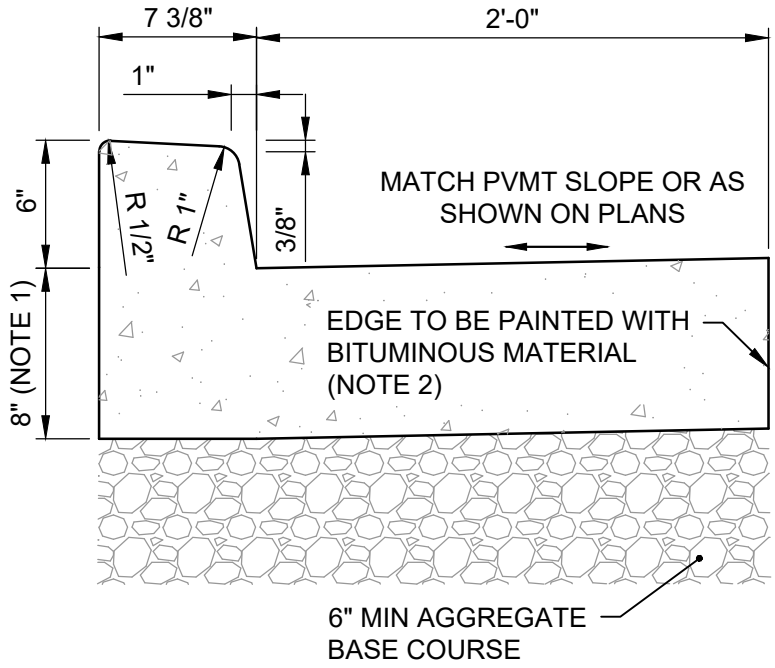
City of Ranson Standard Details			
Detail Number	**Description**	**Last Revision Date**	**Last Revision Description**
CURB AND GUTTER DETAILS			
CG-01	CONCRETE CURB AND GUTTER 25 MPH	12/1/2023	New Detail
CG-02	CONCRETE CURB AND GUTTER 45 MPH	12/1/2023	New Detail
CG-03	CONCRETE CURB 25 MPH	12/1/2023	New Detail
CG-04	CONCRETE CURB 45 MPH	12/1/2023	New Detail
CG-05	PLACEMENT OF CONCRETE CURB BY SEPARATE METHODS	12/1/2023	New Detail
DRIVEWAY DETAILS			
DW-01	RESIDENTIAL DRIVEWAY APRON - CURB AND GUTTER SECTION	12/1/2023	New Detail
DW-02	RESIDENTIAL DRIVEWAY APRON - SHOULDER SECTION	12/1/2023	New Detail
DW-03	COMMERCIAL DRIVEWAY APRON - CURB AND GUTTER SECTION	12/1/2023	New Detail
DW-04	COMMERCIAL DRIVEWAY APRON - SHOULDER SECTION	12/1/2023	New Detail
DW-05	RESIDENTIAL DRIVEWAY APRON - NO SIDEWALK	12/1/2023	New Detail
STREET LIGHTING DETAILS			
LT-01	RESIDENTIAL POST-TOP STREET LIGHT	12/1/2023	New Detail
LT-02	COMMERCIAL POST-TOP STREET LIGHT	12/1/2023	New Detail
LT-03	COMMERCIAL TWIN POST-TOP STREET LIGHT	12/1/2023	New Detail
LT-04	STREET LIGHT FOUNDATION	12/1/2023	New Detail
MISCELLANEOUS DETAILS			
MSC-01	SINKHOLE REPAIR - WVDOH RIGHT-OF-WAY	12/1/2023	New Detail
MSC-02	SINKHOLE REPAIR - OUTSIDE WVDOH RIGHT-OF-WAY	12/1/2023	New Detail
MSC-03	FENCING ACROSS DRAINAGE EASEMENT	12/1/2023	New Detail
PAVEMENT MARKING DETAILS			
PM-01	HIGH VISIBILITY CROSSWALK	12/1/2023	New Detail
PAVEMENT DETAILS			
PVT-01	ASPHALT PAVEMENT	12/1/2023	New Detail
PVT-02	CONCRETE PAVEMENT	12/1/2023	New Detail
PVT-03	ASPHALT PAVEMENT CONNECTION	12/1/2023	New Detail
PVT-04	ASPAHLT PAVEMENT RESTORATION	12/1/2023	New Detail
SIGN DETAILS			
SN-01	STREET NAME SIGN	12/1/2023	New Detail
SN-02	SIGN MOUNTING	12/1/2023	New Detail
SN-03	STREET SIGN MOUNTING BRACKET	12/1/2023	New Detail

SITE DETAILS			
ST-01	TYPICAL CONDITION - CORNER LOT	12/1/2023	New Detail
ST-02	SINGLE DUMPSTER ENCLOSURE	12/1/2023	New Detail
ST-03	DOUBLE DUMPSTER ENCLOSURE	12/1/2023	New Detail
SIDEWALK DETAILS			
SW-01	CONCRETE SIDEWALK WITH VEGETATED BUFFER	12/1/2023	New Detail
SW-02	SIDEWALK WITH MONOLITHIC CURB	12/1/2023	New Detail
SW-03	DETECTABLE WARNING SURFACE	12/1/2023	New Detail
SW-04	PERPENDICULAR CURB RAMP - NO CURB EXTENSION	12/1/2023	New Detail
SW-05	PERPENDICULAR CURB RAMP - CURB EXTENSION	12/1/2023	New Detail
SW-06	PARALLEL CURB RAMP	12/1/2023	New Detail
SW-07	RETROFIT CURB RAMP	12/1/2023	New Detail
UTILITY DETAILS			
UT-01	PIPE TRENCH FOR FLEXIBLE PIPE	12/1/2023	New Detail
UT-02	PIPE TRENCH FOR RIGID PIPE	12/1/2023	New Detail
STORMWATER MANAGEMENT			
SWM-01	CURBSIDE BIORETENTION BASIN	12/1/2023	New Detail
SWM-02	INLET AND OUTLET FOR CURB EXTENSION	12/1/2023	New Detail
SWM-03	BIORETENTION OVERFLOW - BEEHIVE INLET	12/1/2023	New Detail
SWM-04	BIORETENTION EDGE TREATMENT	12/1/2023	New Detail
SWM-05	BIORETENTION OVERFLOW - BEEHIVE INLET	12/1/2023	New Detail
ROADWAY TYPICAL SECTIONS			
TS-01	BOULEVARD OR AVENUE WITH PARALLEL PARKING, 25 MPH	12/1/2023	New Detail
TS-02	BOULEVARD OR AVENUE WITH REVERSE ANGLE PARKING, 25 MPH	12/1/2023	New Detail
TS-03	STREET WITH PARALLEL PARKING ON BOTH SIDES, 25 MPH	12/1/2023	New Detail
TS-04	STREET WITH PARALLEL PARKING ON ONE SIDE, 25 MPH	12/1/2023	New Detail
TS-05	TYPICAL SECTION - PAVED ALLEY	12/1/2023	New Detail
TS-06	TYPICAL SECTION - GRAVEL ALLEY	12/1/2023	New Detail



NOTES:

1. MATCH THICKNESS OF PAVEMENT WHEN ABUTTING CONCRETE PAVEMENT.

2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION.

3. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

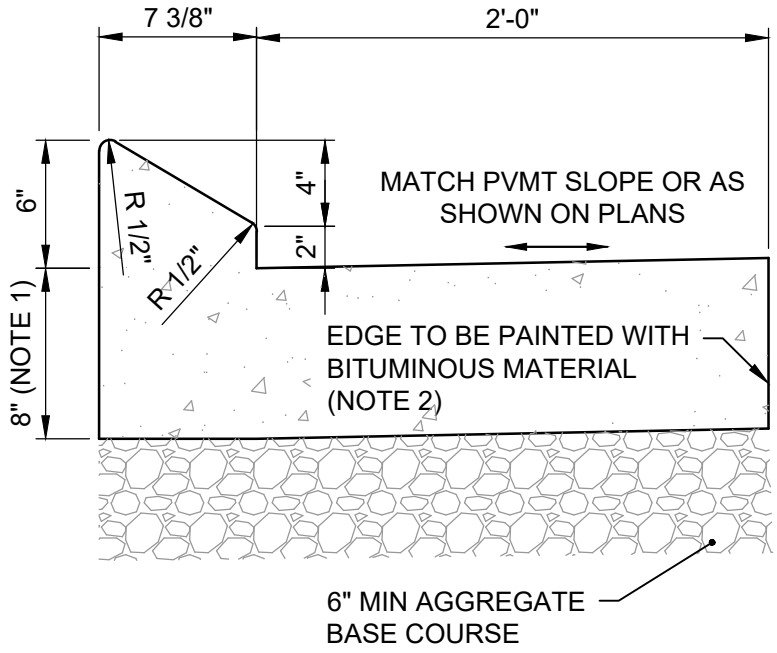
NOT TO SCALE

RANSON

COMBINATION CURB AND GUTTER POSTED SPEED ≤ 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
CG-01	1 OF 1	12/1/2023



NOTES:

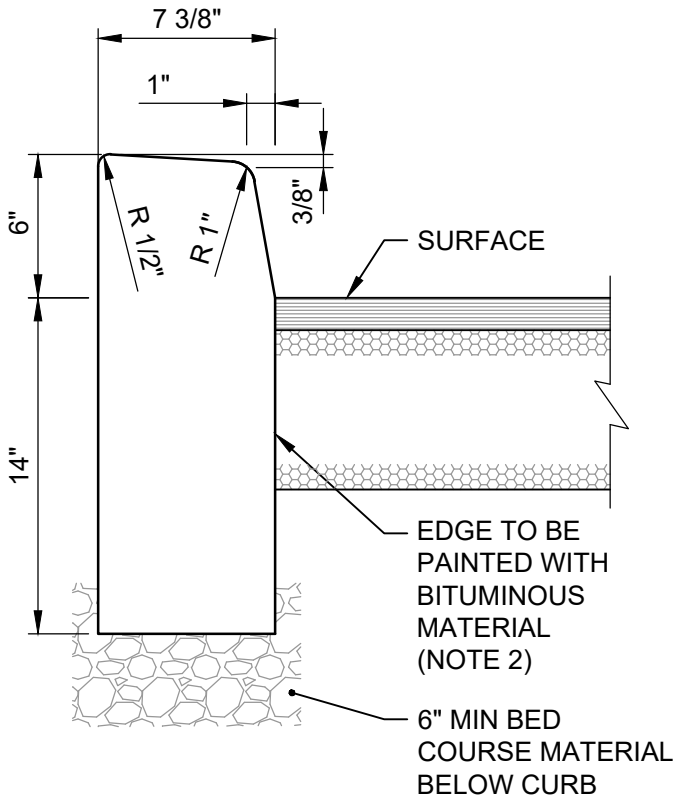
1. MATCH THICKNESS OF PAVEMENT WHEN ABUTTING CONCRETE PAVEMENT.

2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION.

3. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

NOT TO SCALE

RANSON	**COMBINATION CURB AND GUTTER POSTED SPEED > 25 MPH AND ≤ 45 MPH** CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		CG-02	1 OF 1	12/1/2023



NOTES:

1. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION. BARS OR BOLTS SHALL EXTEND THROUGH 1/2 THE WIDTH OF THE CONCRETE CURB.

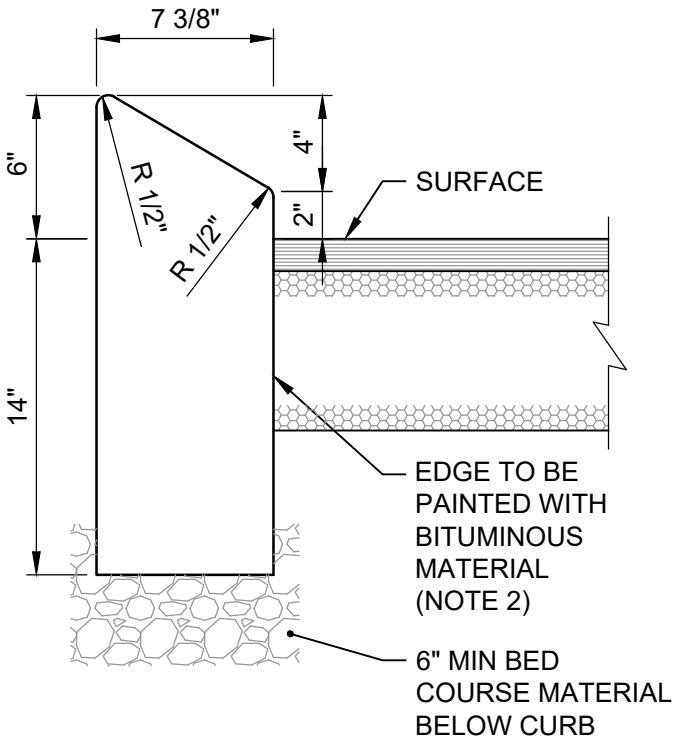
NOT TO SCALE

RANSON

CONCRETE CURB
POSTED SPEED ≤ 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
CG-03	1 OF 1	12/1/2023



NOTES:

1. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION. BARS OF BOLTS SHALL EXTEND THROUGH 1/2 THE WIDTH OF THE CONCRETE CURB.

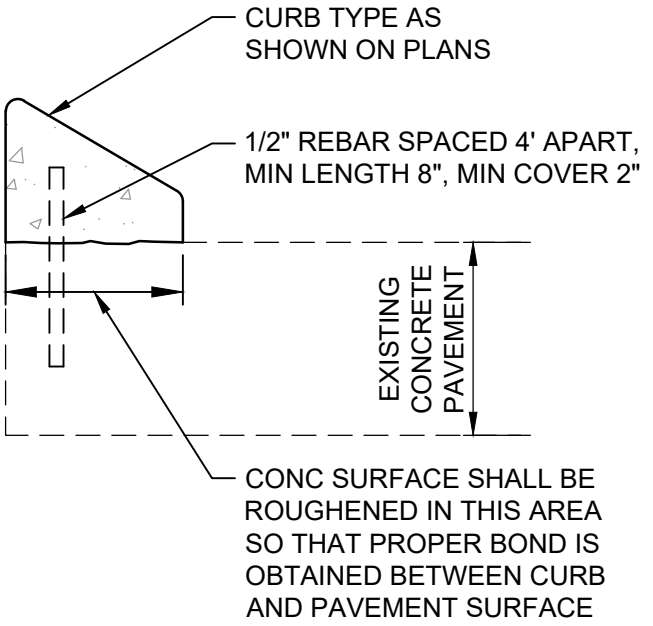
NOT TO SCALE

RANSON

CONCRETE CURB
POSTED SPEED >25 MPH AND ≤ 45 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
CG-04	1 OF 1	12/1/2023



NOTES:

1. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

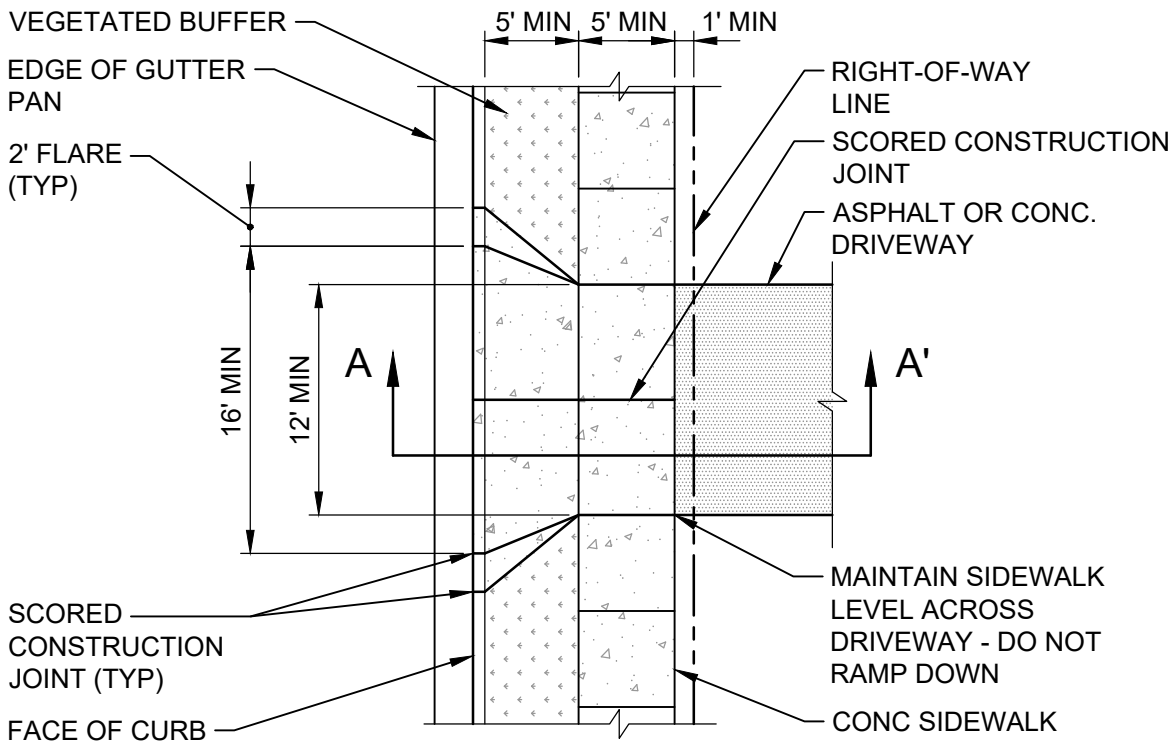
NOT TO SCALE

RANSON

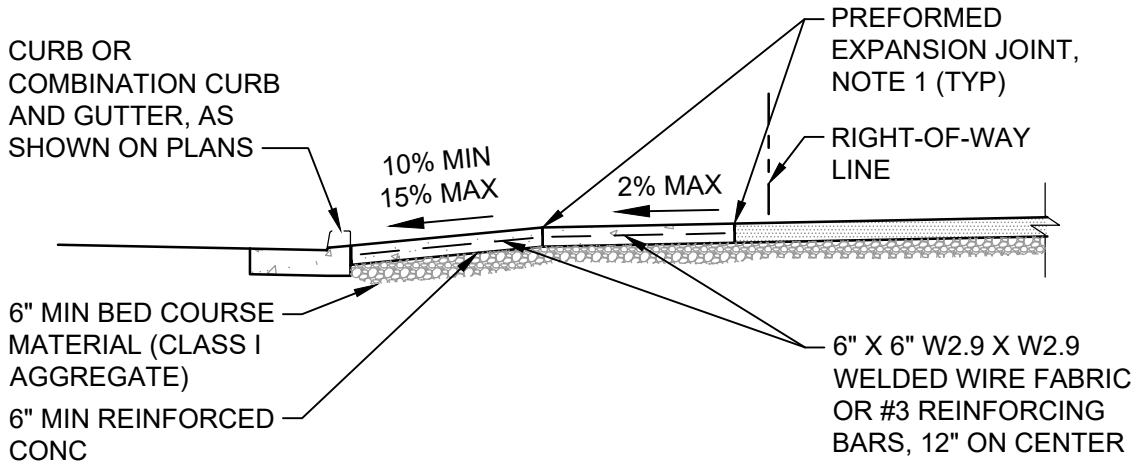
PLACEMENT OF CONCRETE CURB BY SEPARATE METHODS

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
CG-05	1 OF 1	12/1/2023



PLAN



SECTION A-A'

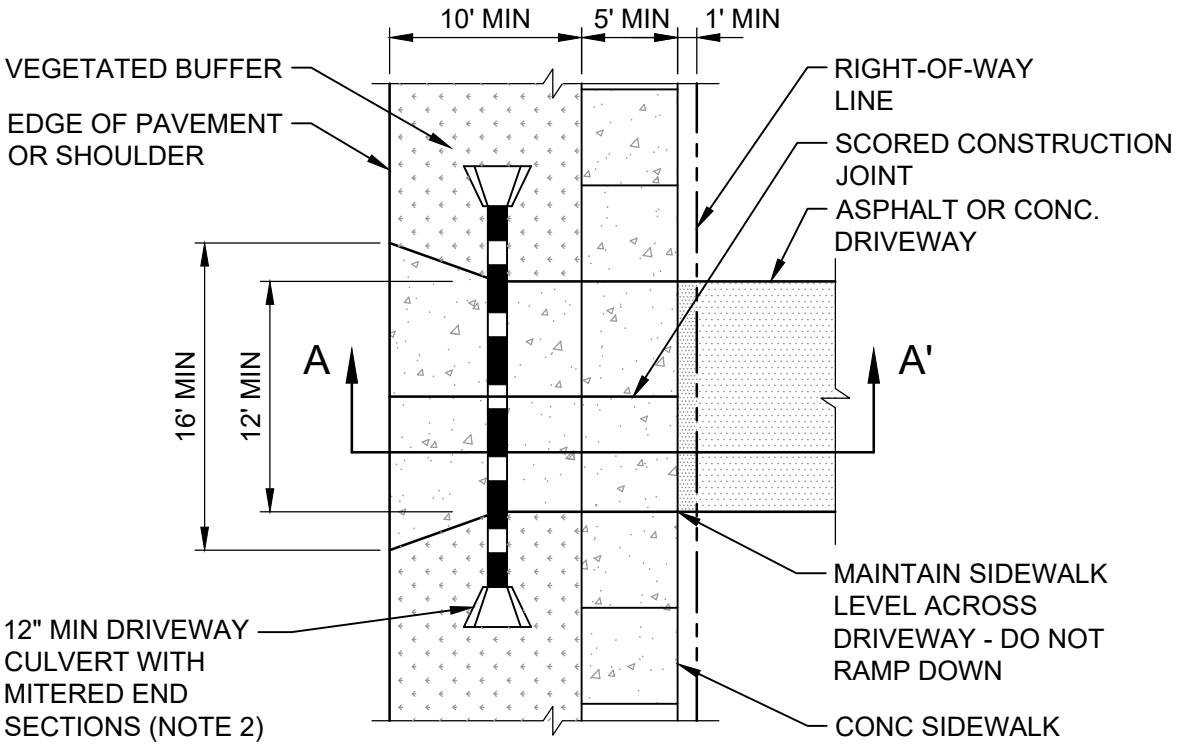
NOTES:

1. PROVIDE PREFORMED EXPANSION JOINT AT BACK OF CURB, GRADE BREAK AT FRONT OF SIDEWALK, AND WHERE APRON ABUTS CONC DRIVEWAY. FOR ASPHALT DRIVEWAY, OMIT EXPANSION JOINT AND COAT EDGE OF CONC APRON WITH BITUMINOUS MATERIAL.

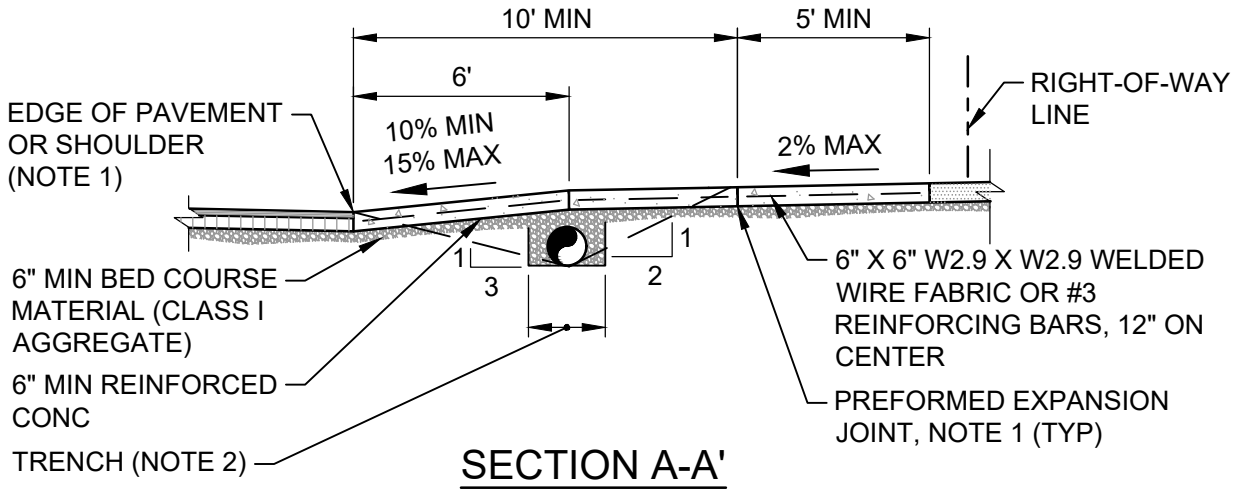
2. ALL JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

NOT TO SCALE

RANSON	RESIDENTIAL DRIVEWAY APRON CURB AND GUTTER SECTION CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		DW-01	1 OF 1	12/1/2023



PLAN



SECTION A-A'

NOTES:

1. PROVIDE PREFORMED EXPANSION JOINT AT GRADE BREAK, FRONT OF SIDEWALK, AND WHERE APRON ABUTS CONC DRIVEWAY. WHERE APRON ABUTS ASPHALT, OMIT EXPANSION JOINT AND COAT EDGE OF CONC APRON WITH BITUMINOUS MATERIAL.

2. TRENCH WIDTH, BEDDING, AND BACKFILL PER SECTION 604 OF THE WVDOH STANDARD SPECIFICATIONS. IF HDPE PIPE IS USED, BACKFILL SHALL BE CONTROLLED LOW STRENGTH MATERIAL. PROVIDE 9" MIN COVER OVER PIPE.

3. ALL JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

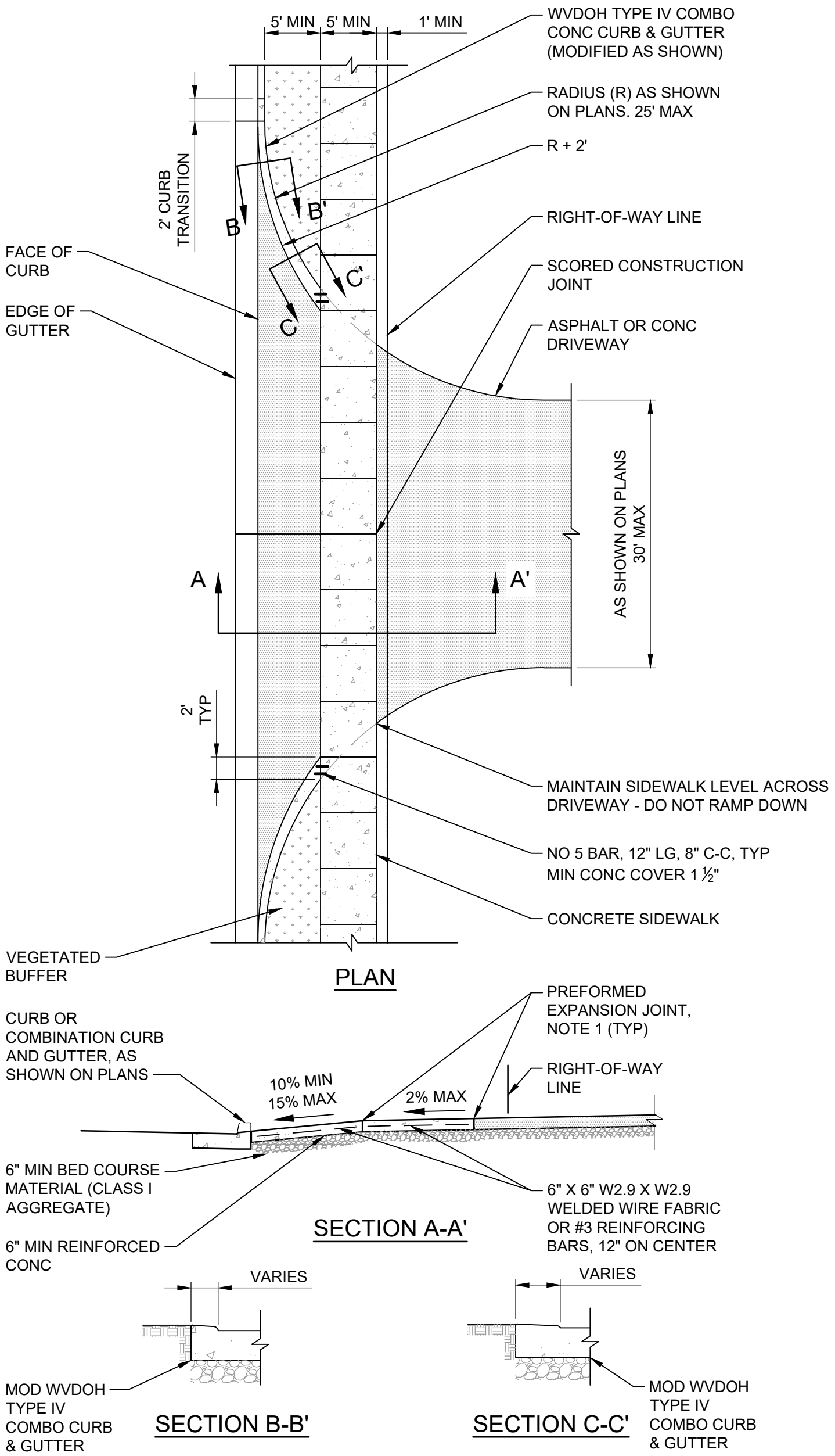
NOT TO SCALE

RANSON

RESIDENTIAL DRIVEWAY APRON SHOULDER SECTION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
DW-02	1 OF 1	12/1/2023



NOTES:

1. PROVIDE PREFORMED EXPANSION JOINT AT BACK OF CURB, GRADE BREAK AT FRONT OF SIDEWALK, AND WHERE APRON ABUTS CONC DRIVEWAY. FOR ASPHALT DRIVEWAY, OMIT EXPANSION JOINT AND COAT EDGE OF CONC APRON WITH BITUMINOUS MATERIAL.

2. ALL JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

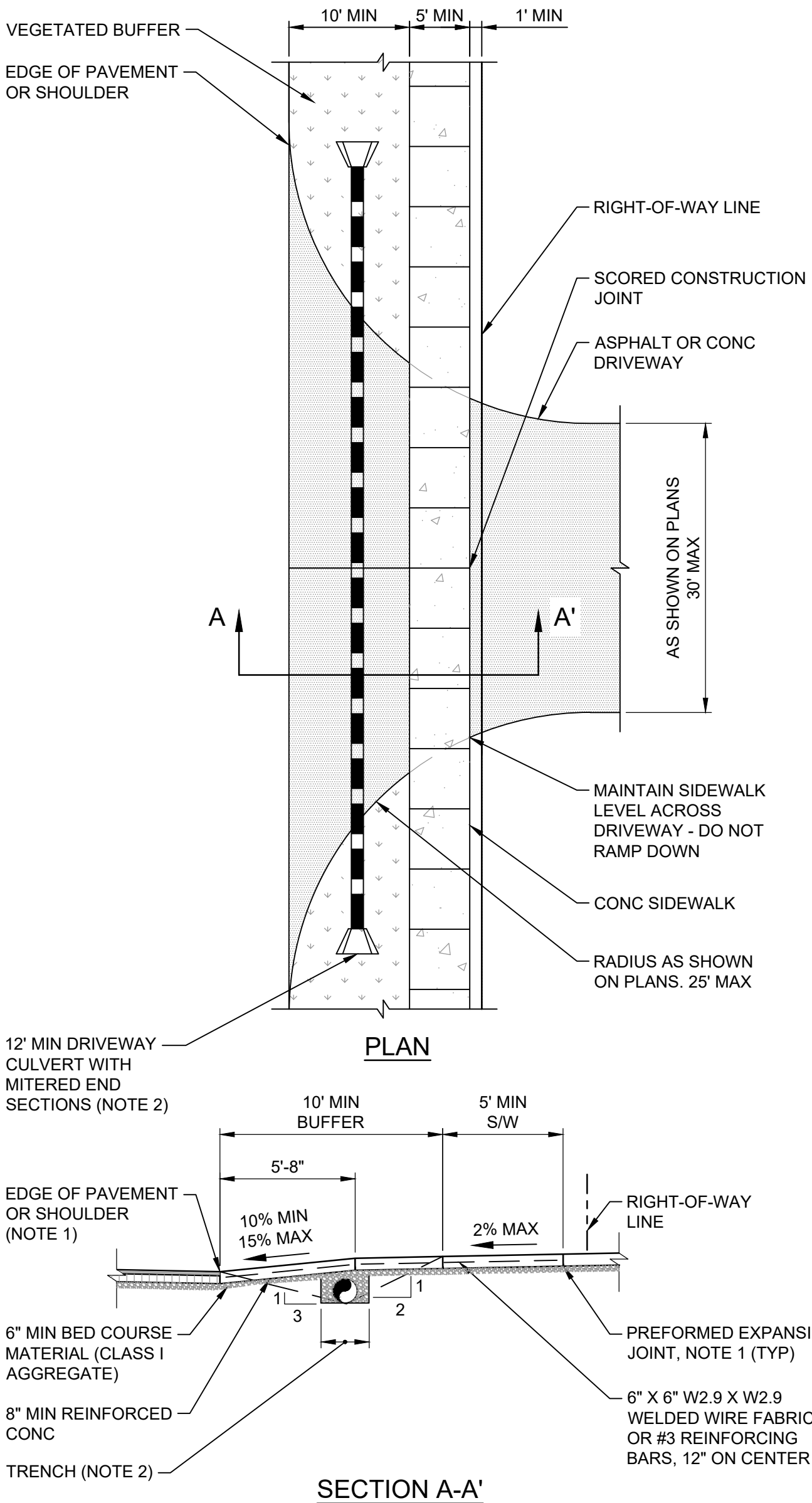
NOT TO SCALE

RANSON

COMMERCIAL DRIVEWAY APRON SHOULDER SECTION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
DW-03	1 OF 1	12/1/2023



PLAN

SECTION A-A'

NOTES:

1. PROVIDE PREFORMED EXPANSION JOINT AT GRADE BREAK AT FRONT OF SIDEWALK, AND WHERE APRON ABUTS CONC DRIVEWAY. FOR ASPHALT DRIVEWAY, OMIT EXPANSION JOINT AND COAT EDGE OF CONC APRON WITH BITUMINOUS MATERIAL.

2. TRENCH WIDTH, BEDDING, AND BACKFILL PER SECTION 604 OF THE WVDOH STANDARD SPECIFICATIONS. IF HDPE PIPE IS USED, BACKFILL SHALL BE CONTROLLED LOW STRENGTH MATERIAL. PROVIDE

3. ALL JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

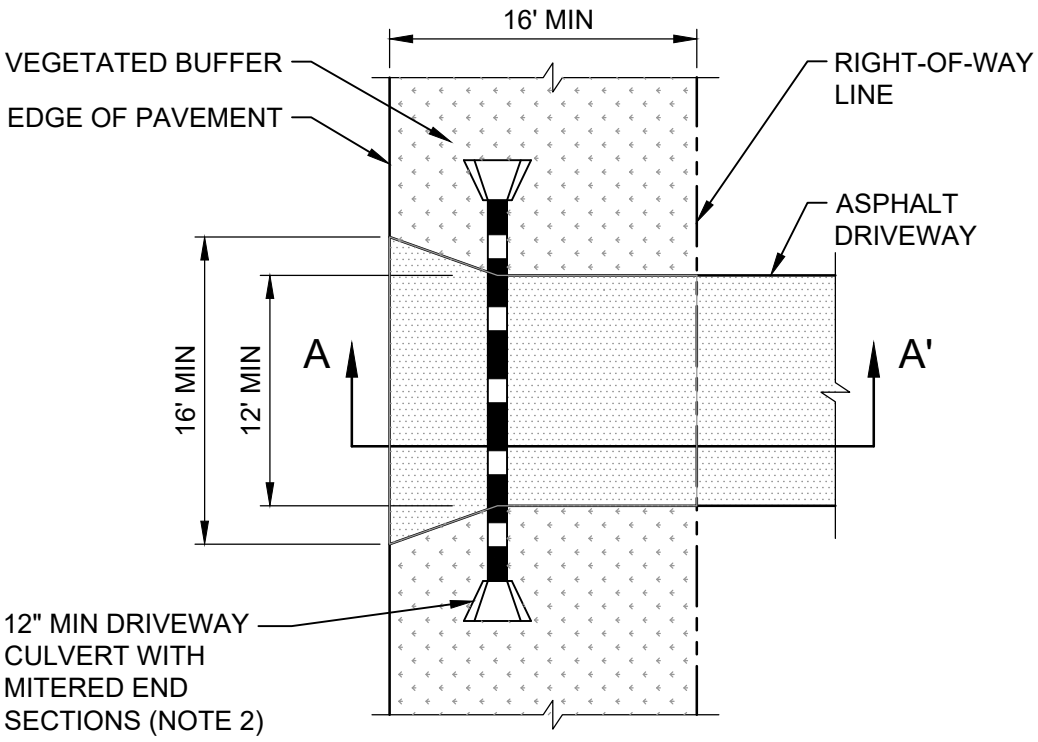
NOT TO SCALE

RANSON

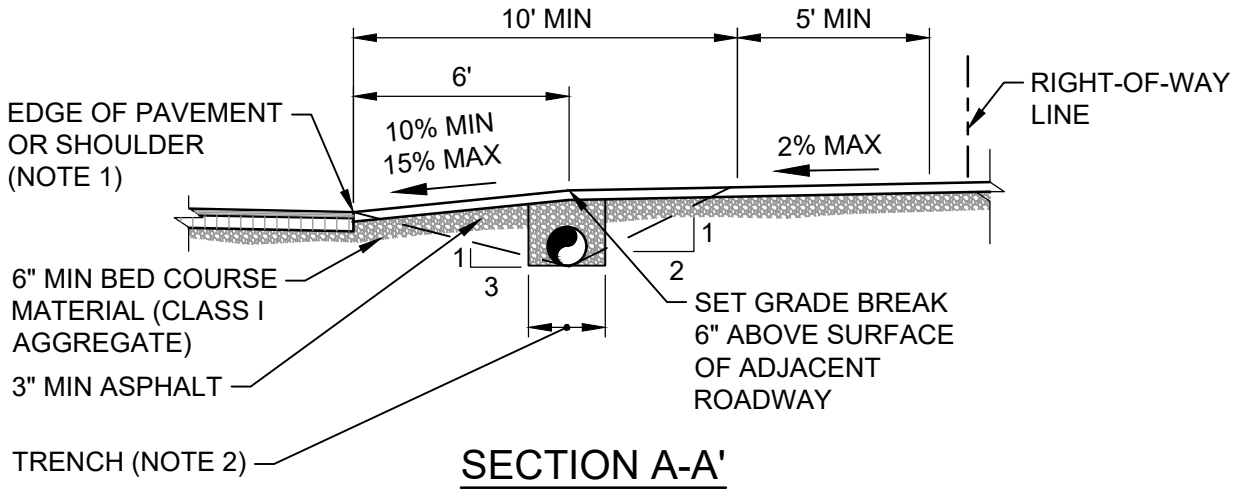
COMMERCIAL DRIVEWAY APRON SHOULDER SECTION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
DW-04	1 OF 1	12/1/2023



PLAN



SECTION A-A'

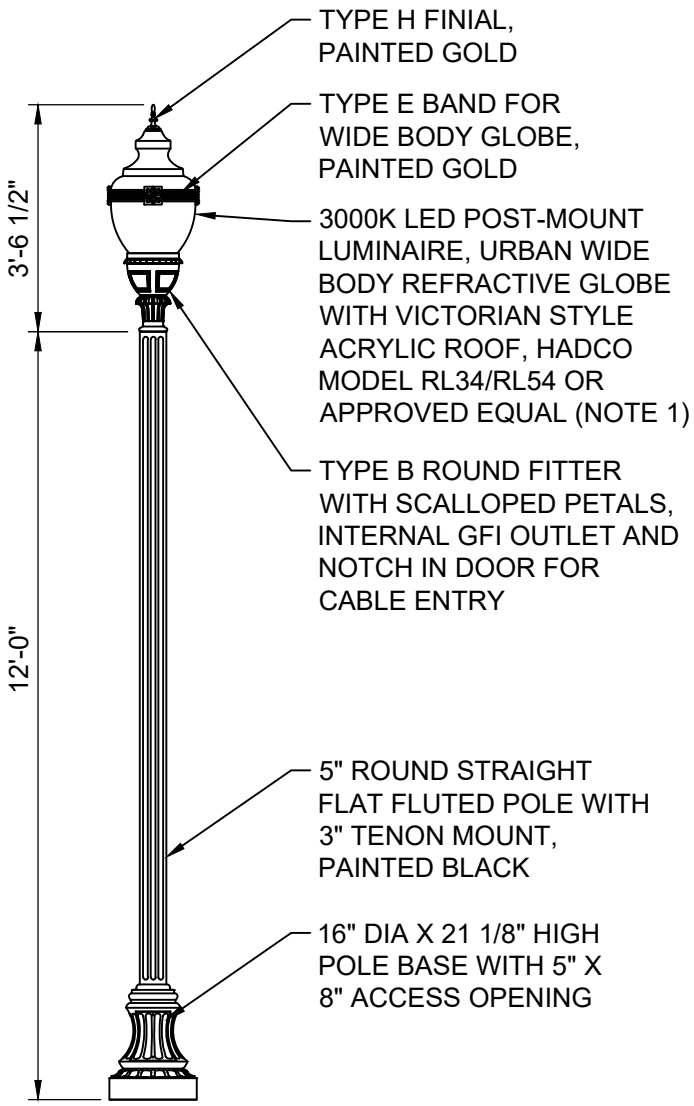
NOTES:

1. LOT DEVELOPMENT WITHOUT A SIDEWALK REQUIRES PRIOR WRITTEN APPROVAL BY THE CITY AND FEE-IN-LIEU PAYMENT INTO THE CITY'S SIDEWALK FUND.

2. TRENCH WIDTH, BEDDING, AND BACKFILL PER SECTION 604 OF THE WVDOH STANDARD SPECIFICATIONS. IF HDPE PIPE IS USED, BACKFILL SHALL BE CONTROLLED LOW STRENGTH MATERIAL. PROVIDE 9" MIN COVER OVER PIPE.

NOT TO SCALE

RANSON	RESIDENTIAL DRIVEWAY APRON - NO SIDEWALK CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		DW-05	1 OF 1	12/1/2023



NOTES:

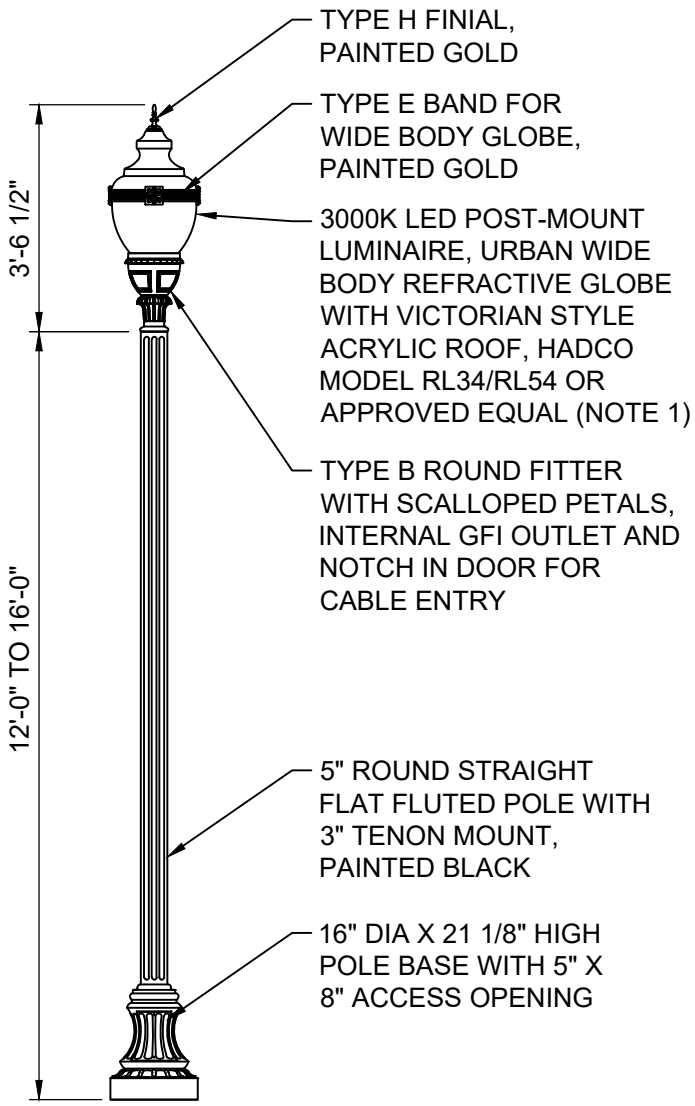
1. PROVIDE TYPE III (RL34) OR TYPE V (RL54) LIGHT DISTRIBUTION AS SHOWN ON PLANS. PROVIDE TYPE V DISTRIBUTION WHERE REQUIRED TO PREVENT LIGHT SPILLOVER ONTO ADJACENT RESIDENTIAL USES.

2. SEE DETAIL LT-04 FOR LIGHT POLE FOUNDATION. DIRECT BURIAL NOT ALLOWED.

3. PROVIDE FIELD ADJUSTMENT SWITCH TO ALLOW THE CITY TO ADJUST ILLUMINATION LEVEL AFTER INSTALLATION. WHERE NEW LIGHTING IS TO BE INSTALLED ON A SEPARATE CIRCUIT, FIELD ADJUSTMENT SWITCH MAY BE LOCATED ON LIGHTING CONTROLLER. WHERE NEW LIGHTING IS TO BE ADDED TO AN EXISTING CIRCUIT, PROVIDE A FIELD ADJUSTMENT SWITCH ON EACH NEW POLE.

NOT TO SCALE

RANSON	**RESIDENTIAL POST-TOP STREETLIGHT** CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-01	1 OF 1	12/1/2023



NOTES:

1. PROVIDE TYPE III (RL34) OR TYPE V (RL54) LIGHT DISTRIBUTION AS SHOWN ON PLANS. PROVIDE TYPE V DISTRIBUTION WHERE REQUIRED TO PREVENT LIGHT SPILLOVER ONTO ADJACENT RESIDENTIAL USES.

2. SEE DETAIL LT-04 FOR LIGHT POLE FOUNDATION. DIRECT BURIAL NOT ALLOWED.

3. PROVIDE FIELD ADJUSTMENT SWITCH TO ALLOW THE CITY TO ADJUST ILLUMINATION LEVEL AFTER INSTALLATION. WHERE NEW LIGHTING IS TO BE INSTALLED ON A SEPARATE CIRCUIT, FIELD ADJUSTMENT SWITCH MAY BE LOCATED ON LIGHTING CONTROLLER. WHERE NEW LIGHTING IS TO BE ADDED TO AN EXISTING CIRCUIT, PROVIDE A FIELD ADJUSTMENT SWITCH ON EACH NEW POLE.

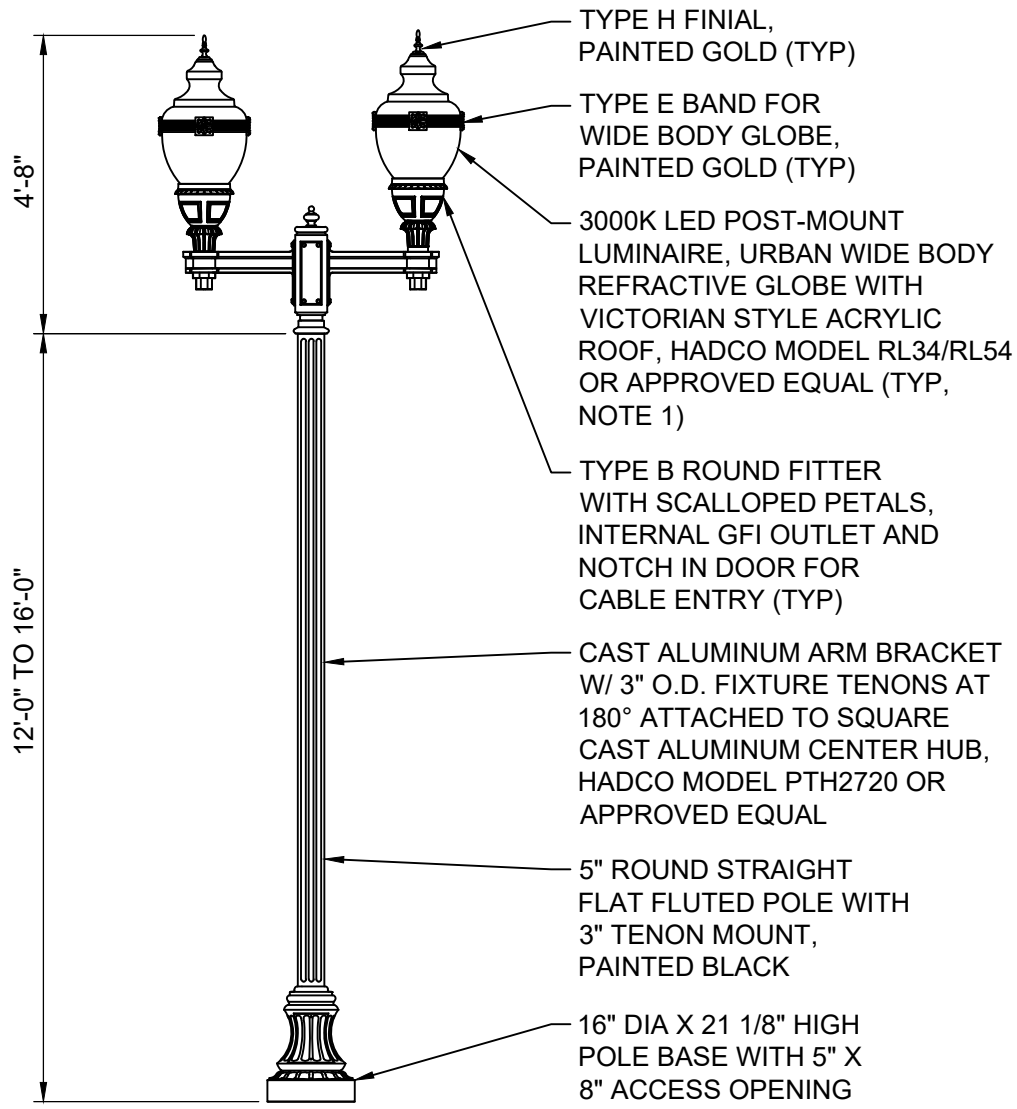
NOT TO SCALE

RANSON

COMMERCIAL POST-TOP STREETLIGHT

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
LT-02	1 OF 1	12/1/2023



NOTES:

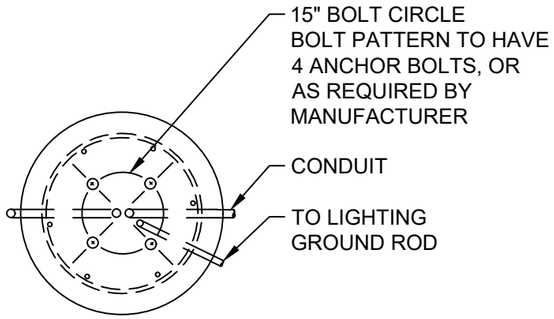
1. PROVIDE TYPE III (RL34) OR TYPE V (RL54) LIGHT DISTRIBUTION AS SHOWN ON PLANS. PROVIDE TYPE V DISTRIBUTION WHERE REQUIRED TO PREVENT LIGHT SPILLOVER ONTO ADJACENT RESIDENTIAL USES.

2. SEE DETAIL LT-04 FOR LIGHT POLE FOUNDATION. DIRECT BURIAL NOT ALLOWED.

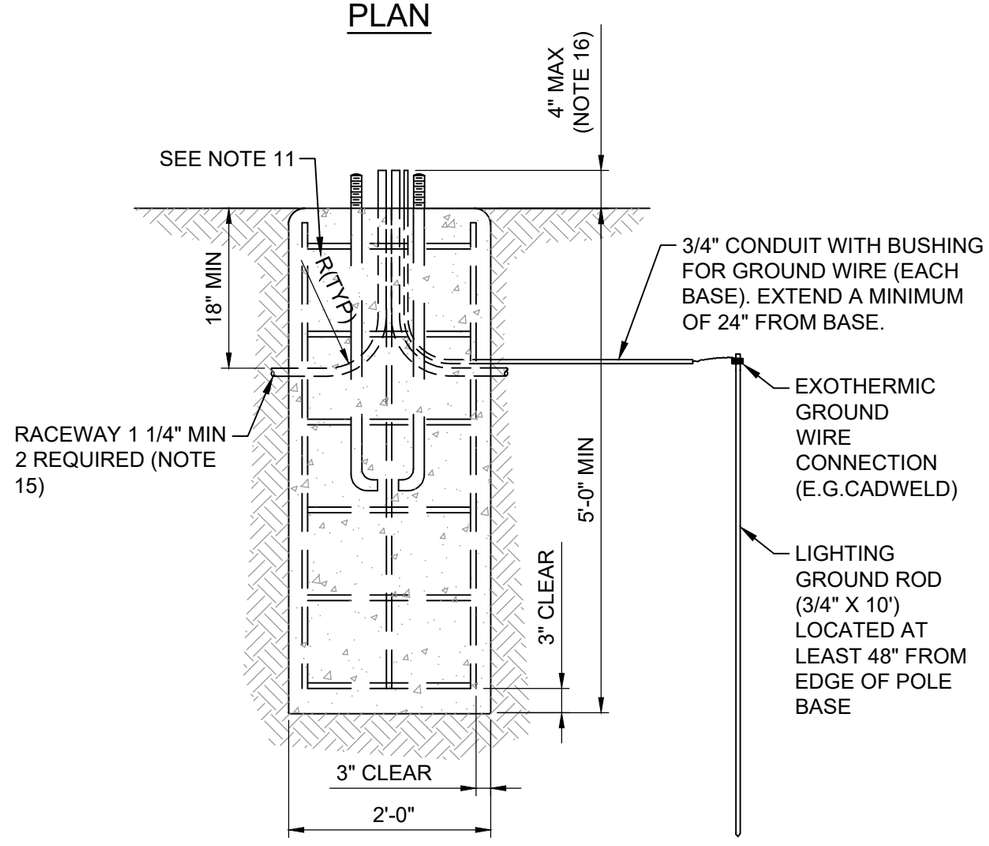
3. PROVIDE FIELD ADJUSTMENT SWITCH TO ALLOW THE CITY TO ADJUST ILLUMINATION LEVEL AFTER INSTALLATION. WHERE NEW LIGHTING IS TO BE INSTALLED ON A SEPARATE CIRCUIT, FIELD ADJUSTMENT SWITCH MAY BE LOCATED ON LIGHTING CONTROLLER. WHERE NEW LIGHTING IS TO BE ADDED TO AN EXISTING CIRCUIT, PROVIDE A FIELD ADJUSTMENT SWITCH ON EACH NEW POLE.

NOT TO SCALE

RANSON	COMMERCIAL TWIN POST-TOP STREETLIGHT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-03	1 OF 1	12/1/2023



PLAN



ELEVATION

NOTES:

1. ALL EXPOSED CONCRETE SHALL HAVE A NORMAL FINISH.

2. ALL OUTSIDE CONCRETE CORNERS AND EDGES SHALL HAVE A 3/4 " CHAMFER.

3. CONCRETE TO BE RODDED OR VIBRATED WHILE POURING.

4. ALL CONCRETE SHALL BE WVDOH CLASS "B".

5. REINFORCING STEEL SHALL NOT BE CLOSER THAN 3" TO THE OUTSIDE SURFACE OF THE FOOTING AND SHALL BE TIED OR WELDED.

6. VERTICAL BARS SHALL BE TIED WITH #4 HOOP BARS AT 1'-0" ON CENTER. THE #4 HOOP BARS SHALL HAVE A 1'-0" MINIMUM LAP.

7. ALL FOOTINGS IN SIDEWALKS SHALL BE FINISHED FLUSH WITH THE EXISTING SIDEWALKS, UNLESS OTHERWISE SPECIFIED BY THE PROJECT ENGINEER.

8. FOOTINGS SHALL BE CIRCULAR IN CROSS-SECTION.

9. WITH PERMISSION OF THE PROJECT ENGINEER, THE DEPTH OF THE FOOTING MAY BE REDUCED ONE (1) FOOT WHEN THE FOOTING IS PLACED IN A CONCRETE OR ASPHALTIC CONCRETE SIDEWALK OR PAVED SURFACE. THE FOOTINGS MAY BE REDUCED BY ONE (1) FOOT WHEN THE FOOTING IS IN ROCK.

10. NO FORMS MAY EXTEND TO A DEPTH GREATER THAN 12" UNLESS APPROVAL IS GRANTED BY THE CITY ENGINEER.

11. THE RADIUS (R) OF THE CURVE OF THE INNER EDGE OF ANY BEND SHALL NOT BE LESS THAN THE SIZE SPECIFIED IN THE NATIONAL ELECTRICAL CODE.

12. GROUNDING:
    A. THE CONTRACTOR IS TO ENGAGE A QUALIFIED TESTING AND INSPECTION AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS
    B. AFTER INSTALLING GROUNDING SYSTEM BUT BEFORE PERMANENT ELECTRICAL CIRCUITS HAVE BEEN ENERGIZED, TEST FOR COMPLIANCE WITH THE FOLLOWING REQUIREMENTS:
    (1) TEST COMPLETED GROUNDING SYSTEM AT EACH POLE AND AT SERVICE DISCONNECT ENCLOSURE.
    (2) MEASURE GROUND RESISTANCE NOT LESS THAN TWO FULL DAYS AFTER THE LAST TRACE OF PRECIPITATION AND WITHOUT SOIL BEING MOISTENED BY ANY MEANS OTHER THAN NATURAL DRAINAGE OR SEEPAGE AND WITHOUT CHEMICAL TREATMENT OR OTHER ARTIFICIAL MEANS OF REDUCING NATURAL GROUND RESISTANCE.
    (3) PERFORM THE TEST BY THE FALL-OF-POTENTIAL METHOD ACCORDING TO IEEE STANDARD 81.
    C. INSTALL ADDITIONAL GROUND RODS AS REQUIRED UNTIL MEASURED GROUND RESISTANCE IS 5 OHMS OR LESS.
    D. GROUND RODS ARE TO BE DRIVEN TO A DEPTH OF 2 INCHES BELOW FINISHED GRADE TO TOP OF ROD AND SEPARATED BY A MINIMUM DISTANCE OF 8 FEET.
    E. INTERCONNECT GROUND RODS WITH A #2 AWG BARE, STRANDED COPPER CONDUCTOR BURIED AT 18 INCHES BELOW GRADE.

13. INSTALL POLE, ANCHOR BOLTS, LEVELING SYSTEM, GROUNDING, AND WIRING PER MANUFACTURER SPECIFICATIONS.

14. SEE DETAIL LT-01 FOR CITY STANDARD POST-TOP LIGHT POLE.

15. IF ONE IS SPARE CONDUIT, AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE TO SHOW THE LOCATION/ DIRECTION OF THE SPARE CONDUIT.

16. USE 3" MAX WHEN USING TRANSFORMER BASES.

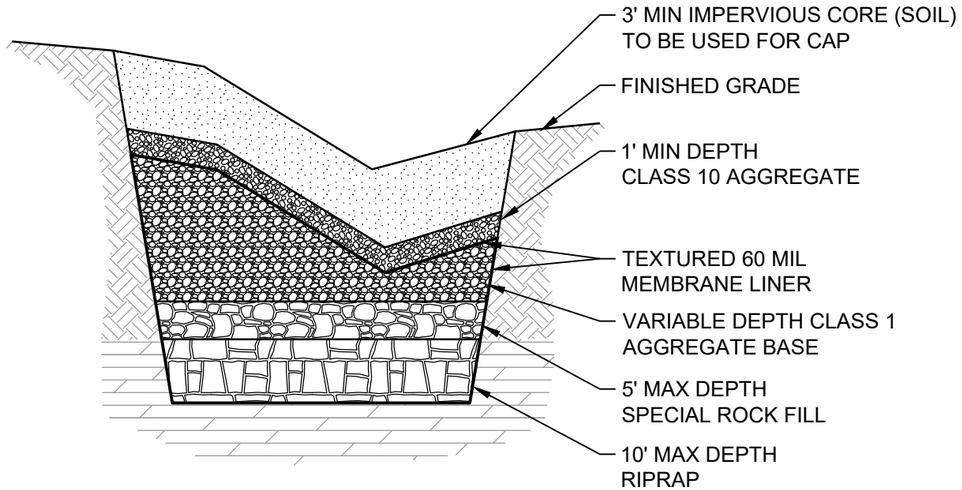
NOT TO SCALE

RANSON

POST TOP STREETLIGHT FOUNDATION - 16' MAX POLE HEIGHT

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
LT-04	1 OF 1	12/1/2023



NOTES:

1. PRIOR TO ANY SINKHOLE EXCAVATION OR WORK TO OR AROUND THE SINKHOLE THE CONTRACTOR SHALL CONTACT CITY OF RANSON PUBLIC WORKS A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK.

2. THE SINKHOLE SHALL BE TREATED BASED ON THE EXISTING FIELD CONDITIONS OF THE SITE AT THE TIME OF CONSTRUCTION.

3. CONSECUTIVE LAYERS OF AGGREGATE AS SHOWN IN THE DETAIL DRAWINGS SHALL BE PLACED IN SUCH A MANNER AS TO PREVENT MIGRATION OF SMALLER AGGREGATES INTO THE VOIDS IN THE LARGER AGGREGATES.

4. ALL EXCAVATION REQUIRED TO CONSTRUCT THE FILTER IN THE SINKHOLE, AS PER THE DETAIL DRAWINGS, SHALL BE INCIDENTAL TO THE IMPERVIOUS CORE PAID PER SQ FOOT.

5. THE BOTTOM LAYER OF RIPRAP, AS SPECIFIED IN THE DETAIL DRAWINGS, SHALL BE TO THE SIZE AND DIMENSIONS AS DETERMINED BY THE ENGINEER UPON REVIEW OF THE EXISTING FIELD CONDITIONS OF THE SINKHOLE TO BE REPAIRED.

6. ALL EROSION AND SEDIMENT CONTROL AROUND THE AREA OF THE SINKHOLE SHALL CONFORM TO THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL LATEST EDITION. SEED AND MULCH THE AREA UPON COMPLETION AND ACCEPTANCE OF THE WORK.

7. THE IMPERVIOUS CORE SHALL OVERLAP A MINIMUM OF 3' BETWEEN THE CLASS I AGGREGATE AND THE CLASS 10 AGGREGATE BASE COURSE LAYER.

8. ALL WORK CONCERNING SINKHOLES SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE CITY ENGINEER OR RANSON PUBLIC WORKS DEPARTMENT PERSONNEL.

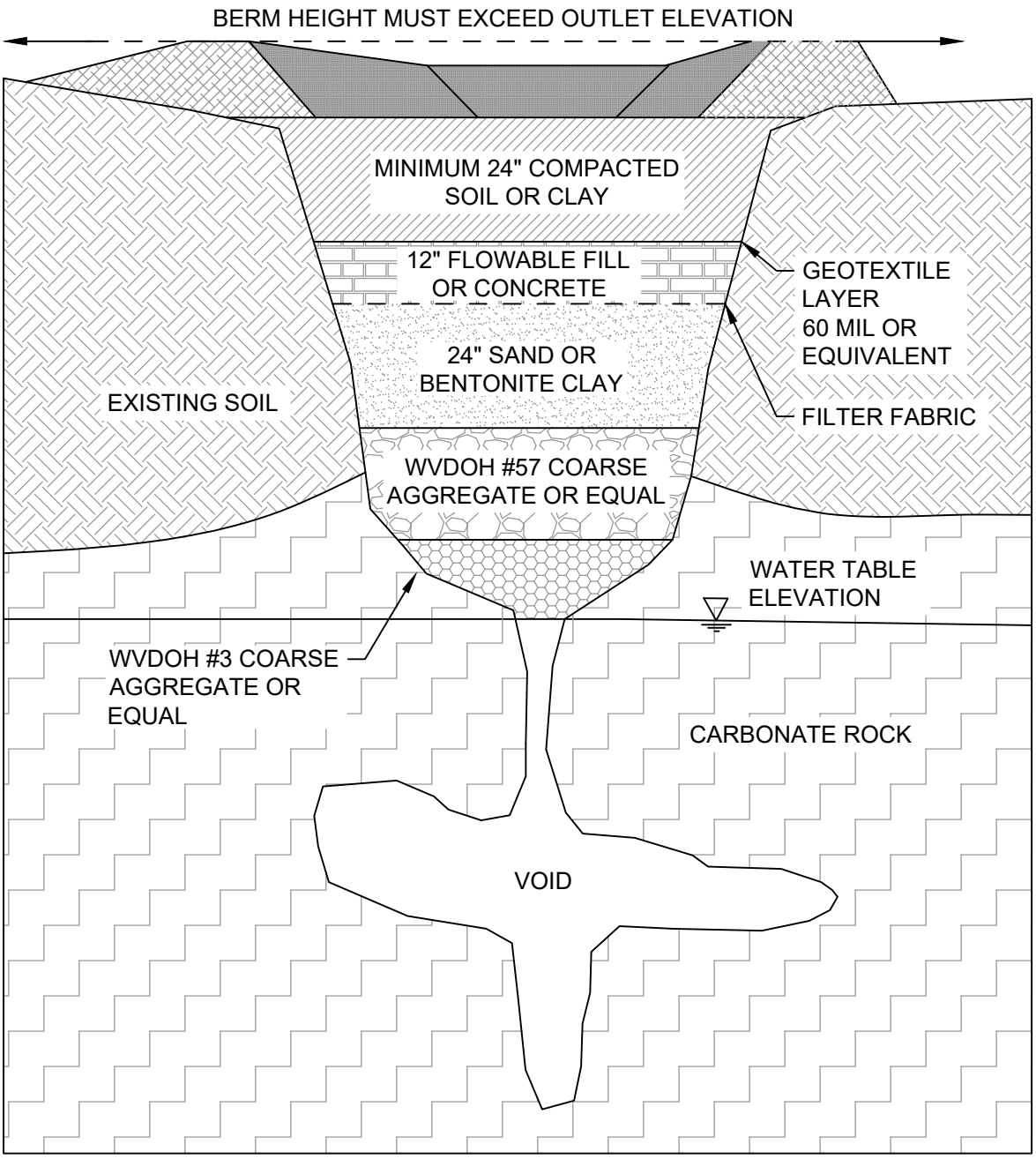
NOT TO SCALE

RANSON

SINKHOLE REPAIR - WVDOH STANDARD

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
MSC-01	1 OF 1	12/1/2023

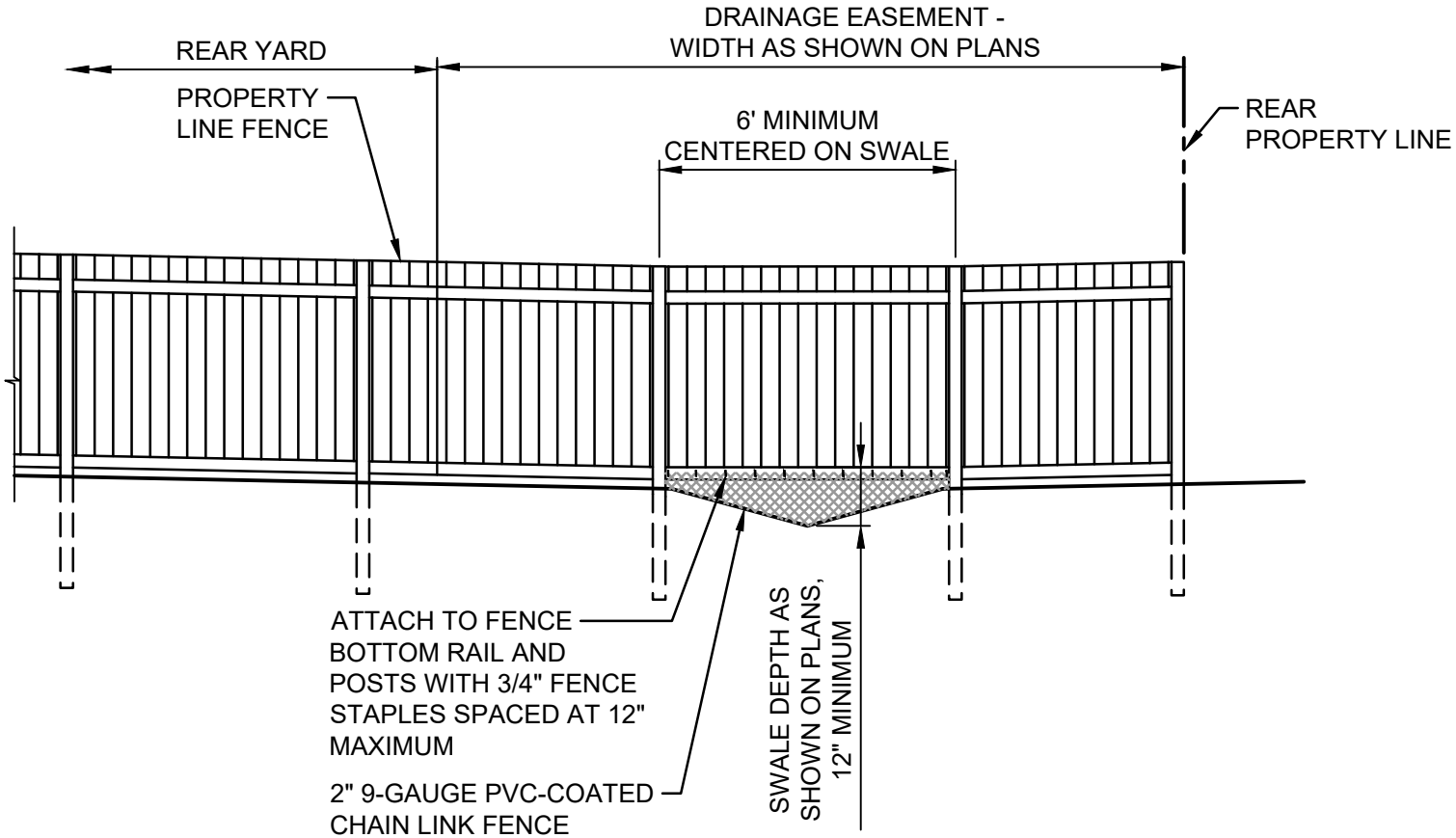


RANSON

SINKHOLE REPAIR DETAIL

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
MSC-02	1 OF 1	12/1/2023



NOTES:

1. THIS DETAIL FOR USE BY INDIVIDUAL HOMEOWNERS ONLY.

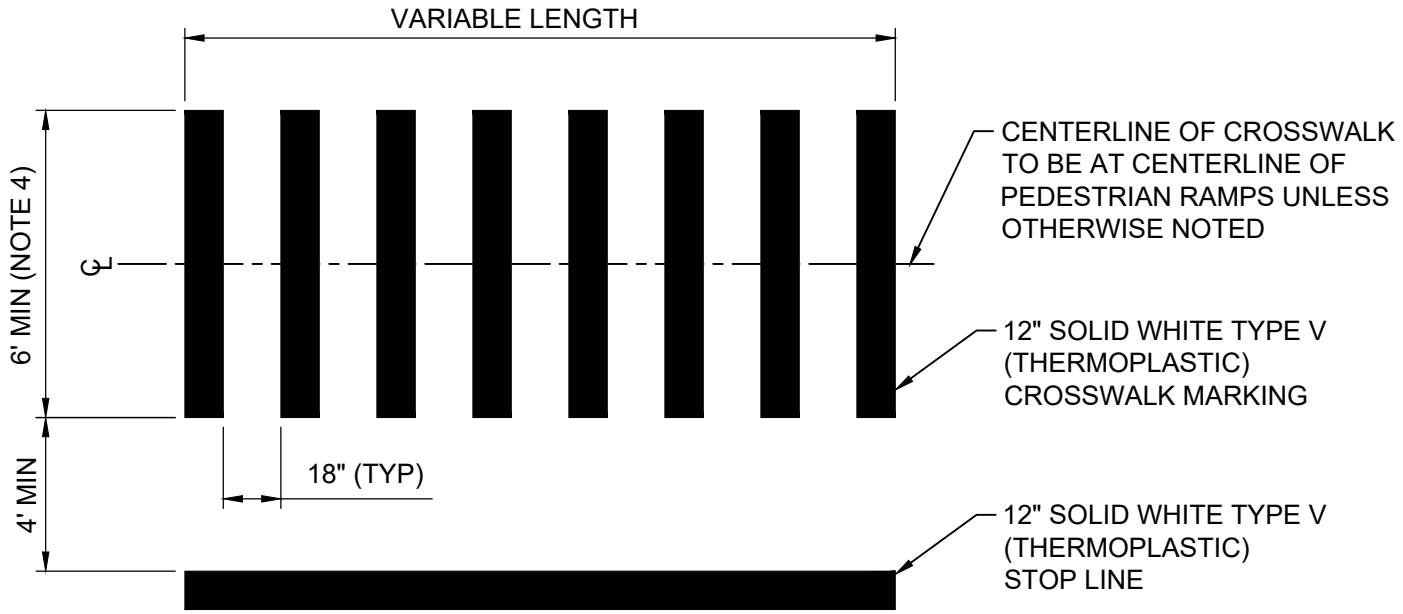
NOT TO SCALE

RANSON

FENCING ACROSS DRAINAGE EASEMENT

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
MSC-03	1 OF 1	12/1/2023



NOTES:

1. MAKE STRIPES PARALLEL TO CURB LINE OF STREET.
2. ALL CURB RAMPS (EXCLUDING ANY FLARED SIDES) MUST BE CONTAINED FULLY WITHIN THE CROSSWALK SERVED. ONE SIDE FLARE MUST ALIGN WITH BACK EDGE OF CROSSWALK IF CROSSWALK WIDTH IS GREATER THAN FIFTEEN FEET.
3. CROSSWALK MARKINGS SHALL BE INSTALLED WITH PREFORMED HEAT APPLIED THERMOPLASTIC OR LIQUID THERMOPLASTIC.
4. 6' MIN CROSSWALK WIDTH ONLY APPLIES WHEN RAMP IS ALIGNED WITH CROSSWALK DIRECTION OF TRAVEL. WHERE RAMP OR CROSSWALK IS SKEWED, WIDEN CROSSWALK TO ACCOMMODATE WHEELCHAIR TURNING SPACE AT BOTTOM OF RAMP. TURNING SPACE MAY NOT ENCROACH ON ADJACENT TRAVEL LANE(S).

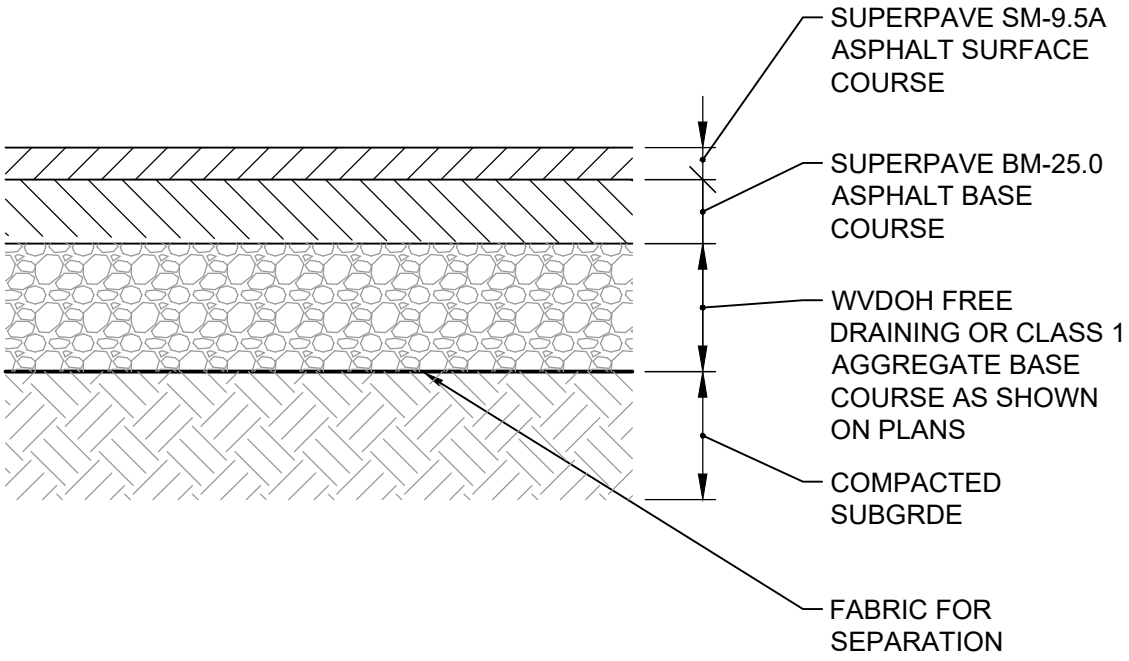
NOT TO SCALE

RANSON

HIGH VISIBILITY CROSSWALK

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
PM-01	1 OF 1	12/1/2023



MINIMUM PAVEMENT THICKNESS (NOTE 1)

SURFACE COURSE	BASE COURSE	AGGREGATE BASE COURSE	SUBGRADE
1 1/2"	3"	6" CLASS 1 OR 4" FREE DRAINING	6"

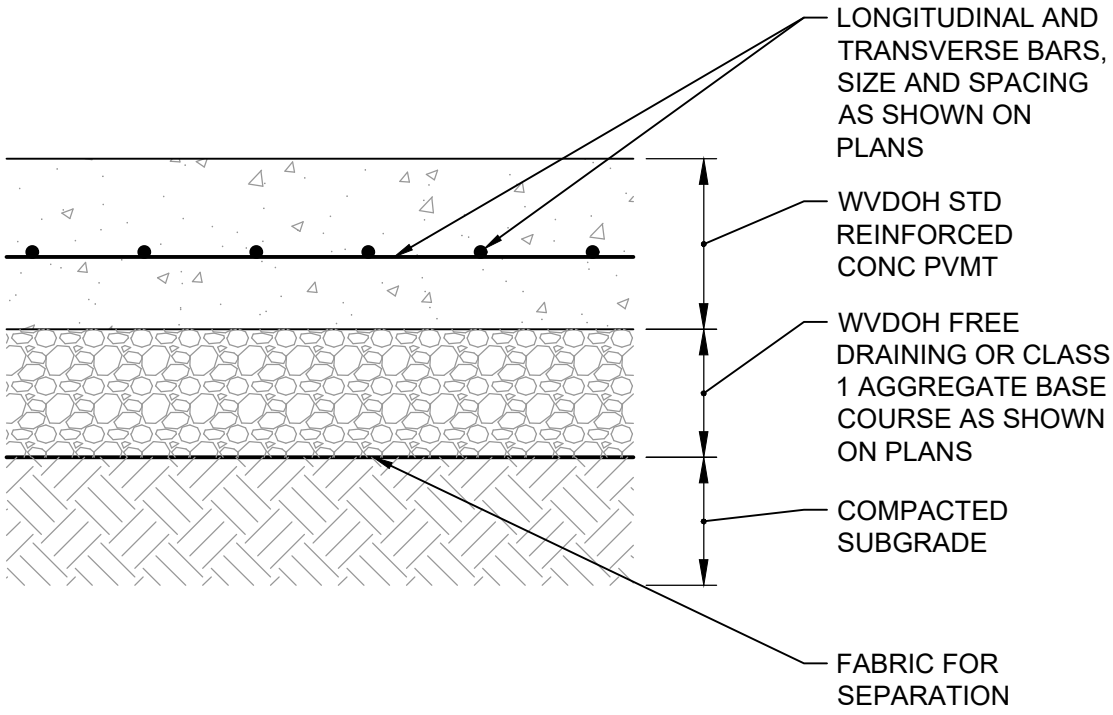
NOTES:

1. PAVEMENT SHALL BE DESIGNED IN ACCORDANCE WITH WVDOH DESIGN DIRECTIVES DD-644 AND DD-646 BASED ON ANTICIPATED TRAFFIC LOADING AND EVALUATION OF UNDERLYING SOILS BY A LICENSED GEOTECHNICAL ENGINEER.

2. THE PRESENCE OF FAULT LINES AND SOLUTION CHANNELS ASSOCIATED WITH KARST GEOLOGY MAY REQUIRE ADDITIONAL THICKENING OF PAVEMENT ELEMENTS OR OTHER MEASURES TO REINFORCE THE UNDERLYING SOILS PRIOR TO PAVEMENT CONSTRUCTION.

NOT TO SCALE

RANSON	ASPHALT PAVEMENT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		PVT-01	1 OF 1	12/1/2023



MINIMUM PAVEMENT THICKNESS (NOTE 2)

REINFORCED CONCRETE	AGGREGATE BASE COURSE	SUBGRADE
8"	GREATER OF EXISTING THICKNESS OR 6" CLASS 1 OR 4" FREE DRAINING	6"

NOTES:

1. THIS DETAIL APPLIES TO REPLACEMENT AND REHABILITATION OF EXISTING CONCRETE AND ASPHALT/CONCRETE COMPOSITE PAVEMENTS ONLY.

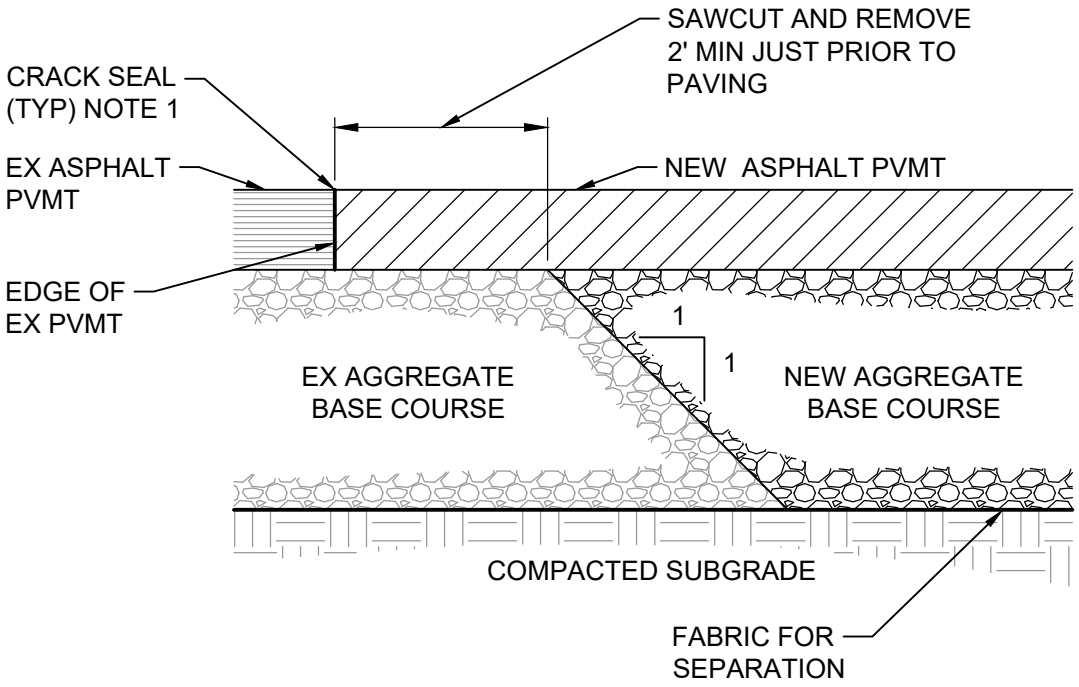
2. PAVEMENT SHALL BE DESIGNED IN ACCORDANCE WITH WVDOH DESIGN DIRECTIVE DD-646 BASED ON ANTICIPATED TRAFFIC LOADING AND EVALUATION OF UNDERLYING SOILS BY A LICENSED GEOTECHNICAL ENGINEER.

3. THE PRESENCE OF FAULT LINES AND SOLUTION CHANNELS ASSOCIATED WITH KARST GEOLOGY MAY REQUIRE ADDITIONAL THICKENING OF PAVEMENT ELEMENTS OR OTHER MEASURES TO REINFORCE THE UNDERLYING SOILS PRIOR TO PAVEMENT CONSTRUCTION.

4. PROVIDE DOWELED LOAD TRANSFER JOINTS AT INTERFACE BEWTEEN EXISTING AND NEW CONCRETE PAVEMENTS.

NOT TO SCALE

		DETAIL NO.	SHEET NO.	REVISION DATE
RANSON	**CONCRETE PAVEMENT** CITY OF RANSON, WEST VIRGINIA	**PVT-02**	1 OF 1	12/1/2023



NOTES:

1. PAINT EDGE OF EX ASPHALT WITH TACK COAT PRIOR TO PAVING. CRACK SEAL JOINT AFTER PAVING OPERATION HAS BEEN COMPLETED.

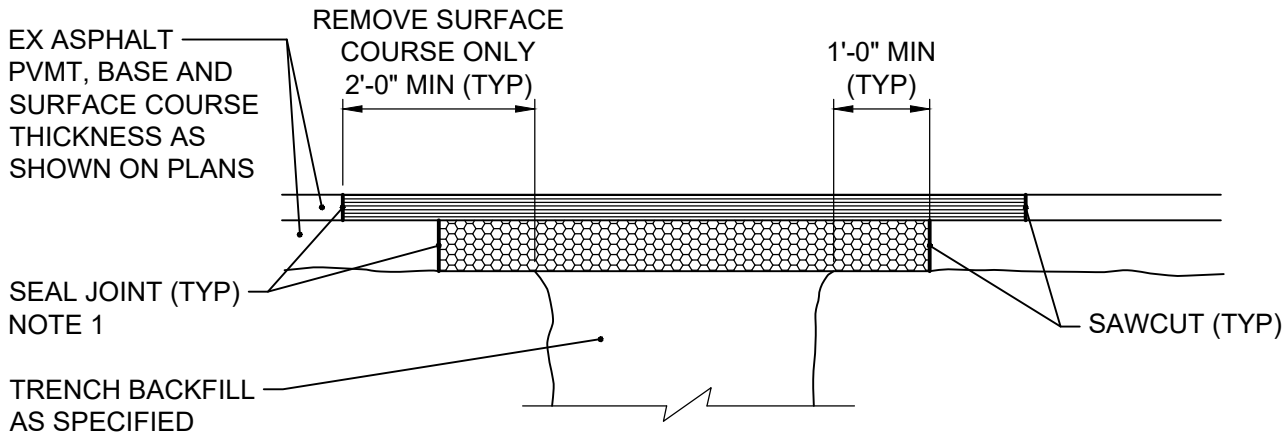
NOT TO SCALE

RANSON

ASPHALT PAVEMENT CONNECTION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
PVT-03	1 OF 1	12/1/2023



NOTES:

1. PAINT EDGE OF EX ASPHALT WITH TACK COAT PRIOR TO PAVING. CRACK SEAL SURFACE OF JOINT AFTER PAVING OPERATION HAS BEEN COMPLETED.

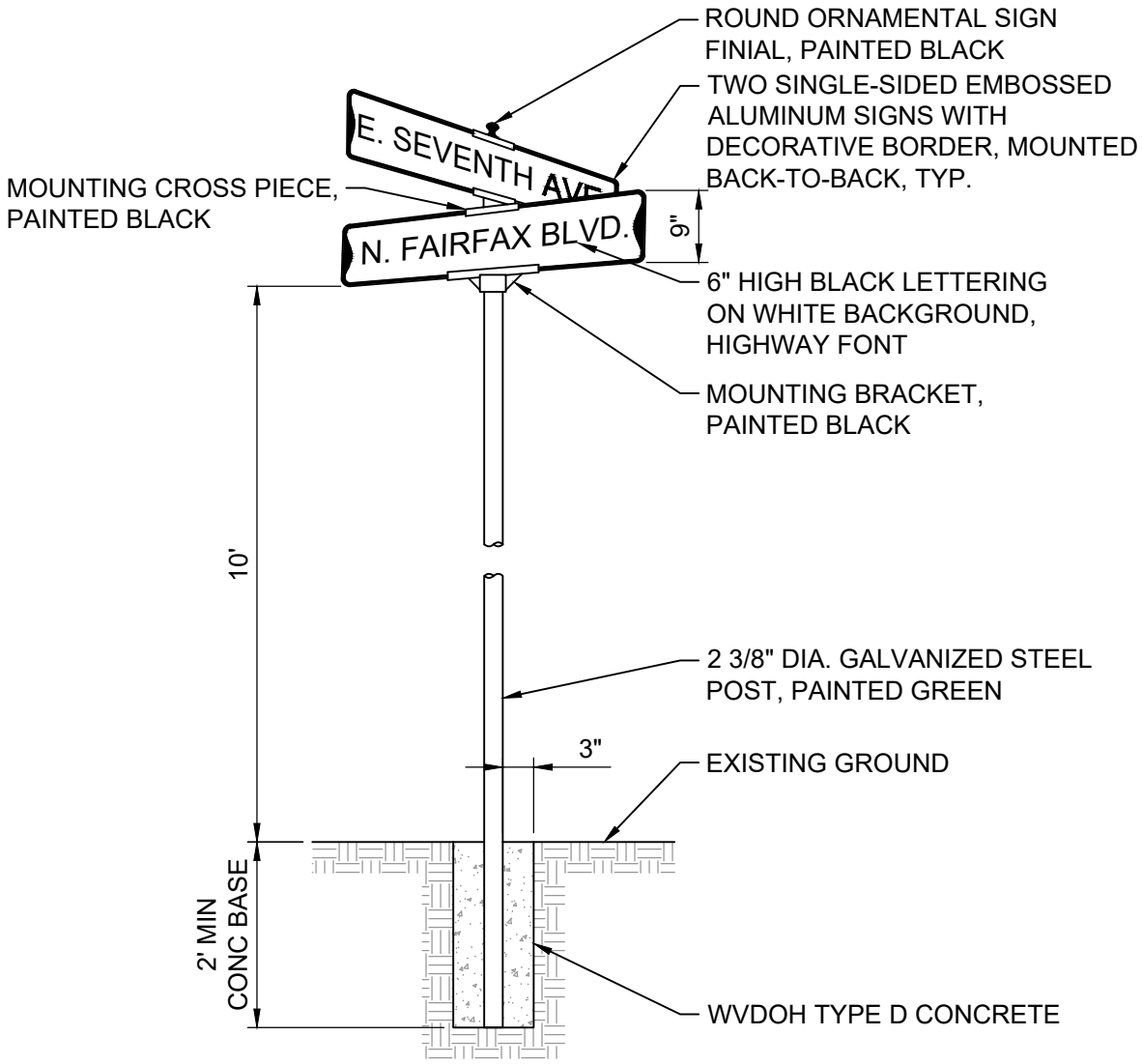
NOT TO SCALE

RANSON

ASPHALT PAVEMENT RESTORATION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
PVT-04	1 OF 1	12/1/2023

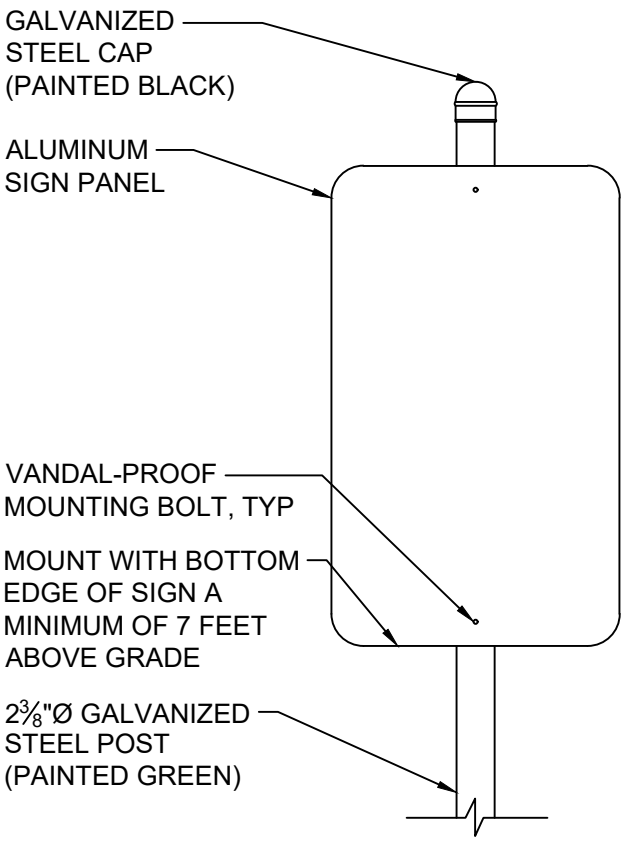


NOTES:

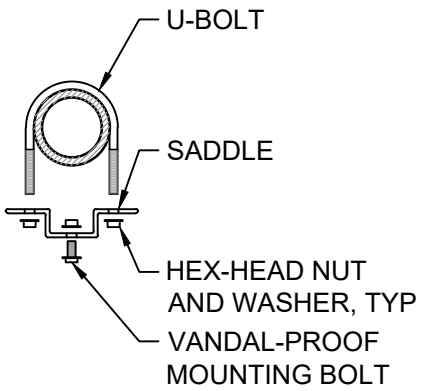
1. SIGN LENGTH SHALL BE A MINIMUM OF 30 INCHES AND A MAXIMUM OF 48 INCHES.
2. REQUEST PAINT COLOR SPECIFICATIONS FROM CITY DEPARTMENT OF PUBLIC WORKS PRIOR TO FABRICATION.
3. PROVIDE SHOP DRAWINGS TO THE CITY FOR APPROVAL PRIOR TO SIGN AND POST FABRICATION.

NOT TO SCALE

RANSON	**STANDARD POST MOUNTED STREET NAME SIGN** CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-01	1 OF 1	12/1/2023



SIGN MOUNTING DETAIL



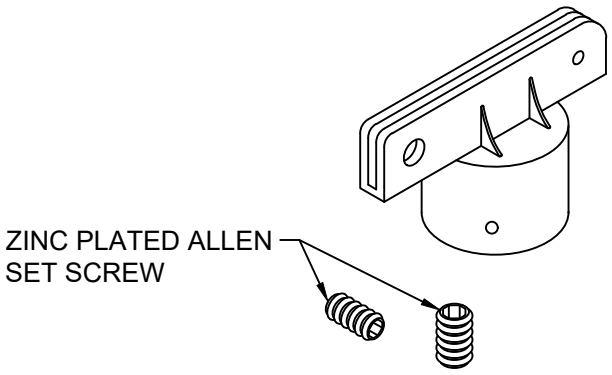
BRACKET DETAIL

NOTES:

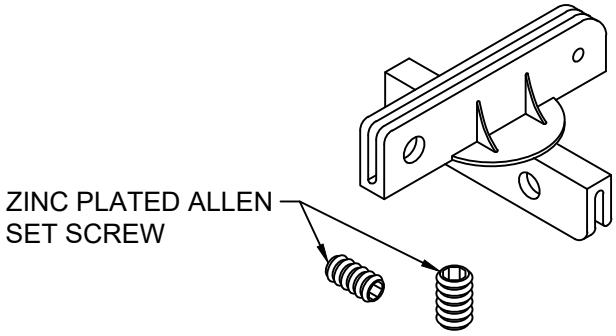
1. TAPCO SINGLE CLAMP-ON U-BRACKETS (OR APPROVED EQUAL) SHALL BE USED FOR SIGN PANEL ATTACHMENT TO POLE.
2. PAINT MOUNTING BRACKET AND U-BOLT BLACK TO MATCH SIGN POST.
3. SIGN PANELS SHALL COMPLY WITH WVDOH SPECIFICATIONS.
4. ALL BOLT HOLES SHALL BE ⅜" DIAMETER AND SHALL BE DRILLED OR FACTORY PUNCHED TO FINISHED SIZE.
5. SIGN BACKING SHALL BE NON-REFLECTIVE OPAQUE BLACK.
6. SIGN TYPE AS SHOWN ON PLANS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR DIMENSIONS AND DETAILS OF SIGN LEGEND.

NOT TO SCALE

RANSON	SIGN MOUNTING CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-02	1 OF 1	12/1/2023



POST TOP BRACKET



CROSSPIECE BRACKET

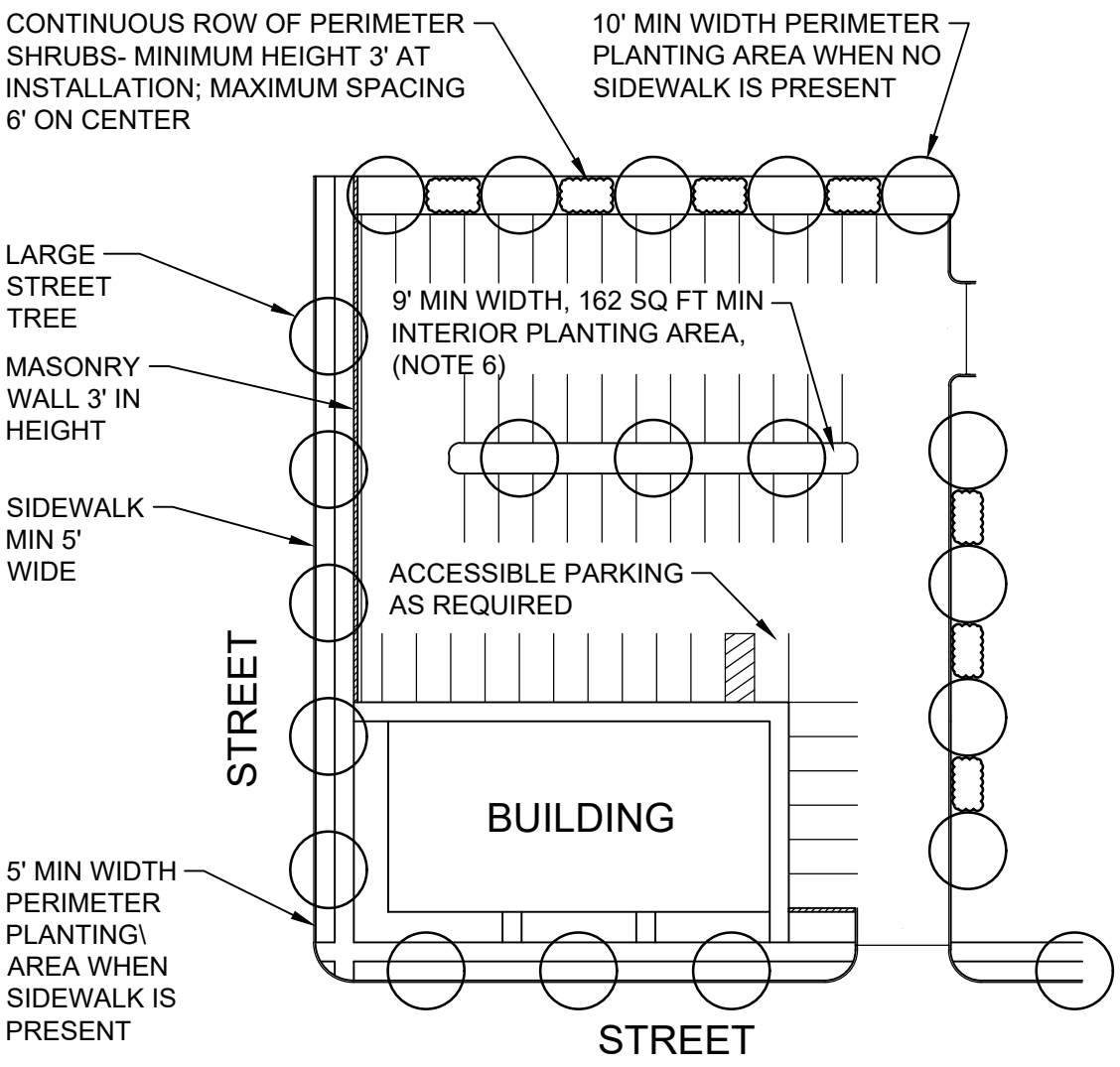
NOTES:

1. TAPCO SIGN BRACKETS (OR APPROVED EQUAL) SHALL BE USED FOR STREET SIGN ATTACHMENT TO POLES.

2. PAINT BRACKETS BLACK.

NOT TO SCALE

RANSON	**STREET SIGN MOUNTING BRACKET** CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-03	1 OF 1	12/1/2023



NOTES:

1. SIDEYARD PARKING ON CORNER LOTS SHALL BE LIMITED TO THE INTERIOR SIDEYARD.
2. LARGE STREET TREES SHALL BE PLANTED A MAXIMUM OF 40' ON CENTER.
3. SMALL AND MEDIUM STREET TREES PERMITTED ONLY WHERE UTILITY LINES PREVENT LARGE STREET TREES. SMALL STREET TRESS SHALL BE PLANTED A MAXIMUM OF 30' ON CENTER. MEDIUM STREET TREES SHALL BE PLANTED A MAXIMUM OF 40' ON CENTER.
4. MINIMUM TREE SIZE AT TIME OF PLANTING SHALL BE 2½" OR MORE IN DIAMETER MEASURED AT BREAST HEIGHT. THE MINIMUM HEIGHTS SHALL BE 8' TO 10'.
5. LANDSCAPE SCREEN MAY BE ELIMINATED IN PART FOR SHARED PARKING ACCESS AND CONNECTED PARKING LOTS.
6. PROVIDE INTERIOR PARKING LOT LANDSCAPING EQUIVALENT TO A MINIMUM OF 5% OF PARKING SPACES LOST, EXCLUDING PERIMETER LANDSCAPING, LANDSCAPING WITHIN 6' OF ANY BUILDING, AND REQUIRED SCREENING AND BUFFERING. A MAXIMUM OF 19 SPACES UNINTERRUPTED BY LANDSCAPING IS PERMITTED.

NOT TO SCALE

RANSON

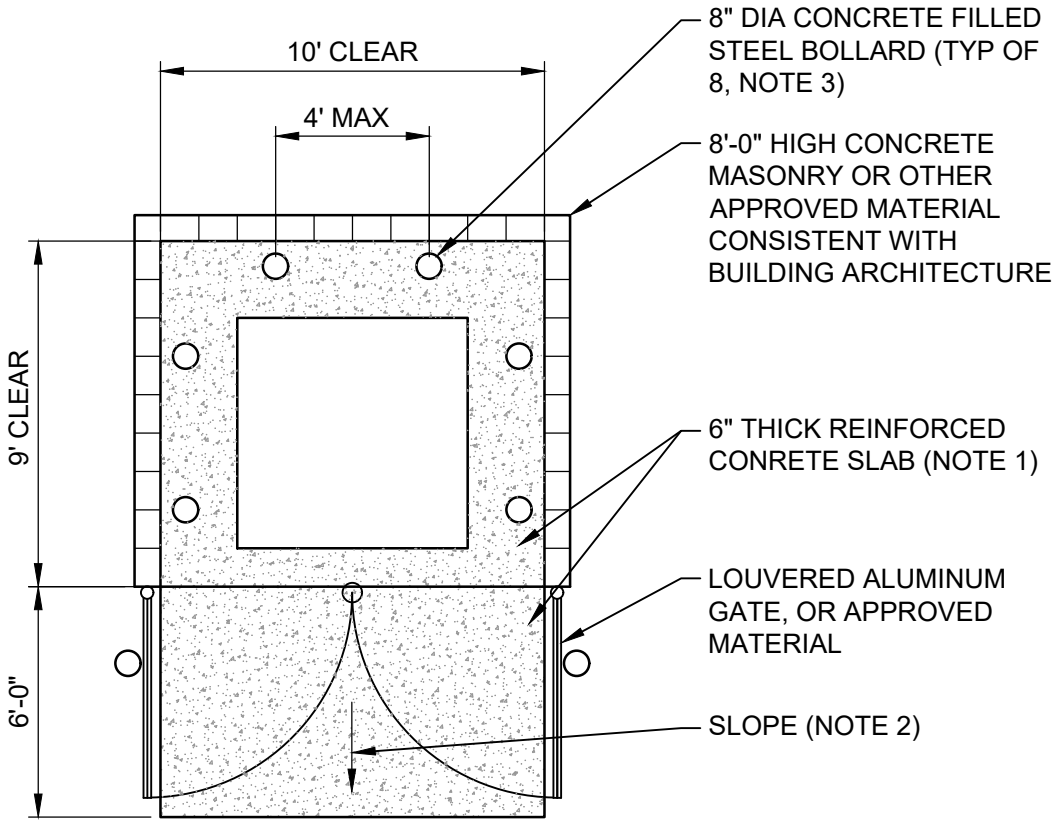
TYPICAL CONDITION - CORNER LOT

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
ST-01	1 OF 1	12/1/2023

NOTES:

1. CONCRETE SLAB WITHN DUMPSTER ENCLOSURE SHALL BE LEVEL..
2. CONCRETE SLAB OUTSIDE DUMPSTER ENCLOSURE SHALL SLOPE AT NO MORE THAN 2% IN ANY DIRECTION.
3. EACH PAIR OF BOLLARDS INSIDE ENCLOSURE MAY BE REPLACED WITH A 8" HIGH X 1' DEEP X 3' LONG CURB.
4. CONFIGURATION SHOWN IS FOR FRONT-LOAD DUMPSTERS. FOR SIDE-LOAD DUMPSTERS, ENLARGE ENCLOSURE TO PROVIDE 48" SQUARE ACCESSIBLE LANDING IN FRONT OF DOOR.



NOT TO SCALE

RANSON

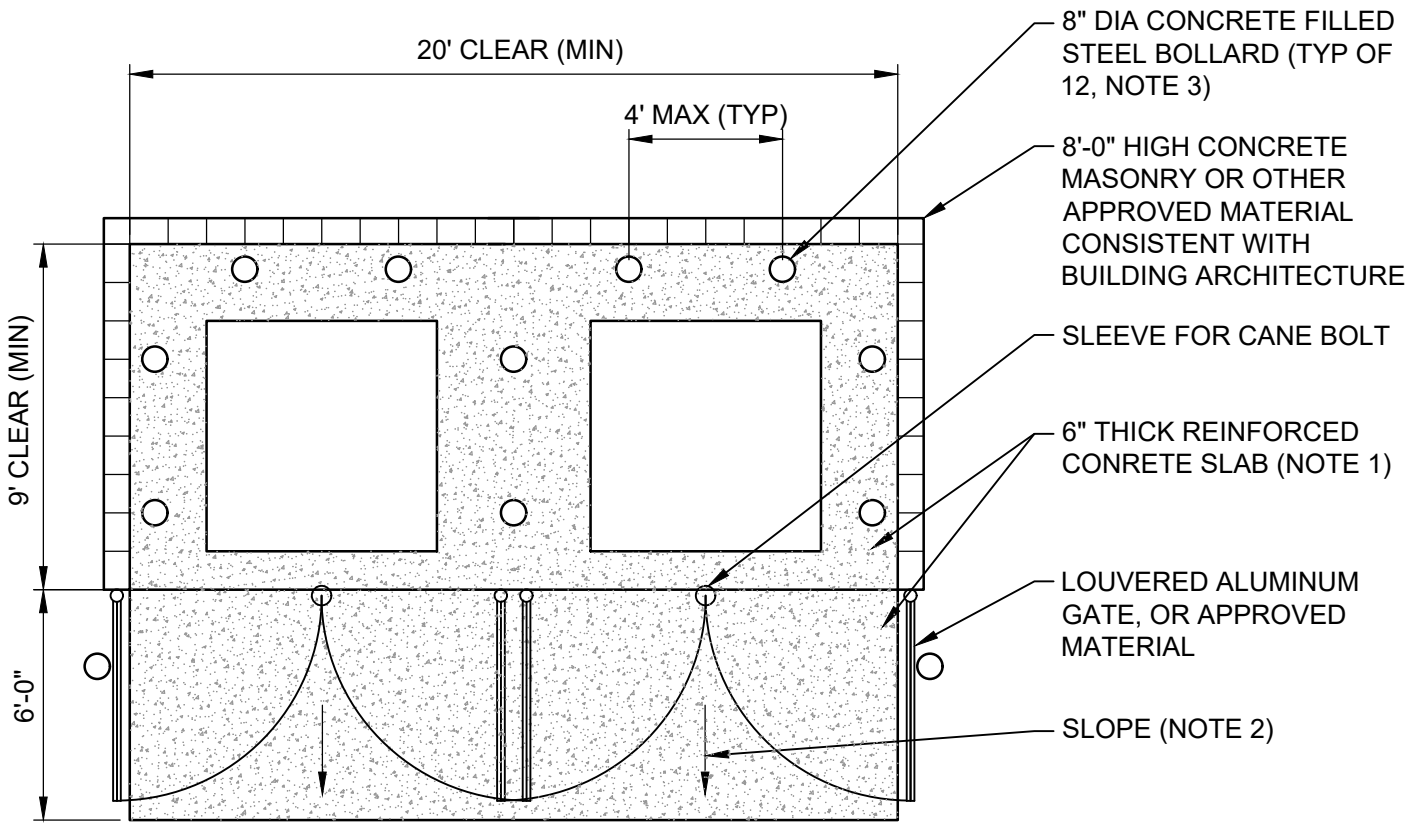
SINGLE DUMPSTER ENCLOSURE

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
ST-02	1 OF 1	12/1/2023

NOTES:

1. CONCRETE SLAB WITHN DUMPSTER ENCLOSURE SHALL BE LEVEL..
2. CONCRETE SLAB OUTSIDE DUMPSTER ENCLOSURE SHALL SLOPE AT NO MORE THAN 2% IN ANY DIRECTION.
3. PAIRS OF PERIMETER BOLLARDS INSIDE ENCLOSURE MAY BE REPLACED WITH A 8" HIGH X 1' DEEP X 3' LONG CURB.
4. CONFIGURATION SHOWN IS FOR FRONT-LOAD DUMPSTERS. FOR SIDE-LOAD DUMPSTERS, ENLARGE ENCLOSURE TO PROVIDE 48" SQUARE ACCESSIBLE LANDING IN FRONT OF DOOR.



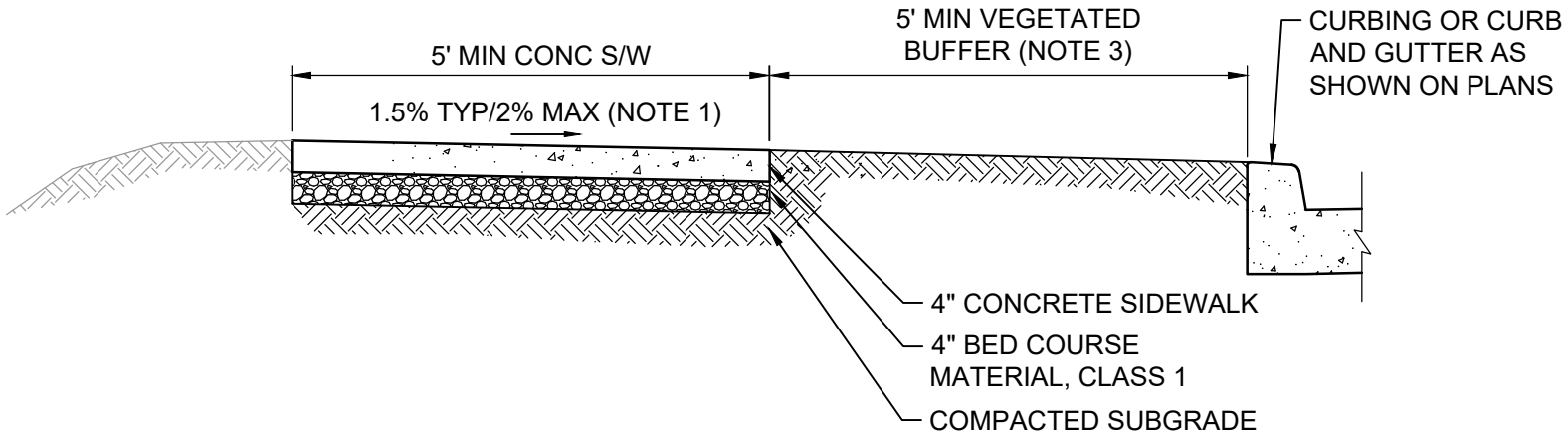
NOT TO SCALE

RANSON

DOUBLE DUMPSTER ENCLOSURE

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
ST-03	1 OF 1	12/1/2023



NOTES:

1. SIDEWALK CROSS SLOPE OF 2% IS ABSOLUTE MAX. THERE IS NO CONSTRUCTION TOLERANCE FOR INCREASED CROSS-SLOPE IN EXCESS OF 2%.

2. MAXIMUM ALLOWABLE LONGITUDINAL SLOPE IS 5% OR SLOPE OF ADJACENT ROADWAY, WHICHEVER IS GREATER.

3. SUBJECT TO APPROVAL BY THE CITY, VEGETATED BUFFER MAY BE OMITTED WHERE SIDEWALK IS ADJACENT TO A PARKING LANE OR A BIKE LANE.

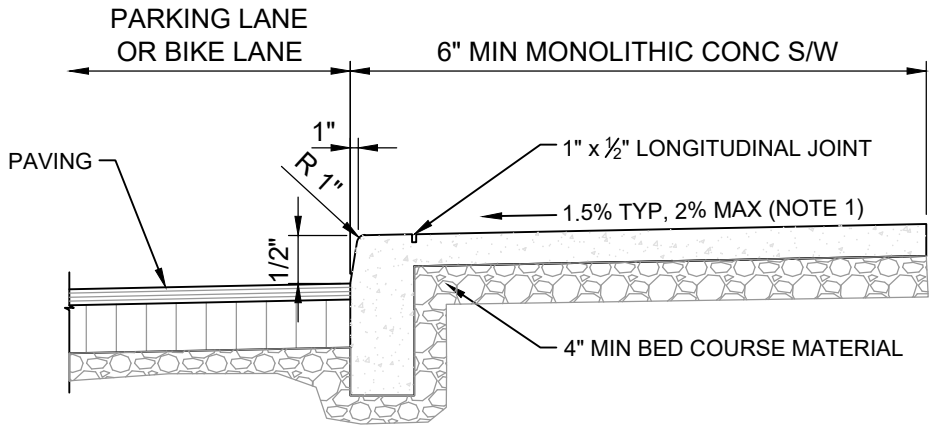
NOT TO SCALE

RANSON

CONCRETE SIDEWALK WITH BUFFER

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SW-01	1 OF 1	12/1/2023



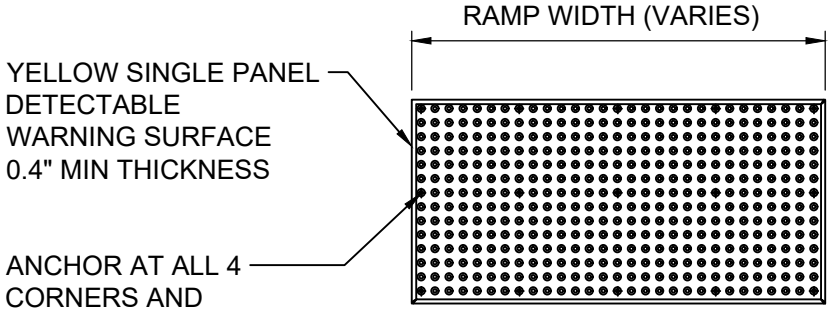
SECTION

NOTES:

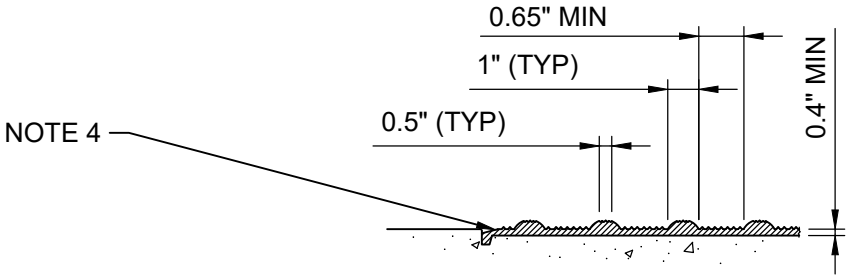
1. SIDEWALK CROSS SLOPE OF 2% IS ABSOLUTE MAX. THERE IS NO CONSTRUCTION TOLERANCE FOR INCREASED CROSS-SLOPE IN EXCESS OF 2%.
2. MAXIMUM ALLOWABLE LONGITUDINAL SLOPE IS 5% OR SLOPE OF ADJACENT ROADWAY, WHICHEVER IS GREATER.
3. MONOLITHIC SIDEWALK WITHOUT VEGETATED BUFFER MAY BE USED ONLY WHERE SIDEWALK IS ADJACENT TO A PARKING LANE OR A BIKE LANE.
4. LONGITUDINAL JOINT BETWEEN SIDEWALK AND CURB SHALL BE CONTINUOUS AND TO A DEPTH OF 1". TRANSVERSE JOINTS SHALL RUN FROM BACK EDGE OF SIDEWALK CONTINUOUS TO THE BOTTOM FACE OF CURB SPACED AT 5' INTERVALS AND TO A DEPTH OF ¼".

NOT TO SCALE

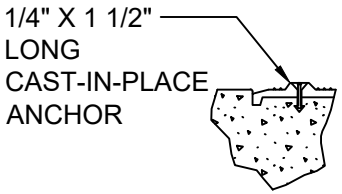
RANSON	SIDEWALK WITH MONOLITHIC CURB CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SW-02	1 OF 1	12/1/2023



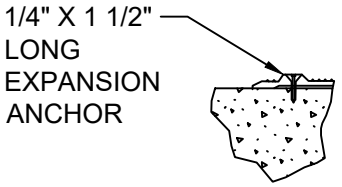
PLAN



TYPICAL SECTION



CAST-IN-PLACE ANCHOR DETAIL



SURFACE ANCHOR DETAIL

NOTES:

1. PROPOSED DETECTABLE WARNING SURFACE AND PANEL ANCHORING PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO INSTALLATION.
2. CAST-IN-PLACE DETECTABLE WARNING PANELS ARE PREFERRED FOR NEW CONSTRUCTION. SURFACE ANCHOR PANELS MAY BE USED WHEN RETROFITTING EXISTING CURB RAMPS.
3. INSTALL DETECTABLE WARNING SURFACE PER MANUFACTURER'S INSTRUCTIONS.
4. FOR NEW CONSTRUCTION, DEPRESS CONCRETE UNDER DETECTABLE WARNING PANEL SO PANEL IS FLUSH WITH SURROUNDING CONCRETE. FOR RETROFIT INSTALLATIONS, PROVIDE DETECTABLE WARNING SURFACE WITH BEVELED EDGES TO ENSURE SURFACE DISCONTINUITY IS LESS THAN 0.25"

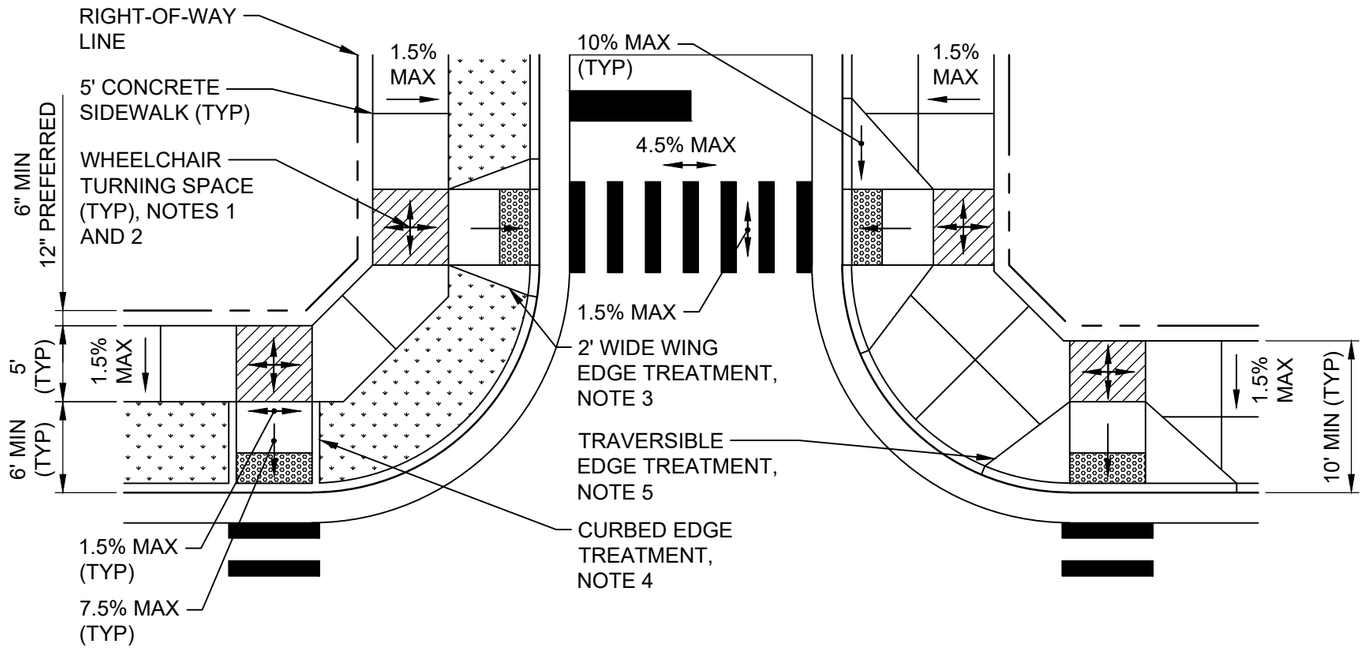
NOT TO SCALE

RANSON

DETECTABLE WARNING SURFACE

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SW-03	1 OF 1	12/1/2023



NOTES:

1. MINIMUM DIMENSIONS FOR WHEELCHAIR TURNING AREAS ARE 5'-0" X 4'-0". WHERE BACK OF TURNING AREA IS CONSTRAINED BY A VERTICAL OBSTRUCTION, INCREASE DIMENSIONS TO 5'-0" X 5'-0". WHEN CURB RAMP IS NOT DIRECTLY ALIGNED WITH PATH OF TRAVEL ALONG CROSSWALK, A MINIMUM 4'-0" X 4'-0" TURNING SPACE MUST ALSO BE PROVIDED AT THE BOTTOM OF THE CURB RAMP. TURNING SPACE MUST BE FULLY WITHIN THE CROSSWALK.
2. WHEELCHAIR TURNING AREAS MAY NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. PROVIDE DETAILS DEMONSTRATING EDGE SLOPES OF TURNING SPACE DO NOT EXCEED 1.5% AND DIAGONAL SLOPE FROM HIGHEST TO LOWEST CORNER DOES NOT EXCEED 2%.
3. 2' WIDE WING EDGE TREATMENT MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE.
4. CURBED EDGE TREATMENTS MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE OR OBSTRUCTION. DO NOT USE CURBED EDGE TREATMENT UNLESS RAMP IS DIRECTLY ALIGNED WITH THE PATH OF TRAVEL ALONG THE CROSSWALK.
5. TRAVERSIBLE EDGE TREATMENT REQUIRED WHEN SIDEWALK IS A MINIMUM OF 10 FEET WIDE AND IMMEDIATELY ADJACENT TO CURB.

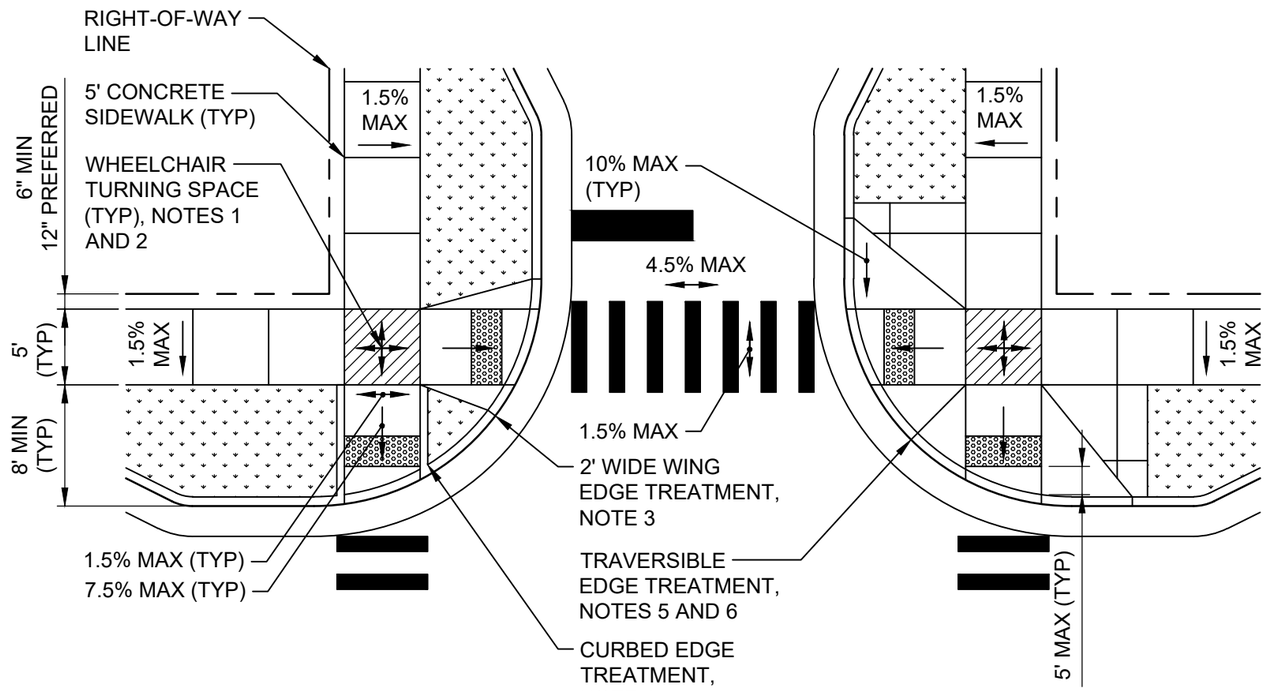
NOT TO SCALE

RANSON

PERPENDICULAR CURB RAMP WITHOUT CURB EXTENSION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SW-04	1 OF 1	12/1/2023



NOTES:

1. MINIMUM DIMENSIONS FOR WHEELCHAIR TURNING AREAS ARE 5'-0" X 4'-0". WHERE BACK OF TURNING AREA IS CONSTRAINED BY A VERTICAL OBSTRUCTION, INCREASE DIMENSIONS TO 5'-0" X 5'-0". WHEN CURB RAMP IS NOT DIRECTLY ALIGNED WITH PATHOF TRAVEL ALONG CROSSWALK, A MINIMUM 4'-0" X 4'-0" TURNING SPACE MUST ALSO BE PROVIDED AT THE BOTTOM OF THE CURB RAMP. TURNING SPACE MUST BE FULLY WITHIN THE CROSSWALK.
2. WHEELCHAIR TURNING AREAS MAY NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. PROVIDE DETAILS DEMONSTRATING EDGE SLOPES OF TURNING SPACE DO NOT EXCEED 1.5% AND DIAGONAL SLOPE FROM HIGHEST TO LOWEST CORNER DOES NOT EXCEED 2%.
3. 2' WIDE WING EDGE TREATMENT MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE.
4. CURBED EDGE TREATMENTS MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE OR OBSTRUCTION. DO NOT USE CURBED EDGE TREATMENT UNLESS RAMP IS DIRECTLY ALIGNED WITH THE PATH OF TRAVEL ALONG THE CROSSWALK.
5. TRAVERSIBLE EDGE TREATMENT REQUIRED WHEN SIDEWALK IS A MINIMUM OF 10 FEET WIDE AND IMMEDIATELY ADJACENT TO CURB.
6. CURB HEIGHT SHALL INCREASE TO A MINUMUM OF 3 INCHES BETWEEN RAMPS.

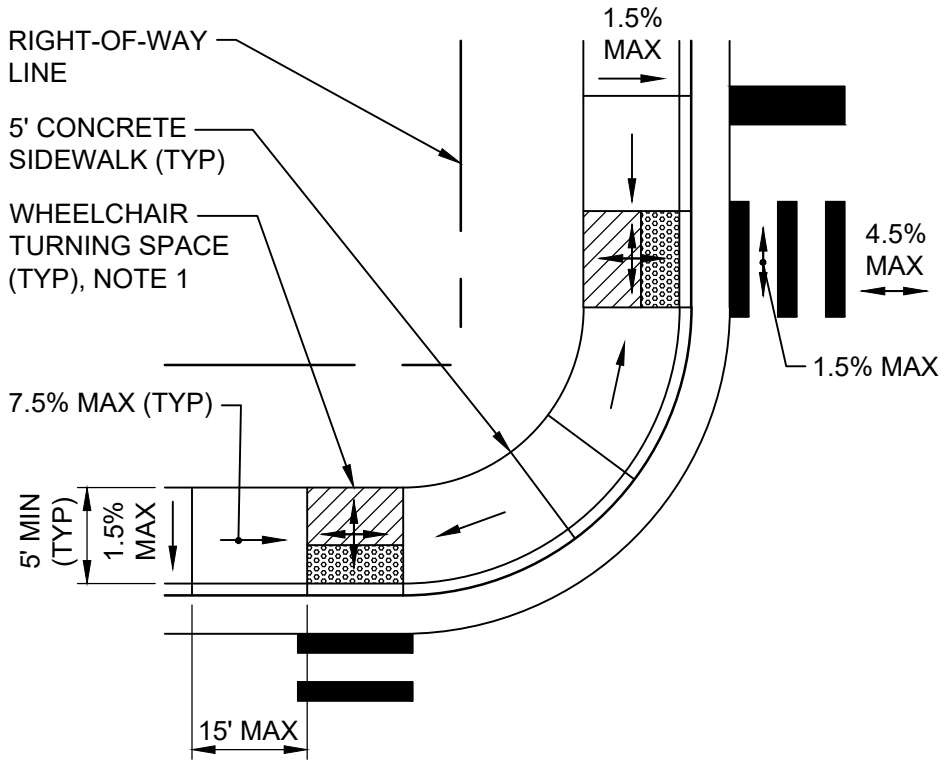
NOT TO SCALE

RANSON

PERPENDICULAR CURB RAMP WITH CURB EXTENSION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SW-05	1 OF 1	12/1/2023

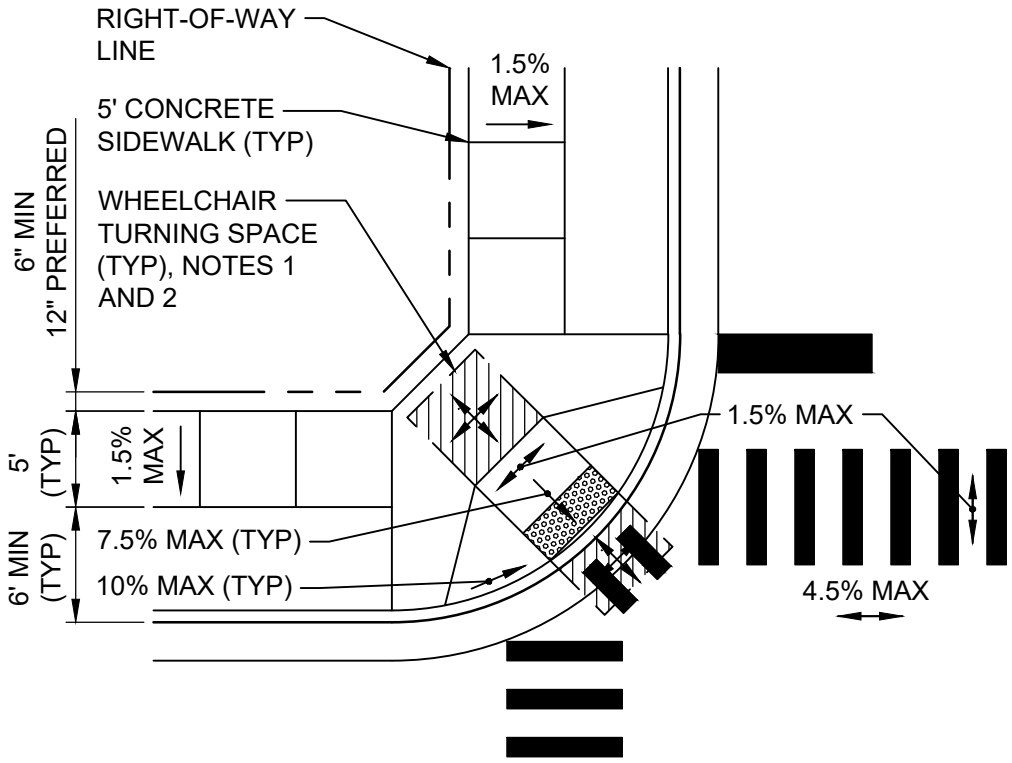


NOTES:

1. WHEELCHAIR TURNING AREAS MAY NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. PROVIDE DETAILS DEMONSTRATING EDGE SLOPES OF TURNING SPACE DO NOT EXCEED 1.5% AND DIAGONAL SLOPE FROM HIGHEST TO LOWEST CORNER DOES NOT EXCEED 2%.

NOT TO SCALE

RANSON	**PARALLEL CURB RAMP** CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SW-06	1 OF 1	12/1/2023



NOTES:

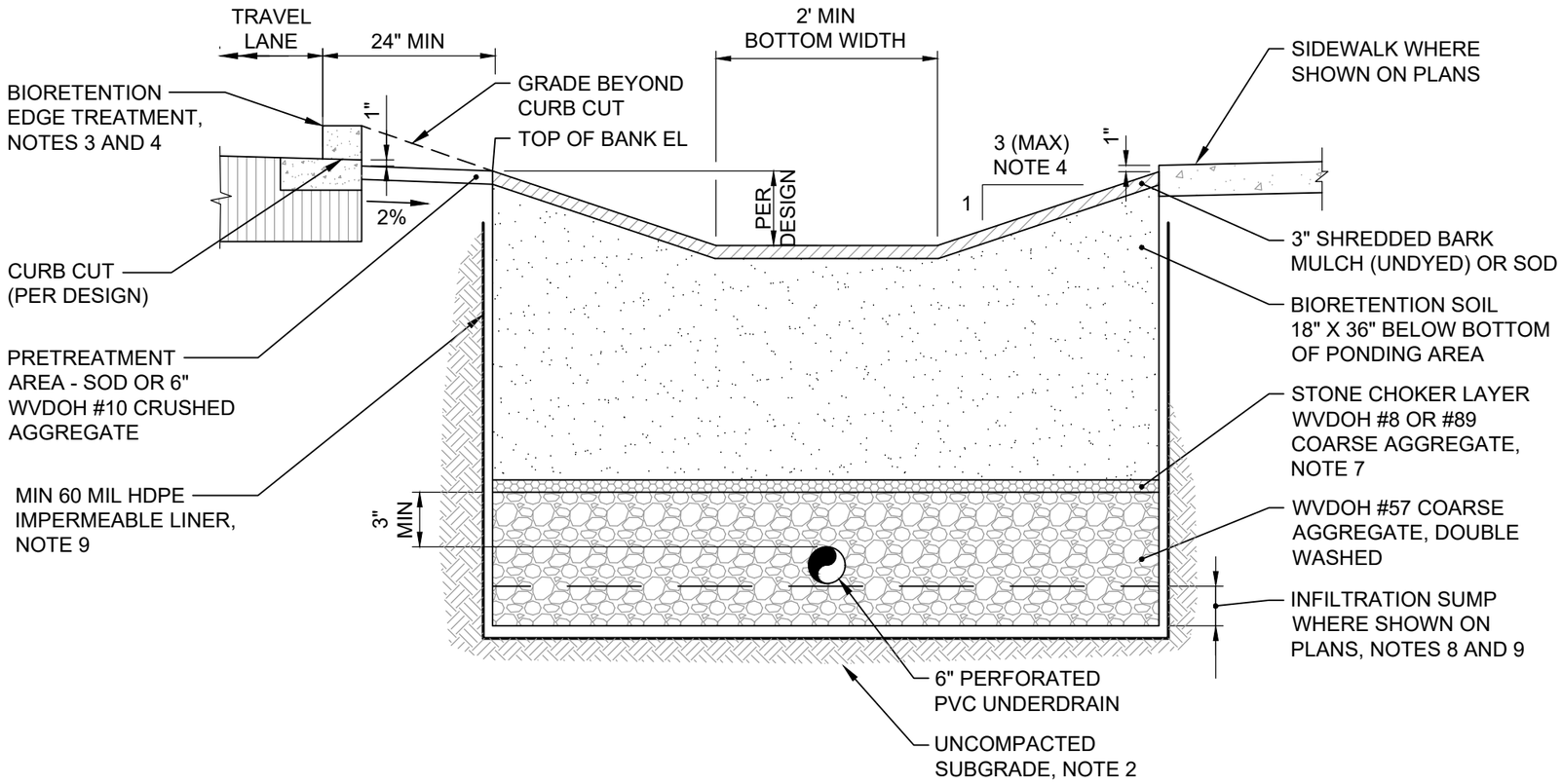
1. MINIMUM DIMENSIONS FOR WHEELCHAIR TURNING AREAS ARE 5'-0" X 4'-0". WHERE BACK OF TURNING AREA IS CONSTRAINED BY A VERTICAL OBSTRUCTION, INCREASE DIMENSIONS TO 5'-0" X 5'-0". WHEN CURB RAMP IS NOT DIRECTLY ALIGNED WITH PATH OF TRAVEL ALONG CROSSWALK, A MINIMUM 4'-0" X 4'-0" TURNING SPACE MUST ALSO BE PROVIDED AT THE BOTTOM OF THE CURB RAMP. TURNING SPACE MUST BE FULLY WITHIN THE CROSSWALK.

2. WHEELCHAIR TURNING AREAS MAY NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. PROVIDE DETAILS DEMONSTRATING EDGE SLOPES OF TURNING SPACE DO NOT EXCEED 1.5% AND DIAGONAL SLOPE FROM HIGHEST TO LOWEST CORNER DOES NOT EXCEED 2%.

3. RETROFIT CURB RAMPS MAY NOT BE USED FOR NEW CONSTRUCTION, AND MAY ONLY BE USED IN THE EXISTING PUBLIC RIGHT-OF-WAY WHEN EXISTING CONSTRAINTS RENDER FULL COMPLIANCE WITH THE US ACCESS BOARD'S ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG) TECHNICALLY INFEASIBLE. THE DESIGNER MUST PROVIDE WRITTEN JUSTIFICATION TO SUPPORT ANY DETERMINATION OF TECHNICAL INFEASIBILITY, AND MUST STILL COMPLY WITH PROWAG REQUIREMENTS TO THE MAXIMUM EXTENT FEASIBLE.

NOT TO SCALE

RANSON	RETROFIT CURB RAMP CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SW-07	1 OF 1	12/1/2023



NOTES:

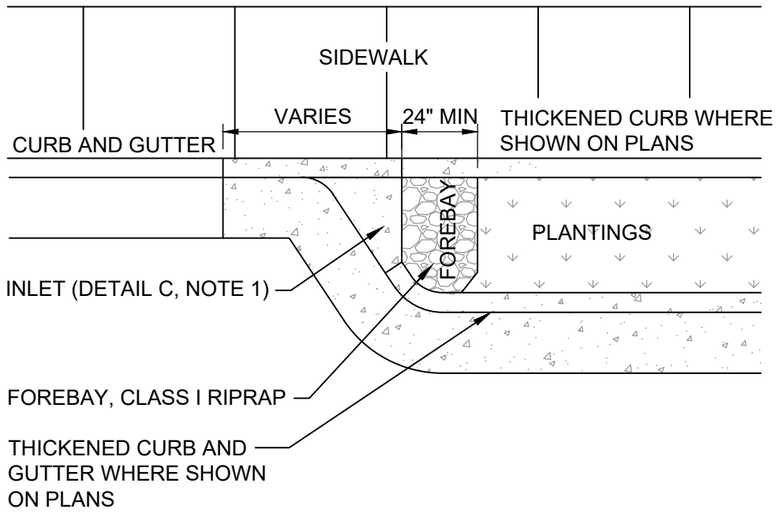
1. ALL MATERIALS AND CONSTRUCTION SHALL MEET CURRENT WVDEP SPECIFICATIONS FOR BIORETENTION AS DETAILED IN THE STORMWATER MANAGEMENT AND DESIGN GUIDANCE MANUAL.
2. SCARIFY SUBGRADE 3" MIN. BEFORE INSTALLATION.
3. STEP OUT ZONE REQUIRED WHEN ADJACENT TO A PARKING LANE. INSTALLATION MAY BE STANDARD CONCRETE SIDEWALK OR SOD BASED ON SURROUNDING CONDITIONS.
4. SIDE SLOPES STEEPER THAN 3:1, AND VERTICAL SIDEWALLS MAY BE ALLOWED IN CONSTRAINED AREAS WITH APPROPRIATE EDGE TREATMENT PER DETAIL SWM-04.
5. TREES AND PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH DESIGN PLANS AND THE CITY'S APPROVED PLANT LIST.
6. BOTTOM OF STONE LAYER MUST BE AT LEAST 2' ABOVE THE SEASONAL HIGH WATER TABLE AND BEDROCK AS DETERMINED BY GEOTECHNICAL INVESTIGATION.
7. PROVIDE 1" THICKNESS OF STONE CHOKER LAYER FOR EVERY 1' THICKNESS OF BIORETENTION SOIL AS MEASURED FROM THE BOTTOM OF THE PONDING AREA.
8. DUE TO THE PRESENCE OF KARST TERRAIN THROUGHOUT THE CITY OF RANSON, INFILTRATION WILL NOT BE ALLOWED UNLESS THE APPLICANT PROVIDES A GEOTECHNICAL INVESTIGATION DEMONSTRATING THERE IS NO KARST WITHIN THE FOOTPRINT OF THE PROPOSED INFILTRATION FACILITY.
9. IF ALLOWED, DEPTH OF INFILTRATION SUMP AS SHOWN ON DESIGN PLANS MUST BE SIZED TO ADDRESS STORMWATER MANAGEMENT REQUIREMENTS. OMIT IMPERMEABLE LINER WHEN DESIGNED AS IN INFILTRATION FACILITY

RANSON

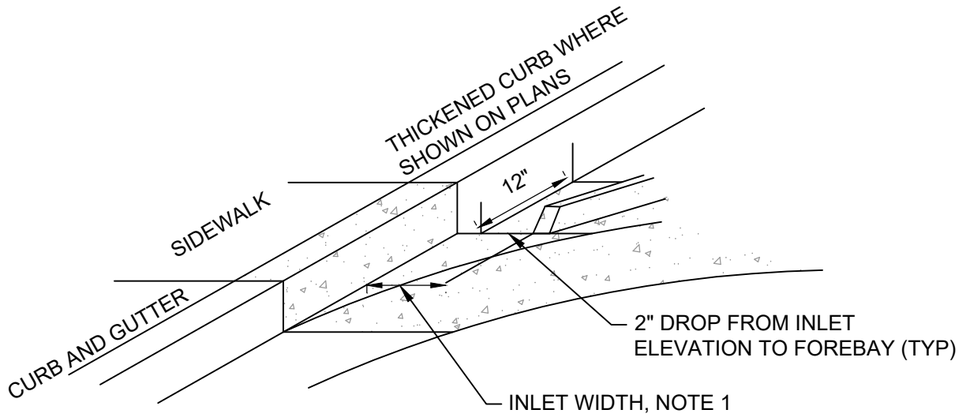
CURBSIDE BIORETENTION BASIN

CITY OF RANSON, WEST VIRGINIA

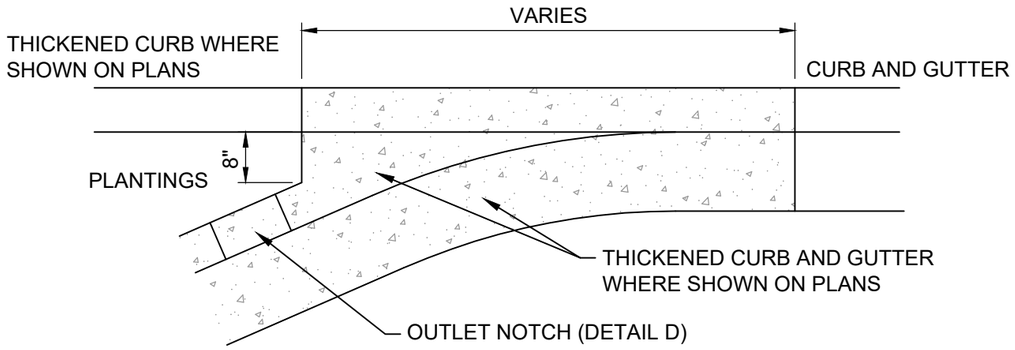
DETAIL NO.	SHEET NO.	REVISION DATE
SWM-01	1 OF 1	12/1/2023



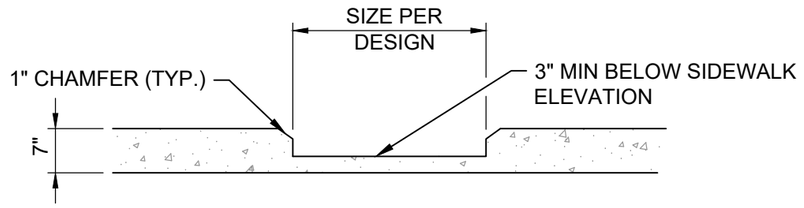
DETAIL A - INLET PLAN VIEW



DETAIL C - INLET ISOMETRIC VIEW



DETAIL B - OUTLET CURB PLAN



DETAIL D - OUTLET NOTCH

NOTES:

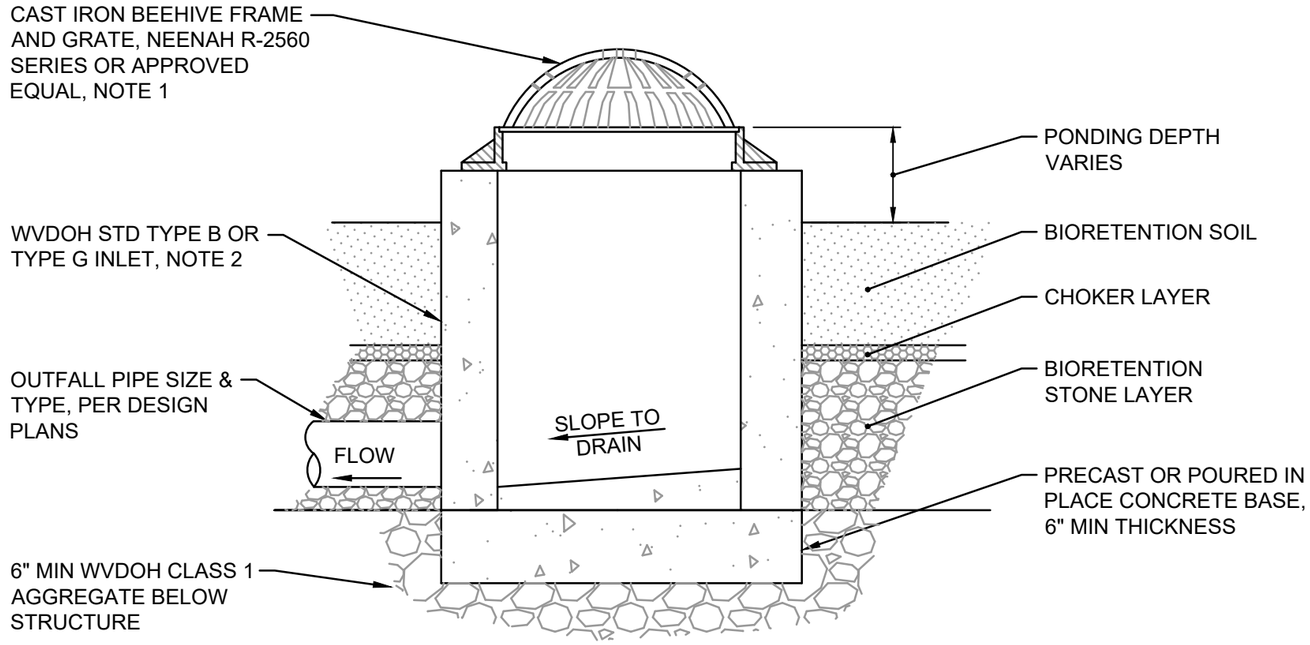
1. INLET OPENING WIDTH SHALL BE DETERMINED BASED ON A HYDROLOGIC AND HYDRAULIC EVALUATION OF THE PROPOSED TREATMENT VOLUMES, CONFIGURATION PER THE CITY'S STORMWATER MANAGEMENT ORDINANCE.

RANSON

INLET AND OUTLET FOR CURB EXTENSION

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SWM-02	1 OF 1	12/1/2023



NOTES:

1. MINIMUM OPENING SIZE SHALL BE 1¼". ANCHOR FRAME TO TOP OF STRUCTURE PER MANUFACTURER RECOMMENDATIONS.

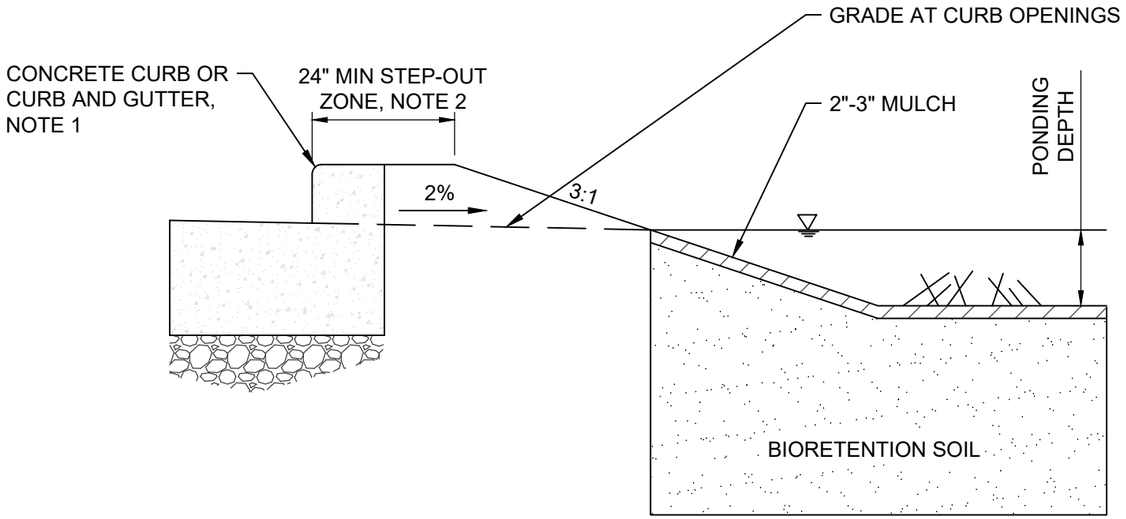
2. WHEN USING TYPE G INLET, PROVIDE FLAT TOP SLAB WITH 22" CIRCULAR OPENING TO ACCOMMODATE BEEHIVE FRAME AND GRATE.

RANSON

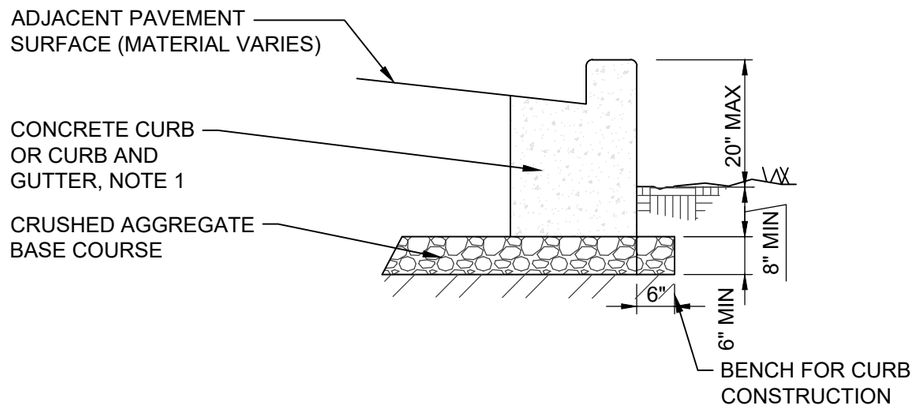
BIORETENTION OVERFLOW - BEEHIVE INLET

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SWM-03	1 OF 1	12/1/2023



CURB WITH SLOPE



THICKENED CONCRETE
CURB AND GUTTER

NOTES:

1. CURB TYPE TO MATCH PLANS.
2. 24" MIN STEP-OUT ZONE REQUIRED ADJACENT TO PARKING WHEN VEGETATED BUFFER IS PRESENT AT BACK OF CURB.
3. THICKENED CONCRETE CURB AND GUTTER TO BE USED WHERE SPACE IS INSUFFICIENT FOR 3:1 BIORETENTION SIDE SLOPES.

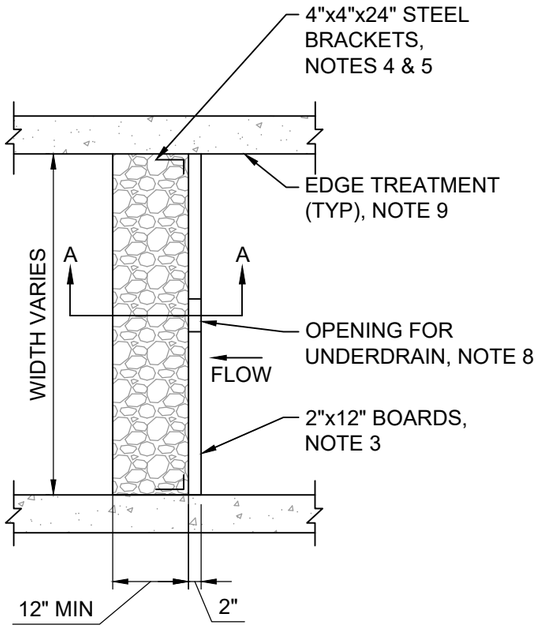
NOT TO SCALE

RANSON

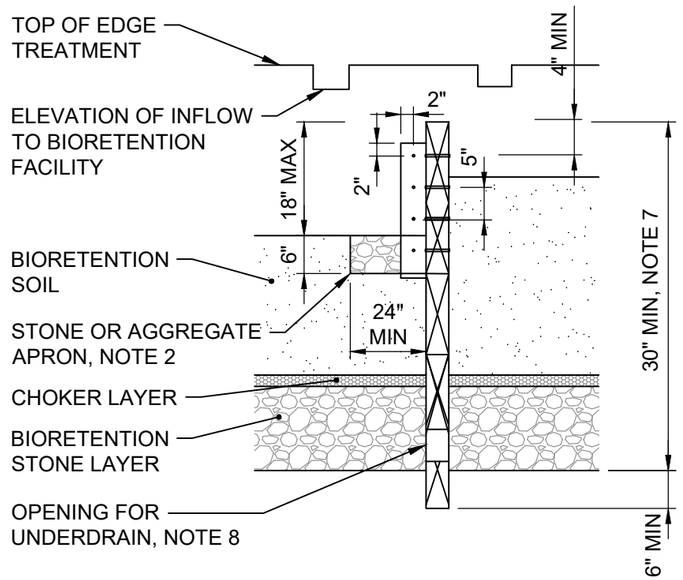
BIORETENTION EDGE TREATMENT

CITY OF RANSON, WEST VIRGINIA

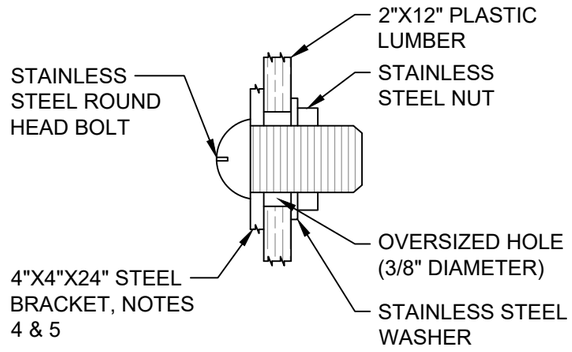
DETAIL NO.	SHEET NO.	REVISION DATE
SWM-04	1 OF 1	12/1/2023



PLAN



SECTION A-A



PLASTIC LUMBER BOLTING DETAIL

NOTES:

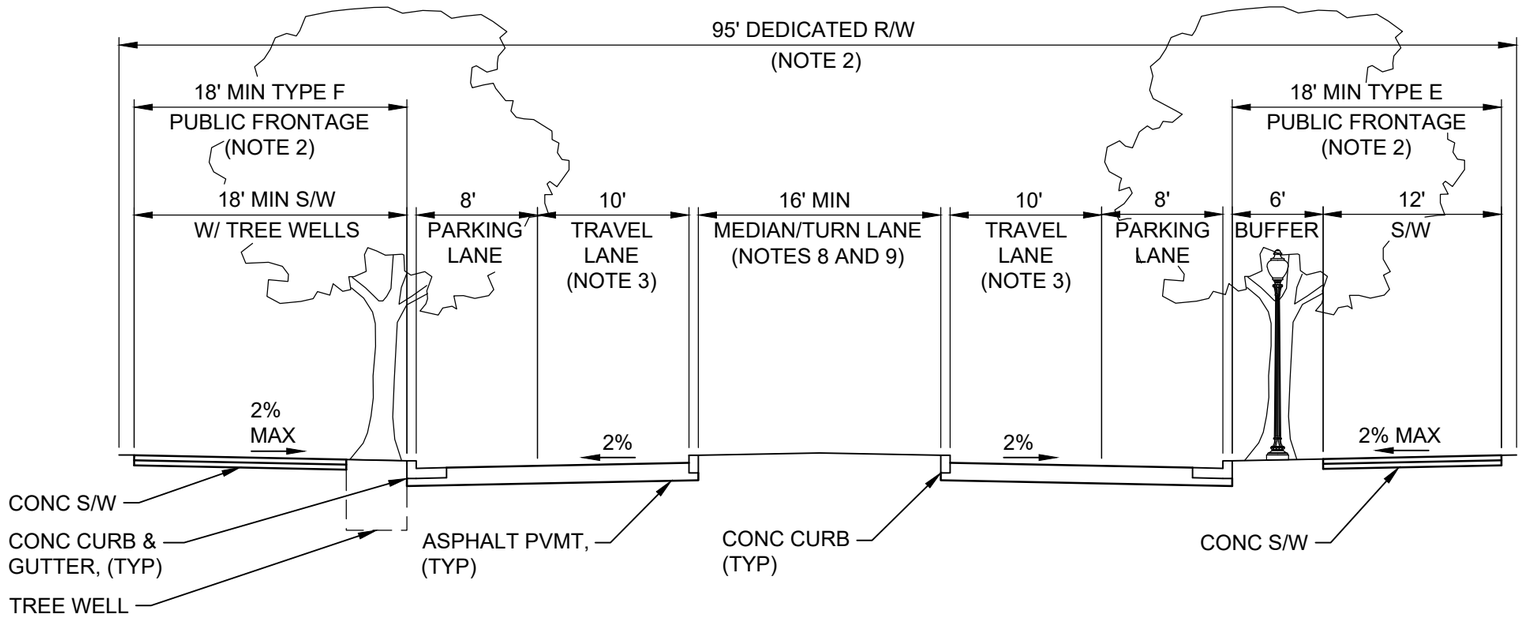
1. LOCATIONS, TOP AND BOTTOM ELEVATIONS, AND WIDTHS OF CHECK DAMS TO BE SPECIFIED IN THE DESIGN PLANS.
2. SIZE OF STONE OR AGGREGATE APRON TO BE SPECIFIED IN THE DESIGN PLANS.
3. EACH BOARD TO BE PLASTIC LUMBER AND CONTINUOUS ALONG ITS LENGTH. OTHER MANUFACTURED PRODUCTS MAY BE USED WITH CITY APPROVAL.
4. ALL FASTENERS TO BE STAINLESS STEEL OR GALVANIZED. BOLTS TO BE 5/16" DIAMETER. AND SPACED 4" ON CENTER.
5. BRACKET TO BE MADE OF 3/16" MIN. STAINLESS OR GALVANIZED STEEL.
6. THIS CHECK DAM MAY BE USED IN BIORETENTION BASINS OR CURB EXTENSIONS.
7. DEPTH OF CHECK DAM VARIES DEPENDING ON THE DEPTH OF THE FACILITY.
8. IF PRESENT, UNDERDRAIN TO PASS THROUGH CHECK DAM IN A NON-PERFORATED PVC PIPE. ANNULAR SPACE AROUND PIPE TO BE FILLED WITH POLYURETHANE FOAM.
9. EDGE TREATMENT TO BE CONCRETE CURB OR CURB AND GUTTER. INCREASE DEPTH OF CONCRETE TO PROVIDE A MINIMUM OF 8" OF EMBEDMENT BELOW SURFACE OF BIORETENTION SOIL.

RANSON

BIORETENTION CHECK DAM

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
SWM-05	1 OF 1	12/1/2023



NOTES:

1. BOULEVARDS (LONG DISTANCE) AND AVENUES (LIMITED DISTANCE) ARE ALLOWABLE WITHIN THE T4 - GENERAL URBAN AND T5 - URBAN CENTER DISTRICTS. AVENUES ARE ALSO ALLOWABLE IN THE T3 SUB-URBAN DISTRICT.

2. PUBLIC FRONTAGES TYPES C, D, E, AND F MAY BE USED WITH THIS THOROUGHFARE TYPE. DEDICATION OF ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHERE RIGHT-OF-WAY IS EXISTING AND IS LESS THAN 90' IN WIDTH. REDUCTION IN FRONTAGE WIDTH BELOW ALLOWABLE MINIMUM REQUIRES CITY APPROVAL..

3. ROADWAY DIMENSIONS ARE MEASURED FROM FACE OF CURB TO FACE OF CURB. TRAVEL LANES SHOULD BE WIDENED TO 11' IF ALONG A SCHOOL BUS OR EMERGENCY ACCESS ROUTE OR IF SPECIFIED BY THE CITY. IF 11-FOOT TRAVEL LANES ARE REQUIRED, RIGHT-OF-WAY WIDTH SHALL BE INCREASED TO 95'.

4. CURB EXTENSIONS SHALL BE INCORPORATED INTO THE PARKING LANE AT INTERSECTIONS. CURB EXTENSIONS MAY BE INCORPORATED INTO THE PARKING LANE MID-BLOCK WHERE APPROPRIATE.

5. THE 6-FOOT MINIMUM CURBSIDE BUFFER ALLOWS SPACE FOR STREET TREES, LIGHTING, LANDSCAPING, STREET APPURTENANCES AND/OR STORMWATER MANAGEMENT FACILITIES. THE BUFFER CAN BE EXPANDED TO ALLOW ADDITIONAL SPACE IF NEEDED.

6. WHERE CURBSIDE BUFFER IS PRESENT, THE MINIMUM SIDEWALK WIDTH SHOWN IS A CLEAR ZONE THAT MUST BE FREE OF OBSTRUCTIONS. WHERE TREE WELLS ARE PROPOSED, THE CLEAR ZONE SHALL EXTEND FROM THE RIGHT-OF-WAY LINE TO A POINT 6 FEET FROM THE BACK OF CURB. MINIMUM ALLOWABLE WITH OF THE CLEAR ZONE IS 5 FEET.

7. CITY STANDARD STREET LIGHTS SHALL BE PROVIDED AT MAXIMUM 50-FOOT INTERVALS, STAGGERED ON BOTH SIDES OF STREET IN COMMERCIAL AREAS. AT THE DISCRETION OF THE CITY, SUPPLEMENTAL LIGHTING MAY BE REQUIRED AT INTERSECTIONS AND MID-BLOCK CROSSINGS TO ENHANCE VISIBILITY OF PEDESTRIANS.

8. MEDIAN SHOULD BE REPLACED WITH LEFT TURN LANES AT INTERSECTIONS WHERE APPROPRIATE. A CONTINUOUS LEFT TURN LANE MAY NOT BE USED. IN AREAS WHERE CENTER TURN LANES ARE NOT NEEDED, THE MEDIAN MAY BE REDUCED TO A 6-FOOT WIDTH TO ALLOW FOR PEDESTRIAN REFUGE AT INTERSECTIONS.

9. MEDIAN AND BUFFERS MAY INCORPORATE STORMWATER MANAGEMENT FEATURES TO TREAT IMPERVIOUS ROADWAY SURFACES. DESIGNER MAY CHOOSE TO REVERSE THE TRADITIONAL CROSS SLOPE OF THE ROADWAY AND DRAIN TOWARD THE MEDIAN.

10. USING THE ALLOWABLE DESIGN SPEED, REFER TO AASHTO: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR ADDITIONAL HORIZONTAL AND VERTICAL DESIGN CONSTRAINTS.

11. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.

12. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.

13. ALL NEW CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH FEDERAL ACCESSIBILITY GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

14. POSITION OF SIDEWALKS AND BUFFERS MAY BE REVERSED WHEN ADJACENT TO A PARKING LANE.

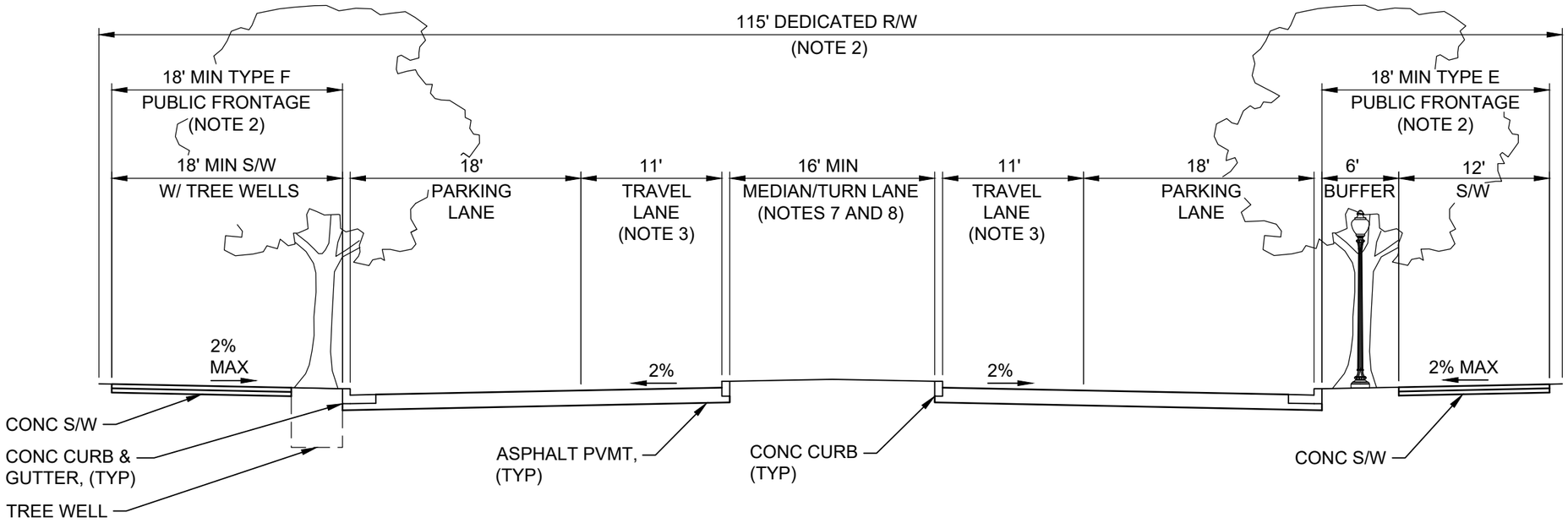
NOT TO SCALE

RANSON

BOULEVARD OR AVENUE WITH PARALLEL PARKING, 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
TS-01	1 OF 1	12/1/2023



NOTES:

1. BOULEVARDS (LONG DISTANCE) AND AVENUES (LIMITED DISTANCE) ARE ALLOWABLE WITHIN THE T4 - GENERAL URBAN AND T5 - URBAN CENTER DISTRICTS. AVENUES ARE ALSO ALLOWABLE IN THE T3 SUB-URBAN DISTRICT.

2. PUBLIC FRONTAGES TYPES C, D, E, AND F MAY BE USED WITH THIS THOROUGHFARE TYPE. DEDICATION OF ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHERE RIGHT-OF-WAY IS EXISTING AND IS LESS THAN 115' IN WIDTH. REDUCTION IN FRONTAGE WIDTH BELOW ALLOWABLE MINIMUM REQUIRES CITY APPROVAL.

3. CURB EXTENSIONS SHALL BE INCORPORATED INTO THE PARKING LANE AT INTERSECTIONS. CURB EXTENSIONS MAY BE INCORPORATED INTO THE PARKING LANE MID-BLOCK WHERE APPROPRIATE.

4. THE 6-FOOT MINIMUM CURBSIDE BUFFER ALLOWS SPACE FOR STREET TREES, LIGHTING, LANDSCAPING, STREET APPURTENANCES AND/OR STORMWATER MANAGEMENT FACILITIES. THE BUFFER CAN BE EXPANDED TO ALLOW ADDITIONAL SPACE IF NEEDED.

5. WHERE CURBSIDE BUFFER IS PRESENT, THE MINIMUM SIDEWALK WIDTH SHOWN IS A CLEAR ZONE THAT MUST BE FREE OF OBSTRUCTIONS. WHERE TREE WELLS ARE PROPOSED, THE CLEAR ZONE SHALL EXTEND FROM THE RIGHT-OF-WAY LINE TO A POINT 6 FEET FROM THE BACK OF CURB. MINIMUM ALLOWABLE WITH OF THE CLEAR ZONE IS 5 FEET.

6. CITY STANDARD STREET LIGHTS SHALL BE PROVIDED AT MAXIMUM 50-FOOT INTERVALS, STAGGERED ON BOTH SIDES OF STREET IN COMMERCIAL AREAS. AT THE DISCRETION OF THE CITY, SUPPLEMENTAL LIGHTING MAY BE REQUIRED AT INTERSECTIONS AND MID-BLOCK CROSSINGS TO ENHANCE VISIBILITY OF PEDESTRIANS.

7. MEDIAN SHOULD BE REPLACED WITH LEFT TURN LANES AT INTERSECTIONS WHERE APPROPRIATE. A CONTINUOUS LEFT TURN LANE MAY NOT BE USED. IN AREAS WHERE CENTER TURN LANES ARE NOT NEEDED, THE MEDIAN MAY BE REDUCED TO A 6-FOOT WIDTH TO ALLOW FOR PEDESTRIAN REFUGE AT INTERSECTIONS.

8. MEDIAN AND BUFFERS MAY INCORPORATE STORMWATER MANAGEMENT FEATURES TO TREAT IMPERVIOUS ROADWAY SURFACES. DESIGNER MAY CHOOSE TO REVERSE THE TRADITIONAL CROSS SLOPE OF THE ROADWAY AND DRAIN TOWARD THE MEDIAN.

9. USING THE ALLOWABLE DESIGN SPEED, REFER TO AASHTO: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR ADDITIONAL HORIZONTAL AND VERTICAL DESIGN CONSTRAINTS.

10. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.

11. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.

12. ALL NEW CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH FEDERAL ACCESSIBILITY GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

13. POSITION OF SIDEWALKS AND BUFFERS MAY BE REVERSED WHEN ADJACENT TO A PARKING LANE.

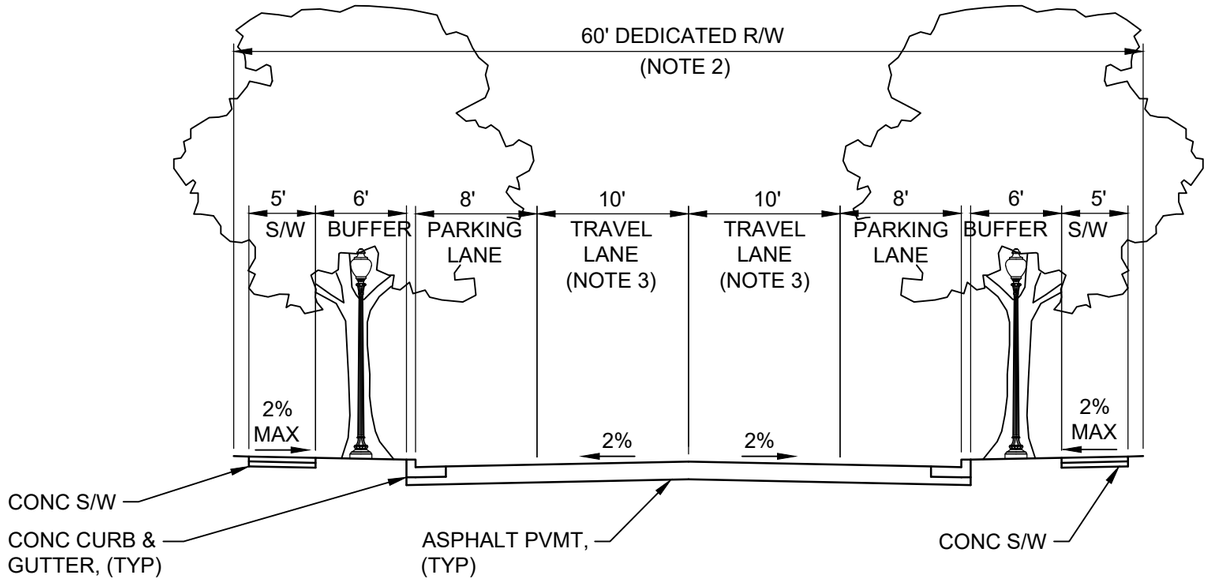
NOT TO SCALE

RANSON

BOULEVARD OR AVENUE WITH REVERSE ANGLE PARKING, 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
TS-02	1 OF 1	12/1/2023



NOTES:

1. STREETS ARE ALLOWABLE WITHIN THE T3 - SUB-URBAN, T4 - GENERAL URBAN AND T5 - URBAN CENTER DISTRICTS.

2. BOTH TYPE C AND TYPE D PUBLIC FRONTAGES ARE ALLOWABLE FOR USE WITH STREETS. PROVIDE 5 ADDITIONAL FEET OF RIGHT-OF-WAY AT THE BACK OF SIDEWALK WHERE TYPE D FRONTAGE IS USED.

3. ROADWAY DIMENSIONS ARE MEASURED FROM FACE OF CURB TO FACE OF CURB. TRAVEL LANES SHOULD BE WIDENED TO 11' IF ALONG A SCHOOL BUS OR EMERGENCY ACCESS ROUTE OR IF SPECIFIED BY THE CITY. IF 11-FOOT TRAVEL LANES ARE REQUIRED, RIGHT-OF-WAY WIDTH SHALL BE INCREASED TO 65'.

4. CURB EXTENSIONS SHALL BE INCORPORATED INTO THE PARKING LANE AT INTERSECTIONS. CURB EXTENSIONS MAY BE INCORPORATED INTO THE PARKING LANE MID-BLOCK WHERE APPROPRIATE.

5. THE 6-FOOT MINIMUM CURBSIDE BUFFER ALLOWS SPACE FOR STREET TREES, LIGHTING, LANDSCAPING, STREET APPURTENANCES AND/OR STORMWATER MANAGEMENT FACILITIES. THE BUFFER CAN BE EXPANDED TO ALLOW ADDITIONAL SPACE IF NEEDED.

6. WHERE CURBSIDE BUFFER IS PRESENT, THE MINIMUM SIDEWALK WIDTH SHOWN IS A CLEAR ZONE THAT MUST BE FREE OF OBSTRUCTIONS. WHERE TREE WELLS ARE PROPOSED, THE CLEAR ZONE SHALL EXTEND FROM THE RIGHT-OF-WAY LINE TO A POINT 6 FEET FROM THE BACK OF CURB. MINIMUM ALLOWABLE WITH OF THE CLEAR ZONE IS 5 FEET.

7. CITY STANDARD STREET LIGHTS SHALL BE PROVIDED AT MAXIMUM 50-FOOT INTERVALS, STAGGERED ON BOTH SIDES OF STREET. AT THE DISCRETION OF THE CITY, SUPPLEMENTAL LIGHTING MAY BE REQUIRED AT INTERSECTIONS AND MID-BLOCK CROSSINGS TO ENHANCE VISIBILITY OF PEDESTRIANS.

8. THE BUFFERS MAY INCORPORATE STORMWATER MANAGEMENT FEATURES TO TREAT IMPERVIOUS ROADWAY SURFACES. DESIGNER MAY CHOOSE TO REVERSE THE TRADITIONAL CROSS SLOPE OF THE ROADWAY AND DRAIN TOWARD THE MEDIAN.

9. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.

10. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.

11. ALL NEW CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH FEDERAL ACCESSIBILITY GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

12. POSITION OF SIDEWALKS AND BUFFERS MAY BE REVERSED WHEN ADJACENT TO A PARKING LANE.

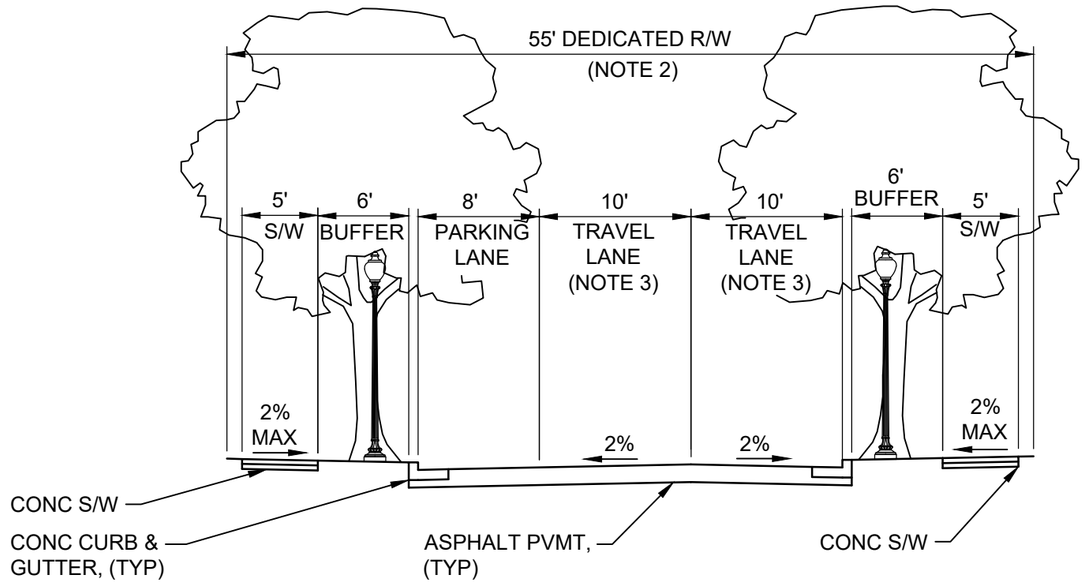
NOT TO SCALE

RANSON

STREET WITH PARALLEL PARKING ON 2 SIDES, 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
TS-03	1 OF 1	12/1/2023



NOTES:

1. STREETS ARE ALLOWABLE WITHIN THE T3 - SUB-URBAN, T4 - GENERAL URBAN AND T5 - URBAN CENTER DISTRICTS.
2. BOTH TYPE C AND TYPE D PUBLIC FRONTAGES ARE ALLOWABLE FOR USE WITH STREETS. PROVIDE 5 ADDITIONAL FEET OF RIGHT-OF-WAY AT THE BACK OF SIDEWALK WHERE TYPE D FRONTAGE IS USED.
3. ROADWAY DIMENSIONS ARE MEASURED FROM FACE OF CURB TO FACE OF CURB. TRAVEL LANES SHOULD BE WIDENED TO 11' IF ALONG A SCHOOL BUS OR EMERGENCY ACCESS ROUTE OR IF SPECIFIED BY THE CITY. IF 11-FOOT TRAVEL LANES ARE REQUIRED, RIGHT-OF-WAY WIDTH SHALL BE INCREASED TO 65'.
4. CURB EXTENSIONS SHALL BE INCORPORATED INTO THE PARKING LANE AT INTERSECTIONS. CURB EXTENSIONS MAY BE INCORPORATED INTO THE PARKING LANE MID-BLOCK WHERE APPROPRIATE.
5. THE 6-FOOT MINIMUM CURBSIDE BUFFER ALLOWS SPACE FOR STREET TREES, LIGHTING, LANDSCAPING, STREET APPURTENANCES AND/OR STORMWATER MANAGEMENT FACILITIES. THE BUFFER CAN BE EXPANDED TO ALLOW ADDITIONAL SPACE IF NEEDED.
6. WHERE CURBSIDE BUFFER IS PRESENT, THE MINIMUM SIDEWALK WIDTH SHOWN IS A CLEAR ZONE THAT MUST BE FREE OF OBSTRUCTIONS. WHERE TREE WELLS ARE PROPOSED, THE CLEAR ZONE SHALL EXTEND FROM THE RIGHT-OF-WAY LINE TO A POINT 6 FEET FROM THE BACK OF CURB. MINIMUM ALLOWABLE WITH OF THE CLEAR ZONE IS 5 FEET.
7. CITY STANDARD STREET LIGHTS SHALL BE PROVIDED AT MAXIMUM 50-FOOT INTERVALS, STAGGERED ON BOTH SIDES OF STREET. AT THE DISCRETION OF THE CITY, SUPPLEMENTAL LIGHTING MAY BE REQUIRED AT INTERSECTIONS AND MID-BLOCK CROSSINGS TO ENHANCE VISIBILITY OF PEDESTRIANS.
8. THE BUFFERS MAY INCORPORATE STORMWATER MANAGEMENT FEATURES TO TREAT IMPERVIOUS ROADWAY SURFACES. DESIGNER MAY CHOOSE TO REVERSE THE TRADITIONAL CROSS SLOPE OF THE ROADWAY AND DRAIN TOWARD THE MEDIAN.
9. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.
10. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.
11. ALL NEW CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH FEDERAL ACCESSIBILITY GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.
12. POSITION OF SIDEWALKS AND BUFFERS MAY BE REVERSED WHEN ADJACENT TO A PARKING LANE.

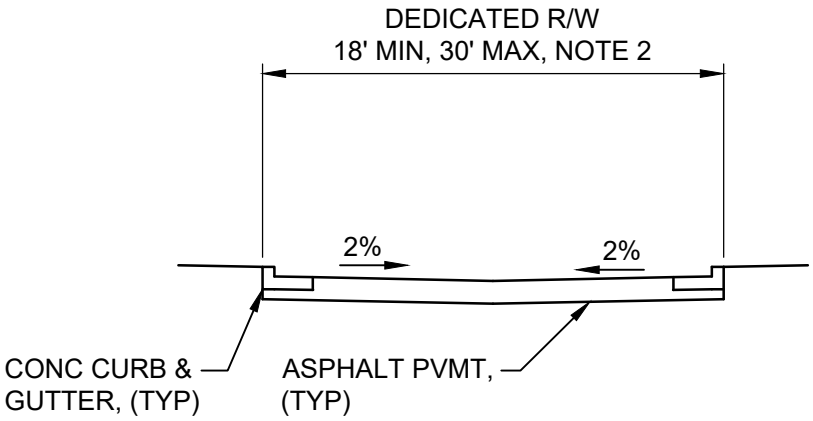
NOT TO SCALE

RANSON

STREET WITH PARALLEL PARKING ON 1 SIDE, 25 MPH

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
TS-04	1 OF 1	12/1/2023



NOTES:

1. ALLEYS ARE ALLOWABLE WITHIN THE T4O - GENERAL URBAN AND T5L AND T5 - URBAN CENTER DISTRICTS.

2. THE ENTIRE WIDTH OF THE RIGHT-OF-WAY MUST BE PAVED AND THE APPLICANT SHALL DEMONSTRATE THAT A TYPICAL RESIDENTIAL GARBAGE TRUCK CAN NAVIGATE INTO AND THROUGH PROPOSED ALLEYS

3. THE PAVEMENT SURFACE SHOULD BE GRADED TO A REVERSE CROWN TO PROMOTE POSITIVE DRAINAGE. THE CITY ENGINEER WILL CONSIDER OTHER DRAINAGE CONFIGURATIONS ON A CASE-BY-CASE BASIS.

4. WHERE CONNECTING ROADWAYS DO NOT HAVE CURB AND GUTTER, ALLEY CURB AND GUTTER MAY BE OMITTED AND THE PAVEMENT EXTENDED TO THE RIGHT-OF-WAY LINES.

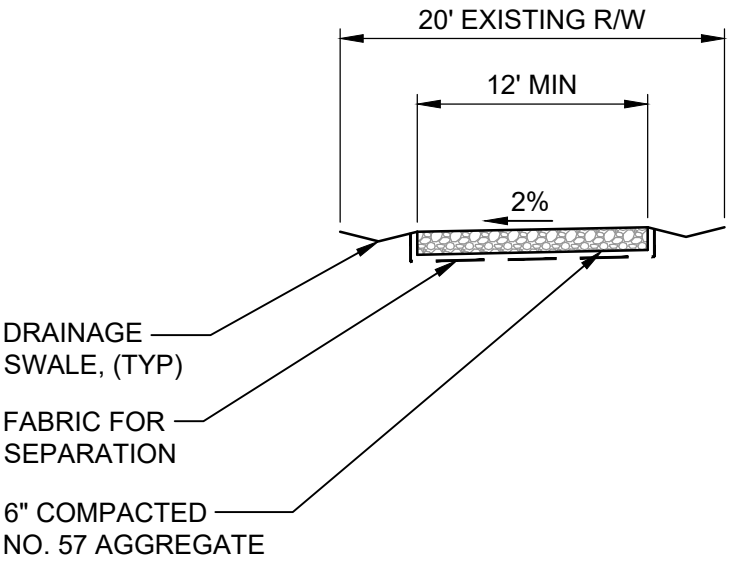
5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.

6. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.

7. ALL NEW CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL COMPLY WITH FEDERAL ACCESSIBILITY GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

NOT TO SCALE

RANSON	PAVED ALLEY CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		TS-05	1 OF 1	12/1/2023



NOTES:

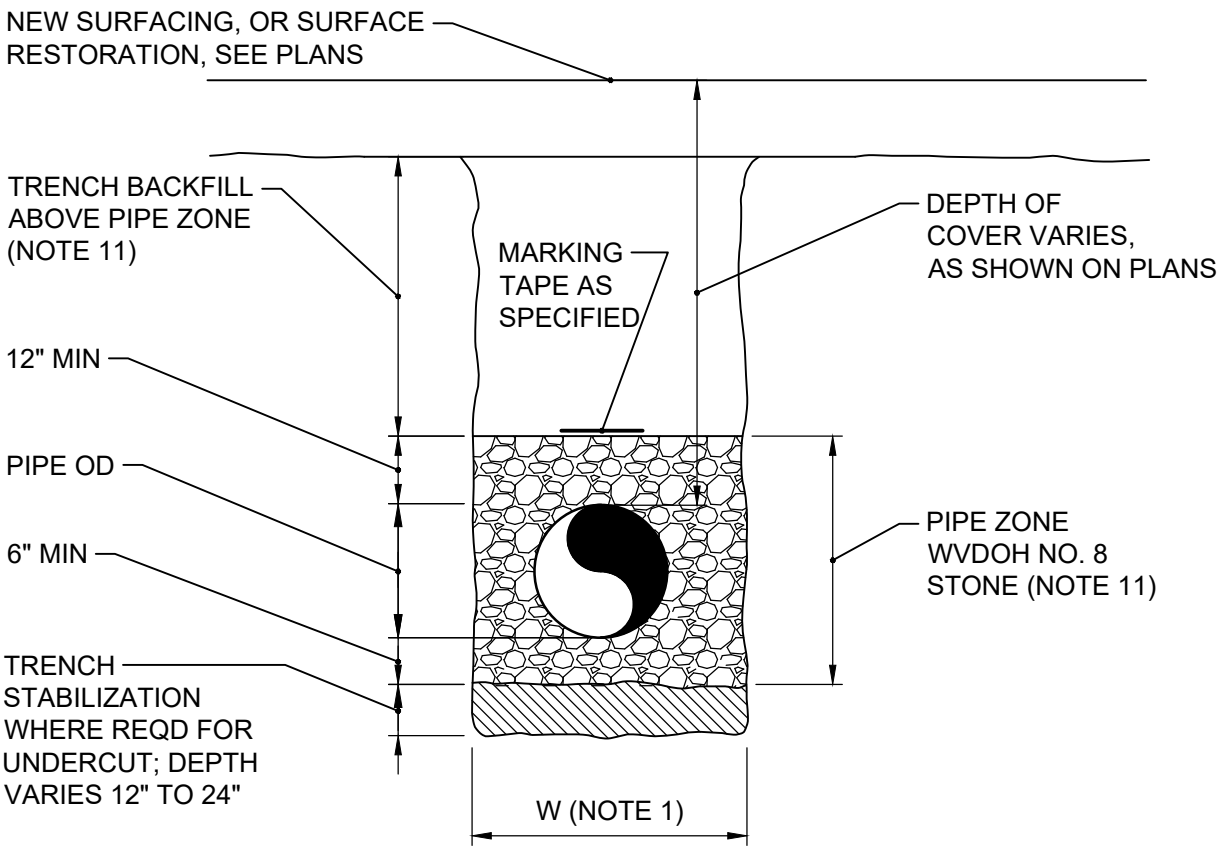
1. GRAVEL ALLEYS ARE NOT PERMITTED FOR NEW CONSTRUCTION, BUT MAY BE PROPOSED IN AREAS WHERE EXISTING ALLEYS ARE GRAVEL AND AREAS WHERE EXISTING ROADWAYS DO NOT HAVE CURB AND GUTTER.

2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF RANSON AND WEST VIRGINIA DIVISION OF HIGHWAYS STANDARDS AND SPECIFICATIONS.

3. ALL UNPAVED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL AND SOD.

NOT TO SCALE

RANSON	GRAVEL ALLEY CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		TS-06	1 OF 1	12/1/2023



NOTES:

1. W = MAXIMUM PERMISSIBLE TRENCH WIDTH, BASED UPON W = OD + 24", UNLESS APPROVED BY THE ENGINEER.
2. TRENCHES TO BE SHEETED AND BRACED AS REQUIRED.
3. PROVIDE BEARING FOR FULL LENGTH OF BARREL. DIG HOLES FOR THE BELL.
4. BACKFILL ON SIDES TO 1/2 OD OF PIPE TO HOLD PIPE IN PLACE PRIOR TO PLACING ADDITIONAL BACKFILL.
5. BACKFILL TO BE COMPACTED IN 6" LAYERS TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (+2%) IN ROADS AND STREETS. COMPACT TO MATCH EXISTING GROUND IN OTHER AREAS.
6. BACKFILL TO BE WVDOH NO. 8 STONE IN PAVED OR SHOULDER AREAS. BACKFILL TO BE NATIVE MATERIAL IN OTHER AREAS.
7. MAINTAIN A MINIMUM OF 3' OF COVER TO THE TOP OF PIPE FOR STORM DRAINS. MAINTAIN A MINIMUM OF 4' OF COVER OVER PIPE FOR SANITARY SEWERS. MAINTAIN A MINIMUM OF 3.5' OF COVER OVER PIPE FOR WATER LINES.
8. A CASING PIPE IS REQUIRED IN ROAD CROSSINGS WHERE SHOWN ON PLANS.
9. ALL WATER AND SEWER LINES REQUIRE APPROVAL FROM APPLICABLE UTILITY PROVIDERS.
10. SEE CITY OF RANSON PAVEMENT RESTORATION DETAIL PVT-04 FOR RESURFACING.
11. FULL DEPTH BELOW PAVEMENT SHALL BE BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL WHERE HDPE DRAINAGE PIPE IS USED.

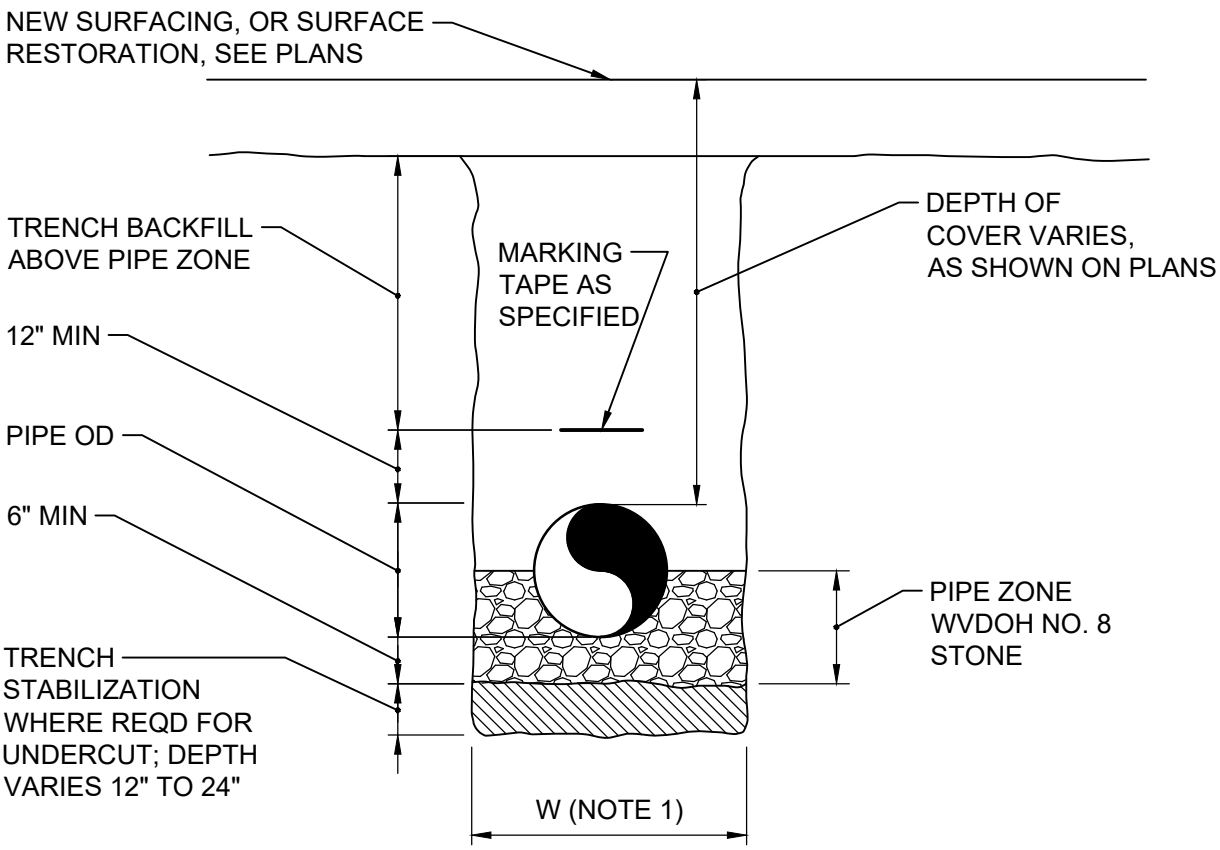
NOT TO SCALE

RANSON

PIPE TRENCH FOR FLEXIBLE PIPE

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
UT-01	1 OF 1	12/1/2023



NOTES:

1. W = MAXIMUM PERMISSIBLE TRENCH WIDTH, BASED UPON W = OD + 24”, UNLESS APPROVED BY THE ENGINEER.
2. TRENCHES TO BE SHEETED AND BRACED AS REQUIRED.
3. PROVIDE BEARING FOR FULL LENGTH OF BARREL. DIG HOLES FOR THE BELL.
4. BACKFILL ON SIDES TO 1/2 OD OF PIPE TO HOLD PIPE IN PLACE PRIOR TO PLACING ADDITIONAL BACKFILL.
5. BACKFILL TO BE COMPACTED IN 6” LAYERS TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (+2%) IN ROADS AND STREETS. COMPACT TO MATCH EXISTING GROUND IN OTHER AREAS.
6. BACKFILL TO BE WVDOH NO. 8 STONE IN PAVED OR SHOULDER AREAS. BACKFILL TO BE NATIVE MATERIAL IN OTHER AREAS.
7. MAINTAIN A MINIMUM OF 3' OF COVER TO THE TOP OF PIPE FOR STORM DRAINS. MAINTAIN A MINIMUM OF 4' OF COVER OVER PIPE FOR SANITARY SEWERS. MAINTAIN A MINIMUM OF 3.5' OF COVER OVER PIPE FOR WATER LINES.
8. A CASING PIPE IS REQUIRED IN ROAD CROSSINGS WHERE SHOWN ON PLANS.
9. DESIGN OF ALL WATER AND SEWER LINES REQUIRES APPROVAL FROM APPLICABLE UTILITY PROVIDERS.
10. SEE CITY OF RANSON PAVEMENT RESTORATION DETAIL PVT-04 FOR RESURFACING.

NOT TO SCALE

RANSON

PIPE TRENCH FOR RIGID PIPE

CITY OF RANSON, WEST VIRGINIA

DETAIL NO.	SHEET NO.	REVISION DATE
UT-02	1 OF 1	12/1/2023