

SCALE: 1" = 30'

<u>GENERAL</u>

- 1. CLEAR, GRUB, STRIP EXISTING VEGETATION, AND EXCAVATE AS NECESSARY TO FACILITATE THE PROPOSED CONSTRUCTION.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILL OF ALL EXCAVATED AREAS AND SHALL STABILIZE, AS INDICATED.
- 3. ALL DISTURBED AREAS SHALL BE STABILIZED WITH 4" TOPSOIL, SEED, AND STRAW MULCH OR SOIL RETENTION BLANKET AS REQUIRED, AND SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION), STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION WITH PERMANENT SEEDING.
- 4. DUST CONTROLLED SHALL BE EXCLUSIVELY THROUGH THE USE OF WATER, COSTS ASSOCIATED WITH THE FURNISHING AND APPLICATION OF WATER FOR DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT.
- 5. CONTRACTOR IS RESPONSIBLE FOR MANAGEMENT OF PEDESTRIAN TRAFFIC DURING
- 6. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL CONFORM TO THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

CONSTRUCTION IN ACCORDANCE WITH THE DELAWARE MUTCD.

- 7. ALL MATERIALS AND WORKMANSHIP SHALL MEET THE DELAWARE DEPARTMENT OF TRANSPORTATION ROAD DESIGN MANUAL, DATED SEPTEMBER 2001 AND ANY
- 8. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING EXCAVATION MUST BE REMOVED AND PROPERLY DISCARDED.
- 9. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
- 10. ALL LEVEL TRANSITIONS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT" AND ANSI A117.1-1998, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".
- 11. THE EXISTING UTILITIES SHOWN HEREON WERE TAKEN FROM THE BEST AVAILABLE RECORDS. COMPLETENESS AND/OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE UNIVERSITY'S ON-CALL UTILITY LOCATE CONTRACTOR TO VERIFY THEIR EXACT LOCATION(S) PRIOR TO THE START OF ANY CONSTRUCTION, AND NOTIFICATION SHALL OCCUR A MINIMUM OF THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO ANY EXCAVATION. ANY DAMAGE INCURRED TO ANY UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR RELIES ON THE UTILITY LOCATION SHOWN HEREON, HE DOES SO AT HIS OWN RISK AND WILL NOT BE ENTITLED TO ADDITIONAL COMPENSATION DUE TO TIME DELAYS OR DAMAGES FROM SAID RELIANCE.
- 12. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT ALL EXISTING TREES NOT OTHERWISE CALLED OUT FOR REMOVAL. SHOULD ANY TREES OR OTHER SITE FEATURES BE DAMAGED OR DESTROYED DUE TO THE CONTRACTORS NEGLIGENCE, THE CONTRACTOR SHALL BEAR THE COST AND RESPONSIBILITY FOR REPAIR AND/OR REPLACEMENT OF THE DAMAGED ITEMS.
- 13. ALL BACKFILL MATERIALS AND COMPACTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH APPLICABLE DELDOT STANDARDS, UNLESS OTHERWISE STATED

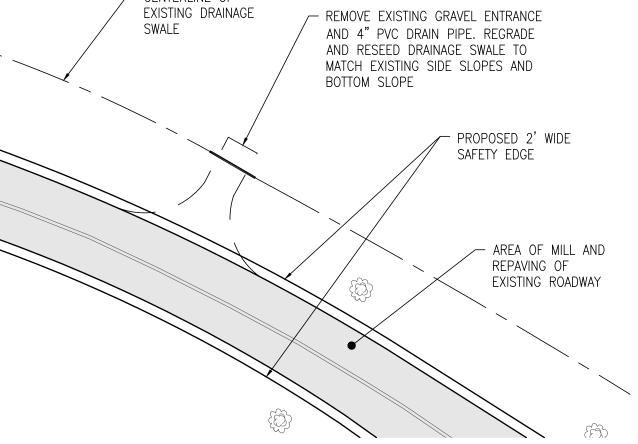
ON THIS PLAN.

- 14. ALL DISTURBED PAVEMENT AND GRASS AREAS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION. TOPSOIL, SEED AND STABILIZE ALL DISTURBED AREAS IMMEDIATELY FOLLOWING CONSTRUCTION.
- 15. EXISTING SITE LOCATIONS AND BOUNDARY LINES TAKEN FROM AERIAL MAPPING DATED 2007.
- 16. PRIOR TO SUBMITTING BID, THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION. CONTRACTOR SHALL INCLUDE IN THEIR BID ALL MATERIAL, LABOR, AND ALL INCIDENTALS FOR A COMPLETE INSTALLATION WHETHER SPECIFICALLY INDICATED OR NOT. ALL CONFLICTS AND/OR ERRORS AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER DURING THE BIDDING PROCESS BY THE CONTRACTOR. THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE. NO COMPENSATION WILL BE CONSIDERED FOR ANY DISCREPANCY WHICH COULD HAVE BEEN NOTICED AT THE SITE VISIT BY THE CONTRACTOR.

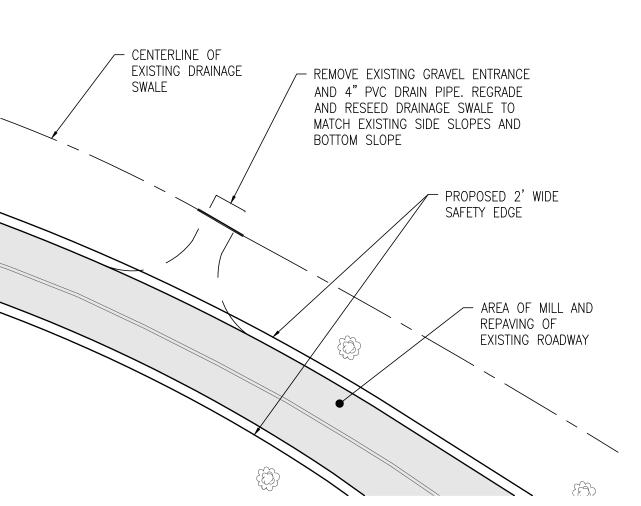
<u>CONCRETE</u>

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318 - "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
- 2. CONCRETE DESIGN MIXES/STRENGTHS SHALL BE 3000 PSI.
- 3. REPRESENTATIVE TEST CYLINDERS WILL BE TAKEN FROM THE CONCRETE PLACED EACH DAY IN ACCORDANCE WITH THE REQUIREMENTS OF ACI.
- REINFORCING STEEL SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
- 5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. ALL WELDED WIRE FABRIC SHALL BE SPLICED SO THAT THE OVERLAP OF THE OUTERMOST CROSS WIRES OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS TWO INCHES, UNLESS OTHERWISE SHOWN ON DRAWINGS.
- 6. FOR ALL SLABS ON GRADE WHERE NOT OTHERWISE SPECIFIED, USE 6 X 6 -W2.9 X W2.9 W.W.F.
- 7. CONCRETE COVER OVER REINFORCING STEEL, UNLESS OTHERWISE SHOWN, SHALL BE 3" FOR FOOTINGS AND OTHER STRUCTURAL CONCRETE DEPOSITED AGAINST GROUND, 2" FOR CONCRETE PERMANENTLY EXPOSED TO EARTH OR WEATHER AND
- 8. ALL STRUCTURAL MEMBERS SHALL BE POURED FOR THEIR FULL DEPTHS IN ONE OPERATION. NO HORIZONTAL JOINTS SHALL BE PLACED IN WALLS WITHOUT APPROVAL OF THE ENGINEER EXCEPT AS SHOWN ON THE DRAWINGS.
- 9. NO CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN SUBGRADE.
- 10. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND PROJECT SPECIFICATIONS.
- 11. THE REQUIRED AIR CONTENT FOR ALL CONCRETE SHALL BE 5% TO 7%. 12. CONCRETE SHALL BE BROOM FINISHED, PULLED IN ONE DIRECTION.
- 13. PROCEED WITH MIXING, GRADING, AND COMPACTING IN CONTINUOUS OPERATIONS.

COMPLETE FINISHING DURING DAYLIGHT HOURS, UNLESS OTHERWISE PERMITTED.



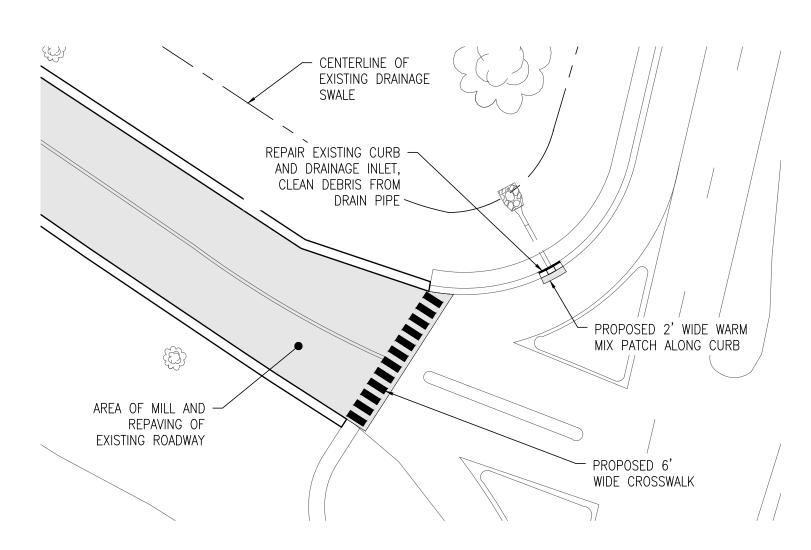
FRONTAGE ROAD DETAIL PLAN



PROPOSED REMOVABLE BOLLARD SEE DETAIL C1.4 PROPOSED 14" X 23" ELL. CLASS IV R.C.P. STORM _ DRAIN PIPE. INSTALL 30 LF. PROPOSED RIP -PROPOSED CURB RAMP, PROPOSED FLARED -RAP R-4 TYPE 1 END SECTION (TYP.) FROPOSED 10' WIDE PROPOSED 15" R.C.P. Z CONCRETE SIDEWALK (TYP.) - PROPOSED CURB RAMP, TYPE 1 PROPOSED 5' WIDE CONCRETE SIDEWALK - PROPOSED PEDESTRIAN CROSSING −(W11−2) & DOWNWARD DIAGONAL — PROPOSED 8" ARROW (W16-7P) SIGN INTEGRAL P.C.C. CURB TYPICAL (2) PLCS. & GUTTER TYPE 3-8 FRONTAGE ROAD PROPOSED 10 FOOT — PROPOSED CURB RAMP. WIDE CROSSWALK TYPE 1 - PROPOSED 2' WIDE PROPOSED 2' WIDE PROPOSED FLARED -SAFETY EDGE. SAFETY EDGE. END SECTION (TYP.) PROPOSED 10' WIDE CONCRETE SIDEWALK PROPOSED FLARED END SECTION (TYP.) PROPOSED REMOVABLE 🥰 PROPOSED 14" X 23" ELL. BOLLARD SEE DETAIL C1.4 CLASS IV R.C.P. STORM DRAIN PIPE. INSTALL 30 LF. PROPOSED 6" P.C.C. - EXISTING DRAINAGE CURB TYPE 1-6 PROPOSED CURB RAMP, SWALE WITH RIP PROPOSED 2' WIDE WARM -RAP BASE TYPE 1 MIX PATCH ALONG CURB

FRONTAGE ROAD SIDEWALK PLAN

SCALE: 1" = 30'



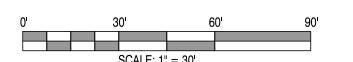
FRONTAGE ROAD - COLLEGE ROAD ENTRANCE DETAIL PLAN

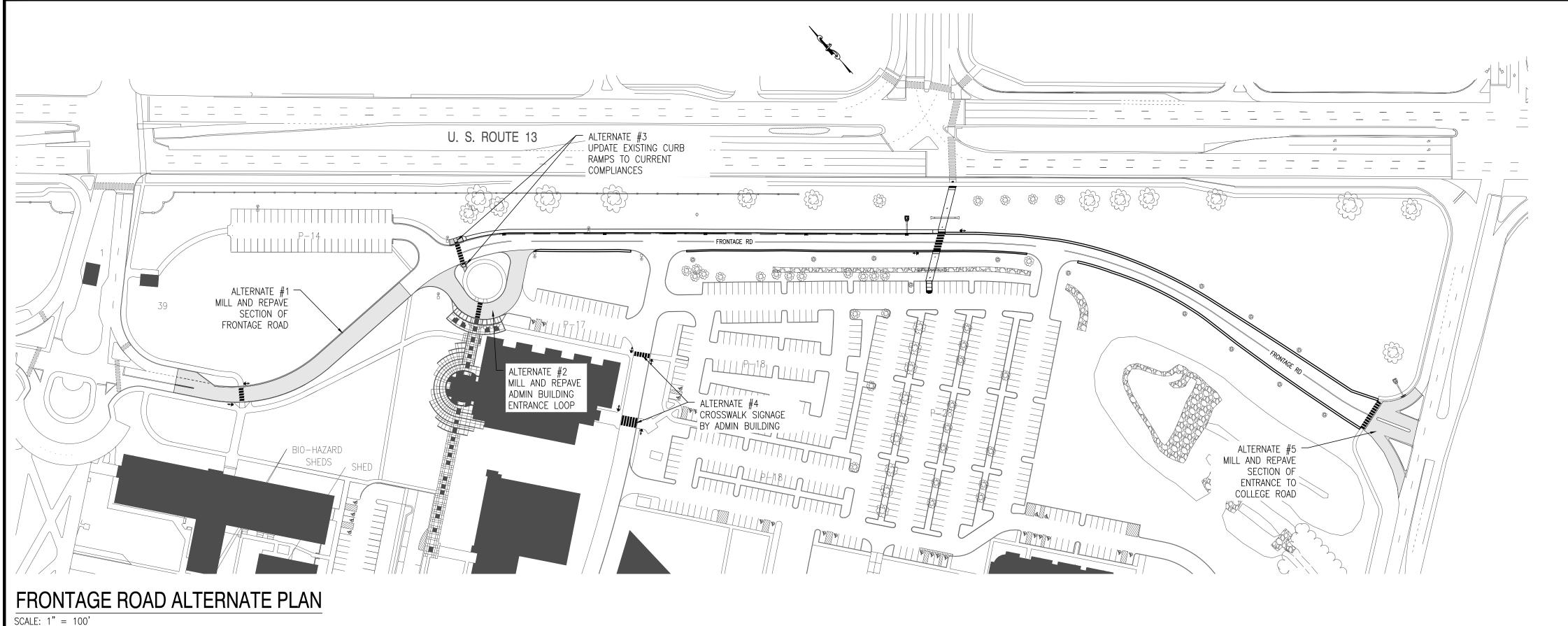
REVISIONS \ DESCRIPTION - FRONTAGE ROAD COLLEGE ROAD) T#: FD-15-084 FOR STATE ENTRANCE TO C 8 VE PA SHEET TITLE CONSTRUCTION **DETAILS** PLAN DOCUMENTS MARCH 28, 2017 DRAWN CHK'D/DESIGNER BAM SCALE SHEET NO. AS NOTED

> PROJECT NO. 125013.14

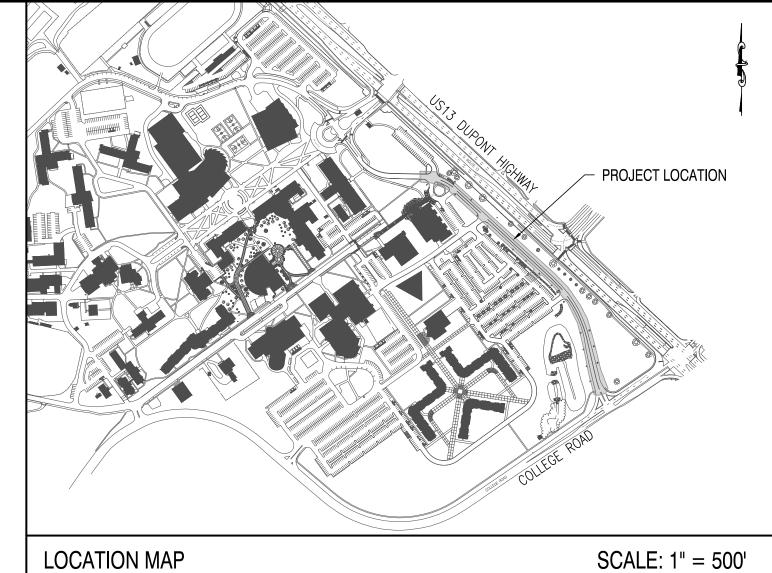
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LATEST VERSION OF THE ADA STANDARDS



NEW 8" CURBING AND

TYPE 1 RAMP WITH

NEW 6" CURBING

ALTERNATE #3 FRONTAGE ROAD ADA RAMP UPGRADES

1. CLEAR, GRUB, STRIP EXISTING VEGETATION, AND EXCAVATE AS NECESSARY TO FACILITATE THE PROPOSED

2. CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILL OF ALL EXCAVATED AREAS AND SHALL STABILIZE, AS

4. DUST CONTROLLED SHALL BE EXCLUSIVELY THROUGH THE USE OF WATER, COSTS ASSOCIATED WITH THE

7. CONTRACTOR SHALL PLACE ALL MILLING MATERIAL PER DSU DIRECTION - ON CAMPUS, DURING TIME OF

5. CONTRACTOR IS RESPONSIBLE FOR MANAGEMENT OF PEDESTRIAN TRAFFIC DURING CONSTRUCTION.

FURNISHING AND APPLICATION OF WATER FOR DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT.

3. ALL DISTURBED AREAS SHALL BE STABILIZED WITH 4" TOPSOIL, SEED, AND STRAW MULCH OR SOIL RETENTION BLANKET AS REQUIRED, AND SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT DELAWARE EROSION AND

6. SIGNING AND STRIPING SHALL BE COMPLIANT WITH THE LATEST VERSION OF THE "DELAWARE MANUAL ON UNIFORM

SEDIMENT CONTROL HANDBOOK (LATEST EDITION), STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

RECONSTRUCT CURB

LATEST VERSION OF

THE ADA STANDARDS

GENERAL NOTES:

WITH PERMANENT SEEDING.

CONSTRUCTION.

TRAFFIC CONTROL DEVICES" (DE-MUTCD).

SCALE: 1" = 50'

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REVISIONS

DESCRIPTION
 ■

VE & REHAB - FRONTAGE ROAD
(ENTRANCE TO COLLEGE ROAD)
CONTRACT #: FD-15-084
FOR

AWARE STATE UNIVERSITY

PAVE & REHAB

SHEET TITLE

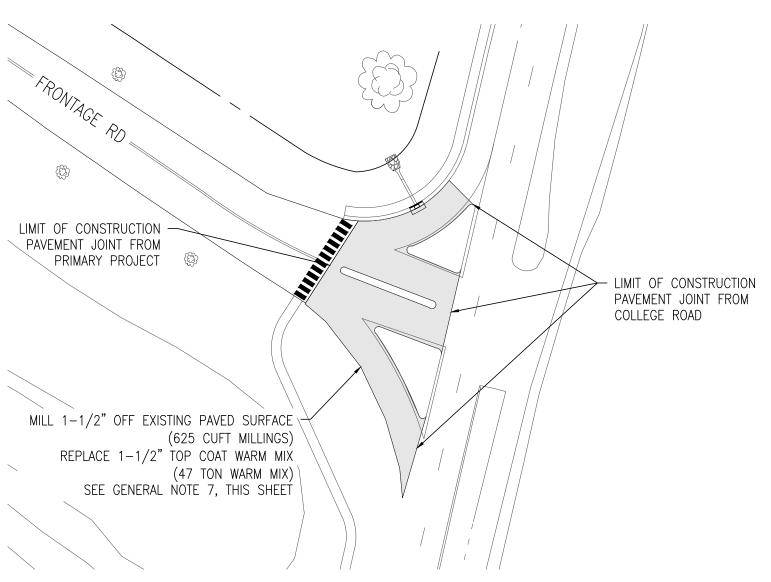
ALTERNATE CONSTRUCTION PLAN

DOCUMENTS MARCH 28, 2017 CHK'D/DESIGNER BAM SCALE SHEET NO.

AS NOTED PROJECT NO. 125013.14

LIMIT OF CONSTRUCTION PAVEMENT JOINT FROM PRIMARY PROJECT EXISTING PAVED SURFACE (681 CUFT MILLINGS) REPLACE 1-1/2" TOP COAT WARM MIX (51 TON WARM MIX) SEE GENERAL NOTE 7, / THIS SHEET LIMIT OF CONSTRUCTION PROPOSED 6' WIDE CROSSWALK PAVEMENT PAVEMENT





ALTERNATE #5 COLLEGE ROAD ENTRANCE PAVEMENT

SCALE: 1" = 50'PROPOSED PEDESTRIAN CROSSING (W11-2) & DOWNWARD DIAGONAL ARROW (W16-7P) SIGN PROPOSED 6' WIDE CROSSWALK PROPOSED PEDESTRIAN CROSSING (W11-2) & DOWNWARD DIAGONAL ARROW (W16-7P) SIGN PROPOSED 10 WIDE CROSSWALK > PROPOSED PEDESTRIAN CROSSING $^{\prime}$ (W11-2) & DOWNWARD DIAGONAL ARROW (W16-7P) SIGN

ALTERNATE #4 ADMIN BUILDING CROSSWALKS AND SIGNING

MILL 1-1/2" OFF EXISTING PAVED SURFACE

REPLACE STRIPING

IN KIND

ALTERNATE #1 FRONTAGE ROAD MILL & PAVE

LIMIT OF CONSTRUCTION PAVEMENT JOINT FROM

MAIN ENTRANCE REPAVE

SCALE: 1" = 50'

REPLACE 1-1/2" TOP COAT WARM MIX

SEE GENERAL NOTE 7, THIS SHEET

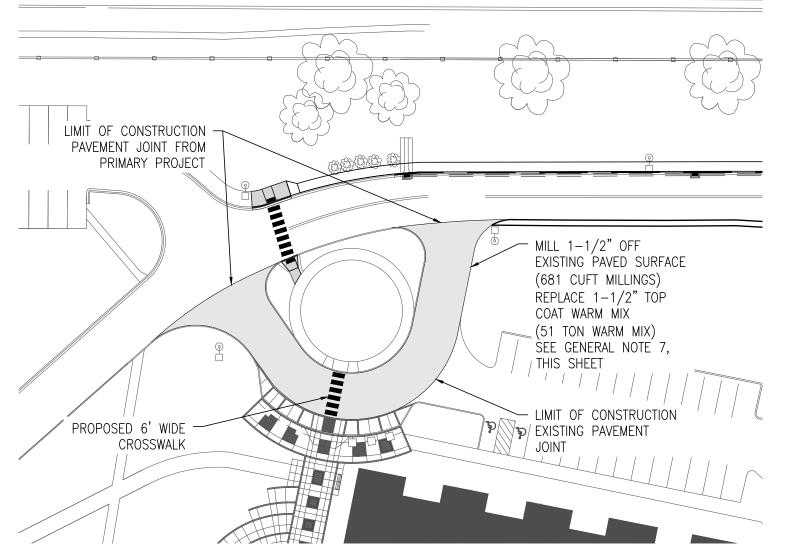
(1,268 CUFT MILLINGS)

(95 TON WARM MIX)

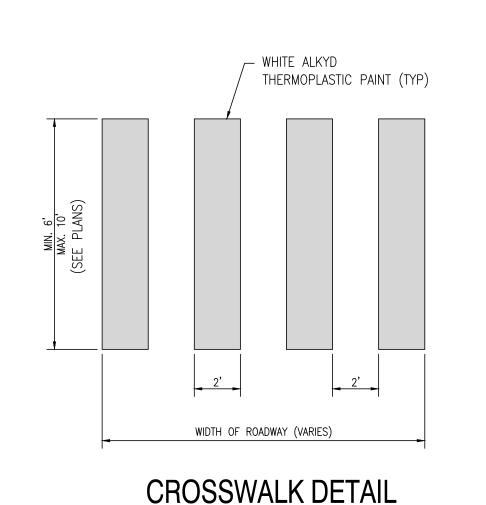
PROPOSED 6' WIDE

CROSSWALK

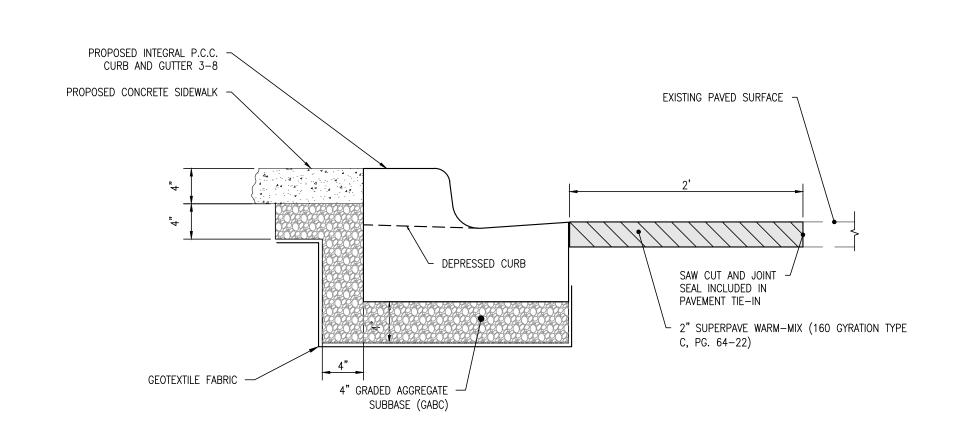
LIMIT OF CONSTRUCTION PAVEMENT JOINT FROM PRIMARY PROJECT



SCALE: 1" = 50'



SCALE: NTS



SCALE: NTS

SQUARE POST SHALL NOT BE LESS THAN 2" X 2" WITH A WALL THICKNESS OF 0.1092". 2" SQUARE TUBING 2 ½" SQUARE TUBING 2 ¼" SQUARE TUBING

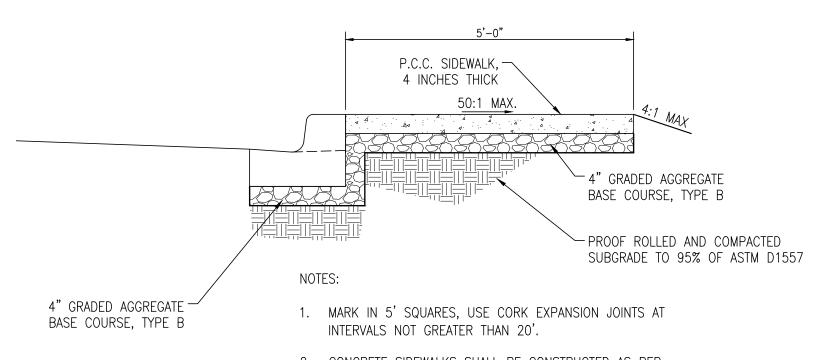
NOTES:

EXISTING PAVING

- 1. SQUARE TUBES ARE TO BE FORMED FROM GALVANIZED SHEET STRUCTURAL (PHYSICAL) QUALITY, ASTM A 446, GRADE A, COATING DESIGNATION G 90, REGULAR SPANGLE, OR HOT ROLLED CARBON SHEET STEEL STRUCTURAL (PHYSICAL) QUALITY, ASTM A 570, GRADE 33. A. NOMINAL OUTSIDE DIMENSION, (INCHES):
 - 2 X 2
 - 2 1/4 X 2 1/4
 - 2 1/2 X 2 1/2 B. ALL FOUR SIDES ARE TO HAVE EVENLY SPACED 7/16" DIAMETER HOLES ON 1" CENTERS THE ENTIRE LENGTH OF THE TUBE.
 - C. TOLERANCE ON HOLE SIZE IS \pm 1/64". TOLERANCE ON HOLE SPACING IS \pm 1/8"
 - STANDARD CORNER RADIUS SHALL BE 5/32" ± 1/64".
 - E. THE FASTENERS TO BE SUPPLIED UNDER THIS SPECIFICATION SHALL BE 5/16" GRADE 5 UNC CORNER BOLTS WITH CADMIUM OR ZINC PLATING, INSTALLATION OF SIGNS SHALL BE WITH 3/8" X 2 1/2" BOLT WITH LOCKNUT AND WASHER.
- 2. REGULATORY SIGNS WIDER THAN 30" SHALL BE MOUNTED ON TWO POSTS. WHEN MORE THAN ONE REGULATORY SIGN IS TO BE INSTALLED ON THE SAME POST ASSEMBLY, THE MOUNTING HOLES SHALL BE DRILLED IN THE FIELD AS THE ASSEMBLY IS BEING CONSTRUCTED.
- DEVELOPMENT SIGNS THAT ARE GREATER THAN 36" WIDE SHALL BE DISPLAYED ON TWO POSTS. A. DEVELOPMENT SIGN FACE BACKGROUNDS SHALL BE GREEN; LEGENDS SHALL BE SILVER
- B. LEGEND SHALL BE 5" SERIES "C" LETTERS.
- C. NO BORDER ON DEVELOPMENT SIGN PANELS.
- D. MAXIMUM DEVELOPMENT SIGN WIDTH OF 36" FOR SINGLE LINE SIGNS, 54" FOR TWO OR
- MORE LINES. E. DEVELOPMENT SIGNS SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY OF THE HIGHWAY ON WHICH THE ENTRANCE(S) IS (ARE) LOCATED. THE SIGNS SHALL BE PLACED WITHIN 750 FEET OF THE CENTERLINE OF THE ENTRANCE(S).

SIGN / SIGN POST DETAIL

SCALE: NTS



- 2. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER
- DELDOT SPECIFICATIONS. 3. CROSS SLOPE OF SIDEWALK SHALL BE 1% MIN., 2% MAX.
- 4. 6" CONCRETE OVER 6" GABC SHALL BE USED IN DRIVEWAYS AND TRANSITIONAL AREAS.

LONGITUDINAL SLOPE AS SHOWN ON PLANS.

EXISTING PAVED SURFACE PROPOSED 2" DEEP ROTOMILLINGS, SAFETY EDGÉ

ROTOMILLINGS SAFETY EDGE DETAIL

- TOP OF NEW PAVEMENT AFTER SAW CUT INCLUDED IN - REMAINING PAVEMENT, AFTER PAVEMENT TAPER
 OVERLAY DEPTH
 1 ½"
 2"
 3"
 4"

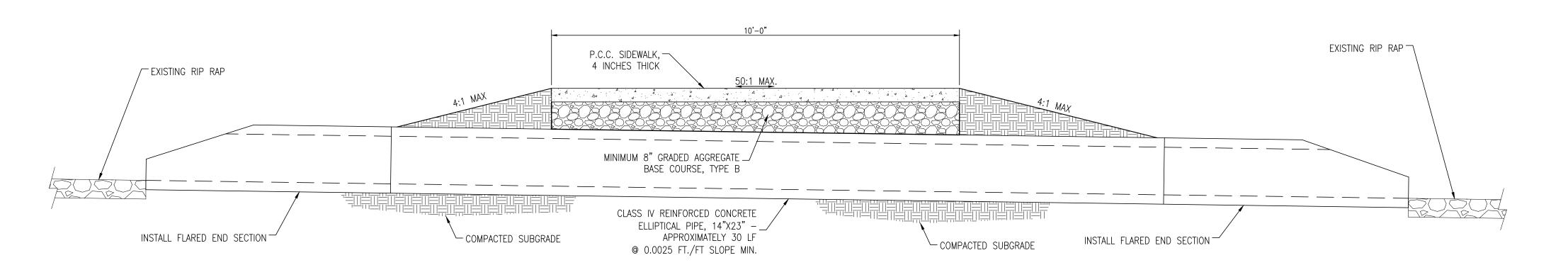
 "A"
 3'
 4'
 6'
 8'

PAVING TAPER DETAIL

SCALE: NTS

FIVE FOOT WIDE SIDEWALK DETAIL

SCALE: NTS



NOTES:

- 1. MARK IN 5' SQUARES, USE CORK EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 20'.
- 2. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER DELDOT SPECIFICATIONS.
- 3. CROSS SLOPE OF SIDEWALK SHALL BE 1% MIN., 2% MAX. LONGITUDINAL SLOPE AS SHOWN ON
- 4. 6" CONCRETE OVER 6" GABC SHALL BE USED IN DRIVEWAYS AND TRANSITIONAL AREAS.

TEN FOOT WIDE SIDEWALK DETAIL (AT PIPE CROSSING)

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W16-7P

24X12

REVISIONS

PAVE & REHAB - FRONTAGE ROAD (ENTRANCE TO COLLEGE ROAD)
CONTRACT #: FD-15-084

DESCRIPTION

(ENTRANCE TO (CONTRACT

SHEET TITLE CONSTRUCTION

DETAILS

DOCUMENTS MARCH 28, 2017

CHK'D/DESIGNER BAM SCALE SHEET NO.

AS NOTED PROJECT NO.

125013.14

