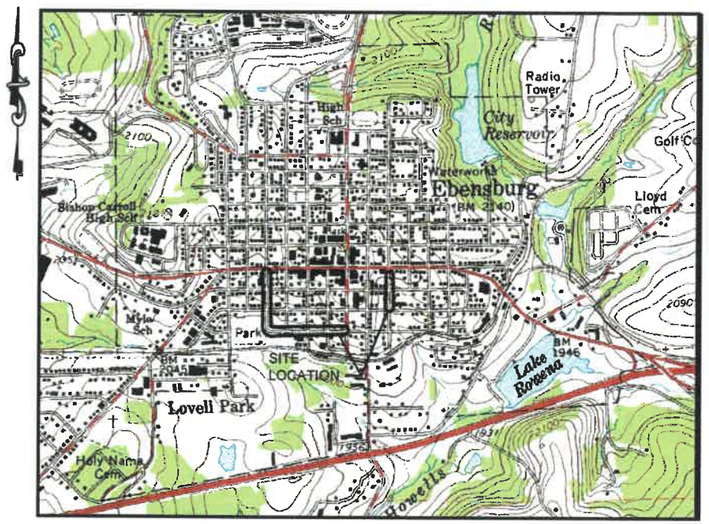
CONSTRUCTION DRAWINGS
FOR
CURB AND SIDEWALK REPLACEMENT PROJECT
CONTRACT 1
BOROUGH OF EBENSBURG
CAMBRIA COUNTY, PENNSYLVANIA

PREPARED FOR THE
THE BOROUGH OF EBENSBURG
CAMBRIA COUNTY, PENNSYLVANIA



PORTION OF USGS MAP 7.5 MINUTE EBENSBURG QUAD

PROJECT VICINITY MAP

1"=2000'

SHEET INDEX

PREPARED BY:
CDI CORP/L.R. KIMBALL
EBENSBURG, PA - JANUARY 2019

CDI L.R. Kimball
615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
web site www.lrkimball.com

CONSULTANTS:

PROJECT NAME:
BOROUGH OF EBENSBURG CURB AND SIDEWALK REPLACEMENT
BOROUGH OF EBENSBURG
CAMBRIA COUNTY, STATE
OWNER:

BOROUGH OF EBENSBURG
300 WEST HIGH STREET
EBENSBURG, PA 15931

PRELIMINARY PLAN FOR REVIEW PURPOSES ONLY

REV.	DATE	DESCRIPTION

ISSUE:	1/14/2019
PROJECT NO:	EBG.E000140.EB21
SCALE:	AS SHOWN
DRAWN BY:	TAG
CHECKED BY:	GLH

SHEET TITLE
COVER AND SITE LOCATION MAP

C0.00

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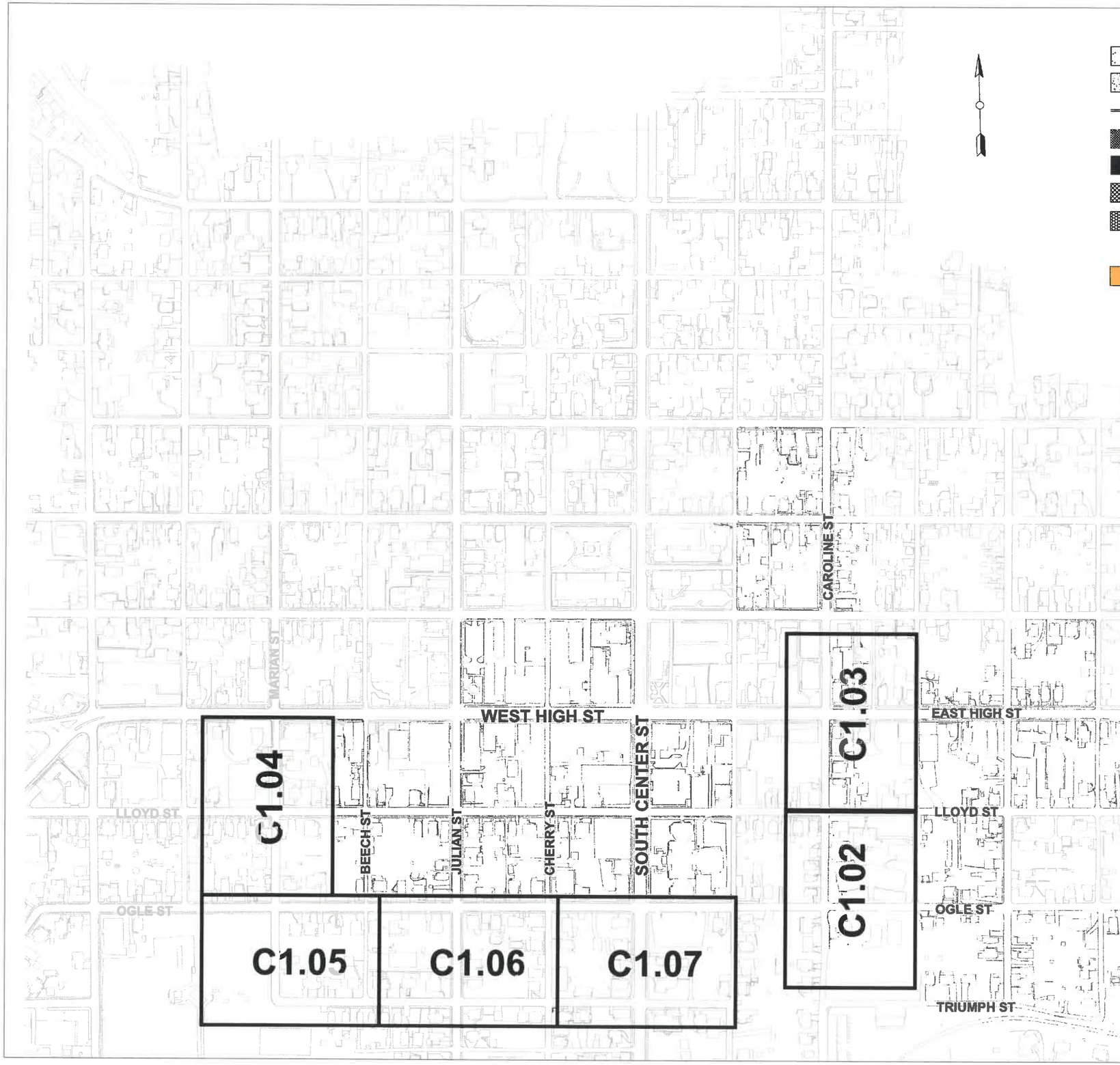
Jan 14, 2019 - 12:58pm



LEGEND (20 SCALE VIEWS)

- NEW CONCRETE SIDEWALK, 4" DEPTH
- NEW CONCRETE DRIVE AREA, 6" DEPTH
- NEW CONCRETE CURB
- ADA LANDING AREA
- ADA STIPPLING
- NEW ASPHALT SURFACING (OUTSIDE OF CURBS)
- NEW ORNAMENTAL STONE SURFACING
- STUMP REMOVAL
- EXISTING CONCRETE/ASPHALT SURFACING TO BE REMOVED (BEYOND LIMIT OF NEW CONCRETE)

NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH PENNDOT PUB. 408 SPECIFICATIONS AND RC-67 OF PUB 72 STANDARDS FOR ROADWAY CONSTRUCTION.
2. ALL DRIVEWAY APRONS ARE TYPE 1, UNLESS OTHERWISE NOTED.
3. RAMP LENGTHS ARE APPROXIMATE AND MUST BE ADJUSTED TO FIELD CONDITIONS WITH A MAXIMUM SLOPE OF 8.33% AND MAXIMUM LENGTH OF 15'.

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CONTRACT 1
INDEX SHEET

C1.01

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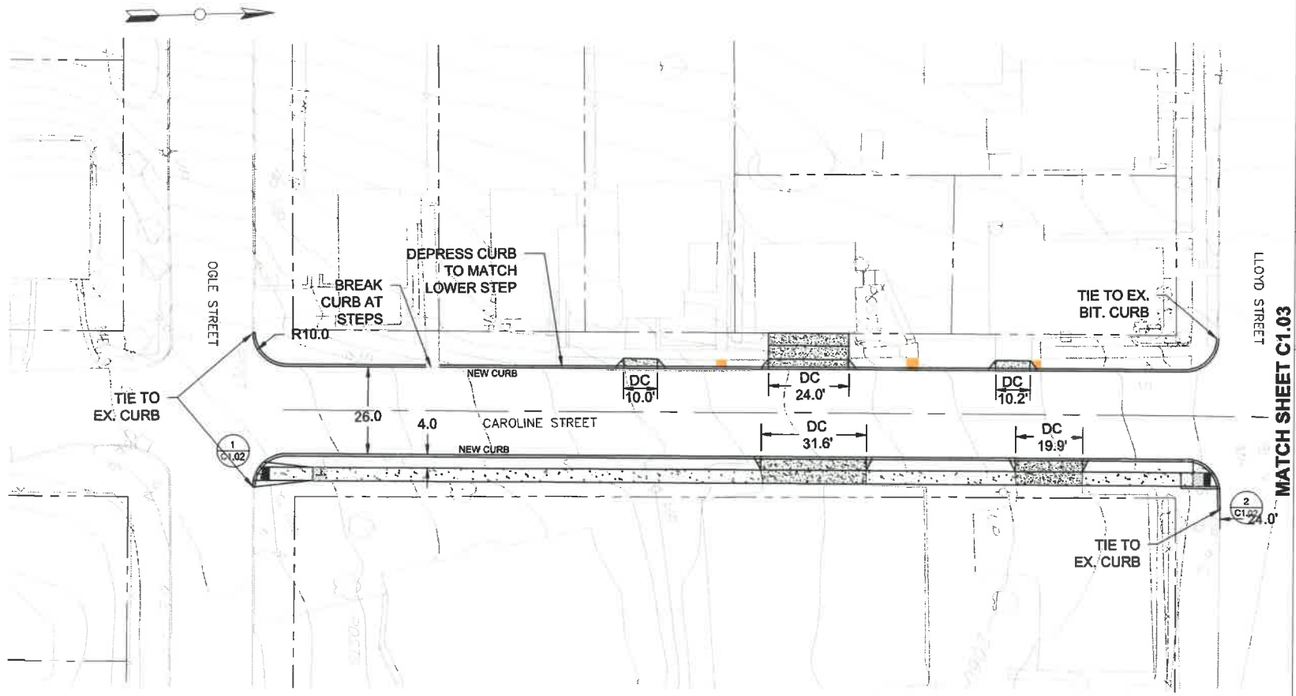
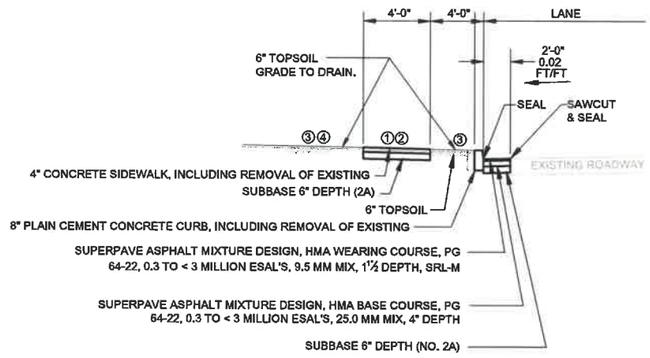


1 CAROLINE ST
SCALE: 1" = 20'



NOTES

1. CONSTRUCT SIDEWALK WITH A 2% CROSS SLOPE. SLOPE DIRECTION SUBJECT TO SITE TOPOGRAPHY.
2. USE 6" THICHNESS WITHIN LIMITS OF DRIVEWAYS AND THEIR ASSOCIATED APRONS AND TRANSITIONS.
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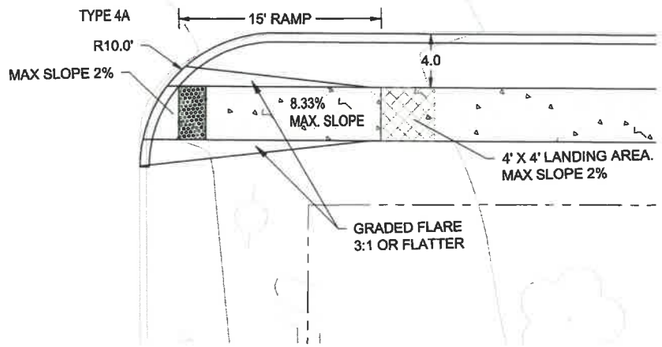
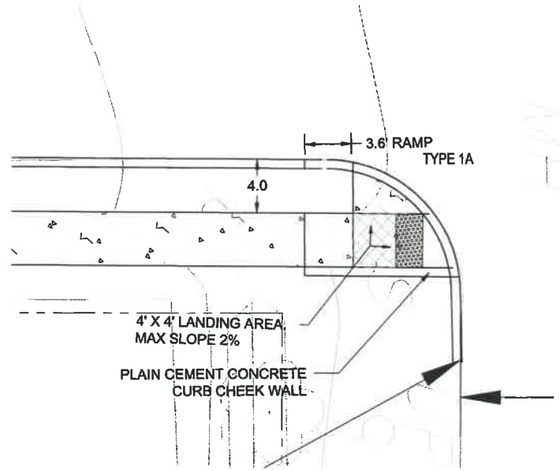
6. CONTRACTOR RESPONSIBLE FOR FURNISHING ADDITIONAL EARTHWORK AND TOPSOIL AS NECESSARY FOR THE GRADING OPERATION.

TYPICAL SIDEWALK SECTION, EAST SIDE
NTS



1 C1.02 RAMP DETAIL – CAROLINE/OGLE NE
SCALE: 1"=5'



2 C1.02 RAMP DETAIL – CAROLINE/LLOYD SE
SCALE: 1"=5'

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Jan 16, 2019 - 10:41am

L.R. Kimball
615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
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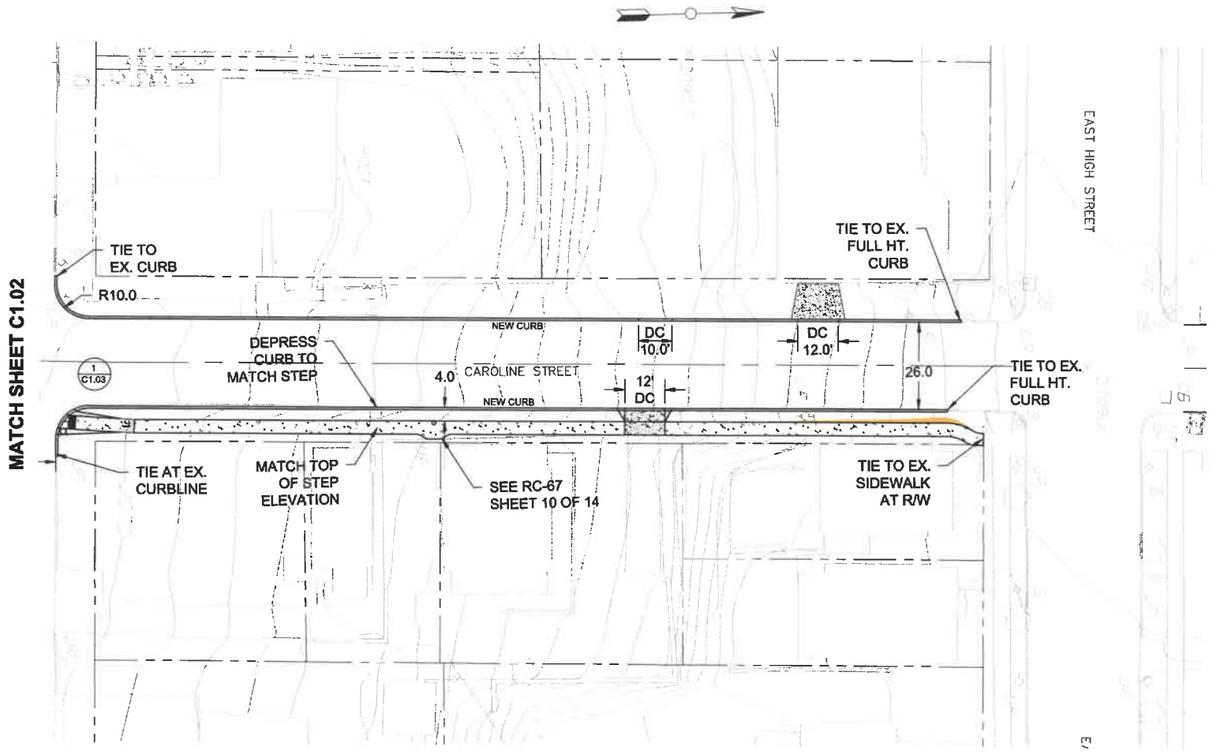
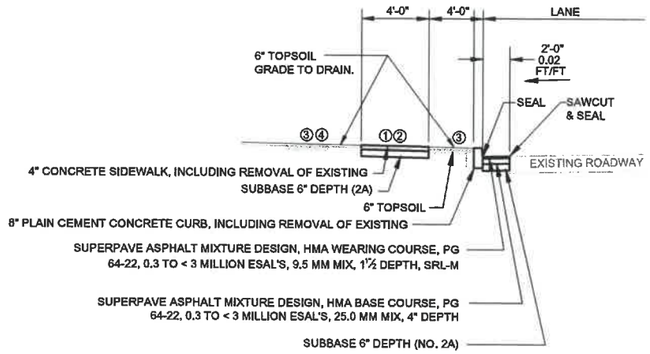
CONTRACT 1
CAROLINE STREET

C1.02



1 CAROLINE ST
SCALE: 1" = 20'



TYPICAL SIDEWALK SECTION, WEST SIDE
NTS

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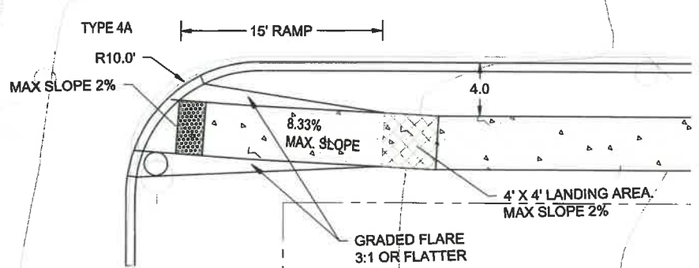
TYPICAL SIDEWALK SECTION, EAST SIDE
NTS



1 C1.03 RAMP DETAIL – CAROLINE/LLOYD NE
SCALE: 1"=5'

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Jan 16, 2019 - 11:18am

CDI L.R. Kimball
615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
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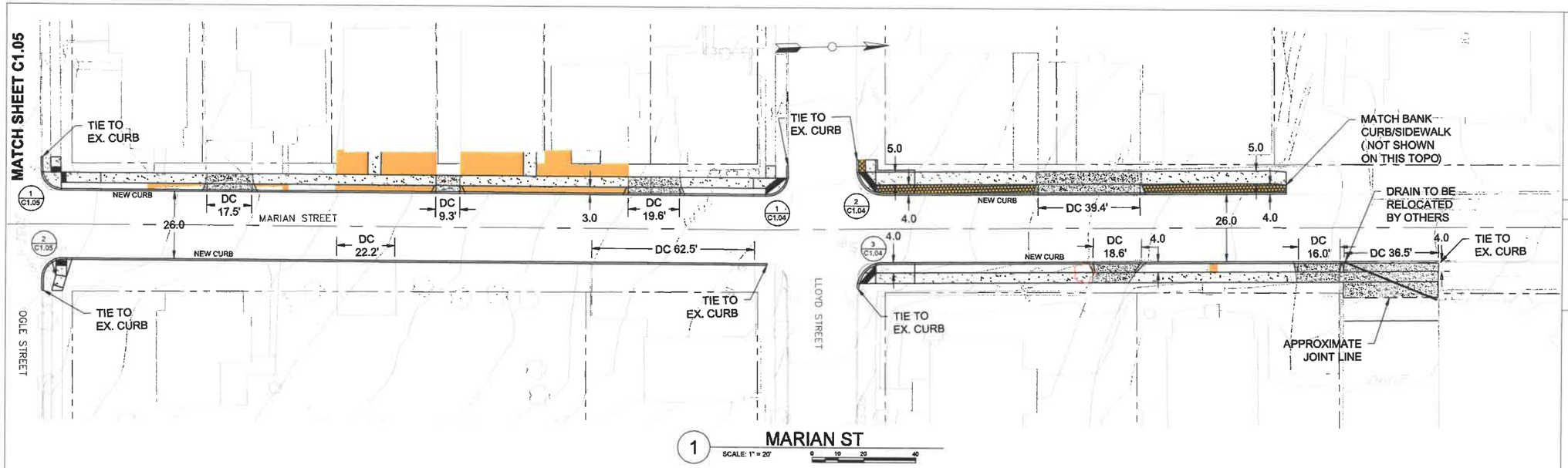
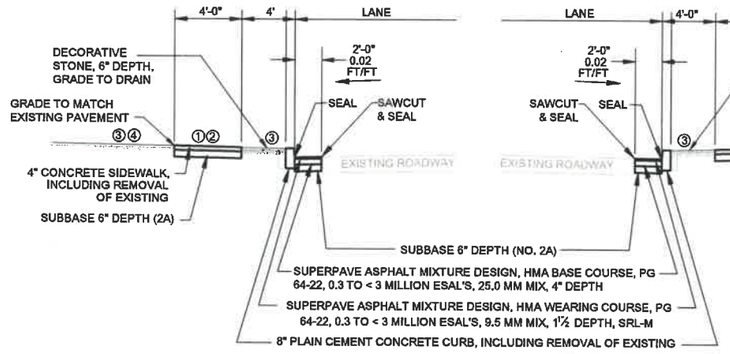
SHEET TITLE

CONTRACT 1
CAROLINE STREET

C1.03

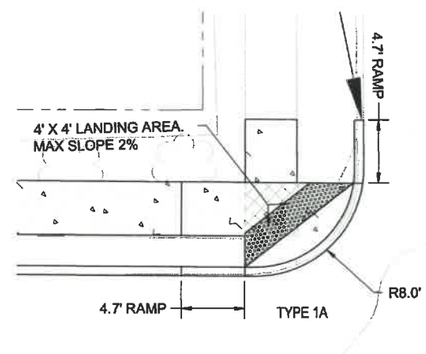


1 MARIAN ST
SCALE: 1" = 20'

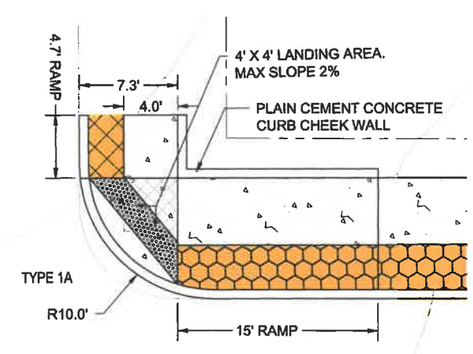


TYPICAL SIDEWALK SECTION, WEST SIDE
NTS LLOYD TO HIGH

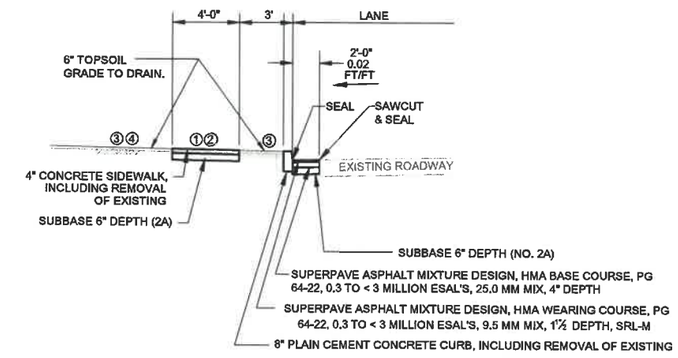
TYPICAL SIDEWALK SECTION, EAST SIDE
NTS LLOYD TO HIGH



1 C1.04 RAMP DETAIL – MARIAN/LLOYD SW
SCALE: 1"=5'



2 C1.04 RAMP DETAIL – MARIAN/LLOYD NW
SCALE: 1"=5'



TYPICAL SIDEWALK SECTION, WEST SIDE
NTS OGLE TO LLOYD

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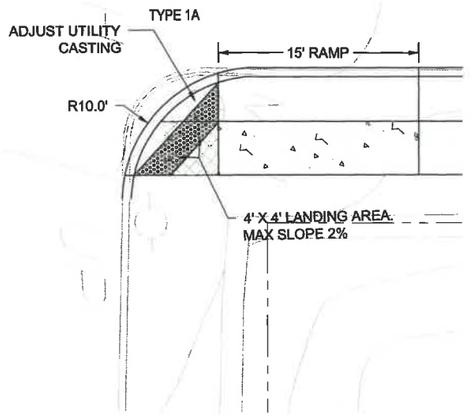

3 C1.04 RAMP DETAIL – MARION/LLOYD NE
SCALE: 1"=5'

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Jan 16, 2019 - 11:21am

CDI L.R. Kimball
615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
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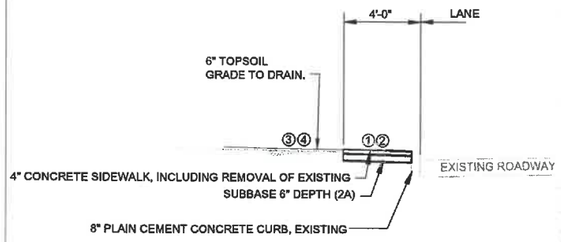
SHEET TITLE

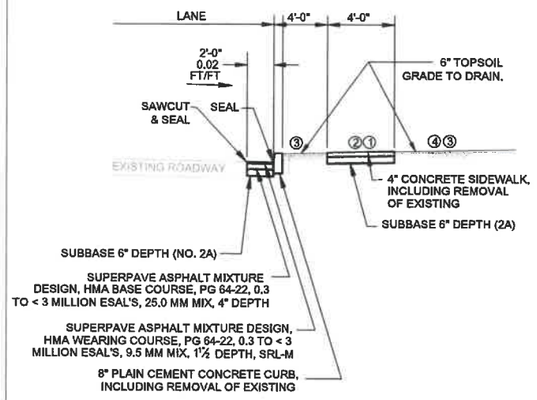
CONTRACT 1
MARIAN STREET

C1.04



TYPICAL SIDEWALK SECTION, WEST SIDE

NTS



TYPICAL SIDEWALK SECTION, SOUTH SIDE

NTS

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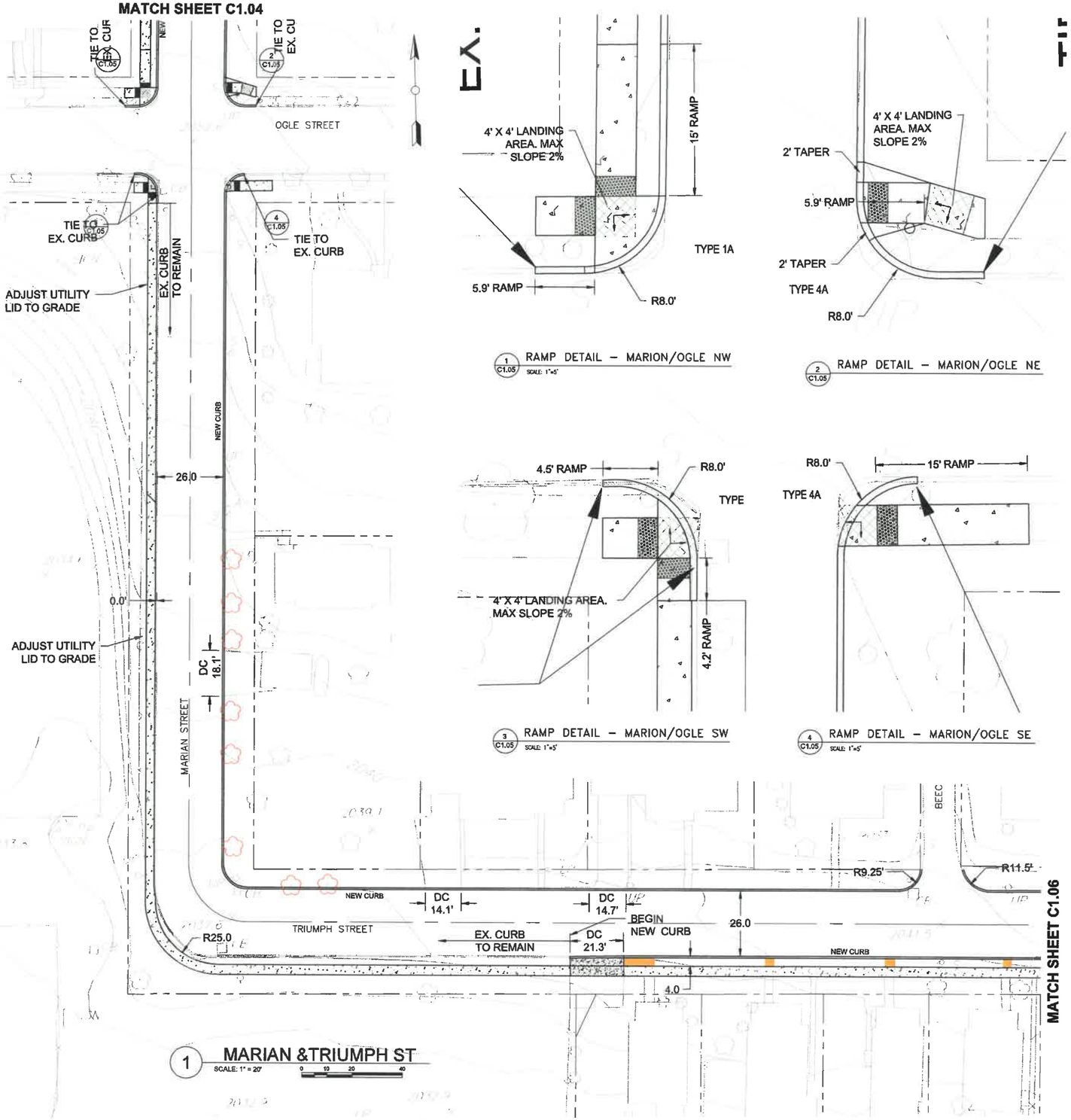
MATCH SHEET C1.04



1 MARIAN &TRIUMPH ST

SCALE: 1" = 20'

1 C1.05 RAMP DETAIL – MARION/OGLE NW

SCALE: 1"=5'

2 C1.05 RAMP DETAIL – MARION/OGLE NE

3 C1.05 RAMP DETAIL – MARION/OGLE SW

SCALE: 1"=5'

4 C1.05 RAMP DETAIL – MARION/OGLE SE

SCALE: 1"=5'

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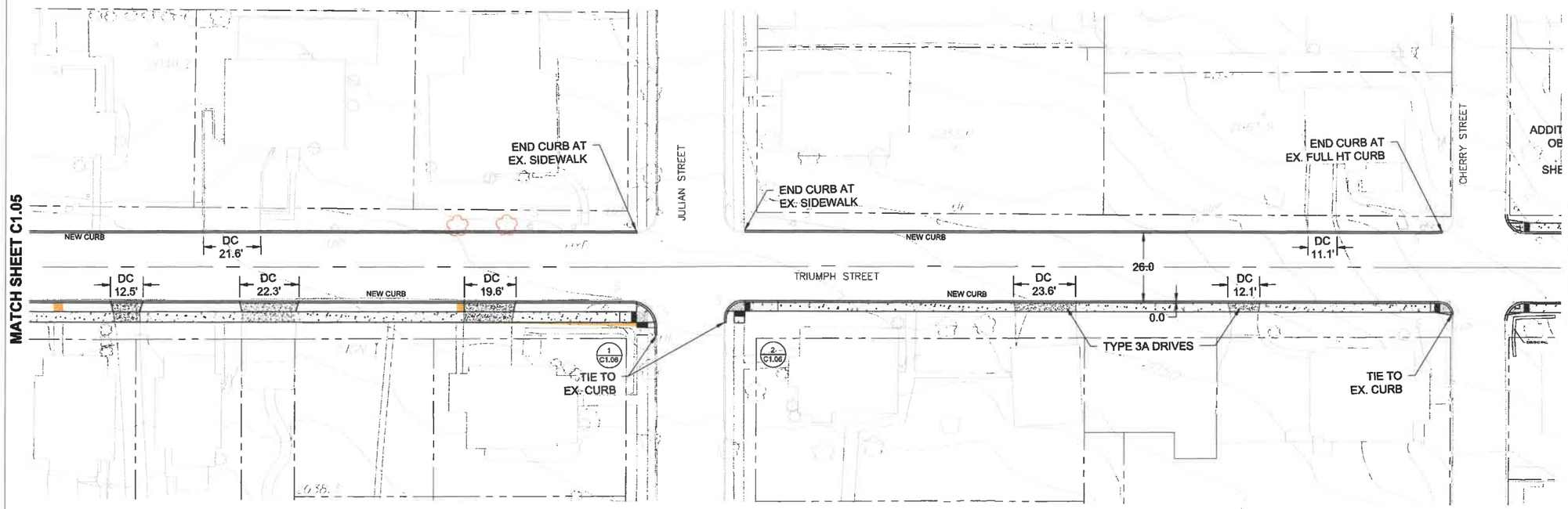
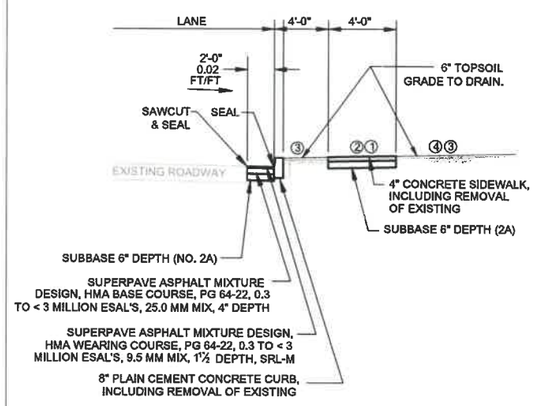
CONTRACT 1
MARIAN & TRIUMPH STREETS

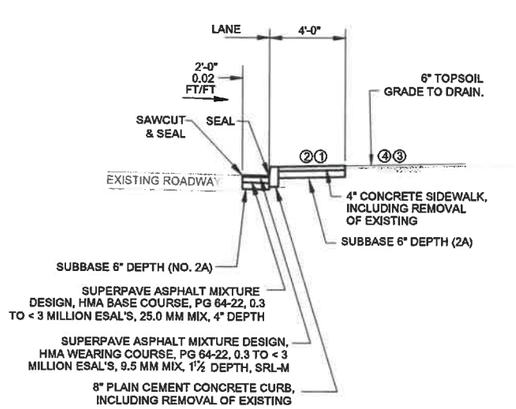
C1.05



1 TRIUMPH ST
SCALE: 1" = 20'



TYPICAL SIDEWALK SECTION, SOUTH SIDE
NTS MARION TO JULIAN



TYPICAL SIDEWALK SECTION, SOUTH SIDE
NTS JULIAN TO CHERRY

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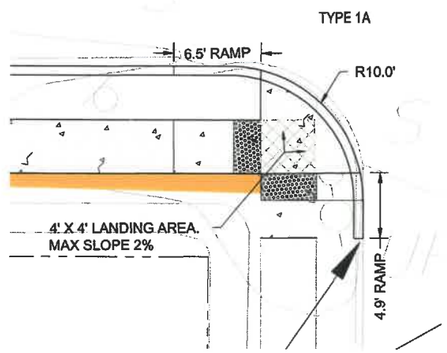
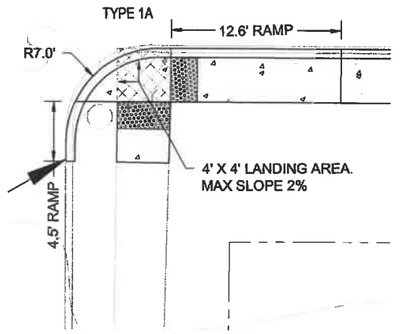


1 C1.06 RAMP DETAIL – TRIUMPH/JULIAN SW
SCALE: 1"=5'



2 C1.06 RAMP DETAIL – TRIUMPH/JULIAN SE
SCALE: 1"=5'

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Jan 16, 2019 - 11:33am

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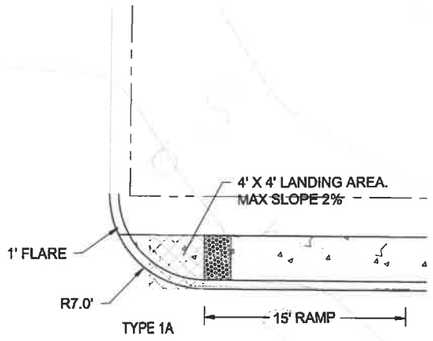
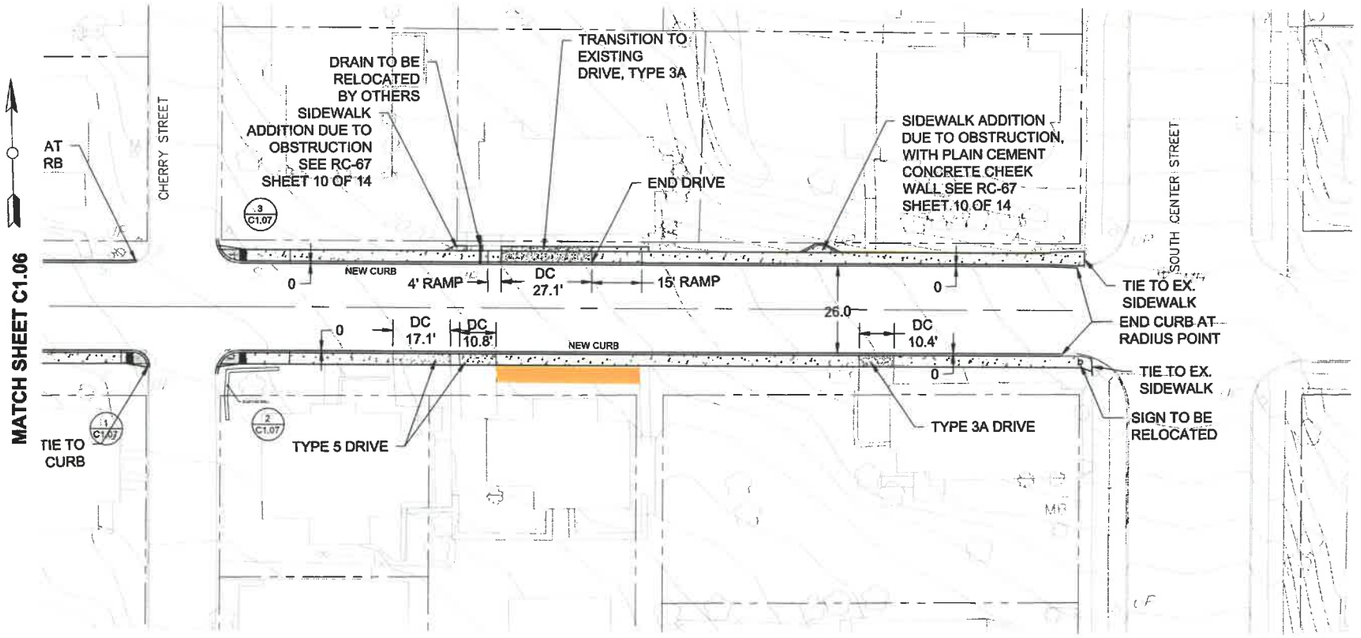
TRIUMPH STREET

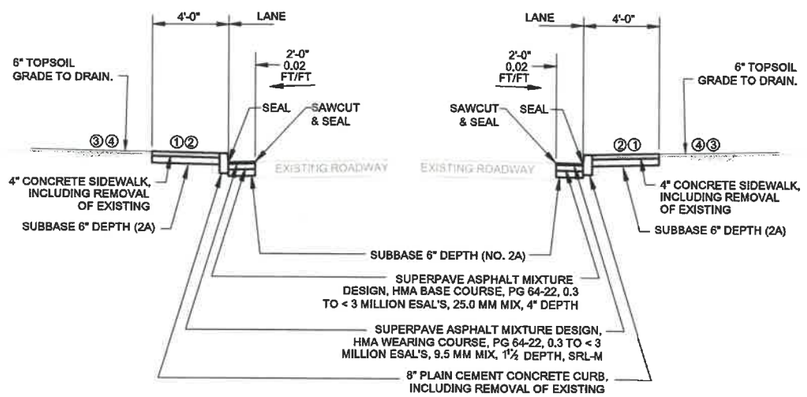
C1.06



3 C1.07 RAMP DETAIL – TRIUMPH/CHERRY NE
SCALE: 1"=5'

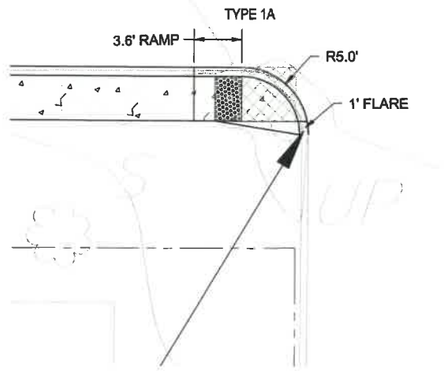


1 TRIUMPH ST
SCALE: 1" = 20' 0 10 20 40

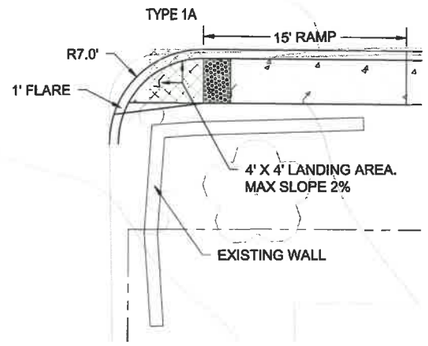


TYPICAL SIDEWALK SECTION, NORTH SIDE
NTS

TYPICAL SIDEWALK SECTION, SOUTH SIDE
NTS



1 C1.07 RAMP DETAIL – TRIUMPH/CHERRY SW
SCALE: 1"=5'



2 C1.07 RAMP DETAIL – TRIUMPH/CHERRY SE
SCALE: 1"=5'

NOTES

1. CONSTRUCT SIDEWALK WITH A 2% CROSS SLOPE. SLOPE DIRECTION SUBJECT TO SITE TOPOGRAPHY.
2. USE 6" THICHNESS WITHIN LIMITS OF DRIVEWAYS AND THEIR ASSOCIATED APRONS AND TRANSITIONS.
3. GRADE TO DRAIN. CONSTRUCT WITH A 2% CROSS SLOPE, TYPICAL. SLOPE DIRECTION SUBJECT TO SITE TOPOGRAPHY. STEEPER SLOPE PERMISSIBLE WHERE TOPOGRAPHY WARRANTS WITH A 3:1 MAXIMUM OR 2:1 MAXIMUM WHERE APPROVED BY THE BOROUGH.
4. CONTRACTOR RESPONSIBLE TO SAWCUTTING, REMOVAL, AND CONSTRUCTION OF REPLACEMENT TRANSITIONS FOR EXISTING ENTRANCE WALKS.
5. CONTRACTOR RESPONSIBLE FOR SAWCUTTING, EXCAVATION , AND REMOVAL OF ALL EXISTING CURBING, SIDEWALK, PAVEMENT, STUMPS, EXCAVATED MATERIAL AND OTHER OBSTRUCTIONS NECESSARY FOR CONSTRUCTION.
6. CONTRACTOR RESPONSIBLE FOR FURNISHING ADDITIONAL EARTHWORK AND TOPSOIL AS NECESSARY FOR THE GRADING OPERATION.

CDI L.R. Kimball

615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
web site www.lrkimball.com

CONSULTANTS:

PROJECT NAME:

BOROUGH OF EBENSBURG CURB AND SIDEWALK REPLACEMENT

BOROUGH OF EBENSBURG
CAMBRIA COUNTY, STATE
OWNER:

BOROUGH OF EBENSBURG
300 WEST HIGH STREET
EBENSBURG, PA 15931

REV.	DATE	DESCRIPTION
ISSUE:		1/14/2019
PROJECT NO:		EBG.E000140.EB21
SCALE:		AS SHOWN
DRAWN BY:		TAG
CHECKED BY:		GLH

SHEET TITLE

CONTRACT 1
TRIUMPH STREET

C1.07

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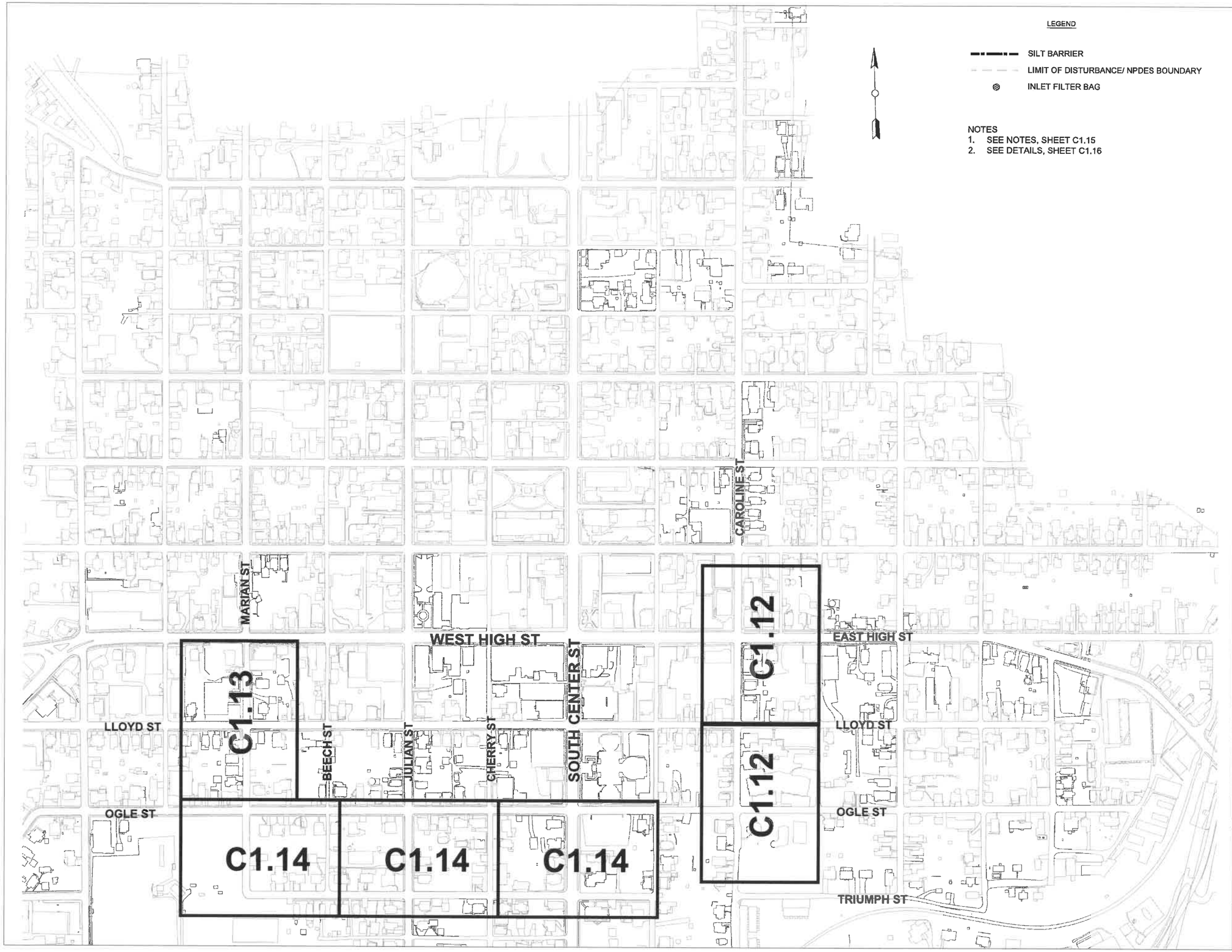

LEGEND

- SILT BARRIER
- LIMIT OF DISTURBANCE/ NPDES BOUNDARY
- INLET FILTER BAG

NOTES
1. SEE NOTES, SHEET C1.15
2. SEE DETAILS, SHEET C1.16

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SHEET TITLE

CONTRACT 1
INDEX SHEET
E & S CONTROL PLAN

C1.11

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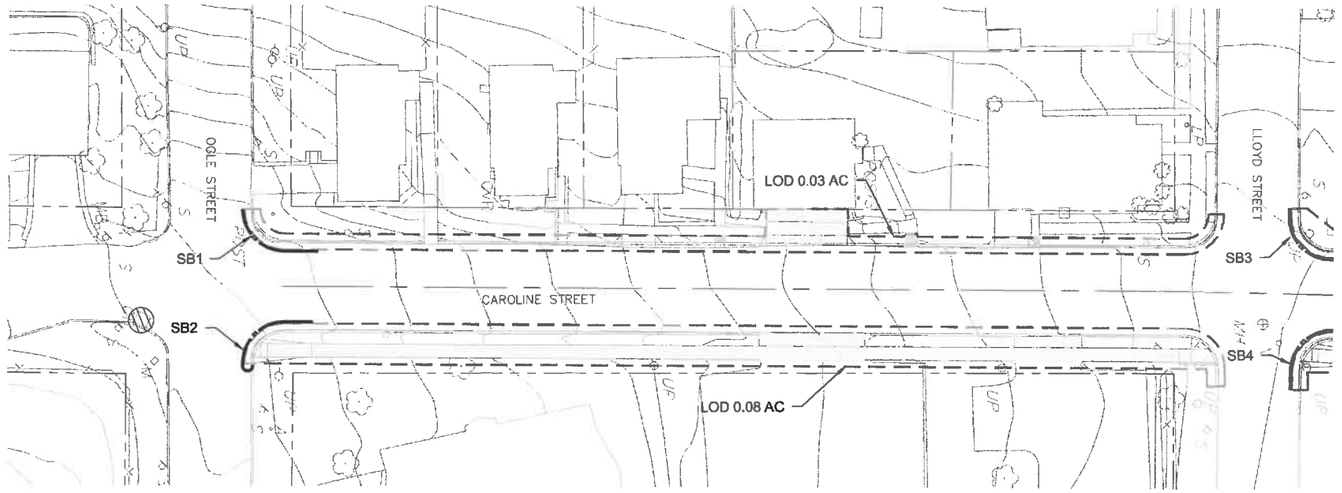
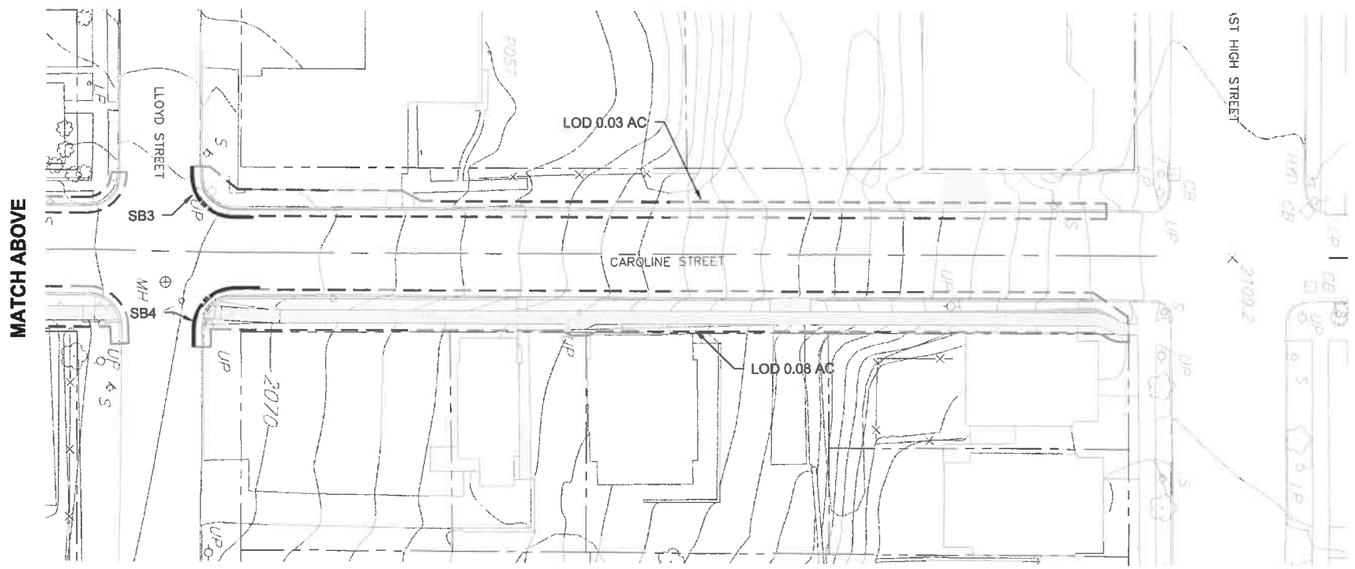


1 CAROLINE ST
SCALE: 1" = 20'



2 CAROLINE ST
SCALE: 1" = 20'

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SHEET TITLE

CONTRACT 1
CAROLINE STREET
E & S CONTROL PLAN

C1.12

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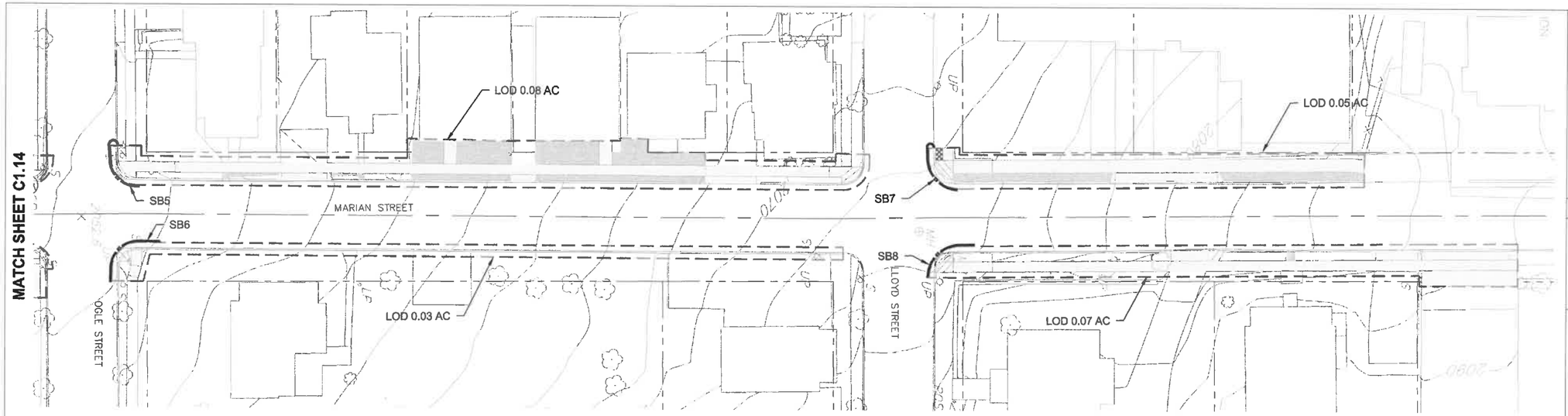

1 MARIAN ST
SCALE: 1" = 20' 0 10 20 40

CDI L.R. Kimball

615 West Highland Ave.
Ebensburg, Pa. 15931

phone (814) 472-7700
fax (814) 472-7712
web site www.lrkimball.com

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CAMBRIA COUNTY, STATE

OWNER:

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SHEET TITLE

CONTRACT 1
MARIAN STREET
E & S CONTROL PLAN

C1.13

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Jan 16, 2019 - 12:45pm

MATCH SHEET C1.13

MATCH BELOW BOTTOM (1)

MATCH IMMEDIATELY BELOW (3)

MATCH IMMEDIATELY ABOVE (2)

MATCH ABOVE TOP (2)

SB5 SB6 OGLE STREET

LOD 0.03 AC

JULIAN STREET

SB13

TRIUMPH STREET

SB12

SB9 SB11 SB14

LOD 0.05 AC

2 TRIUMPH ST
SCALE: 1" = 20'

SB16

LOD 0.05 AC

SB15 SB14

LOD 0.06 AC

3 TRIUMPH ST
SCALE: 1" = 20'

MARIAN STREET

LOD 0.06 AC

SB10

TRIUMPH STREET

SB9

LOD 0.20 AC

1 TRIUMPH ST
SCALE: 1" = 20'

CDI L.R. Kimball

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SHEET TITLE

CONTRACT 1
MARIAN/TRIUMPH STREET
E & S CONTROL PLAN

C1.14

SEDIMENTATION CONTROL GENERAL NOTES

ID SEDIMENTATION CONTROL MEASURES SHALL BE
ALL SOIL DISTURBING ACTIVITIES CEASE AND
.IZATION OF DISTURBED AREAS IS COMPLETE AND
ENGINEER AND THE SNYDER COUNTY CONSERVATION

)R SHALL INSPECT ALL EROSION AND SEDIMENTATION
AFTER EACH RAINFALL OR SNOW MELT EVENT OR ON
ND REMOVE ALL ACCUMULATED SEDIMENT WHENEVER
UMULATION HAS REACHED THE SPECIFIED SEDIMENT
)EPOSITS FROM THE SEDIMENT STRUCTURES WILL BE
CONTRACTOR'S DISPOSAL AREA OR UTILIZED ON SITE
MANNER.

)R SHALL NOTIFY THE ENGINEER IMMEDIATELY IF HE
IY SEDIMENT OR EROSION CONTROL DEVICE IS NOT
CTLY.

D SEDIMENTATION CONTROLS MUST BE
ABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE
'ARY AREAS OF THE CONTROLS. ONLY LIMITED
. BE PERMITTED TO PROVIDE ACCESS TO THE EROSION
)N CONTROL DEVICES.

R SOCKS WILL BE CLEANED OF ACCUMULATED
HE SEDIMENT REACHES ONE-HALF OF THE BARRIER
RRIER FAILS TO HOLD IN ANY WAY, THE FAILED SECTION
AND REPLACED IMMEDIATELY. PRIOR TO THE FINAL
IER FOLLOWING ALL STAGES OF CONSTRUCTION AND
UPSLOPE DRAINAGE AREAS, THE ACCUMULATED
REMOVED. AFTER REMOVAL REGRADE AND
QUIRED.

VED ROADWAYS WILL BE KEPT CLEAN OF ALL
L BE INSPECTED DAILY BY THE CONTRACTOR.

UST ENSURE THAT PROPER MECHANISMS ARE IN
L WASTE MATERIALS. CONSTRUCTION WASTES
NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING
ETE WASH WATER, SANITARY WASTES, ETC. THAT
IMPACT WATER QUALITY. MEASURES SHOULD BE
EMENTED FOR HOUSEKEEPING, MATERIALS
LITTER CONTROL. WHERE POSSIBLE, RECYCLING OF
S IS PREFERRED, RATHER THAN DISPOSAL.

D SEDIMENTATION NOTES

STABILIZED, ALL EROSION AND SEDIMENTATION
IE MAINTAINED PROPERLY. MAINTENANCE MUST
ONS OF ALL EROSION AND SEDIMENTATION
EACH STORM EVENT AND ON A WEEKLY BASIS. ALL
D REMEDIAL MAINTENANCE WORK, INCLUDING
R, REPLACEMENT, REMULCHING, AND RENETTING
IED IMMEDIATELY.

SURE CONTAINED, WITHIN THIS PLAN, PROVE
EQUATELY REMOVING SEDIMENT, FROM ON-SITE
DISCHARGE, OR OF STABILIZING THE SURFACES
ONAL MEASURES MUST BE IMMEDIATELY
THE PROPERTY OWNER/DEVELOPER TO ELIMINATE
MS.

STABILIZATION HAS BEEN ACHIEVED, TEMPORARY
IMENTATION CONTROLS MUST BE REMOVED.
DURING REMOVAL OF THE CONTROLS MUST BE

THE LOCATION AND TYPE OF ETER AND ON SITE BMP'S.

)POSED TEMPORARY CONTROL MEASURES IS TO PREVENT
TING THE PROJECT SITE AND EVENTUALLY ENTERING A
TRUCTION.

E RESPONSIBLE FOR THE CONSTRUCTION AND
ARY CONTROL MEASURES DURING CONSTRUCTION. THE
ESPONSIBLE FOR SUPPLEMENTING THE EROSION AND
. PLAN AS NECESSARY, IN ORDER TO PREVENT EROSION
RELEASE OF SEDIMENT LADEN RUNOFF. THE FOLLOWING
ONTROL MEASURES ARE SHOWN ON THE CONSTRUCTION
IGNED IN ACCORDANCE WITH THE DEP EROSION AND
TROL MANUAL.

)TECTION: SILT SACKS WILL BE REQUIRED FOR ALL INLETS
N-OFF.

HALL BE INSTALLED AROUND THE PERIMETER OF THE
THE WORK AREA. THE COMPOST FILTER SOCK SHALL
FORE IT LEAVES THE SITE.

)TTED, SMALL GRAIN FREE OF ALL KINDS OF WEEDS AND
WEEDS SUCH AS: THISTLES, JOHNSONGRASS AND

LL BE GREEN DYED AND AIR-DRIED WOOD CELLULOUS
) GROWTH OR GERMINATION INHIBITING SUBSTANCES, IN
DING ONE HUNDRED POUNDS NET WEIGHT SHOWN ON
THE FOLLOWING:
T: 14% +/- 3%
OVEN DRIED BASIS):98.6+/- 0.2%
+/- 0.2%
APACITY: 1000% MINIMUM

L BE SUITABLE FIBROUS GROUND, SHREDDED OR CHUNKS,
K, FREE FROM VIABLE, NOXIOUS WEED SEEDS AND
POSED AND BETWEEN 1/4" AND 2" IN DIMENSION
HALL COMFORM TO PADOT STANDARDS CONTAINING NO
AGENTS TOXIC TO PLANT LIFE AND NOT MORE THAN
E ACIDS.
LL COMFORM TO PADOT STANDARDS.
ION SHALL BE NATURAL VEGETABLE GUM BLENDED WITH
NG AGENTS (TERRA TACK AR) AS MANUFACTURED BY
PANY OR EQUAL.
S AS APPROVED BY THE PADEP BUREAU OF LAND AND
.
G WILL OCCUR AFTER ANY EARTH DISTURBANCE THAT
D AFTER 4 DAYS.

CONSTRUCTION SEQUENCE NOTES

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

2. BEFORE IMPLEMENTATION OF ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE SNYDER COUNTY CONSERVATION DISTRICT.

3. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 E. SEQ. AND 287.1 ET SEQ.

4. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST PROVIDE PROOF THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE SNYDER COUNTY CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS.

5. ANY FILL MATERIAL IMPORTED TO THE SITE SHALL BE "CLEAN" FILL IN ACCORDANCE WITH PADEP REGULATIONS AND CONSTRUCTION SPECIFICATIONS. CLEAN FILL IS DEFINED AS UNCONTAMINATED INERT SOLID MATERIAL THAT MAY INCLUDE SOIL, ROCK, DREDGED MATERIAL, USED ASPHALT AND BRICK, BLOCK, OR CONCRETE FROM C & D ACTIVITIES THAT HAS BEEN UNAFFECTED BY SPILL OR RELEASE, OR IF AFFECTED, LEVELS ARE BELOW RESIDENTIAL SHS. ENVIRONMENTAL DUE DILIGENCE SHALL BE USED AND MEANS THAT EVERY EFFORT SHALL BE MADE TO ENSURE THAT THE LAND BEING PURCHASED/DEVELOPED DOES NOT POSE ANY POTENTIAL RISKS OR ENVIRONMENTAL HAZARDS THAT MAY AFFECT THE AREA'S DEVELOPMENT OR ITS FUTURE OCCUPANTS.

PROPER MEASURES FOR DISPOSING AND RECYCLING MATERIALS FROM THE PROJECT SITE

SEDIMENT MATERIAL REMOVED FROM THE VARIOUS CONTROL FACILITIES WILL BE TRANSPORTED TO AND DEPOSITED IN AN ON-SITE AREA ACCEPTABLE TO THE ENGINEER. THE AREA IN QUESTION WILL BE LOCATED WITHIN THE EXISTING TEMPORARY EROSION AND SEDIMENTATION CONTROL RUNOFF AREA TO PREVENT FURTHER SEDIMENT RUNOFF DUE TO THE OCCURRENCE OF AN ADDITIONAL RAINFALL EVENT. MATERIALS DEPOSITED IN THESE AREAS WILL BE ALLOWED TO DRY TO AT LEAST THE OPTIMUM MOISTURE CONTENT BEFORE BEING INTEGRATED WITH OTHER EXCAVATED MATERIAL AND USED IN THE PLACEMENT OF COMPACTED FILL. ANY ADDITIONAL DEBRIS THAT ACCUMULATES, AND CANNOT BE RECYCLED ON-SITE, WILL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL LOCATION. THE DISPOSAL LOCATION WILL BE DETERMINED BY THE MATERIAL IN QUESTION, AND BY THE RULES AND REGULATIONS SET FORTH BY THE DEP, COUNTY CONSERVATION DISTRICT, AND THE LOCAL MUNICIPALITY. PRIOR TO THE REMOVAL OF ANY MATERIAL (I.E. EXCESS SOIL, BUILDING MATERIALS, CONCRETE, WASH WATER, SANITARY WASTES, ETC.) FROM THE SITE, THE CONTRACTOR MUST HAVE AN EROSION AND SEDIMENTATION CONTROL PLAN WITH ACCEPTABLE BMP'S APPROVED BY THE LOCAL MUNICIPALITY AND COUNTY CONSERVATION DISTRICT, FOR THEIR DISPOSAL SITE. CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE MEASURES FOR HOUSEKEEPING, MATERIAL MANAGEMENT, AND LITTER CONTROL.

MAINTENANCE PROGRAM

MAINTENANCE OF TEMPORARY CONTROLS: UNTIL THE SITE IS STABILIZED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL BMP'S. CONTRACTOR IS RESPONSIBLE TO PAY FOR ANY EROSION AND SEDIMENTATION CONTROL VIOLATIONS ON SITE. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING, AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. RESPONSIBILITIES SHALL INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:

REMOVAL OF PONDED WATER. INSPECT ANY LOW LYING AREAS, AS WELL AS ANY STRUCTURAL AREAS WHICH WATER COULD ACCUMULATE IN. THIS WOULD CONSIST OF OPEN BUILDING FOUNDATIONS AND/OR BASEMENTS, AND ANY OTHER AREAS WHERE WATER COULD ACCUMULATE. PUMPED WATER FILTER BAGS MAY BE USED TO DEWATER SUCH AREAS AND FILTER SILT LADEN WATER FROM DISTURBED AREAS, PRIOR TO DISCHARGING TO WATERS OF THE COMMONWEALTH BY WAY OF THE ON-SITE STORMWATER COLLECTION SYSTEM. PUMPED WATER FILTER BAGS SHALL BE INSTALLED AND IMPLEMENTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN DRAWINGS.

DAILY SEDIMENT REMOVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DAILY REMOVAL OF ANY SEDIMENT DEPOSITED ON PUBLIC ROADS AND RETURN TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER WILL BE UNACCEPTABLE.

COMPOST FILTER SOCKS SHALL BE CLEANED WHEN SEDIMENT ACCUMULATIONS HAVE REACHED 1/2 THE HEIGHT OF THE SOCK. DAMAGED SOCK SHALL BE REPLACED IMMEDIATELY.

AN ADEQUATE SUPPLY OF ADDITIONAL EROSION/SEDIMENTATION CONTROL MATERIALS (INCLUDING, BUT NOT LIMITED TO, COMPOST FILTER SOCKS, INLET PROTECTION, TEMPORARY SEED, SAND BAGS, ROCKS, AND GRAVEL) SHALL BE STOCKPILED AND ARE TO BE USED IN THE EVENT THAT EMERGENCY REPAIRS OF SOIL EROSION/SEDIMENTATION CONTROLS ARE REQUIRED.

MAINTENANCE OF PERMANENT CONTROLS: AFTER FINISHED SUB-GRADES ARE CONSTRUCTED, LEAVE TEMPORARY CONTROLS IN PLACE. TOPSOIL WILL BE SPREAD, SOIL SUPPLEMENTS WILL BE ADDED AND THE AREA WILL BE RAKED SMOOTH.

ANY STABILIZED AREAS DISTURBED DURING THE MAINTENANCE ACTIVITIES SHALL BE IMMEDIATELY STABILIZED WITH THE DESIGN STABILIZATION OF THE AREA.

ALL INSPECTIONS SHALL BE LOGGED ONTO PADEP FORM 3150-FM-BWEW0083 DATED 2/2012 AND KEPT ON SITE AT ALL TIMES.

CRITICAL STAGES OF IMPLEMENTATION

NONE.

CONSTRUCTION SEQUENCE

1. Contact the Cambria County Conservation District at least seven days prior to the intended start of construction to schedule a preconstruction meeting to be held with the Conservation District, contractor, and the Project Engineer. Ebensburg Borough shall also be notified in writing three days prior to the meeting.
2. Each step in the construction sequence shall be completed before initiation of the next step.
3. Contractor shall provide additional erosion and sedimentation control devices as necessary based on site conditions and weather patterns during construction.
4. If at any time during construction sediment laden water cannot be diverted to the silt sock, it must be pumped though a filter bag facility, such as the one shown on the Erosion & Sediment Control Detail sheet, before being discharged to the existing downstream waterway.
5. Contractor shall acquire E&S Plan approval for any off-site borrow or waste areas that will supply material for this site or facilitate disposal of excess material.
6. Install inlet filter bags and silt barriers prior to initiating any upslope excavation work.
7. Saw cut pavement inward of new face of curb to create a neat excavation line.
8. Excavate and deposit in waiting trucks any topsoil to be stockpiled for subsequent stabilization efforts. Stockpile at Contractor's established laydown area.
9. Excavate to remove existing curb, sidewalk, tree stumps and excess soil, depositing material directly into waiting trucks to avoid deposition on unprotected areas outside of Limit of Disturbance.
10. Grade for and install new curb and sidewalk.
11. Stabilize unpaved areas with topsoil, seeding, and mulch.
12. Repave gap along new face of curb.
13. Coordinate site inspection by Cambria County Conservation District to verify site stabilization prior to removal of E&S Controls.

SITE SOILS MAP

SOIL TYPES TABLE DETAIL

DISTURBED SOILS

SYMBOL	NAME	SLOPE (%)	DRAINAGE CLASS	DEPTH TO BEDROCK	DEPTH TO SEASONAL HIGH H2O TABLE (FT)	PERMEABILITY (IN/HR)	CAPABILITY SUB CLASS	HYDROLOGIC SOIL GROUP
Ur	Urban Land	NA	NA	NA	NA	NA	NA	NA
CeB	Cookport & Earnest soils	3-8%	Mod Well	40	4	NA	2e	C/D
WgC	Wharton/Gilpin Complex	8-15	Mod Well	25	14	0.06 - 2.00	3e	C/D

SPECIAL NOTES

THE LIMITATIONS FOR THE ABOVE SOILS INCLUDE LIMITATIONS THAT REDUCE THE CHOICE OF PLANTS THAT CAN BE USED. SEE BELOW FOR SPECIFIC LIMITATIONS. THESE LIMITATIONS WILL BE OVERCOME BY IMPLEMENTING A PROPER PLANTING PLAN FOR THE SOILS LOCATED ON SITE OR USE AN AMENDED SOIL MIX IF NEEDED.

CAPABILITY/SUBCLASS CLASSIFICATION

III - SOILS HAVE SEVERE LIMITATIONS THAT REDUCE THE CHOICE OF PLANTS OR THAT REQUIRE SPECIAL CONSERVATION PRACTICES OR BOTH
w - WATER INTERFERENCE MAY OCCUR

GENERAL NOTES

THE ABOVE SOILS INFORMATION IS PROVIDED FROM THE NRCS WEB SOIL SURVEY AS GENERAL INFORMATION ONLY

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ACTUAL SITE CONDITION.

THE LANDSCAPE PLAN HAS BEEN DEVELOPED BY A REGISTERED LANDSCAPE ARCHITECT WITH THE SOIL LIMITATIONS IN MIND. SOIL AMENDMENTS AND PROPER MULCHING ARE PLANNED IN CERTAIN AREAS TO ACCOMMODATE THE LIMITATIONS OF THE SOIL TYPES.

ADDITIONAL LIMITATION NOTES

SYMBOL	LIMITATIONS	LIMITATIONS RESOLUTION
CeB	CUTBANKS CAVE, CORROSIVE TO CONCRETE AND STEEL, DROUGHTY, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE, HYDRIC/HYDRIC INCLUSIONS, LOW STRENGTH/LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL, WETNESS	THE CONTRACTOR SHALL IMPLEMENT AT ALL TIMES ALL APPLICABLE OSHA STANDARDS AND REGULATIONS TO SAFEGUARD WORKERS, ALL UNDERGROUND CONCRETE FEATURES SHALL HAVE A PROTECTIVE LAYER OF LIMESTONE BETWEEN THE STRUCTURE ANDTHE SOIL TO PREVENT EROSION, THE LANDSCAPE PLAN HAS BEEN DEVELOPED WITH DROUGHT TOLERANT PLANTS, ALL SLOPES ARE EQUAL /LESS THAN THE MAXIMUM ALLOWED. ALL EMBANKMENTS TO BE GRADED AND STABILIZED. DISTURBED AREAS IN WHICH WORK CEASES FOR A PERIOD OF 4 DAYS SHALL BE STABILIZED. THE DISTURBED AREAS SHALL BE STABILIZED IN A TIMELY MANNER TO LIMIT EROSION, THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN TO ADDRESS ANY POTENTIAL HIGH WATER TABLE CONCERNS AND KEEP ANY NECESSARY EQUIPMENT/MATERIALS ON-SITE DURING CONSTRUCTION TO IMPLEMENT SUCH PLAN SHOULD THE NEED ARISE, ANY POTENTIAL WETLANDS ON SITE WILL BE AVOIDED OR PROPOSED DISTURBANCE WILL BE PROPERLY PERMITTED THROUGH THE PROPER AGENCY, THE DISTURBED AREAS SHALL BE STABILIZED IN A TIMELY MANNER TO LIMIT THE CHANCE OF LANDSLIDES. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES, STORMWATER MANAGEMENT FACILITIES HAVE BEEN DESIGNED TAKING INTO CONSIDERATION THE PERCOLATION RATES OF THE SOILS. UNDERDRAINS AND/OR DRY DETENTION FACILITIES MAY BE ADDED TO THE STORMWATER MANAGEMENT FACILITIES TO ADDRESS THE PERCLOATION RATE. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES, CONTRACTOR SHALL STRIP AND STORE TOPSOIL ON SITE FOR FINAL GRADING PURPOSES. IF ADDITIONAL TOPSOIL IS NEEDED. THE CONTRACTOR SHALL IMPORT TOPSOIL FROM A SITE WHICH HAS AN APPROVED EROSION CONTROL PERMIT/PLAN OR PURCHASE THE TOPSOIL FROM A SUPPLIER. THE BUILDING FOUNDATIONS AND UTILITIES SHALL BE INSTALLED BELOW THE FROST LINE. THE GRADING PLAN HAS BEEN DEVELOPED TAKING INTO CONSIDERATION ANY SHRINK-SWELL ISSUES OF THE SOIL. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES. THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN TO ADDRESS ANY POTENTIAL WETNESS CONCERNS AND KEEP NECESSARY EQUIPMENT/MATERIALS ON-SITE DURING CONSTRUCTION TO IMPLEMENT SUCH PLAN SHOULD THE NEED ARISE. THE LANDSCAPE PLAN WAS DEVELOPED UTILIZING PLANTS TOLERANT TO WET CONDITIONS.
WgC	CUTBANKS CAVE, CORROSIVE TO CONCRETE AND STEEL, DROUGHTY, EASILY ERODIBLE, DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE, HYDRIC/HYDRIC INCLUSIONS, LOW STRENGTH/LANDSLIDE PRONE, SLOW PERCOLATION, PIPING, POOR SOURCE OF TOPSOIL, FROST ACTION, SHRINK-SWELL, WETNESS	THE CONTRACTOR SHALL IMPLEMENT AT ALL TIMES ALL APPLICABLE OSHA STANDARDS AND REGULATIONS TO SAFEGUARD WORKERS, ALL UNDERGROUND CONCRETE FEATURES SHALL HAVE A PROTECTIVE LAYER OF LIMESTONE BETWEEN THE STRUCTURE ANDTHE SOIL TO PREVENT EROSION, THE LANDSCAPE PLAN HAS BEEN DEVELOPED WITH DROUGHT TOLERANT PLANTS, ALL SLOPES ARE EQUAL /LESS THAN THE MAXIMUM ALLOWED. ALL EMBANKMENTS TO BE GRADED AND STABILIZED. DISTURBED AREAS IN WHICH WORK CEASES FOR A PERIOD OF 4 DAYS SHALL BE STABILIZED. THE DISTURBED AREAS SHALL BE STABILIZED IN A TIMELY MANNER TO LIMIT EROSION, THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN TO ADDRESS ANY POTENTIAL HIGH WATER TABLE CONCERNS AND KEEP ANY NECESSARY EQUIPMENT/MATERIALS ON-SITE DURING CONSTRUCTION TO IMPLEMENT SUCH PLAN SHOULD THE NEED ARISE, ANY POTENTIAL WETLANDS ON SITE WILL BE AVOIDED OR PROPOSED DISTURBANCE WILL BE PROPERLY PERMITTED THROUGH THE PROPER AGENCY, THE DISTURBED AREAS SHALL BE STABILIZED IN A TIMELY MANNER TO LIMIT THE CHANCE OF LANDSLIDES. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES, STORMWATER MANAGEMENT FACILITIES HAVE BEEN DESIGNED TAKING INTO CONSIDERATION THE PERCOLATION RATES OF THE SOILS. UNDERDRAINS AND/OR DRY DETENTION FACILITIES MAY BE ADDED TO THE STORMWATER MANAGEMENT FACILITIES TO ADDRESS THE PERCLOATION RATE. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES, CONTRACTOR SHALL STRIP AND STORE TOPSOIL ON SITE FOR FINAL GRADING PURPOSES. IF ADDITIONAL TOPSOIL IS NEEDED. THE CONTRACTOR SHALL IMPORT TOPSOIL FROM A SITE WHICH HAS AN APPROVED EROSION CONTROL PERMIT/PLAN OR PURCHASE THE TOPSOIL FROM A SUPPLIER. THE BUILDING FOUNDATIONS AND UTILITIES SHALL BE INSTALLED BELOW THE FROST LINE. THE GRADING PLAN HAS BEEN DEVELOPED TAKING INTO CONSIDERATION ANY SHRINK-SWELL ISSUES OF THE SOIL. THE CONTRACTOR SHALL CONSULT A GEOTECHNICAL ENGINEER FOR EARTH MOVING ACTIVITIES TO ADDRESS ANY POTENTIAL ISSUES. THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN TO ADDRESS ANY POTENTIAL WETNESS CONCERNS AND KEEP NECESSARY EQUIPMENT/MATERIALS ON-SITE DURING CONSTRUCTION TO IMPLEMENT SUCH PLAN SHOULD THE NEED ARISE. THE LANDSCAPE PLAN WAS DEVELOPED UTILIZING PLANTS TOLERANT TO WET CONDITIONS.
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L.R. Kimball
615 West Highland Ave.
Ebensburg, Pa. 15931
phone (814) 472-7700
fax (814) 472-7712
web site www.lrkimball.com

CONSULTANTS:

PROJECT NAME:

BOROUGH OF EBENSBURG CURB AND SIDEWALK REPLACEMENT

BOROUGH OF EBENSBURG
CAMBRIA COUNTY, STATE
OWNER:

BOROUGH OF EBENSBURG
300 WEST HIGH STREET
EBENSBURG, PA 15931

REV.	DATE	DESCRIPTION

ISSUE:	1/14/2019
PROJECT NO:	EBG.E000140.EB21
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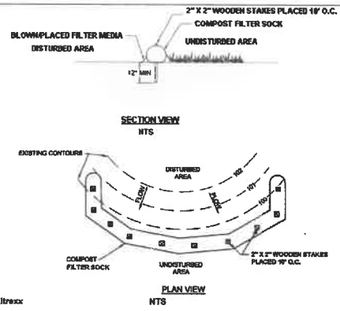
CHECKED BY:	GLH

SHEET TITLE

CONTRACT 1
NOTES
E & S CONTROL PLAN

C1.15



Filtrexx

Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

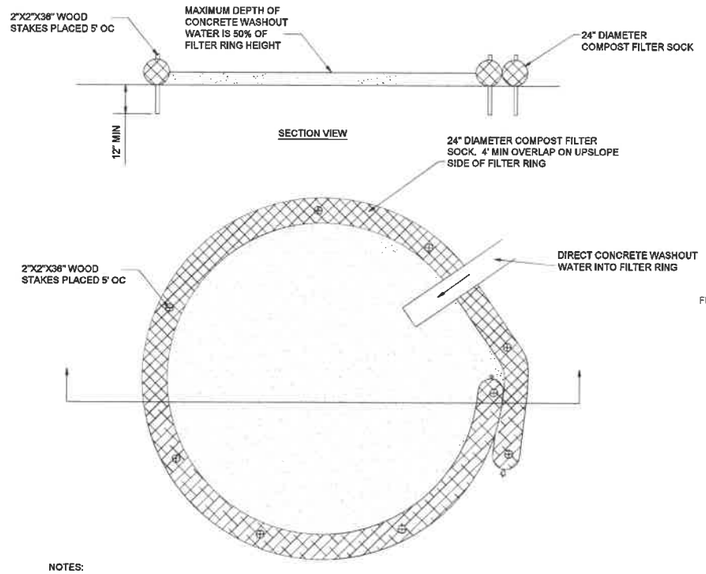
Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

BARRIER NO.	LOCATION	SOCK SIZE (IN)	SLOPE (%)	SLOPE LENGTH ABOVE BARRIER (FT)
SB1	CAROLINE AT OGLE	24"	8%	300
SB2	CAROLINE AT OGLE	24"	8%	300
SB3	CAROLINE AT LLOYD	24"	10%	300
SB4	CAROLINE AT LLOYD	24"	10%	300
SB5	MARIAN AT OGLE	18"	6%	300
SB6	MARIAN AT OGLE	18"	6%	300
SB7	MARIAN AT LLOYD	18"	6%	300
SB8	MARIAN AT LLOYD	18"	6%	300
SB9	MARIANOGLE TO TRIUMPH/JULIAN (WEST & SOUTH SIDES)	12"	20%	10
SB10	TRIUMPH AT BEECH	12"	3%	270
SB11	TRIUMPH AT JULIAN	12"	10%	20
SB12	TRIUMPH AT JULIAN	12"	4%	300
SB13	TRIUMPH AT JULIAN	12"	4%	300
SB14	TRIUMPH - JULIAN TO CHERRY (SOUTH SIDE)	12"	20%	10
SB15	TRIUMPH - CHERRY TO CENTER (SOUTH SIDE)	18"	9%	260
SB16	TRIUMPH AT CHERRY	18"	9%	260

COMPOST FILTER SOCK DETAIL

SCALE: NTS



NOTES:

SURPLUS CONCRETE SHALL BE RETURNED TO SUPPLIERS SITE OR CONTRACTOR SHALL MAINTAIN CONCRETE WASHOUT FACILITIES AT THEIR LAYDOWN YARD.

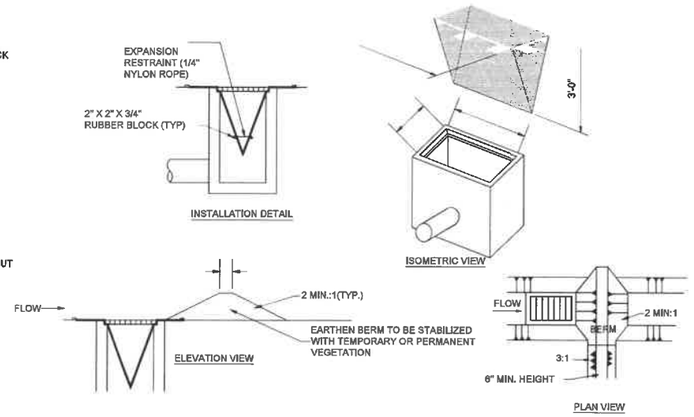
INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.

18" DIAMETER FILTER SOCK MAY BE STACKED ONTO 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

CONCRETE WASHOUT DETAIL

N.T.S.



MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

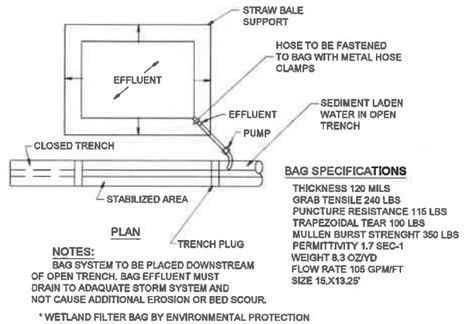
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR TRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS

FILTER BAG INLET PROTECTION CHANNEL OR ROADSIDE SWALE DETAIL

SCALE: NTS



BAG SPECIFICATIONS

THICKNESS 120 MILS
GRAB TENSILE 240 LBS
PUNCTURE RESISTANCE 115 LBS
TRAPEZOIDAL TEAR 100 LBS
MULLEN BURST STRENGHT 350 LBS
PERMITTIVITY 1.7 SEC-1
WEIGHT 8.3 OZ/YD
FLOW RATE 105 GPM/FT
SIZE 15.X13.25'

NOTES:

BAG SYSTEM TO BE PLACED DOWNSTREAM OF OPEN TRENCH. BAG EFFLUENT MUST DRAIN TO ADAQUATE STORM SYSTEM AND NOT CAUSE ADDITIONAL EROSION OR BED SCOUR.

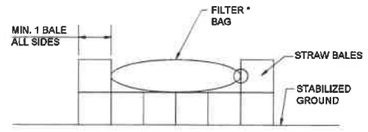
* WETLAND FILTER BAG BY ENVIRONMENTAL PROTECTION PRODUCTS OR APPROVED EQUAL

FILTER BAG FACILITY DETAIL

N.T.S.

SEEDING TABLE

SEED TYPE	DESCRIPTION, FORMULA, SPECIES	% BY WEIGHT	MINIMUM % PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE:	FERTILIZER RATE: 1,000LBS./ACREF. BASIC	FERTILIZER RATE: 1,000LBS./ACREF. STARTER	LIME RATE: TONS/AC	MULCH RATE:
TYPE 1 LAWN AREAS (PER PENNDOT SPECS)	PENNDOT FORMULA B						10-20-20	40	6	3 TON/ACRE
	*PERENNIAL RYEGRASS MIXTURE	20	98	90	0.15	0.44				
	*CREEPING RED FESCUE	30	98	85	0.15	0.67				
	*KENTUCKY BLUEGRASS MIXTURE	50	98	80	0.20	1.2				
						2.3 LBS./1000 S.F.				
TYPE 3 TEMPORARY SEEDING	ANNUAL RYEGRASS	100	98	90	0.15	TOTAL = 1.1 LBS./1000 S.F.	10-20-20	6		3 TON/ACRE



CONTRACTOR'S PUMP CAPICITY SHALL NOT EXCEED MANUFACTORS SPECIFICATIONS

SECTION

FILTER BAG FACILITY DETAIL

N.T.S.

CDI L.R. Kimball

615 West Highland Ave.
Ebensburg, Pa. 15931

phone (814) 472-7700
fax (814) 472-7712
web site www.lrkimball.com

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SHEET TITLE

CONTRACT 1
DETAILS
E & S CONTROL PLAN

C1.16

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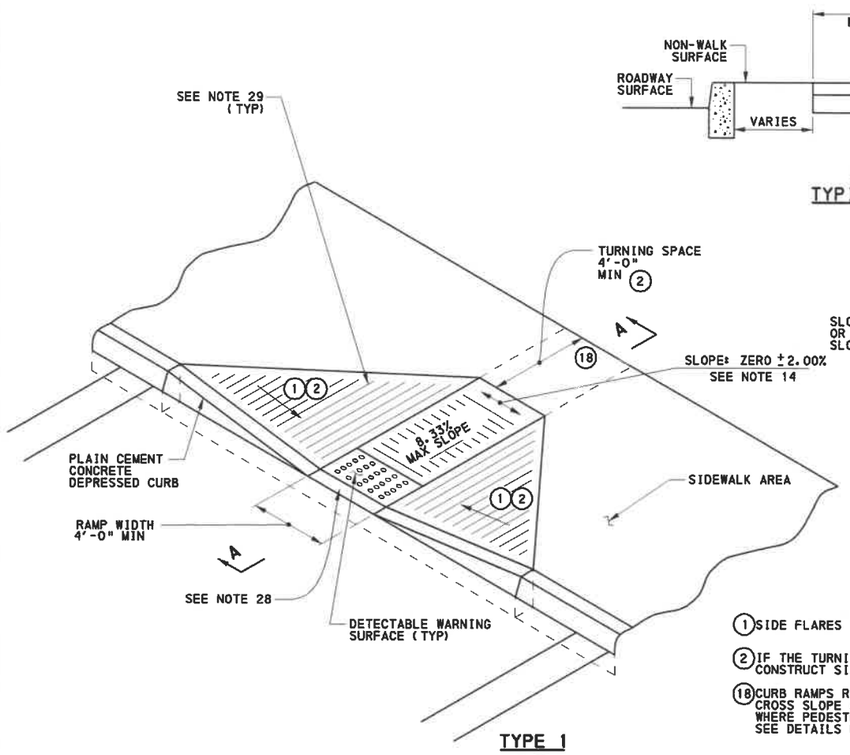
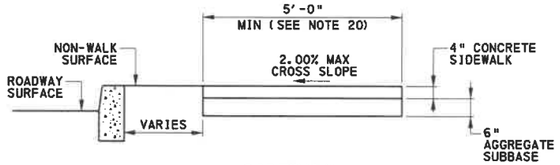
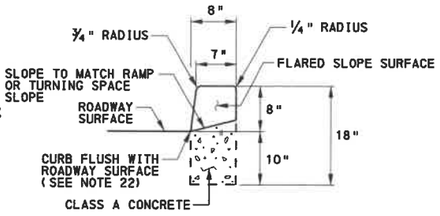


TYPE 1
CURB RAMP



SIDEWALK
TYPICAL SECTION

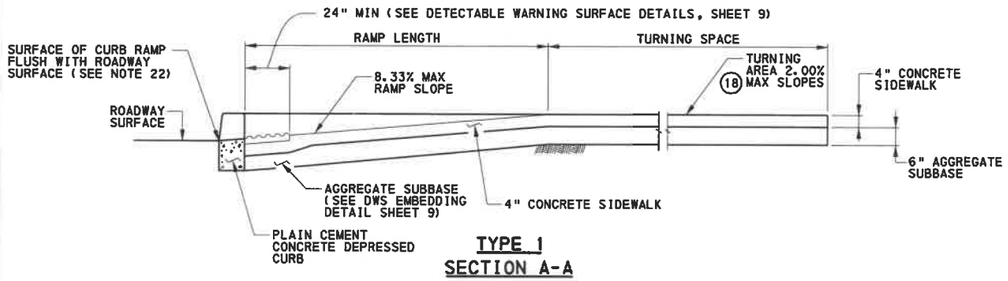


DEPRESSED CURB
FOR CURB RAMPS

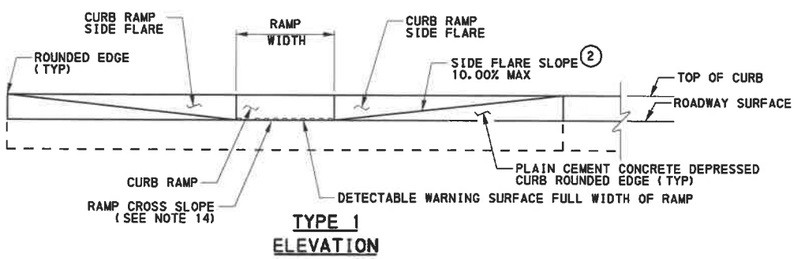
(1) SIDE FLARES 10.00% MAX SLOPE

(2) IF THE TURNING SPACE IS INDICATED TO BE LESS THAN 4'-0", CONSTRUCT SIDE FLARES 8.33% MAX SLOPE.

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.



TYPE 1
SECTION A-A



TYPE 1
ELEVATION

PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1
8.33%	12:1
7.14%	14:1
5.00%	20:1
2.00%	50:1
1.00%	100:1

EQUIVALENT SLOPES

NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676, 694, AND 695.
2. PROVIDE EXPANSION JOINT MATERIAL ½" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0" X 4'-0" CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. SEE SHEET 7 FOR CROSSWALK DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
10. THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSHBUTTONS. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.
11. SEE TC-8803 FOR ADDITIONAL PEDESTRIAN PUSHBUTTON DETAILS NOT SHOWN.
12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB. SEE SHEET 9 FOR INSTALLATIONS ALONG CURVED SURFACES.
13. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESS ROUTE.
15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00%. FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%, CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
17. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.00%. SEE SHEET 8 FOR DETAILS.
18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 SLOPE.
20. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS, REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.
23. CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 OR FLATTER. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN PATH.
24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
25. FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES. SEE SHEET 7 FOR DETAILS.
26. A 4'-0" MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.
27. INSTALL DUMMY JOINTS WHERE RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT.
28. CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. TRANSITION CURB RAMP CROSS SLOPE TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3.00% PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
29. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. SEE NOTE 5.

COMMONWEALTH OF PENNSYLVANIA
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CURB RAMPS AND SIDEWALKS NEW CONSTRUCTION OR ALTERATION DETAILS TYPE 1 CURB RAMPS AND TYPICAL SECTIONS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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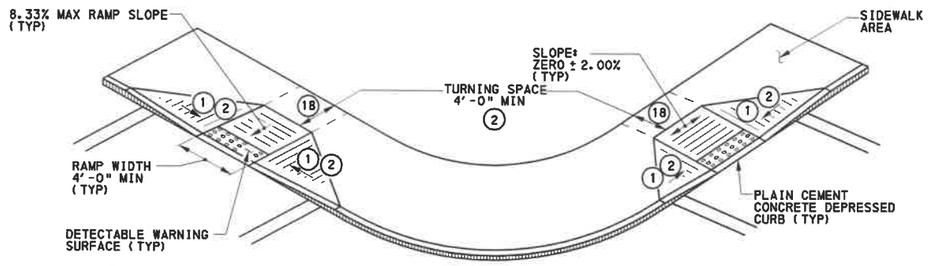
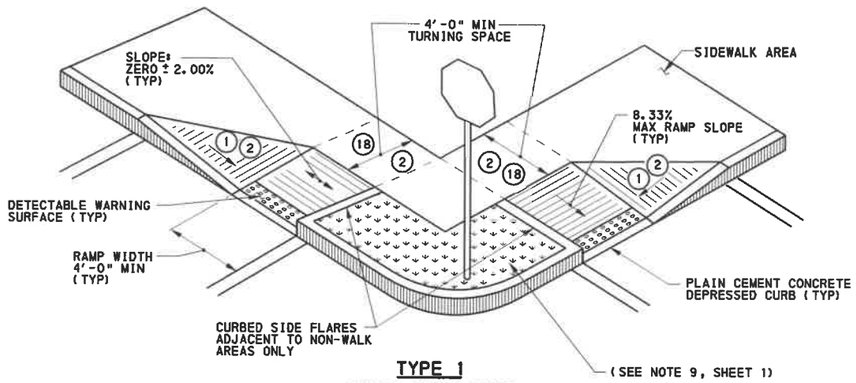
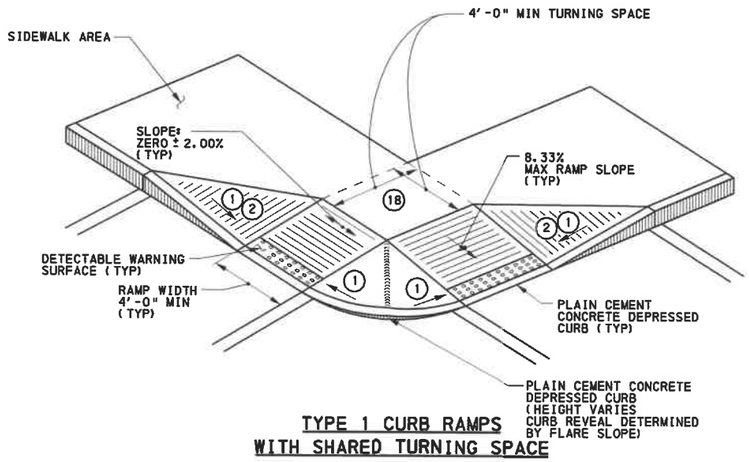


NOTE: IF SPACE IS LIMITED, IT MAY BE NECESSARY TO CURB THE SIDE FLARES OF THE TYPE 1 CURB RAMPS (SEE ALTERNATE INSTALLATION DETAIL BELOW). PEDESTRIAN TRAFFIC SHOULD NOT BE DIRECTED TO CROSS THE VERTICAL DROP.

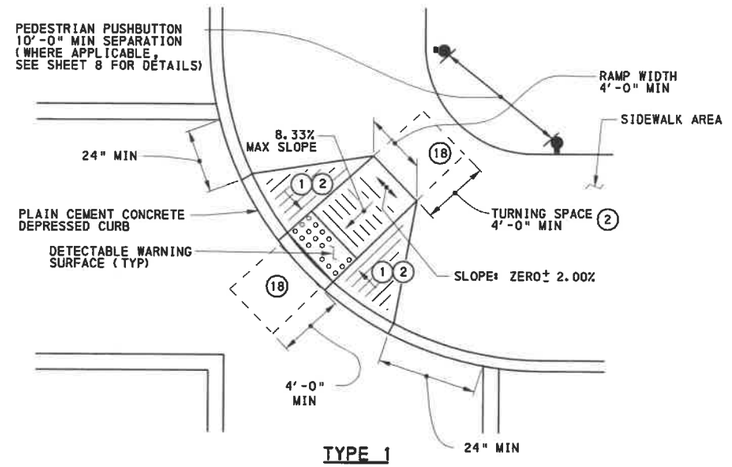
TYPE 1
DOUBLE CURB RAMPS
(PREFERRED INSTALLATION)



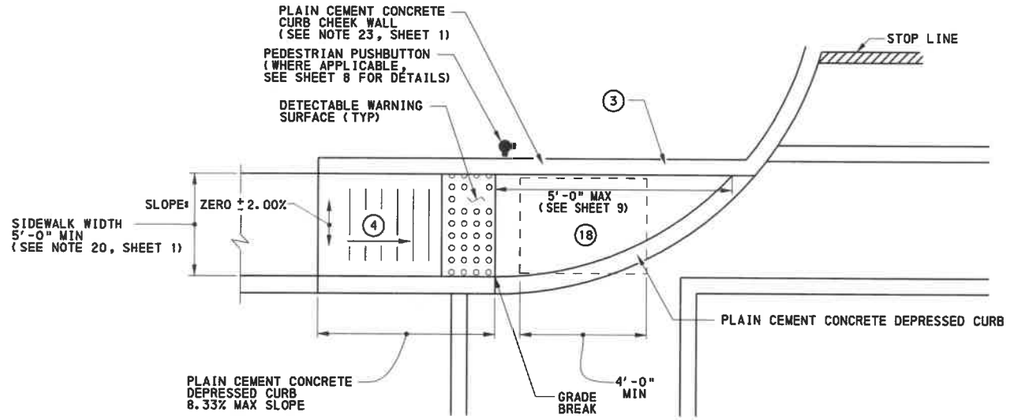
TYPE 1
DOUBLE CURB RAMPS
(ALTERNATE INSTALLATION)



TYPE 1 CURB RAMPS
WITH SHARED TURNING SPACE



TYPE 1
CURB RAMP
(DIAGONAL - REQUIRES ASSISTANT DISTRICT EXECUTIVE APPROVAL)



TYPE 1A
CURB RAMP
ASSISTANT DISTRICT EXECUTIVE APPROVAL REQUIRED IF TURNING SPACE IS NOT ENTIRELY ON SIDEWALK

(1) SIDE FLARES 10.00% MAX SLOPE.

(2) IF THE TURNING SPACE IS INDICATED TO BE LESS THAN 4'-0", CONSTRUCT SIDE FLARES 8.33% MAX SLOPE.

(3) OPTIONAL ROLLED CONCRETE SURFACE OR REGRADE SLOPE CAN BE USED TO MEET THE ADJACENT SURFACES IN LIEU OF A RETURN CURB CHEEK WALL.

(4) 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
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CURB RAMPS AND SIDEWALKS

NEW CONSTRUCTION OR ALTERATION DETAILS TYPE 1 AND TYPE 1A CURB RAMPS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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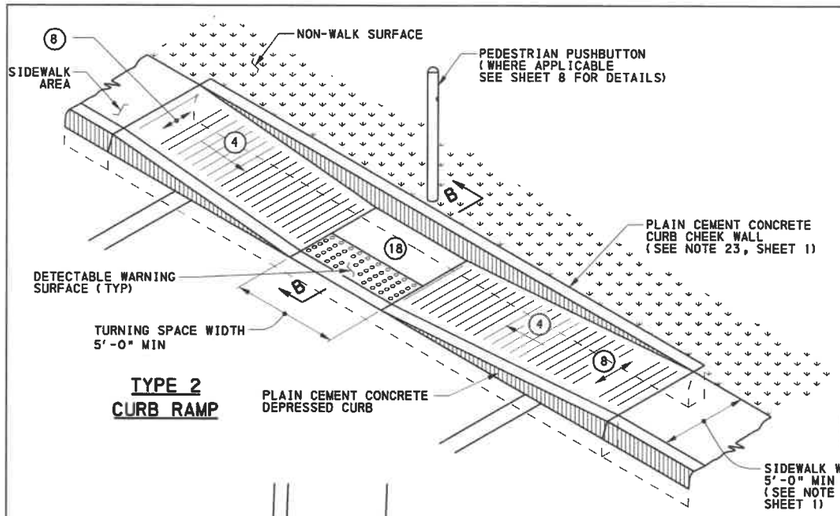
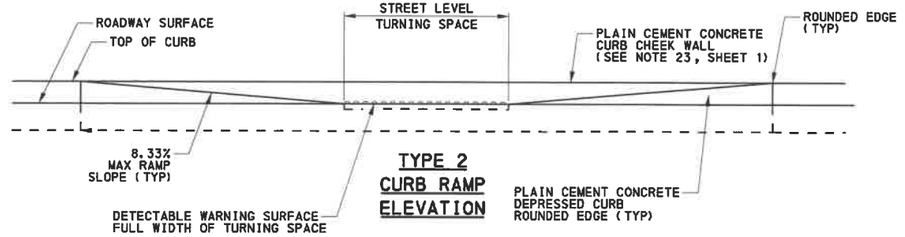
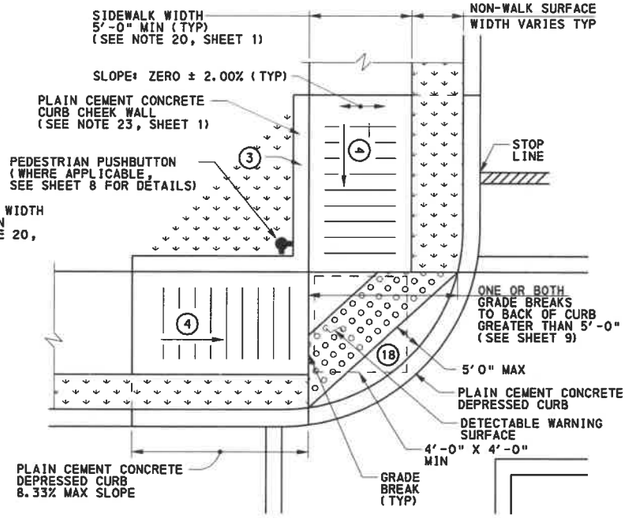
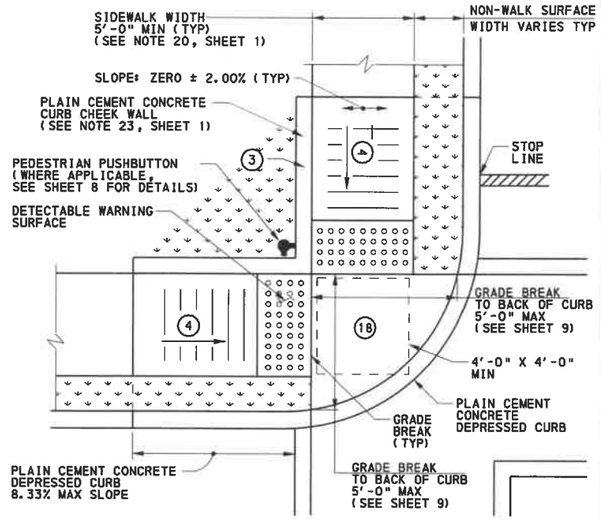


TYPE 2
CURB RAMP

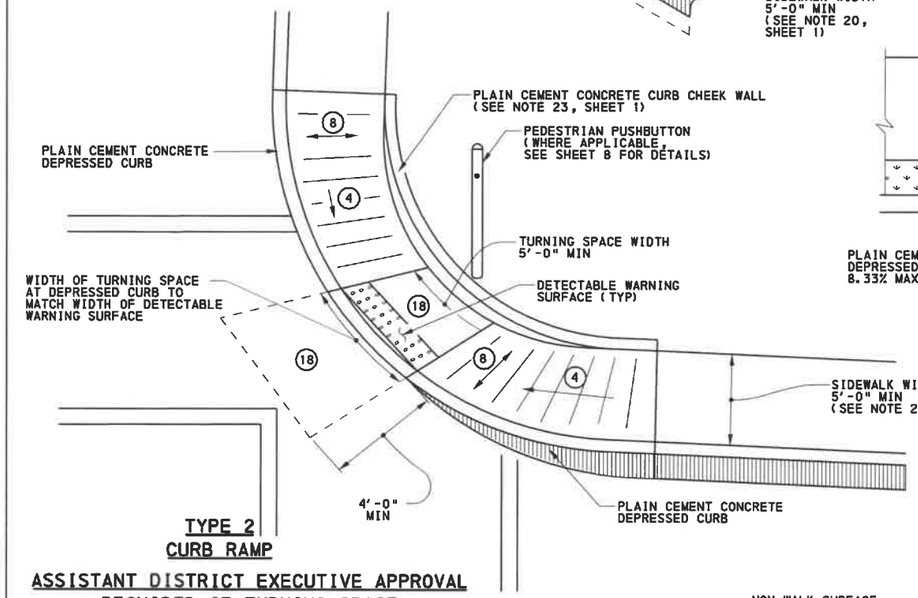


TYPE 2
CURB RAMP
ELEVATION

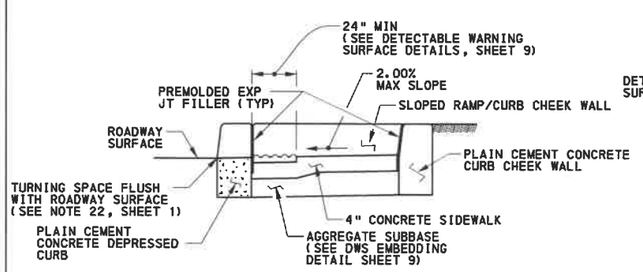




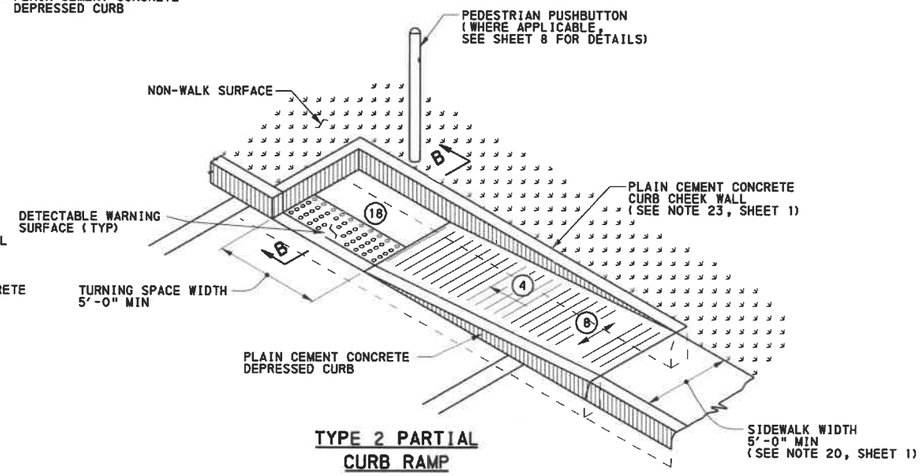
TYPE 1A
CURB RAMPS
ASSISTANT DISTRICT EXECUTIVE APPROVAL
REQUIRED IF TURNING SPACE
IS NOT ENTIRELY ON SIDEWALK



TYPE 2
CURB RAMP
ASSISTANT DISTRICT EXECUTIVE APPROVAL
REQUIRED IF TURNING SPACE
IS NOT ENTIRELY ON SIDEWALK



TYPE 2
CURB RAMP
SECTION B-B



TYPE 2 PARTIAL
CURB RAMP

(3) OPTIONAL CONCRETE ROLLED FLARE OR REGRADE SLOPE CAN BE USED TO MEET THE ADJACENT SURFACES IN LIEU OF PLAIN CEMENT CONCRETE CURB CHEEK WALL. SEE SHEET 4.

(4) 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1

(8) SLOPE: ZERO ±2.00%

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

NEW CONSTRUCTION OR ALTERATION DETAILS TYPE 1A AND TYPE 2 CURB RAMPS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
ACTING DIR. BUREAU OF PROJECT DELIVERY

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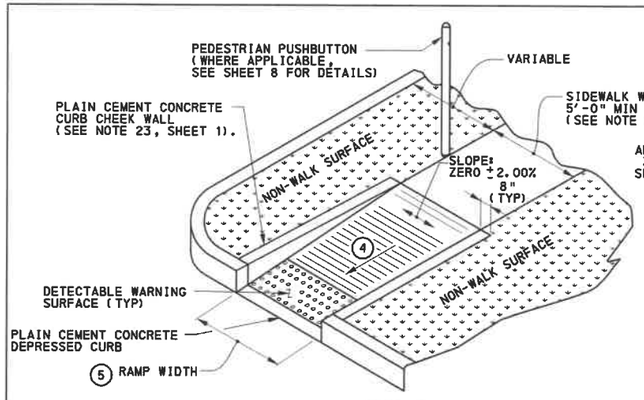
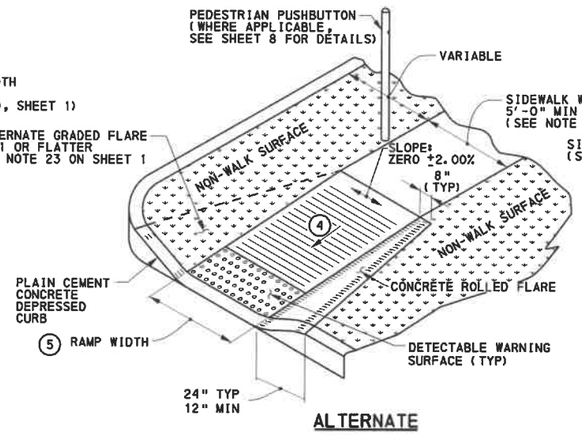
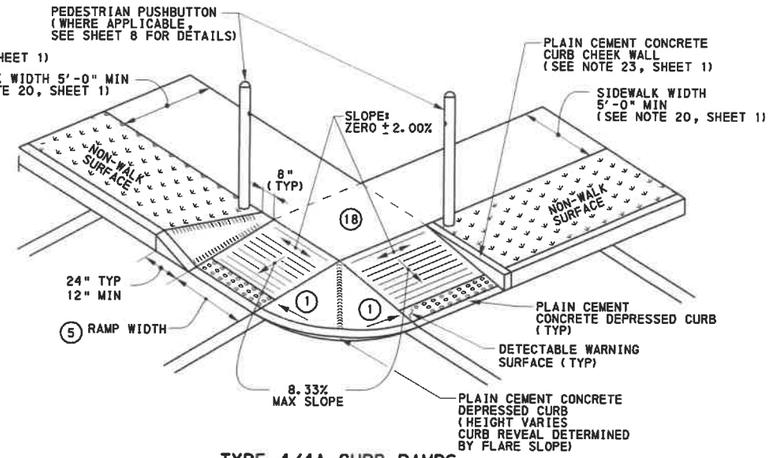


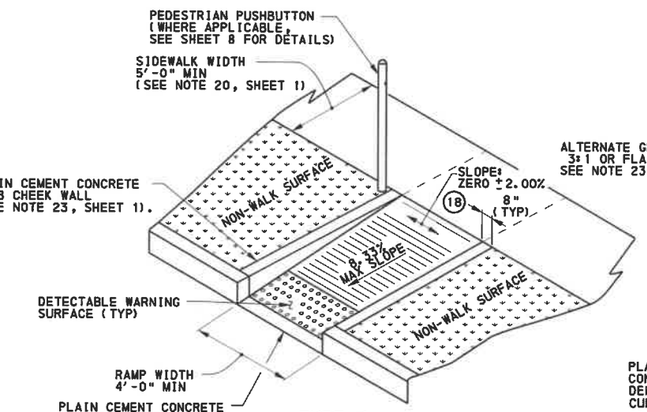
TYPE 4
CURB RAMP
(PARALLEL)



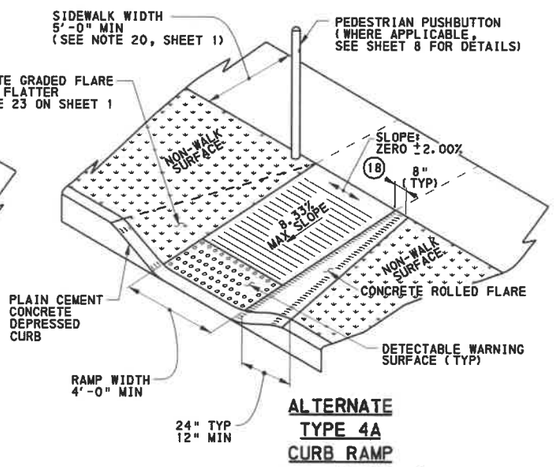
ALTERNATE
TYPE 4A
CURB RAMP
(PARALLEL)



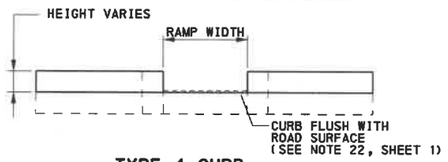
TYPE 4/4A CURB RAMPS
WITH SHARED TURNING SPACE



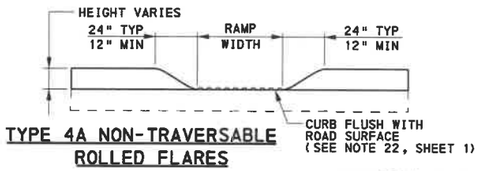
TYPE 4
CURB RAMP
(PERPENDICULAR)



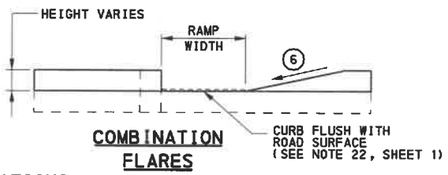
ALTERNATE
TYPE 4A
CURB RAMP
(PERPENDICULAR)



TYPE 4 CURB
CHEEK WALL FLARES



TYPE 4A NON-TRAVERSABLE
ROLLED FLARES



COMBINATION
FLARES

TYPICAL ELEVATIONS
FOR DEPRESSED CURBS

(1) SIDE FLARES 10.00% MAX SLOPE.
(4) 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.
(5) CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO THE MINIMUM 4'-0".
(6) SLOPE VARIES SEE RAMP DETAILS.
(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS NEW CONSTRUCTION OR ALTERATION DETAILS TYPE 4 CURB RAMPS AND TYPICAL ELEVATIONS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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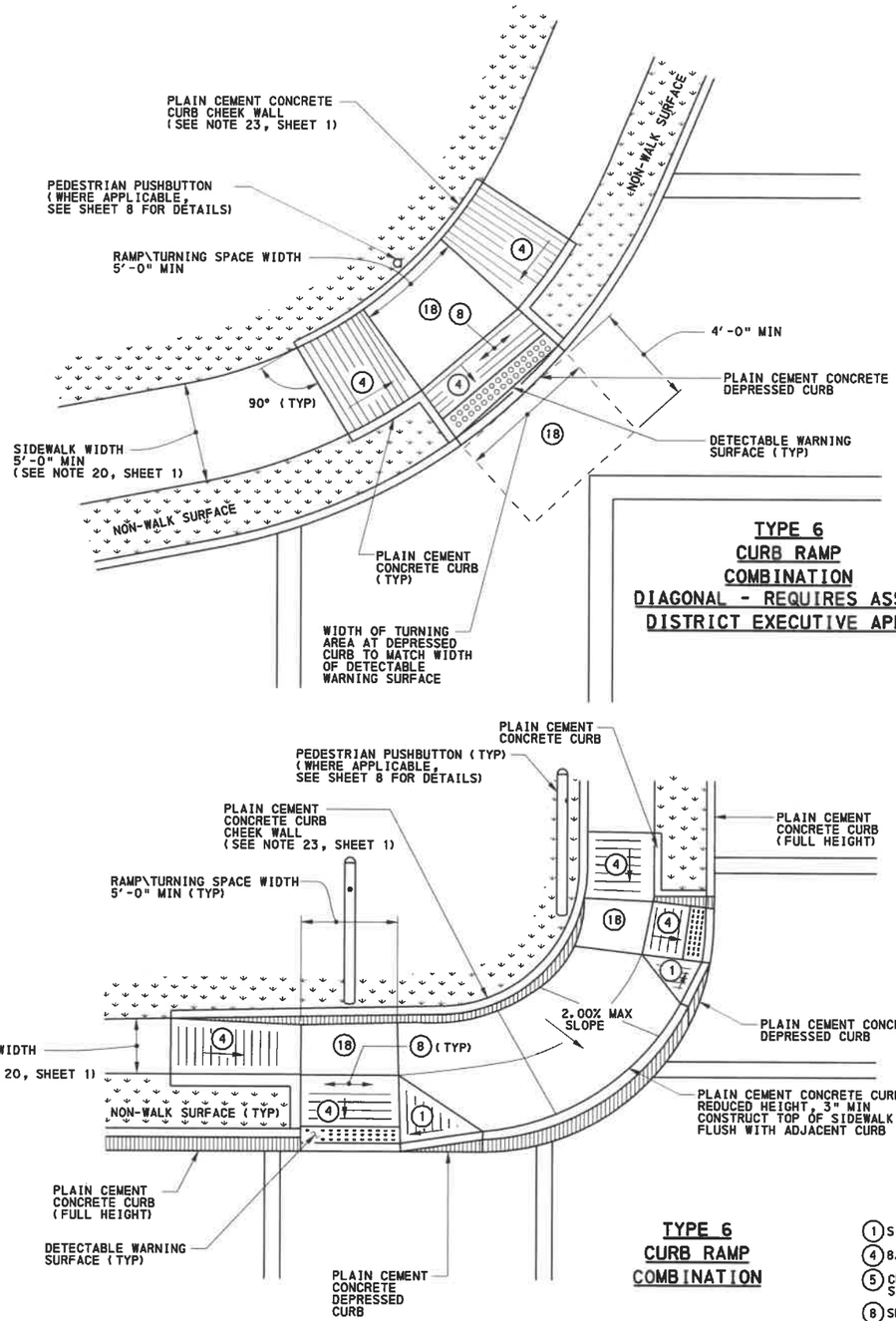
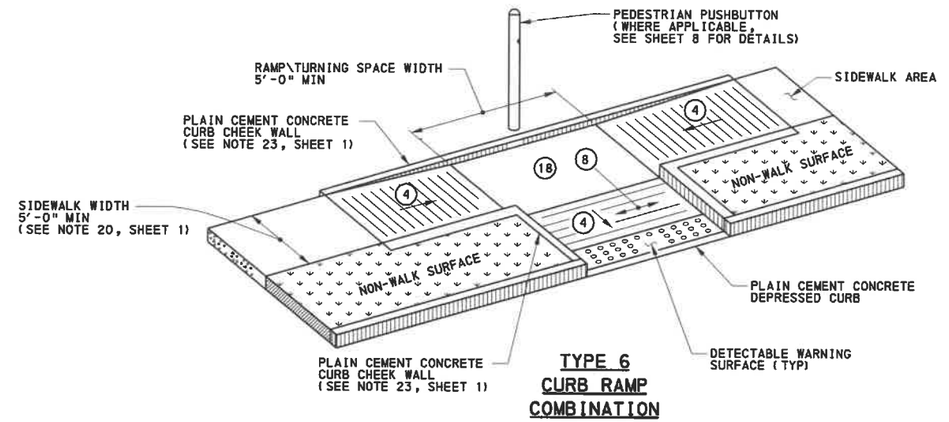
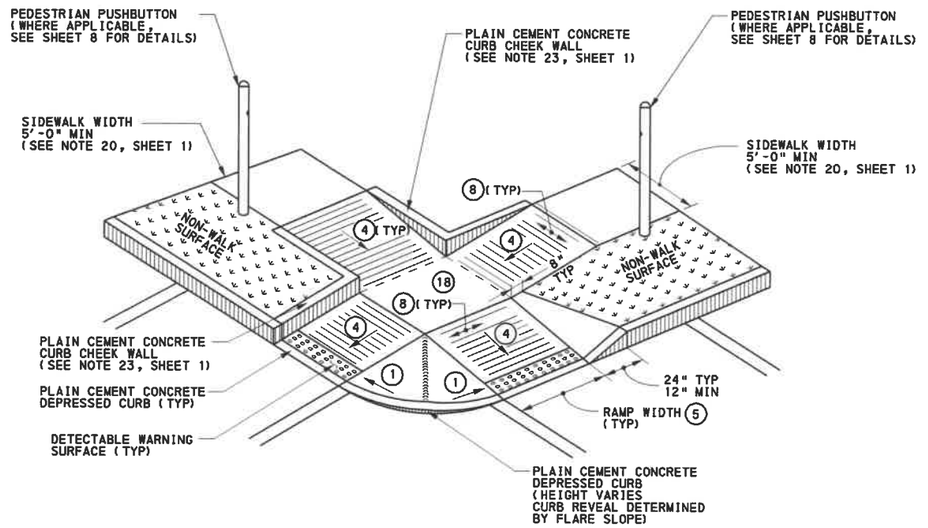


TYPE 6 CURB RAMP COMBINATION DIAGONAL - REQUIRES ASSISTANT DISTRICT EXECUTIVE APPROVAL

TYPE 6 CURB RAMP COMBINATION



TYPE 6 CURB RAMP COMBINATION



TYPE 6 CURB RAMPS WITH SHARED TURNING SPACE

(1) SIDE FLARES 10.00% MAX SLOPE.

(4) 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.

(5) CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO 4'-0".

(8) SLOPE: ZERO ± 2.00%.

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

NEW CONSTRUCTION OR ALTERATION DETAILS TYPE 6 CURB RAMPS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
ACTING DIR. BUREAU OF PROJECT DELIVERY

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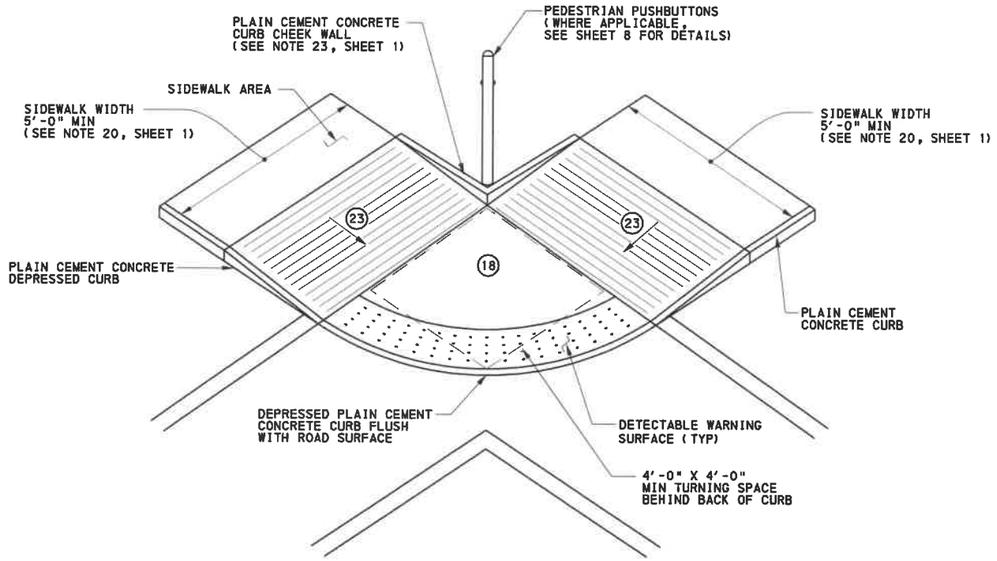
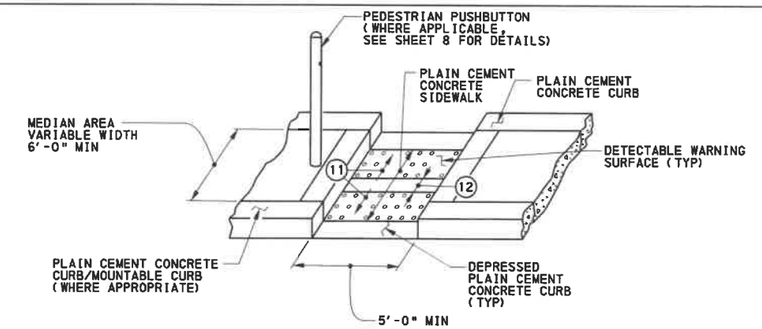
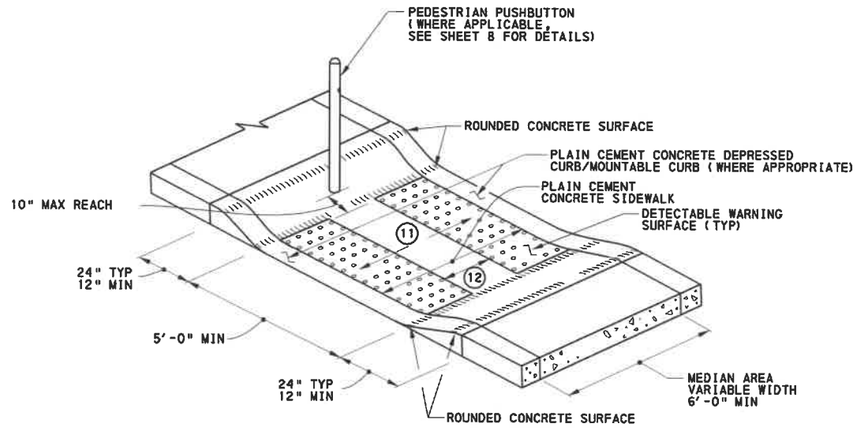


NOTE: DO NOT INSTALL GRATINGS, ACCESS COVERS AND OTHER APPURTENANCES ON THE BLENDED TRANSITION SURFACE WITHIN THE PEDESTRIAN ACCESS ROUTE. EXISTING UTILITY COVERS IN THE PATH OF TRAVEL ARE ACCEPTABLE IF THE TOP SURFACE IS FLUSH [LESS THAN 1/4" IN ELEVATION DIFFERENCE], FIRM, STABLE AND SLIP RESISTANT. INLET GRATES MUST HAVE OPENINGS NO GREATER THAN 1/2" IN DIRECTION OF TRAVEL.

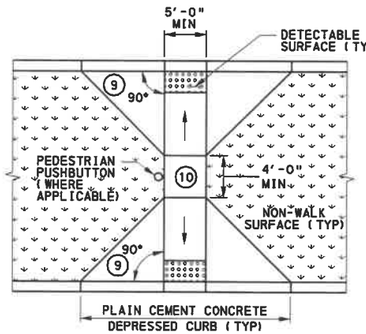
BLENDED TRANSITION



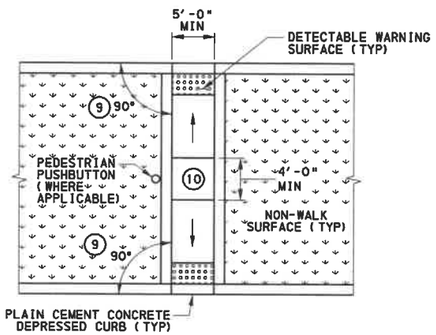
TYPE A
TYPICAL MEDIAN OR ISLAND ACCESS OPENING WITH CURB SIDES
(NARROW MEDIANS)



TYPE B
TYPICAL MEDIAN OR ISLAND ACCESS OPENING WITH FLARED SIDES
(NARROW MEDIANS)



RAMPED MEDIAN OR ISLAND ACCESS OPENING (TYPE 1 DOUBLE CURB RAMPS)



RAMPED MEDIAN OR ISLAND ACCESS OPENING (TYPE A DOUBLE CURB RAMPS)

(9) 90° DESIRABLE.

(10) TURNING SPACES ARE NOT REQUIRED FOR LONGITUDINAL SLOPES 5.00% OR LESS.

(11) PROVIDE ADEQUATE SLOPE FOR DRAINAGE (5.00% MAX).

(12) 2'-0" MIN SEPARATION. DO NOT INSTALL DETECTABLE WARNING SURFACES IF SEPARATION IS LESS THAN 2'-0". REFER TO DM-2 CHAPTER 6 FOR ADDITIONAL DETAILS.

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

(23) 5.00% MAX RUNNING SLOPE FOR BLENDED TRANSITION. FOR SLOPES GREATER THAN 5.00% SEE TYPE 2 CURB RAMPS ON SHEET 3 FOR ADDITIONAL DETAILS.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

NEW CONSTRUCTION OR ALTERATION DETAILS BLENDED TRANSITION / MEDIANS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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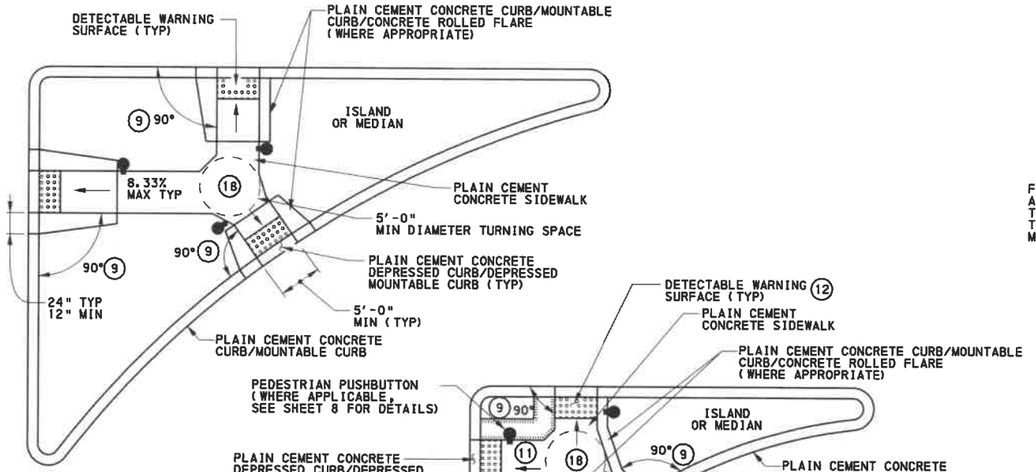


MEDIAN OR ISLAND CURB RAMPS

ALTERNATE SMALL ISLAND WITH CUT THROUGH

(9) 90° DESIRABLE.

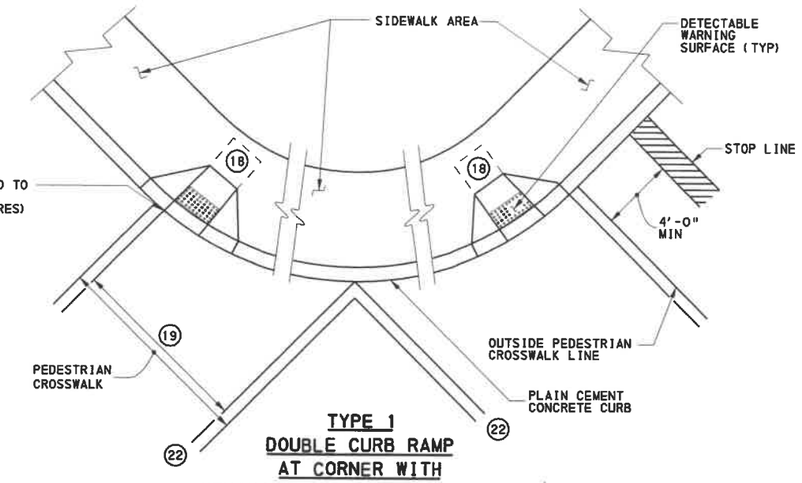
(11) PROVIDE ADEQUATE SLOPE FOR DRAINAGE (5.00% MAX).

(12) 2'-0" MIN SEPARATION. DO NOT INSTALL DETECTABLE WARNING SURFACES IF SEPARATION IS LESS THAN 2'-0".

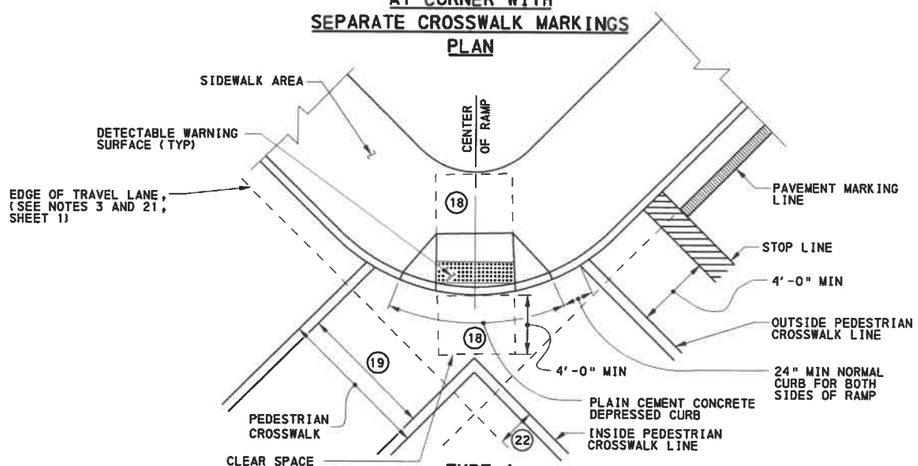
(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

(19) 6'-0" MIN MEASURED FROM INSIDE OF PAINTED EDGE TO INSIDE OF PAINTED EDGE.

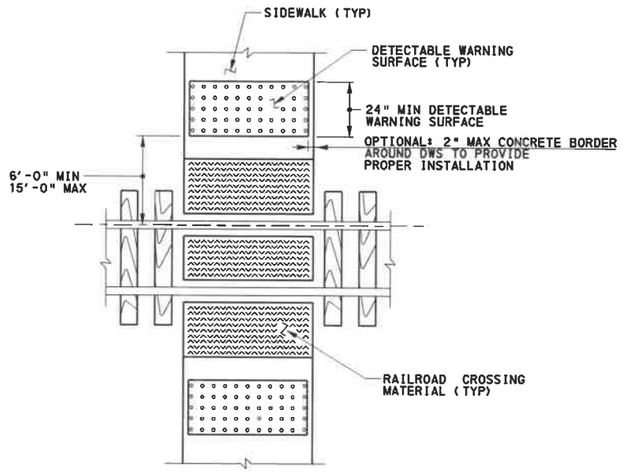
(22) THE INSIDE PEDESTRIAN CROSSWALK LINES MUST BE OUTSIDE OF THE PARALLEL VEHICLE TRAVEL LANE.



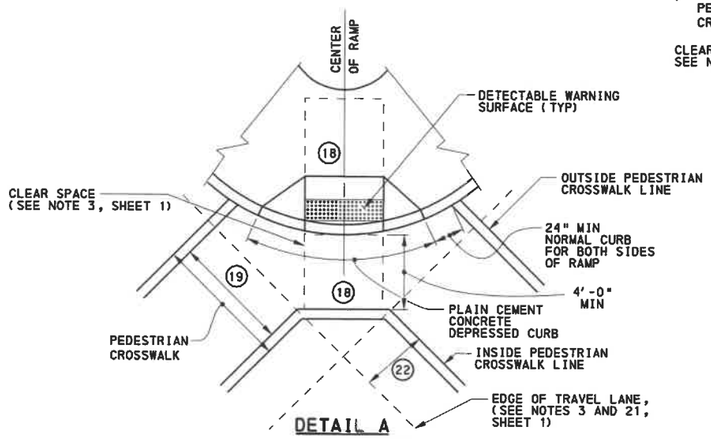
TYPE 1
DOUBLE CURB RAMP
AT CORNER WITH
SEPARATE CROSSWALK MARKINGS
PLAN



TYPE 1
SINGLE CURB RAMP AT
CORNER WITH CROSSWALK MARKINGS
PLAN
(DIAGONAL- REQUIRES ASSISTANT DISTRICT EXECUTIVE APPROVAL)



TYPICAL DETECTABLE WARNING
SURFACE AT RAILROAD CROSSING



DETAIL A
CLEAR SPACE
AT CROSSWALK MARKINGS
PLAN
(DIAGONAL - REQUIRES ASSISTANT DISTRICT EXECUTIVE APPROVAL)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR ALTERATION DETAILS
CROSSWALKS, MEDIANS, RAILROAD CROSSING DETECTABLE WARNING SURFACE

RECOMMENDED JUN. 10, 2013	RECOMMENDED JUN. 10, 2013	SHT 7 OF 14
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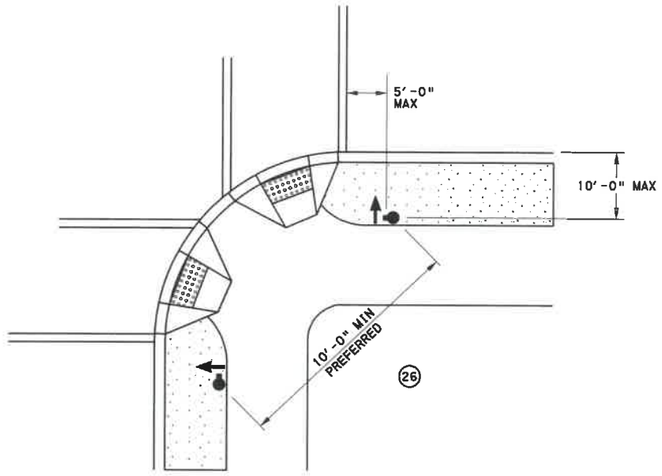
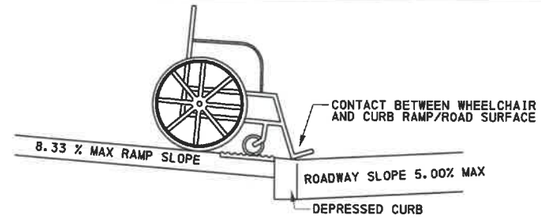
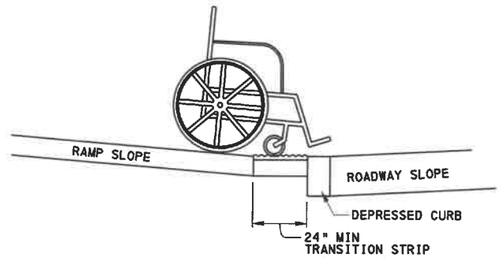


RECOMMENDED PUSHBUTTON LOCATIONS



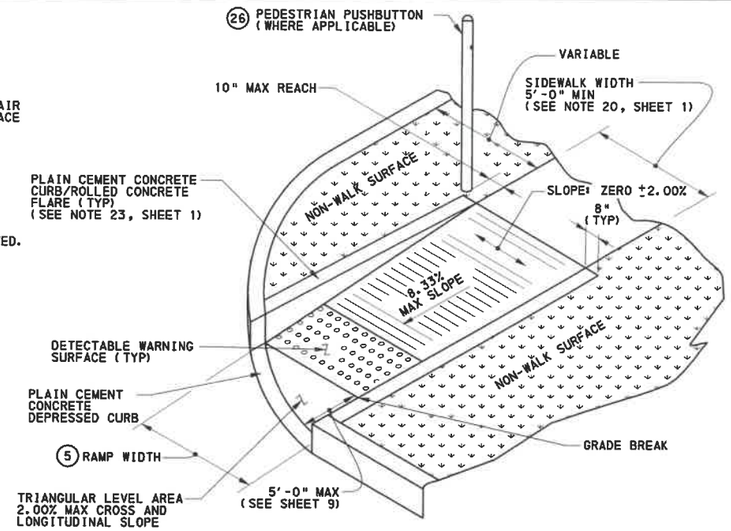
ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE GREATER THAN 13.33% NOT PERMITTED.



PROVIDE A 24" MIN TRANSITION STRIP IF ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE ARE GREATER THAN 13.33%.

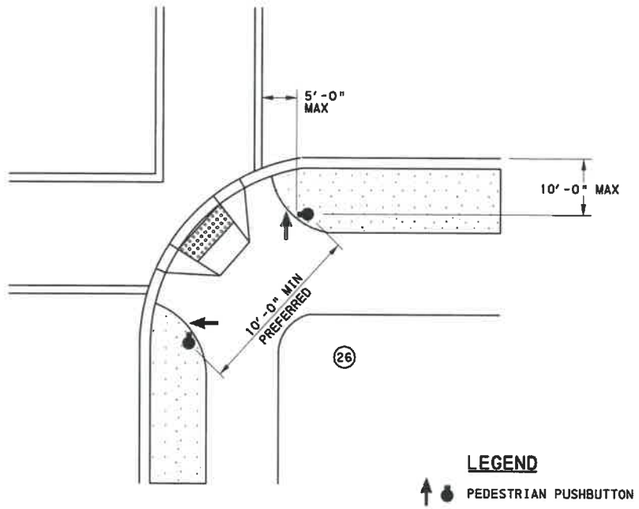
TRANSITION STRIP SLOPE NOT TO EXCEED 5.00%

CHANGE OF GRADE LIMITATIONS



TRIANGULAR LEVEL AREA FOR DIRECTIONAL RAMPS ON CURB RETURNS

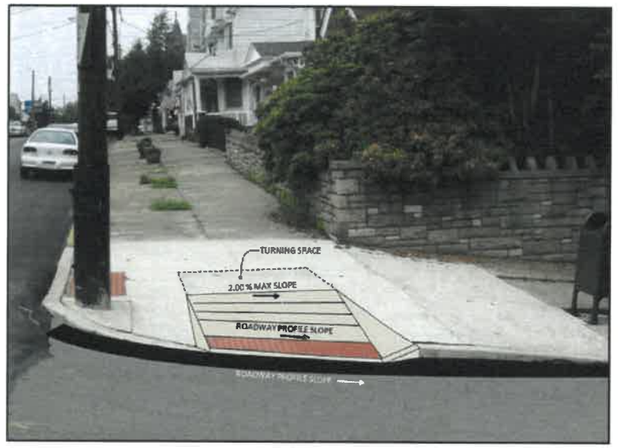
PROVIDE A LEVEL TRIANGULAR AREA WHEN DIRECTIONAL RAMPS ARE INSTALLED ON A CURB RETURN TO TRANSITION THE GRADE BREAK.



LEGEND

PEDESTRIAN PUSHBUTTON

RECOMMENDED PUSHBUTTON LOCATIONS



RAMP CROSS SLOPE TRANSITION TO MATCH ROADWAY PROFILE SLOPE

* SLOPES SHOWN ARE FOR ILLUSTRATION ONLY.

TRANSITION CURB RAMP CROSS SLOPE TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3.00 % PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.

COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE OR USE 1'-0" DETECTABLE WARNING SURFACE TILES.

CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE.

(5) CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO 4'-0".

(26) NEW CONSTRUCTION MUST COMPLY WITH RECOMMENDED LOCATIONS. FOR ALTERATION PROJECTS LOCATE PEDESTRIAN PUSHBUTTONS, TO THE MAXIMUM EXTENT FEASIBLE, AS FOLLOWS:

- ADJACENT TO A LEVEL NON-SLIP SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS A NON-SLIP WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- WITHIN 5'-0" OF THE CROSSWALK EXTENDED.
- BETWEEN 1'-6" AND 10'-0" OF THE EDGE OF CURB, SHOULDER OR PAVEMENT.
- PARALLEL TO THE CROSSWALK TO BE USED.

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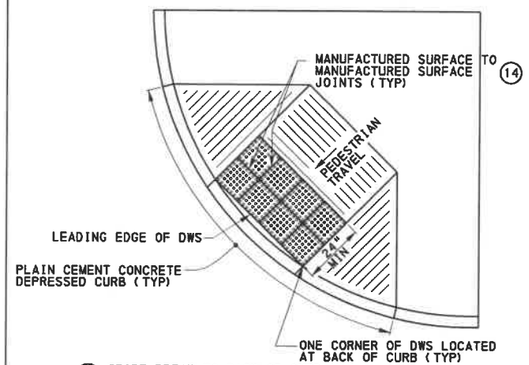
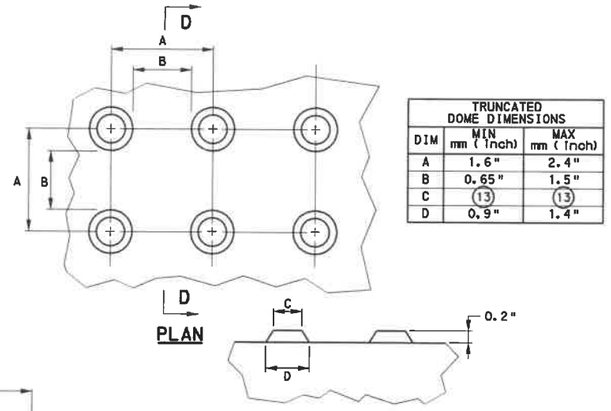
CURB RAMPS AND SIDEWALKS NEW CONSTRUCTION OR ALTERATION DETAILS PUSHBUTTONS, TRIANGULAR LEVEL AREA, CHANGE OF GRADE AND CROSS SLOPE TRANSITIONS

RECOMMENDED JUN. 10, 2013 CHIEF, HWY. DELIVERY DIVISION	RECOMMENDED JUN. 10, 2013 ACTING DIR. BUREAU OF PROJECT DELIVERY	SHT 8 OF 14 RC-67M

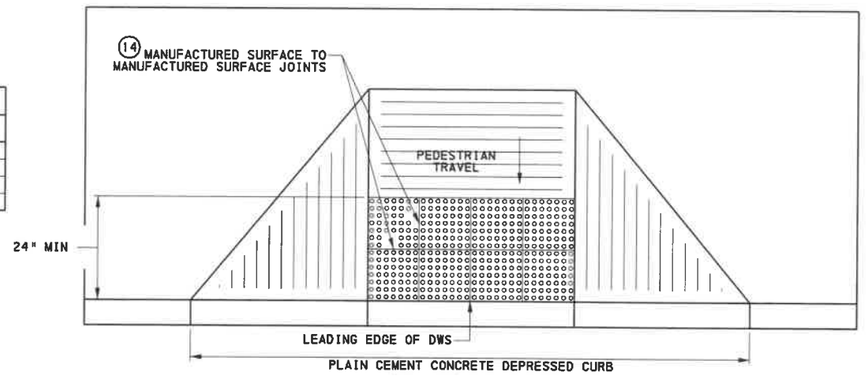
SEE NOTE 3 ON SHEET 1 CONCERNING DIAGONAL RAMPS



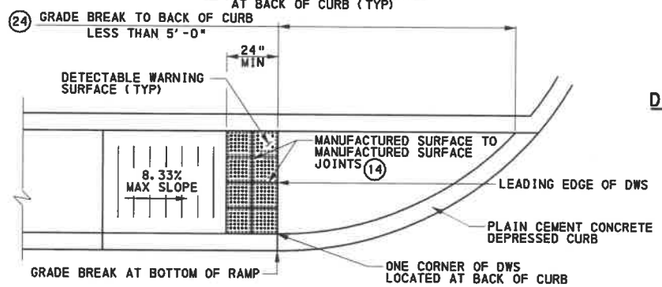


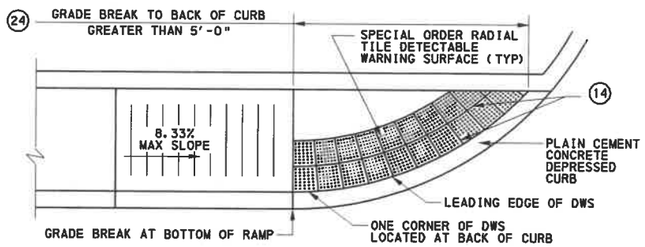
TRUNCATED DOME DIMENSIONS		
DIM	MIN mm (inch)	MAX mm (inch)
A	1.6"	2.4"
B	0.65"	1.5"
C	(13)	(13)
D	0.9"	1.4"

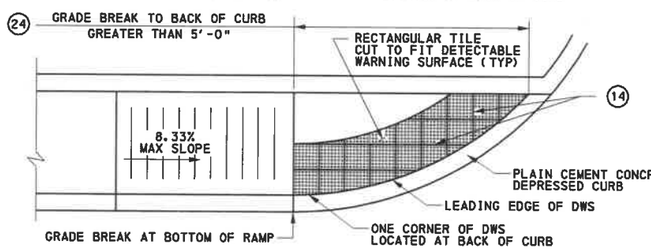
DETECTABLE WARNING SURFACE (DWS)
TRUNCATED DOME DETAILS

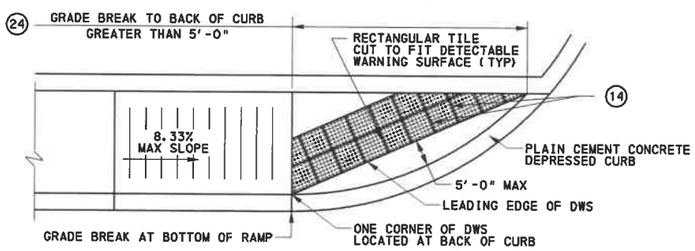


DETECTABLE WARNING SURFACE (DWS)
ON TYPE 1 CURB RAMP







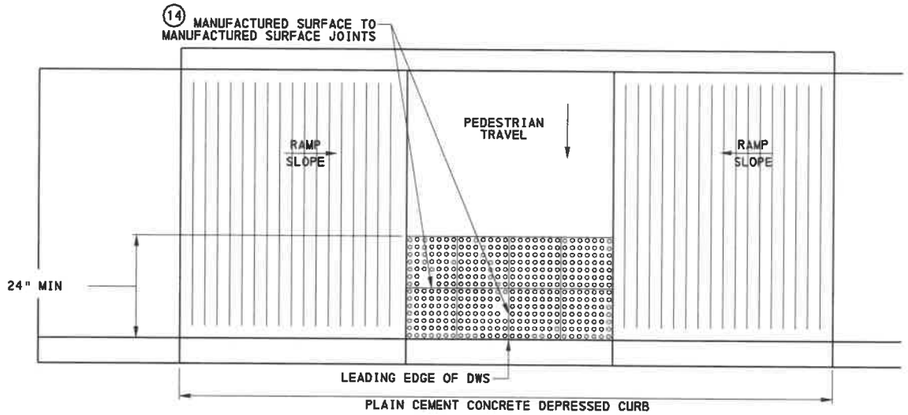


DETECTABLE WARNING SURFACE (DWS)
ON CURVED SURFACES

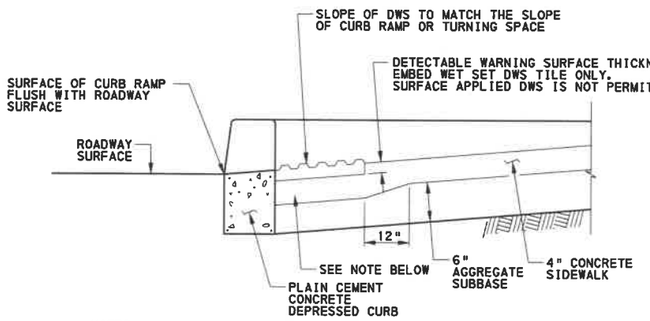
(13) THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

(14) PLACE ADJACENT DWS TILES WITH MANUFACTURED SURFACE TO MANUFACTURED SURFACE. CUT TILES ALONG THE PERIMETER ONLY.

(24) LOCATE ONE CORNER OF THE DWS AT THE BACK OF CURB. NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 5'-0" AWAY FROM THE BACK OF CURB.



DETECTABLE WARNING SURFACE (DWS)
ON TYPE 2 CURB RAMP



NOTES:
CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.

OPTIONAL: CONSTRUCT 2" MAX CONCRETE BORDER AROUND DWS TO PROVIDE PROPER INSTALLATION. SEE PEDESTRIAN PUSHBUTTON ACCESS AREAS DETAIL ON SHEET 14, FOR PLAN VIEW DETAILS.

DETECTABLE WARNING SURFACE
EMBEDDING DETAIL

COMMONWEALTH OF PENNSYLVANIA
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BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

NEW CONSTRUCTION OR ALTERATION DETAILS DETECTABLE WARNING SURFACE

RECOMMENDED JUN. 10, 2013
R. Wyatt Dilley
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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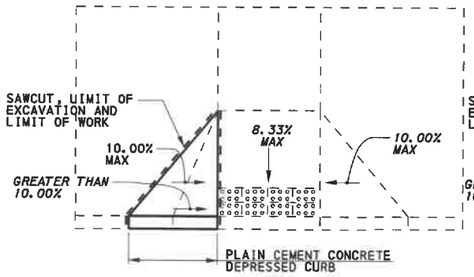
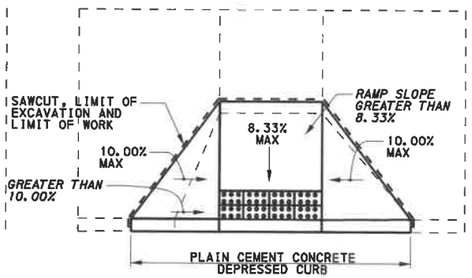


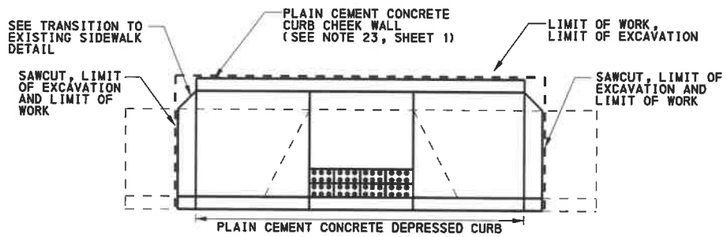
DETAIL ILLUSTRATES FLARE REMOVAL AND REPLACEMENT.

SIDE FLARE RECONSTRUCTION



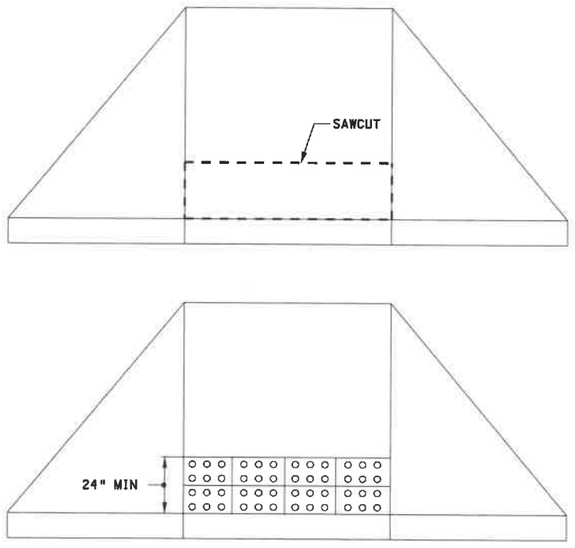
DETAIL ILLUSTRATES CURB RAMP (INCLUDING FLARES) REPLACEMENT.

TOTAL RAMP RECONSTRUCTION

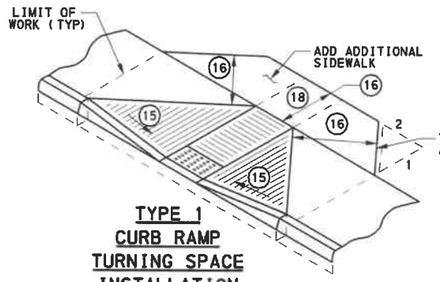


DETAIL ILLUSTRATES A TYPE 1 EXISTING RAMP REPLACED WITH A TYPE 2 RAMP. USE THIS DETAIL AS AN EXAMPLE TO REPLACE ANY RAMP WITH A DIFFERENT CURB RAMP TYPE.

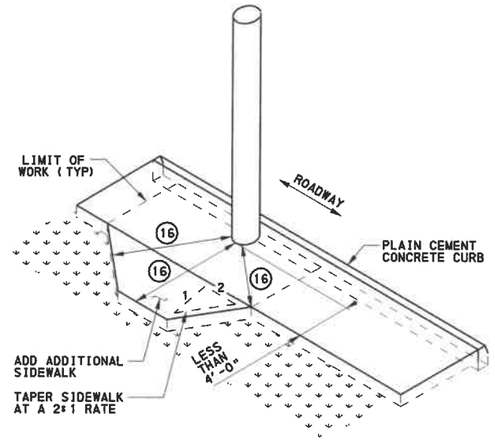
TOTAL RAMP RECONSTRUCTION (RAMP TYPE CHANGE)



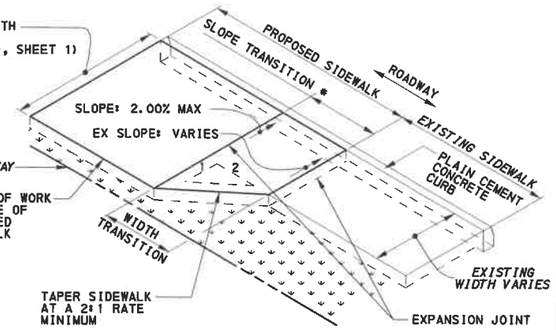
DETECTABLE WARNING SURFACE (DWS) INSTALLATION DETAIL



TYPE 1 CURB RAMP TURNING SPACE INSTALLATION



SIDEWALK ADDITION DUE TO OBSTRUCTIONS



TRANSITION TO EXISTING SIDEWALK DETAIL

* MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: DELTA % SLOPE X 0.5'.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: CHANGE IN WIDTH X 2.

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.

DETECTABLE WARNING SURFACE (DWS) INSTALLATION INSTRUCTIONS

1. SAW CUT EXISTING CURB RAMP SURFACE WHERE THE DWS WILL BE PLACED.
2. REMOVE EXISTING CONCRETE FROM THIS AREA.
3. REPLACE AND COMPACT ANY DISTURBED AGGREGATE SUBBASE.
4. PLACE NEW CEMENT CONCRETE AND LEVEL TO A 4 INCH DEPTH SO THAT THE TOP OF THE CONCRETE IS LOWER THAN THE ADJOINING SIDEWALK, EQUIVALENT TO THE EMBEDDING DEPTH OF THE DWS MATERIAL.
5. LAY OUT AND PROPERLY FIT EACH UNIT PRIOR TO SETTING IN WET CONCRETE.
6. CUT UNITS AS NECESSARY ALONG PERIMETER OF DETECTABLE WARNING SURFACE.
7. PLACE UNITS ACROSS THE ENTIRE WIDTH OF THE CURB RAMP SURFACE AND/OR WHERE THE CURB IS FLUSH.
8. PRESS UNITS INTO FULL CONTACT WITH THE FRESH CONCRETE.
9. ADJUST HEIGHT OF EACH UNIT EDGE TO BE LEVEL WITH ADJACENT RAMP SURFACES.
10. ONLY TRUNCATED DOMES SHOULD BE ABOVE THE ADJACENT FINISHED CONCRETE.
11. FILL ANY SAW CUT GAPS WITH APPROVED JOINT SEALANT MATERIAL.

(15) SIDE FLARES 10.00% MAX FOR RAMPS WITH TURNING SPACES 4'-0" OR GREATER. SIDE FLARES 8.33% MAX FOR RAMPS WITH TURNING SPACES LESS THAN 4'-0".

(16) 4'-0" MIN PEDESTRIAN ACCESS ROUTE.

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

COMMONWEALTH OF PENNSYLVANIA
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BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

ALTERATION DETAILS

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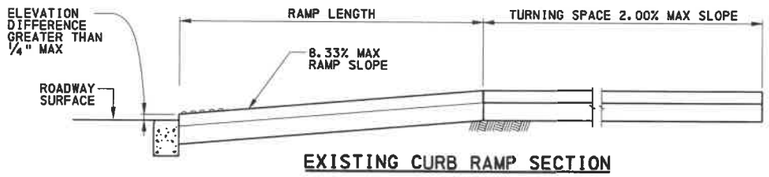
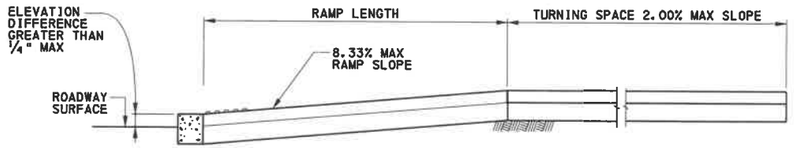


EXISTING CURB RAMP SECTION
(VERTICAL DROP AT RAMP)

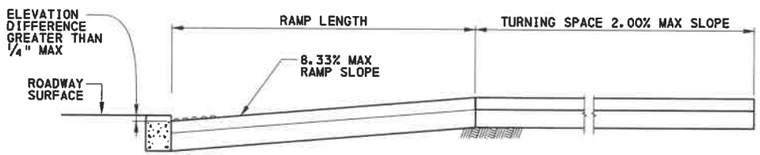
RECOMMENDED CORRECTION:
RECONSTRUCT THE ENTIRE (OR PORTIONS OF) RAMP, TURNING SPACES AND FLARES WHERE APPLICABLE (SEE RAMP RECONSTRUCTION DETAIL ON SHEET 10).



EXISTING CURB RAMP SECTION
(VERTICAL DROP AT ROAD SURFACE)

RECOMMENDED CORRECTION:
RECONSTRUCT THE ENTIRE (OR PORTIONS OF) RAMP, TURNING SPACES AND FLARES WHERE APPLICABLE (SEE RAMP RECONSTRUCTION DETAIL ON SHEET 10).

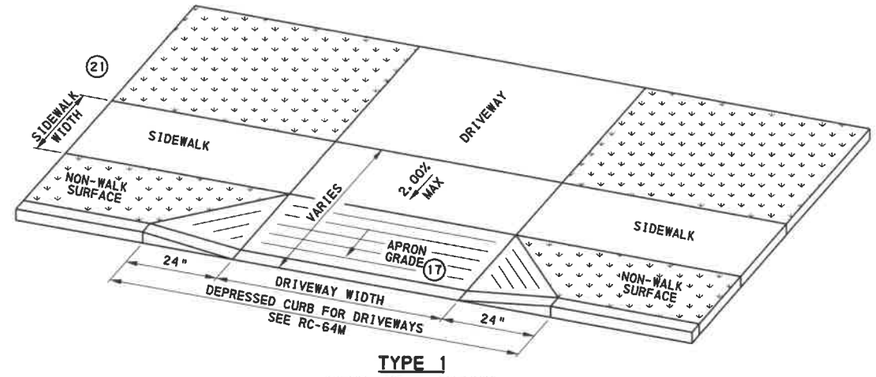
ALTERNATE CORRECTION:
GRIND CURB TO PROVIDE A MAX SLOPE OF 8.33%, FINISHED SURFACE MUST NOT HAVE ELEVATION DIFFERENCES GREATER THAN 1/4".



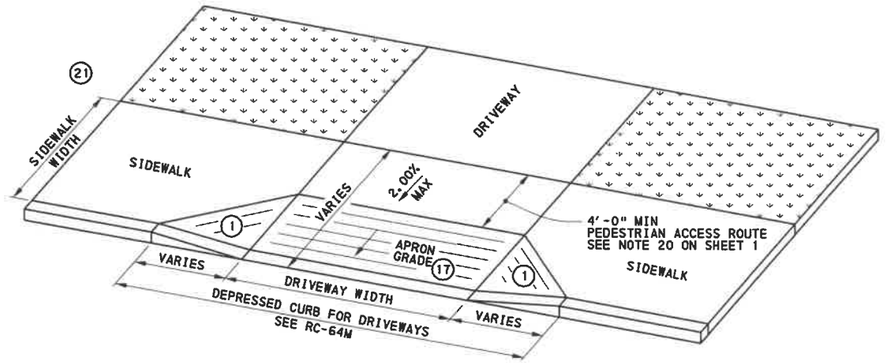
EXISTING CURB RAMP SECTION
(RAMP SETTLEMENT)

RECOMMENDED CORRECTION:
RECONSTRUCT THE ENTIRE (OR PORTIONS OF) RAMP, TURNING SPACES AND FLARES WHERE APPLICABLE (SEE RAMP RECONSTRUCTION DETAIL ON SHEET 10).

ALTERATION DETAILS



TYPE 1
DRIVEWAY APRON



TYPE 1A
DRIVEWAY APRON

(1) SIDE FLARES 10.00% MAX SLOPE.

(17) 8.00% MAX CHANGE IN GRADE BETWEEN ROAD SURFACE AND DRIVEWAY.

(21) MINIMUM SIDEWALK WIDTH 5'-0" (SEE NOTE 20, SHEET 1).

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

ALTERATION DETAILS
AND DRIVEWAY APRONS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

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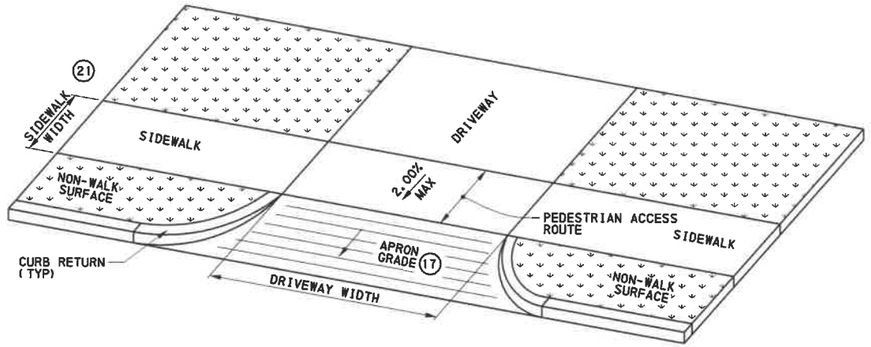
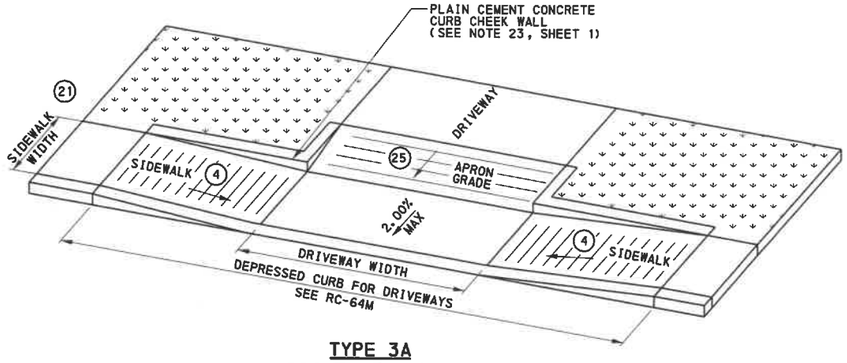
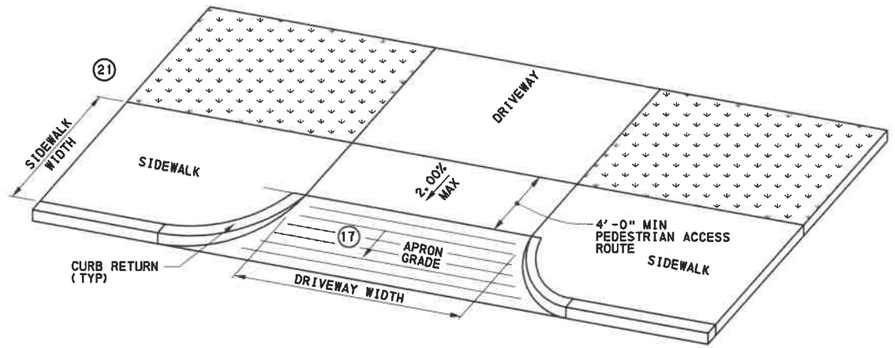


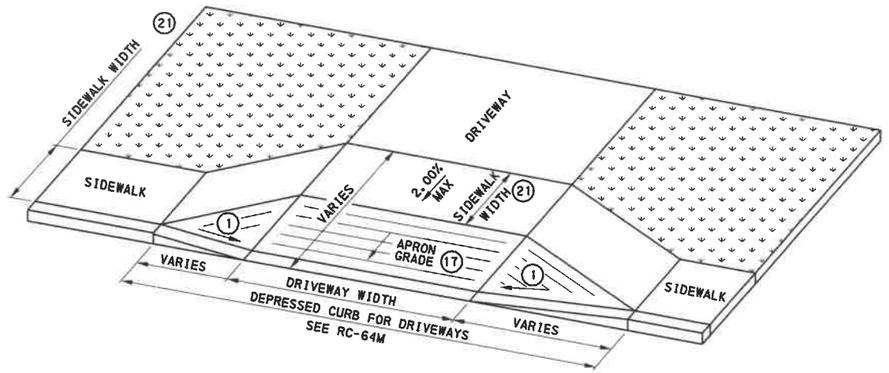
TYPE 2
DRIVEWAY APRON



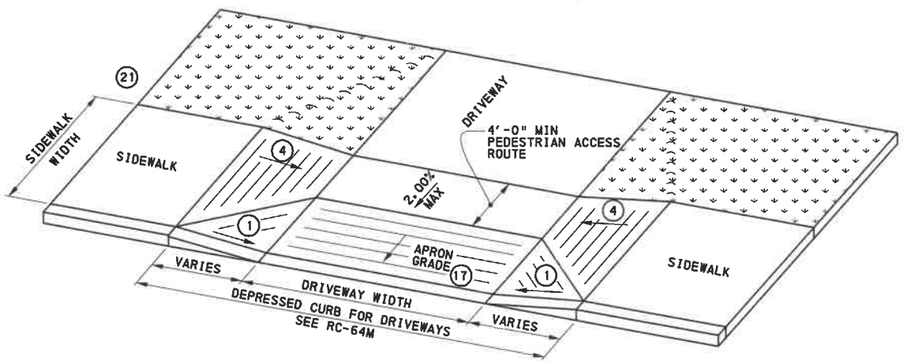
TYPE 3A
DRIVEWAY APRON



TYPE 2A
DRIVEWAY APRON



TYPE 4
DRIVEWAY APRON



TYPE 3
DRIVEWAY APRON

(1) SIDE FLARES 10.00% MAX SLOPE.

(4) 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.

(17) 8.00% MAX CHANGE IN GRADE BETWEEN ROAD SURFACE AND DRIVEWAY.

(21) MINIMUM SIDEWALK WIDTH 5'-0" (SEE NOTE 20, SHEET 1)

(25) 8.00% MAX CHANGE IN GRADE BETWEEN DRIVEWAY SURFACE AND SIDEWALK.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
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CURB RAMPS AND SIDEWALKS

DRIVEWAY APRONS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
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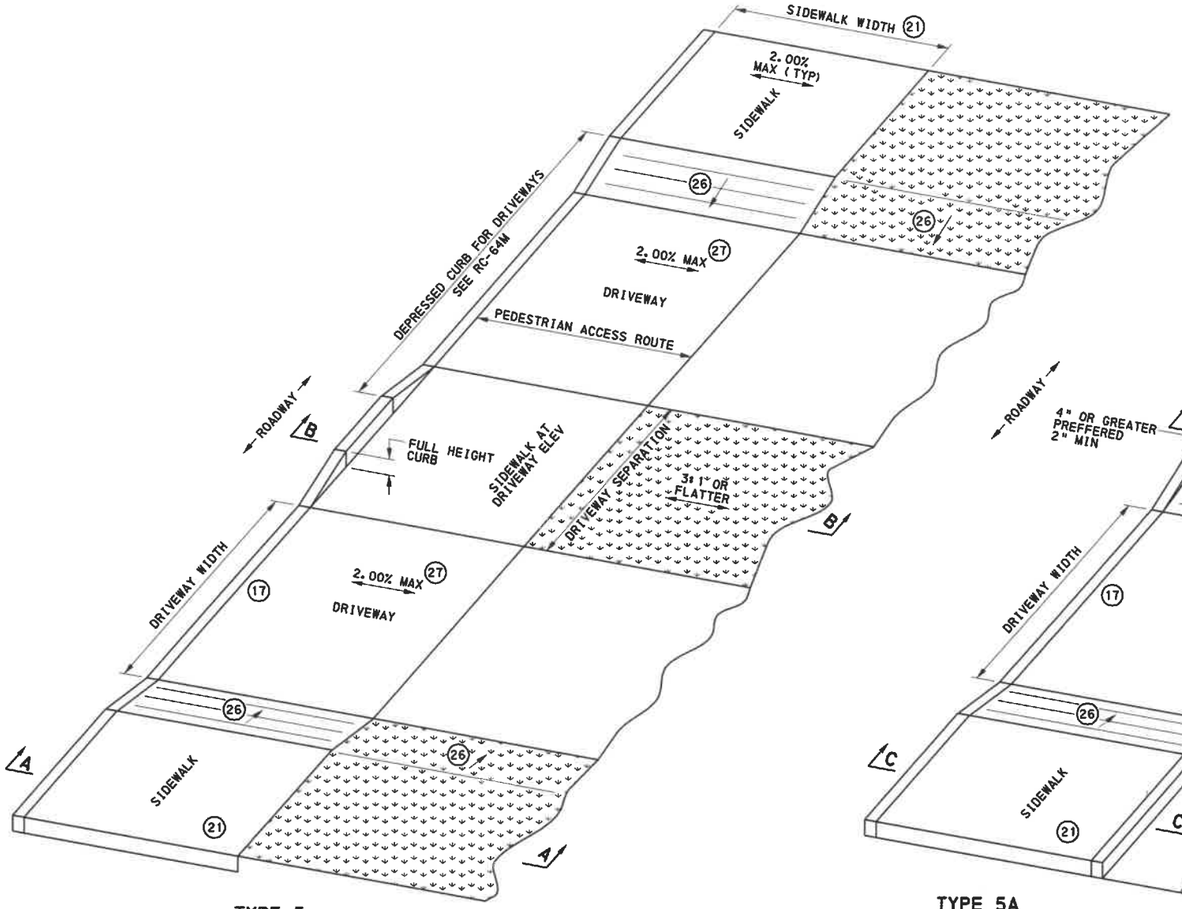
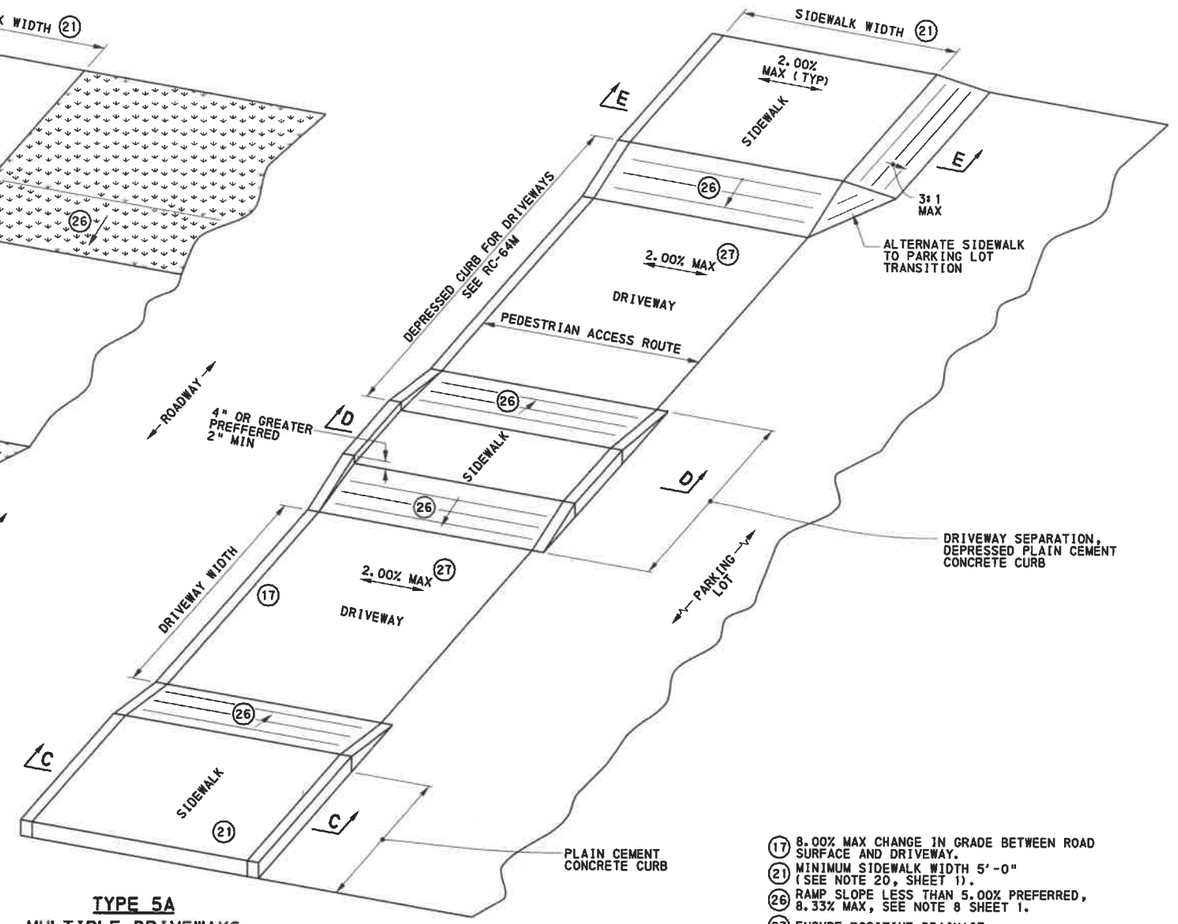
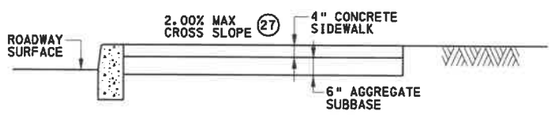


TYPE 5
MULTIPLE DRIVEWAYS

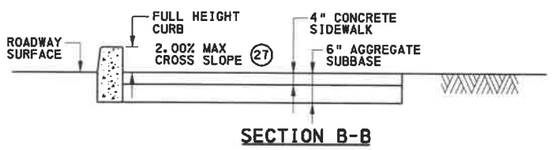


TYPE 5A
MULTIPLE DRIVEWAYS

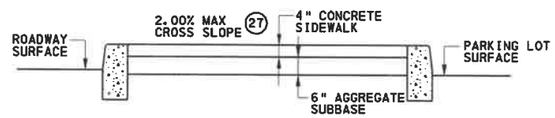
(17) 8.00% MAX CHANGE IN GRADE BETWEEN ROAD SURFACE AND DRIVEWAY.
(21) MINIMUM SIDEWALK WIDTH 5'-0" (SEE NOTE 20, SHEET 1).
(26) RAMP SLOPE LESS THAN 5.00% PREFERRED, 8.33% MAX, SEE NOTE 8 SHEET 1.
(27) ENSURE POSITIVE DRAINAGE.



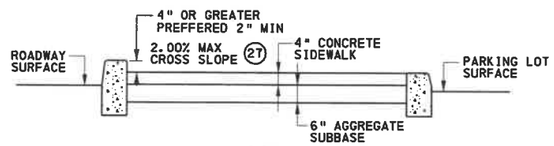
SECTION A-A



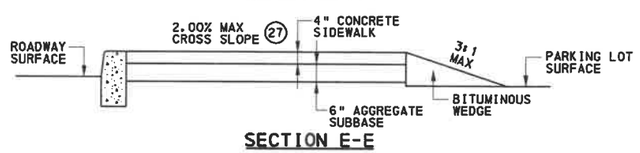
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

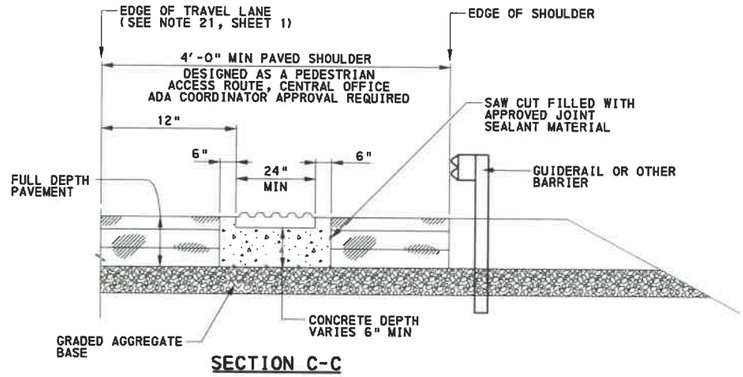
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS

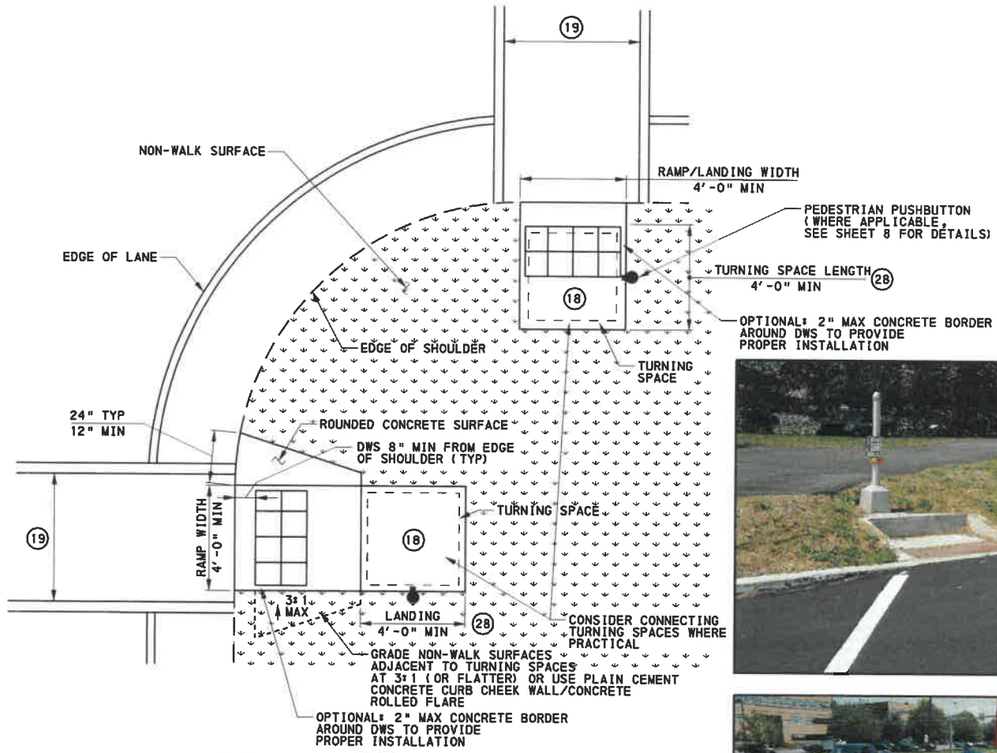
DRIVEWAY APRONS

RECOMMENDED JUN. 10, 2013
CHIEF, HWY. DELIVERY DIVISION

RECOMMENDED JUN. 10, 2013
ACTING DIR. BUREAU OF PROJECT DELIVERY



SECTION C-C

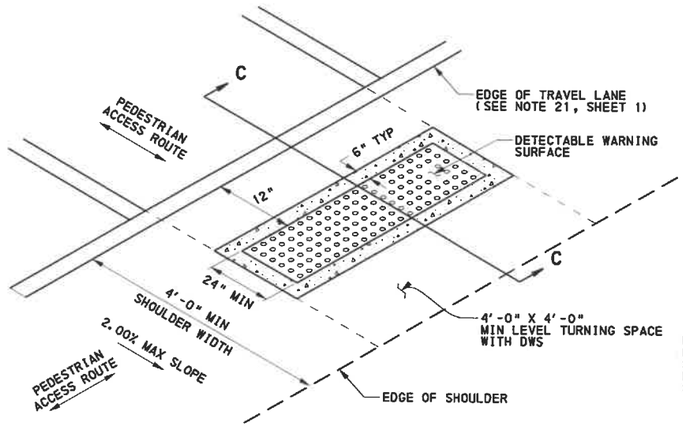


PEDESTRIAN PUSHBUTTON
ACCESS AREAS

(18) CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

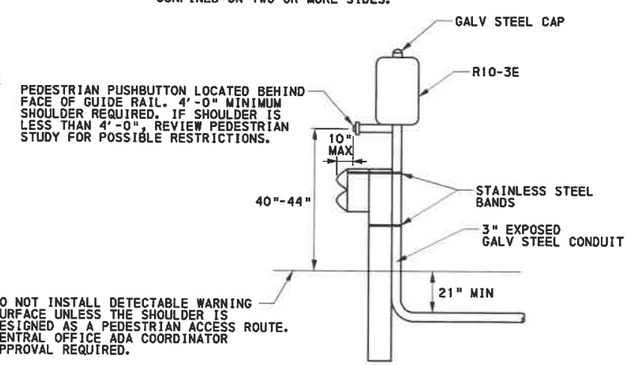
(19) 6'-0" MIN MEASURED FROM INSIDE OF PAINTED EDGE TO INSIDE OF PAINTED EDGE.

(28) TURNING SPACES SHOWN ARE TO PROVIDE ACCESS TO PEDESTRIAN PUSHBUTTON. TURNING SPACE MUST BE 5'-0" X 5'-0" WHEN CONFINED ON TWO OR MORE SIDES.



DWS PLACEMENT ON
PAVED SHOULDERS
DESIGNED AS A
PEDESTRIAN ACCESS
ROUTE (PAR)

CENTRAL OFFICE ADA COORDINATOR
APPROVAL REQUIRED



PEDESTRIAN PUSHBUTTON
BEHIND GUIDE RAIL

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS
DWS PLACEMENT ON PAVED SHOULDERS AND AT PEDESTRIAN PUSHBUTTONS

RECOMMENDED JUN. 10, 2013 CHIEF, HWY. DELIVERY DIVISION	RECOMMENDED JUN. 10, 2013 ACTING DIR. BUREAU OF PROJECT DELIVERY	SHT 14 OF 14 RC-67M