TCP 9

PROJECT NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION AND ITS LATEST REVISIONS AND THE 6TH EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND ITS LATEST REVISIONS.
2. THE CONTRACTOR SHALL ENSURE ACCESS TO ALL DRIVES AND SIDE ROADS AT ALL TIMES DURING CONSTRUCTION.
3. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F.
4. IN-STREAM CONSTRUCTION SHALL OCCUR ONLY WITHIN THE TIMEFRAME SPECIFIED IN THE PROJECT PERMITS INCLUDED IN THE CONTRACT DOCUMENTS. IF THE CONTRACTOR PROPOSES TO PERFORM IN STREAM WORK OUTSIDE OF THESE TIMEFRAMES, THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE APPROPRIATE REGULATING ENTITIES PRIOR TO PERFORMING THE WORK.

PRECAST CONCRETE BOX CULVERTS AND WINGWALLS

1. THE BOX CULVERT INCLUDING SILLS, HEADWALLS, CUT-OFF WALLS, AND WINGWALLS WILL BE PAID FOR UNDER THE APPROPRIATE SECTION 540 CONTRACT ITEM.
2. THE BOX CULVERT INCLUDING THE SILLS, HEADWALLS AND WINGWALL STEMS SHALL BE PRECAST. THE CUT-OFF-WALL AND WINGWALL FOOTINGS MAY BE EITHER PRECAST OR CAST IN PLACE. THE DESIGN OF THESE CULVERTS SHALL BE THE RESPONSIBILITY OF THE FABRICATOR. CULVERT SHALL BE DESIGNED FOR AN HL-93 LIVE LOAD. CAST-IN-PLACE CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 501 FOR CONCRETE, HIGH PERFORMANCE CLASS B. THE BOTTOM OF WINGWALL FOOTINGS SHALL BE AT THE ELEVATIONS SHOWN IN THE PLANS. CUT-OFF WALLS BELOW WINGWALL FOOTINGS WILL NOT BE ALLOWED.
3. THE CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR THE BOX CULVERTS AND ALL ASSOCIATED DETAILS IN ACCORDANCE WITH SUBSECTION 105.03.
4. THE BOX CULVERT TYPICAL SECTIONS SHOWN IN THE DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. THE ACTUAL SHAPE OF THE BOX CULVERT AND ITS COMPONENTS WILL BE DEPENDENT ON THE FABRICATOR.
5. ALL BOX CULVERT JOINTS SHALL BE STRENGTHENED WITH PERMANENT CLOSURE HARDWARE. ALL HARDWARE COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 726.08.
6. ALL REINFORCING TO BE LEVEL I (UNCOATED).
7. AFTER BOX CULVERT SECTIONS HAVE BEEN SET IN THEIR FINAL POSITION, THE EXTERIOR (TOP AND SIDES) AND INTERIOR (SIDES AND BOTTOM) OF ALL BOX CULVERT JOINTS, AND ALL LIFTING HOLES, SHALL BE GROUTED WITH MORTAR, TYPE IV. PRIOR TO THE APPLICATION OF ANY WATERPROOFING, ALL MORTAR SHALL BE WET CURED A MINIMUM OF 12 HOURS OR UNTIL THE COMPRESSIVE STRENGTH HAS REACHED 2000 psi. APPROVED CURING COMPOUNDS MAY BE USED ON INTERIOR SURFACES IN LIEU OF WET CURING.
8. A TWO FOOT WIDE STRIP OF SHEET MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH SIDE JOINT IN ACCORDANCE WITH SUBSECTION 540.10. THE MEMBRANE SHALL BE CENTERED ON THE JOINT AND SHALL RUN THE ENTIRE HEIGHT OF THE JOINT. THE ENTIRE TOP OF THE BOX CULVERT SHALL THEN BE COVERED WITH TORCH APPLIED MEMBRANE. TORCH APPLIED MEMBRANE WILL BE PAID SEPARATELY UNDER CONTRACT ITEM 519.20. THE MEMBRANE SHEETS SHALL OVERLAP THE EDGES OF THE CULVERT BY ONE FOOT ON EACH SIDE AS SHOWN IN THE PLANS.
9. WATER REPELLENT IN ACCORDANCE WITH ITEM 514.10 SHALL BE APPLIED TO ALL EXPOSED SURFACES EXCEPT THE INSIDE OF THE BOX.

SIMULATED STREAM BED

1. BED MATERIAL TO BE PLACED IN THE RECONSTRUCTED CHANNEL AND BOX CULVERT IS INTENDED TO MIMIC THE NATIVE CHANNEL. THE MATERIAL SHALL BE STONE FILL TYPE II SUPPLEMENTED WITH THE TAILINGS OF A TOPSOIL SCREENING OPERATION WITH GRADATION ADJUSTED TO CONFORM TO THE FOLLOWING TABLE:

STONE/SIEVE SIZE	% FINER, BY WEIGHT
36"	100
12"	30-85
#4	4-30
#200	4-12

2. INSTALLATION OF THE BED MATERIAL MAY REQUIRE INDIVIDUAL PLACEMENT OF LARGE STONES AT SPECIFIC LOCATIONS, AS DIRECTED BY THE ENGINEER. THE BED MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND THE AGENCY OF NATURAL RESOURCES STREAM ALTERATION ENGINEER, AND WILL BE IN ACCORDANCE WITH ITEM 900.608, SPECIAL PROVISION (STONE FILL, CULVERT LINING).

UTILITY COORDINATION

1. SEE THE LAYOUT SHEETS AND UTILITY SPECIAL PROVISIONS FOR INFORMATION AND REQUIREMENTS RELATED TO UTILITY COORDINATION.

TRAFFIC CONTROL

1. THE TRAFFIC CONTROL PLANS ARE SCHEMATIC ONLY AND SHOULD BE USED AS A REFERENCE. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ONE LANE CLOSURES PER THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE CONTRACTOR SHALL ALLOW THE ENGINEER 14 CALENDAR DAYS TO REVIEW AND ACCEPT THE PROPOSED PLANS BEFORE THEY ARE TO BE IMPLEMENTED. NO WORK SHALL COMMENCE UNTIL THE TRAFFIC CONTROL PLAN HAS BEEN APPROVED. DEVELOPMENT AND IMPLEMENTATION OF TRAFFIC CONTROL PLAN SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL SECTION 900.
2. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS OR CORNER SIGHT DISTANCE FROM HIGHWAYS OR DRIVES.
3. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
4. ORANGE SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956 TYPE VII, VIII OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED.
5. ROLL UP SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING ASTM D 4956 TYPE VI.
6. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
7. FIXED SIGNS SHALL BE IN COMPLIANCE WITH VAOT CONSTRUCTION STANDARD E-121.
8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AT A ONE FOOT MINIMUM ABOVE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
9. WHERE SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUB SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
10. THE NUMBER OF CHANNELIZING DEVICES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ON THE TRAFFIC CONTROL PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED IS TO BE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOUR, CURVE, ETC.).
11. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED AT THE DISCRETION OF THE ENGINEER AND IN ACCORDANCE WITH SECTION 6F.60 OF THE MUTCD.
12. TRAVEL LANES SHALL BE A MINIMUM OF 12 FEET WIDE WITH 1 FOOT MINIMUM WIDTH SHOULDERS.
13. THE CONTRACTOR SHALL SHIFT TRAFFIC IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. ALL EQUIPMENT SHALL BE MOVED TO A LOCATION OUTSIDE OF THE CONSTRUCTION CLEAR ZONE (15') DURING NON-WORK PERIODS IF POSSIBLE. IF NOT POSSIBLE, EQUIPMENT SHALL BE OFF ROADWAY AND MARKED WITH CHANNELIZING DEVICES.

TEMPORARY TRAFFIC SIGNALS:

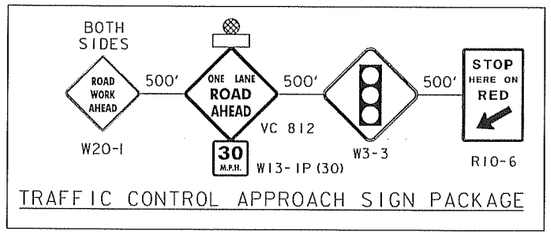
1. TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL BE PAID AS PART OF ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL ALL-INCLUSIVE)
2. DESIGN OF THE SIGNAL SUPPORTS AND ANY REQUIRED GUYING IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. SIGNAL PHASING/TIMING ADJUSTMENTS REQUESTED BY THE ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD.
4. SIGNAL FACES SHALL BE LED AND CONSIST OF 12" LENSES. (RED, YELLOW, AND GREEN)
5. THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16.5 FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO ENSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROAD GRADE.
6. SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
7. SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. HOWEVER, THE USE OF PORTABLE SIGNALS IS ENCOURAGED. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE OF NO GREATER THAN 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE CURRENT EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
8. SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
9. THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGNS, LUMINAIRES, FLASHING BEACONS, ASSOCIATED PAVEMENT MARKINGS, AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
10. INSTALL WIRING BETWEEN SIGNAL POLES TO PROVIDE FOR A SAFE INSTALLATION. ATTACHMENT TO UTILITY POLES TO BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY.
11. PLACE TEMPORARY POLES BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE.
12. POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELING PUBLIC.
13. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.
14. A 250 WATT MER/150 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 30 FEET ABOVE ROADWAY CENTERLINE. THE INTENT IS TO ILLUMINATE THE AREA AROUND THE SIGNAL HEADS AND STOP BAR FOR INCREASED VISIBILITY. THE ENGINEER SHALL DETERMINE THE ADEQUACY OF THE LIGHTING AND DIRECT CHANGES IF THE LIGHTING IS INSUFFICIENT.
15. SEE STD. E-121 FOR SIGN PLACEMENT. SEE STDS. E-171A AND E-172 FOR ADDITIONAL INFORMATION ON SIGNALS.
16. ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
17. ALL STOP SIGNS AND ANY TRAFFIC SIGNS MADE IRRELEVANT DUE TO THE TEMPORARY SIGNAL SHALL BE COMPLETELY COVERED DURING OPERATION OF THE TEMPORARY SIGNAL OR AT THE DISCRETION OF THE ENGINEER.
18. CONSTRUCTION APPROACH SIGNS SHALL BE PROVIDED ON EACH APPROACH PER THE "TRAFFIC CONTROL APPROACH SIGN PACKAGE" SHOWN ON THE TRAFFIC CONTROL PLAN SHEETS. ADDITIONAL CONSTRUCTION APPROACH SIGNS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEER PER STANDARDS T-1, T-10 AND T-17.
19. THE SIGNAL SYSTEM SHALL UTILIZE VEHICLE DETECTION AND BE PROGRAMMED TO DWELL ON RED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SIGNAL PHASING AND TIMING. THE CONTRACTOR SHALL SUBMIT A PHASING DIAGRAM TO THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL MAKE SIGNALS OPERATIONAL ONLY AFTER RECEIVING APPROVAL OF THE PHASING DIAGRAM BY THE ENGINEER.

Stantec

PROJECT NAME: IRASBURG
PROJECT NUMBER: STP CULV(30)

FILE NAME: z11c266frm.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: J. HUNGERFORD
PROJECT NOTES

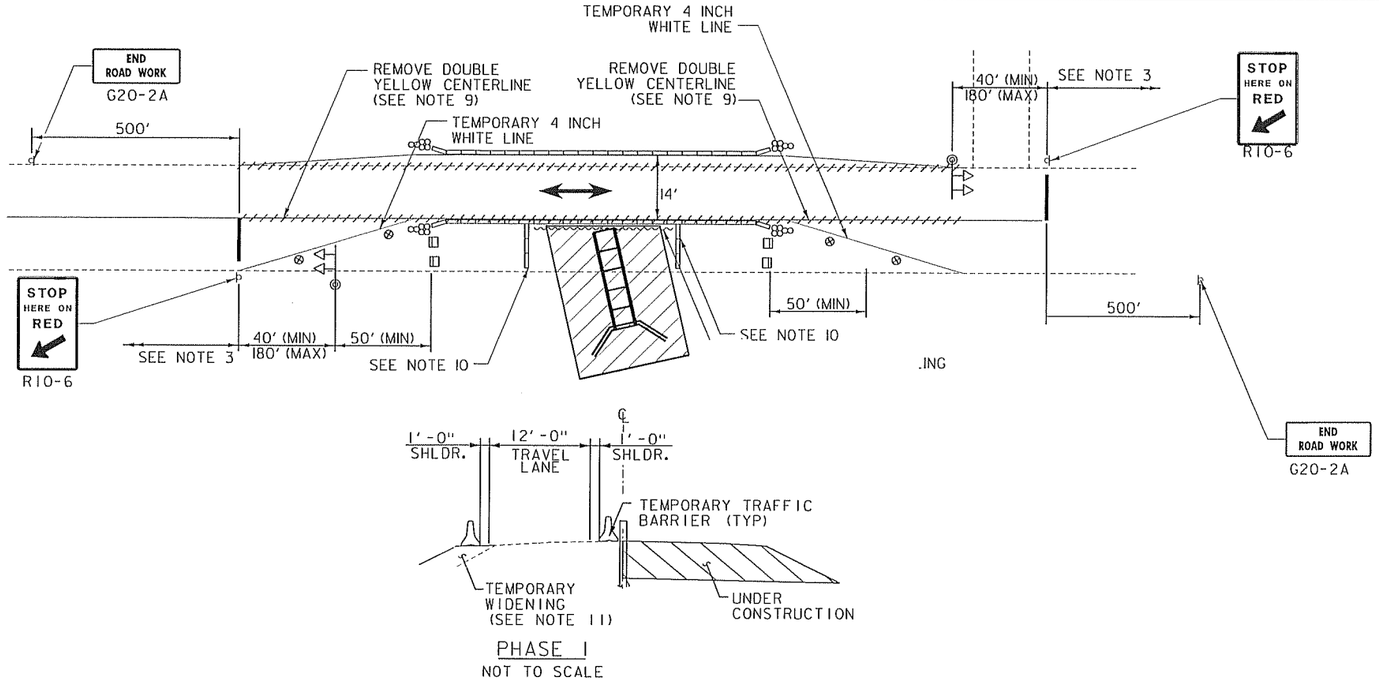
PLOT DATE: 10/21/2014
DRAWN BY: L. BUXTON
CHECKED BY: M. CHENETTE



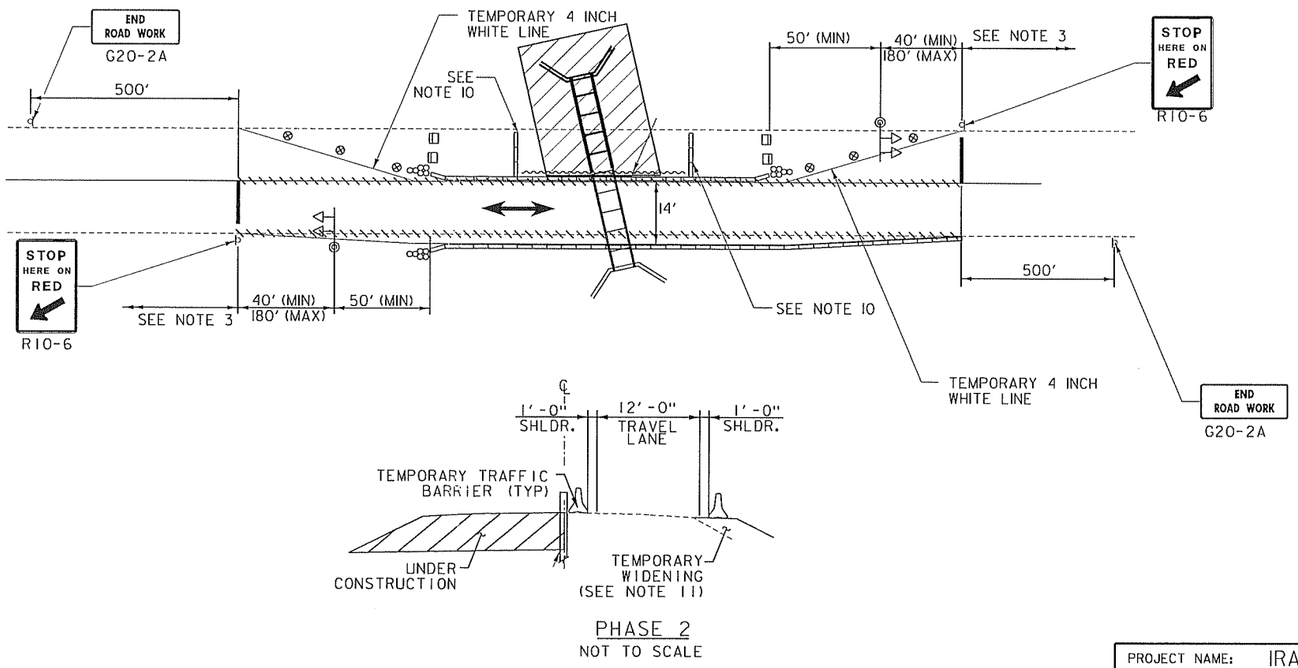
TRAFFIC CONTROL APPROACH SIGN PACKAGE

NOTES:

1. SEE SHEET 4 FOR GENERAL TRAFFIC CONTROL NOTES.
2. REFER TO STANDARD T-10 FOR CONSTRUCTION APPROACH SIGNS CRITERIA.
3. REFER TO "TRAFFIC CONTROL APPROACH SIGN PACKAGE" DETAIL THIS SHEET.
4. CHANNELIZING DEVICE SPACING
   TANGENT SECTIONS: 60 FT. (2X DESIGN SPEED LIMIT)
   TAPER SECTIONS: 30 FT. (1X DESIGN SPEED LIMIT)
   DESIGN SPEED THROUGH CONSTRUCTION ZONE = 30MPH
5. ACCESS TO ALL EXISTING SIDE ROADS, DRIVES, AND PARKING AREAS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
6. TRAFFIC CONTROL SHALL ALLOW FOR A WB-67 DESIGN VEHICLE.
7. ATTENUATORS SHALL MEET THE POSTED SPEED OF 50 MPH.
8. CHANNELIZING DEVICES LEFT OVERNIGHT SHALL BE DRUMS.
9. REMOVED CENTERLINE TO BE REPLACED WITH DURABLE 4 INCH YELLOW LINE.
10. TEMPORARY TRAFFIC BARRIER TO BE IN PLACE WHILE EXCAVATION IS OPEN AND WORK IS NOT ACTIVE OR AT THE DISCRETION OF THE ENGINEER.
11. TEMPORARY WIDENING TO BE PAID FOR AS PART OF ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)



PHASE 1
NOT TO SCALE



PHASE 2
NOT TO SCALE

LEGEND

- UNDER CONSTRUCTION
- ALTERNATING ONE WAY TRAFFIC
- TEMPORARY TRAFFIC BARRIER
- CHANNELIZING DEVICE
- ENERGY ABSORPTION ATTENUATOR
- TYPE III BARRIER
- CONSTRUCTION SIGN
- TEMPORARY TRAFFIC SIGNAL
- FLASHING BEACON
- REMOVE OR MASK PAVEMENT MARKINGS

Stantec

PROJECT NAME:	IRASBURG
PROJECT NUMBER:	STP CULV(30)
FILE NAME: zllc266tc.dgn	PLOT DATE: 9/26/2014
PROJECT LEADER: M. CHENETTE	DRAWN BY: L. BUXTON
DESIGNED BY: I. MAYNARD	CHECKED BY: M. CHENETTE
TRAFFIC CONTROL PLAN - BR6	SHEET 18 OF 55

300' RADIUS

TCP II

STA. 25+20 LT.

STATE OF VERMONT
HIGHWAY DEPARTMENT

PHASE I DETOUR

BEGIN PROJECT
STA. 24+47.00

STONE FILL, TYPE III (TYP.)

STA. 10+58.00

ASSUMED 25' x 25' TEMPORARY WORK AREA FOR IMPOUNDMENT AND/OR STREAM DIVERSION.
WP1
N 843711.16'
E 1691789.39'
STA. 25+20, LT.

VT 58 STA. 25+04.83 =
CHANNEL LINE STA. 11+03.92

NEW PUSH BRACE, BY OTHERS
GUY WIRE TO BE REMOVED BY OTHERS

ANTICIPATED TOE OF SLOPE FOR TRAFFIC CONTROL PHASING

EXISTING ROW

STA 27+99.0

TO IRASBURG

ROUTE 58

EXIST. 96" CGMP TO BE REMOVED

TO LOWELL

S 85°20' 10.63" E

BEGIN APPROACH MATCH EXISTING
BEGIN COLD PLANING
STA. 23+47.00

END COLD PLANING
STA. 23+97.00

BERNARD & DENISE ROBILLARD

BEGIN BRIDGE
STA. 24+93.83
STA. 24+90, RT.

P.I. STA 24+14.76 BCK
STA 24+25.35 AHD

WP2
N 843645.52'
E 1691800.02'

STONE FILL, CULVERT LINING (TYP.)

END SPECIAL PROVISION
(STONE FILL, CULVERT LINING)
STA. 11+60.00

END BRIDGE
STA. 25+15.83

STONE FILL, TYPE III (TYP.)

BRIGHTON BROOK

STOP PROJECT
STA. 25+63.00

END APPROACH
MATCH EXISTING
END COLD PLANING
STA. 26+63.00

BEGIN COLD PLANING
STA. 26+13.00

ANTICIPATED TOE OF SLOPE FOR TRAFFIC CONTROL PHASING

PHASE II DETOUR

ROBILLARD, GUY & HELEN

PLAN
SCALE: 1" = 20'-0"
0 20 40

PORTABLE LIGHT TOWER
STOP BAR
TRAILER MOUNTED TRAFFIC SIGNAL
TRITON BARRIER

LEGEND
STONE FILL, TYPE III
SPECIAL PROVISION (STONE FILL, CULVERT LINING)

NOTES:
1. GRADE IN ACCORDANCE WITH TYPICAL ROADWAY SECTION AND ROADWAY CROSS SECTIONS UNLESS NOTED OTHERWISE.

TRAFFIC SIGN SUMMARY

STATION	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (In)	HEIGHT (In)	NEW SIGNS "A"	NEW SIGNS "B"	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (In) 1.75 lb/ft 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	REMARKS	STD. SHEET NUMBER
24+90, RT	BRIDGE 6 VT 58	1	6	8	0.33		1	X			X		VR-701	T-42
25+20 LT	BRIDGE 6	1	6	8	0.33		1	X			X		VR-701	T-42

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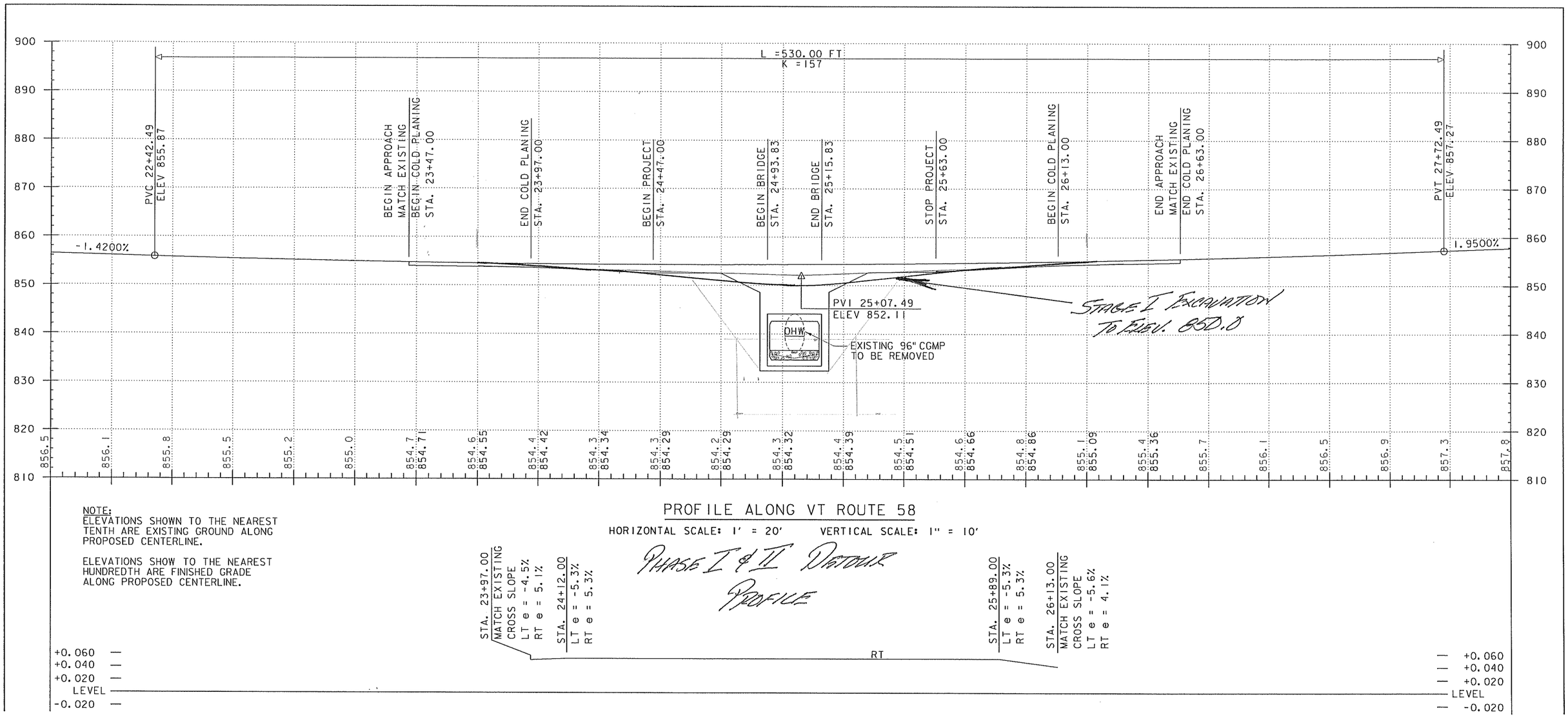
PLAN LAYOUT SHEET BR6

TCP 12



NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOW TO THE NEAREST HUNDREDTH ARE FINISHED GRADE ALONG PROPOSED CENTERLINE.

PROFILE ALONG VT ROUTE 58

HORIZONTAL SCALE: 1' = 20' VERTICAL SCALE: 1" = 10'

PHASE I & II DETOUR PROFILE

STA. 23+97.00
MATCH EXISTING
CROSS SLOPE
LT e = -4.5%
RT e = 5.1%

STA. 24+12.00
LT e = -5.3%
RT e = 5.3%

STA. 25+89.00
LT e = -5.3%
RT e = 5.3%

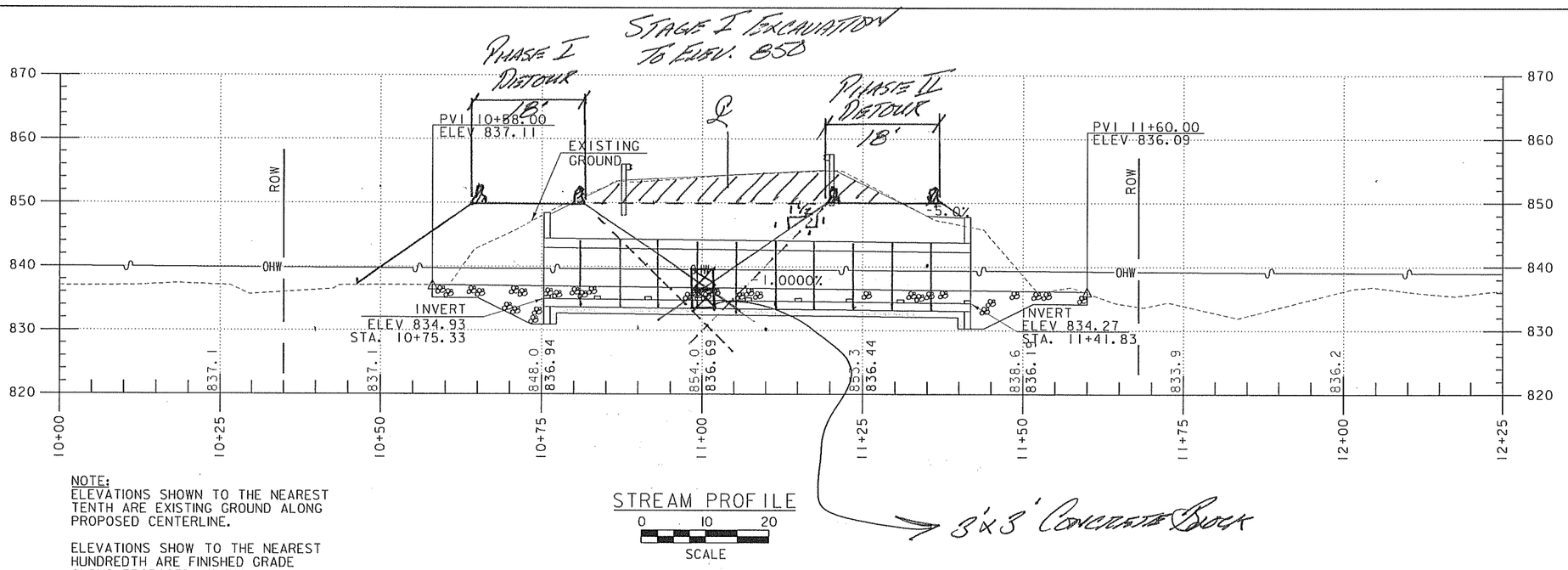
STA. 26+13.00
MATCH EXISTING
CROSS SLOPE
LT e = -5.6%
RT e = 4.1%

RT

+0.060
+0.040
+0.020
LEVEL
-0.020

SHEET 15 of 55
ROADWAY PROFILE RR6

TCP 13



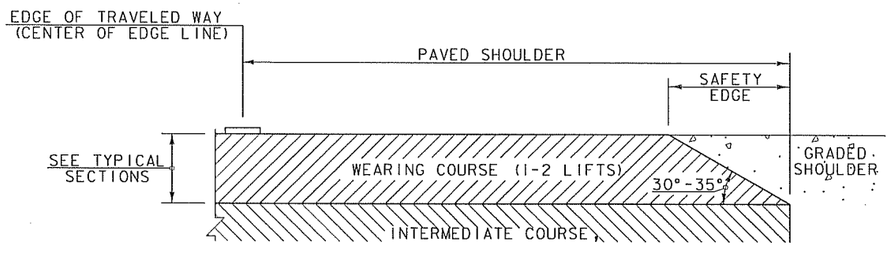
NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

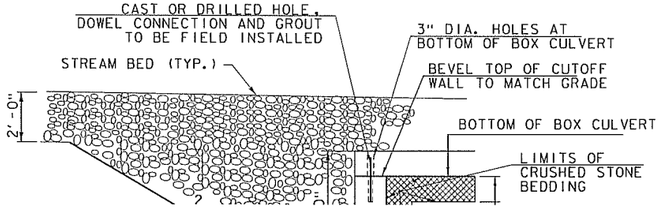
ELEVATIONS SHOW TO THE NEAREST HUNDREDTH ARE FINISHED GRADE ALONG PROPOSED CENTERLINE.

STREAM PROFILE

0 10 20

SCALE

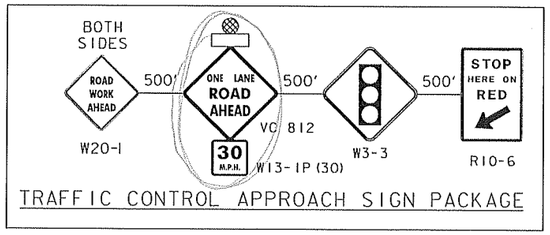




SHEET 16 of 55

STREAM PROFILE BR-6

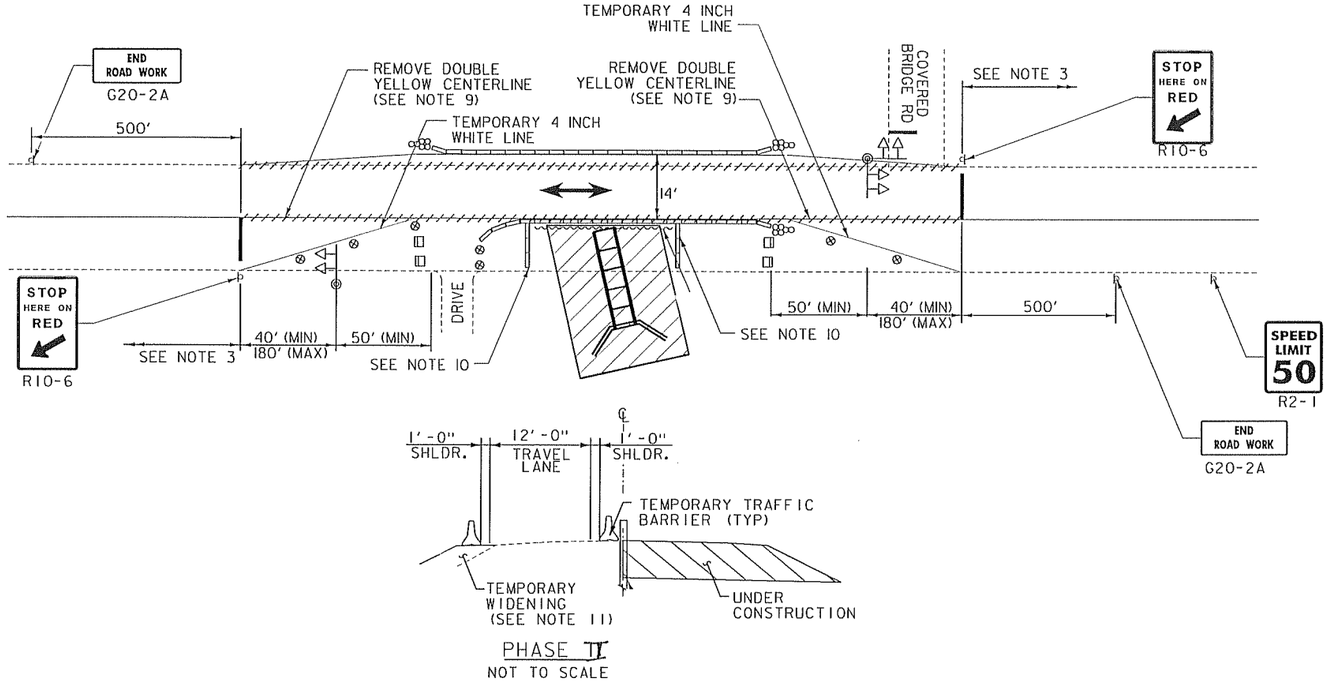
TCP-14



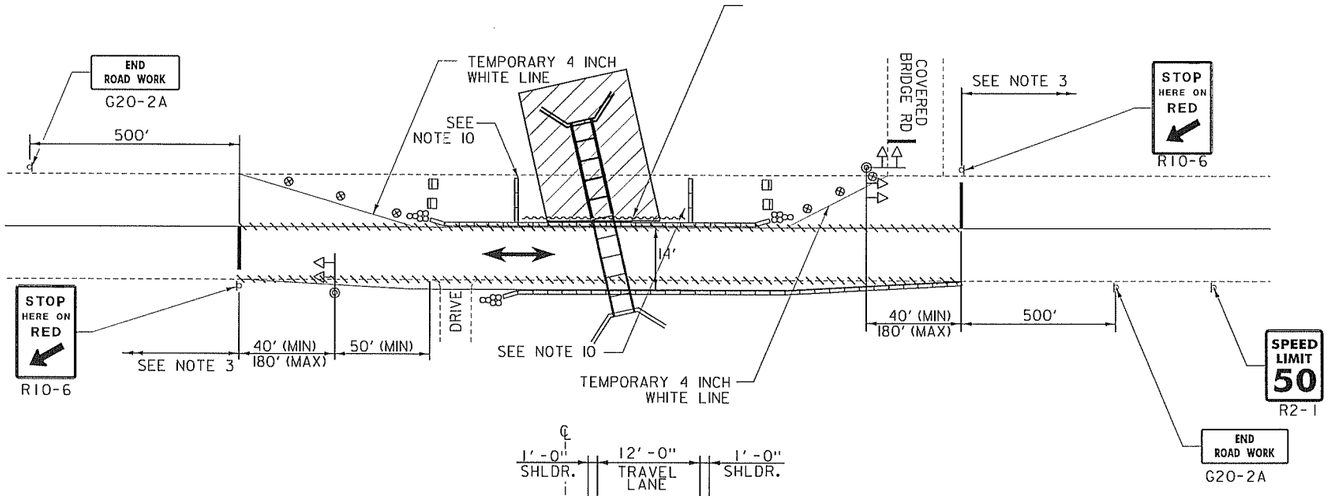
TRAFFIC CONTROL APPROACH SIGN PACKAGE

NOTES:

1. SEE SHEET 4 FOR GENERAL TRAFFIC CONTROL NOTES.
2. REFER TO STANDARD T-10 FOR CONSTRUCTION APPROACH SIGNS CRITERIA.
3. REFER TO "TRAFFIC CONTROL APPROACH SIGN PACKAGE" DETAIL THIS SHEET.
4. CHANNELIZING DEVICE SPACING
   TANGENT SECTIONS: 60 FT. (2X DESIGN SPEED LIMIT)
   TAPER SECTIONS: 30 FT. (1X DESIGN SPEED LIMIT)
   DESIGN SPEED THROUGH CONSTRUCTION ZONE = 30MPH
5. ACCESS TO ALL EXISTING SIDE ROADS, DRIVES, AND PARKING AREAS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
6. TRAFFIC CONTROL SHALL ALLOW FOR A WB-67 DESIGN VEHICLE.
7. ATTENUATORS SHALL MEET THE POSTED SPEED OF 50 MPH.
8. CHANNELIZING DEVICES LEFT OVERNIGHT SHALL BE DRUMS.
9. REMOVED CENTERLINE TO BE REPLACED WITH DURABLE 4 INCH YELLOW LINE.
10. TEMPORARY TRAFFIC BARRIER TO BE IN PLACE WHILE EXCAVATION IS OPEN AND WORK IS NOT ACTIVE OR AT THE DISCRETION OF THE ENGINEER.
11. TEMPORARY WIDENING TO BE PAID FOR AS PART OF ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)



PHASE II
NOT TO SCALE



PHASE I
NOT TO SCALE

LEGEND

- UNDER CONSTRUCTION
- ALTERNATING ONE WAY TRAFFIC
- TEMPORARY TRAFFIC BARRIER
- CHANNELIZING DEVICE
- ENERGY ABSORPTION ATTENUATOR
- TYPE III BARRIER
- CONSTRUCTION SIGN
- TEMPORARY TRAFFIC SIGNAL
- FLASHING BEACON
- REMOVE OR MASK PAVEMENT MARKINGS

Stantec

PROJECT NAME: IRASBURG	
PROJECT NUMBER: STP CULV(30)	
FILE NAME: z11c266tc.dgn	PLOT DATE: 9/26/2014
PROJECT LEADER: M. CHENETTE	DRAWN BY: L. BUXTON
DESIGNED BY: I. MAYNARD	CHECKED BY: M. CHENETTE
TRAFFIC CONTROL PLAN - BR7	SHEET 39 OF 55

TCP 15

621.20 - STEEL BEAM GUARDRAIL, GALVANIZED
STA. 33+11.03, LT. TO STA. 34+50.00, LT.
STA. 34+41.44, RT. TO STA. 34+50.00, RT.
STA. 35+50.00, LT. TO STA. 36+49.20, LT.
STA. 35+50.00, RT. TO STA. 36+61.45, RT.

621.21 - HD STEEL BEAM GUARDRAIL, GALVANIZED
STA. 34+50.0, LT. TO STA. 34+87.5, LT.
STA. 34+50.0, RT. TO STA. 34+87.5, RT.
STA. 35+12.5, LT. TO STA. 35+50.0, LT.
STA. 35+12.5, RT. TO STA. 35+50.0, RT.

621.216 - HD STEEL BEAM GUARDRAIL, GALVANIZED/NESTED
STA. 34+87.5, LT. TO STA. 35+12.5, LT.
STA. 34+87.5, RT. TO STA. 35+12.5, RT.

621.60 - ANCHOR FOR STEEL BEAM RAIL
STA. 33+11.03, LT.
STA. 34+41.44, RT.
STA. 36+49.20, LT.
STA. 36+61.45, RT.

621.80 - REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 33+12.71, LT. TO STA. 36+05.57, LT.
STA. 34+48.75, RT. TO STA. 35+86.30, RT.

675.20 - TRAFFIC SIGNS, TYPE A
675.341 SQUARE TUBE SIGN POST AND ANCHOR
STA. 34+81, RT.
STA. 35+18 LT.

646.400- DURABLE 4 INCH WHITE LINE
STA. 33+55.00, RT. TO STA. 36+47.00, RT.
STA. 33+55.00, LT. TO STA. 36+47.00, LT.

646.410- DURABLE 4 INCH YELLOW LINE
STA. 33+55.00, CL. TO STA. 36+47.00, CL. (DYEL)

675.50 - REMOVING SIGNS
STA. 33+22, LT.
STA. 35+70, LT.

675.60 - ERECTING SALVAGED SIGNS
STA. 33+22, LT.
STA. 35+70, LT.

CURVE DATA
DELTA = 14°50'31.6"
D = 5°12'31.4"
R = 1100.00'
T = 143.28'
L = 284.95'
E = 9.29'

300' RADIUS

N

VT STATE PLANE GRID

NELSON FARMS, INC.

SIGN TO REMAIN IN PLACE DURING CONSTRUCTION

COFFERDAM

WP1
N 840379.06'
E 1699906.53'

STREAM BED (MATCH EXISTING, REUSE EXISTING MATERIAL WHERE POSSIBLE)

EXIST. 96" CGMP TO BE REMOVED

RIPRAP, HEAVY TYPE

POE STA 2+00.00

BLACK RIVER

FLOW

PC STA 32+82.08

EXIST. ROW

OHW

TO IRASBURG

N 85° 40' 32.72" E

VT ROUTE 58

B-103

B-104

N 70° 50' 01.09" E

STA. 35+18, LT.

BRIDGE 7 VT 58

VT 58 STA. 35+00.07 = CHANNEL LINE STA. 1+41.07

PT STA 35+17.03

HIGH VOLTAGE POWER LINES LOCATION NOT SHOWN ON SURVEY (APPROXIMATE LOCATION)

EXISTING VILLAGE SIGN TO BE REMOVED DURING CONSTRUCTION AND REINSTALLED WHEN CONSTRUCTION IS COMPLETE

COVERED BRIDGE ROAD

HVCTD

EXISTING 4 ROD ROW PER S55(2) 19652

POE

38+00

37+00

36+00

35+00

34+00

33+00

32+00

TO ORLEANS

HUTCHINS

STONE FILL, TYPE III

AER E&T

BEGIN COLD PLANING
STA. 35+97.00

PROPOSED POWER LINE
END APPROACH
MATCH EXISTING
END COLD PLANING
STA. 36+47.00

ANTICIPATED TOE OF SLOPE FOR TRAFFIC CONTROL PHASING

END PROJECT
STA. 35+47.00

END BRIDGE
STA. 35+11.07

MAGOON, ALAN

EXISTING UTILITY TO BE RELOCATED

EXIST. ROW

PT STA 32+61.91

PROPOSED UTILITY LOCATION

END COLD PLANING
STA. 34+05.00

RESUME PROJECT
STA. 34+55.00

BEGIN APPROACH
MATCH EXISTING
BEGIN COLD PLANING
STA. 33+55.00

PI STA 34+35.36 BCK = N 85° 40' 32.72" E AHD
PI STA 34+33.75

BEGIN BRIDGE
STA. 34+89.07

Temp. Culvert to Drive for Phase I Detour

WP2
N 840324.75'
E 1699920.22'

PI STA 0+54.94

STA. 34+81, RT.

BRIDGE 7 VT 58

POB STA 0+00.00

FLOW UNNAMED TRIBUTARY

BEGIN SPECIAL PROVISION (STONE FILL, CULVERT LINING)
STA. 0+75.00

SPECIAL PROVISION
STONE FILL,
CULVERT MATERIAL
(TYP.)

ASSUMED 25' x 25' TEMPORARY WORK AREA FOR IMPOUNDMENT AND/OR STREAM DIVERSION.

PLAN
SCALE: 1" = 20'-0"
0 20 40

Light Tower
Reflectorized Barrels
Stop Bar
Triton Barrier
Trailer Mounted Traffic Signal

LEGEND
RIPRAP, HEAVY TYPE
STONE FILL, TYPE III
SPECIAL PROVISION (STONE FILL, CULVERT LINING)

NOTES:
1. GRADE IN ACCORDANCE WITH TYPICAL ROADWAY SECTION AND ROADWAY CROSS SECTIONS UNLESS NOTED OTHERWISE.

TRAFFIC SIGN SUMMARY

STATION	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW SIGNS "A"	NEW SIGNS "B"	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	REMARKS	STD. SHEET NUMBER
33+81, RT	BRIDGE 7 VT 58	1	6	8	0.33		1	X			X		VR-701	T-42
35+18, LT	BRIDGE 7 VT 58	1	6	8	0.33		1	X			X		VR-701	T-42
		TOTALS			SF 0.66	SF		FT 30						

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

BR7 Phase I Detour Rev.

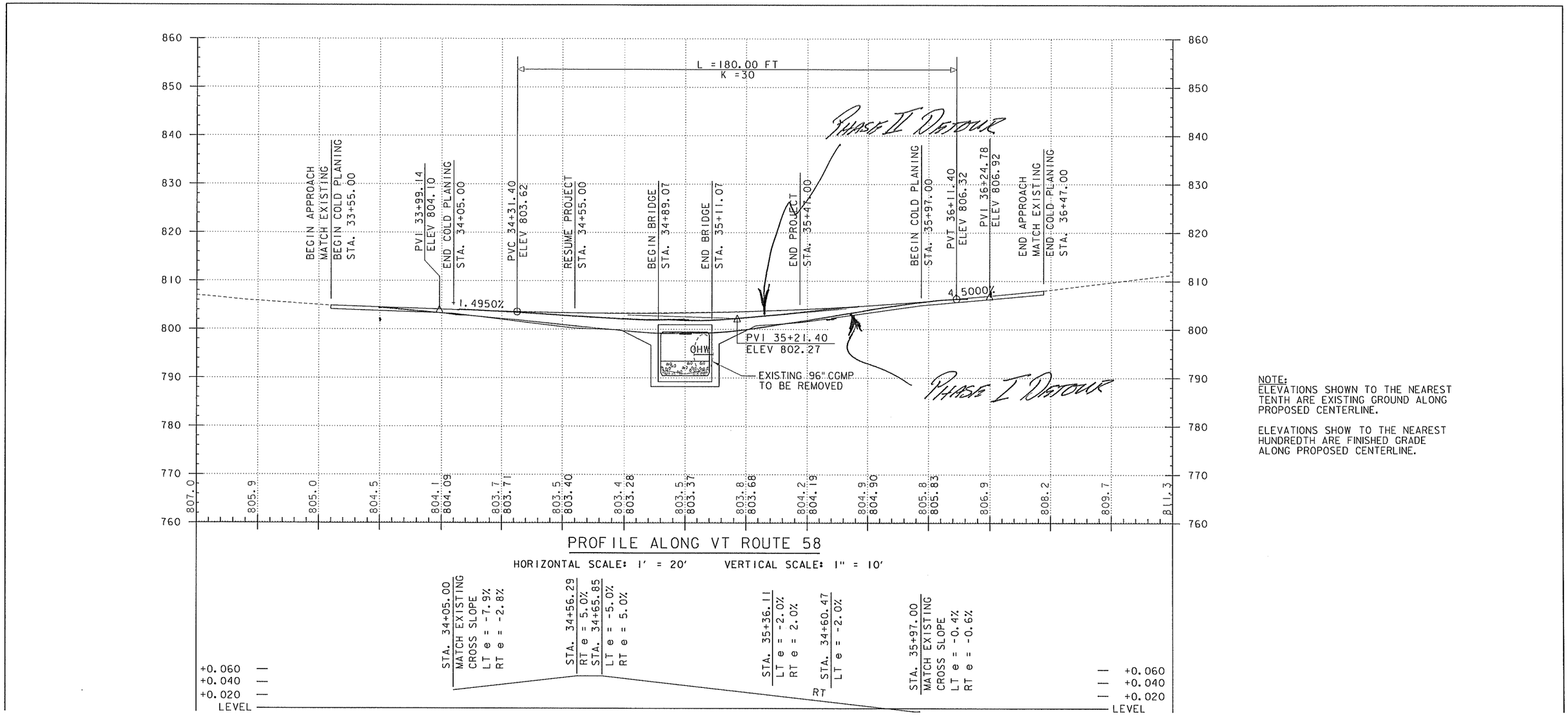
Stantec

PROJECT NAME: IRASBURG
PROJECT NUMBER: STP CULV(30)

FILE NAME: z11c266bdr_br7.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: J. HUNGERFORD
PLAN LAYOUT SHEET - BR7

PLOT DATE: 10/21/2014
DRAWN BY: L. BUXTON
CHECKED BY: M. CHENETTE
SHEET 35 OF 55

TCP 16



NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOW TO THE NEAREST HUNDREDTH ARE FINISHED GRADE ALONG PROPOSED CENTERLINE.

PROFILE ALONG VT ROUTE 58

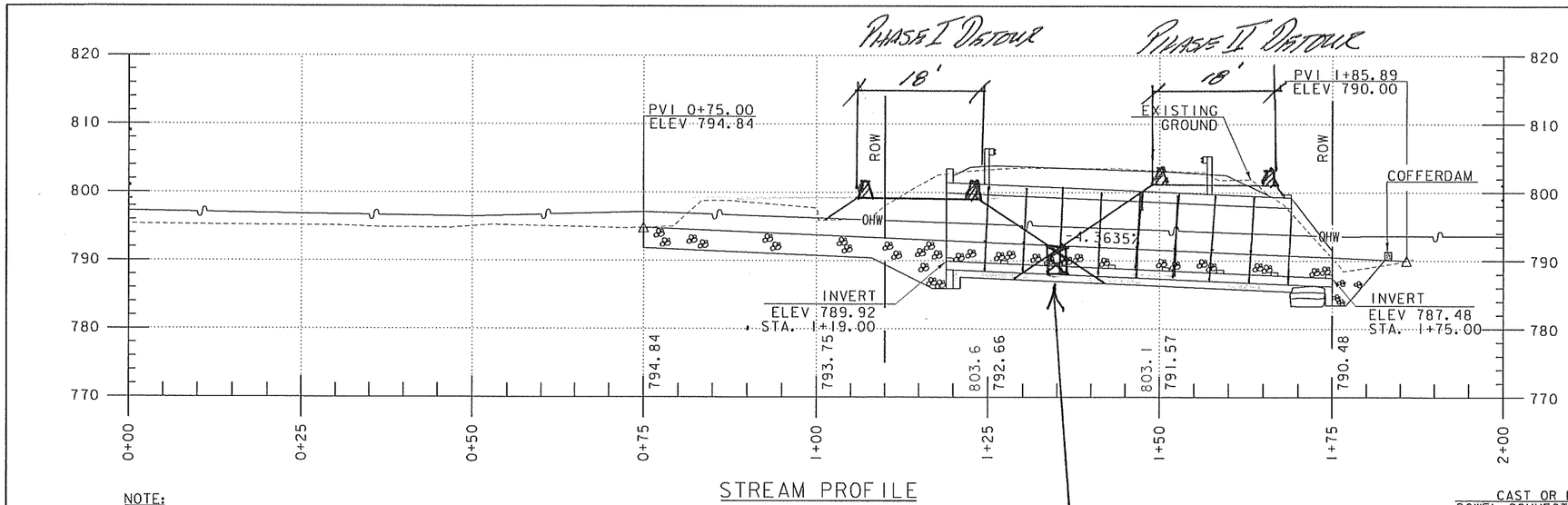
HORIZONTAL SCALE: 1' = 20' VERTICAL SCALE: 1" = 10'

TRASBURG - STP CULV(80)

BRT PHASE I & II PROFILE

PLAN SHEET 36 of 55

TCP 17



STREAM PROFILE

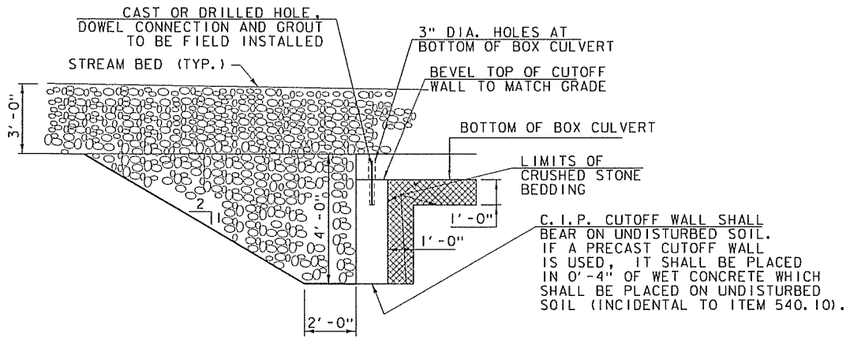
0 10 20

SCALE

NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

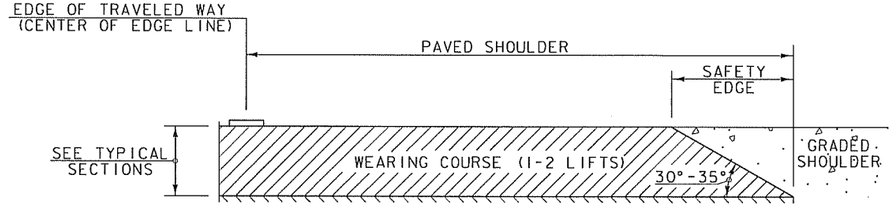
ELEVATIONS SHOW TO THE NEAREST HUNDREDTH ARE FINISHED GRADE ALONG PROPOSED CENTERLINE.

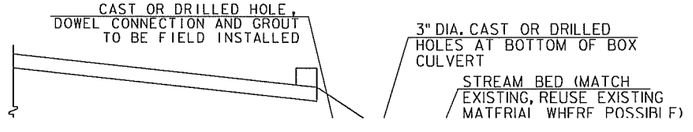
INSTALL CONCRETE BLOCK FOR SHORT TERM EXCAVATION



INLET CUTOFF WALL DETAIL

NOT TO SCALE





SHEET 37 of 55

STREAM PROFILE - BR7

TCP 18

LEGEND

(A) ROAD WORK AHEAD — W20-1

(B) ROAD WORK 500 FT — W20-1

(C) SIDE ROAD WORK AHEAD — VC-869

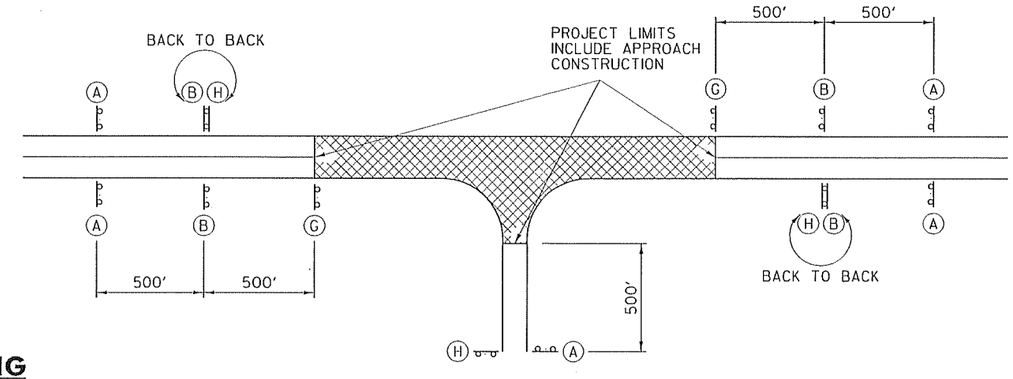
(D) SIDE ROAD WORK 500 FT — VC-869

(E) SIDE ROAD WORK LEFT — VC-869

(F) SIDE ROAD WORK RIGHT — VC-869

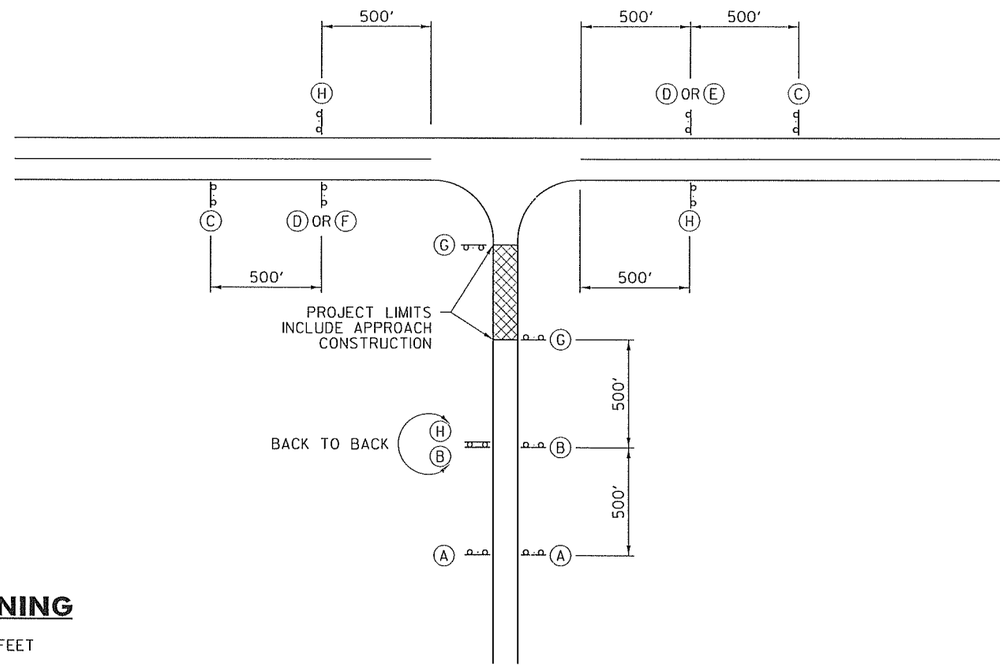
(G) ROAD WORK NEXT XX MILES — G20-1

(H) END ROAD WORK — G20-2



TYPICAL APPROACH SIGNING

FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.



SIDE ROAD APPROACH SIGNING

TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION. FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.

GENERAL NOTES:

1. SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.
2. THE "ROAD WORK NEXT XX MILES" SIGN (G20-1) SHALL BE INSTALLED IN ADVANCE OF TEMPORARY TRAFFIC CONTROL ZONES THAT ARE MORE THAN TWO MILES IN LENGTH OR AS DIRECTED BY THE ENGINEER. DISTANCES SHALL BE STATED TO THE NEAREST WHOLE MILE.
3. SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

OTHER STDS. REQUIRED: T-1, T-28

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

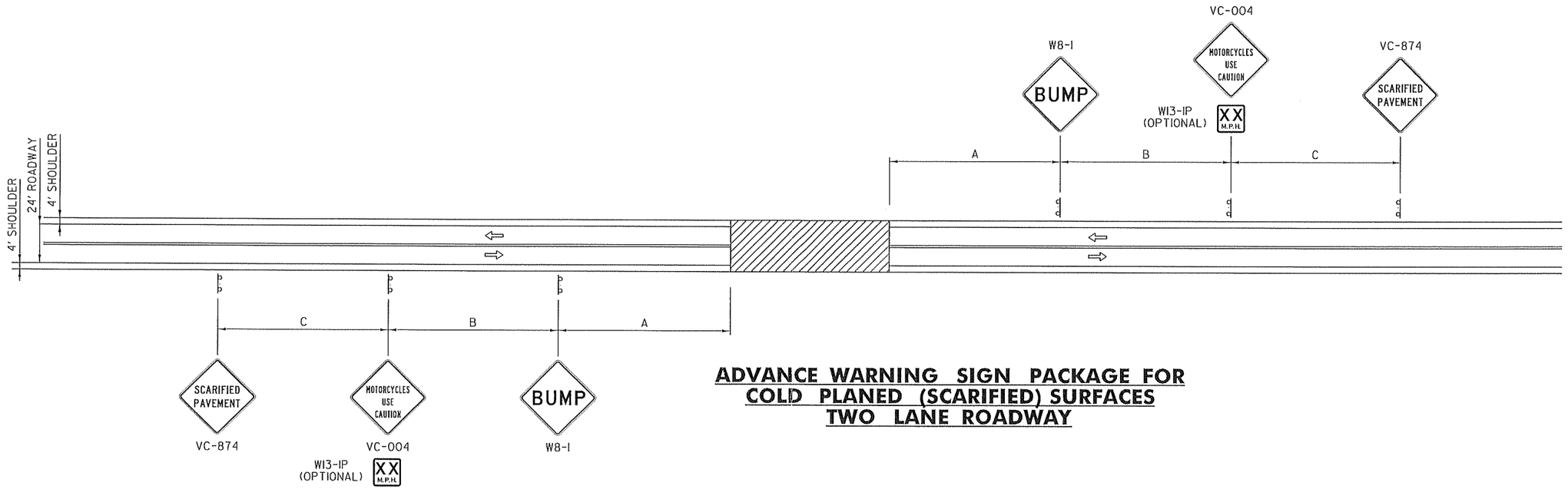
FEDERAL HIGHWAY ADMINISTRATION

CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING

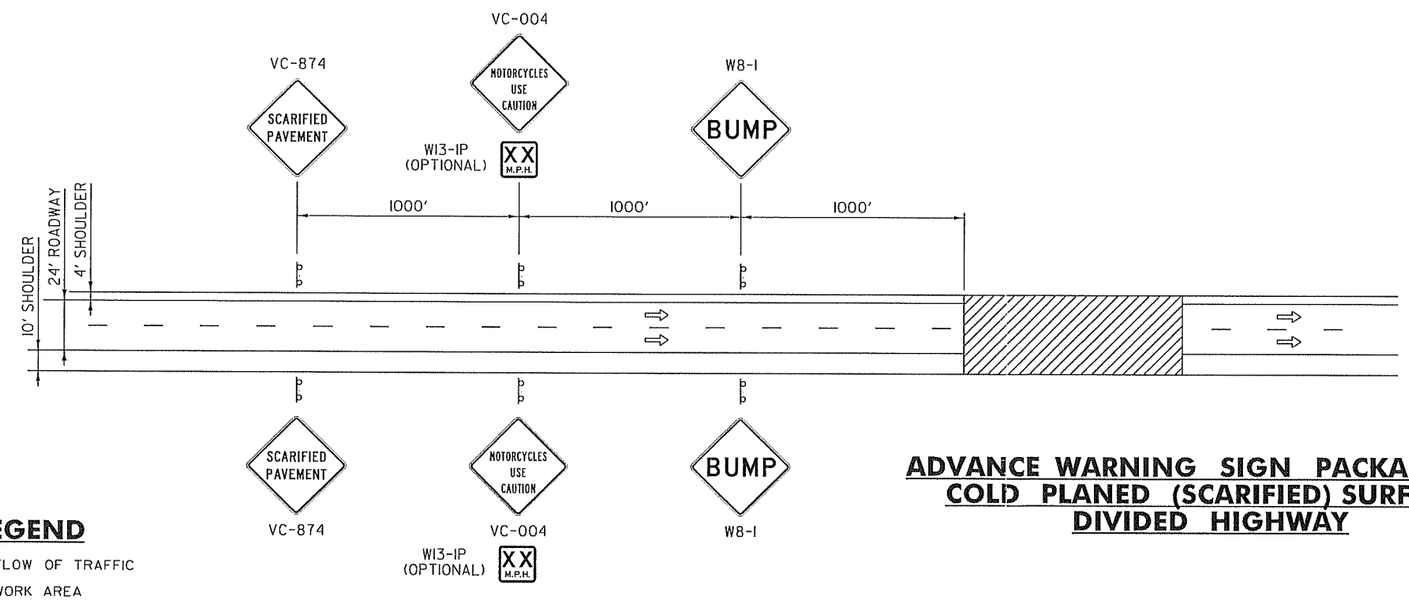
VERMONT AGENCY OF TRANSPORTATION

STANDARD T-10

TCP 19



ADVANCE WARNING SIGN PACKAGE FOR COLD PLANED (SCARIFIED) SURFACES TWO LANE ROADWAY



ADVANCE WARNING SIGN PACKAGE FOR COLD PLANED (SCARIFIED) SURFACES DIVIDED HIGHWAY

LEGEND

⇨ FLOW OF TRAFFIC

▨ WORK AREA

GENERAL NOTES:

1. THE BUMP SIGN MAY BE ELIMINATED WHEN THERE IS NO BUMP. WHEN THE CONTRACTOR IS WORKING IN THE CONSTRUCTION AREA, THE APPROPRIATE ADVANCED WARNING SIGN PACKAGE SHALL BE USED. SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) FOR ADDITIONAL INFORMATION.
2. GATE POSTING OF SIGNS IS AN OPTION AS DETERMINED BY THE ENGINEER FOR TWO LANE ROADWAY WHEN PASSING, TURNING OR CLIMBING LANES LIMIT VISIBILITY.
3. FOR DIMENSIONS A, B AND C, REFER TO THE MUTCD. USE TABLE 6C-1 (RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING), FOR SIGN SPACING.

OTHER STDS. REQUIRED: T-1, T-28

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

FEDERAL HIGHWAY ADMINISTRATION

TRAFFIC CONTROL MISCELLANEOUS DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD T-17