SUBSET 06 - HIGHWAYS

HIGHWAY DESIGN
INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
06.02	TYPICAL CROSS SECTIONS		
06.03 - 06.04	MISCELLANEOUS DETAILS		
06.05	CONSTRUCTION PLAN		
06.06 - 06.11	CROSS SECTIONS		

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

Matthew R. Vail, P.E.
For William Britnell:
2017.07.17 15:39:18-04'00'

TRANSPORTATION PRINCIPAL ENGINEER

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/17/2017

DESIGNER/DRAFTER: JLM

CHECKED BY: JDA

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Plan\HW_MSH_0172-0435_INX.dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

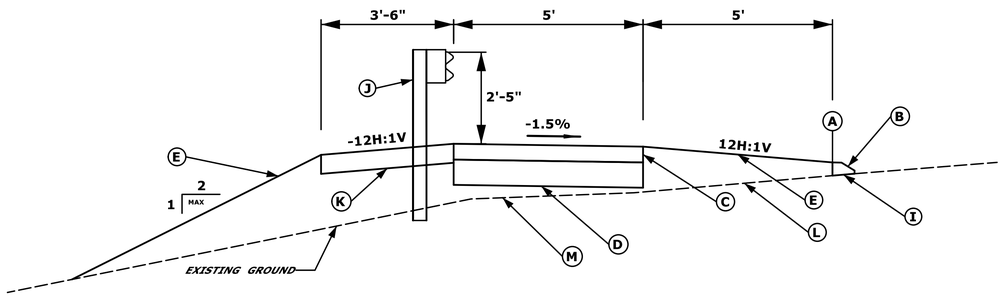
TOWN: GROTON

DRAWING TITLE: INDEX SHEET

PROJECT NO. 172-435

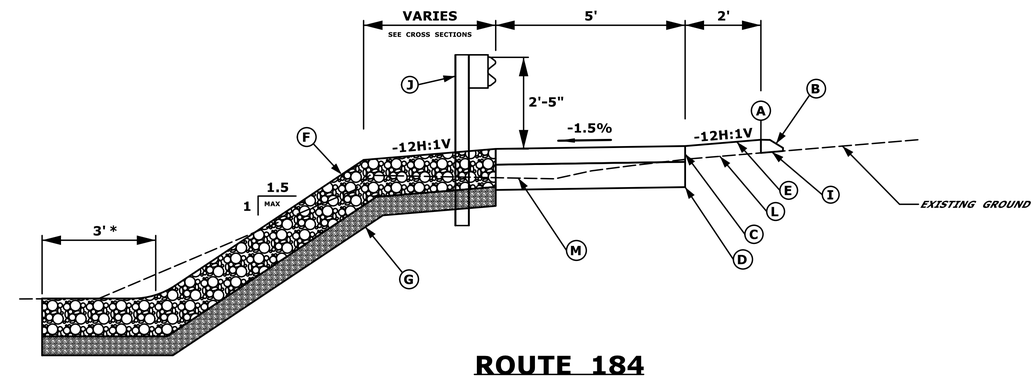
DRAWING NO. INX-01

SHEET NO. 06.01



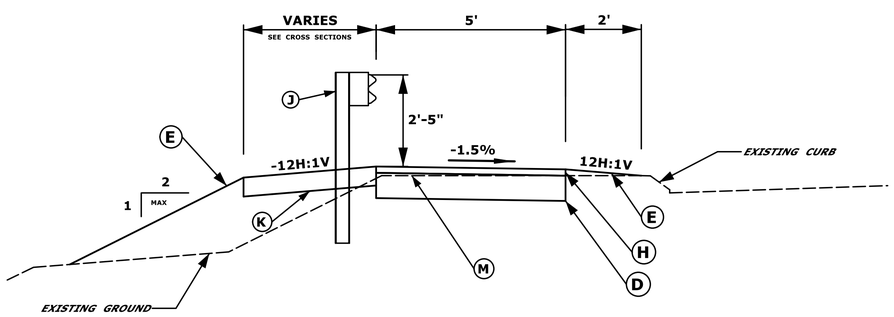
ROUTE 184

STA. 103+75 TO STA. 104+50



ROUTE 184

STA. 104+86 TO STA. 105+13



PUMPKIN HILL ROAD

STA. 201+38 TO STA. 202+02

NOTES

-GRADING SHOULD RESULT IN A ONE INCH VERTICAL REVEAL OF THE EXISTING ENDWALL
-FACE OF GUIDERAIL SHOULD BE PLACED FLUSH WITH THE BACK OF SIDEWALK AT APPLICABLE STATIONS SHOWN ON PLAN
-FACE OF GUIDERAIL WILL FLARE FOR TRANSITION TO END ANCHORS, SEE PLAN FOR LAYOUT
-CLASS 1 ECM (EROSION CONTROL MATTING) TYPE D TO BE INSTALLED AS DIRECTED BY THE ENGINEER, ON SLOPES STEEPER THAN 4H:1V
-REMOVAL OF ALL EXISTING CONCRETE AND BITUMINOUS SIDEWALK SHALL BE PAID FOR UNDER INSTALLATION OF SIDEWALK
-REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR UNDER EARTH EXCAVATION

LEGEND

Ⓐ CUT BITUMINOUS CONCRETE PAVEMENT
Ⓑ BITUMINOUS CONCRETE PARK CURB
Ⓒ CONCRETE SIDEWALK
Ⓓ 8 in. THICK GRANULAR FILL
Ⓔ 4 in. TOPSOIL/TURF ESTABLISHMENT/ECM
Ⓕ 12 in. CRUSHED STONE FOR SLOPE PROTECTION 1.5H:1V
Ⓖ 6 in. THICK GRANULAR FILL
Ⓗ BITUMINOUS CONCRETE SIDEWALK
Ⓘ MATERIAL FOR TACK COAT
Ⓙ METAL BEAM RAIL - TYPE RB-350
Ⓚ 6 in. THICK PROCESSED AGGREGATE
Ⓛ REMOVE EXISTING PAVEMENT
Ⓜ REMOVE EXISTING SIDEWALK

* SLOPE PROTECTION EXTENDED 3' BEYOND TOE OF SLOPE WHERE CONCRETE WALL NOT PRESENT

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DESIGNER/DRAFTER: JLM
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STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0172-0435_TYP-01.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
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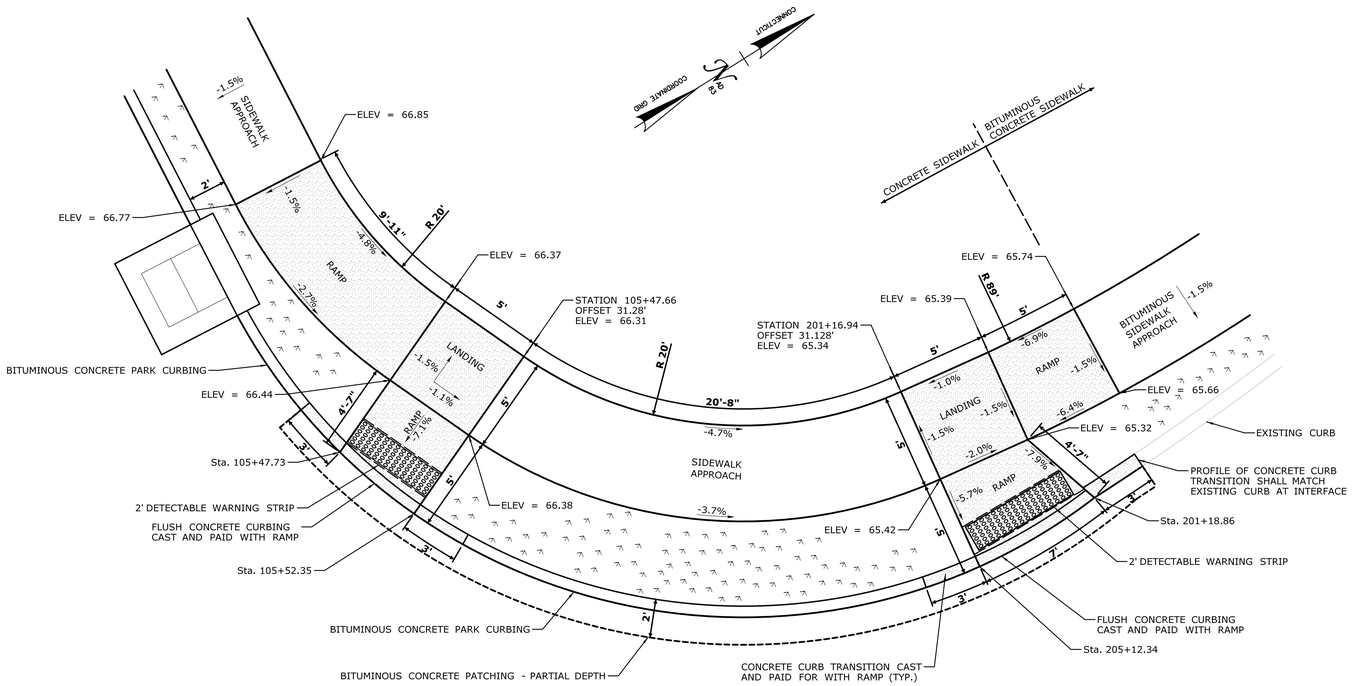
PROJECT TITLE: INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

TOWN: GROTON

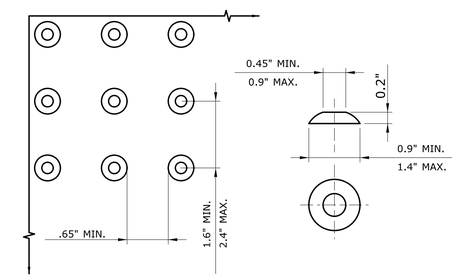
DRAWING TITLE: TYPICAL SECTIONS

PROJECT NO. 172-435
DRAWING NO. TYP-01
SHEET NO. 06.02



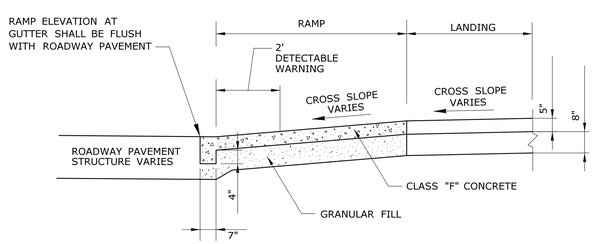
NOTES

1. ALL GRADES TAKE PRECEDENCE OVER ELEVATIONS SHOWN.
2. RAMPS SHALL BE FREE OF SAGS.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CLASS "F" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE OF ALL SIDEWALK RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. SURFACE DISCONTINUITIES SHALL NOT EXCEED 1#2" MAX. VERTICAL DISCONTINUITIES BETWEEN 1#4" AND 1#2" MAX. SHALL BE BEVELED 1:2 MINIMUM APPLIED ACROSS THE ENTIRE LEVEL CHANGE.
5. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
6. CONCRETE SIDEWALK RAMPS, SHALL BE PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK RAMP", AS DEFINED BY THE CONSTRUCTION LIMITS ON THE PLANS AND SHALL BE FIELD VERIFIED.
7. CURB REMOVAL AND CAST IN PLACE CURBING REQUIRED FOR THE RAMP, SHALL BE INCLUDED WITH PAY ITEM "CONCRETE SIDEWALK RAMP". CURBING OUTSIDE LIMITS OF RAMP OR LANDING SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
8. PREFERRED LOCATION TO INSTALL DETECTABLE WARNING STRIP SHALL BE 8" FROM THE EDGE OF ROAD ALONG THE FULL WIDTH OF THE RAMP.
9. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF RUNNING SLOPE THE TRANSITION FROM RAMP TO GUTTER SHALL BE FLUSH WITHOUT A LIP.
10. UTILITY POLES, LUMINAIRE, PEDESTRIAN OR SIGNAL POLES, GRATES, ACCESS COVERS, AND OTHER APPURTENANCES SHALL NOT BE LOCATED ON RAMPS, LANDINGS, BLENDED TRANSITIONS, AND AT GUTTERS WITHIN THE PEDESTRIAN ACCESS ROUTE.
11. SHADED AREAS ARE PAY LIMITS FOR CONCRETE SIDEWALK RAMP.

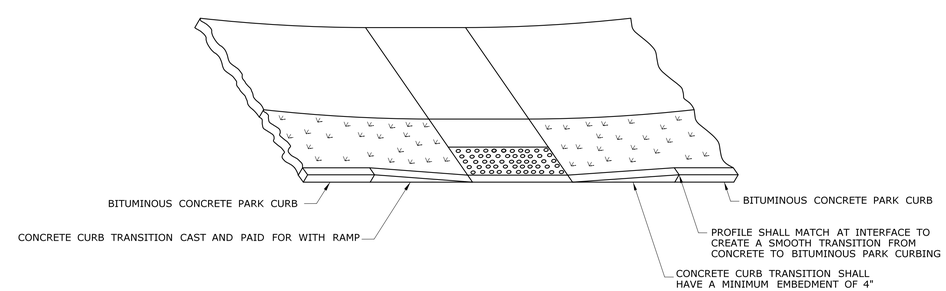


DOME SPACING **DOME SECTION**

STANDARD DOME ON DETECTABLE WARNING TILES



TYPICAL SECTION THRU SIDEWALK RAMP



TYPICAL SECTION FOR CURB TRANSITION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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DESIGNER/DRAFTER: JLM
CHECKED BY: JDA
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ..\HW_MSH_0172-0435_MDS-01.dgn

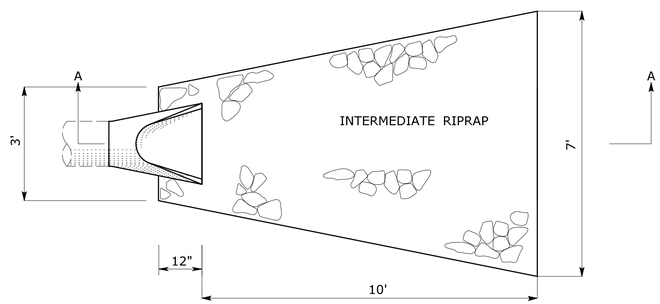
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

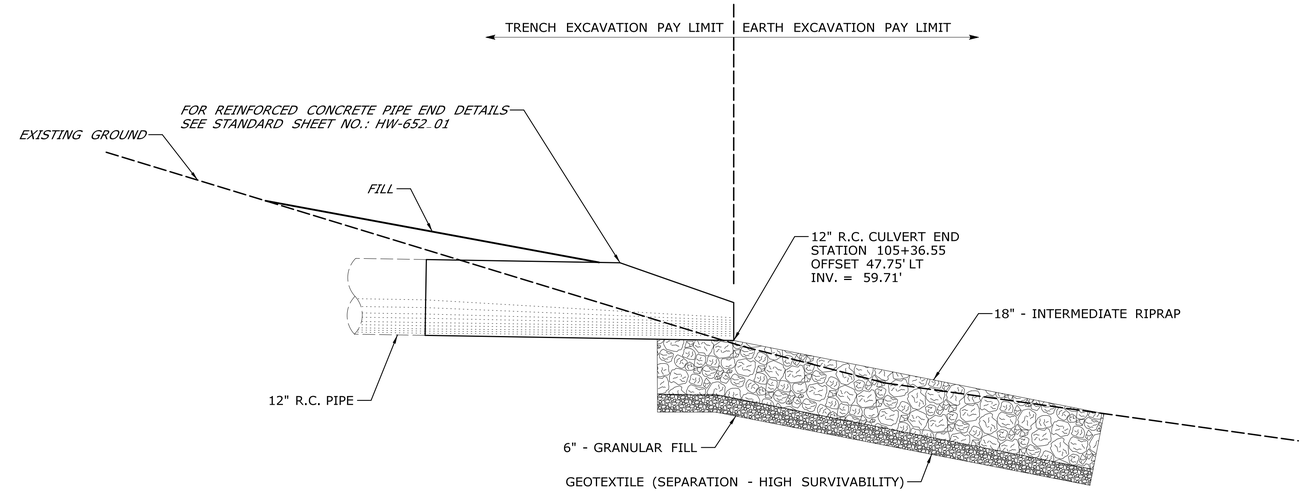
TOWN: **GROTON**

DRAWING TITLE:
MISCELLANEOUS DETAIL SIDEWALK RAMPS

PROJECT NO. **172-435**
DRAWING NO. **MDS-01**
SHEET NO. **06.03**



PLAN VIEW



SECTION A-A

INTERMEDIATE RIPRAP APRON

NOTES

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.

2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

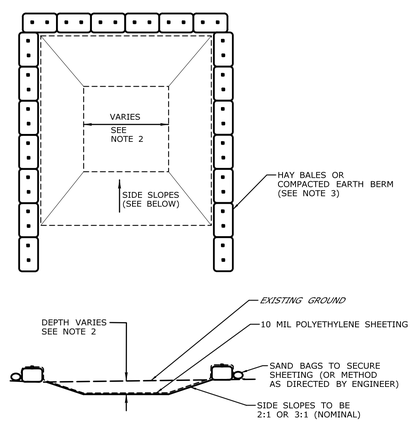
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.

4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.

5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.

6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.

7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.



CONCRETE WASHOUT AREA

NOT TO SCALE
(SEE NOTE 2)

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DESIGNER/DRAFTER: JLM
CHECKED BY: JDA
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0172-0435_MDS-02.dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

TOWN: GROTON

DRAWING TITLE:
MISCELLANOUS DETAILS

PROJECT NO. 172-435
DRAWING NO. MDS-02
SHEET NO. 06.04

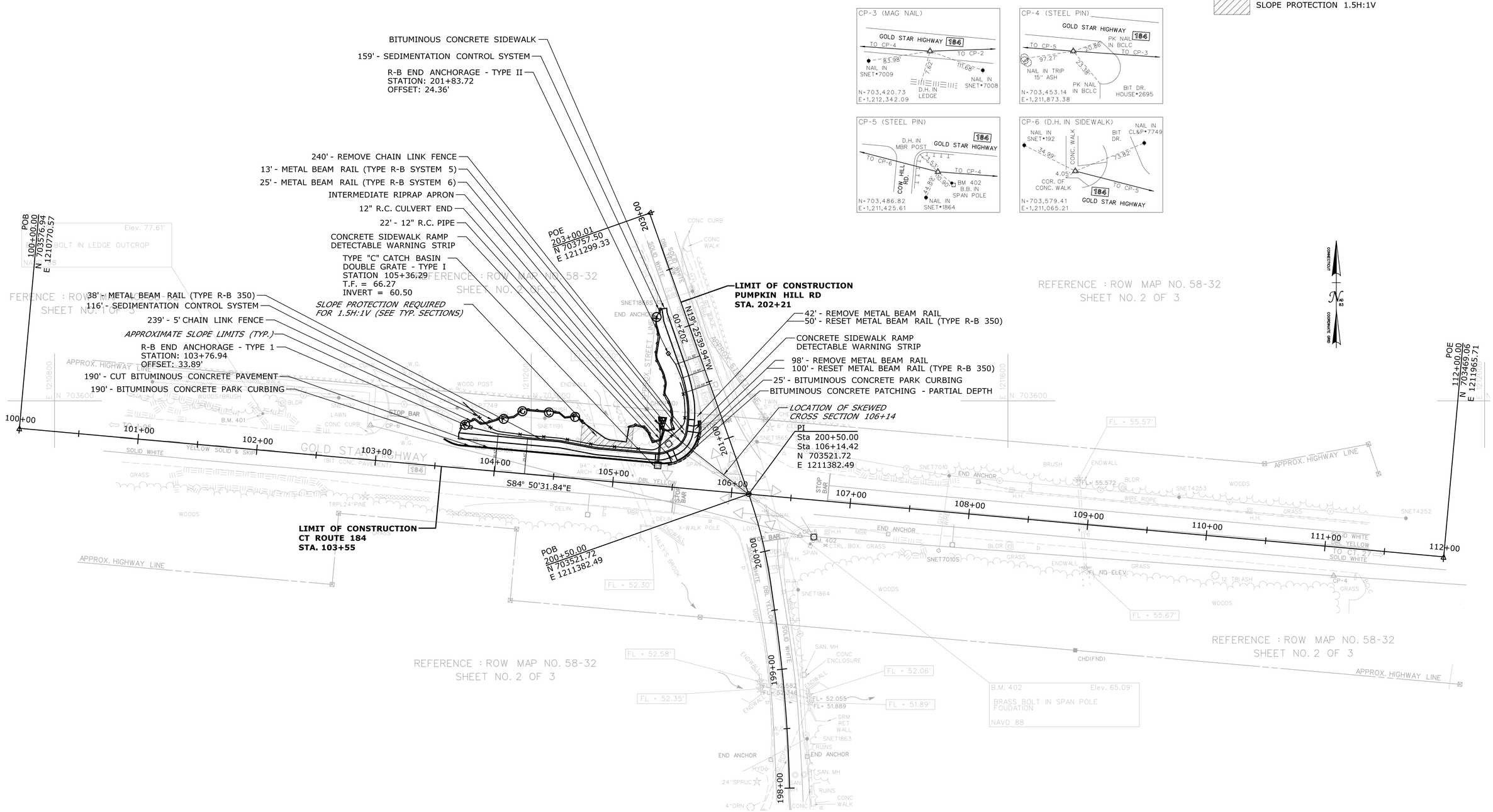
GENERAL NOTES:

1. TO KEEP SPAN POLE OUTSIDE THE DEFLECTION DISTANCE OF THE GUIDERAIL, THE SPAN POLE SHALL BE PLACED A MINIMUM OF 1'-10" AWAY FROM THE R-B SYSTEM 6 MEASURED FROM THE BACK OF THE POST
2. KEEP ROADWAY CLEAR OF DEBRIS

LEGEND

BITUMINOUS CONCRETE PATCHING - PARTIAL DEPTH

SLOPE PROTECTION 1.5H:1V



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Plotted Date: 7/17/2017

DESIGNER/DRAFTER: JLM

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SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Plan\HW_MSH_0172-0435_PLN.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

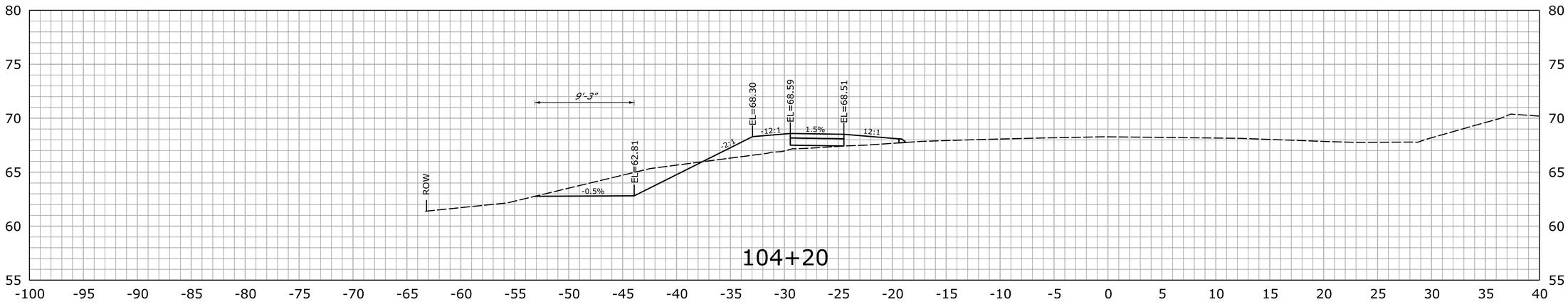
TOWN: GROTON

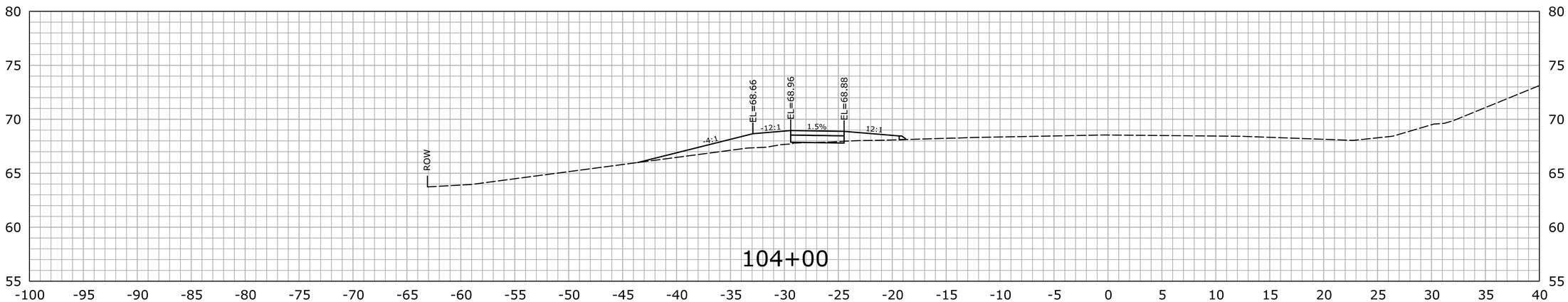
DRAWING TITLE: CONSTRUCTION PLAN

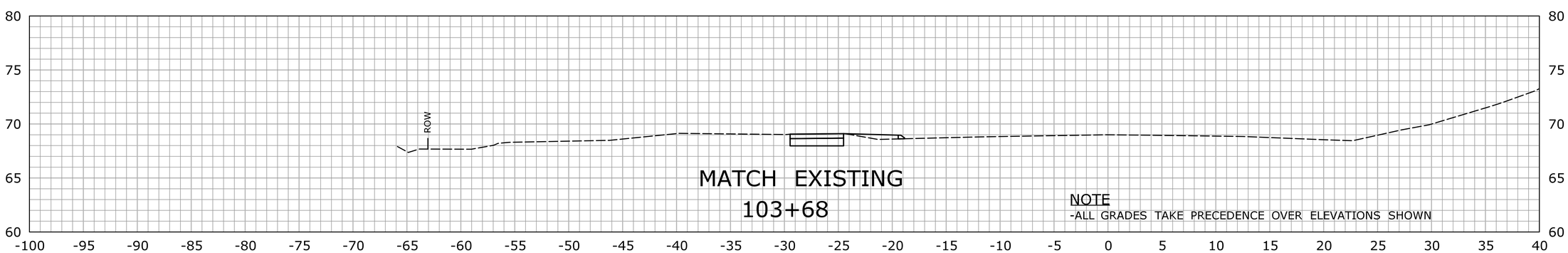
PROJECT NO. 172-435

DRAWING NO. PLN-01

SHEET NO. 06.05







NOTE
-ALL GRADES TAKE PRECEDENCE OVER ELEVATIONS SHOWN

STA.103+68 TO STA.104+20

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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DESIGNER/DRAFTER: JLM
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SCALE 1" = 5'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_IRD_0172_0435_INR.dgn

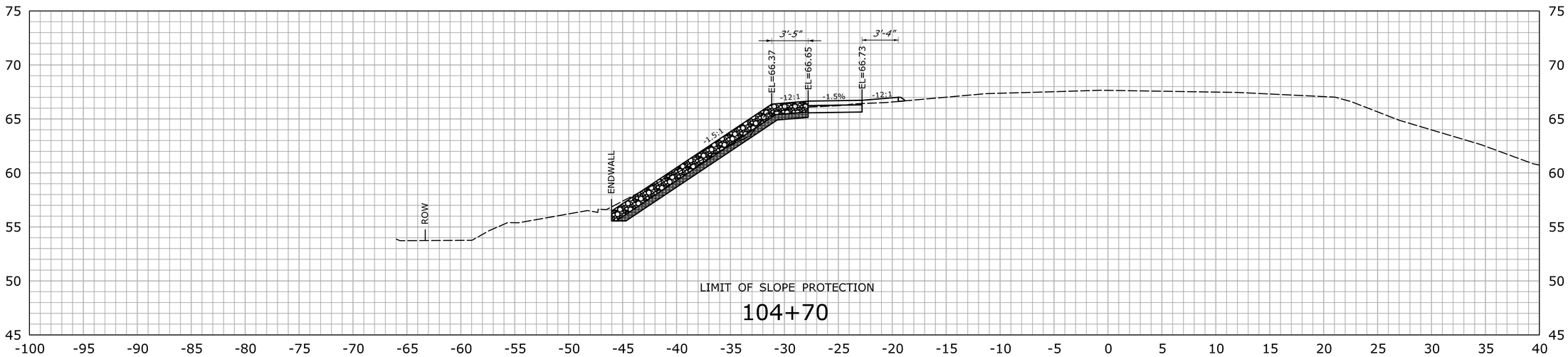
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

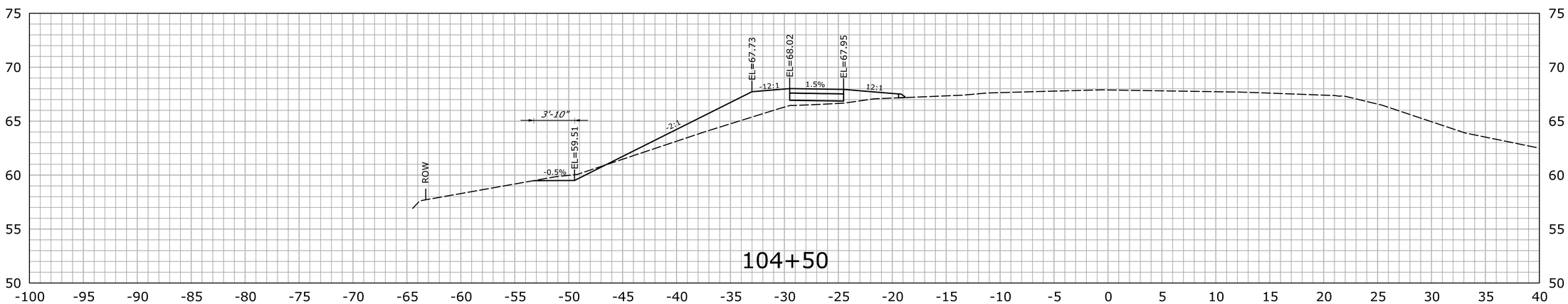
PROJECT TITLE: INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

TOWN: GROTON

DRAWING TITLE: CROSS SECTIONS ROUTE 184

PROJECT NO. 172-435
DRAWING NO. XSC-01
SHEET NO. 06.06





STA.104+50 TO STA.104+70

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INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

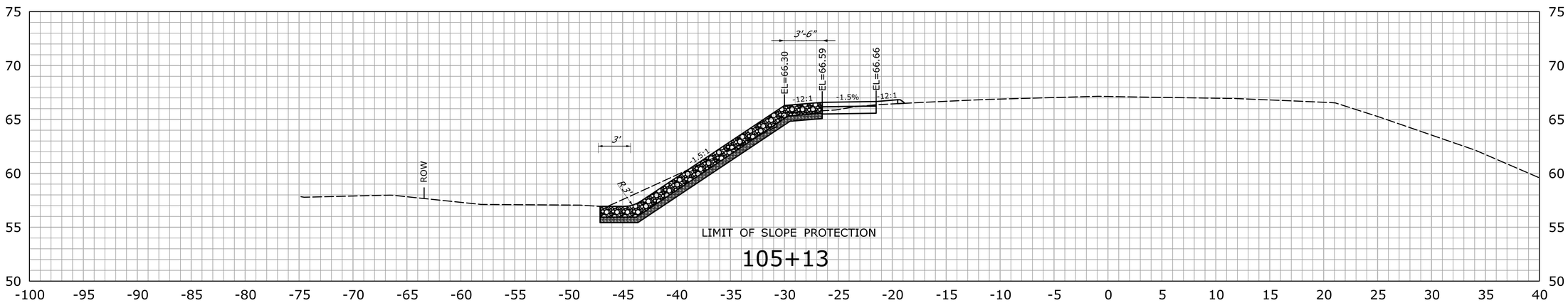
TOWN: GROTON

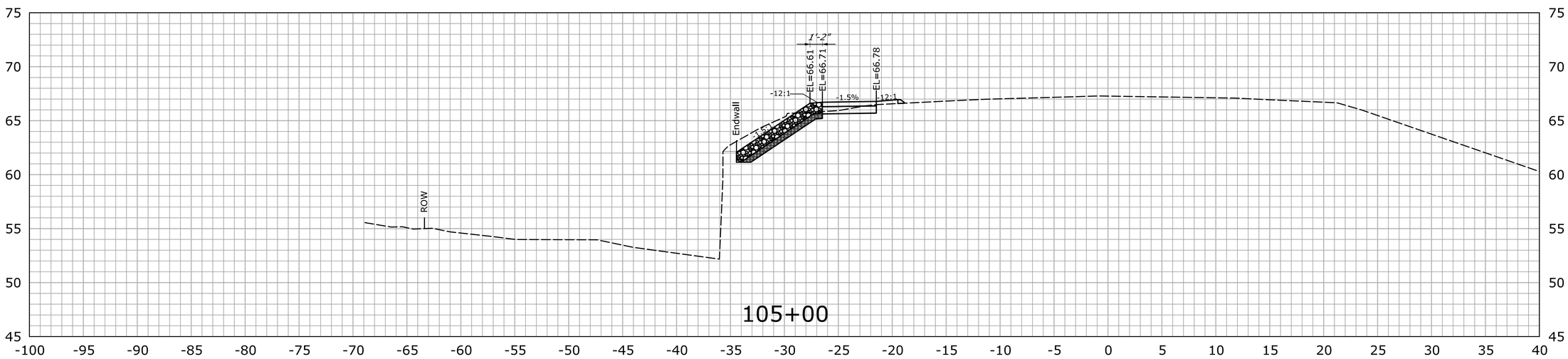
DRAWING TITLE: CROSS SECTIONS ROUTE 184

PROJECT NO. 172-435

DRAWING NO. XSC-02

SHEET NO. 06.07





STA.105+00 TO STA.105+13

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INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

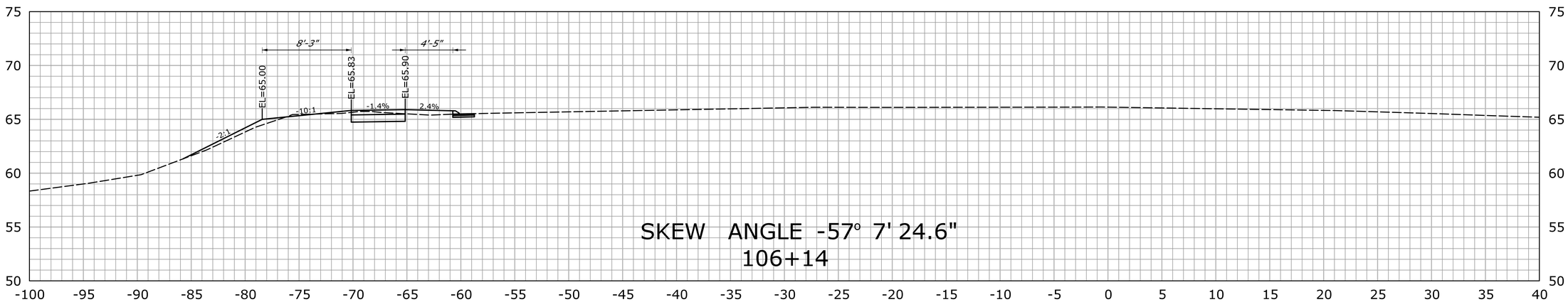
TOWN: GROTON

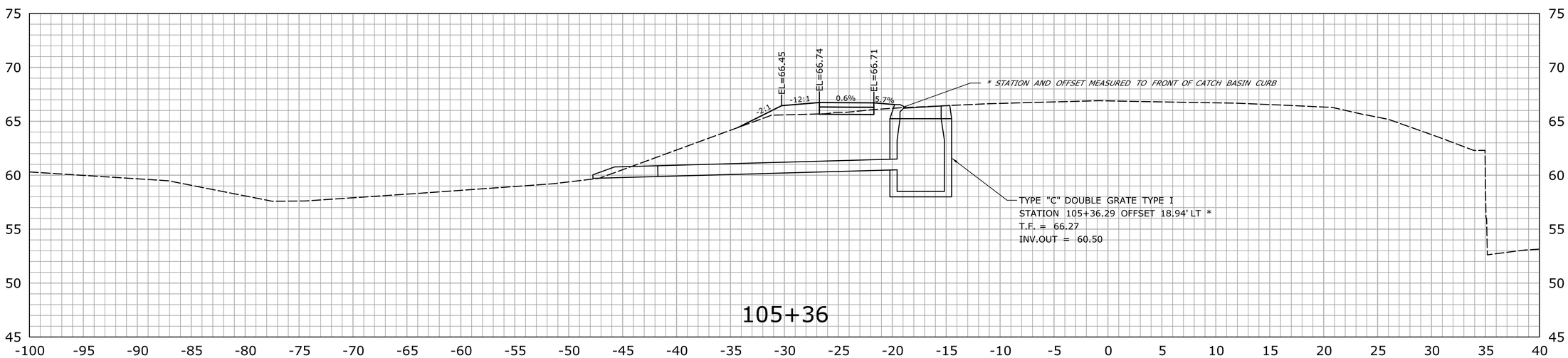
DRAWING TITLE: CROSS SECTIONS ROUTE 184

PROJECT NO. 172-435

DRAWING NO. XSC-03

SHEET NO. 06.08





STA.105+36 TO STA.106+14

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SCALE 1" = 5'

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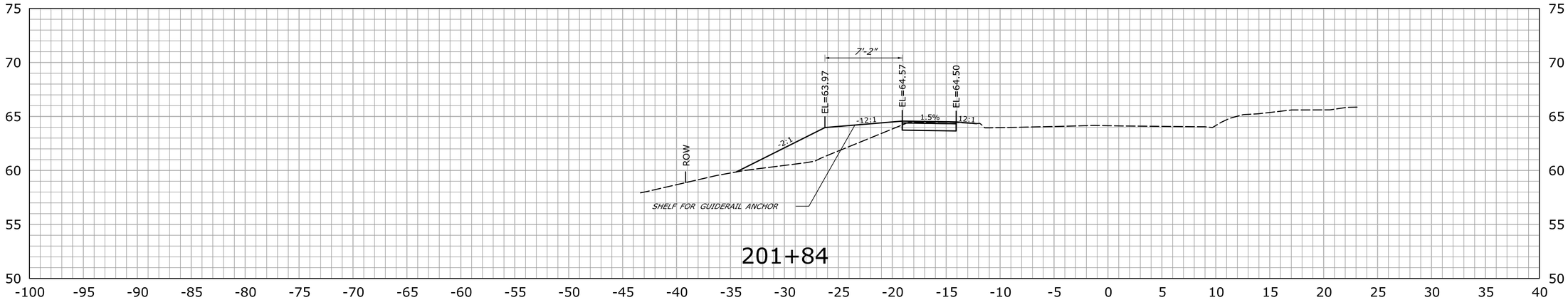
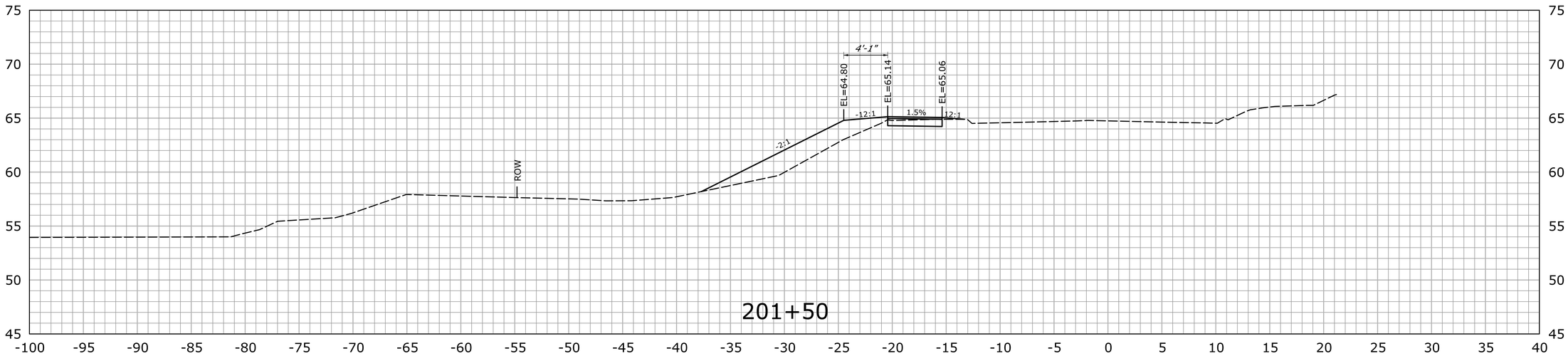
INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

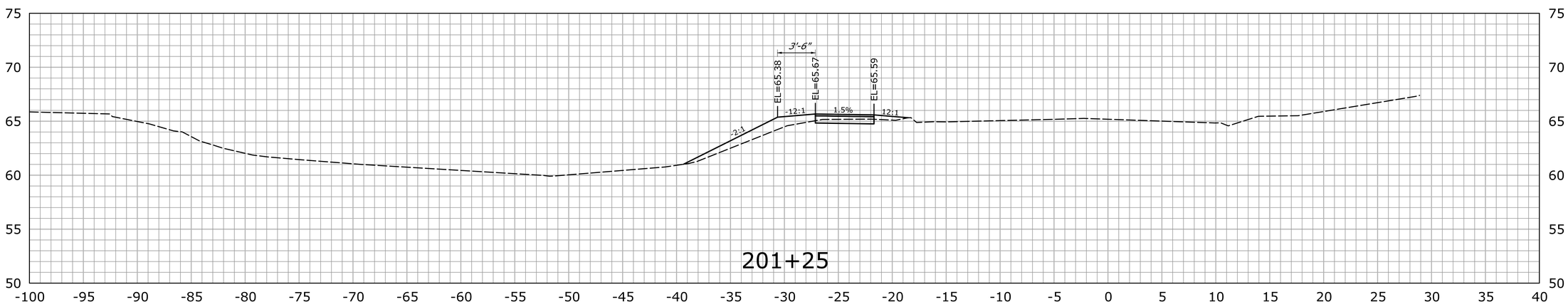
TOWN: GROTON

DRAWING TITLE:
CROSS SECTIONS ROUTE 184

PROJECT NO. 172-435
DRAWING NO. XSC-04
SHEET NO. 06.09







STA.201+25 TO STA.201+84

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PROJECT TITLE:

INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

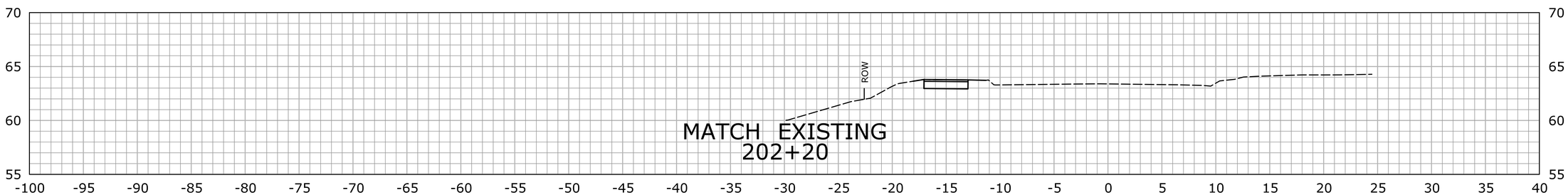
TOWN: GROTON

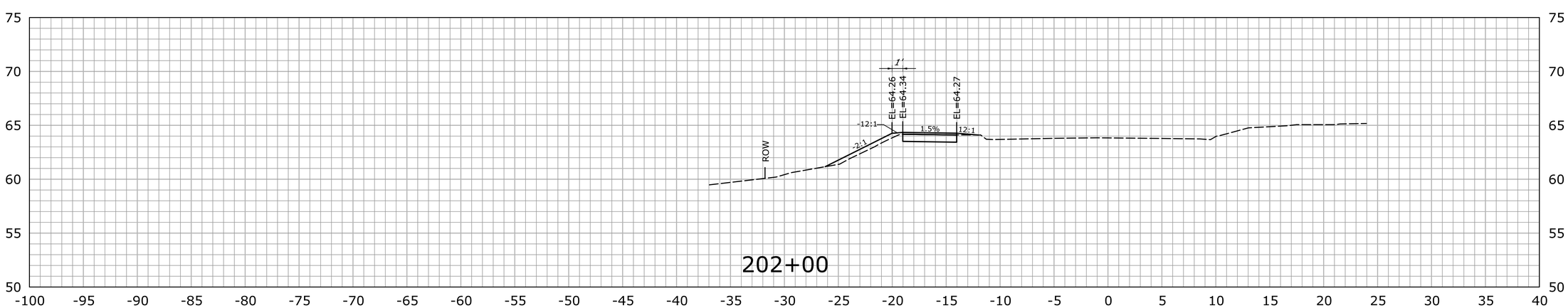
DRAWING TITLE: CROSS SECTIONS PUMPKIN HILL RD

PROJECT NO. 172-435

DRAWING NO. XSC-05

SHEET NO. 06.10





STA.202+00 TO STA.202+20

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/17/2017

DESIGNER/DRAFTER: JLM

CHECKED BY: JDA

SCALE IN FEET 0 5 10

SCALE 1" = 5'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_IRD_0172_0435_INR.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: INSTALLATION OF TRAFFIC CONTROL SIGNALS IN DISTRICTS 1 & 2

TOWN: GROTON

DRAWING TITLE: CROSS SECTIONS PUMPKIN HILL RD

PROJECT NO. 172-435

DRAWING NO. XSC-06

SHEET NO. 06.11