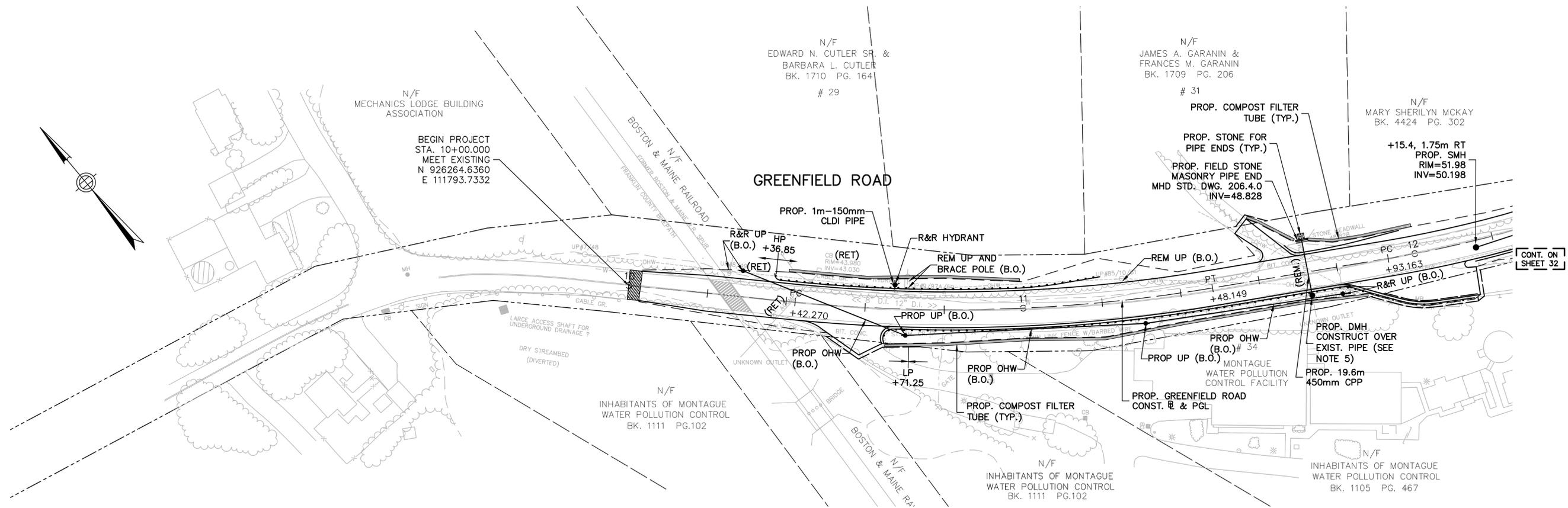


**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	31	157
PROJECT FILE NO.		601657	

**DRAINAGE &
UTILITY PLAN**



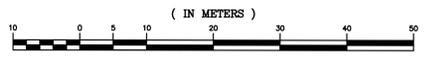
CONT. ON SHEET 32

NOTES:

- ALL EXISTING DRAINAGE STRUCTURES AND PIPE WITHIN THE PROPOSED ROADWAY SHALL BE REMOVED (REM.) UNLESS NOTED OTHERWISE. DRAINAGE STRUCTURES TO BE REMOVED SHALL BE PAID FOR UNDER ITEM 146. DRAINAGE PIPE TO BE REMOVED SHALL BE PAID FOR UNDER ITEM 120.
- ALL PROPOSED DRAINAGE STRUCTURES SHALL BE CLEANED UPON PLACEMENT OF TOP COURSE OF HOT MIX ASPHALT.
- ALL DRAINAGE INLETS, EXISTING AND PROPOSED, WITHIN PROJECT LIMITS SHALL HAVE SEDIMENTATION FILTRATION SYSTEMS INSTALLED DURING CONSTRUCTION.
- ALL DROP INLETS AND CATCH BASINS WITH 300mm OUTLET PIPES SHALL BE PROVIDED WITH 300mm CATCH BASIN TRAPS.
- THE OUTLET LOCATION AND OUTLET INVERT OF THE EXISTING DRAINAGE PIPE IS UNKNOWN. THE INVERTS OF THE PROPOSED MANHOLE WILL BE DETERMINED IN THE FIELD BASED ON THE INVERTS OF THE EXISTING DRAINAGE PIPE.
- ALL CATCH BASINS AND DROP INLETS SHALL HAVE EXTRA DEEP SUMPS (1.22m MIN.)
- SUBDRAIN INVERT SHALL BE 1.4m BELOW FINAL GRADE OR AS SHOWN ON CROSS SECTIONS.

- ALL FRAMES AND GRATES IN THE ROADWAY SHALL CONFORM TO MASSDOT STD. DWGS. 201.6.0 AND 201.7.0. FRAMES AND GRATES IN GRASS SHOULDERS SHALL CONFORM TO MASSDOT STD. DWGS. 201.6.0 AND 201.10.0.
- CONTRACTOR SHALL COORDINATE WITH TELEPHONE COMPANY FOR FIELD LOCATION OF UNDERGROUND TELEPHONE. CONTRACTOR SHALL ALSO COORDINATE THEIR ACTIVITIES WITH TELEPHONE COMPANY FOR THEIR RELOCATION WORK.
- CATCH BASINS SHALL CONFORM TO MASSDOT STD. DWG. 201.4.0, WITH THE ADDITION OF EXTRA DEEP SUMPS.
- MANHOLES SHALL CONFORM TO MASSDOT STD. DWG. 202.4.0 REGARDLESS OF DEPTH.
- ALL GUTTER INLETS SHALL BE PRECAST WITH 600mm SQUARE INTERNAL DIMENSIONS.
- INVERTS SHOWN ARE PROPOSED AND SHOWN FOR BIDDING PURPOSES ONLY. ACTUAL INVERTS SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR.

GRAPHIC SCALE



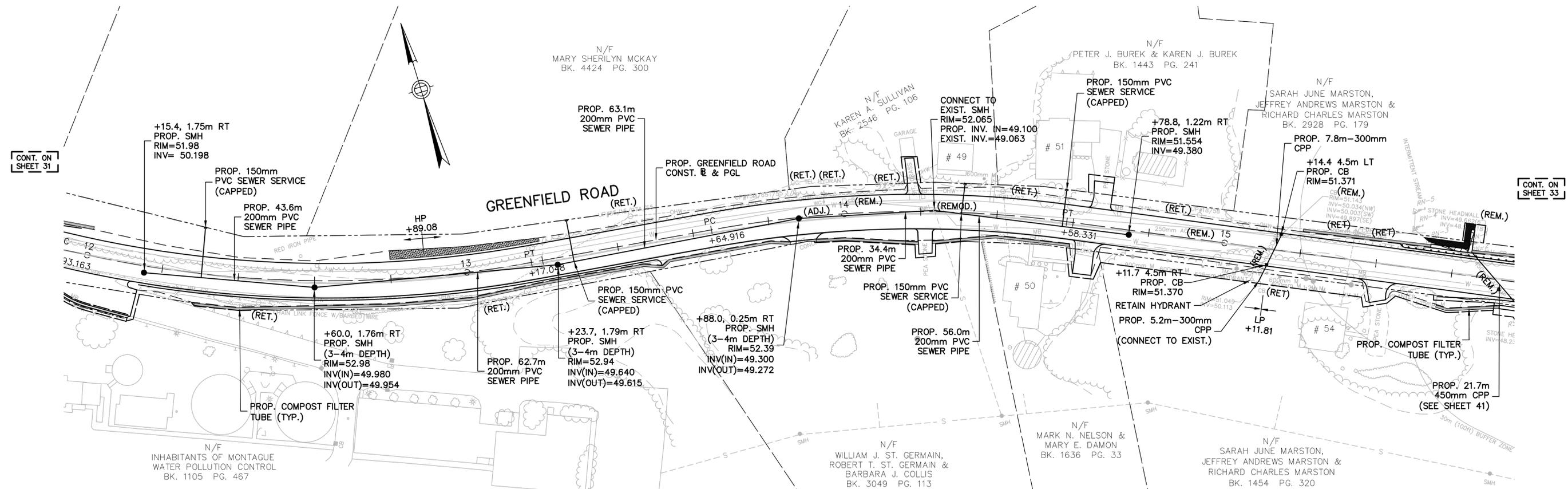
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IN CHARGE OF: _____
 DRAWN BY: _____
 CHECKED BY: _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	32	157
PROJECT FILE NO.		601657	

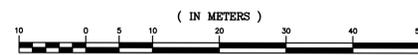
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 31

CONT. ON SHEET 33

GRAPHIC SCALE



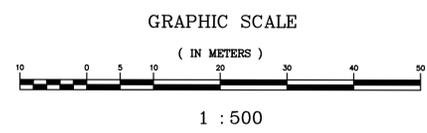
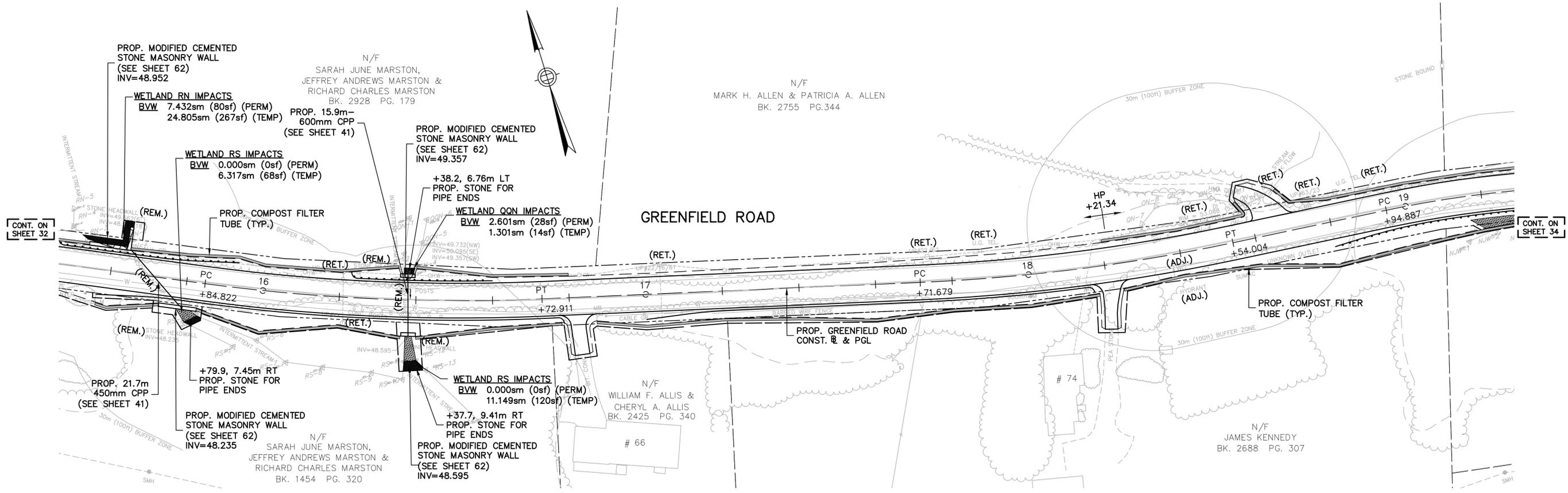
1 : 500

IN CHARGE OF: MDE
 DRAWN BY: RJD
 CHECKED BY: MDE

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	33	157
PROJECT FILE NO.		601657	

**DRAINAGE &
UTILITY PLAN**

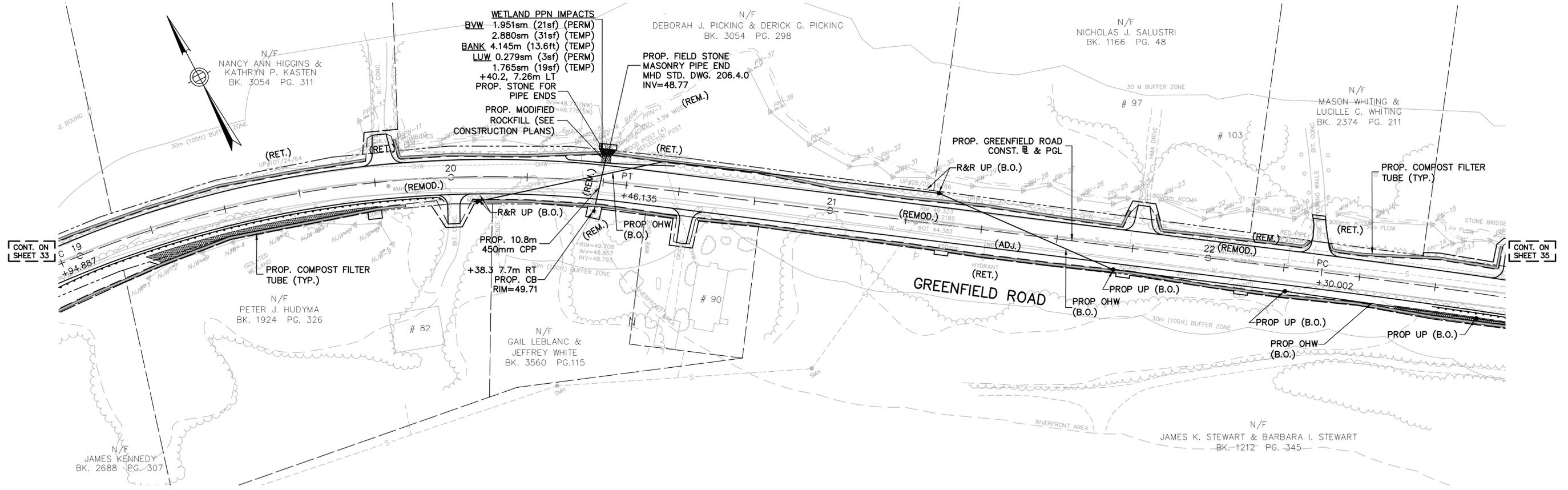


IN CHARGE OF
DRAWN BY
CHECKED BY

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	34	157
PROJECT FILE NO.		601657	

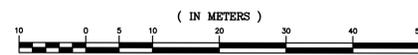
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 33

CONT. ON SHEET 35

GRAPHIC SCALE



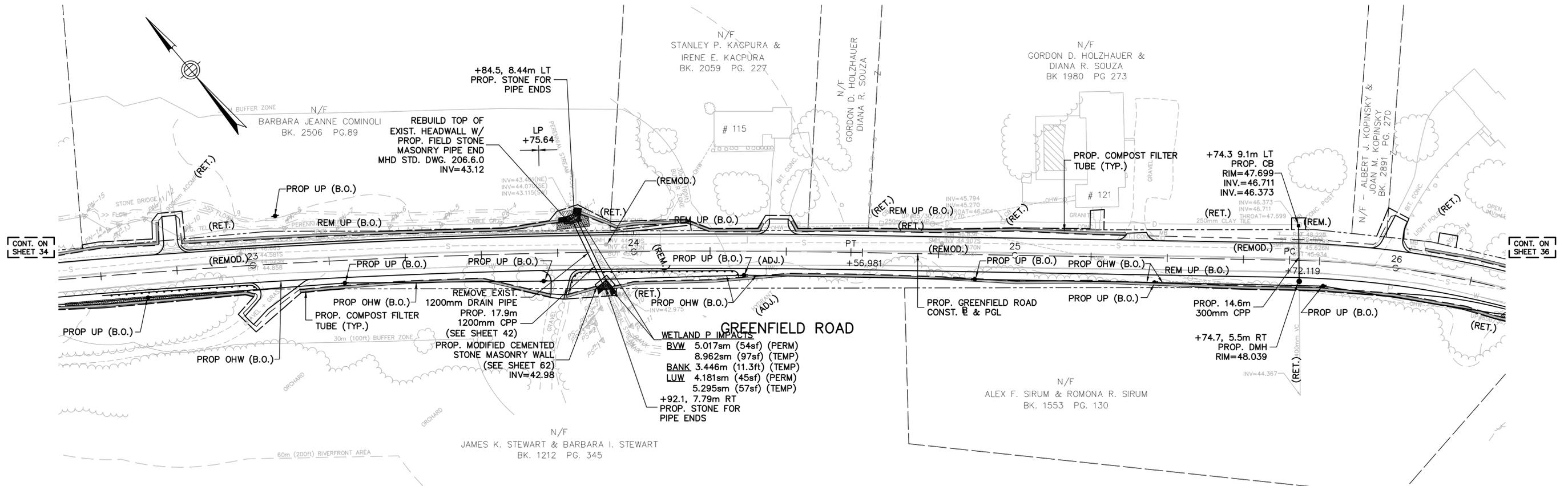
1 : 500

IN CHARGE OF
DRAWN BY
CHECKED BY

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	35	157
PROJECT FILE NO.		601657	

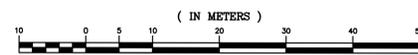
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 34

CONT. ON SHEET 36

GRAPHIC SCALE



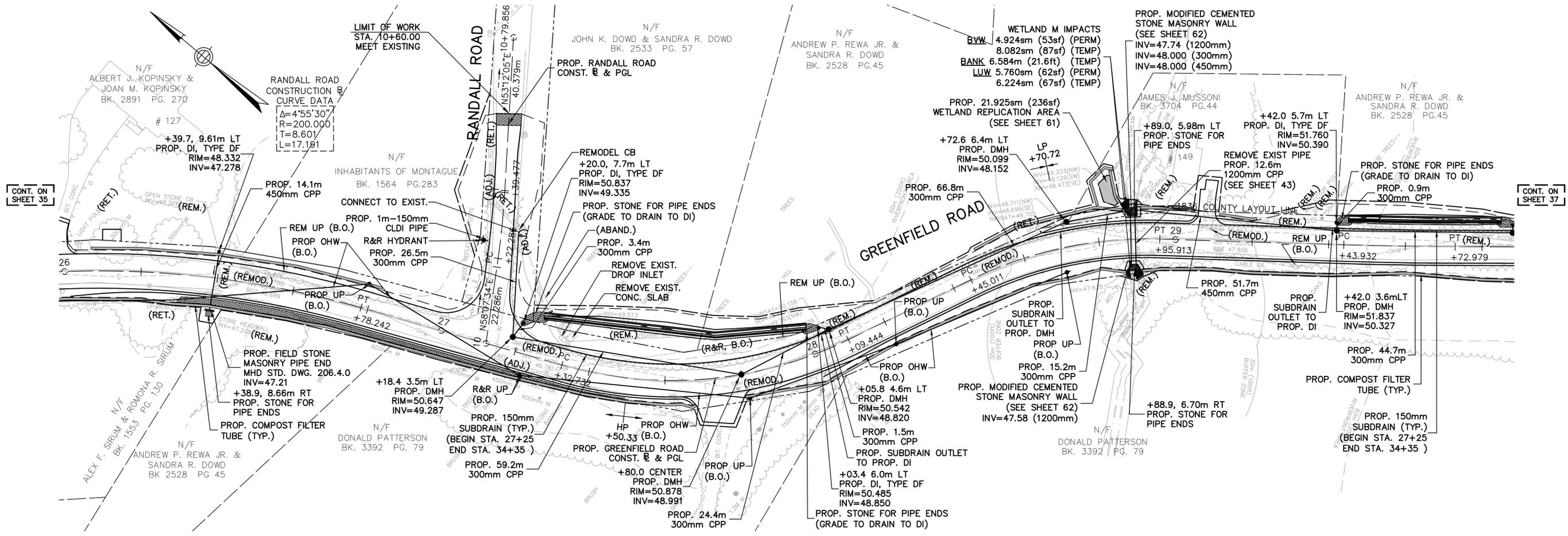
1 : 500

IN CHARGE OF: _____
 DRAWN BY: _____
 CHECKED BY: _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	36	157
PROJECT FILE NO.		601657	

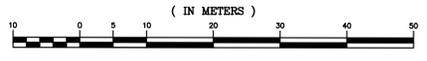
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 35

CONT. ON SHEET 37

GRAPHIC SCALE
(IN METERS)



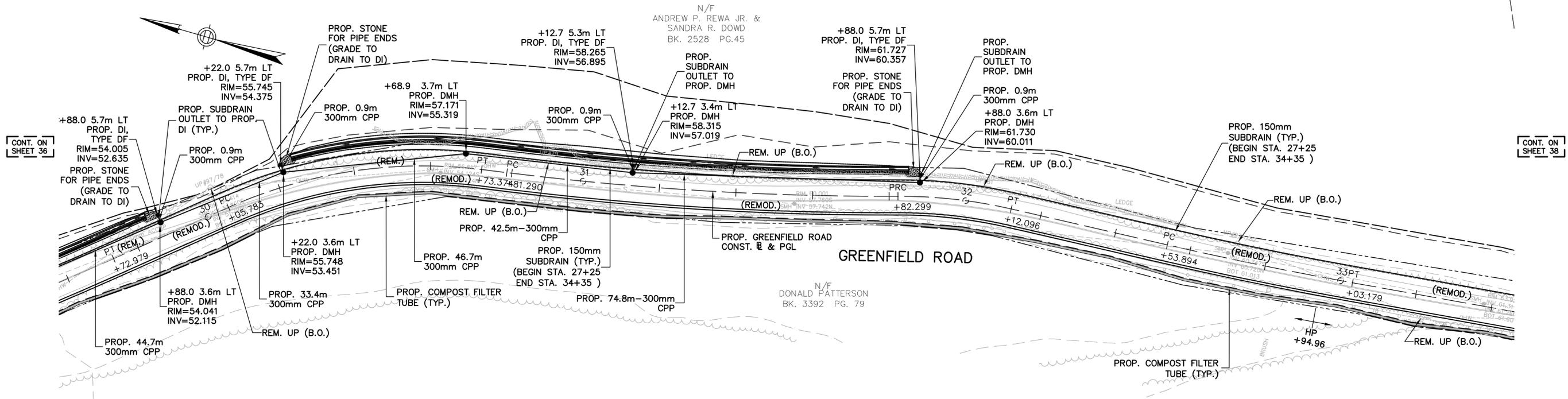
1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	37	157
PROJECT FILE NO.		601657	

**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 36

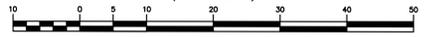
CONT. ON SHEET 38

N/F
ANDREW P. REWA JR. &
SANDRA R. DOWD
BK. 2528 PG. 45

N/F
DONALD PATTERSON
BK. 3392 PG. 79

GRAPHIC SCALE

(IN METERS)



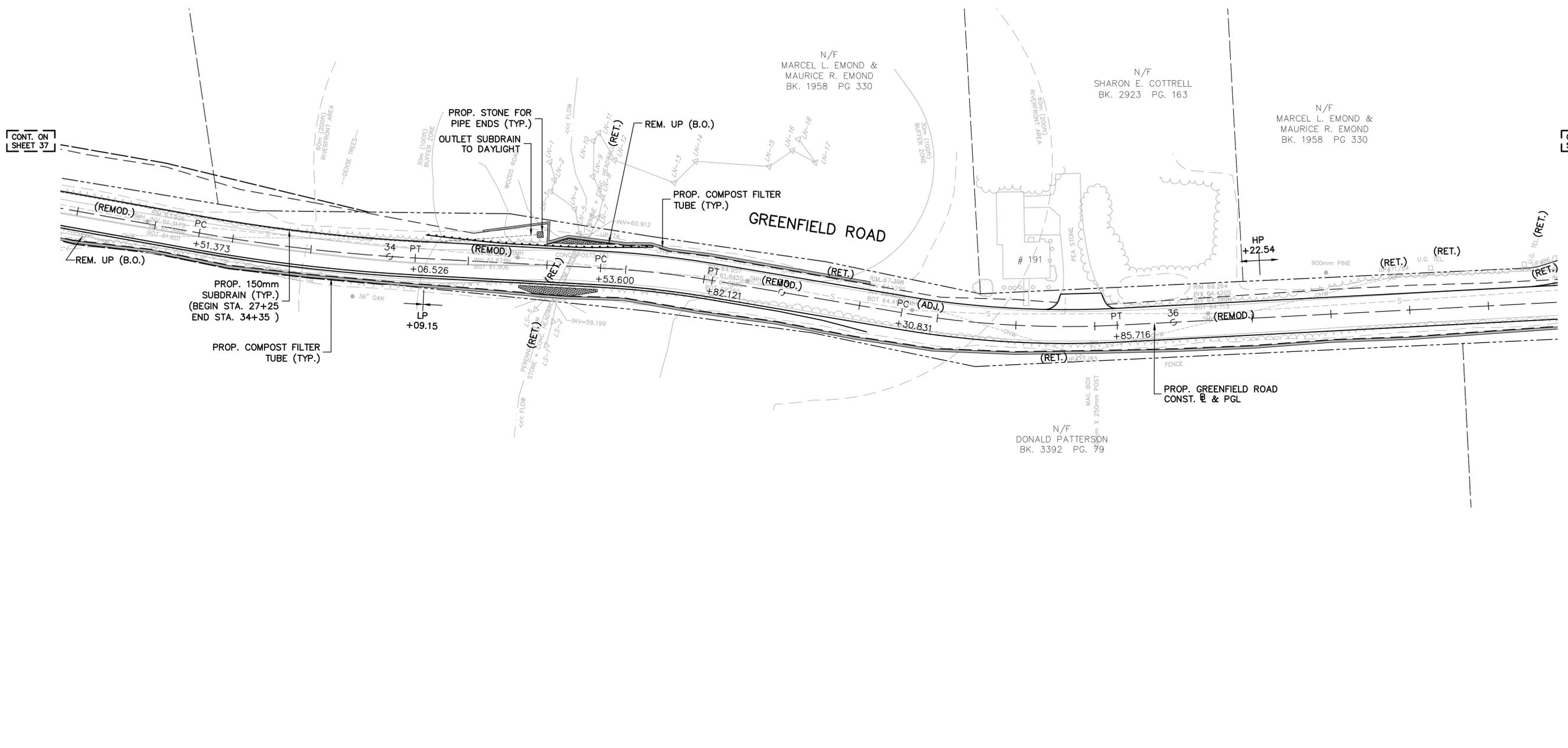
1 : 500

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	38	157
PROJECT FILE NO.		601657	

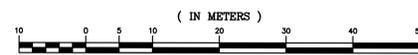
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 37

CONT. ON SHEET 39

GRAPHIC SCALE



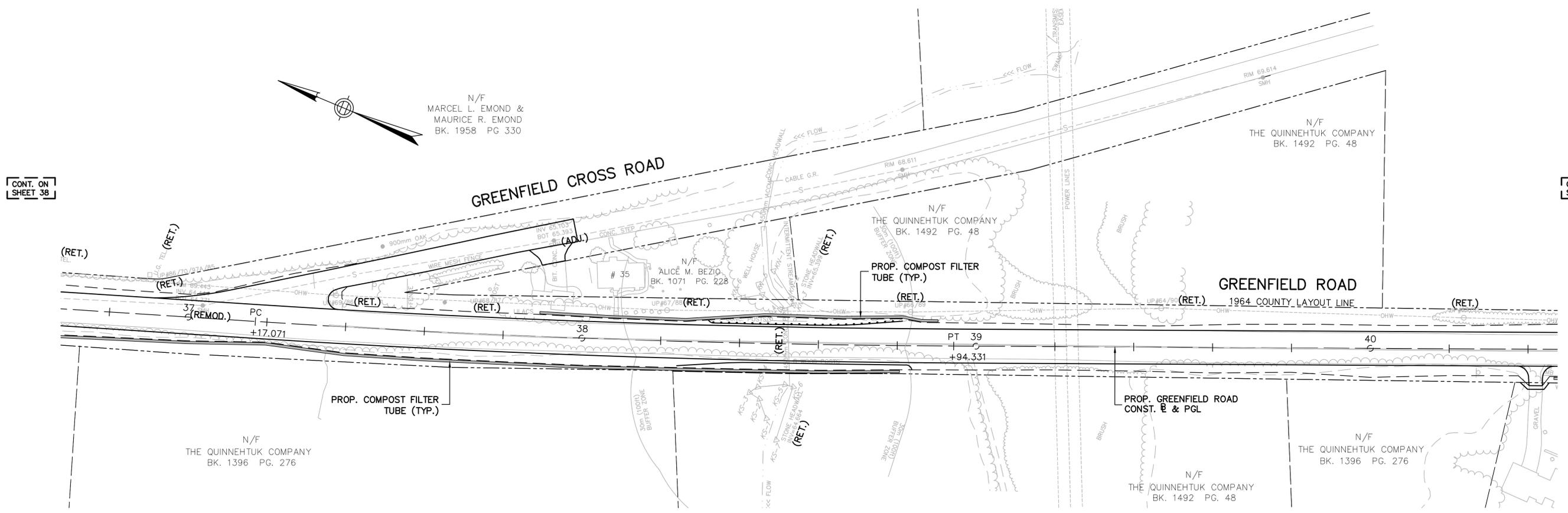
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IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	39	157
PROJECT FILE NO.		601657	

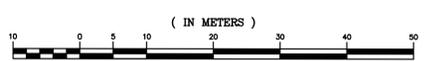
**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 38

CONT. ON SHEET 40

GRAPHIC SCALE



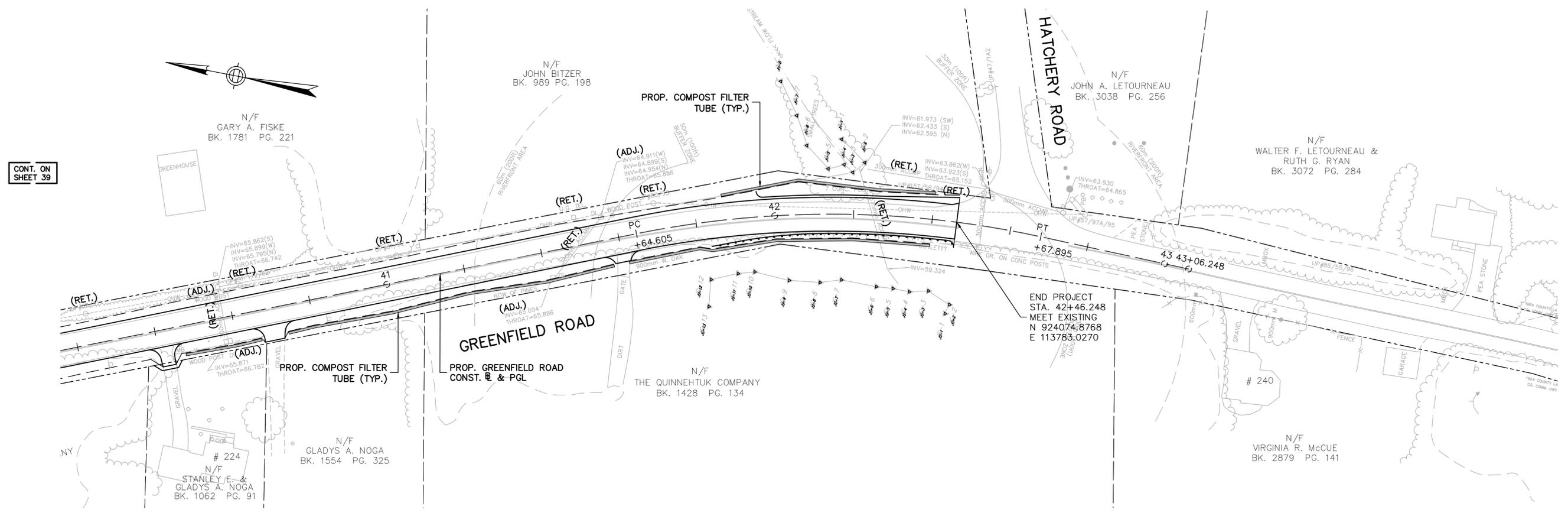
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IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

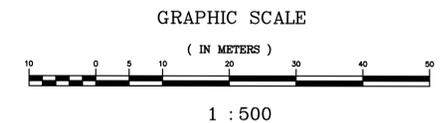
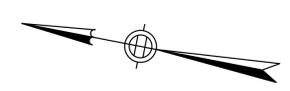
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	40	157
PROJECT FILE NO.		601657	

**DRAINAGE &
UTILITY PLAN**



CONT. ON SHEET 39



IN CHARGE OF
DESIGNED BY
DRAWN BY
CHECKED BY

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	41	157
PROJECT FILE NO.		601657	

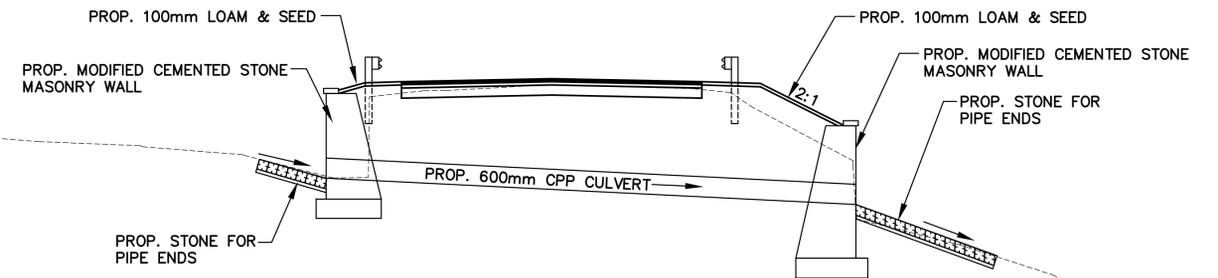
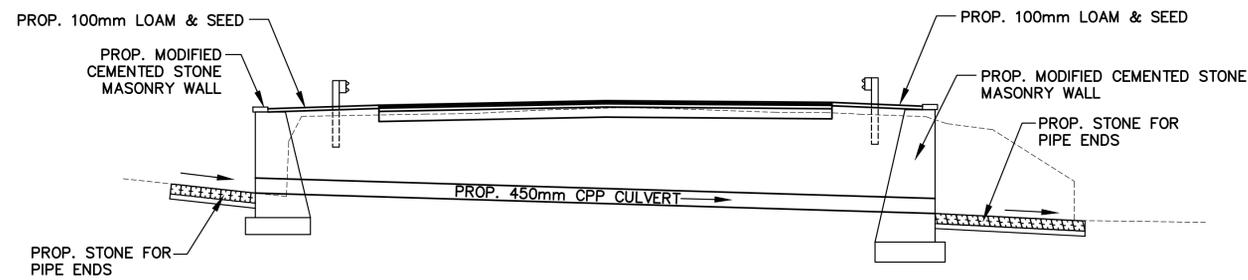
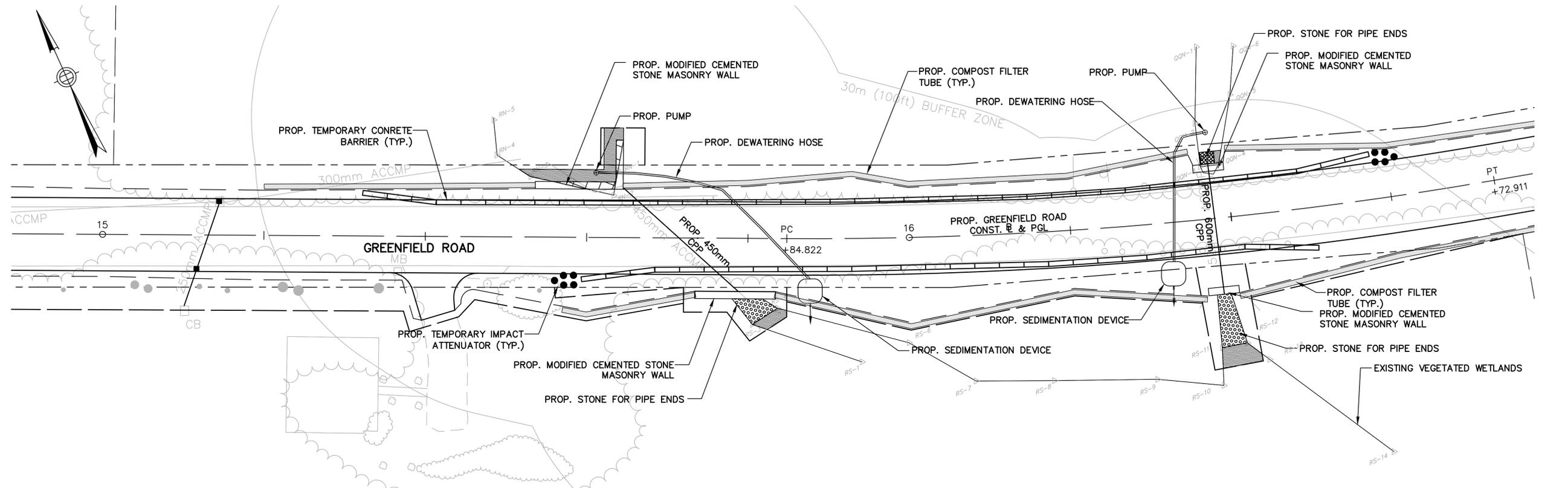
DRAINAGE DETAILS

GENERAL NOTES – CULVERT REPLACEMENT PLANS

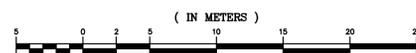
1. THESE PLANS ARE PROVIDED FOR DISPLAY PURPOSES ONLY, IN ORDER TO OFFER A SUGGESTED SEQUENCE OF CONSTRUCTION.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN TO THE RESIDENT ENGINEER DEPICTING THE METHOD OF CONSTRUCTING ALL CULVERTS CROSSING GREENFIELD ROAD. THE PLAN MUST BE APPROVED PRIOR TO COMMENCING WITH ANY WORK.
3. ALL CULVERTS MUST BE CONSTRUCTED ON A DRY BED. IN THE EVENT THAT DRY CONDITIONS ARE ENCOUNTERED, DEWATERING PUMP AND APPURTENANCES WILL NOT BE NECESSARY.
4. AT THE CONCLUSION OF EACH WORK DAY, THE CONTRACTOR SHALL PROVIDE AN OPEN PASSAGEWAY TO PERMIT THE FLOW OF WATER WITHOUT RESTRICTION TO THE SATISFACTION OF THE ENGINEER.

SUGGESTED SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY DETOUR AS SHOWN ON SHEET 58.
2. INSTALL TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS AS SHOWN ON THIS SHEET.
3. INSTALL COMPOST FILTER TUBES, SEDIMENTATION BASIN AND DEWATERING PUMP.
4. INSTALL DEWATERING HOSE TO CROSS GREENFIELD ROAD.
5. REMOVE EXISTING CULVERT AND CONSTRUCT PROPOSED CULVERT CROSSINGS.
6. INSTALL REMAINING ROADWAY DRAINAGE PIPING AND STRUCTURES.
7. CONTRACTOR SHALL REMOVE SECTIONS OF TEMPORARY CONCRETE BARRIER AS NECESSARY TO GAIN ACCESS TO THE SITE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.



GRAPHIC SCALE



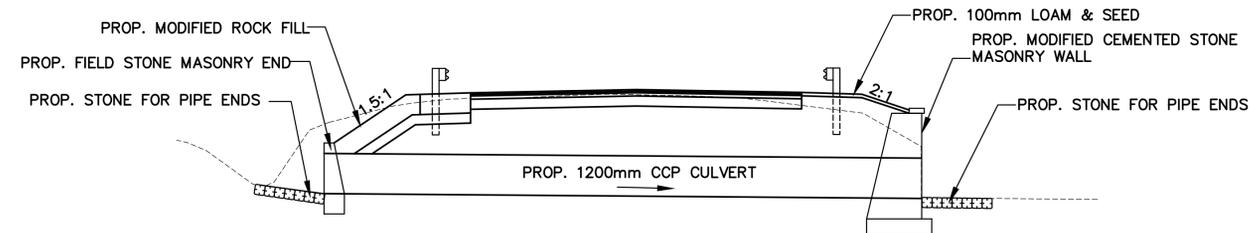
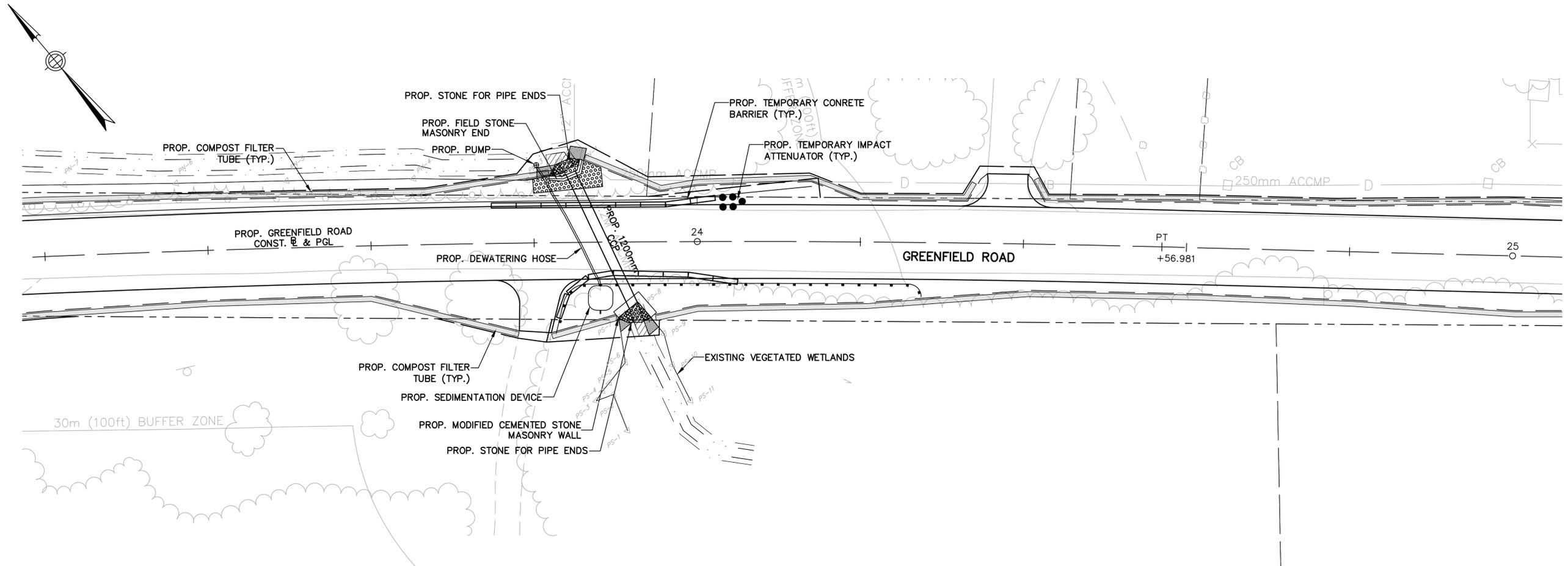
1 : 250

IN CHARGE OF
DRAWN BY
CHECKED BY

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	42	157
PROJECT FILE NO.		601657	

DRAINAGE DETAILS



SUGGESTED SEQUENCE OF CONSTRUCTION

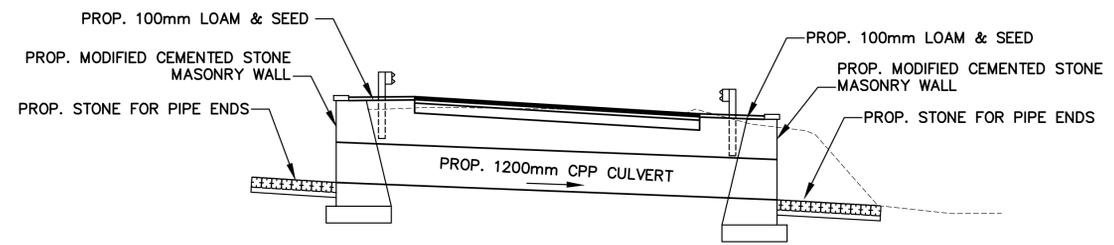
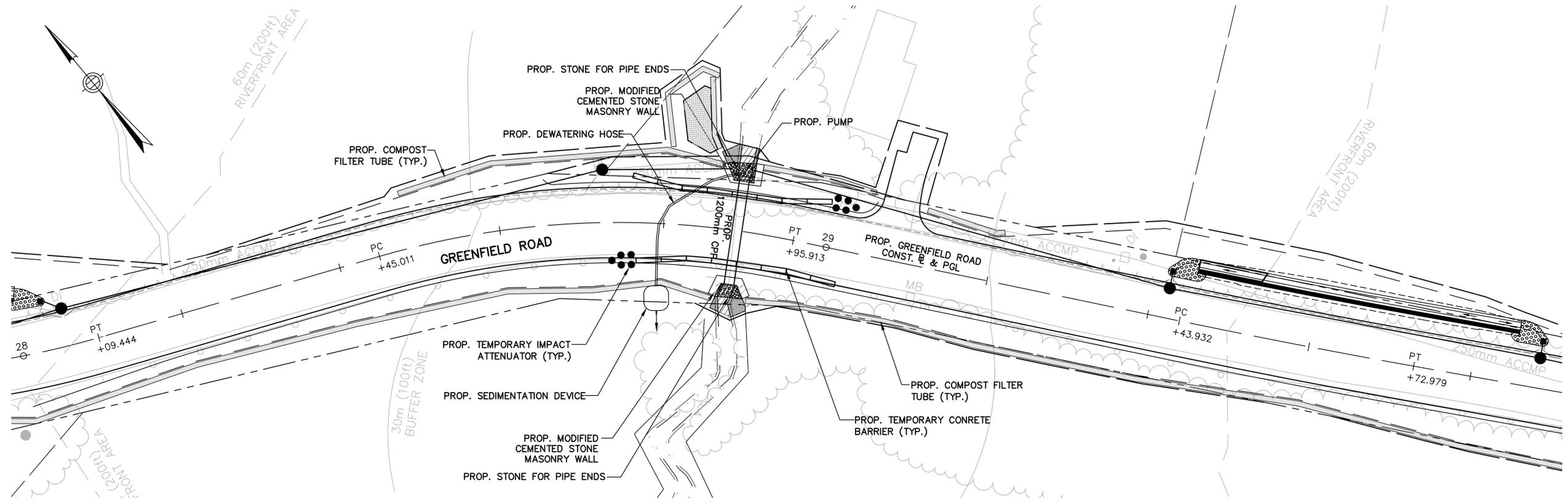
1. INSTALL TEMPORARY DETOUR AS SHOWN ON SHEET 58.
2. INSTALL TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS AS SHOWN ON THIS SHEET.
3. INSTALL COMPOST FILTER TUBES, SEDIMENTATION BASIN AND DEWATERING PUMP.
4. INSTALL DEWATERING HOSE TO CROSS GREENFIELD ROAD.
5. REMOVE EXISTING CULVERT AND CONSTRUCT PROPOSED CULVERT CROSSINGS.
6. INSTALL REMAINING ROADWAY DRAINAGE PIPING AND STRUCTURES.
7. CONTRACTOR SHALL REMOVE SECTIONS OF TEMPORARY CONCRETE BARRIER AS NECESSARY TO GAIN ACCESS TO THE SITE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.

IN CHARGE OF: MDE
 DRAWN BY: MDE
 CHECKED BY: MDE

**MONTAGUE
GREENFIELD ROAD**

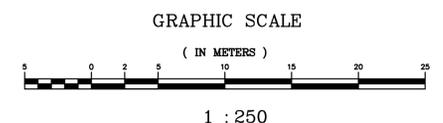
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	43	157
PROJECT FILE NO.		601657	

DRAINAGE DETAILS



SUGGESTED SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY DETOUR AS SHOWN ON SHEET 59.
2. REMOVE AND RESET UNDERGROUND TELEPHONE CABLE (BY OTHERS) PRIOR TO REMOVAL OF EXIST. 1200mm CULVERT
3. INSTALL TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS AS SHOWN ON THIS SHEET.
4. INSTALL COMPOST FILTER TUBES, SEDIMENTATION BASIN AND DEWATERING PUMP.
5. INSTALL DEWATERING HOSE TO CROSS GREENFIELD ROAD.
6. REMOVE EXISTING CULVERT AND CONSTRUCT PROPOSED CULVERT CROSSINGS.
7. INSTALL REMAINING ROADWAY DRAINAGE PIPING AND STRUCTURES.
8. CONTRACTOR SHALL REMOVE SECTIONS OF TEMPORARY CONCRETE BARRIER AS NECESSARY TO GAIN ACCESS TO THE SITE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.

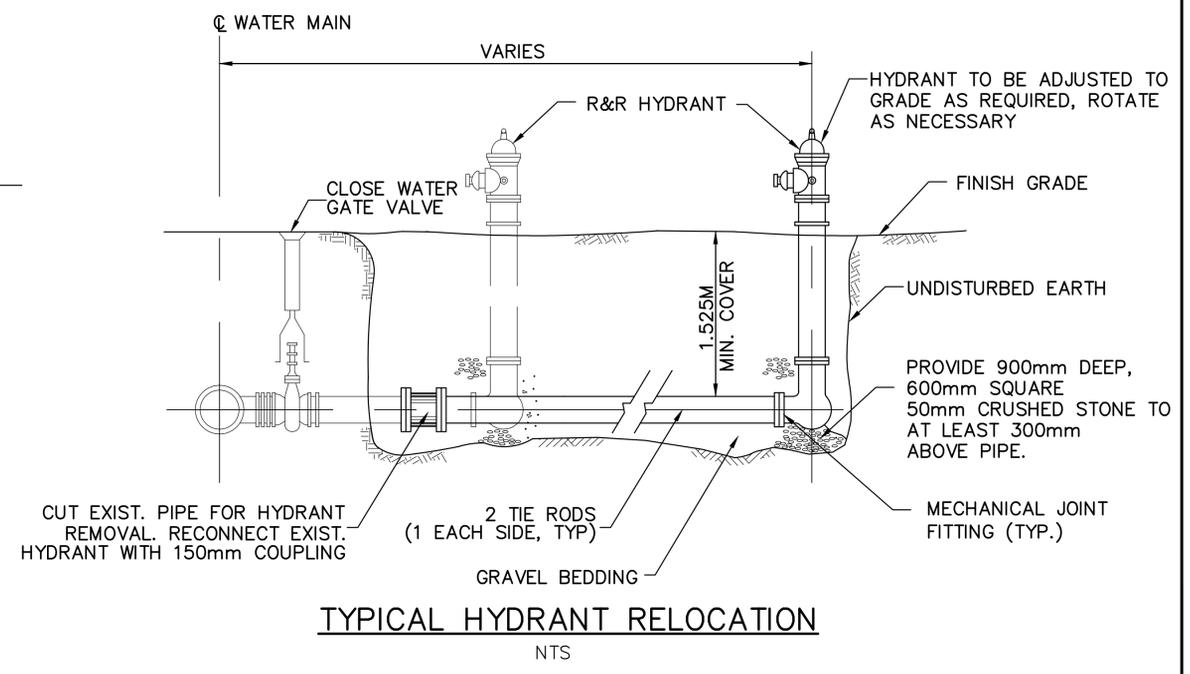
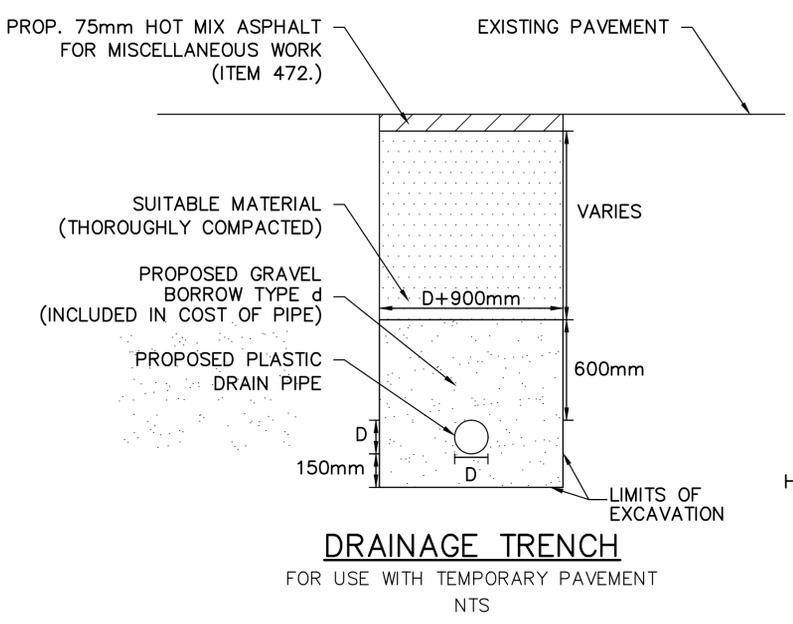
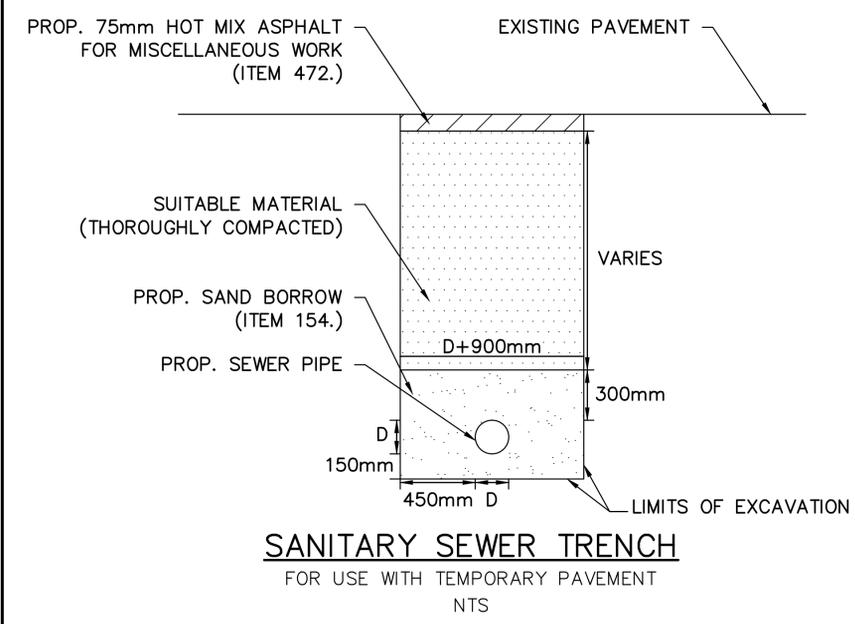
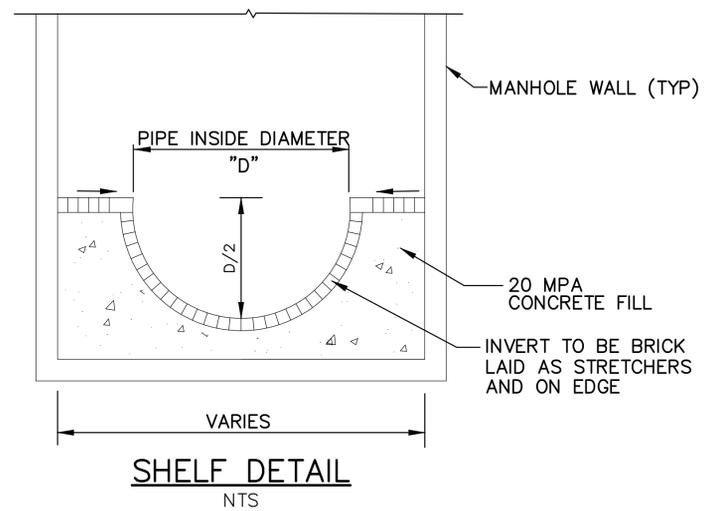
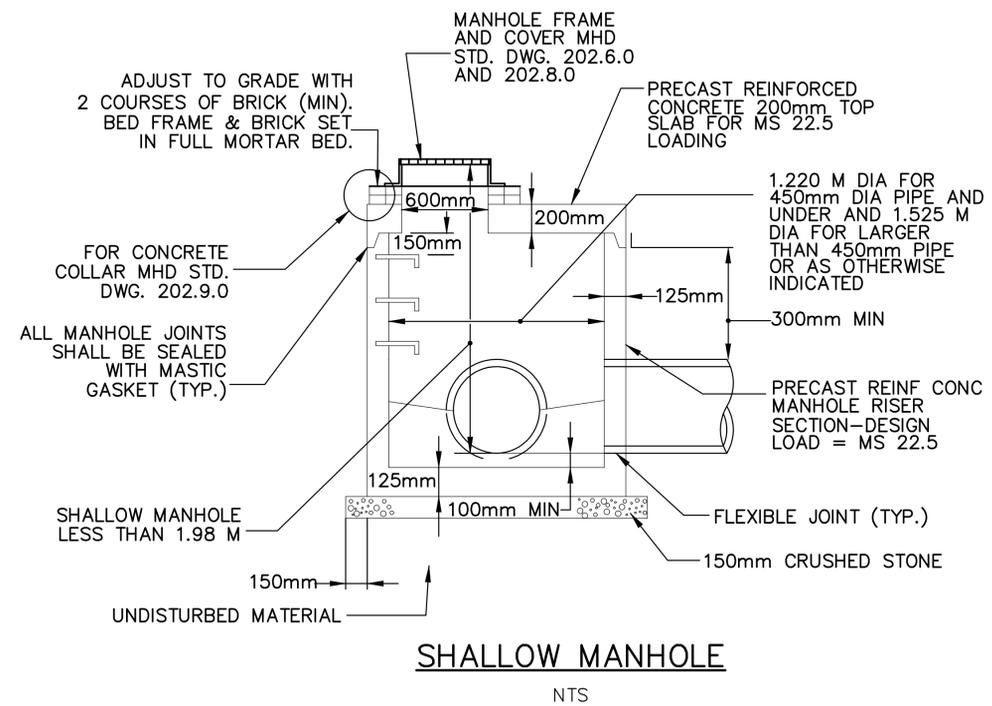


IN CHARGE OF
DRAWN BY
CHECKED BY

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	44	157
PROJECT FILE NO.		601657	

DRAINAGE DETAILS



IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

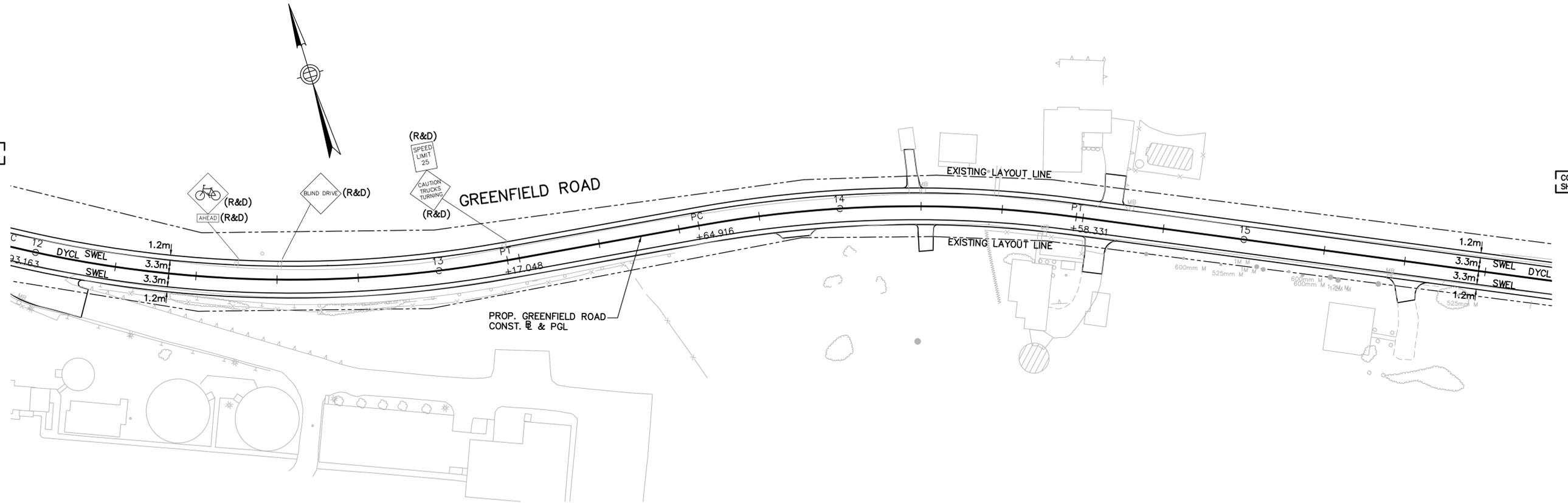
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	46	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

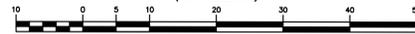
CONT. ON
SHEET 45

CONT. ON
SHEET 47



GRAPHIC SCALE

(IN METERS)



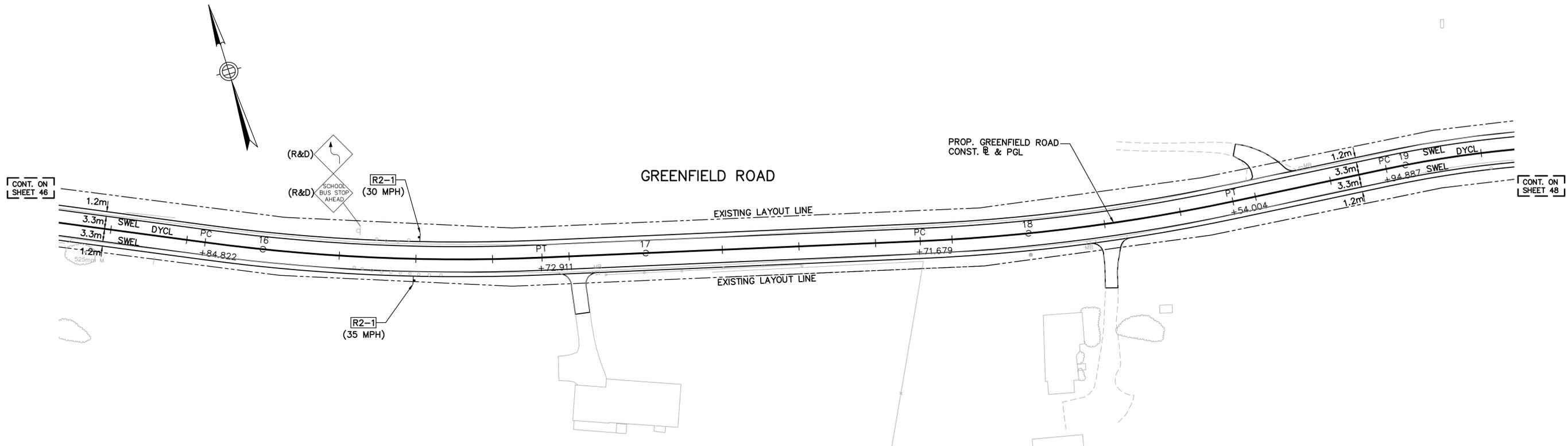
1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	47	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

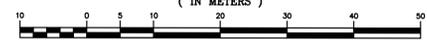


CONT. ON SHEET 46

CONT. ON SHEET 48

GRAPHIC SCALE

(IN METERS)



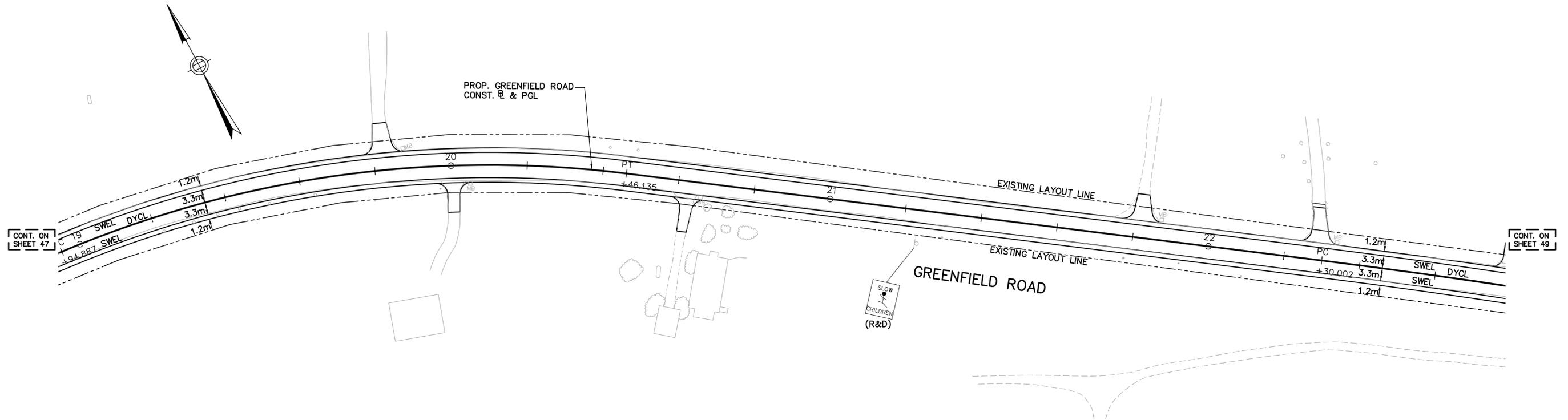
1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	48	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

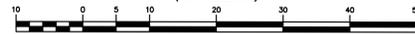


CONT. ON SHEET 47

CONT. ON SHEET 49

GRAPHIC SCALE

(IN METERS)



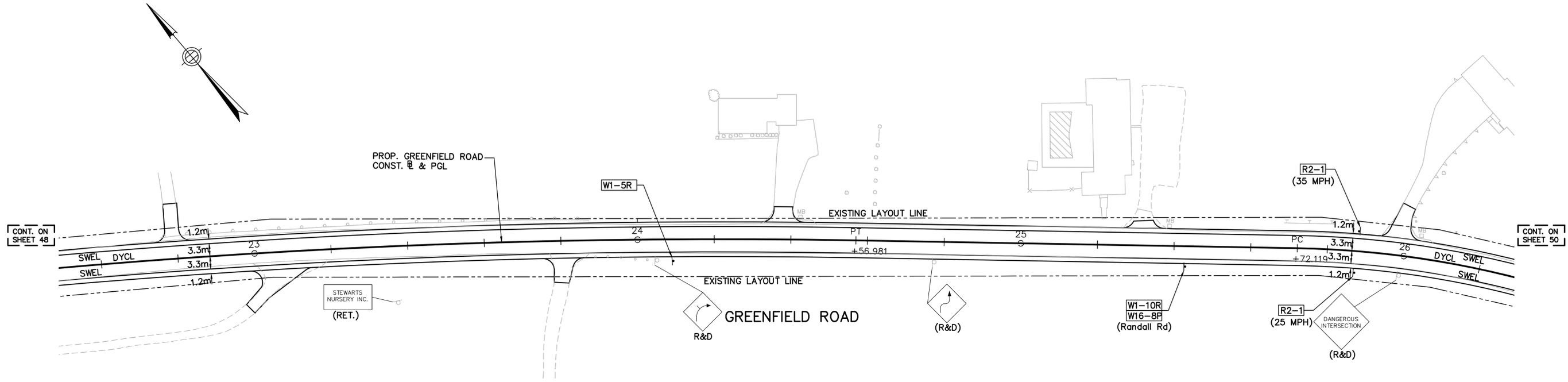
1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

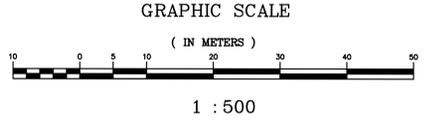
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	49	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**



CONT. ON SHEET 48

CONT. ON SHEET 50

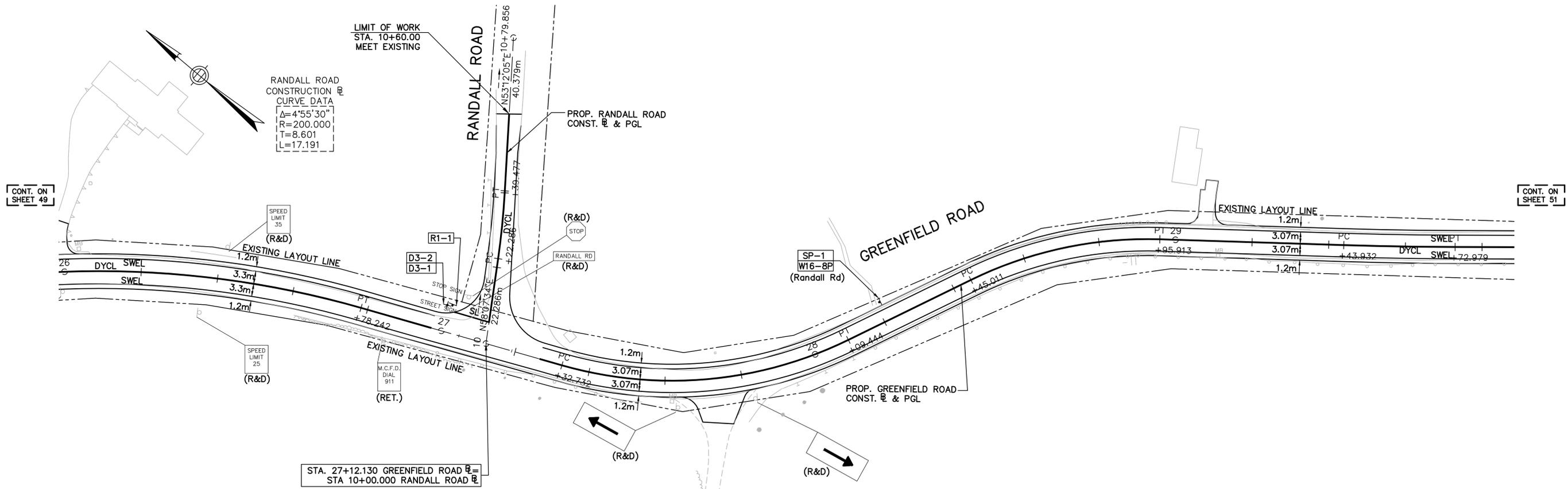


IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	50	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**



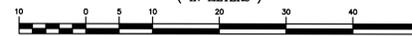
CONT. ON SHEET 49

CONT. ON SHEET 51

STA. 27+12.130 GREENFIELD ROAD @
STA 10+00.000 RANDALL ROAD @

GRAPHIC SCALE

(IN METERS)



1 : 500

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

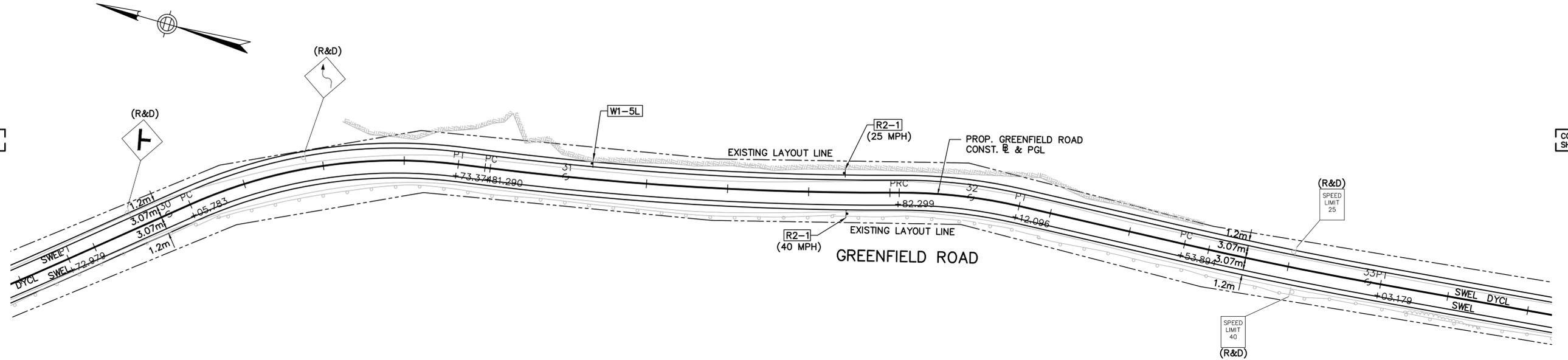
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	51	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

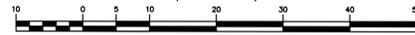
CONT. ON
SHEET 50

CONT. ON
SHEET 52



GRAPHIC SCALE

(IN METERS)



1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

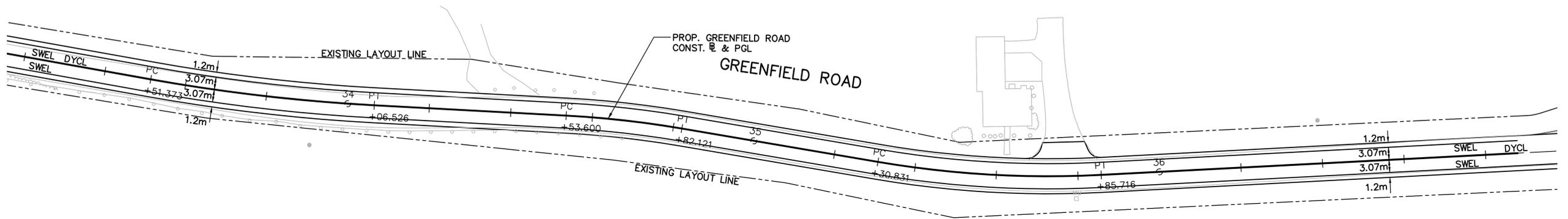
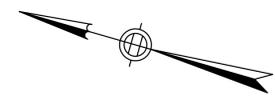
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	52	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

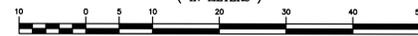
CONT. ON
SHEET 51

CONT. ON
SHEET 53



GRAPHIC SCALE

(IN METERS)



1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

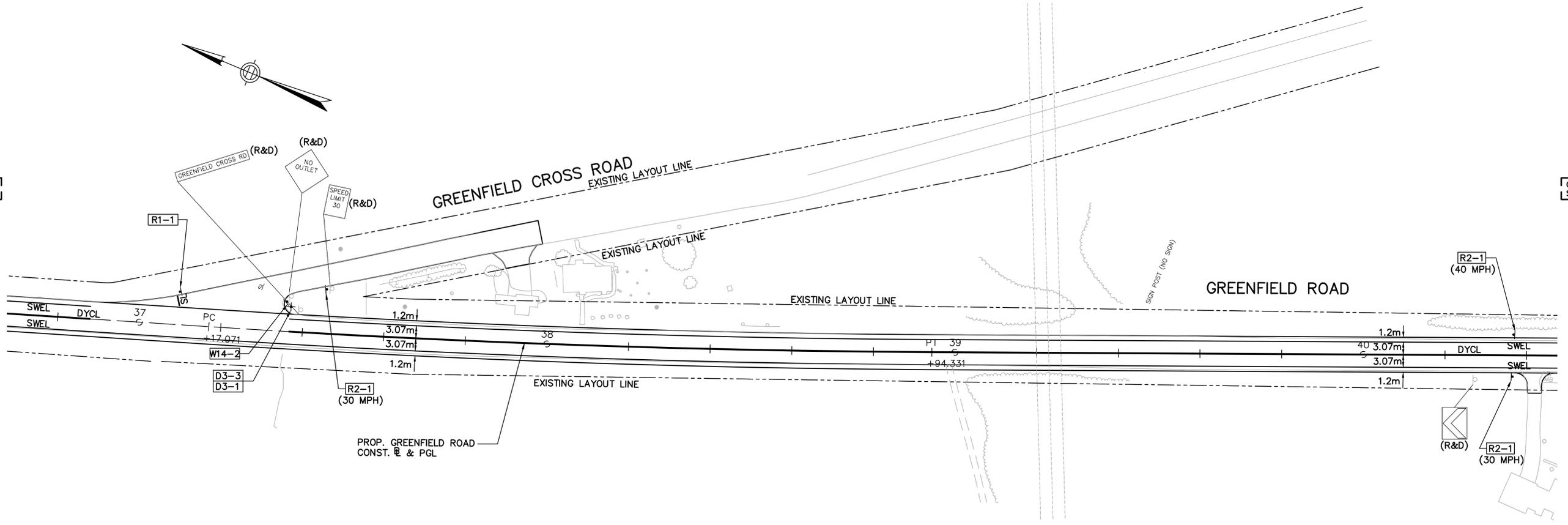
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	53	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**

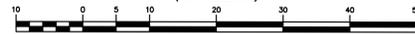
CONT. ON
SHEET 52

CONT. ON
SHEET 54



GRAPHIC SCALE

(IN METERS)



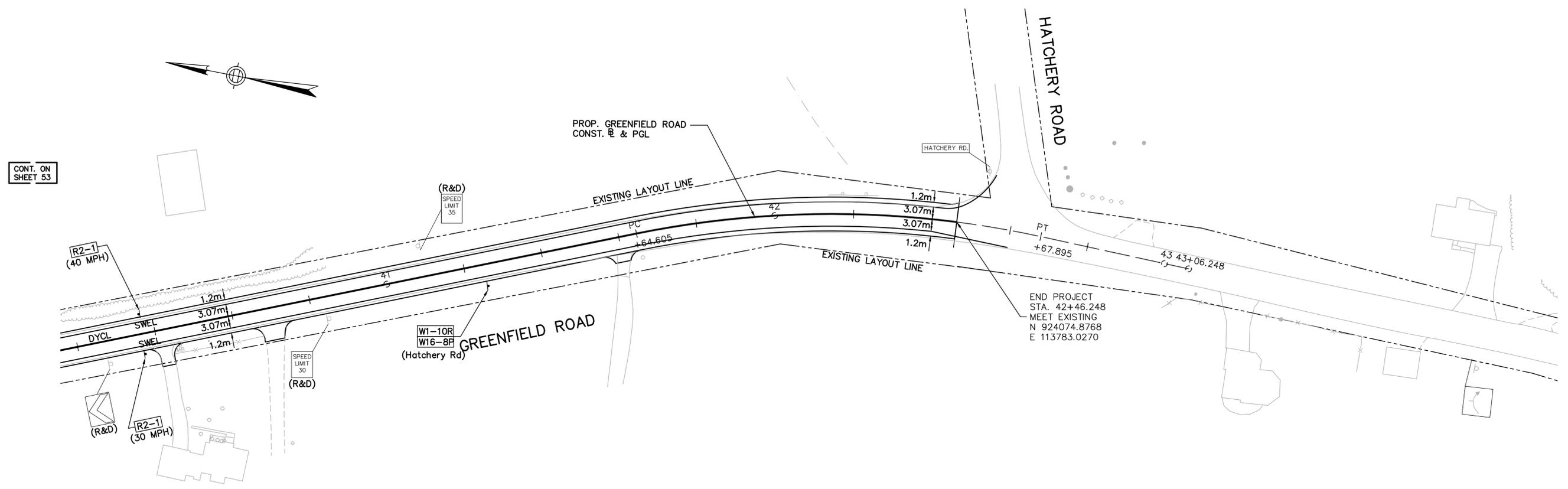
1 : 500

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	54	157
PROJECT FILE NO.		601657	

**PAVEMENT MARKING &
SIGNING PLAN**



CONT. ON SHEET 53

END PROJECT
STA. 42+46.248
MEET EXISTING
N 924074.8768
E 113783.0270

GRAPHIC SCALE



1 : 500

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

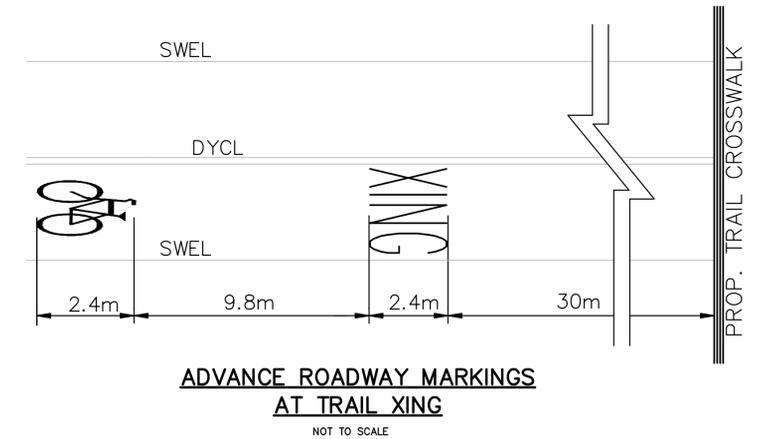
**MONTAGUE
GREENFIELD ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	55	157
PROJECT FILE NO.		601657	

SIGN SUMMARY

TRAFFIC SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN (mm)		TEXT	TEXT DIMENSIONS (mm)		NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (m ²)	TOTAL AREA (m ²)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER			
D3-1	VAR.	300		150C/100C	75 75	2	MUTCD STANDARD			1-P5 (2 REQ'D)	PAY UNDER ITEM 874.	
D3-2	VAR.	300		150C/100C	75 75	1	MUTCD STANDARD			MOUNT W/D3-1	PAY UNDER ITEM 874.	
D3-3	VAR.	300		150B/100B	75 75	1	MUTCD STANDARD			MOUNT W/D3-1	PAY UNDER ITEM 874.	
R1-1	750	750		MUTCD STANDARD		2	MUTCD STANDARD			1-P5 (2 REQ'D)	0.56	1.12
R2-1(XX)	600	750		MUTCD STANDARD		11	MUTCD STANDARD			1-P5 (11 REQ'D)	0.45	4.95
SP-1	900	900		N/A	N/A	1	YELLOW (RETRO-REFLECTIVE)	BLACK	BLACK	1-P5 (1 REQ'D)	0.81	0.81
W1-5L	750	750		MUTCD STANDARD		1	MUTCD STANDARD			1-P5 (1 REQ'D)	0.56	0.56
W1-5R	750	750		MUTCD STANDARD		1	MUTCD STANDARD			1-P5 (1 REQ'D)	0.56	0.56
W1-10R	900	900		MUTCD STANDARD		2	MUTCD STANDARD			1-P5 (2 REQ'D)	0.81	1.62
W11-15	750	750		MUTCD STANDARD		3	MUTCD STANDARD			1-P5 (3 REQ'D)	0.56	1.68
W11-15P	600	450		MUTCD STANDARD		3	MUTCD STANDARD			MOUNT W/W11-15	0.27	0.81
W14-2	750	750		MUTCD STANDARD		1	MUTCD STANDARD			P5 (1 REQ'D)	0.56	0.56
W16-7p	600	300		MUTCD STANDARD		2	MUTCD STANDARD			MOUNT W/W11-15	0.18	0.36
W16-8P	600	200		MUTCD STANDARD		1	MUTCD STANDARD			MOUNT W/W1-10R	0.12	0.12
W16-8P	600	200		MUTCD STANDARD		2	MUTCD STANDARD			MOUNT W/W1-10R, SP-1	0.12	0.24



- NOTES: 1. ALL WARNING, REGULATORY AND ROUTE MARKERS SHALL BE FABRICATED WITH HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING (SEE SECTION M9.30.0) TYPE III OR IV.
2. ALL SIGNS NOTED AS "(R&R)" SHALL BE MOUNTED ON NEW P5 POSTS OR AS OTHERWISE INDICATED.
3. ALL P5 POSTS SHALL BE TELESCOPIC RECTANGULAR TYPE POSTS.
4. QUANTITIES OF SIGNS AND POSTS SHOWN ON THIS SHEET MAY DIFFER FROM THE PAVEMENT MARKING AND SIGNING PLANS. WHERE DIFFERENCES OCCUR, THE PAVEMENT MARKING AND SIGNING PLANS SHALL PREVAIL.
5. ALL STOP AND YIELD SIGNS PROPOSED IN THIS CONTRACT ARE SUBJECT TO FIELD INVESTIGATION BY THE DISTRICT OFFICE OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION TO JUSTIFY WARRANTS BEFORE INSTALLATION. NUMERICAL LIMITS AND JUSTIFICATION FOR THE SPEED SIGNS SHALL BE OBTAINED FROM THE SPEED ZONING UNIT OF THE TRAFFIC DEPARTMENT BEFORE FABRICATION AND/OR ERECTION.

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

TEMPORARY TRAFFIC CONTROL NOTES

GENERAL

- ALL TEMPORARY TRAFFIC CONTROL MEASURES SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), MASSDOT'S "STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS", THE STANDARD SPECIFICATIONS, AND THE FOLLOWING NOTES.
- THE TEMPORARY TRAFFIC CONTROL PLANS CONTAINED HEREIN ARE GIVEN AS A GUIDE FOR TYPICAL WORK ZONE TRAFFIC CONTROL APPLICATIONS FOR THE TYPES OF WORK ANTICIPATED FOR THIS PROJECT. THEY ARE NOT INTENDED TO COVER ALL POSSIBLE CONSTRUCTION OPERATIONS WHICH THE CONTRACTOR MAY CHOOSE TO EMPLOY. WORK ZONE TRAFFIC CONTROL FOR OTHER CONSTRUCTION OPERATIONS OR OTHER TRAFFIC SITUATIONS IF APPLICABLE SHALL BE IN ACCORDANCE WITH THE REFERENCES LISTED IN NOTE 1 AND AS APPROVED OR DIRECTED BY THE ENGINEER.
- LANE RESTRICTIONS MAY NOT REMAIN OVERNIGHT OR DURING NON-WORKING HOURS. AFTER EACH WORKING DAY, TRAFFIC CONTROL DEVICES THAT ARE NOT REQUIRED SHALL BE MOVED OFF THE ROADWAY OR FULL DEPTH CONSTRUCTION AREA AND PLACED SO AS NOT TO IMPEDE PEDESTRIAN AREAS, ABUTTER ACCESS OR CAUSE CONFUSION TO MOTORISTS. STEEL PLATES MAY BE USED AT THE DISCRETION OF THE ENGINEER IN ORDER TO OPEN THE ROADWAY DURING NON-WORKING HOURS.
- CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- PLACE ALL CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS FOR EACH PHASE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ONE (1) THRU TRAVEL LANE HAVING A MINIMUM WIDTH OF 3m SHALL BE PROVIDED IN EACH DIRECTION DURING ALL PHASES OF CONSTRUCTION AS SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MINIMUM LANE WIDTH IS MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- WHEN WORK INFRINGES UPON THE TRAVELED WAY, WORK SHALL BE RESTRICTED TO OFF-PEAK HOURS ONLY (NORMALLY 9.00am TO 4.00pm, MONDAY TO FRIDAY). DETOURS MAY ONLY BE IMPLEMENTED DURING THESE TIMES. TWO LANES MUST BE OPEN TO TRAFFIC AT THE CONCLUSION OF EACH WORK DAY.
- TAPER LENGTH FORMULAE FOR CHANNELIZATION DEVICES:
 $L = W \times S / 1.6$ FOR SPEED EQUAL TO OR GREATER THAN 70 K.P.H.
 $L = W \times S^2 / 155$ FOR SPEED EQUAL TO OR LESS THAN 65 K.P.H.
 WHERE: L = MIN. LENGTH OF TAPER, S = POSTED SPEED (K.P.H.), W = OFFSET WIDTH (METERS).
- ADVISORY SPEED LIMIT SHALL BE SET IN THE FIELD BY THE ENGINEER. W13-1 PLATES SHALL BE USED WHERE APPROPRIATE.
- FLASHING ARROW PANEL SHALL BE SET IN "ARROW MODE" WHEN USED FOR ACTUAL LANE CLOSURES ONLY. FOR SHOULDER CLOSURES, BULBS TO BE ILLUMINATED IN A NON-DIRECTIONAL CAUTION CONFIGURATION TO AVOID UNNECESSARY LANE SHIFTS.
- DISTANCES SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS ARE A GUIDE ONLY, AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.

GRADE DIFFERENCES

- WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND COLD PLANED OR NEW PAVEMENT, THE CONTRACTOR SHALL PATCH A TEMPORARY HOT MIX ASPHALT WEDGE WITH A 12:1 (OR FLATTER) SLOPE ALONG THE ROADWAY FOR SMOOTH TRANSITION (SEE DETAIL, THIS SHEET).
- CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 50mm DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS.
- CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 100mm DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION BY USE OF DRUMS (SEE DETAIL, THIS SHEET).
- A MINIMUM SLOPE OF 4:1 MUST BE MAINTAINED AFTER WORKING HOURS DURING SUBBASE AND BASE COURSE INSTALLATION ALONG EDGE OF THE TRAVELWAY (SEE DETAIL, THIS SHEET). A MAXIMUM SLOPE OF 8:1 MUST BE MAINTAINED ON ALL ABUTTER ACCESS DRIVES.

CONSTRUCTION SIGNING

- THE FIRST CONSTRUCTION SIGN IN A SERIES ON EACH APPROACH TO THE PROJECT SHALL BE FLUORESCENT ORANGE, HIGH PERFORMANCE (OR HIGH INTENSITY) SHEETING.
- ALL CONSTRUCTION SIGNS SHALL BE BLACK LEGEND ON A REFLECTORIZED ORANGE BACKGROUND UNLESS OTHERWISE NOTED.
- CONSTRUCTION SIGNING SHOWN ON THE ADVANCE SIGNING PLAN CAN REMAIN IN PLACE FOR THE ENTIRE PROJECT DURATION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- STANDARD ORANGE OR FLUORESCENT RED-ORANGE FLAGS (400mmx400mm MIN.) MAY BE ATTACHED TWO (2) EACH ON ALL ADVANCE WARNING SIGNS. FLAGS SHALL NOT INTERFERE WITH A CLEAR VIEW OF THE SIGN FACE. IF USED, THE COST OF THE FLAGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SIGN.
- ALL SIGNS, INCLUDING EXISTING, THAT ARE NOT REPRESENTATIVE OF ACTUAL WORK CONDITIONS SHALL BE EITHER COVERED OR REMOVED WHEN NOT APPLICABLE.
- IF USED, ALL W20-4 SIGNS SHALL BE TAKEN DOWN OR COVERED AT THE CLOSE OF EACH DAY.
- USE W20-8 SIGNS ONLY WHILE POLICE ARE DIRECTING TRAFFIC. THEY SHALL BE TAKEN DOWN OR COVERED AT THE CLOSE OF EACH DAY.

PAVEMENT MARKINGS

- EXISTING PAVEMENT MARKINGS WHICH ARE NO LONGER APPLICABLE TO THE PROPOSED WORK SHALL BE REMOVED. APPLY TEMPORARY PAVEMENT MARKINGS FOR LONGER TERM SETUPS THAT EXCEED THREE DAYS AS SHOWN IN THE TEMPORARY TRAFFIC CONTROL PLANS. TEMPORARY MARKINGS MAY BE USED AT THE DISCRETION OF THE ENGINEER FOR SETUPS WITH A DURATION BETWEEN 1 AND 3 DAYS.

CHANNELIZATION

- REFLECTORIZED CONES SHALL BE MINIMUM 710mm HIGH, 915mm CONES ARE RECOMMENDED.

- FLASHING OR STEADY BURN WARNING LIGHTS MAY BE USED ON BARRICADES, TEMPORARY CONCRETE BARRIERS OR WHERE DIRECTED BY THE ENGINEER. IF USED, THE COST OF THE LIGHTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE DEVICE THEY ARE MOUNTED ON.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH SOME FORM OF LIGHTING MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES." IF THEY DO NOT MEET THIS CRITERIA, THEY MUST BE REMOVED FROM THE PROJECT.
- TEMPORARY IMPACT ATTENUATORS MUST MEET THE PERFORMANCE STANDARDS ON NCHRP 350.
- THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS. IF USED, THE COST OF THE LIGHTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE DRUM.

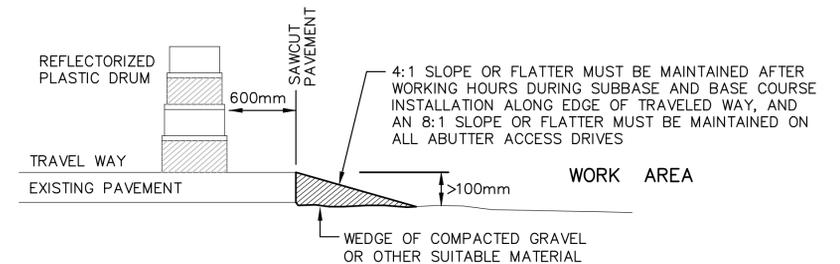
CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN (mm)		TEXT	TEXT DIMENSIONS (mm)			NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (m ²)	TOTAL AREA (m ²)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RITE. MKR.		BACK-GROUND	LEGEND	BORDER		
G20-1	900	450	END ROAD WORK	MUTCD STANDARD			4	MUTCD STANDARD			0.40	1.62
M4-8a	600	450	END DETOUR	MUTCD STANDARD			2	MUTCD STANDARD			0.27	0.54
M4-9AL	750	600	DETOUR	MUTCD STANDARD			3	MUTCD STANDARD			0.45	1.35
M4-9AR	750	600	DETOUR	MUTCD STANDARD			4	MUTCD STANDARD			0.45	1.80
M4-9L	750	600	DETOUR	MUTCD STANDARD			4	MUTCD STANDARD			0.45	1.80
M4-9R	750	600	DETOUR	MUTCD STANDARD			4	MUTCD STANDARD			0.45	1.80
M4-9V	750	600	DETOUR	MUTCD STANDARD			6	MUTCD STANDARD			0.45	2.70
M4-10L	1200	450	DETOUR	MUTCD STANDARD			1	MUTCD STANDARD			0.54	0.54
M4-10R	1200	450	DETOUR	MUTCD STANDARD			1	MUTCD STANDARD			0.54	0.54
R2-10a	1200	900	WORK ZONE SPEED LIMITS DOUBLED	MASSDOT STANDARD			4	MASSDOT STANDARD			1.08	4.32
R11-2	1200	750	ROAD CLOSED	MUTCD STANDARD			2	MUTCD STANDARD			0.90	1.80
R11-4	1200	750	ROAD CLOSED TO TRAFFIC	MUTCD STANDARD			3	MUTCD STANDARD			0.90	2.70
SP-2	600	300	GREENFIELD RD	150C 100C	75 75		4	ORANGE	BLACK	BLACK	0.18	0.72
W5-1	900	900	ROAD AHEAD	MUTCD STANDARD			1	MUTCD STANDARD			0.81	0.81
W8-3	900	900	ROAD ENDS	MUTCD STANDARD			2	MUTCD STANDARD			0.81	1.62
W8-8	750	750	ROUGH ROAD	MUTCD STANDARD			2	MUTCD STANDARD			0.56	1.12
W13-1	600	750	XX M.P.S.	MUTCD STANDARD			4	MUTCD STANDARD			0.45	1.80
W20-1c	900	900	ROAD WORK AHEAD	MUTCD STANDARD			4	MUTCD STANDARD			0.81	3.24
W20-2c	900	900	DETOUR AHEAD	MUTCD STANDARD			3	MUTCD STANDARD			0.81	2.43
W20-3	900	900	ROAD CLOSED 500 FT	MUTCD STANDARD			2	MUTCD STANDARD			0.81	1.62
W20-3	900	900	ROAD CLOSED 1000 FT	MUTCD STANDARD			2	MUTCD STANDARD			0.81	1.62
W20-4	900	900	ONE LANE ROAD 1000 FT	MUTCD STANDARD			3	MUTCD STANDARD			0.81	2.43
W20-7a	900	900	ROAD WORK AHEAD	MUTCD STANDARD			2	MUTCD STANDARD			0.81	1.62
W20-8	900	900	POLICE OFFICER AHEAD	MUTCD STANDARD			3	MUTCD STANDARD			0.81	2.43
W21-5a	900	900	RIGHT SHOULDER CLOSED	MUTCD STANDARD			1	MUTCD STANDARD			0.81	0.81

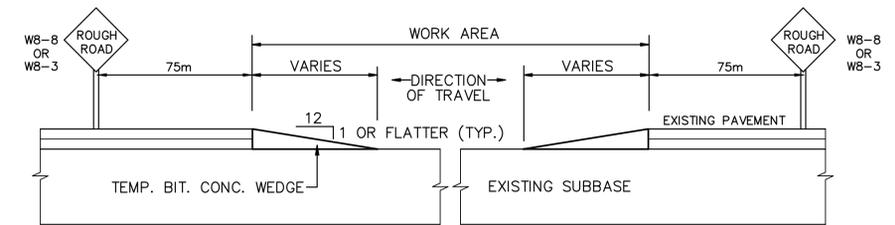
MONTAGUE GREENFIELD ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	56	157
PROJECT FILE NO.		601657	

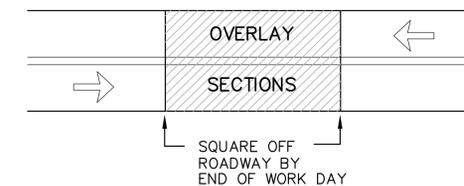
TEMPORARY TRAFFIC CONTROL PLAN



LATERAL DROP-OFF DETAIL



LONGITUDINAL DROP-OFF DETAIL

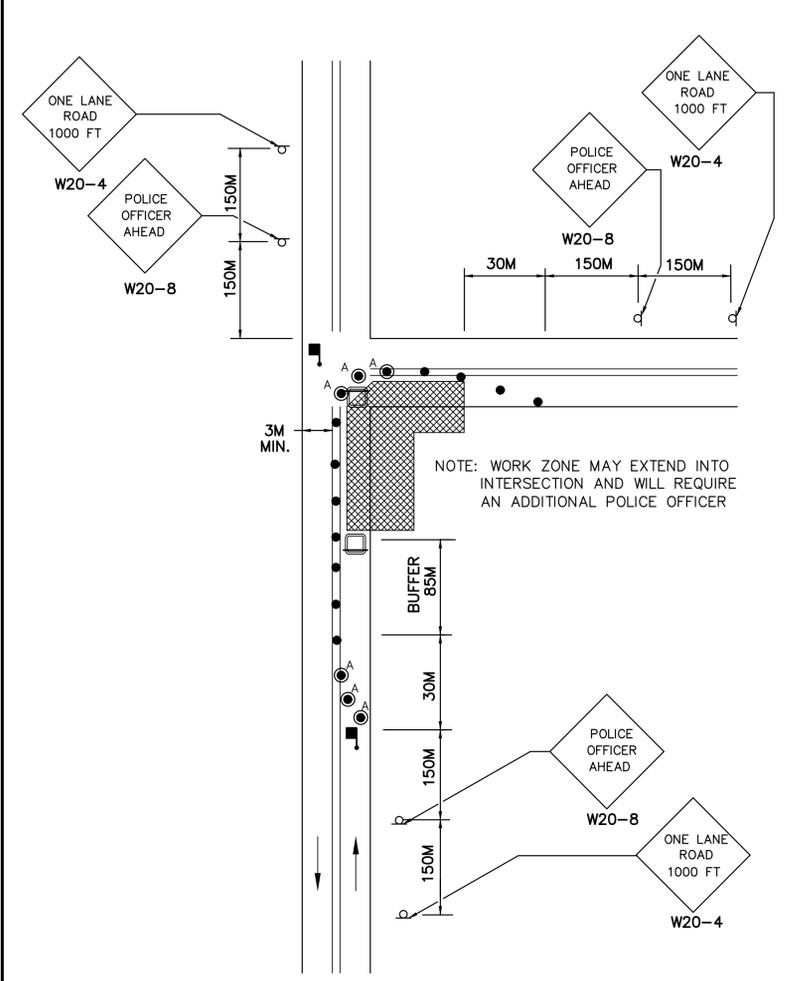


AFTER WORK HOURS TREATMENT FOR AREAS RECEIVING OVERLAY

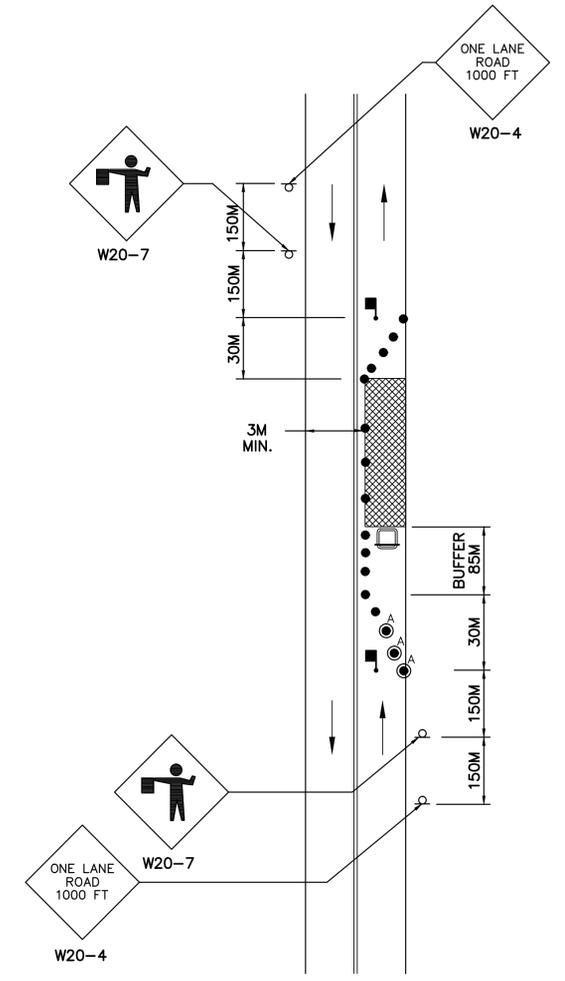
TRAFFIC MANAGEMENT LEGEND

- WORK AREA
- DIRECTION OF TRAVEL
- REFLECTORIZED DRUM
- CONSTRUCTION SIGN
- REFLECTORIZED DRUM WITH TYPE 'A' FLASHING WARNING LIGHT
- POLICE OFFICER CONTROL
- FLAGGER CONTROL
- PORTABLE TYPE III BARRICADE (1200mm WIDE, MIN.)
- TEMPORARY CONCRETE BARRIER
- TEMPORARY IMPACT ATTENUATOR
- FLASHING ARROW PANEL
- PAVEMENT MARKINGS TO COVER OR REMOVE (SEE NOTE 23)

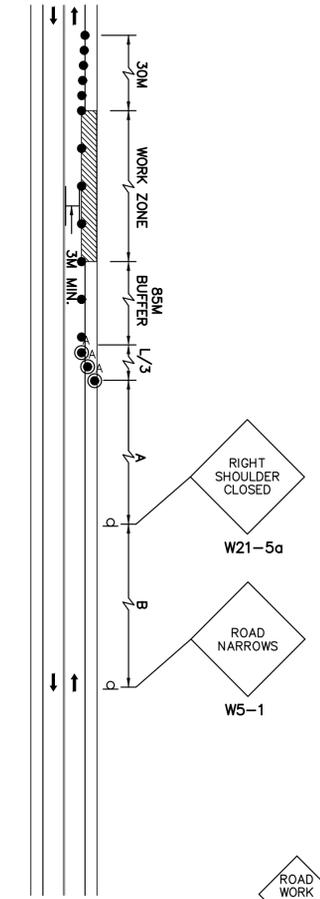
IN CHARGE OF
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 MDE



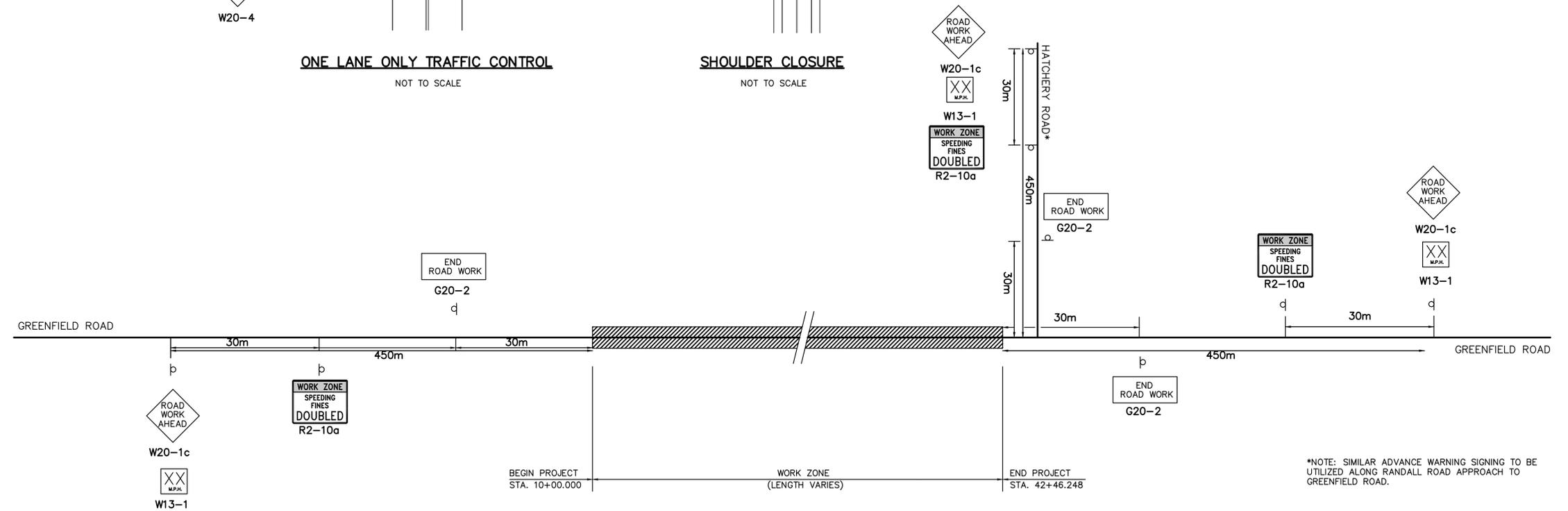
INTERSECTION TRAFFIC CONTROL
NOT TO SCALE



ONE LANE ONLY TRAFFIC CONTROL
NOT TO SCALE



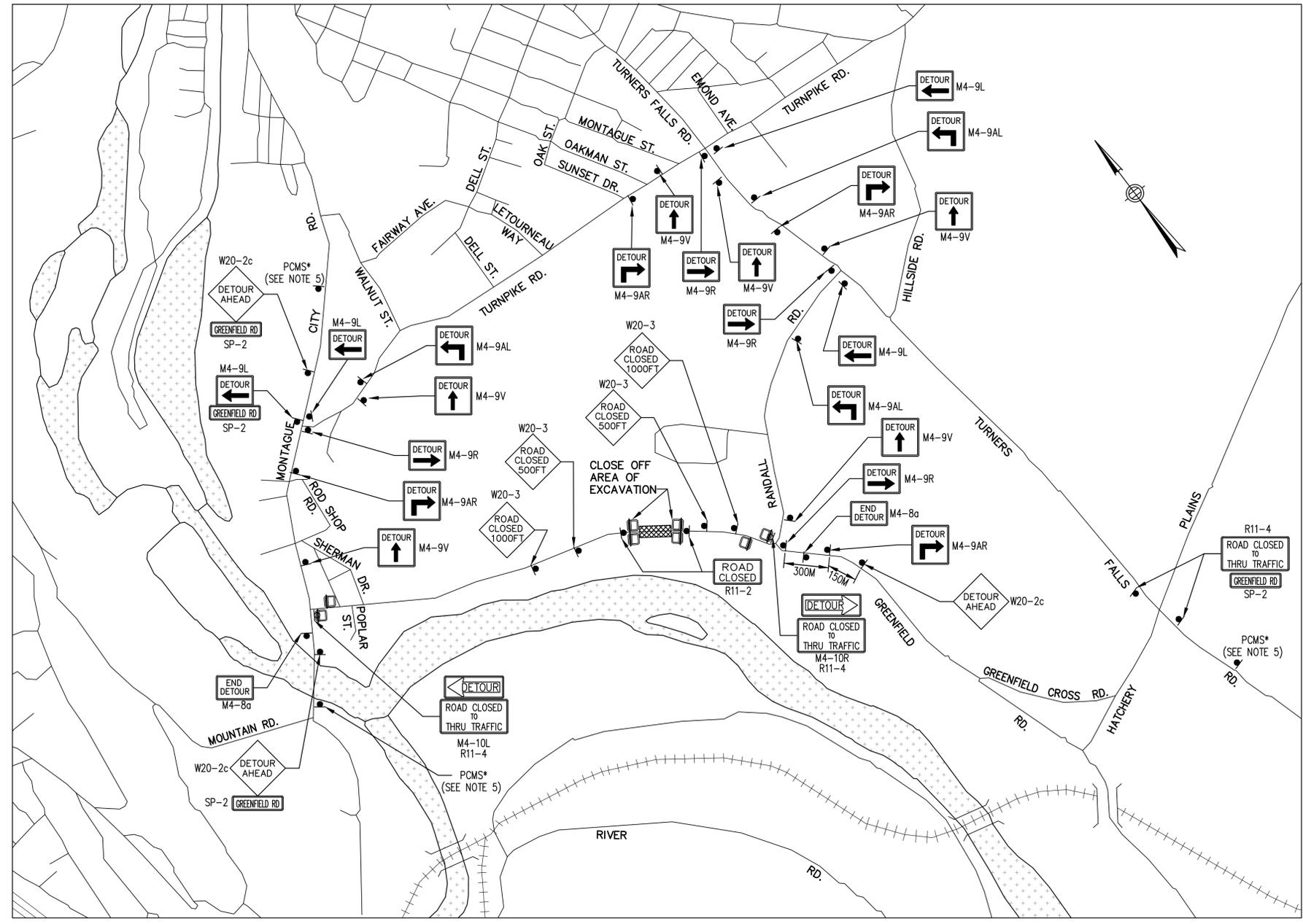
SHOULDER CLOSURE
NOT TO SCALE



ADVANCE WARNING SIGN PLAN
N.T.S.

*NOTE: SIMILAR ADVANCE WARNING SIGNING TO BE UTILIZED ALONG RANDALL ROAD APPROACH TO GREENFIELD ROAD.

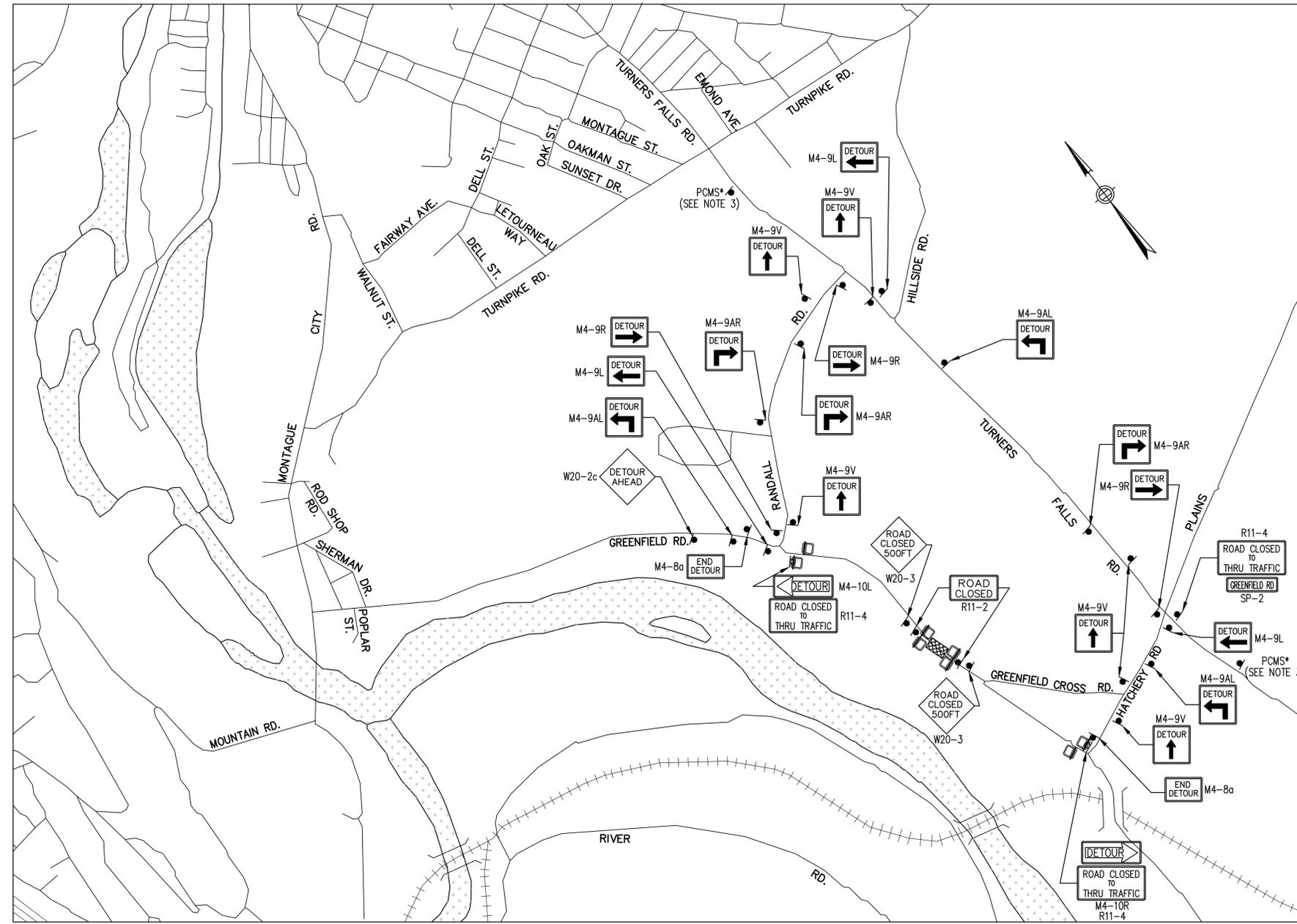
IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____



- NOTES:**
1. THIS PROPOSED DETOUR IS FOR CULVERT REPLACEMENT ONLY.
 2. LOCAL ACCESS SHALL BE MAINTAINED AT ALL TIMES.
 3. DETOUR SHALL ONLY BE IMPLEMENTED ON WORKDAYS BETWEEN 9AM-4PM.
 4. STEEL PLATES MAY BE USED AT THE DISCRETION OF THE ENGINEER IN ORDER TO OPEN THE ROADWAY DURING NON-WORKING HOURS.
 5. EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS TO BE DETERMINED IN FIELD.

DETOUR PLAN
N.T.S
WORK BETWEEN MONTAGUE CITY ROAD
AND RANDALL ROAD

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____



NOTES:

1. LOCAL ACCESS SHALL BE MAINTAINED AT ALL TIMES.
2. STEEL PLATES MAY BE USED AT THE DISCRETION OF THE ENGINEER IN ORDER TO OPEN THE ROADWAY DURING NON-WORKING HOURS.
3. EXACT LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS TO BE DETERMINED IN FIELD.

DETOUR PLAN

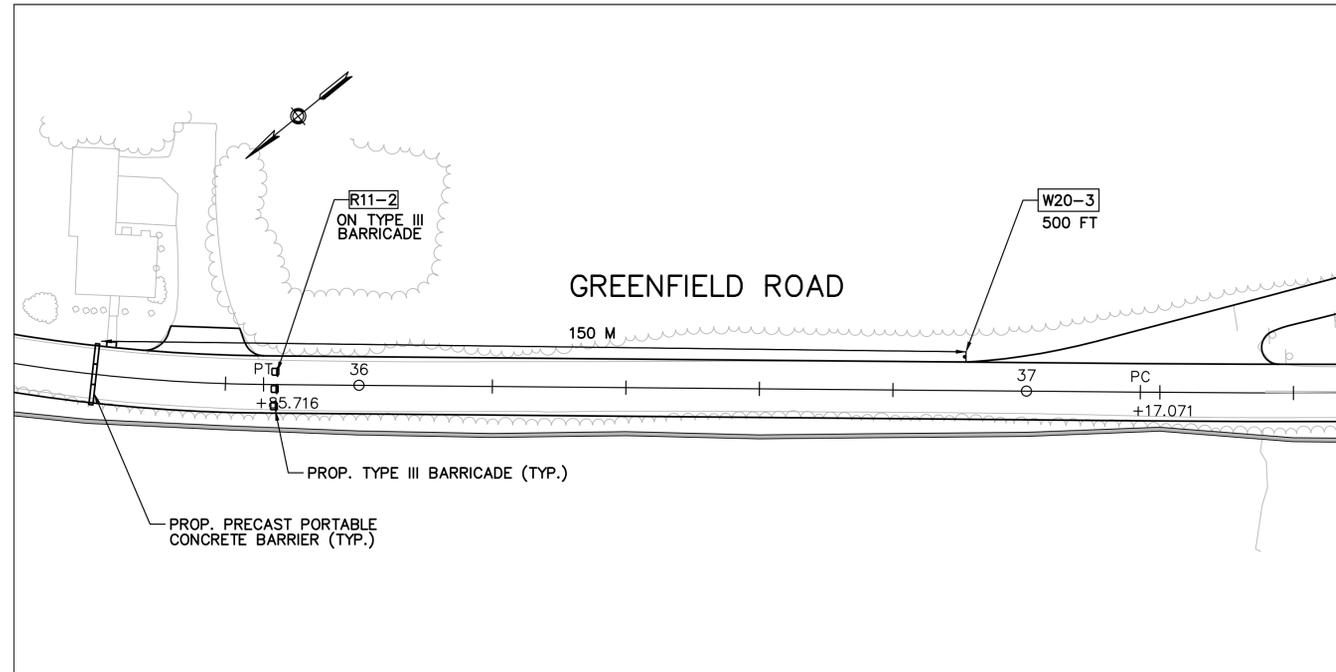
N.T.S
WORK BETWEEN RANDALL ROAD
AND HATCHERY ROAD

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

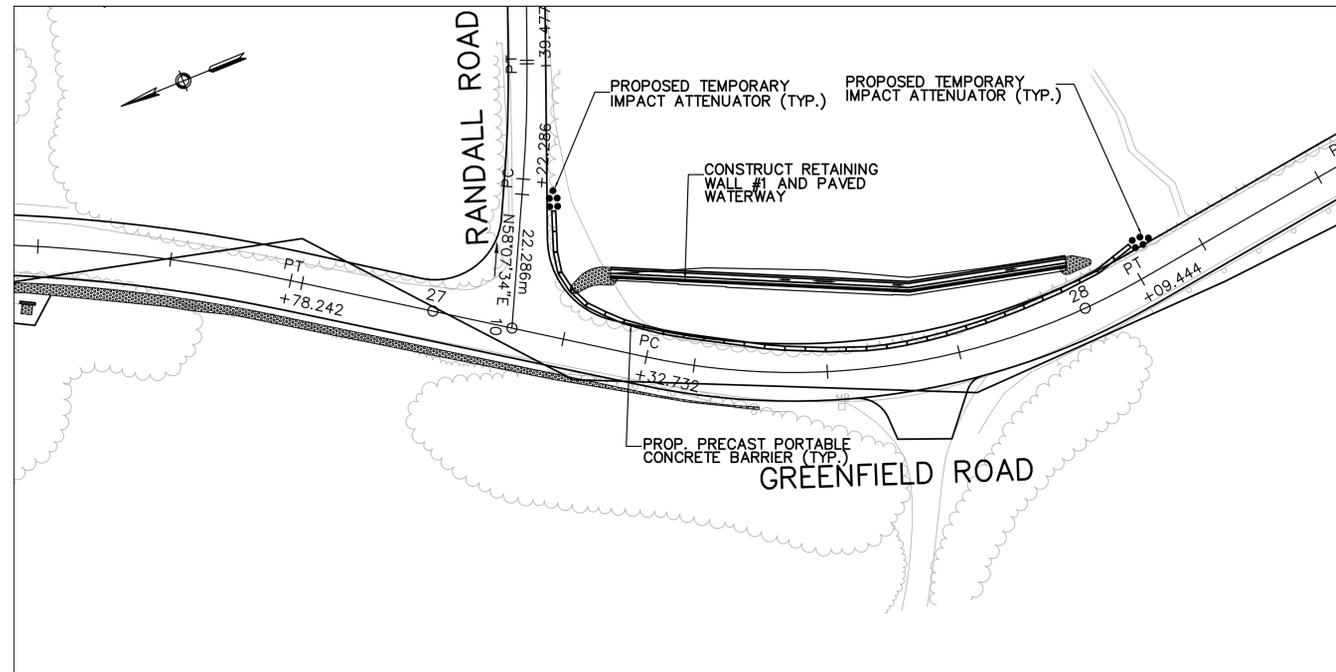
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	60	157
PROJECT FILE NO.		601657	

TEMPORARY TRAFFIC CONTROL PLAN



ROADWAY CLOSURE PLAN

PROPOSED WORK
STA 29+20 TO STA 35+40
N.T.S.



TEMPORARY TRAFFIC CONTROL

RETAINING WALL #1
N.T.S.

NOTES:

1. THE PROPOSED ROADWAY CLOSURE PLAN SHOWN IS FOR PROPOSED WORK BETWEEN STA 29+20 AND 35+40.
2. PRIOR TO CLOSING THE ROAD, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE EMERGENCY PERSONNEL FROM THE TOWN OF MONTAGUE AND ALL AFFECTED ABUTTERS.
3. PRIOR TO INSTALLING THE PRECAST PORTABLE CONCRETE BARRIER, THE CONTRACTOR SHALL INSTALL DETOUR AS SHOWN ON SHEET 59.
4. THE ROADWAY CLOSURE AND DETOUR MAY REMAIN IN PLACE OVERNIGHT. THE CONTRACTOR MUST MAINTAIN ACCESS FOR ABUTTERS AT ALL TIMES.
5. THE CONTRACTOR SHALL REMOVE SECTIONS OF PRECAST PORTABLE CONCRETE BARRIER AS NECESSARY TO GAIN ACCESS TO THE SITE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT PAYMENT ITEMS.
6. USE SAME SETUP FOR THE NORTHERLY APPROACH.

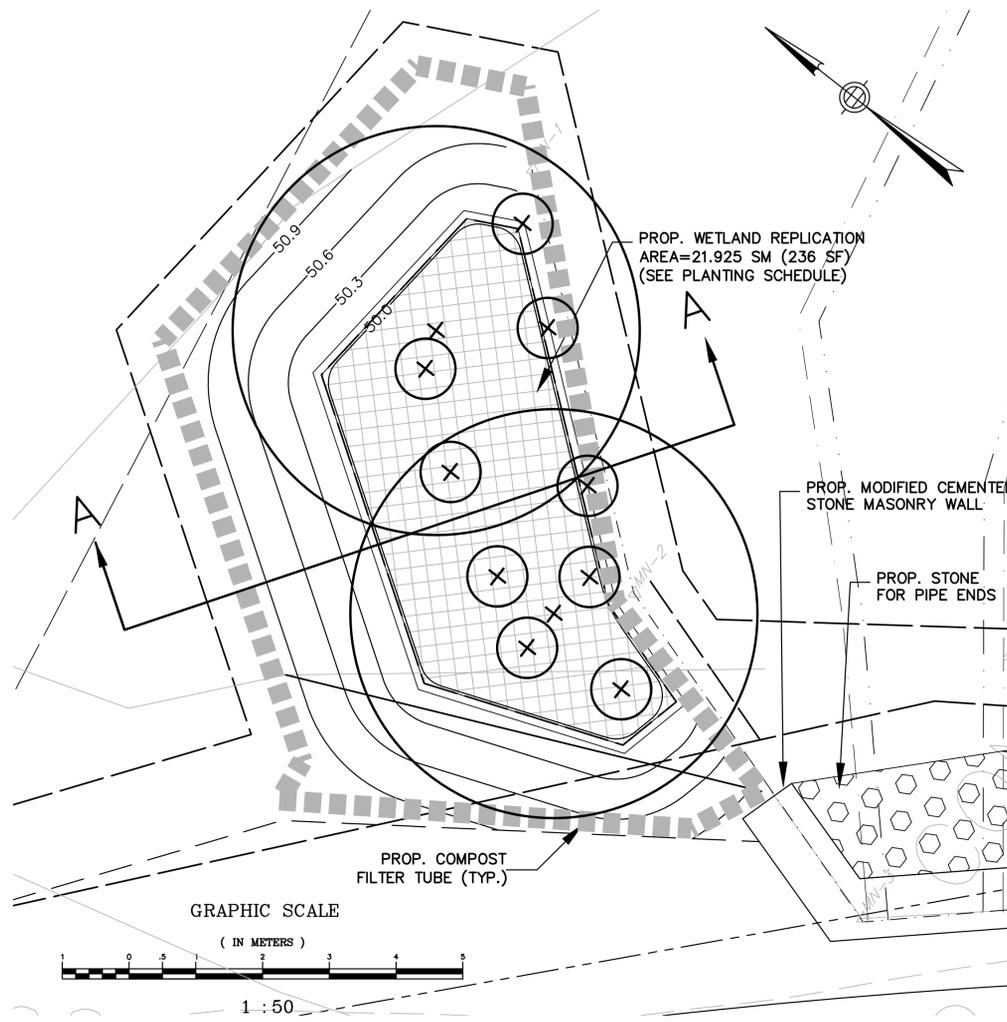
SUGGESTED CONSTRUCTION SEQUENCE

1. CONSTRUCT PROPOSED CULVERTS AND ASSOCIATED DRAINAGE USING TEMPORARY DETOURS AS SHOWN ON SHEETS 58 AND 59.
2. CONSTRUCT RETAINING WALL #1 USING TEMPORARY TRAFFIC CONTROL SHOWN ON THIS SHEET. IN ADDITION TO THE SETUP SHOWN, USE THE SHOULDER CLOSURE SHOWN ON SHEET 57.
3. CONSTRUCT RETAINING WALL #2 AND #3 USING TEMPORARY TRAFFIC CONTROL SHOWN ON THIS SHEET.
4. CONSTRUCT PROPOSED CULVERT AT STA 34+46 AND ASSOCIATED DRAINAGE USING THE ROADWAY CLOSURE PLAN SHOWN ON THIS SHEET.
5. CONSTRUCT FULL DEPTH HMA PAVEMENT WITH RECLAIMED SUBBASE MATERIAL USING TEMPORARY TRAFFIC CONTROL AS SHOWN ON SHEET 57.

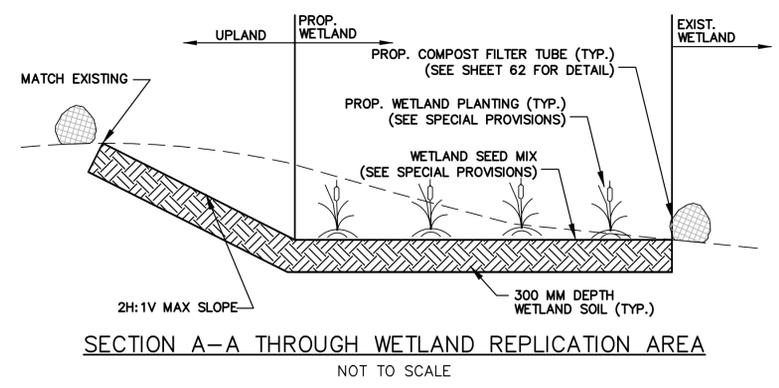
IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

WETLAND PLANTING SCHEDULE

SPECIES	QUANTITY	SIZE	SPACING
TREES			
ACER RUBRUM (RED MAPLE)	2	50-60 MM CALIPER	AS SHOWN
SHRUBS			
RED TWIG DOGWOOD (CORNUS SERICEA)	3	460-610 MM	1.5 M OC
ELDERBERRY (SAMBUCUS CANADENSIS)	3	460-610 MM	1.5 M OC
HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM)	3	460-610 MM	1.5 M OC
GROUND COVER			
CINNAMON FERN (OSMUNDA CINNAMOMEA)	9	# 1 POTS	375 MM OC
ROYAL FERN (OSMUNDA REGALIS)	9	# 1 POTS	375 MM OC
CARDINAL FLOWER (LOBELIA CARDINALIS)	9	SP5	300 MM OC
WOOD PHLOX (PHLOX DIVARICATA)	9	SP5	300 MM OC
SMARTWEED WATER PEPPER (POLYGONUM HYDROPIPEROIDES)	9	SP5	300 MM OC



WETLAND REPLICATION AREA PLAN



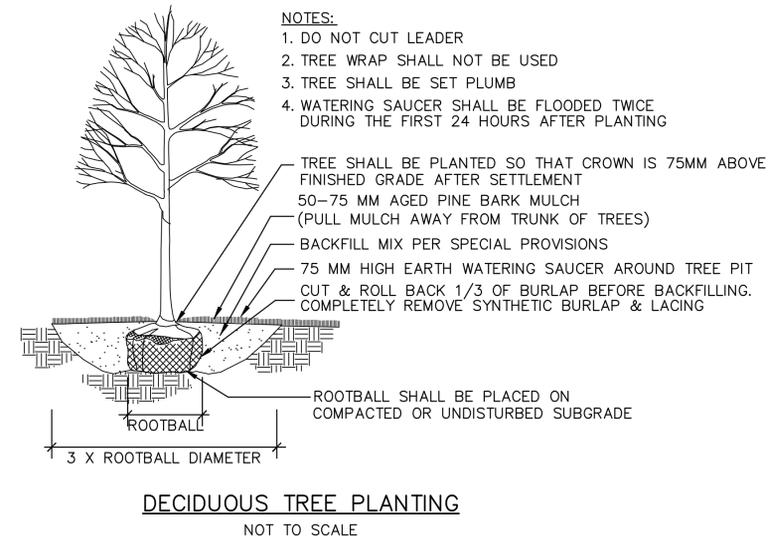
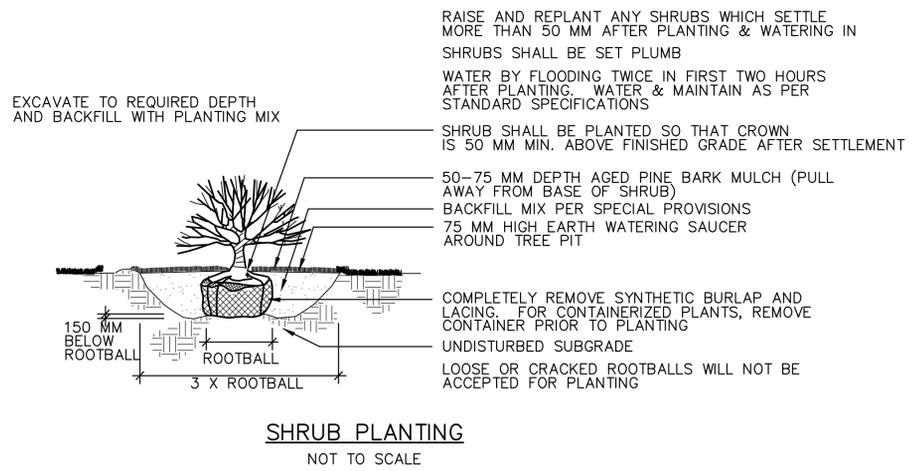
SECTION A-A THROUGH WETLAND REPLICATION AREA
NOT TO SCALE

GENERAL NOTES

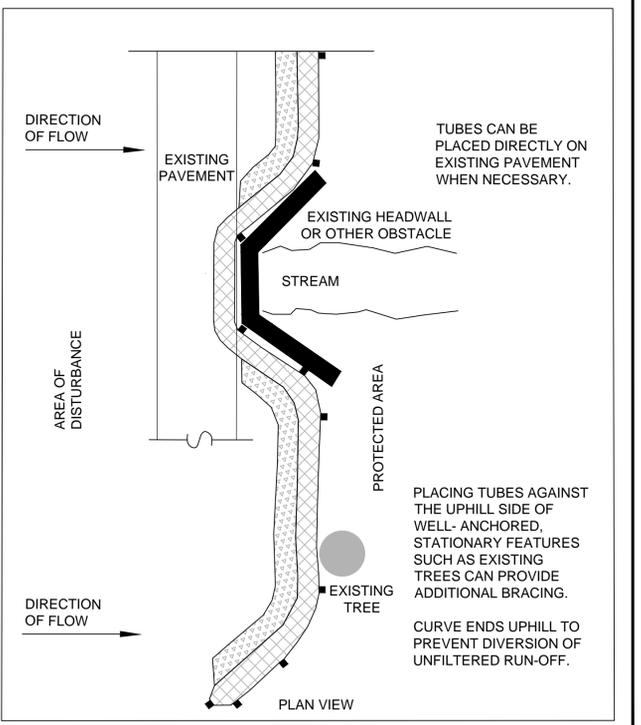
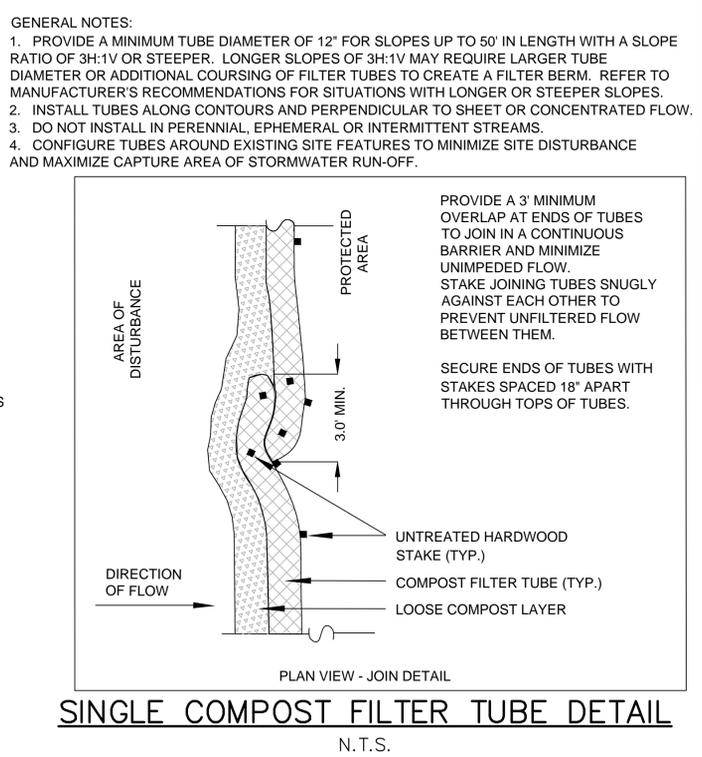
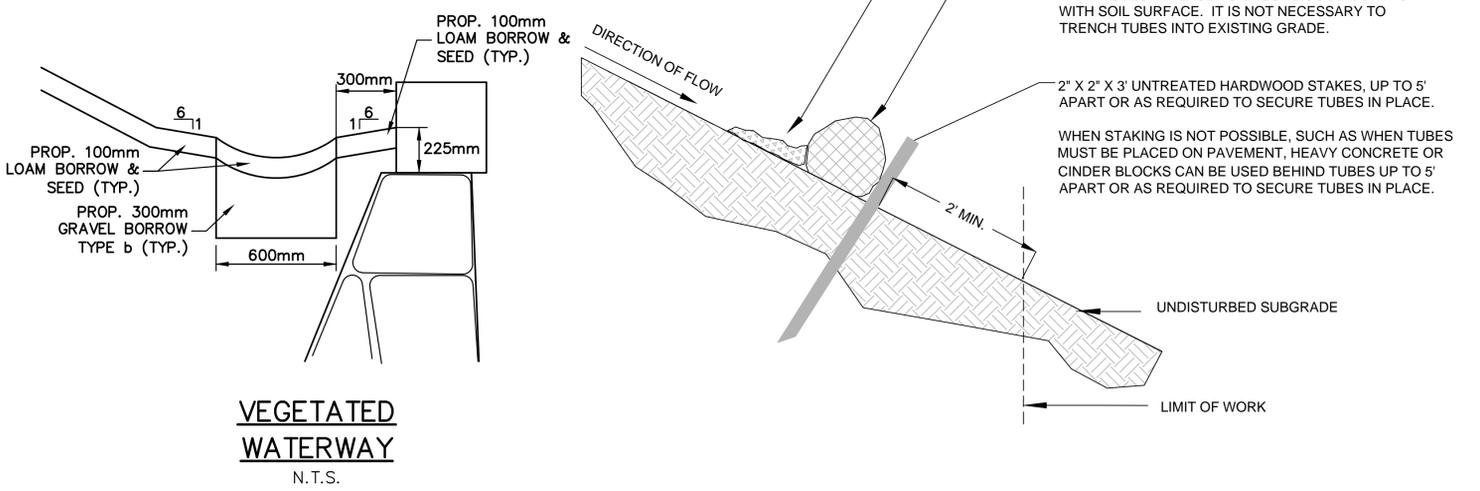
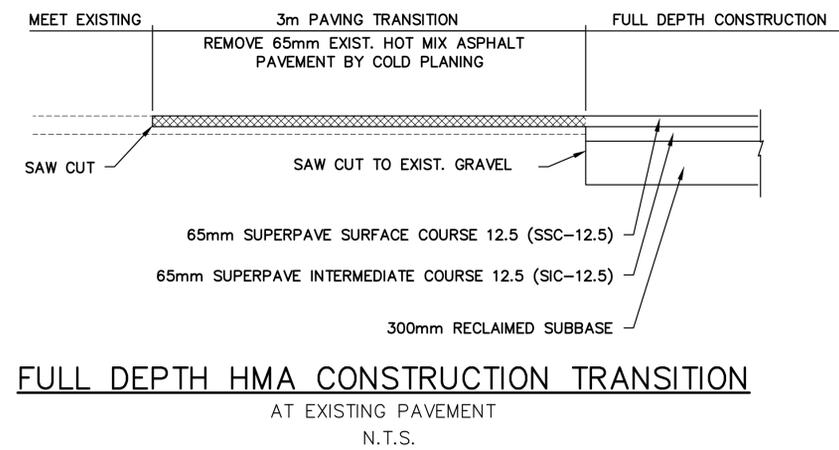
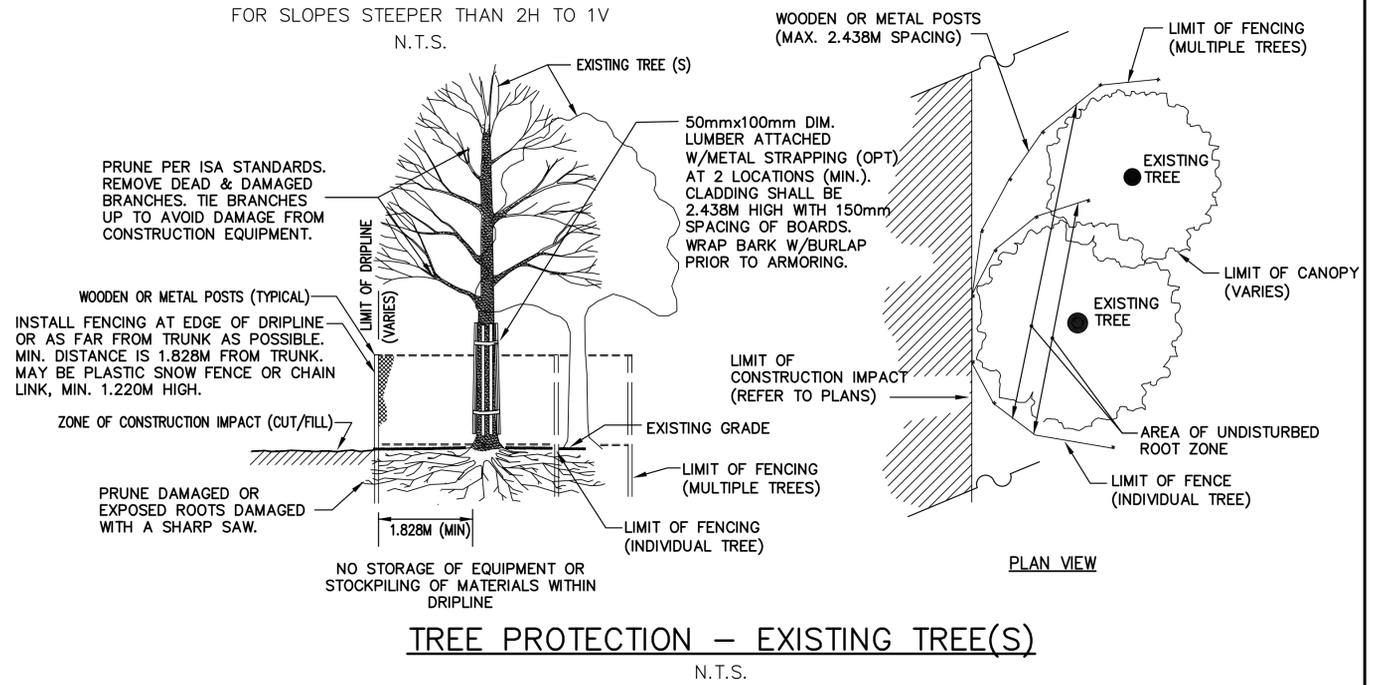
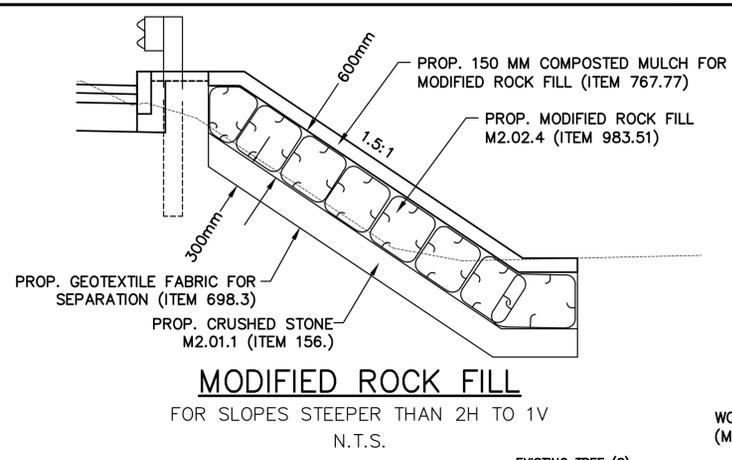
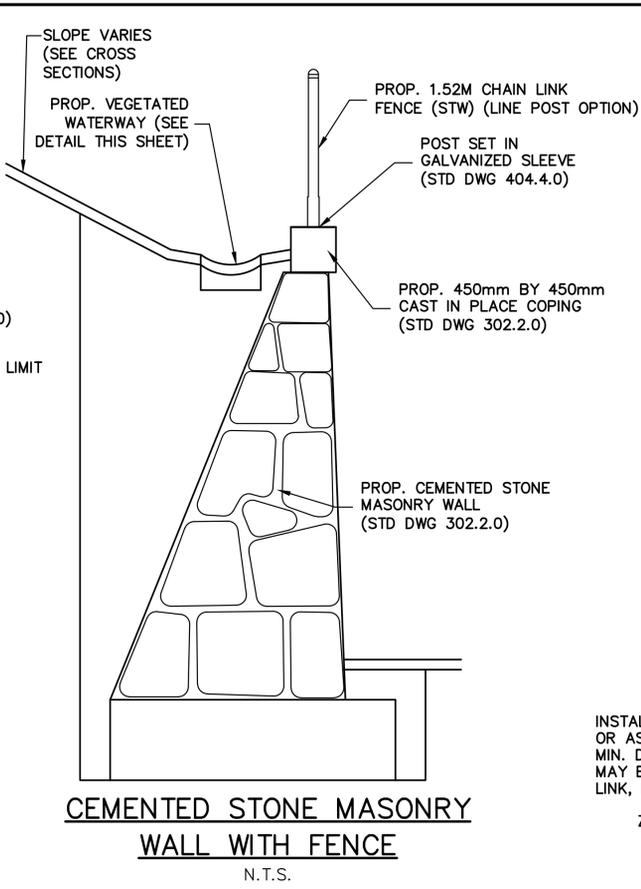
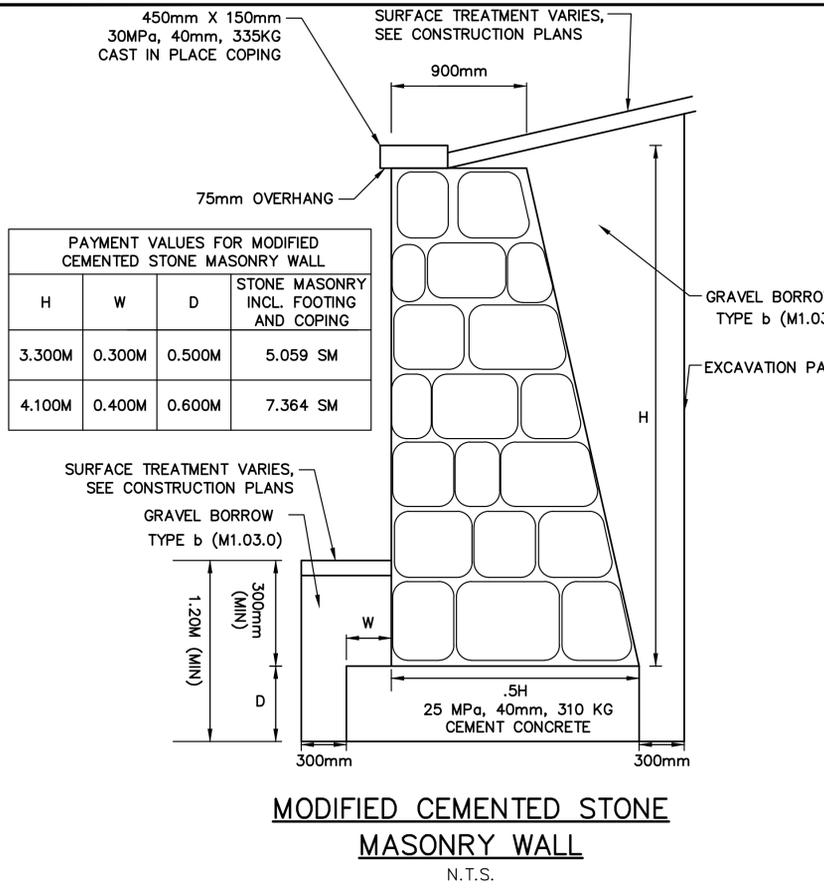
1. THE CONTRACTOR SHALL USE EXTREME CARE TO MINIMIZE THE DISTURBANCE OF VEGETATION USING SMALLER CONSTRUCTION EQUIPMENT AND HAND METHODS AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL DEVELOP A WORK PLAN IDENTIFYING ACCESS AND EGRESS LOCATIONS TO BEST MINIMIZE DISTURBANCE AREAS AND EXCESS MATERIAL STOCKPILING. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF THIS WORK.
3. PRIOR TO ENGAGING IN CONSTRUCTION ACTIVITIES RELATED TO THE REPLACEMENT WETLAND, THE CONTRACTOR SHALL BE REQUIRED TO MEET WITH THE WETLAND SPECIALIST TO REVIEW SPECIAL CONSTRUCTION AND EROSION CONTROL REQUIREMENTS. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED SUCH THAT EXCAVATED WETLAND SOIL SHALL BE RELOCATED AS QUICKLY AS POSSIBLE.
4. APPLY WETLAND SEED MIX TO ALL AREAS NOT RECEIVING GROUND COVER AT A RATE OF 0.005 KG/SM.

SEQUENCE OF CONSTRUCTION

1. INSTALL COMPOST FILTER TUBES AS SHOWN ON THIS SHEET.
2. EXCAVATE EXISTING GROUND TO EXPAND EXISTING WETLAND LIMITS AS SHOWN ON THIS PLAN AND AS DIRECTED BY WETLAND SPECIALIST.
3. BACKFILL ENTIRE EXCAVATED AREA WITH WETLAND SOIL AS STATED IN THE SPECIAL PROVISIONS AND AS DIRECTED BY WETLAND SPECIALIST.
4. INSTALL WETLAND PLANTINGS AND WETLAND SEED MIX IN ACCORDANCE WITH THE PLANTING SCHEDULE, SPECIAL PROVISIONS AND AS DIRECTED BY THE WETLAND SPECIALIST.
5. REMOVE ALL REMAINING COMPOST FILTER TUBES WITHOUT DISTURBING WETLAND PLANTINGS NO EARLIER THAN TWO MONTHS FOLLOWING ESTABLISHED MATURITY OF ALL SEEDED AREAS OR AS OTHERWISE DIRECTED BY THE ENGINEER.



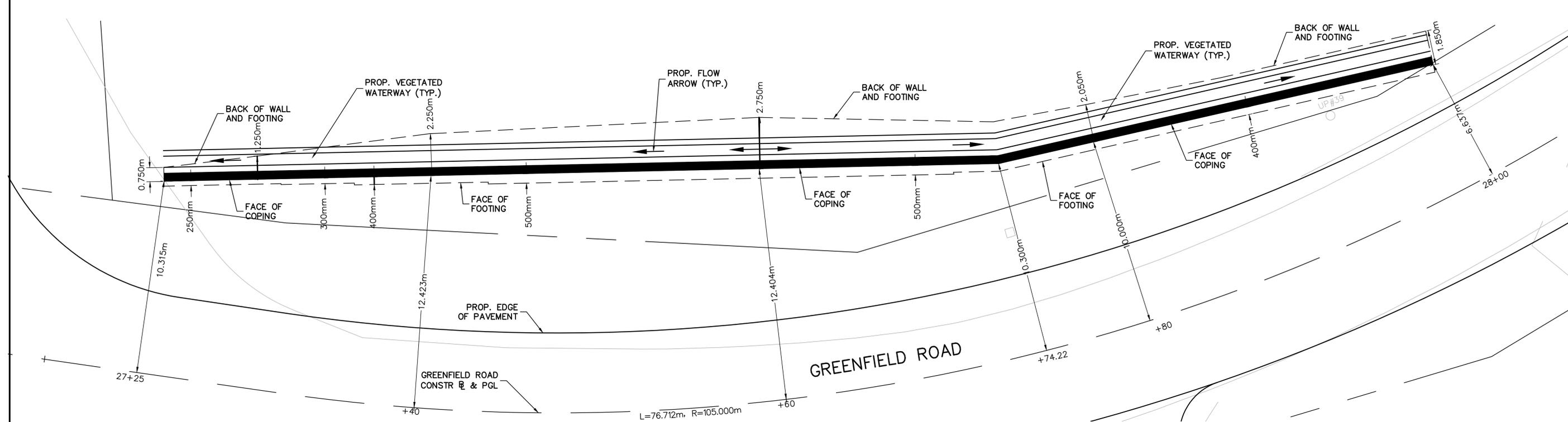
IN CHARGE OF: _____
 DRAWN BY: _____
 CHECKED BY: _____



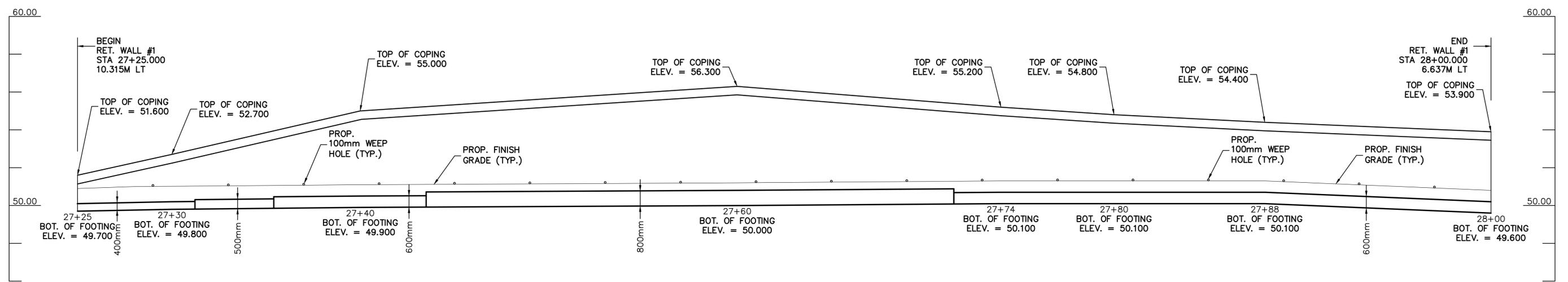
IN CHARGE OF
MDE
DRAWN BY
MDE
CHECKED BY
MDE

MONTAGUE GREENFIELD ROAD			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	63	157
PROJECT FILE NO.		601657	

RETAINING WALL DETAILS
RETAINING WALL # 1



PLAN
1:100



FACE OF WALL ELEVATION
HORIZ. 1:100
VERT. 1:100

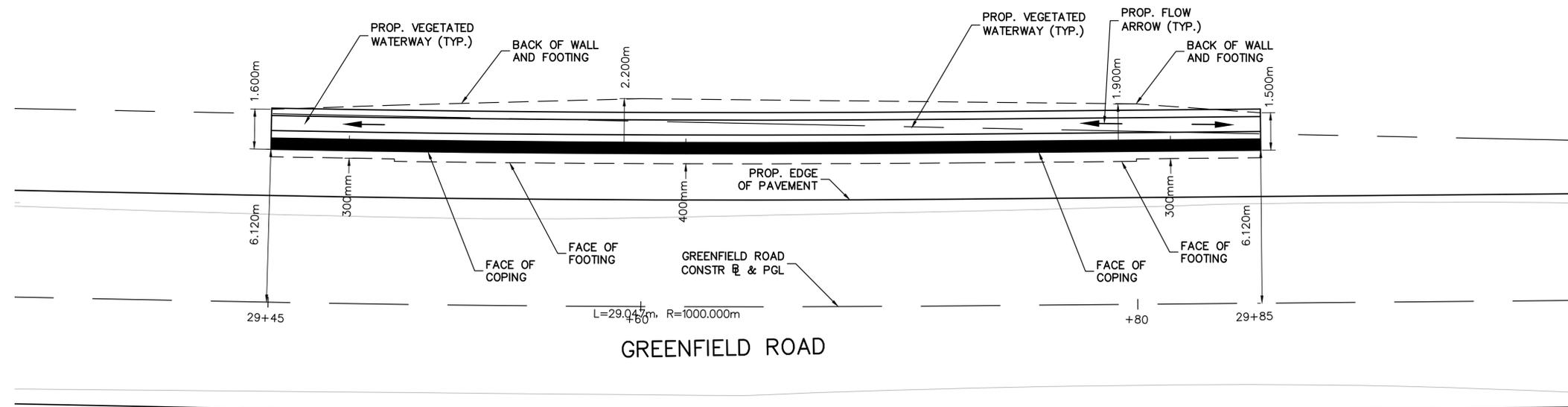
WALL NOTES:

- REFER TO MASSDOT HIGHWAY DIVISION STANDARD DETAIL 302.2.0 FOR ADDITIONAL INFORMATION.
- CONSTRUCTION JOINTS IN THE FOOTINGS SHALL BE SPACED AT A MAXIMUM OF 7 METERS.
- FENCE NOT SHOWN FOR CLARITY.

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

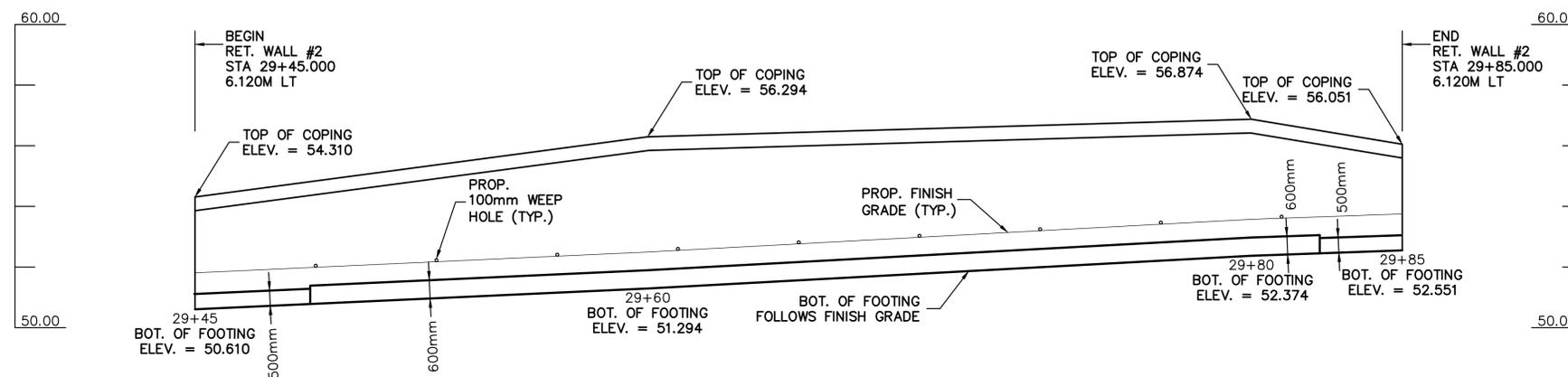
MONTAGUE GREENFIELD ROAD			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	64	157
PROJECT FILE NO.		601657	

**RETAINING WALL DETAILS
RETAINING WALL # 2**



GREENFIELD ROAD

PLAN
1:100



FACE OF WALL ELEVATION

HORIZ. 1:100
VERT. 1:100

WALL NOTES:

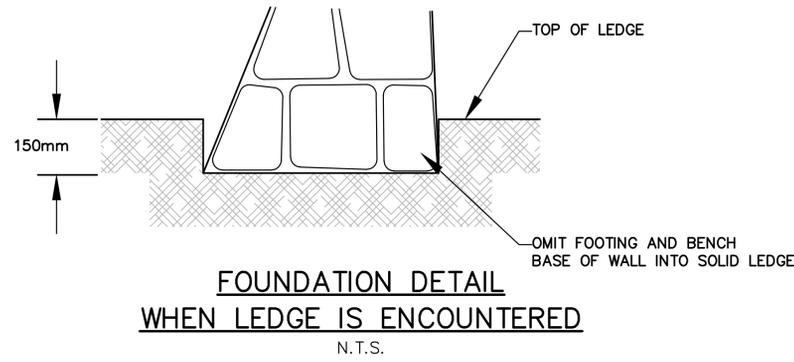
- REFER TO MASSDOT HIGHWAY DIVISION STANDARD DETAIL 302.2.0 FOR ADDITIONAL INFORMATION.
- CONSTRUCTION JOINTS IN THE FOOTINGS SHALL BE SPACED AT A MAXIMUM OF 7 METERS.
- PROPOSED GUARD RAIL AND FENCE NOT SHOWN FOR CLARITY.

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

**MONTAGUE
GREENFIELD ROAD**

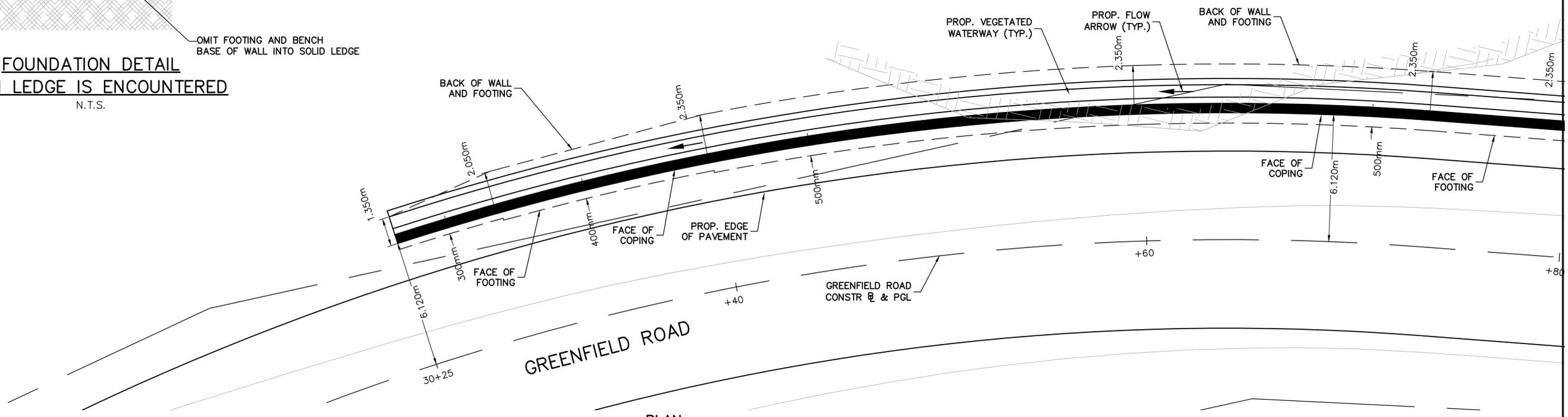
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	FED. AID	65	157
PROJECT FILE NO. 601657			

**RETAINING WALL DETAILS
RETAINING WALL # 3**



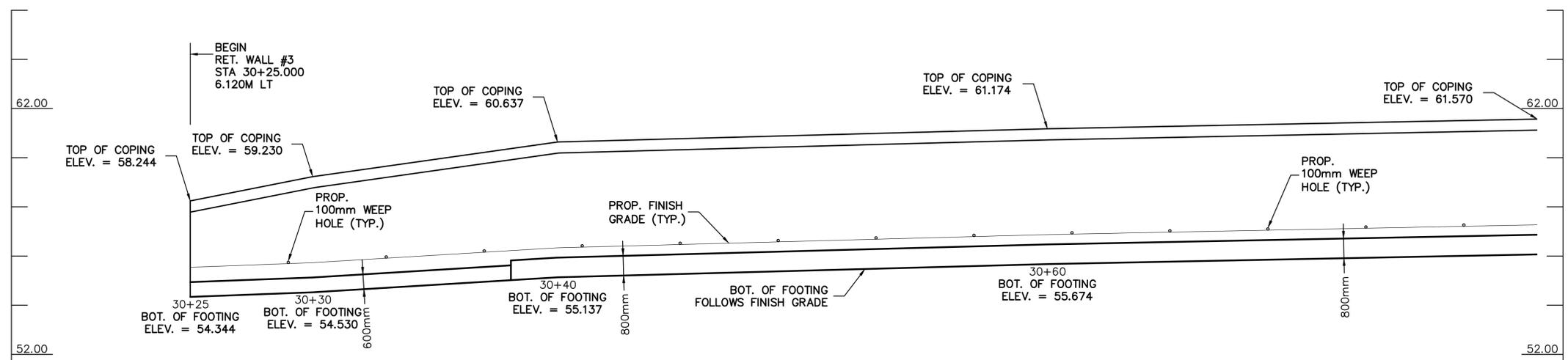
**FOUNDATION DETAIL
WHEN LEDGE IS ENCOUNTERED**

N.T.S.



**PLAN
1:100**

CONT. ON SHEET 66



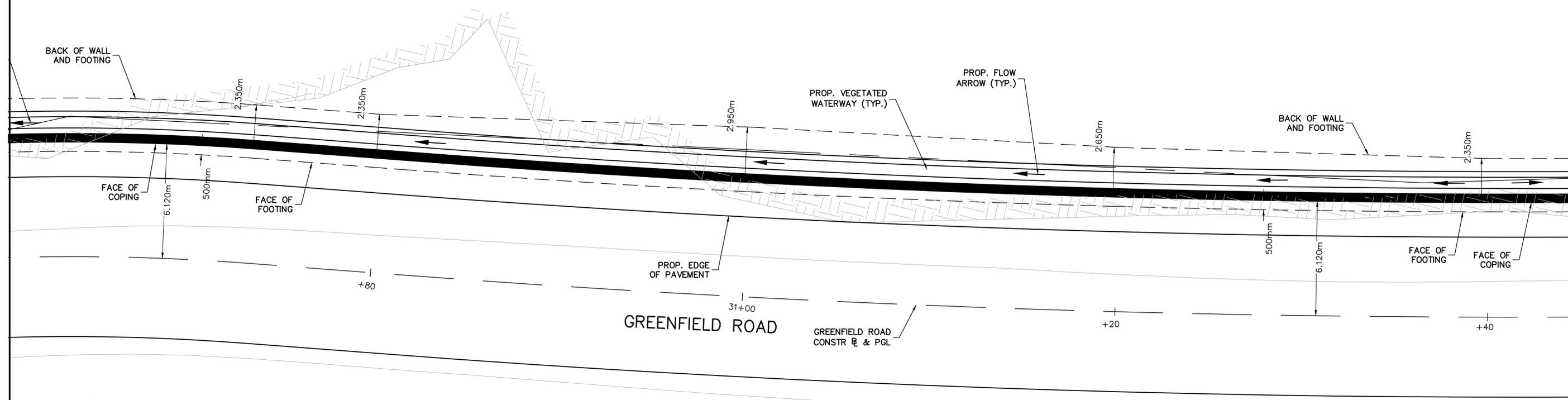
FACE OF WALL ELEVATION

HORIZ. 1:100
VERT. 1:100

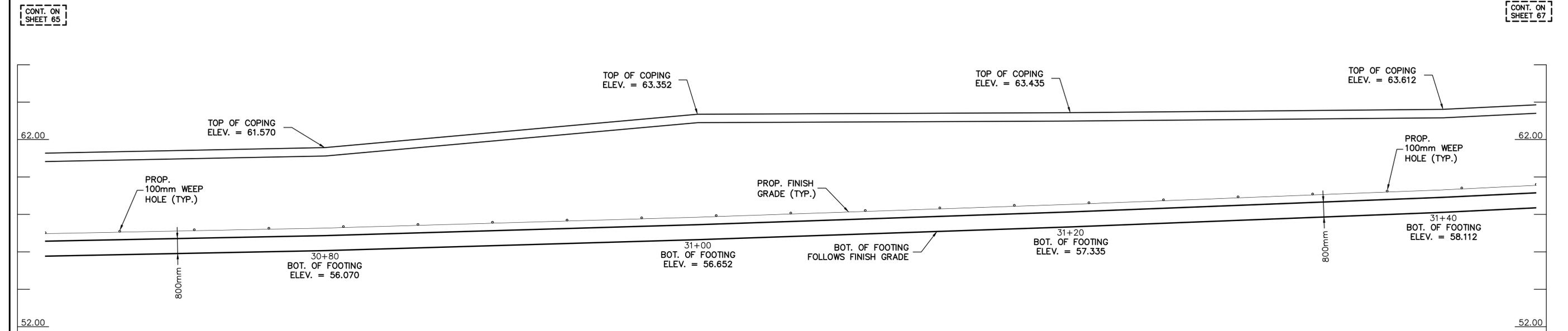
WALL NOTES:

- REFER TO MASSDOT HIGHWAY DIVISION STANDARD DETAIL 302.2.0 FOR ADDITIONAL INFORMATION.
- CONSTRUCTION JOINTS IN THE FOOTINGS SHALL BE SPACED AT A MAXIMUM OF 7 METERS.
- PROPOSED GUARD RAIL AND FENCE NOT SHOWN FOR CLARITY.
- IN THE EVENT THAT THE EXISTING ROCK IS STABLE, THE PROPOSED RETAINING WALL WILL BE REPLACED WITH THE STANDARD ROCK CUT AS DETAILED IN CONSTRUCTION STANDARD E 102.1.0.

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____



PLAN
1:100



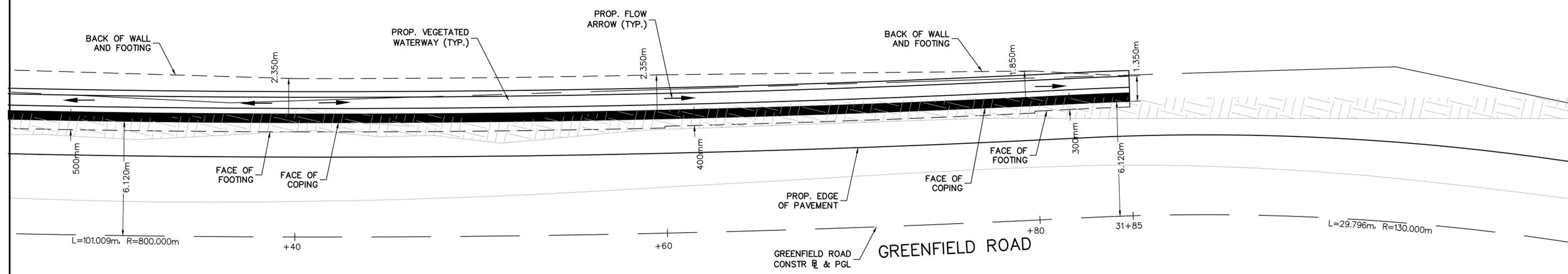
FACE OF WALL ELEVATION
HORIZ. 1:100
VERT. 1:100

- WALL NOTES:**
- REFER TO MASSDOT HIGHWAY DIVISION STANDARD DETAIL 302.2.0 FOR ADDITIONAL INFORMATION.
 - CONSTRUCTION JOINTS IN THE FOOTINGS SHALL BE SPACED AT A MAXIMUM OF 7 METERS.
 - PROPOSED GUARD RAIL AND FENCE NOT SHOWN FOR CLARITY.
 - IN THE EVENT THAT THE EXISTING ROCK IS STABLE, THE PROPOSED RETAINING WALL WILL BE REPLACED WITH THE STANDARD ROCK CUT AS DETAILED IN CONSTRUCTION STANDARD E 102.1.0.

IN CHARGE OF _____
DRAWN BY _____
CHECKED BY _____

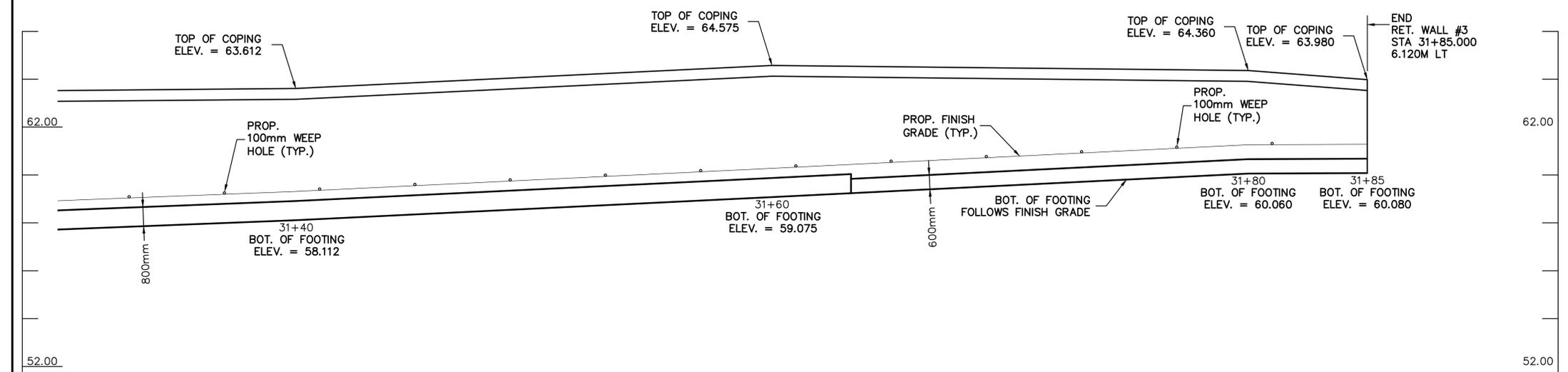
CONT. ON SHEET 65

CONT. ON SHEET 67



PLAN
1:100

CONT. ON SHEET 66



FACE OF WALL ELEVATION
HORIZ. 1:100
VERT. 1:100

WALL NOTES:

1. REFER TO MASSDOT HIGHWAY DIVISION STANDARD DETAIL 302.2.0 FOR ADDITIONAL INFORMATION.
2. CONSTRUCTION JOINTS IN THE FOOTINGS SHALL BE SPACED AT A MAXIMUM OF 7 METERS.
3. PROPOSED GUARD RAIL AND FENCE NOT SHOWN FOR CLARITY.
4. IN THE EVENT THAT THE EXISTING ROCK IS STABLE, THE PROPOSED RETAINING WALL WILL BE REPLACED WITH THE STANDARD ROCK CUT AS DETAILED IN CONSTRUCTION STANDARD E 102.1.0.

IN CHARGE OF _____
 DRAWN BY _____
 CHECKED BY _____