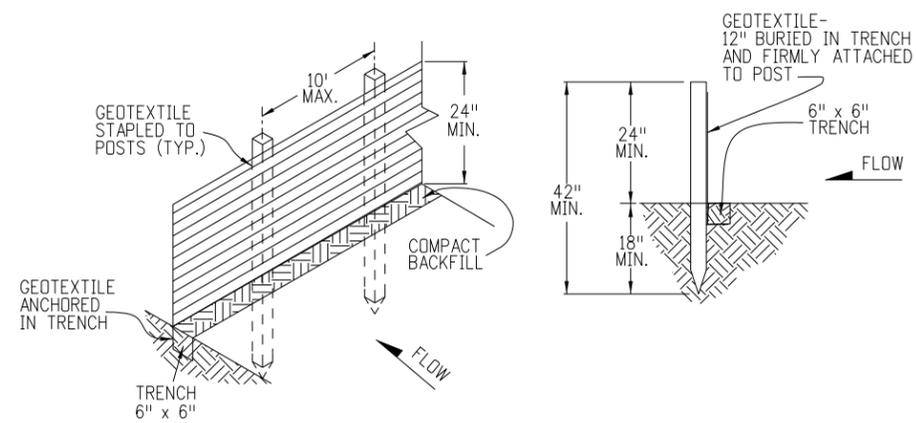
Colorado Department of Transportation
 4201 East Arkansas Avenue
 Denver, Colorado 80222
 Phone: (303) 757-9083
 Fax: (303) 757-9820

Project Development Branch DD/LTA

**TEMPORARY
 EROSION CONTROL**

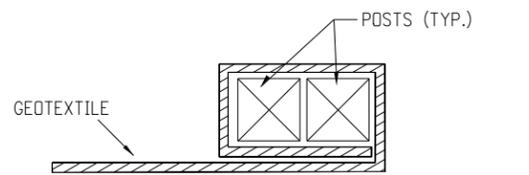
Issued By: Project Development Branch on July 04, 2006

STANDARD PLAN NO.
M-208-1
SHEET 13 OF 15



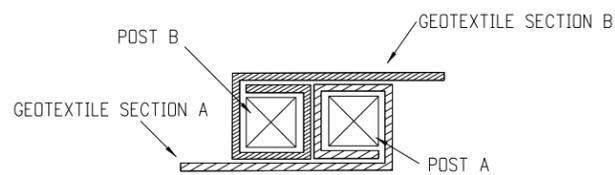
SILT FENCE

GEOTEXTILE SHALL BE ATTACHED TO WOOD POSTS WITH THREE OR MORE STAPLES PER POST.
 STAPLES SHALL BE 1/2"
 WOOD POST SHALL BE 1 1/2" X 1 1/2" NOMINAL.



END SECTION DETAIL (PLAN VIEW)

GEOTEXTILE SHALL BE FOLDED AROUND TWO POSTS ONE FULL TURN. SECURE GEOTEXTILE TO POST WITH THREE STAPLES MINIMUM.

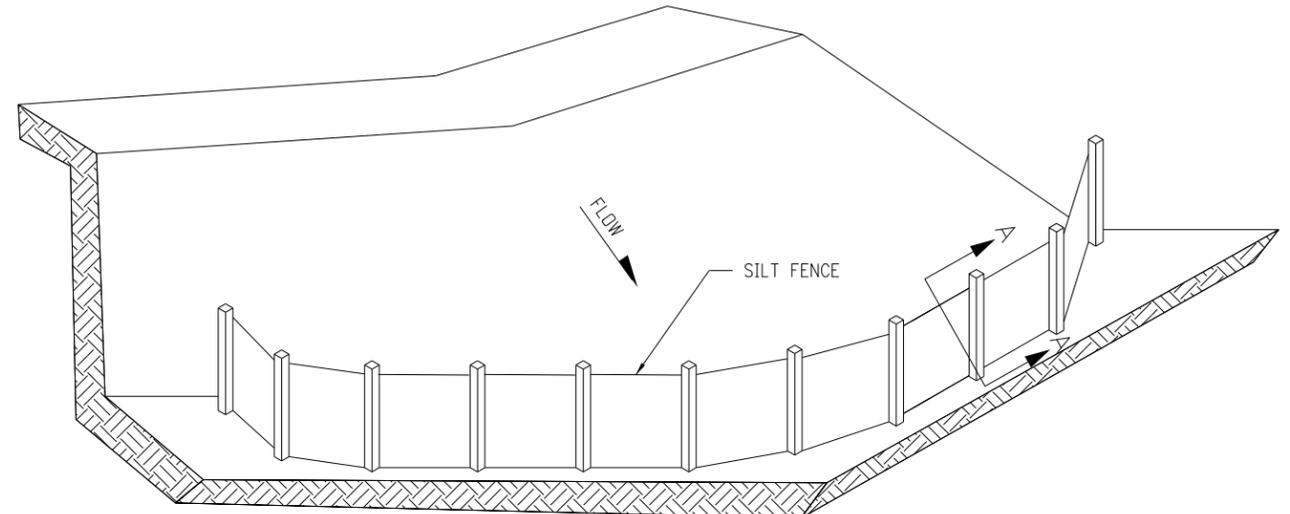


JOINING SECTION DETAIL (PLAN VIEW)

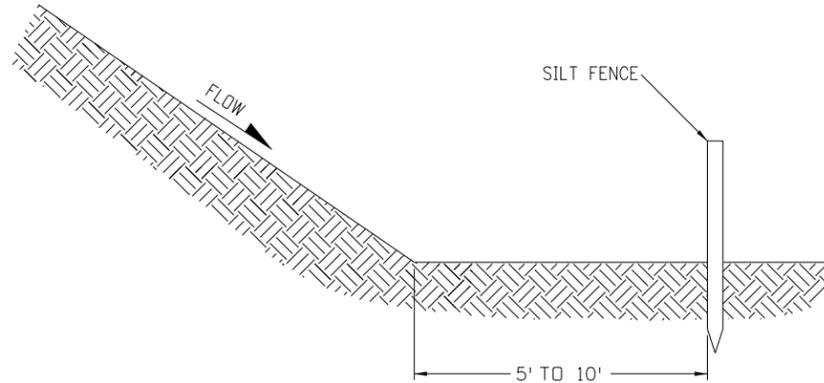
FOLD GEOTEXTILE AROUND EACH POST ONE FULL TURN. SECURE GEOTEXTILE TO POST WITH THREE STAPLES MINIMUM.
 POSTS SHALL BE TIGHTLY ABUTTED WITH NO GAPS TO PREVENT POTENTIAL FLOW-THROUGH OF SEDIMENT AT JOINT.

NOTES

1. SILT FENCE SHALL HAVE A MAXIMUM DRAINAGE AREA OF ONE-QUARTER ACRE PER 100 FEET OF SILT FENCE LENGTH; MAXIMUM SLOPE LENGTH BEHIND BARRIER IS 100 FEET; MAXIMUM GRADIENT BEHIND THE BARRIER IS 2:1.
2. SILT FENCE USED AT TOE OF SLOPE SHALL BE PLACED 5 TO 10 FEET BEYOND TOE OF SLOPE TO PROVIDE STORAGE CAPACITY.
3. SILT FENCE SHALL BE PLACED ON THE CONTOUR, WITH ENDS FLARED UP SLOPE.



ISOMETRIC VIEW



SECTION A-A

TOE OF SLOPE PROTECTION

SILT FENCE APPLICATION

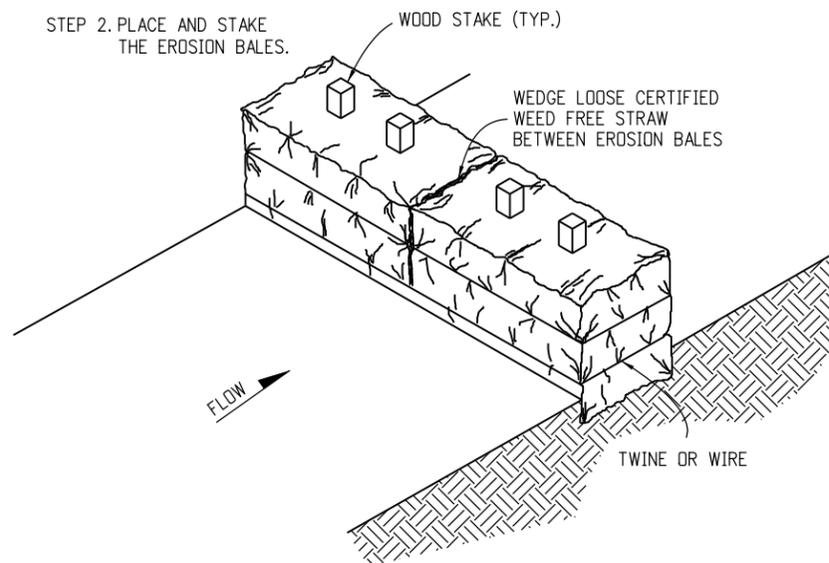
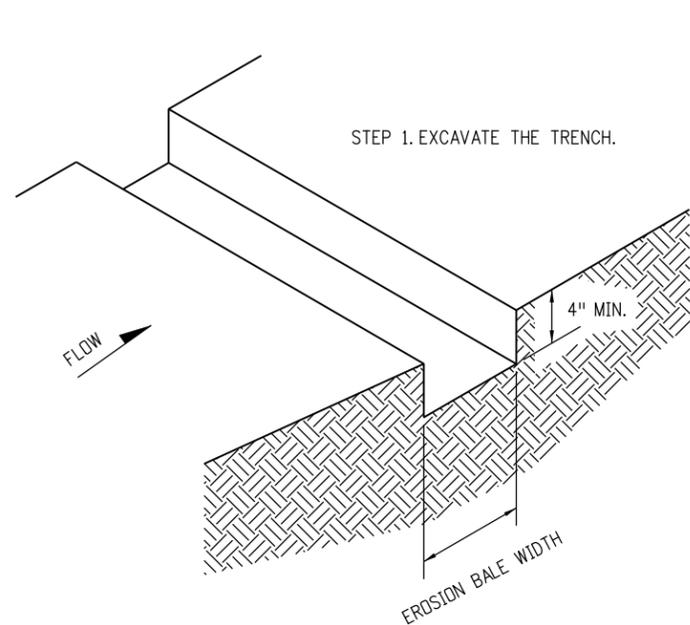
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Last Modification Date: 07/29/11	Initials: LTA
Full Path: www.dot.state.co.us/DesignSupport/	
Drawing File Name: 20801010012.dgn	
CAD Ver.: MicroStation V8	Scale: Not to Scale Units: English

Sheet Revisions	
Date:	Comments
08/26/10	Revised to meet new water quality standards.
	Revised sheets 1-7.
	Added sheets 8-12.

Colorado Department of Transportation
 4201 East Arkansas Avenue
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 Fax: (303) 757-9820
 Project Development Branch DD/LTA

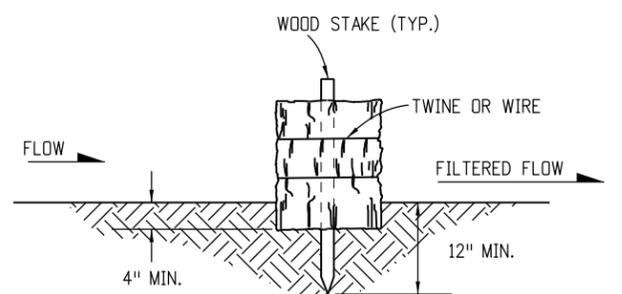
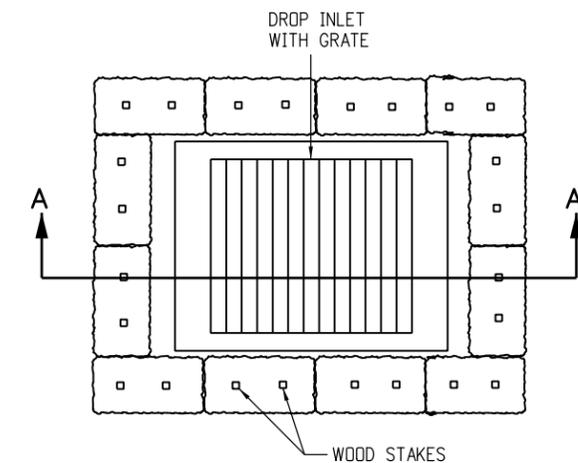
**TEMPORARY
 EROSION CONTROL**
 Issued By: Project Development Branch on July 04, 2006

STANDARD PLAN NO.
M-208-1
SHEET 14 OF 15

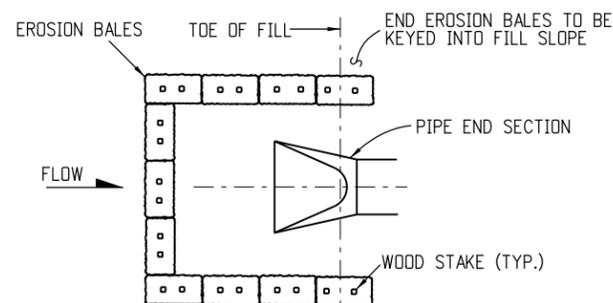


NOTES

1. STAKES SHALL BE WOOD AND SHALL BE 2" X 2" NOMINAL.
2. EROSION BALES SHALL BE 18" X 18" X 36".
3. EROSION BALES SHALL BE ENTRENCHED 4 IN. MINIMUM INTO THE SOIL, TIGHTLY ABUTTED WITH NO GAPS, STAKED, AND BACKFILLED AROUND THE ENTIRE OUTSIDE PERIMETER.

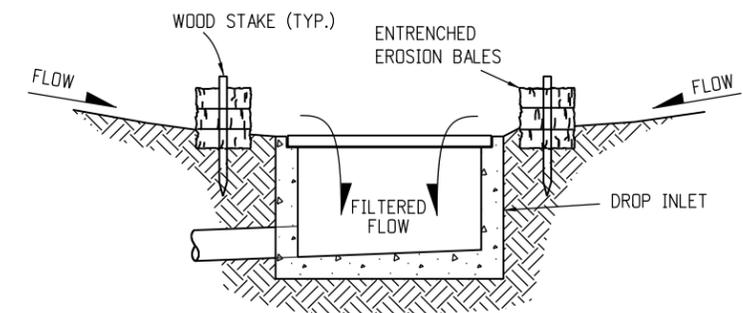


EROSION BALE TRENCHING AND STAKING



PLAN VIEW

EROSION BALE CULVERT INLET PROTECTION



SECTION A-A

EROSION BALE FILTER AT DROP INLET

EROSION BALE APPLICATIONS

Computer File Information		Sheet Revisions		Colorado Department of Transportation  4201 East Arkansas Avenue Denver, Colorado 80222 Phone: (303) 757-9083 Fax: (303) 757-9820 Project Development Branch DD/LTA	<h1>TEMPORARY EROSION CONTROL</h1> <p>Issued By: Project Development Branch on July 04, 2006</p>	STANDARD PLAN NO.	
Creation Date: 06/08/10	Initials: DD	Date:	Comments:			<h2>M-208-1</h2>	
Last Modification Date: 07/29/11	Initials: LTA	08/26/10	Revised to meet new water quality standards.				
Full Path: www.dot.state.co.us/DesignSupport/	(R-X)		Revised sheets 1-7.				
Drawing File Name: 20801012012.dgn	(R-X)		Added sheets 8-12.				
CAD Ver.: MicroStation V8	Scale: Not to Scale	Units: English	(R-X)		<h2>SHEET 15 OF 15</h2>		