S T A T E O F C O N N E C T I C U T
DEPARTMENT OF TRANSPORTATION

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NEWINGTON, CONNECTICUT 06131-7546

Phone: 860-594-3128

October 15, 2014

Subject: Project No. 151-273
F.A.P. No. 0842(195)
Reconstruction of I-84, Washington Street to Pierpont Road, Town of Waterbury.

NOTICE TO CONTRACTORS:

This is to notify all concerned and especially the prospective bidders that the bid opening for the subject project is still scheduled for **October 22, 2014** at 2:00 P.M. in the Conference Room of the Department of Transportation Administration Building, 2800 Berlin Turnpike, Newington, Connecticut.

Addendum No. 4 is attached and can also be obtained on the Statewide Contracting Portal at http://www.biznet.ct.gov/scp_search/BidResults.aspx?groupid=64

This Addendum is necessary to revise a contract documents.

Pre-Bid Questions and Answers: Questions pertaining to DOT advertised construction projects must be presented through the CTDOT Pre-Bid Q and A Website. The Department cannot guarantee that all questions will be answered prior to the bid date. **PLEASE NOTE - at 12:01 am, the day before the bid, the subject project(s) being bid will be removed from the Q and A Website, Projects Advertised Section, at which time questions can no longer be submitted through the Q and A Website. At this time, the Q and A for those projects will be considered final, unless otherwise stated and/or the bid is postponed to a future date and time to allow for further questions and answers to be posted.**

Philip J. Melchionne
For: Gregory D. Straka
Contracts Manager
Division of Contracts Administration

OCTOBER 15, 2014
RECONSTRUCTION OF I-84
FEDERAL AID PROJECT NO. 0842(195)
STATE PROJECT NO. 0151-0273
CITY OF WATERBURY

ADDENDUM NO. 4

This Addendum addresses the following questions and answers contained on the "CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS":

Question and Answer Nos. 85, 107, 113, 115, 116, 117 and 119

PERMIT

Delete the Army Corps of Engineers Permit issued in Addendum No. 3 in its entirety and replace with the attached Army Corps of Engineers Permit.

SPECIAL PROVISIONS

NEW SPECIAL PROVISION

The following Special Provision is hereby added to the Contract:

- ITEM NO. 1008720A – 100 MM RIGID METAL MULTI DUCT CONDUIT – UNDER ROADWAY

REVISED SPECIAL PROVISIONS

The following Special Provisions are hereby deleted in their entirety and replaced with the attached like-named Special Provisions:

- CONTRACT TIME AND LIQUIDATED DAMAGES
- INCENTIVE AND LIQUIDATED DAMAGES PROVISIONS
- ITEM NO. 0651649A – CURED IN-PLACE PIPE LINING

NOTE: The Special Provision entitled:
ITEM NO. 1008112 – 25 MM RIGID METAL CONDUIT
is hereby deleted and replaced with the Special Provision entitled
ITEM NO. 1008112A – 25 MM RIGID METAL CONDUIT IN TRENCH

DELETED SPECIAL PROVISION

The following Special Provision is hereby deleted in its entirety:

- ITEM NO. 0950039A – EROSION CONTROL MATTING TYPE D

CONTRACT ITEMS

NEW CONTRACT ITEMS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1008720A	100 MM RIGID METALMULTI DUCT CONDUIT – UNDER ROADWAY	M	25
1002203	TRAFFIC CONTROL FOUNDATION - PEDESTAL - TYPE I	EA	7
1103024	10500 MM STEEL SPAN POLE	EA	2

REVISED CONTRACT ITEM(S)

ITEM NO.	DESCRIPTION	ORIGINAL QUANTITY	REVISED QUANTITY
1002201	TRAFFIC CONTROL FOUNDATION - SPAN POLE	30 EA	23 EA
1002208	TRAFFIC CONTROL FOUNDATION - CONTROLLER - TYPE IV	11 EA	8 EA
1010001	CONCRETE HANDHOLE	67 EA	64 EA
1010021	CONCRETE HANDHOLE - TYPE II	14 EA	11 EA
1010052A	CAST IRON HANDHOLE COVER	10 EA	8 EA
1010054A	CAST IRON HANDHOLE COVER - TYPE II	10 EA	1 EA
1102002	2400 MM ALUMINUM PEDESTAL	10 EA	7 EA
1103021	8500 MM STEEL SPAN POLE	10 EA	3 EA
1103022	9000 MM STEEL SPAN POLE	2 EA	13 EA
1103023	10000 MM STEEL SPAN POLE	20 EA	2 EA
1103029	9500 MM STEEL SPAN POLE	10 EA	33 EA
1105001A	1 WAY, 1 SECTION SPAN WIRE TRAFFIC SIGNAL	20 EA	16 EA
1105003A	1 WAY, 3 SECTION SPAN WIRE TRAFFIC SIGNAL	50 EA	43 EA
1105007A	2 WAY, 3 SECTION SPAN WIRE TRAFFIC SIGNAL	10 EA	4 EA
1105203A	1 WAY, 3 SECTION POLE MOUNTED TRAFFIC SIGNAL	10 EA	2 EA

1107002	PEDESTRIAN PUSH BUTTON AND SIGN, PEDESTAL MOUNTED	6 EA	7 EA
1108115A	FULL ACTUATED CONTROLLER-8 PHASE	10 EA	7 EA
1108724A	PHASE SELECTOR	10 EA	7 EA
1111401A	LOOP VEHICLE DETECTOR	90 EA	81 EA
1111407A	CAMERA VIDEO DETECTION SYSTEM	10 EA	3 EA
1111451A	LOOP DETECTOR SAW CUT	192 M	1200 M
1112410A	DETECTOR (TYPE A)	20 EA	14 EA
1112470A	PRE-EMPTION SYSTEM CHASSIS	10 EA	7 EA
1113104	9 CONDUCTOR NO. 14 CABLE	50 M	55 M
1113106	12 CONDUCTOR NO. 14 CABLE	30 M	50 M
1114201A	AUXILIARY EQUIPMENT CABINET	10 EA	7 EA
1202239A	OVERHEAD TRUSS SIGN SUPPORT FOUNDATION	4 EA	8 EA

The Detailed Estimate Sheets do not reflect these changes.

The Bid Proposal Form has been revised to reflect these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

MAY 28, 2014
FEDERAL AID PROJECT NO.: 0842(195)
STATE PROJECT NO. 151-273

RECONSTRUCTION OF I-84

City of Waterbury
Federal Aid Project No. 0842(195)

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, 2004, as revised by the Supplemental Specifications dated January 2014 (otherwise referred to collectively as "ConnDOT Form 816") is hereby made part of this contract, as modified by the Special Provisions contained herein. . The State of Connecticut Department of Transportation's "Construction Contract Bidding and Award Manual" ("Manual"), May 14, 2010 edition or latest issue, is hereby made part of this contract. If the provisions of this Manual conflict with provisions of other Department documents (not including statutes or regulations), the provisions of the Manual will govern. The Manual is available upon request from the Transportation Manager of Contracts. The Special Provisions relate in particular to the Reconstruction of I-84 in the City of Waterbury.

COMBINED PROJECTS

There will be but one Contract for Federal Aid Project No. 0842(195) (State Project No. 151-273).

CONTRACT TIME AND LIQUIDATED DAMAGES

In order to minimize the hazard, cost and inconvenience to the traveling public, pollution of the environment and the detriment to the business area, it is necessary to limit the time of construction work which interferes with traffic as specified in Article 1.08.04 of the Special Provisions.

There will be four assessments for liquidated damages and they will be addressed in the following manner:

1. For this contract, an assessment per day for liquidated damages, at a rate of Sixteen Thousand ($16,000.00) Dollars per day shall be applied to each calendar day the work runs in excess of the One Thousand Nine Hundred Fifteen (1,915) allowed calendar days after authorization to proceed with NTP-2 to complete Opening I-84,

Ramps and Local Roadways to Traffic in their respective full widths and their final alignments as described in the special provision "Incentive and Liquidated Damages Provisions".

2. For this contract, an assessment per day for liquidated damages, at a rate of Sixteen Thousand Dollars ($16,000.00) per day shall be applied to each calendar day the work runs in excess of the Two Hundred Eighty Five (285) allowed calendar days to complete the EB 23 On-Ramp Construction/Detour work as described in the special provision "Incentive and Liquidated Damages Provisions".

3. For this contract, an assessment per day for liquidated damages, at a rate of Five Thousand Five Hundred Dollars ($5,500.00) per day shall be applied to each calendar day the work runs in excess of the One Thousand Two Hundred Twenty Five (1,225) allowed calendar days to complete the Plank Road East, Scott Road to Harpers Ferry Road work as described in the special provision "Incentive and Liquidated Damages Provisions".

4. For this contract, an assessment per hour for liquidated damages shall be applied to each hour, or any portion thereof, in which the Contractor interferes with normal traffic operations during the restricted hours given in Article 1.08.04 of the Special Provisions. The liquidated damages shall be as shown in the following tables entitled "Liquidated Damages Per Hour" for each hour, or any portion thereof, in which the Contractor interferes with normal traffic operations during the restricted hours.

For the purpose of administering this contract, normal traffic operations are considered interfered with when:

1. Any portion of the travel lanes or shoulders is occupied by any personnel, equipment, materials, or supplies including signs.

2. The transition between the planes of pavement surfaces is at a rate of 25 mm in less than 4.5 m longitudinally.

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LIQUIDATED DAMAGES PER HOUR

Route I-84 Eastbound West of Exit 19 On-Ramp 2 Lane Section	
If Working Periods Extends Into	1 Lane Closure
1st Hour of Restrictive Period	$ 1,500
2nd Hour of Restrictive Period	$ 5000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 10,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a "2" or "E"

For each hour shown on the Limitation of Operations charts designated with an "E", liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Eastbound Exit 19 On-Ramp to Lane Drop East of Exit 23 Off-Ramp 3 Lane Section		
If Working Periods Extends Into	1 Lane Closure	2 Lane Closure
1st Hour of Restrictive Period	$1,500	$ 5,000
2nd Hour of Restrictive Period	$5,000	$ 25,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 10,000	$ 60,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Eastbound Lane Drop East of Exit 23 Off-Ramp to Exit 25A Off-Ramp 2 Lane Section	
If Working Periods Extends Into	1 Lane Closure
1st Hour of Restrictive Period	$ 5,000
2nd Hour of Restrictive Period	$ 15,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 35,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a "2" or "E".

For each hour shown on the Limitation of Operations charts designated with an "E", liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Eastbound Exit 25A Off-Ramp to Exit 27 Off-Ramp 3 Lane Section			
If Working Periods Extends Into	A.M. 1 Lane Closure	A.M. 2 Lane Closure	P.M. 1 Lane Closure
1st Hour of Restrictive Period	$1,500	$ 5,000	$ 1,500
2nd Hour of Restrictive Period	$ 5,000	$ 15,000	$ 5,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 10,000	$ 35,000	$ 10,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Eastbound East of Exit 27 Off-Ramp 3 Lane Section			
If Working Periods Extends Into	A.M. 1 Lane Closure	A.M. 2 Lane Closure	P.M. 1 Lane Closure
1st Hour of Restrictive Period	$ 1,500	$ 5000	$ 1,500
2nd Hour of Restrictive Period	$ 5000	$ 15,000	$ 5000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 10,000	$ 35,000	$ 10,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Westbound East of Route I-691 On-Ramp 3 Lane Section			
If Working Periods Extends Into	A.M. 1 Lane Closure	A.M. 2 Lane Closure	P.M. 1 Lane Closure
1st Hour of Restrictive Period	$ 1,500	$ 15,000	$ 1,500
2nd Hour of Restrictive Period	$ 5,000	$ 70,000	$ 5,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 10,000	$ 100,000	$ 10,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Westbound Route I-691 On-Ramp to Exit 25A Off-Ramp 3 Lane Section			
If Working Periods Extends Into	A.M. 1 Lane Closure	A.M. 2 Lane Closure	P.M. 1 Lane Closure
1st Hour of Restrictive Period	$ 1,500	$ 25,000	$ 1,500
2nd Hour of Restrictive Period	$ 10,000	$ 100,000	$ 5,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 20,000	$ 100,000	$ 10,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”.

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Westbound Exit 25A Off-Ramp to Lane Add West of Exit 23 Off-Ramp 2 Lane Section	
If Working Periods Extends Into	1 Lane Closure
1st Hour of Restrictive Period	$ 80,000
2nd Hour of Restrictive Period	$ 100,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 100,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a "2" or "E".

For each hour shown on the Limitation of Operations charts designated with an "E", liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

LIQUIDATED DAMAGES PER HOUR

Route I-84 Westbound West of the Lane Add located West of Exit 23 Off-Ramp 3 Lane Section		
If Working Periods Extends Into	1 Lane Closure	2 Lane Closure
1st Hour of Restrictive Period	$ 1,500	$ 50,000
2nd Hour of Restrictive Period	$ 10,000	$ 100,000
3rd Hour or any Subsequent Hour of Restrictive Period	$ 60,000	$ 100,000

The above liquidated damages apply to those hours shown on the Limitation of Operations charts designated with a “3” or “E”.

For those hours on the Limitation of Operations charts designated with a "2", the liquidated damages shown above for "1 Lane Closure" shall apply when only one lane is open to traffic.

For each hour shown on the Limitation of Operations charts designated with an “E”, liquidated damages of $500 shall apply for each hour, or part thereof, if all available shoulder widths are not available to traffic.

Liquidated damages in the amount of $500 shall apply for each hour, or part thereof, that the Contractor interferes with existing traffic operations on any ramps or turning roadways during the non-allowable hours.

INCENTIVE AND LIQUIDATED DAMAGES PROVISIONS

Time will be of the essence in completing the stage construction for this project and in opening the new bridges, additional travel lanes and shoulders along I-84, ramps and local roadways. In order to reduce the hazard, cost and inconvenience to the traveling public; the pollution of the environment; and the detriments to local businesses which inevitably result from construction projects such as this, it is necessary that the Contractor complete those portions of I-84 Eastbound and Westbound, ramps and local roadways within Project Limits to their full widths at the earliest date possible. To achieve this, the following plan has been established and made a part of the Contract.

The "Incentive Completion Date(s)" are the earliest possible dates that the Department desires to complete the specified Contract Construction Stage elements. The "Allowable Completion Date(s)" are the latest dates that the Contractor will receive incentive payments from the Department to complete the specified Contract Construction Stage elements. Completion prior to the "Incentive Completion Date(s)" will result in a Lump Sum Incentive Payment equal to the Maximum Incentive Payment Amount.

Should the Contractor complete the specified Contract Construction Stage elements after the "Incentive Completion Date(s)" and on or before the "Allowable Completion Date(s)" the total payment shall be as defined below.

> Lump Sum Incentive Payment = Incentive Bonus Payment Amount + ((Incentive Daily Payment Amount) x (number of days the Contract Construction Stage elements are complete before the "Allowable Completion Date"))

Should the Contractor fail to complete the specified Contract Construction Stage elements by the "Allowable Completion Date(s)" no Incentive Bonus Payment will be made and Liquidated Damages will be assessed for each day after the "Allowable Completion Date(s)" to complete the specified Contract Construction Stage elements. ..

> Total Liquidated Damages = Liquidated Damages Daily Amount x (number of days after the "Allowable Completion Date" to complete the Contract Construction Stage elements)

The Contractor shall complete all Contract work and be prepared to open the subject travel ways to traffic at their required widths, with travel lanes and shoulders before the corresponding dates and times. The Incentive and Liquidated Damages payments will be applied as described below. The total combined incentive payment(s) made by the Department to the Contractor under this Contract, if any are due, shall not exceed $6,450,000 for the Project. The total amount of liquidated damages that may be assessed and taken by the Department under this Contract shall not be limited.

Incentive Payment Terms and Conditions

Description of the Work	
Opening I-84, Ramps and Local Roadways to Traffic in their respective full widths and their final alignments: Complete all Contract Construction elements required to open the following roadways to traffic full width with their final number of lanes in their final alignment: I-84 EB, I-84 WB, all on and off ramps within project limits, Hamilton Avenue, Harper's Ferry Road, Scott Road, East Main Street, Reidville Drive, Plank Road and Plank Road East. Elements to be completed and operational include but are not limited to bituminous concrete to its final course, permanent pavement markings, permanent drainage systems; permanent illumination; permanent sign structures and signing; permanent Incident Management System, permanent signalization, all traffic control devices; permanent precast concrete barrier curb, metal beam rail and three-cable guide rail, permanent noise barrier walls and all other items incidental thereto.	
Allowable Completion Date 1915 Calendar Days after authorization to proceed with NTP 2	**Incentive Bonus Payment Amount** $0.00
Incentive Daily Payment Amount $13,595.00	**Maximum Incentive Payment Amount** $4,500,000.00 (331 days @ $13,595.00)
Incentive Completion Date 1584 Calendar Days after authorization to proceed with NTP 2	**Liquidated Damages Daily Amount** $16,000.00

Description of the Work
EB 23 On-Ramp Construction/Detour: The existing EB 23 On-Ramp will be closed in Stage 2 and existing ramp traffic will be detoured to the EB 25 On-Ramp at Scott Road via Hamilton Avenue, Harpers Ferry Road and relocated Reidville Drive. The major project elements that must be completed before the new EB 23 On-Ramp can be constructed and operational are listed below: • Reidville Drive westerly relocated segment (Stage 1) • Hamilton Avenue bridge (Structure 04321) and approaches (Stages 1 and 2) • I-84 westerly bridge over the Mad River (Structure 01224) and the eastbound and westbound roadway approaches – southerly portion (Stage 1) • I-84 EB and WB Crossover Roadways east and west of Structure 01224 (Stage 1) • EB 25 Off-Ramp to Harpers Ferry Road permanent configuration (Stage 2) • EB 23 On-Ramp-Structure 06590, Retaining Walls 102 and 103 and the embankment supported ramp structure (Stage 2)

The closure/reopening of the EB 23 On-Ramp must be limited to the minimum time possible with a **"Maximum"** duration of two hundred eighty-five (285) days but, with an **"Optimum"** duration of two hundred twenty-five (225) days measured from the initial ramp closure to the reopening of the ramp.

The Contractor shall receive an incentive bonus for each day that the work is completed for a maximum of sixty (60) days prior to the **"Maximum"** duration day limitation and will be assessed liquidated damages for each day in excess of the **"Maximum"** duration of two hundred eighty-five (285) days as presented below:

Allowable Completion Date 285 Calendar Days after EB23 On Ramp Closure	**Incentive Bonus Payment Amount** $0.00
Incentive Daily Payment Amount $16,000.00	**Maximum Incentive Payment Amount** $960,000.00 (60 days @ $16,000.00)
Incentive Completion Date 225 Calendar Days after EB23 On Ramp Closure	**Liquidated Damages Daily Amount** $16,000.00

Description of the Work

Plank Road East, Scott Road to Harpers Ferry Road: Existing Plank Road East including the existing WB 24 On-Ramp at the westerly terminus of Plank Road East will remain open throughout the timeframe allotted for the realignment/reconstruction of the existing roadway in Stages 1 thru 5. The construction of the westerly extension to Harpers Ferry Road will be constructed in segments in Stages 1, 4 and 5 since a third of the extended roadway occupies the area of the existing I-84 to be removed. Upon completion, Plank Road East will serve as a two-way frontage road, linking Scott Road to Harpers Ferry Road on the north side of the I-84 WB Roadway.

The major Project elements that must be completed before Plank Road East can function as a two-way frontage road are listed below:

- Plank Road East, east of the Extension (Stages 1 thru 5) and a segment of the Extension abutting the Calvary Cemetery (Stage 1)
- I-84 relocated segment (Stages 1 thru 3)
- Culvert 01227 northerly crossing of the Plank Road East extension
- Plank Road East Extension west of the Calvary Cemetery (Stages 4 and 5)

The construction/opening of Plank Road East, inclusive of the Extension, must be limited to the minimum time possible with a **"Maximum"** duration of 1,225 days, but with an **"Optimum"** duration of 1,045 days measured from the time existing I-84 is removed to the opening of the entire length of roadway from Scott Road to Harpers Ferry Road.

The Contractor shall receive an incentive bonus for each day that the work is completed for a maximum of 180 days prior to the "**Maximum"** duration day limitation and will be assessed liquidated damages for each day beyond the **"Maximum"** duration of 1,225 days as presented below:

Allowable Completion Date 1,225 Calendar Days from the time existing I-84 is removed	**Incentive Bonus Payment Amount** $0.00
Incentive Daily Payment Amount $5,500.00	**Maximum Incentive Payment Amount** $990,000.00 (180 days @ $5,500.00)
Incentive Completion Date 1,045 Calendar Days from the time existing I-84 is removed	**Liquidated Damages Daily Amount** $5,500.00

The Department shall pay to the Contractor a Lump Sum Incentive Payment under Item No. 0108100, as set forth in the Incentive and Liquidated Damages Table by which the actual completion date of the pertinent work meets or precedes the "Allowable Completion Date." The Engineer shall determine said Date and the amount of any appropriate payment(s) to be made in this regard, subject to the conditions set forth hereinabove. For purposes of calculation and determination of entitlement to incentive payments hereunder, the Allowable Completion Date will be established prior to bid solicitation for the Contract, and said Date will not be adjusted thereafter for any reasons, cause or circumstance, regardless of fault on the part of any party, except in the instance of a catastrophic event (i.e., Acts of God including fire, flood, earthquake, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike or lockout.

The Department and the Contractor and other parties involved in the Project must anticipate that Project delays may occur and may arise from any one of various kinds of events and circumstances prior to or during the Contract period, including, but not limited to, the deletion of Contract work, the issuing of construction orders, the relocation of utilities, the execution of supplemental agreements, the discovery of differing site conditions, the adding of extra work to the Contract, the emergence of right-of-way conflicts, problems with the obtaining or the terms of permits, action or inaction by persons or entities working on the project or by third parties, delays in the process of reviewing or approving shop drawings, expansion of the physical limits of the Project, the effects of weather conditions on Project activities, the occurrence of weekends or holidays, the suspension of any Project operation, or other events, forces or factors that affect highway construction work. Such events, forces or factors, and the Project delays, disruptions, inefficiencies or any other detrimental effects caused by them, are to be deemed to have been anticipated and contemplated by the parties in entering into this Contract, and shall not extend or constitute cause for extending any Allowable Completion Date for the purpose of determining whether or not any incentive payment is due to the Contractor, or of calculating the amount of any incentive payment due to the Contractor.

Further, any and all costs or detrimental effects incurred by the Contractor in accelerating its work in an attempt to meet the Allowable Completion Date or to increase the amount of

incentive payments that may be due to the Contractor, regardless of the effects of any delay, disruption, inefficiency or other detrimental effect of the kinds of events, forces or factors referred to above, shall be solely the Contractor's responsibility, and may not be used as the basis for any claim by the Contractor for additional compensation. The Contractor's sole means, if any, for recovering such acceleration costs from the State shall be the incentive payment(s) that will be due to it if it completes the pertinent work prior to the relevant Allowable Completion Date.

If a catastrophic event (as defined above) substantially delays or disrupts a portion of the Contract work described in the Incentive and Liquidated Damages Table, and if said effects and their claimed extent are supported by the Contractor's Critical Path Schedule, the Contractor and the Department shall agree on the number of calendar days by which to extend the pertinent Allowable Completion Date(s), and the adjusted Date(s) will be used in calculating any related incentive payment(s). If the Contractor and the Department cannot agree on the appropriate adjustment of the pertinent Date(s), the Department will adjust the Date(s) in accordance with the period of delay that the Department reasonably deems to have been caused solely by the catastrophic event. The Contractor shall have no right whatsoever to contest such determination, save and except in the event that the Contractor establishes that the number of calendar days of delay recognized by the Department in this context was arbitrary and without any reasonable basis.

A Waiver of Claim (WOC) executed between the Contractor and the Department will be issued to establish the extended pertinent Allowable Completion Date(s). The WOC will be incorporated into the Contract by Construction Order. If the Contractor elects to take advantage of the incentive payment provisions, and if any portion of said provisions should conflict with any other provision of the Contract, the Contract shall be interpreted in accordance with these incentive payment provisions:

(1) If the Contractor wishes to take advantage of the incentive payment provisions, the Contractor must actually complete the pertinent work and obtain written verification of the actual completion date from the Engineer on or before the pertinent Allowable Completion Date.

(2) Within 30 days of receiving such verification of its actual completion date, the Contractor must write to the District Engineer of the Department Construction District administering the Project, notifying the District Engineer that the Contractor elects to receive payment(s) under said provisions. A copy of the Engineer's verification of the pertinent actual completion date(s) must be enclosed with the notice to the District Engineer. In said written notice, the Contractor, in the following language, shall:

> "waive and release the State from any and all claims, causes of action, issues, demands, disputes, matters or controversies of any nature or kind, known or unknown, present or potential, which the Contractor, its employees, agents or successors may have, may have had or ever may have against the Department, its officials, employees, consultants, or its other agents or representatives, in connection with the Contract or the Project, including, but not limited to, claims regarding Project work performed or deleted, construction orders, supplemental agreements, delays, disruptions, differing site conditions, utility conflicts, design changes or defects, time extensions, extra work, right-of-way issues, permitting

issues, actions of suppliers or subcontractors or other contractors or third parties, shop drawing review or rejection, expansion of the physical Project limits, weather conditions, weekend or holiday cessation of Project activities, restrictions of working hours, suspensions of the Contractor's operations, extended or unabsorbed home office or jobsite overhead, lost profits, markups on subcontractor work, acceleration costs, and any other direct or indirect costs, and any other adverse impacts, events, conditions or circumstances or potential damages, relating to or arising out of the Contract or the Project. This waiver and release and acknowledgement of satisfaction shall be all-inclusive and absolute, except for any routine adjustment by the Department of final quantity estimates."

If the Contractor does not, (1) prior to the Allowable Completion Date, complete the pertinent Contract work and obtain written verification from the Engineer of the actual completion date of said work, or (2) within 30 days of said written verification, give the required written notice to the District Engineer of its election to receive incentive payment under the Contract, then the Contractor shall have no right to any payment under these incentive payment provisions.

Without regard to any verification by the Engineer that pertinent Contract work has been completed, and without regard to whether or not any incentive has been elected or earned under these provisions, the Contractor shall remain responsible for all such work and the continued maintenance thereof until such date as the Department formally accepts all work under the Contract in accordance with Section 1.08.14 of these Specifications.

Liquidated Damages Terms and Conditions

Whether or not the Contractor elects to take advantage of these incentive payment provisions, these liquidated damage provisions shall apply to all circumstances in which the Engineer does not verify in writing that the pertinent Contract work has been completed by the "Allowable Completion Date" listed in the Incentive and Liquidated Damages Table.

If the Contractor does not complete the pertinent work on or before the applicable Incentive Completion Date but completes the work prior to the Allowable Completion date, the Contractor will be due a reduced incentive amount which will be computed in accordance with the aforementioned formula. The "Liquidated Damages Daily Amount" and "Allowable Completion Date" for each Contract Milestone listed in the Incentive and Liquidated Damages Table is the same Contract Milestone, liquidated damage and calendar date indicated in the special provision "Contract Time and Liquidated Damages".

ITEM #0651649A – CURED IN-PLACE PIPE LINING

Description:

Work under this item shall consist of furnishing all labor, transportation, equipment, appliances and materials, and perform all operations in connection with the installation of cured-in-place lining to rehabilitate existing corrugated metal pipe storm sewers as specified herein and shown on the drawings. This work also includes television inspection and handling of storm flow by-pass before, during, and after the cured-in-place liner installation.

Materials:

A. Quality Assurance: The cured-in-place pipe lining and installation used on the project may be a patented operation and must be installed by a Contractor licensed by the patent holder. The Contractor shall indemnify the State from claims of patent infringement and any loss that may result therefrom.

B. Materials and installation shall be in accordance with ASTM Designation F 1216-93 "Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube".

C. Properties of the liner components shall meet or exceed the requirements of the latest edition of ASTM F 1216 and those listed below:

D. Liner Component Properties:

1. Tubing: Fiber fabric of at least five denier to retain resin, with sufficient needling and cross-lapping to yield a minimum burst strength of 7 Mpa in transverse direction (hoop stress), free from tears, holes, cuts, foreign material and other defects.

2. Liner Coating: Polyurethane, polyethylene, polyvinyl chloride, or nylon bonded to the layer of the fiber fabric at 400 grams/square meter forming a nominal 0.254 mm pinhole-free coating laying.

3. Resin: Either polyester or epoxy, depending on application, with sufficient thixotropic properties to obtain no-draining characteristics when impregnated into the fiber fabric tubing that is compatible with the installation process.

4. Catalyst: Compatible with the resin and other materials used in the manufacture of the liner. The non-promoted resin shall be catalyzed by the addition of sufficient catalyst to produce the required physical properties of the cured pipe.

E. Finished and Cured Liner Properties:

1. The finished lining shall fit tightly and neatly against the existing inside pipe wall.

F. Samples:

1. Samples of material identical to the raw material to be used in the project shall be provided. In addition, specimens shall be prepared utilizing identical materials, curing, and technique that will be accepted as representative of the actual installed liner.

2. Following the curing of the installed liner, samples of the cured liner removed during the trimming shall be made available and certified test reports and materials certificates will be provided to the State in accordance with Section 1.06.07 of the Standard Specifications as ordered by the Engineer.

G. Liner Design and Selection:

1. It is the intent of this pipe liner installation to improve the structural integrity in the existing storm sewer through a reduction in the internal pipe diameter.

2. The liner shall be designed by the manufacturer to be structurally self-supporting and shall not rely on the structural strength of the existing storm sewer pipe. The liner shall be designed to support all dead and live loadings and any external hydrostatic pressure transferred to the new liner. MS-18 live loads shall be used for storm sewers under roadways.

3. The Contractor shall carefully inspect the condition of the existing pipe prior to manufacture of the pipe liner to verify the size, length, thickness, and material composition of the line, and to warrant its suitability for the particular application and existing conditions found. Shop drawings and calculations for design of the pipe and pipe thickness shall be submitted to the Engineer for review.

Construction Methods:

A. Submittals:

1. Submit documentation of the Contractor's experience.

2. Furnish samples and Independent Testing Laboratory Certification that the liner material(s) are in compliance with the requirements contained herein.

3. Submit shop drawings which include details of all component materials and construction including complete manufacturer's recommendations for storage

procedures and temperature control, handling and inserting the liner, curing details, service reconnection methods, and trimming and finishing. The submittal shall also include liner size and wall thickness, shop drawings and calculations for the design of the liner, insertion locations, wet-up requirements at each insertion location including all equipment, trucks, and material layouts, maintenance and protection of traffic requirements, and proposed storm sewer flow controls.

B. Delivery, Storage and Handling:

1. Packing and Shipping: Exercise extreme care during transportation, handling, storing, and installation to ensure that liner material is not torn, cut, or otherwise damaged.

2. Acceptance at Site: If any part or parts of the liner material becomes torn, cut or otherwise damaged before or during installation, it shall be repaired or replaced before proceeding further, at no additional cost to the State.

3. Storage and Protection: Store and protect materials in accordance with manufacturer's recommendations.

C. Examination:

The storm sewers to be lined shall be inspected via television immediately before installation of the liner to verify that conditions are acceptable for the liner installation to proceed and to confirm the design conditions of the liner. In the event of a discrepancy, the Engineer should be immediately notified.

D. Preparation:

1. Storm Flow Bypass: Bypass storm flows around the storm sewer sections to be lines.

2. Storm Sewer Cleaning: The storm sewer shall be satisfactorily cleaned in accordance with Section 6.53 of the Standard Specifications.

3. Line Obstructions: If inspection reveals an obstruction that cannot be removed by conventional cleaning equipment, in accordance with Section 6.53 of the Standard Specifications, or that grouting may be required prior to installation of the liner to completely stop infiltration through joints and defects in lieu of progressive rounding, the Engineer shall be immediately notified.

E. Liner Storage, Handling and Preparation:

The location where the resins and liner material will be stored shall be designated by the Contractor subject to approval by the Engineer. The Engineer will inspect and reject any materials found defective or otherwise unsatisfactory. The "wet out" procedure shall

utilize the resin and catalyst in sufficient quantities to ensure complete impregnation of the liner and provide the properties specified in the Finished and Cured Liner Properties Sections.

F. Liner Installation:

1. The Contractor's operations to furnish and install the lining shall be in strict conformance with the component material and liner manufacturer's recommendations.

2. The Contractor shall insert the liner into the pipe in accordance with the shop drawings. Precautions shall be taken not to damage the liner during installation.

3. Insertion of Uncured Lining: Insertion shall be through an existing storm sewer structure. Insertion shall depend on the method selected. The internal pressure shall be sufficient to overcome external pressures exerted on the liner at service connections, joints, and open sections, and to hold the tube tightly to pipe wall, producing concave "dimples" at side connections. The Contractor shall ensure that the internal pressure will not damage the existing pipe.

4. Curing and Inserted Liner: After insertion is completed, the Contractor shall cure the liner using an approved heat source. The equipment shall be capable of delivering heat throughout the liner per the manufacturer's recommendations, and shall uniformly raise and hold the temperature as required to completely cure the resin.

The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing heat supply.

The operation of the heat exchange and the recirculation of the heated medium shall be maintained continuously throughout the cure period. Cure shall be completed when the exposed portions of the liner are hard and sound and the remote temperature sensor indicates that an exotherm has occurred. Particular care shall be exercised during the curing operation to ensure that the liner is not overstressed.

5. Cool-Down of the Cured Lining: The hardened liner shall be cooled to the recommended temperature before relieving the static head pressure. Care shall be taken in the release of the static head so that surges will not develop and damage the newly installed liner.

G. Acceptance Testing:

The Contractor shall complete a post-installation television inspection immediately following completion of the work, and provide the State with a video tape showing the completed work.

H. Sealing at Storm Sewer Structures:

If the liner fails to make a tight seal at structures, the Contractor shall apply a seal at the point. The seal shall be of a resin mixture compatible with the liner.

I. Manufacturer's Field Service:

Manufacturer's qualified personnel shall provide full-time supervision of the entire lining process.

J. Warranty:

The Contractor shall warrant and shall obtain from the manufacturer and installer its warranty that the cured-in-place liner will be free from defects in materials and workmanship for a period of one (1) year from the date of substantial completion. Said manufacturer's warranty shall be in a form acceptable to and for the benefit of the State and shall be submitted as a condition of final payment. Any work found to be defective within the said warranty period shall be repaired, or replaced at the sole option of and at no cost to the State. Such repair or replacement shall include the cost of removal and reinstallation.

Method of Measurement:

This work will be measured for payment by the number of liner meters of storm pipe installed with cured-in-place lining, completed and accepted in place.

Culverts cleaned will be measured for payment by the actual number of linear meters of culvert cleaned.

Basis for Payment:

This work will be paid at the contract unit price per linear meter for "Cured-in-Place Pipe Lining", complete in place, which price shall include all installation of lining, television inspection, handling of storm flow bypass, disposal of excess cured lining, sealing, structures, additional grouting required for installation of liner and material, equipment, tools, labor and work incidental thereto.

Storm sewer cleaning shall be paid for at the contract unit price per linear foot for "Clean Existing Culvert – 300 mm to 1050 mm Diameter" in accordance with Section 6.53 of the Standard Specifications.

ITEM #1008015A - 50 MM RIGID METAL CONDUIT – SURFACE

ITEM #1008017A - 75 MM RIGID METAL CONDUIT – SURFACE

ITEM #1008112A – 25 MM RIGID METAL CONDUIT – IN TRENCH

ITEM #1008115A - 50 MM RIGID METAL CONDUIT - IN TRENCH

ITEM #1008117A - 75 MM RIGID METAL CONDUIT - IN TRENCH

ITEM #1008215A - 50 MM RIGID METAL CONDUIT – UNDER ROADWAY

ITEM #1008720A - 100 MM RIGID METAL MULTI DUCT CONDUIT – UNDER ROADWAY

ITEM #1008791A – 100 MM PVC MULTIDUCT CONDUIT – IN MEDIAN

DESCRIPTION:

The mainline conduit shall be a 4" (100 mm) multiduct conduit system designed and engineered for direct burial and protection of optical fiber cable. The multiduct concept shall maximize duct usage by compartmentalization of cables for current requirements and for future expansion.

For the 100 mm PVC conduit, the Contractor shall be required to install the conduit **simultaneously** with the pullboxes to insure that the conduit innerduct on each side of the pullbox is at exactly a 90-degree angle to the side of the pullbox. For Rigid Metal Conduit under Roadway, the Contractor shall be required to install the conduit simultaneously with the installation of the pullboxes. For Rigid Metal Conduit under Roadway, the Contractor shall be required to install a minimum of 10 feet (3.0 meters) of Flexible Conduit on each side of the pullbox to insure that the innerduct enters the pullbox at exactly a 90 degree angle to the side of the pullbox. **The cost of the Flexible Metal Conduit shall be included in the cost of the appropriate conduit item; it shall not be paid for separately. The required installation is shown on the IMS details. The required length of Flexible Metal Conduit on each side of a structure shall be as shown on the appropriate detail.**

The mainline conduit shall contain four (4) factory installed 1.25" (30 mm) PVC inner-ducts within a 4" (100 mm) outer-duct. Conduit under road, and as noted on the plans, shall be Rigid Metal. Conduit in trench and in the median, and as noted on the plans, shall be 4" (100 mm) Polyvinyl Chloride.

The 2" (50 mm) RMC conduit shall be used for mainline optical fiber cable, branches off the mainline conduit, telephone service and electrical service as indicated on the plans. The 2" (50 mm) RMC – Surface used as risers on utility poles shall include an entrance fitting

(weatherhead) at the top termination of the conduit run as indicated on the plans. The 3" (75 mm) conduit shall be used for utility service for CCTV cameras and variable message signs as indicated on the plans.

As part of this item, the Contractor will be required to test the integrity of the conduit with a poly-line and to install a pull tape in each and separate innerduct as required in the specification.

Work under the above items shall conform to Public Utility Commission Rules and Regulations, where applicable, and to Section 10.08 of the standard specifications, supplemented and amended as follows:

MATERIALS:

A. General:

The multi-cell conduit system shall be a pre-assembled conduit manufactured from a 4" (100 mm) round outerduct containing four (4) factory installed innerducts. The innerducts shall be held together in a square configuration by a system of spacers, bands, or other mechanism. The coupling system shall be resistant to water infiltration, air loss during cable installation, and shall be capable of locking the system tightly together to not allow free twisting of the innerducts.

The conduit shall be free from defects including non-circularity and foreign inclusions. It shall be nominally uniform (as commercially practical) in color, density, and physical properties. It shall be straight and the ends shall be cut square to the inside diameter. Polyvinyl Chloride (PVC) conduit shall be Type 40 grade conforming to Section M.15.09 of the standard specifications. Rigid Metal Conduit shall be galvanized steel also conforming to Section M.15.09 of the standard specifications. The PVC conduit shall include a grounding wire conforming to Article M.15.13 of the standard specifications. PVC conduit and fittings shall be supplied with an ultraviolet inhibitor.

B. PVC Outerduct:

The complete PVC Type 40 Multi-cell conduit system shall be UL Listed, designed and engineered for direct burial or encased underground applications. Protective outer-duct shall be 4" (100 mm) PVC Type 40 with extended 6" (150 mm) integral bell end and have a lay length of 20 feet (6.1 m). The outer-duct shall have a longitudinal running print line to assure proper innerduct orientation and alignment. This line shall consist of the following wording: "INSTALL THIS SIDE UP – Connecticut D.O.T. Cable – For Assistance Call 860-594-3447". The outer-duct shall be marked with data traceable to plant location, date, shift, and machine of manufacture.

The outer-duct shall have a circumferential ring on the spigot end of the ducts so as to provide a reference point for ensuring the proper insertion depth when connecting conduit ends. Both ends of the conduit shall be capped to protect inner-duct during shipment and job site storage.

The PVC conduit system to be utilized shall be a complete system and the Contractor shall provide the following fittings:

- Coupling Kits
- Terminator Kits
- Lubrication Fittings
- Repair Kits
- Installation Accessories

A complete line of fittings, adapters, and elbows shall be available and shall be manufactured from the same materials and manufacturing process as the conduit. The multi-cell conduit shall be joined by use of a coupling system that effectively seals the outerducts and innerducts but allows for expansion or contraction in the system. A silicone non-petroleum base lubricant may be used for assembly of the multi-cell conduit.

All conduit entering and exiting conduit termination points shall have a terminator installed that is made of PVC with an anti-reversing gasket that prevents ingress of water and debris into the outer conduit and the innerduct.

C. Couplings:

The PVC coupling body shall allow for transitions from PVC conduit to RMC conduit to Flexible Sweeps and any combination thereof. The coupling body shall have a factory assembled, multi-stage gasket that is anti-reversing for sealing both the outer and inner-duct. A secondary, mid-body gasket shall be seated at the shoulder of the bell to assure 100psi (690 kPa) air pressure (in accordance with Bellcore GR-2884 Issue 1) and watertight integrity with minimum joint infiltration of 6 psi (41 kPa). This will allow for the use of Air-Jet technology to be used in the placing of cables. The PVC conduit system shall be designed so that both straight sections and fittings will assemble without the need for cement or glue.

The coupling body shall be designed so that when the conduit is joined, the outer walls of the innerducts and the inner walls of the outerduct shall be sealed, providing an airtight seal from within the innerduct system and a watertight seal from the outside of the outerduct. The coupling body shall be tested for water tightness and air-tightness in accordance with Bellcore GR-2884-CORE Issue 1, July 1995 (R3-41 for water-tightness and R3-43 for air-tightness). The coupling body shall conform to the following requirements:

Watertightness: 6 psi (41 kPa) minimum
Air Tightness: no significant leakage at 100 psi (690 kPa)

The system shall be designed so that expansion and contraction of the inner-duct shall take place in the coupling body, and the fittings shall allow going from steel to PVC without compromising air/water tightness, or pulling capabilities. The coupling body shall be factory assembled in the

bell end of the outer duct and shall be manufactured from high impact engineered thermoplastic. The coupling body face shall be supplied with lead-ins to facilitate assembly. The coupling body shall have each conduit entrance identified with a raised number and the white inner duct locator conduit entrance shall have raised ribs that can be felt through a glove.

The PVC system shall be designed so that the assembly of components can be accomplished by inserting the spigot end into the male bell end to the marked insertion depth. (The insertion depth is marked on the spigot end)

D. Sweeps:

The PVC conduit system shall offer a complete line of fixed and flexible sweep-bends with system compatible bell and spigot ends. The PVC conduit system shall offer and the Contractor shall utilize the following standard fixed sweep-bends:

Radius	**Bend**	**System**
4 ft & 3 ft. (1200mm & 900mm)	11.25°, 22.5°, 45°, 90°	4-way

Note: Direction changes shall not exceed 90 degrees.

The flexible sweep-bend shall be supplied in two lengths to meet field requirements. They shall have a PVC outer jacket and be acceptable for exposed and direct burial installation. The inner-duct shall extend 6" out of the spigot end of the flexible elbow. Once the elbow is bent to the proper angle, the innerducts shall be trimmed to the proper length for insertion to the bell end. PVC inner ducts shall not be allowed in bend and sweeps.

Length Feet (Meters)	**Radius** Feet (Meters)	**Bend** degrees (°)	**System**
10 (3.2)	4 (1.2) min	0-90	4-way
10 (3.2)	6 (1.8)	0-70	4-way
10 (3.2)	9 (2.7)	0-55	4-way
16 (4.9)	4 (1.2) min	0-90	4-way
16 (4.9)	6 (1.8)	0-70	4-way
16 (4.9)	9 (2.7)	0-55	4-way

All bends, including flexible sweeps, shall have a minimum radius of 3 ft. (900 mm). The inner-duct system shall be solvent welded to the coupling body; supported by a moveable spacer every 4 ft. (1.32 m). The bends shall not violate the minimum bending radius of the fiber optic cable.

All bends shall have nylon inner ducts, or approved equivalent, installed to prevent burn-through in accordance with test procedure outlined in Bellcore GR-2884 Issue 1 Section R3-35 and R3-36.

E. Innerduct:

The inner-duct in straight lengths shall be manufactured from PVC or high density polyethylene (HDPE). Innerducts shall be factory treated with atomized silicone or manufactured in a manner to reduce friction during pulling of fiber optic cable.

Innerduct to be used in bends and sweeps shall have a minimum burn through time of 90 minutes when tested in accordance with Bellcore GR-2884 Issue 1 Section R3-35, and R3-36.
PVC inner ducts shall not be allowed in bends and sweeps.

The innerducts shall have a permanent dry lubricant extruded within the inner wall and shall incorporate longitudinal ribs within the inner wall. The innerducts shall have a nominal size of 1.25" (30 mm) and shall consist of 4 unique colors: white, red, orange, and yellow. Innerduct colors shall be oriented in a clockwise direction as specified above, looking at the spigot end of the multi-cell conduit system. The white innerduct shall be located directly under the print line on the outerduct.

Each inner-duct shall be sealed with an expanding Neoprene Plug that withstands 22 psi (150 kPa) and seals the inner-duct from water and debris infiltration, and a provision for tying off a pull line.

F. Steel Outerduct:

All components of the conduit system shall meet or exceed the following specifications and standards:

1. ASTM A 36. Standard Specification for Structural Steel.
2. ASTM A 53. Standard Specification for Steel Pipe.
3. ASTM A 570 Standard specification for Steel.
4. ASTM A 479 Standard Specification For Stainless Steel.

In addition, the steel outer duct shall conform to the following industry standards:
NEC Article 346
ANSI C80.1
U.L. 6

The conduit system shall be a complete system with all the following fittings:

Manhole Terminator Kits
Deflection Fittings

Offset Fittings
Expansion/Contraction Fittings
Lubrication Fittings
Repair Kits
Installation Accessories
Steel to PVC Sched. 40
Steel PVC-Coated Flexible Elbows
Stand Off Fittings
Entrance Fittings

Galvanized outer-duct shall be hot dipped galvanized inside and out; conduit shall be smooth and free from burrs and coated with rust inhibitor.

Rigid steel shall be supplied in 10 foot (3-meter) lengths with a length tolerance of +/- ½ " (10mm) and shall be Schedule 40 minimum. Conduit shall be supplied with thread protectors.

Each section of steel conduit shall be supplied with one reversing spin coupling that allows straight sections and fittings to be joined without spinning the conduit. The reversing coupling shall be galvanized and have three set screws to lock the coupling in place.

The Steel Outerduct system shall be designed so that the assembly of components can be accomplished in the following steps:

a. Loosen set screws on coupling spin back to allow for insertion
b. Insert male into female and spin coupling forward to bottom
c. Once the spin coupling is installed, there shall be no threads visible on the 4" (100 mm) steel conduits.
d. Tighten set screws

The Steel conduit system shall offer a complete line of fixed and flexible sweep-bends with system compatible bell and spigot ends. The Steel conduit system shall offer and the Contractor shall utilize the following standard fixed sweep-bends:

Radius	Bend	System
4 ft & 3 ft. (1200mm & 900mm)	11.25°, 22.5°, 45°, 90°	4-way

Note: Direction changes shall not exceed 90 degrees.

The flexible sweep-bend shall be supplied in two lengths to meet field requirements. They shall have a steel core with a PVC outer jacket and be UL Listed for exposed and direct burial installation. The inner-duct shall always remain flush to the end of the flexible elbow, even when bending. PVC inner ducts shall not be allowed in bend and sweeps.

Length Feet (Meters)	**Radius** Feet (Meters)	**Bend** degrees (°)	**System**
10 (3.2)	4 (1.2) min	0-90	4-way
10 (3.2)	6 (1.8)	0-70	4-way
10 (3.2)	9 (2.7)	0-55	4-way
16 (4.9)	4 (1.2) min	0-90	4-way
16 (4.9)	6 (1.8)	0-70	4-way
16 (4.9)	9 (2.7)	0-55	4-way

All bends, including flexible sweeps, shall have a minimum radius of 3 ft. (900 mm). The inner-duct system shall be solvent welded to the coupling body; supported by a moveable spacer every 4 ft. (1.32 m). The bends shall not violate the minimum bending radius of the fiber optic cable.

All bends shall have nylon inner ducts, or approved equivalent, installed to prevent burn-through in accordance with test procedure outlined in GR-2884 Issue 1 Section R3-35 and R3-36.
.

The following performance requirements shall be met:

Yield	30,000 psi (200 MPa)
Tensile	50,000 psi (345 MPa)
Hardness	Rockwell “B” 55-65

All conduit entering and exiting conduit terminal points shall have a terminator installed that is made of PVC with an anti-reversing gasket that prevents ingress of water and debris into the outer conduit and inner-duct.

The rigid steel conduit system shall offer expansion/contraction fittings with system compatible threads and reversing couplings. The inner-duct of the expansion/contraction fittings shall also be system compatible. The capacity of the fitting shall be 8” (200 mm) total stroke with 4” (100 mm) expansion and 4” (100mm) contraction capacities.

G. Conduit Testing:

The poly-line installed to verify the integrity of the conduit system shall be ¼” (6 mm) polypropylene.

The pull tape shall consist of polyethylene or PVC jacket woven into the polyester tape. The pull tape shall be NEPTCO Part No. WP1250P, or approved equal, for cable sizes of less than 97 fibers. NEPTCO Part No. WP1800P, or approved equal, shall be used for cable size of 97-288 fibers.

The pull tape shall have the following properties:

- 1250 lb tensile strength
- flat, not round, construction
- printed foot markings
- pre-lubricated for reduced pulling tension at start of cable pull
- low susceptibility to absorption of moisture; moisture resistant

Underground utility marking tape shall have a minimum tensile strength of 78 lbf (350 N) and a minimum elongation of 700 percent before breakage. The tape shall not delaminate nor smear when wet and shall be resistant to insects. The tape shall not degrade when exposed to alkalis, acids or other corrosive elements found in soil.

Pressure treated wood for Identification Posts shall conform to Article M.12.13 of the Standard Specifications. Signs on Identification Posts shall conform to Article M.18.13 of the Standard Specifications.

H. Bedding Material:

Bedding material for all conduit shall be No. 100 fine aggregate as defined in Section M.03 of the standard specifications and backfill for the pits shall be pervious structure backfill conforming to Article 2.16.02.

CONSTRUCTION METHODS:

A. General:

Construction methods shall conform to Article 10.08.03 of the Standard Specifications and to the manufacturer's instructions.

The Contractor shall layout the trench for the conduit in conjunction with the installation of pullboxes, vaults, or manholes. When installing the conduit, the Contractor shall be aware of the location of the proposed conduit terminal point when they are at a sufficient distance from the terminal point to allow for adjustment of the trench so that the conduit will line up flush with the applicable entry point. Flexible conduit will not be used indiscriminately or in the median.

A silicon, non-petroleum based lubricant on the coupling body may be used to facilitate installation.

PVC conduits entering conduit terminal points shall terminate flush with the inside wall. The inner-duct shall extend 6” (150 mm) from the inside face.

Galvanized rigid steel conduit shall extend 2” (50 mm) into the manhole/vault/pull box/handhole for installation of grounded end bushings.

Conduits and inner-duct entering conduit terminal points or where terminated in trench, shall be capped or sealed to prevent ingress of water and debris into the conduit. Conduits containing inner-duct shall be plugged using a quadplex expansion plug inside the conduit around the inner-duct. Inner-duct containing one cable shall be plugged using an expandable cable seal off. Conduits terminating in a trench shall be clearly marked and flagged, both in trench and above trench for future locating.

At each conduit terminal point, a PVC coupling body with anti-reversing gasket that seals between the conduit and inner-duct shall be used as follows:

In places where the field installed inner-duct enters and exits existing conduit, the space between the conduit and the inner-duct, as well as the space between the inner-duct and the cable shall be sealed by means of a split internal expansion plug. Bushing sleeves shall be equipped to suit varying cable sizes. Sealing capacity shall withstand 22 psi (150 kPa).

All inner-duct shall be sealed by means of a polypropylene duct plug equipped with a neoprene or polyurethane gasket. Plugs shall be equipped with an attachment to secure the pull rope in the inner-duct.

When PVC cannot be installed at the required depth, such as where ledge or rock is encountered, the Contractor shall install Rigid Metal conduit at the maximum depth possible. If the Contractor is unable to obtain a minimum depth of 18” (0.45 meters), the Contractor shall install the conduit as directed by the Engineer.

A Bare #8, stranded copper cable shall be fastened to the outside of all PVC in trench. The #8 cable shall be secured to the conduit with nylon cable tie wraps spaced at 8 ft. (2.5 meter) intervals. The #8 cable shall run continuously in trench with no splices. Splices shall only be made in manholes or handholes when necessary. Splices shall be made with a standard crimp type ground splice. The cable shall be securely bonded to metal conduit through the use of standard metal conduit bonding bushings as specified in the Standard Specification.

Warning Tape shall be placed in trench over conduit as shown on the details. Identification Posts shall be carefully placed adjacent to conduit in trench at intervals not to exceed 1200 ft. (365 meters) in length, except at long span bridges and paved areas.

B. Conduit Under Roadway:

The preferred method of installing steel casing under roadway shall be by veneering or cutting. In areas where the conduit is installed under live traffic, such as a ramp crossing, the conduit will be capped in concrete. In areas where the conduit is installed in the shoulder and the required depth cannot be obtained, the conduit shall be installed at a minimum depth of 18" (0.45 meters) and capped in concrete.

Where veneering or cutting is not possible, and under the direction of the Engineer, steel casing may be furnished and installed by jacking. The casing shall be designed to withstand all the loads that it will be subject to, including the loads during installation and the in-service highway loads. The casing shall be designed by and bear the seal and signature of a Connecticut Licensed Professional Engineer and the computations shall be submitted with the Jacking Plan. The pipe shall be installed to preclude interference with highway traffic or damage to traveled lanes or shoulders. Jacking operations shall be conducted so as to prevent caving ahead or to cause voids outside of the pipe.

The auger head shall not proceed more than 4" (100 mm) ahead of the pipe being jacked. Removal of the material from the jacking pits by washing or sluicing will not be permitted.

A shoring and jacking pit plan shall be prepared by and bear the seal and signature of a Connecticut licensed Professional Engineer.

After the casing pipe is jacked in place, the inside shall be thoroughly cleaned free from grease, dirt, rust, moisture or other deleterious contaminants. All welding on the steel casing pipe shall be done by a certified welder. The galvanized steel conduit shall be inserted with skids securely attached to maintain full support of the conduit and to prevent damage.

The space between the conduit and the casing shall be grout sealed for at least 1 ft. (0.30 meters) from each end of the casing. Grout shall attain a minimum of 400 psi (2.76 MPa) compressive strength after 7 days. Pits shall be back-filled with pervious structure backfill as prescribed in Article 2.16.03 of the Standard Specifications.

For Jacking operations, the Contractor shall provide the following:

A. A jacking pit plan depicting:
   (1) Protection of traffic and pedestrians
   (2) The dimension of pit
   (3) Shoring, bracing struts, walers, or sheet pile
   (4) Size and type of casing
   (5) Conduit skids and means of attachment

B. The proposed method of jacking including:
   (1) The jacking system

(2) A detail of the separator-cushion at the end of casing against which the jacking force
will be applied.
(3) The support system behind the jack
(4) The support system under the jack and at the bottom of the pit.

C. Conduit Testing:

The Contractor shall test each cell of the multicell conduit after the conduit is installed. All testing shall be performed using the procedures and mandrel size recommended by the multicell or conduit manufacturer. The Contractor will be required to install a poly-line within each cell of the conduit. The intention of the conduit testing is to verify the integrity of the completed system; therefore, this testing will only be allowed to commence once the conduit system has been completely installed. Testing shall be performed in the presence of the Engineer. The Engineer will document the date, time, and the results of the testing and shall submit this information to Highway Operations for record keeping purposes.

D. Pull Tape:

The Contractor shall install pull tape, by hand pulling, blowing, or via vacuum method, into each empty conduit and empty cell within a multi-cell conduit during conduit installation. The Contractor shall install the pull tape after conduit testing has been completed. The Contractor shall neatly coil and secure 10 ft (3 meters) of slacked pull tape in each vault location.

The pull tape shall be field installed within each innerduct for the purpose of attaching to, and pulling of, the fiber optic cable.

E. As -Built Plans:

The Contractor shall advise the Engineer of any change of measurement of layout of the Plans submitted to them. Upon completion of construction but prior to acceptance of the contract, the Contractor shall furnish as-built plans on 2 ft. by 3 ft. (55 cm by 91 cm) standard plan sheets. All construction changes, with the final location and depth of the conduits, etc. shall be shown in sepia or other reproducible format. These plans shall include all field installations. One sepia or other reproducible of the Project Plans will be provided to the Contractor for their use. Any other base maps that may be necessary for the Contractor to comply with this requirement shall be the Contractor's responsibility.

METHOD OF MEASUREMENT:

The conduit shall be measured for payment by the actual number of feet (meters) of the type and size installed and accepted**. Expansion fittings, fixed and flexible sweep-bends, conduit fittings, will not be measured for payment but shall be included in the pay item for the conduit of the type and size specified.** The measured length shall be from end to end along the centerline through all fittings.

All work necessary to complete the attachment of the rigid metal conduit of the type indicated, including but not limited to mounting brackets, clamps, hangers, anchors, bolts, fittings etc. to the structures, will not be measured for payment but shall be included in the pay item for the conduit. In-Structure conduit installed under the bridge deck and within the girders shall be measured for payment as conduit of the size and type specified – surface.

The warning tape, identification posts with signs, pull tape, and the poly-line conduit testing will not be measured for payment but shall be included in the pay item for the conduit of the type and size specified.

The #8 Bare copper ground cable, splices, and installation will not be measured for payment but shall be included with the cost of the appropriate conduit item contained within this specification.

BASIS OF PAYMENT:

Article 10.08.05 – Basis of Payment shall be amended as follows:
In the second paragraph, after the words "bonding bushings", add the words "bonding wire,".

This work shall be paid for at the contract unit price per foot (meter) for conduit of the size and type indicated, within the limits shown on the plans and in the details. This price shall include all materials required including expansion fittings, fixed and flexible sweep-bends, conduit fittings, pervious structure backfill, boxes, caps, entrance fittings, pull tape, poly-line, inserts, warning tape, ground wire, identification posts with signs, structural supports, equipment, tools, labor and work incidental thereto.

Trenching and backfilling shall be paid as specified in Section 10.01 of the Standard Specifications.

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

September 24, 2014

Regulatory Division
File No. NAE-2012-1062

Attn: Mr. Mark Alexander
Connecticut Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Dear Mr. Alexander:

Attached are two copies of a Department of the Army permit authorizing your project. **Please sign both copies of the permit and return one signed copy to this office at the address above.** The authorized work cannot start until we receive a complete, signed copy of the permit.

You are required to complete and return the attached forms to this office:

1. Preliminary Jurisdictional Determination Form to be submitted along with your signed copy of the permit.
2. Work Start Notification Form at least two weeks before the anticipated work start date.
3. Compliance Certification Form within one month following the completion of the authorized work.
4. Mitigation Work Start Notification Form since your project involves mitigation.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions, **including any conditions contained on the attached state water quality certification.** If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

Our verification of this project's wetland delineation under the Corps of Engineers Wetlands Delineation Manual, and its applicable supplement, is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

A combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form, and flow chart explaining the appeals process and your options, are attached to this letter. If you desire to appeal this proffered permit, you must submit a completed RFA form along with any supporting or clarifying information to Michael G. Vissichelli; Administrative Appeals Review Officer; North Atlantic Division, Corps of

Engineers; North Atlantic Fort Hamilton Military Community, Bldg. 301; General Lee Avenue; Brooklyn, NY 11252-6700. Contact info: (347) 370-4663 or michael.g.vissichelli@usace.army.mil

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

You may not appeal conditions contained in the State water quality certification or the CZM consistency determination under this program as they are automatically included in the Federal permit. Also note that the Department of the Army permit process does not supersede any other agency's jurisdiction.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

If you have any questions regarding this correspondence, please contact Susan Lee at (978) 318-8494, (800) 343-4789, or use (800) 363-4367 within Massachusetts.

Sincerely,

Barbara Newman

Barbara Newman
Acting Chief, Permits and Enforcement Branch
Regulatory Division

Attachments

DEPARTMENT OF THE ARMY PERMIT

Permittee Connecticut Department of Transportation (CTDOT), 2800 Berlin Turnpike, P.O. Box 317546, Newington, CT 06131-7546

Permit No. NAE-2012-1062

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Excavate/fill/backfill in approximately 1.27 acres (1.09 ac. permanent, 0.18 ac. temporary) of wetlands/waters areas, including replacement/rehabilitation of existing culverts along I-84 (in Waterbury and Cheshire) and relocation/reconfiguration of portions of stream systems (Mad River, Beaver Pond Brook), in association with the widening/reconstruction of a 2.7-mile section of I-84 in Waterbury, CT (State Project No. 151-273) extending from Washington Avenue east to Pierpont Road. Permanent and temporary impacts to wetlands and watercourse areas are shown on Table 1 below.
The widening (add third travel lane and full width shoulders in each direction)/reconstruction and safety improvements project include the realignment of the highway in the vicinity of Harpers Ferry Road (Interchange No. 24) to eliminate the existing sharp reverse curvature, and interchange reconfiguration within the project limits.

Project Location:

The site coordinates are: Latitude 41.538° N, Longitude 73.002° W (at Beaver Pond Brook resource along south side of I-84 within the project area) in Waterbury, Connecticut .

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2019 **. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.**

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

(Special conditions continued on Page 5)

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1415).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Thomas J. Maziarz 9-30-2014

(PERMITTEE) CTDOT *(DATE)*

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Barbara Newman for 9/24/14

(DISTRICT ENGINEER) *(DATE)*

Christopher J. Barron
Colonel, Corps of Engineers

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) *(DATE)*

☆U.S. GOVERNMENT PRINTING OFFICE: 1986 — 717-425

Project Description cont'd from page 1:

The reconfiguration of interchanges consists of the elimination of two existing weave sections (EB 23 On-Ramp/EB 24 Off-Ramp and WB 25 On-Ramp/WB 24 Off-Ramp), providing a new WB 24 On-Ramp from Harpers Ferry Road and relocation of the WB 25 Off-Ramp to Scott Road.

An operational lane will be provided for Westbound I-84 between Harpers Ferry Road (Interchange No. 24 Westbound On-Ramp) and Hamilton Avenue (Interchange No. 23 Westbound Off-Ramp) to improve flow of traffic.

As a result of the realignment of I-84 and reconfiguration of the ramps, portions of the following State and local roads intersecting within the project limits will be reconstructed: Hamilton Avenue; Harpers Ferry Road; Scott Road; Plank Road; Reidville Drive; Plank Road East; and East Main Street.

The project includes the construction/replacement of eight highway bridges (four over watercourses), one pedestrian crossing over the Mad River, seven culverts (five within the Beaver Pond Brook, one within East Mountain Brook and one within the Mad River), and twenty retaining wall features.

The project also includes rehabilitation of five existing culverts including four corrugated metal pipe (CMP) culverts in the project area, some of which will be rehabilitated by culvert lining of the existing deteriorated CMP cross culverts located under high highway embankments. Among them are a 750mm (30inch) and a 1,500mm (60 inch) CMP culverts located outside of the 2.7 mile section above identified project limits in the Town of Cheshire approximately 1,400 meters (4,600± feet) and 3,300 meters (10,800± feet) east of Pierpont Road, respectively.

Additional associated work includes sanitary sewer and water line reconstruction, general drainage improvements, noise abatement, and new highway signing and pavement markings.

The authorized work is described and shown on the attached project plans entitled "RECONSTRUCTION OF I-84 CITY OF WATERBURY" on thirty-three (33) sheets, various plot dates (12/18/2013, 1/10/2014, 1/13/2014, and 1/28/2014).

Compensatory mitigation is required consisting of an ILF payment into the AUDUBON CT In-Lieu-Fee Program and permittee-responsible mitigation. Permittee-responsible mitigation consists of approximately 0.57 acres of onsite wetland enhancement area at the confluence of Beaver Pond Brook and Mad River; and onsite stream/habitat enhancement sites on approximately 3,383 LF of the Mad River and Beaver Pond Brook in association with the reconstruction and reconfiguration of segments of the Mad River and Beaver Pond Brook stream systems within the project area.

Permittee-responsible mitigation is as described and shown on the attached Figure 1 entitled: "COMPENSATORY MITIGATION PLAN I-84 Habitat Enhancement Sites Mad River and Beaver Pond Brook Waterbury, Connecticut", dated "1/29/2014", and as further detailed in a mitigation plan entitled: 'Compensatory Wetland and Waters of the U.S. Mitigation Plan for Reconstruction of I-84 in Waterbury, Connecticut State Project No. 151-273 Federal Aid Project No. NHI-84-2 (172)33', dated 'January 31, 2014' (title page attached).

Table 1. Summary of Watercourse & Wetland Impacts												
REACH	Channel Permanent (Area)		Channel Temporary (Area)		Channel Permanent (Linear)		Channel Temporary (Linear)		Wetlands Permanent		Wetlands Temporary	
	S M	Ac.	S M	Ac.	M	FEET	M	FEET	SM	Ac.	S M	Ac.
MR #1	89	0.02	0	0.00	27	89	0	0	875	0.22	0	0.00
MR #2	774	0.19	1,193	0.29	125	410	203	666	132	0.03	0	0.00
MR #3	0	0.00	1,057	0.26	0	0	37	121	469	0.12	129	0.03
MR #4	3,459	0.85	4,230	1.05	144	472	279	915	1,612	0.40	0	0.00
MR #5	1,325	0.33	2,533	0.63	110	361	167	548	419	0.10	251	0.06
Sub Total	5,647	1.39	9,013	2.23	706	1,332	686	2,251	3,517	0.87	380	0.09
BPB #1	0	0.00	327	0.08	9	30	35	115	0	0.00	0	0.00
BPB #2	799	0.20	991	0.24	107	351	132	433	379	0.09	0	0.00
BPB #3	0	0.00	0	0.00	0	0	0	0	0	0.00	0	0.00
BPB #4	120	0.03	306	0.08	12	39	43	141	0	0.00	0	0.00
BPB #5	0	0.00	0	0.00	0	0	0	0	0	0.00	0	0.00
BPB #6	4,163	1.03	965	0.24	495	1,624	98	322	279	0.07	0	0.00
BPB #6A	0	0.00	0	0.00	0	0	0	0	242	0.06	259	0.06
BPB #7	0	0.00	0	0.00	0	0	0	0	0	0.00	0	0.00
BPB #8	2	0.00	195	0.05	2	7	80	262	0	0.00	0	0.0
BPB #8A	0	0.00	0	0.00	0	0	0	0	0	0.00	22	0.01
BPB #9	0	0.00	0	0.00	0	0	0	0	0	0.00	26	0.01
Sub Total	5,084	1.26	2,784	0.69	625	2,051	388	1,273	900	0.22	307	0.08
CB #1	0	0.00	0	0.00	0	0	0	0	0	0.00	53	0.01
All Sites	**10,731**	**2.65**	**11,797**	**2.92**	**1,031**	**3,383**	**1,074**	**3,524**	**4,417**	**1.09**	**740**	**0.18**

(Special conditions continued from Page 2)

Condition #1 cont'd:
If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The permittee shall complete and return the attached Compliance Certification Form within one month following the completion of the authorized work.

3. No temporary fill (e.g., gravel, cofferdams, construction/swamp mats, log, corduroy, culverts) may be placed in wetlands and/or waters of the United States unless specifically authorized by this permit. Temporary fill that is authorized herein shall adhere to the following:

a. All temporary fill shall be stabilized to prevent its eroding into portions of waters of the U.S., including wetlands, where it is not authorized.

b. Unconfined temporary fill authorized for discharge into waters of the U.S., including wetlands, shall consist of material that minimizes impacts to water quality (e.g. sandbags, clean gravel, stone, aggregate, etc.).
c. Temporary fill authorized for discharge into wetlands should be placed on geotextile fabric or other material (e.g., straw) laid on the pre-construction wetland grade where practicable to minimize impacts.
d. Temporary fill shall be removed as soon as it is no longer needed, disposed of at an upland site, and suitably contained to prevent subsequent erosion into waters of the U.S, including wetlands.
e. Waters of the U.S., including wetlands, where temporary fill was discharged shall be restored
f. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must be placed in a manner that will not be eroded by expected high flows.

4. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering sediments, shall be installed and properly maintained to minimize impacts on wetlands and/or waters during construction. These devices must be removed after soils disturbed by construction activities are stabilized by revegetation or other means. The sediment collected by these devices must be periodically removed and placed in uplands, in a manner that will prevent its erosion and transport to wetlands and/or waters.

5. All areas of wetlands and/or waters, which are disturbed during construction, except those authorized herein for permanent impact, shall be restored to their approximate original elevation (but not higher) and condition by careful protection, and/or removal and replacement, of existing soil and vegetation. In addition, if upland clearing, grubbing, or other construction activity results in, or may result in, soil erosion with transport and deposition into a wetland or waterway, devices such as geotextile silt fences, sediment trenches, etc., shall be installed and properly maintained to minimize such impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.

6. The permittee shall provide compensatory mitigation (ILF and permittee-responsible) for aquatic resource impacts as follows:

a. ILF mitigation shall consist of the payment of $363,817.00 to the Connecticut In-Lieu Fee program. The permittee shall a) make a cashier's check or bank draft out to "National Audubon Society, Inc.," and include "Corps file number NAE-2012-01062" and the statement "For ILF account only"; b) enclose the attached "Connecticut In-lieu Fee Project Impact Worksheet"; c) send a) and b) to: Executive Director, National Audubon-Society, Inc., Connecticut Chapter, Attn: ILF Program, 613 Riversville Road, Greenwich, CT 06831; and d) send a copy of the check or bank draft to: PATS Branch, Regulatory Division, New England District, US Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

Authorized work may not begin until you receive a copy of the Notification of Sale of Credits Letter from Audubon-CT acknowledging receipt of your check and accepting compensatory mitigation responsibility for your project.

b. Permittee-responsible mitigation shall be provided consisting of approximately 0.57 acres of onsite wetland enhancement area at the confluence of Beaver Pond Brook and Mad River; and onsite stream/habitat enhancement sites on approximately 3,383 LF of the Mad River and Beaver Pond Brook

in association with the reconstruction and reconfiguration of segments of the Mad River and Beaver Pond Brook stream systems within the project area.

The elements of the permittee-responsible mitigation are as shown on the attached Figure 1 entitled: 'COMPENSATORY MITIGATION PLAN I-84 Habitat Enhancement Sites Mad River and Beaver Pond Brook Waterbury, Connecticut', dated '1/29/2014', and shall be performed in accordance with the attached mitigation plan (title page attached) entitled: **'Compensatory Wetland and Waters of the U.S. Mitigation Plan for Reconstruction of I-84 in Waterbury, Connecticut State Project No. 151-273 Federal Aid Project No. NHI-84-2 (172) 33', dated 'January 31, 2014'**. The permittee-responsible mitigation work shall be completed within one year of the first impacts to regulated resources unless the Corps provides a written extension.

7. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 6.b above will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers. The term "mitigation success" means success as defined in the mitigation plan this permit requires you to implement. Demonstration of success under this permit shall consist of the required mitigation monitoring, corrective measures, submittal of mitigation monitoring reports, and a final wetland assessment.

8. The introduction, spread, or the increased risk of invasion of non-native invasive plant or animal species on the project site, due to the site work, into new or disturbed areas, or areas adjacent to the project site shall be managed and controlled. Prior to being onsite, the contractor shall thoroughly inspect and remove seeds, plant material, soil, mud, insects, and other invertebrates on all equipment, including construction mats, to be used on the project site to prohibit introduction of invasive organisms. At a minimum, the following shall be inspected and cleaned on terrestrial vehicles where applicable:

Rubber Tired Vehicles - Crevices in upper surface and panels, tires, rims, and fender wells, spare tire mounting area, bumpers, front and rear quarter panels, around and behind grills, bottom of radiator vent openings, brake mechanisms, transmission, stabilizer bar, shock absorbers, front and rear axles, beds, suspension units, exhaust systems, light casings, and mirrors.
Tracked Land Vehicles - Crevices in upper surface and panels, top of axles and tensioners, support rollers, between rubber or gridded areas, beneath fenders, hatches, under casings, and grills.
Interiors of All Vehicles - Beneath seats, beneath floor mats, upholstery, beneath foot pedals, inside folds of gear shift cover.

When equipment has been previously used in an area known or suspected to contain live zebra or quagga mussels at any life stage, the contractor shall thoroughly clean all equipment that was in contact with the body of water before bringing it to the project site.

9. Work shall conform to the permit plans and work authorized by this permit. Any proposed modifications to the authorized work or plans shall be submitted to our office for written approval prior to implementation.

10. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2012-1062", and shall be submitted via: a) MAIL: Attn: Susan Lee – Regulatory Division, Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751, or b) FAX: (978) 318-8303. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. Requirements for immediate notification to the Corps shall be done by telephone to (978) 318-8338.

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131

Attention: Mark W. Alexander, Transportation Assistant Planning Director

Application No.:	IW-201304706, WQC-201304707
Town:	Waterbury, Cheshire
Waters:	Mad River, Beaver Pond Brook, Unnamed Tributary to Mad River
Permit type:	Inland Wetlands and Watercourses, Water Quality Certification
Project:	Reconstruction of I-84, DOT Project 151-273

Dear Mr. Alexander:

The Commissioner of Energy and Environmental Protection has approved your application to conduct certain regulated activities. Your attention is directed to the conditions of the enclosed permit. You should read your permit carefully. Construction and other work must conform to that which is authorized.

If you have not already done so, you should contact the local Planning and Zoning Office and the U. S. Army Corps of Engineers to determine local and federal permit requirements on your project, if any. Write the Corps' New England District, Regulatory Branch, 696 Virginia Road, Concord, MA 01742-2751; http://www.nae.usace.army.mil/ or call 1-800-343-4789.

If you have any questions concerning your permit, please contact the Inland Water Resources Division at (860) 424-3019.

4/29/2014
DATE

Colin Clark, P.E., Civil Engineer

COPIES FURNISHED TO:

All Parties
Mayor/First Selectman
Conservation Commission
Inland Wetland Agency
DEEP Inland Fisheries
DPH Drinking Water Section
U. S. Army Corps of Engineers
Planning & Zoning Commission

Inland Wetlands and Watercourses Permit &
Water Quality Certification

Permittee: Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131

Attn: Mark W. Alexander, Transportation Assistant Planning Director

Permit No: IW-201304706, WQC-201304707

City: Waterbury, Cheshire

Project: Reconstruction of I-84, DOT Project 151-273

Waters: Mad River, Beaver Pond Brook, Unnamed Tributary to Mad River

Pursuant to Connecticut General Statutes Section 22a-39, the Commissioner of Energy and Environmental Protection ("Commissioner") hereby grants a permit to the Connecticut Department of Transportation ("the Permittee") to conduct regulated activities associated with the reconstruction of I-84. In addition, pursuant to Section 401 of the Federal Clean Water Act (33 USC 1341), Certification is hereby granted for activities, including but not limited to construction or operation of facilities, which may result in any discharge into the waters of the state associated with the above referenced project. The purpose of said activities is to improve traffic flow and decrease accident rates along this section of I-84.

AUTHORIZED ACTIVITY

Specifically, the permittee is authorized to: widen I-84 to accommodate a third travel lane and full width shoulders in both directions for a 14,110± foot section of I-84 in Waterbury; realign the highway in the vicinity of Interchange No. 24; reconfigure affected interchanges; reconstruct portions of Hamilton Avenue, Harpers Ferry Road, Scott Road, Plank Road, Reidville Drive, Plank Road East, and East Main Street affected by the widening of I-84; construction / replacement of eight highway bridges, one pedestrian bridge, culverts and twenty retaining walls; rehabilitate existing culverts; relocate / reestablish portions of Mad River, Beaver Pond Brook, and an unnamed intermittent stream tributary to Mad River; miscellaneous mitigation and fisheries enhancements.

The activities proposed will impact 1.27± acres of inland wetlands, 1,820± feet of Mad River, 2,755± feet of Beaver Pond Brook, and 445± feet of unnamed intermittent stream tributary to Mad River.

All activities shall be conducted in accordance with plans entitled: "*Connecticut Department of Transportation Plan for Reconstruction of I-84, Attachment G – Environmental Permit Plans, in the Towns of Waterbury, Cheshire,*" prepared by Berger, Lehman Associates, P.C. and Amman & Whitney, submitted October 11, 2013, last revised March 1, 2014, and submitted as a part of the application.

This authorization constitutes the licenses and approvals required by Section 22a-39of the Connecticut General Statutes and Section 401 of the Federal Clean Water Act (33 USC 1341).

This authorization is subject to and does not derogate any present or future property rights or other rights or powers of the State of Connecticut, conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state, or local laws or regulations pertinent to the property or activity affected thereby.

Said discharge(s) will comply with the applicable provisions of sections 301, 302, 303, 306 and 307 of the Federal Clean Water Act (33 USC 1311, 1312, 1313, 1316 and 1317, respectively) and will not violate Connecticut's Water Quality Standards.

The permittee's failure to comply with the terms and conditions of this permit shall subject the permittee, including the permittee's agents or contractor(s) to enforcement actions and penalties as provided by law.

This authorization is subject to the following conditions:

CONDITIONS:

1. **Expiration.** The Inland Wetland and Watercourse permit shall expire 5 years from the time of issuance. The Water Quality Certification shall expire upon expiration of the U.S. Army Corps of Engineers (USACOE) Section 404 permit for the same activity.

2. **Construction Commencement and Completion.** If construction of any structures or facilities authorized herein is not completed within 5 years of issuance of this permit or within such other time as may be provided by this permit, or if any activity authorized herein is not commenced within 5 years of issuance of this permit or within such other time as may be provided by this permit, this permit shall expire 5 years after issuance or at the end of such other time.

3. **Notification of Project Initiation.** The permittee shall notify the Commissioner in writing two weeks prior to commencing construction or modification of structures or facilities authorized herein.

4. **De minimis Alteration.**

The permittee may not make any alterations, except de minimis alterations, to any structure, facility, or activity authorized by this permit unless the permittee applies for and receives a modification of this permit. The permittee may not make any de minimis alterations to any structure, facility, or activity authorized by this permit without written permission from the Commissioner. A de minimis alteration means a change in the design, construction or operation authorized under this permit that does not increase environmental impacts or substantively alter the construction of the project as permitted.

5. **Maintenance of Structures.** All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or exempted pursuant to section 22a-377 of the General Statutes or section 22a-377(b)-1 of the Regulations of Connecticut State Agencies, or otherwise exempt pursuant to other General Statutes, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.

Unless the permittee maintains in optimal condition any structures or facilities authorized by this permit, the permittee shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities.

6. **Accuracy of Documentation.** In issuing this permit, the Commissioner has relied on information provided by the permittee. If such information was false, incomplete, or misleading, this permit may be modified, suspended or revoked and the permittee may be subject to any other remedies or penalties provided by law.

7. **Best Management Practices & Notification of Adverse Impact.** In constructing or maintaining any structure or facility or conducting any activity authorized herein, or in removing any such structure or facility under condition 5 hereof, the permittee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

The permittee shall immediately inform the Commissioner of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.

8. **Reporting of Violations.** The permittee shall, no later than 48 hours after the permittee learns of a violation of this permit, report same in writing to the Commissioner. Such report shall contain the following information:

    a. the provision(s) of this permit that has been violated;
    b. the date and time the violation(s) was first observed and by whom;
    c. the cause of the violation(s), if known
    d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
    e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
    f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
    g. the signatures of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with condition 12 of this permit.

9. **Material Storage in the Floodplain.** The storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the permittee or the permittee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.

10. **Permit Transfer.** This permit is not transferable without the prior written consent of the Commissioner.

11. **Contractor Notification.** The permittee shall give a copy of this permit to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The permittee's contractor(s) shall conduct all operations at the site in full compliance with this permit and, to the extent provided by law, may be held liable for any violation of the terms and conditions of this permit.

12. **Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the permittee or a responsible corporate officer of the permittee, a general partner of

the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b and in accordance with any other applicable statute."

13. **Submission of Documents.** Any document or notice required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Director, Inland Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval on any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means any calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

14. **Rights.** This permit is subject to and does not derogate any rights or powers of the State of Connecticut, conveys no property rights or exclusive privileges, and is subject to all public and private rights and to all applicable federal, state, and local law. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this State. The issuance of this permit shall not create any presumption that this permit should be renewed.

15. **Final Stormwater System Plans.** Thirty (30) days prior to commencement of construction, the Department of Transportation shall submit to the Inland Water Resources Division for review and approval final stormwater drainage system design

plans and reports showing the treatment measures that will be constructed for the purpose of treating stormwater runoff from the project site.

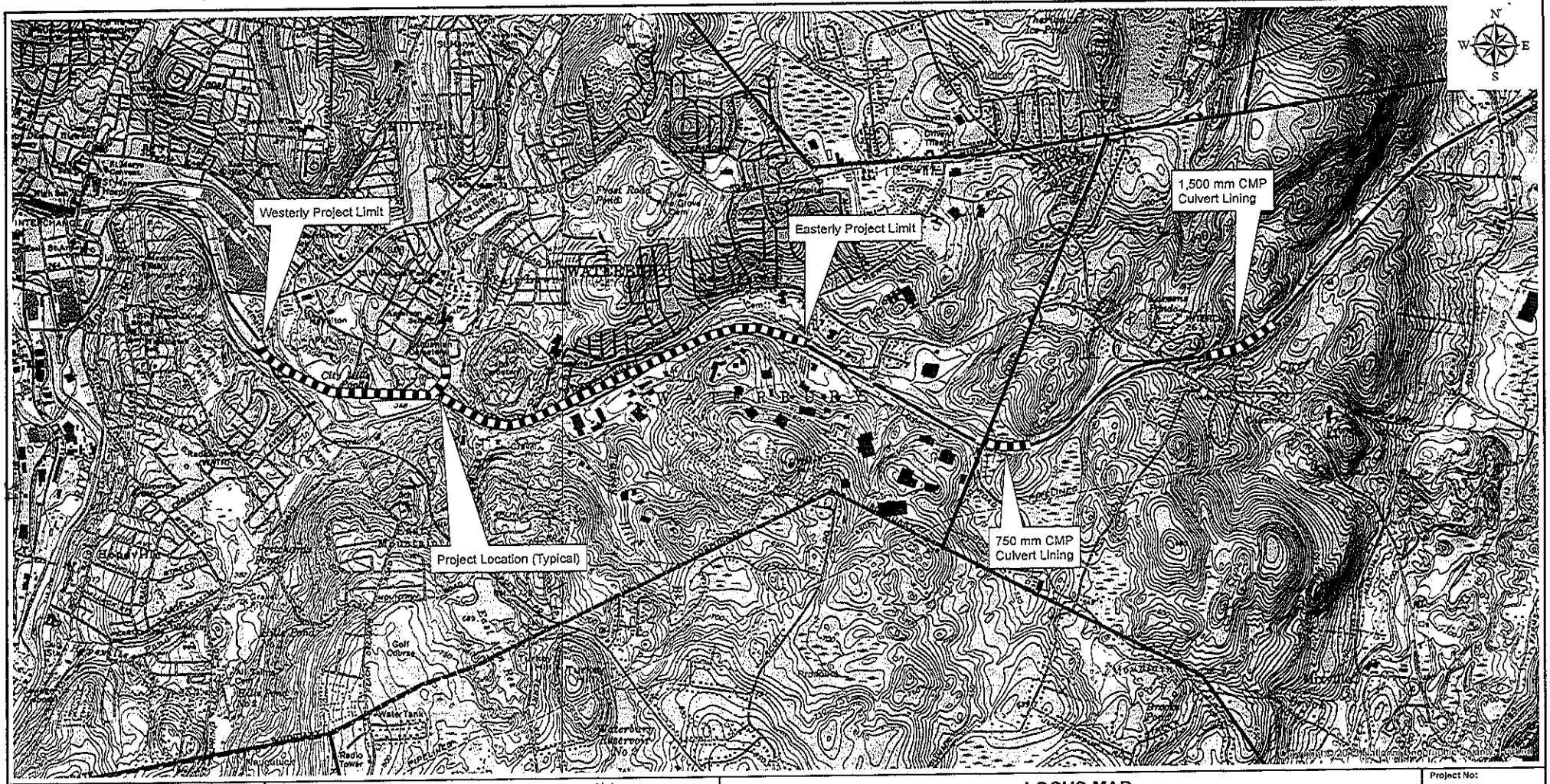
16. **FEMA Letter of Map Revision.** The Department of Transportation shall be responsible for applying for and obtaining a Letter of Map Revision (LOMR) from FEMA for those activities which will affect the hydrologic or hydraulic characteristics of Mad River and Beaver Pond Brook and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). This LOMR must be obtained from FEMA no later than 2 (two) years following completion of construction activities.

17. **Unconfined Instream Work.** All unconfined instream work shall be limited to the period of June 1 through September 30.

Issued by the Commissioner of Energy and Environmental Protection on:

April 25, 2014
Date

for Macky McCleary
Deputy Commissioner



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Meters
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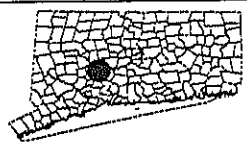


GZA GeoEnvironmental, Inc.
Springfield, MA / Glastonbury, CT

Legend

- Project Corridor
- Town Boundaries
- USA Topo Maps

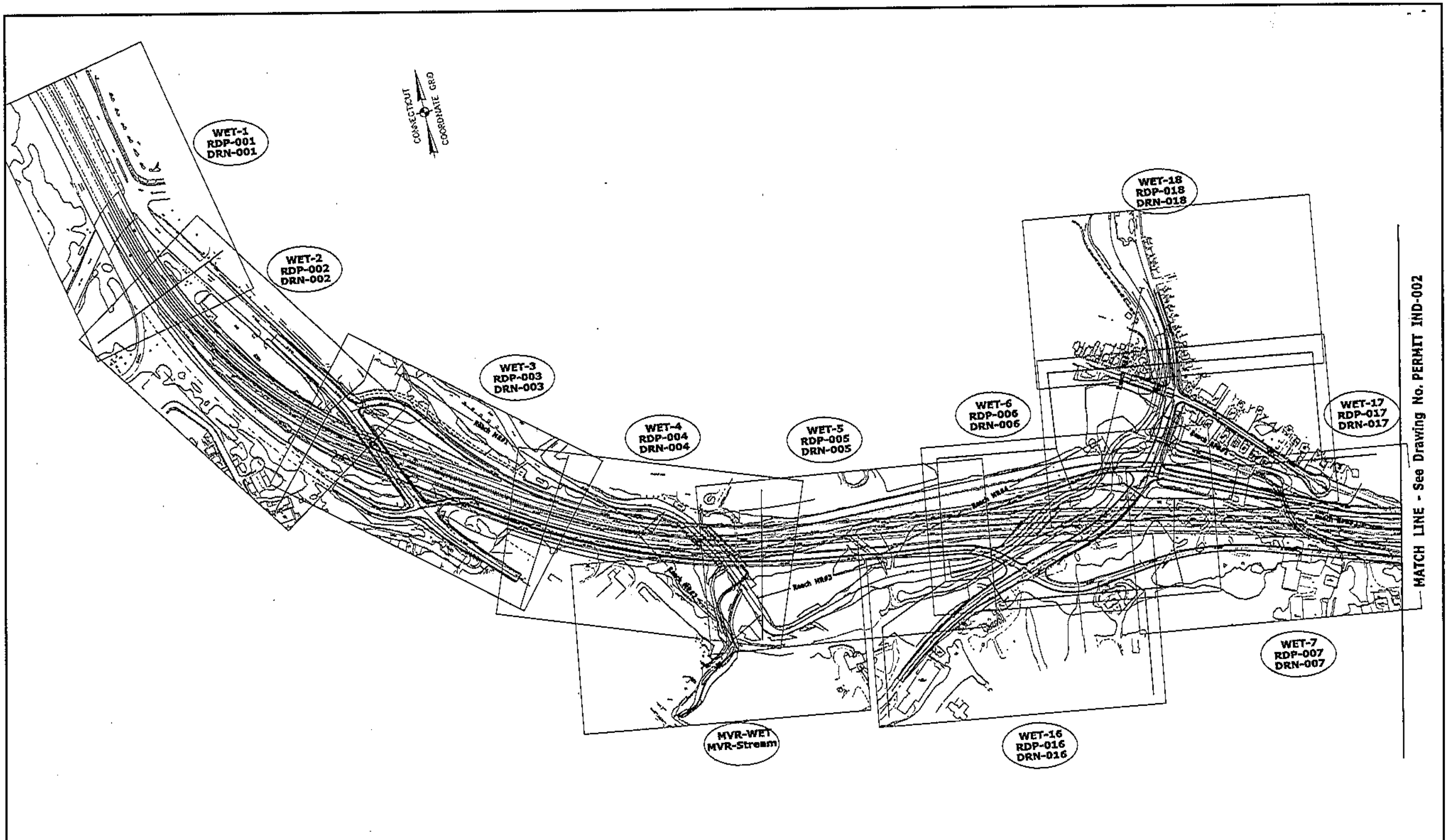
LOCUS MAP

I-84 Reconstruction
Waterbury and Cheshire, Connecticut

USGS TOPOGRAPHIC QUADRANGLE MAP
WATERBURY AND SOUTHINGTON, CT
Date obtained from University of Connecticut
Map and Geographic Information Center

Project No:	15.0166290
Drawn by:	ERH
Checked by:	PGD
Date:	8/27/2012
Figure No:	1

ADDENDUM NO. 4



REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.

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DESIGNER: J. HUND
DRAFTER: M. MOSLEY
CHECKED BY: T. BULZAK
DATE CHECKED:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CADD #FILEABREV#
PLOTTED 1/10/2014

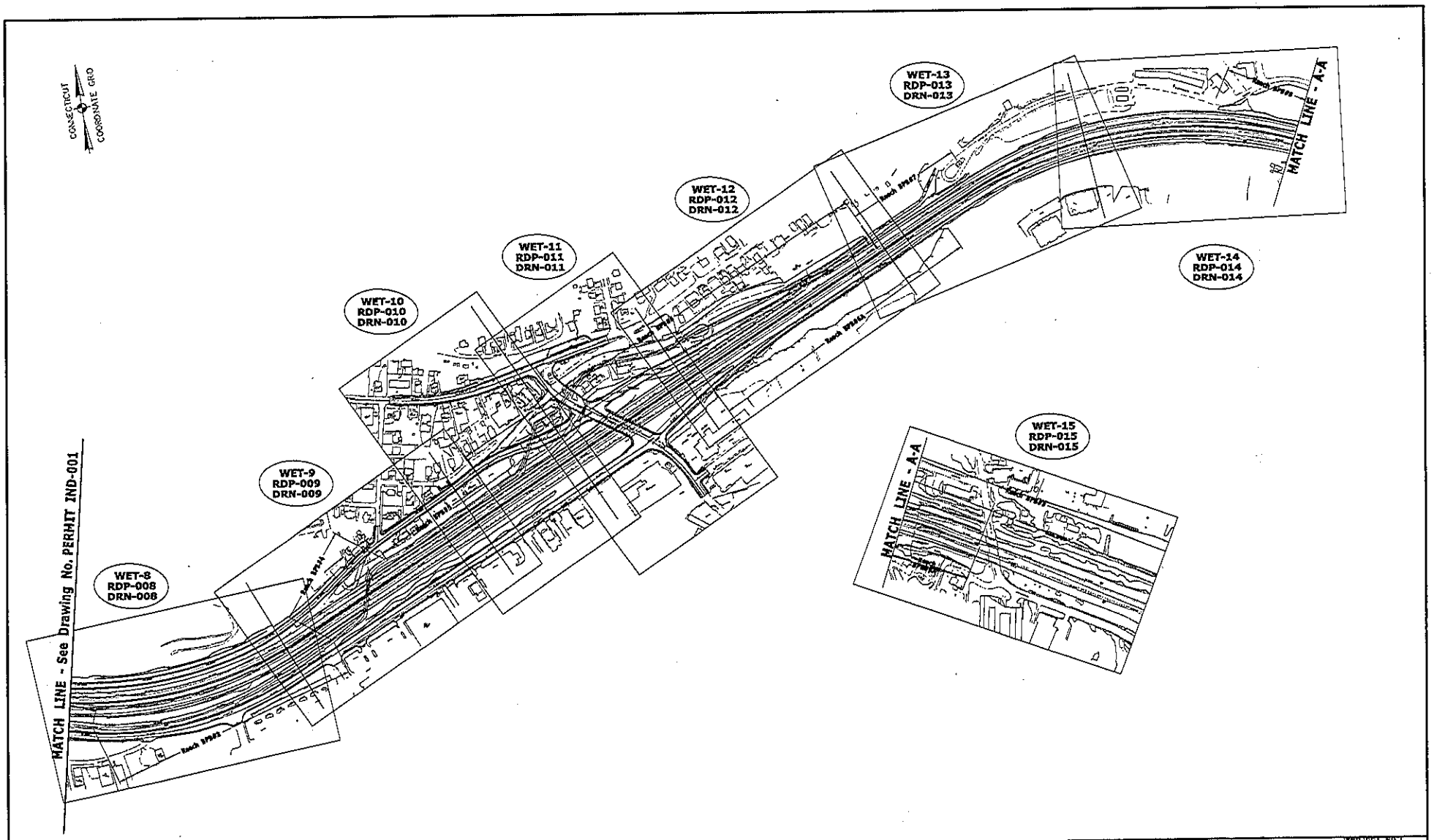
KAMMANN WHITNEY
2500 WESTCHESTER AVE.
3RD FLOOR
HARRISON, NY

PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY

TOWN: WATERBURY

DRAWING TITLE: ENVIRONMENTAL PERMIT PLANS INDEX SHEET - 1

PROJECT NO.: 151-273
DRAWING NO.: PERMIT IND-001
SHEET NO.:



REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 25 50 75 100 125 SCALE 1:2500 1 METER= 3.2808333 U.S. SURVEY FEET	DESIGNED: J. MUND DRAFTED: M. MOULLY CHECKED BY: T. SULZAK DATE CHECKED:	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION CADD & FILE ARRAY: PLOTTED 1/10/2014	CUMMINGS & WHITNEY 3500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY

PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY

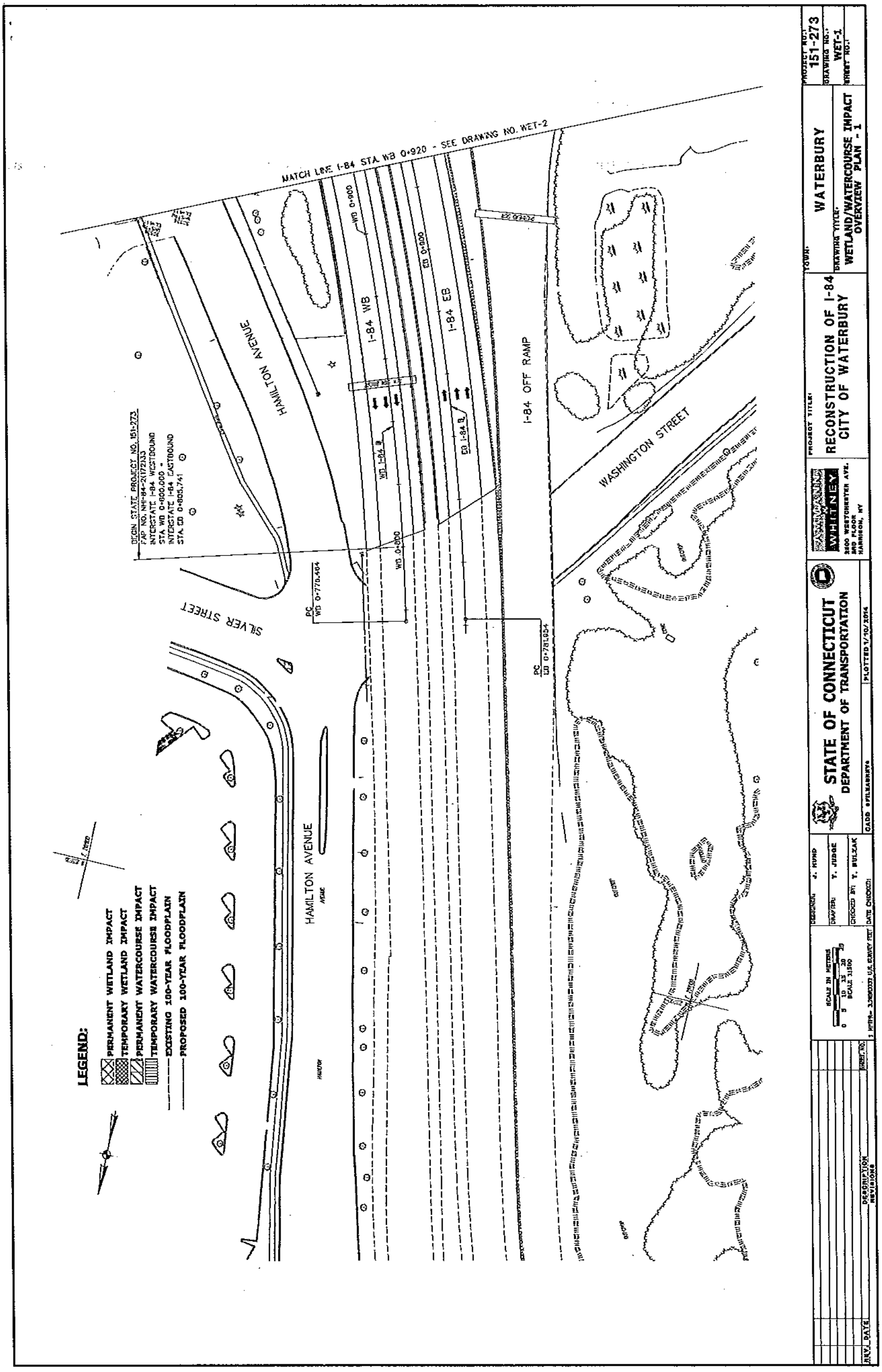
TOWN: WATERBURY

DRAWING TITLE: ENVIRONMENTAL PERMIT PLANS INDEX SHEET - 2

PROJECT NO.: 151-273

DRAWING NO.: PERMIT IND-002

SHEET NO.: - -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TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
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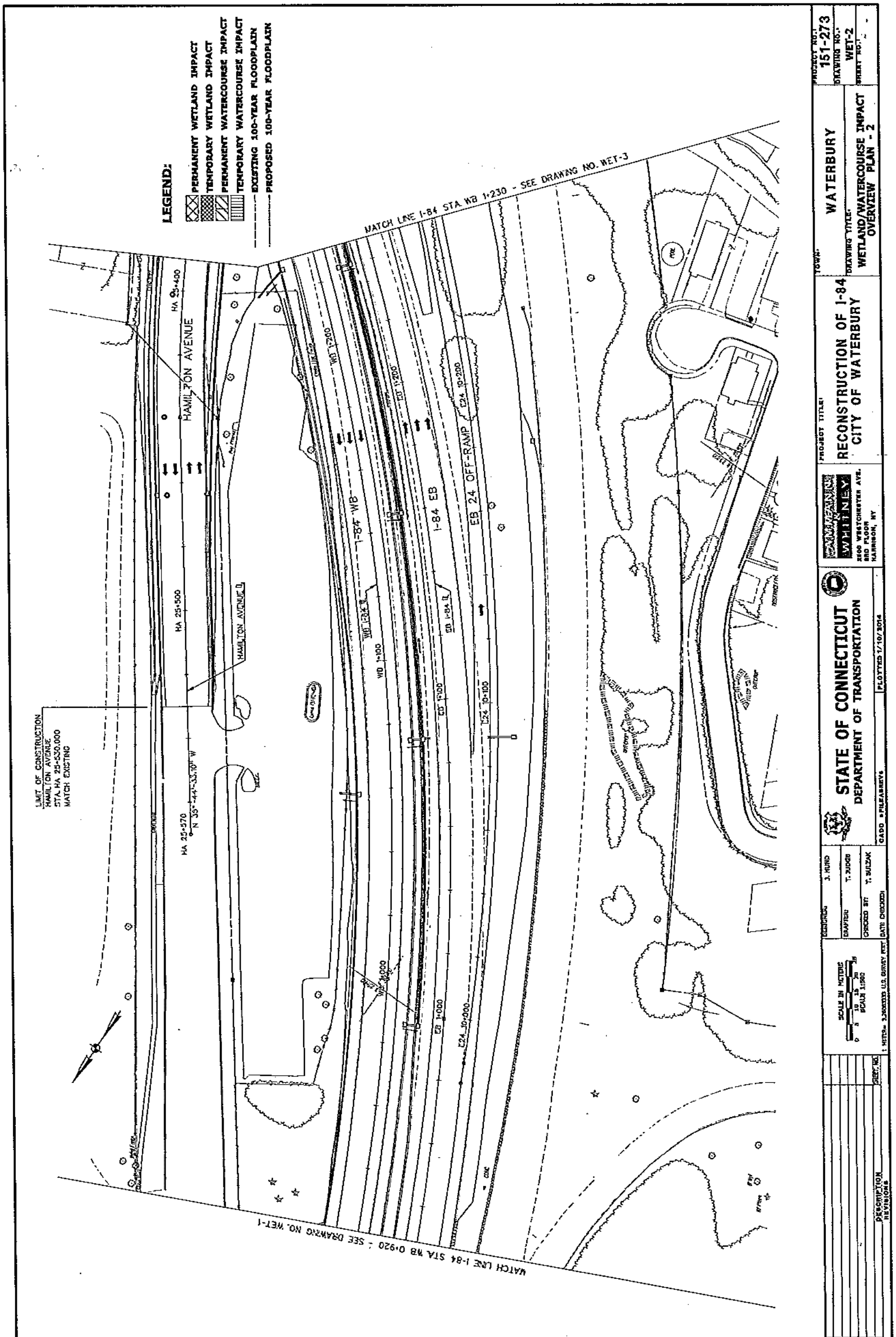
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 STA WB 0+920 - SEE DRAWING NO. WET-2
HAMILTON AVENUE
SILVER STREET
I-84 WB
I-84 EB
I-84 OFF RAMP
WASHINGTON STREET
WB 0+900
EB 0+900
WB 0+800
PC WB 0+770.464
PC EB 0+781.854
BEGIN STATE PROJECT NO. 151-273
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 1
151-273
WET-1



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PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
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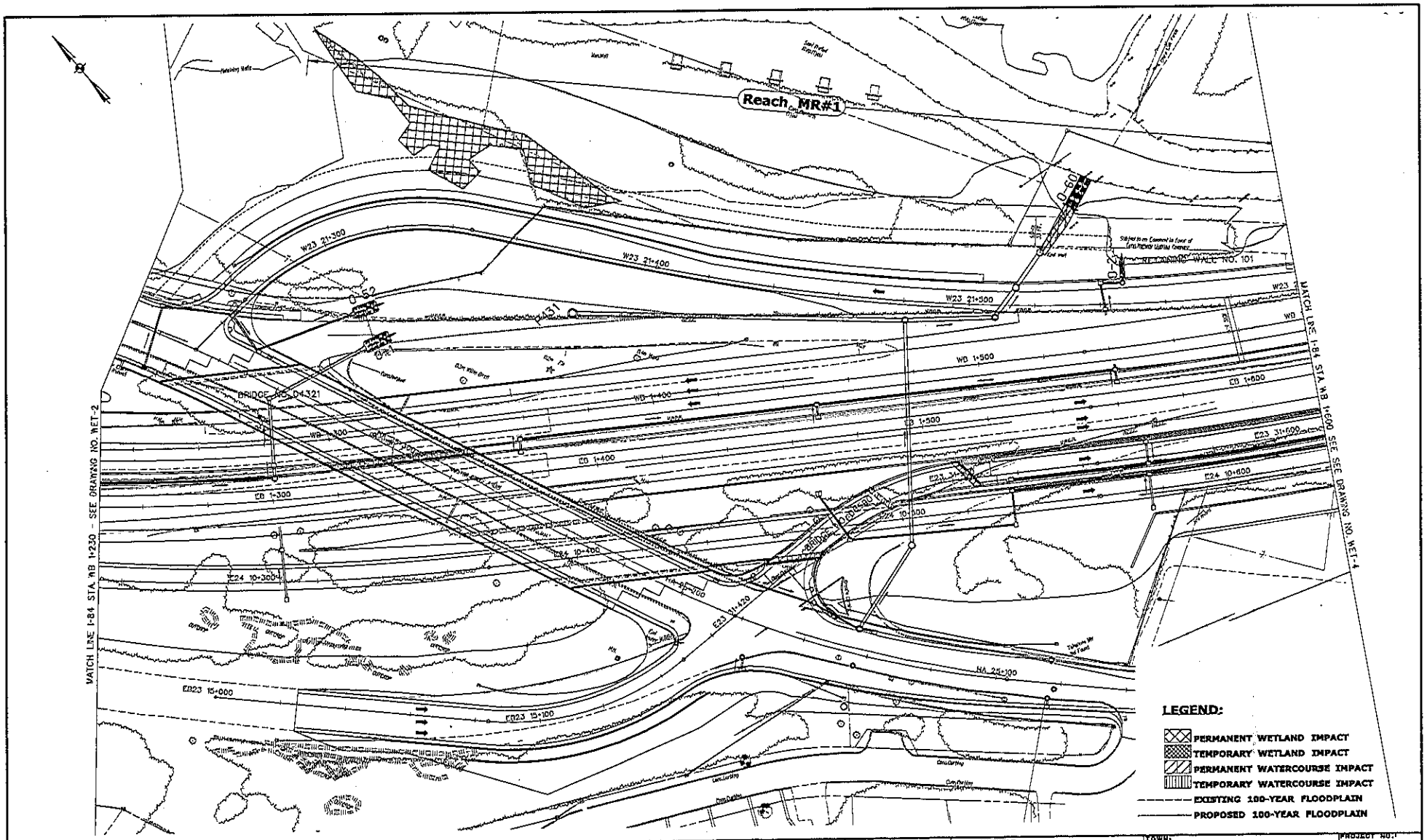
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 STA WB 1+230 - SEE DRAWING NO. WET-3
MATCH LINE I-84 STA WB 0+920 ; SEE DRAWING NO. WET-1
HAMILTON AVENUE
I-84 WB
I-84 EB
EB 24 OFF-RAMP
LIMIT OF CONSTRUCTION
HAMILTON AVENUE
MATCH EXISTING
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 2
151-273
WET-2



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

FAY, SPOFFORD & THORNDIKE / WHITNEY
8500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY

PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY

TOWN: WATERBURY

DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 3

PROJECT NO.: 151-273

DRAWING NO.: WET-3

SHEET NO.:

DESIGNED: J. HUND
DRAWN: T. JUDGE
CHECKED BY: T. SULZAK
DATE CHECKED:
CADD FILEABREV:
PLOTTED 1/10/2014

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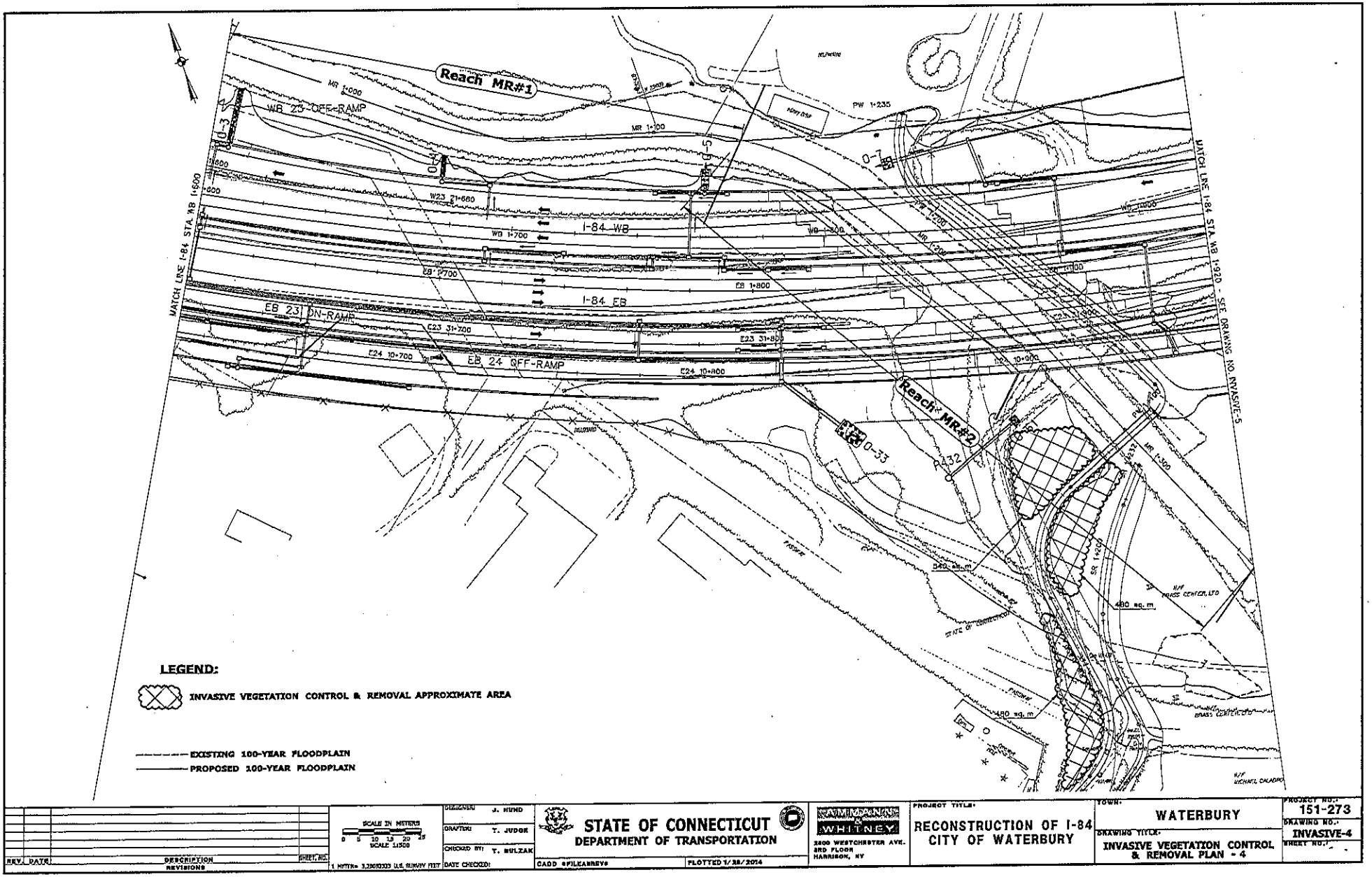

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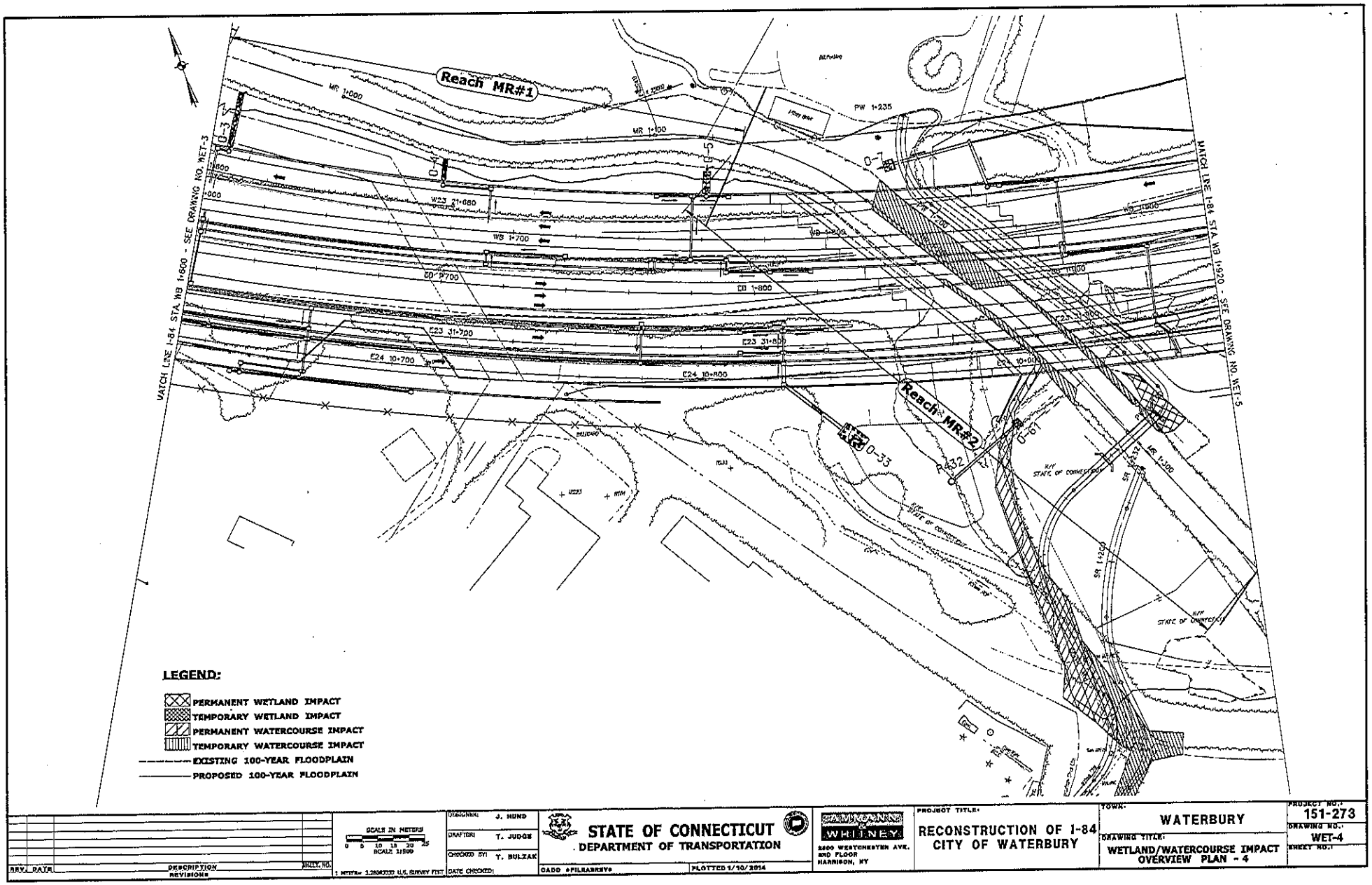
1 METER= 3.2808333 U.S. SURVEY FEET

CADD #FILENAME# PLOTTED 1/28/2014



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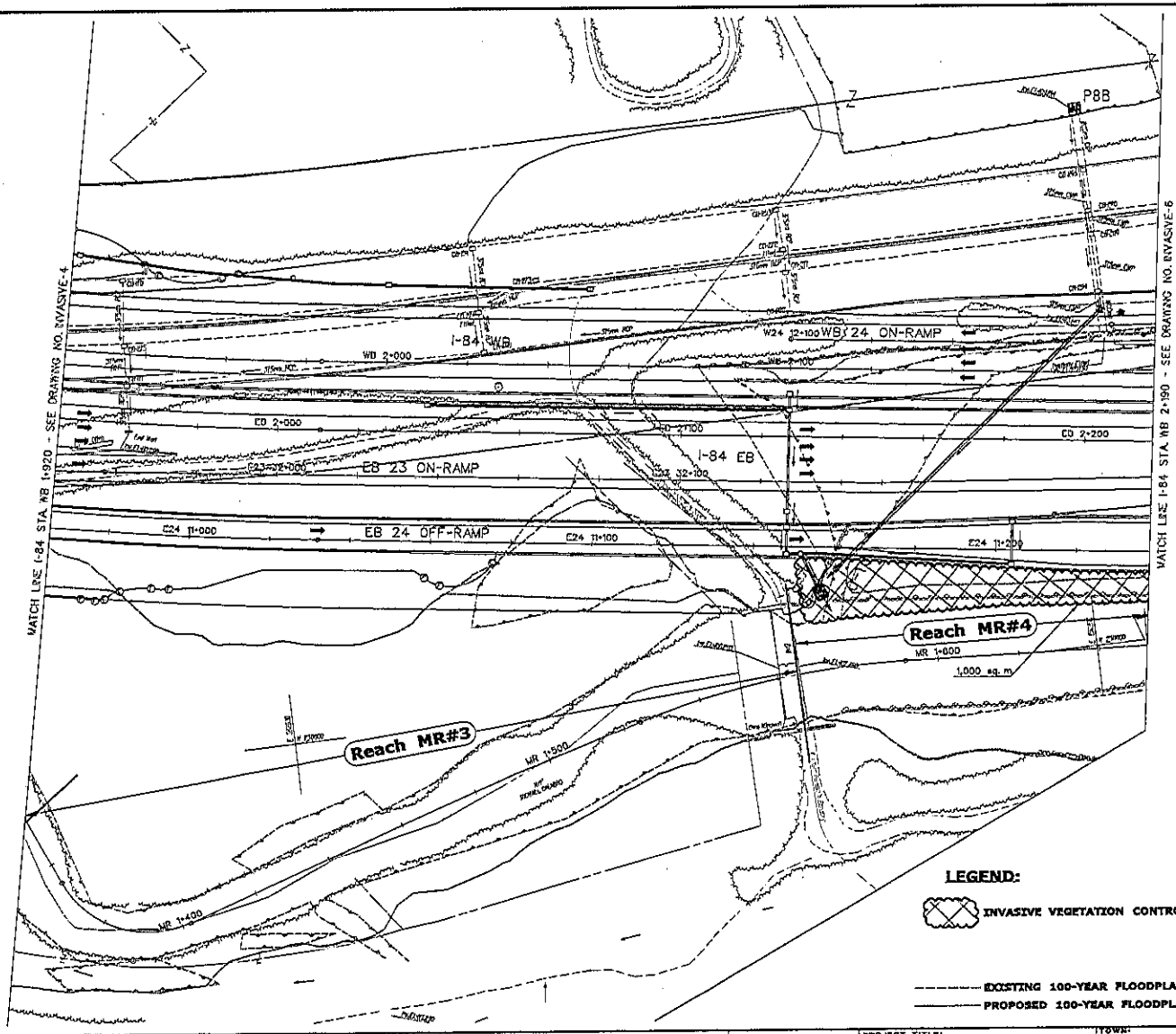

REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.

SCALE IN METERS
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SCALE 1:500

DESIGNED: J. HUND
DRAFTED: T. JUDGE
CHECKED BY: T. BULZAK
DATE CHECKED:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CADD #FILENAME#

PLOTTED 1/28/2014

SAMMARTINO & WHITNEY
3500 WESTCHESTER AVE, 3RD FLOOR
HARRISON, NY

PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY

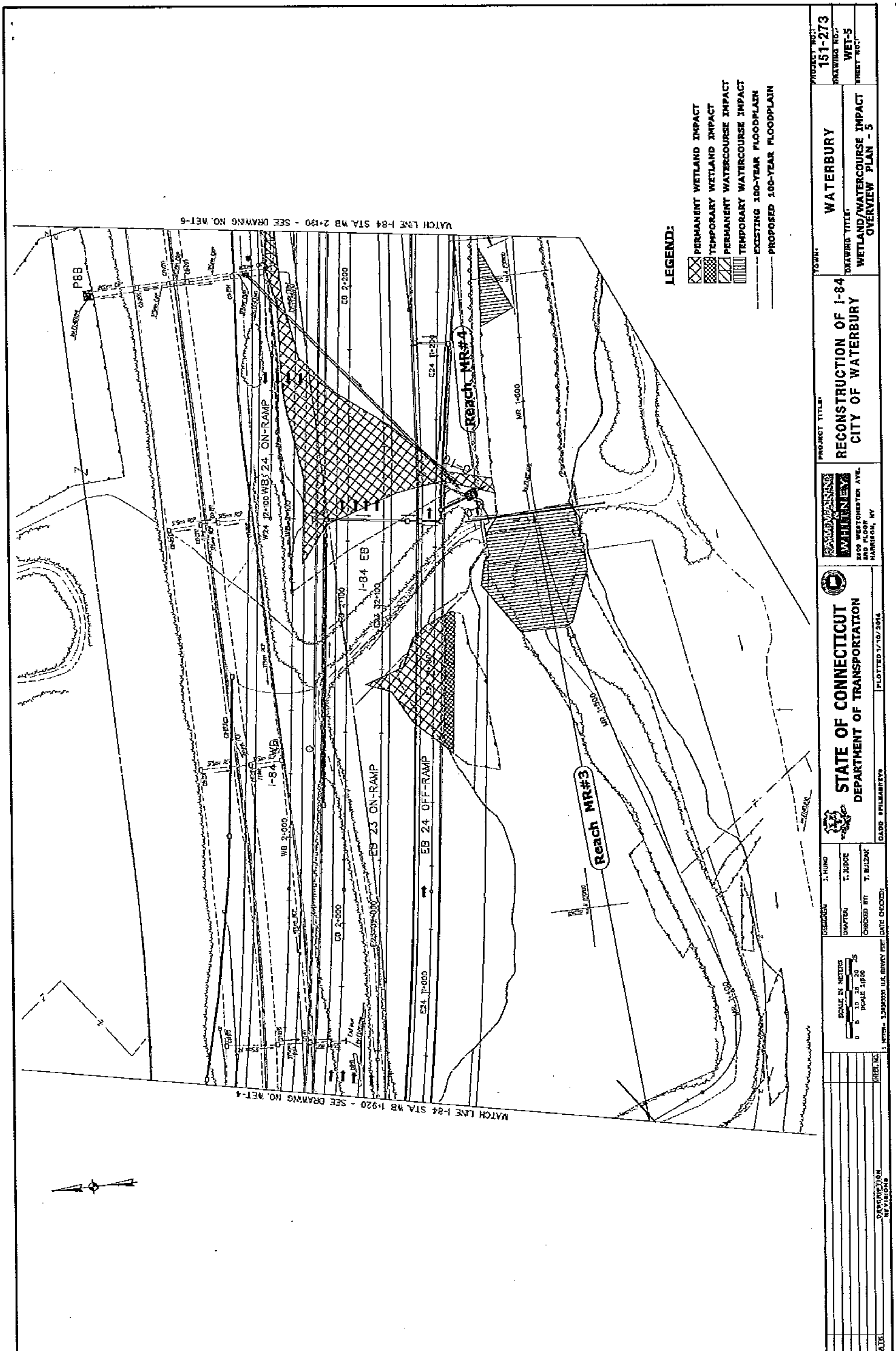
TOWN: WATERBURY

PROJECT NO.: 151-273

DRAWING NO.: INVASIVE-5

DRAWING TITLE: INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 5

SHEET NO.: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TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
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EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 STA WB 2+190 - SEE DRAWING NO. WET-6
MATCH LINE I-84 STA WB 1+920 - SEE DRAWING NO. WET-4
Reach MR#4
Reach MR#3
I-84 EB
I-84 WB
WB 24 ON-RAMP
EB 23 ON-RAMP
EB 24 OFF-RAMP
P88
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 5
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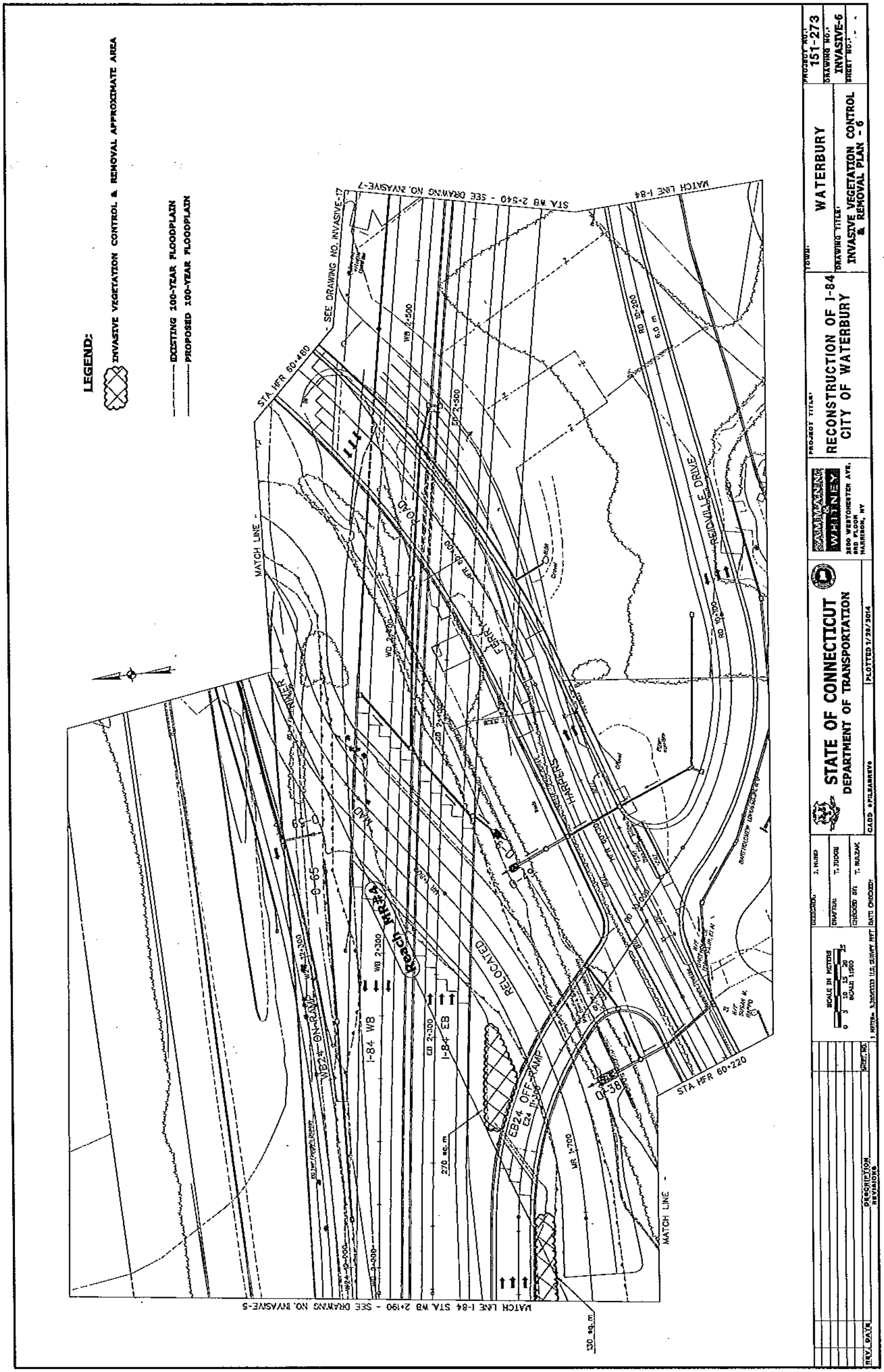
PLOTTED 1/10/2014
REVISIONS
DESCRIPTION
REV. DATE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PROPOSED 100-YEAR FLOODPLAIN
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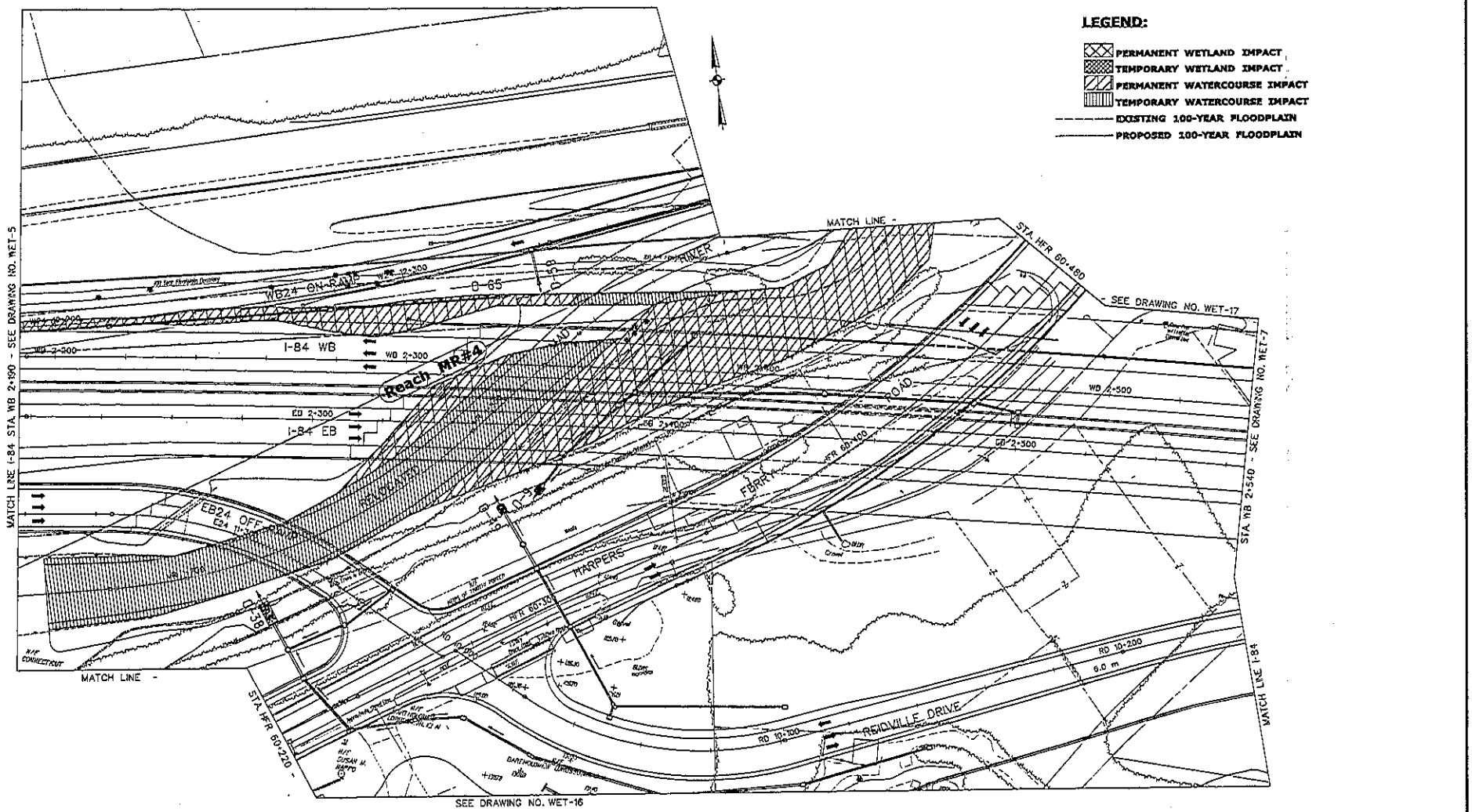
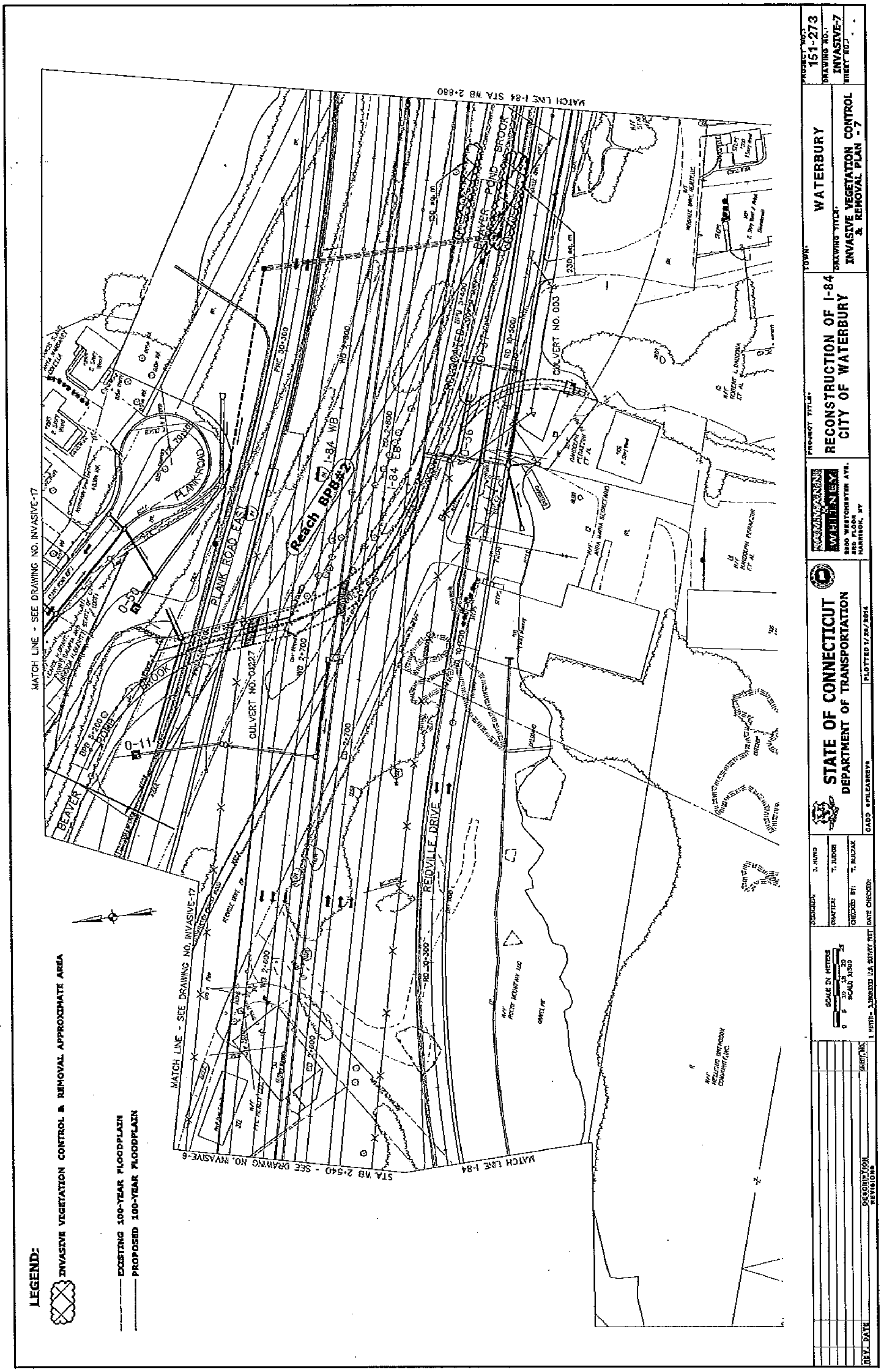
STA WB 2+540 - SEE DRAWING NO. INVASIVE-7
SEE DRAWING NO. INVASIVE-17
MATCH LINE I-84
MATCH LINE
STA HFR 60+480
STA HFR 60+220
REIDVILLE DRIVE
RELOCATED
HARPERS
FERRY
MAD RIVER
I-84 WB
I-84 EB
WB24 ON-RAMP
EB24 OFF-RAMP
270 sq.m
130 sq.m
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 6
151-273
INVASIVE-6



REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:1000	DESIGNED: J. HUND	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
				1 METER= 3.280833333 U.S. SURVEY FEET	DRAFTED: T. JUDGE		TOWN: WATERBURY
					CHECKED BY: T. SULZAK		DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 6
					DATE CHECKED:	CADD #FILEABBREV# PLOTTED 1/10/2014	PROJECT NO.: 151-273 DRAWING NO.: WET-6 SHEET NO.:

WHITNEY
2500 WESTCHESTER AVE.
2ND FLOOR
HARRISON, NY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EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
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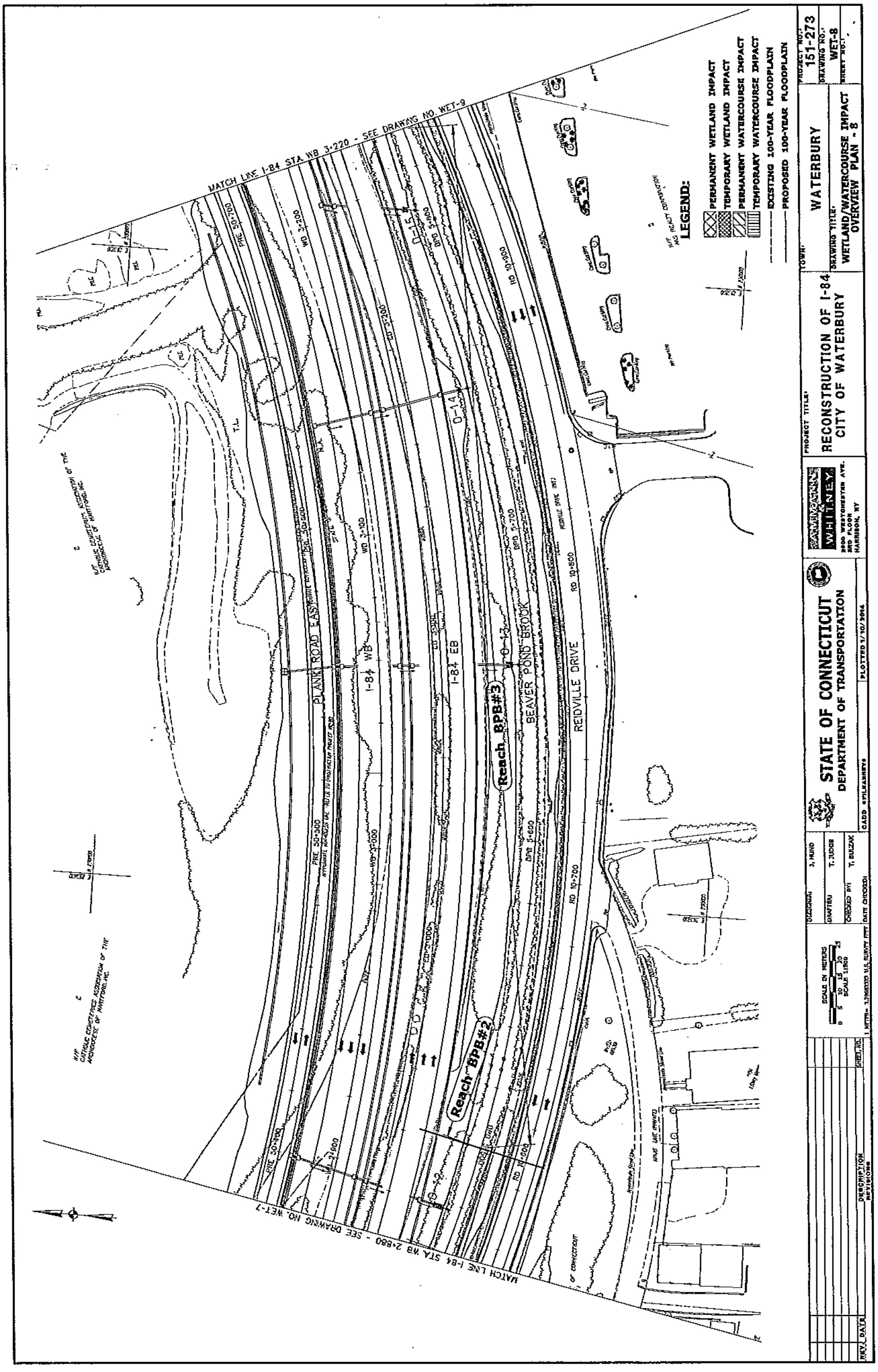
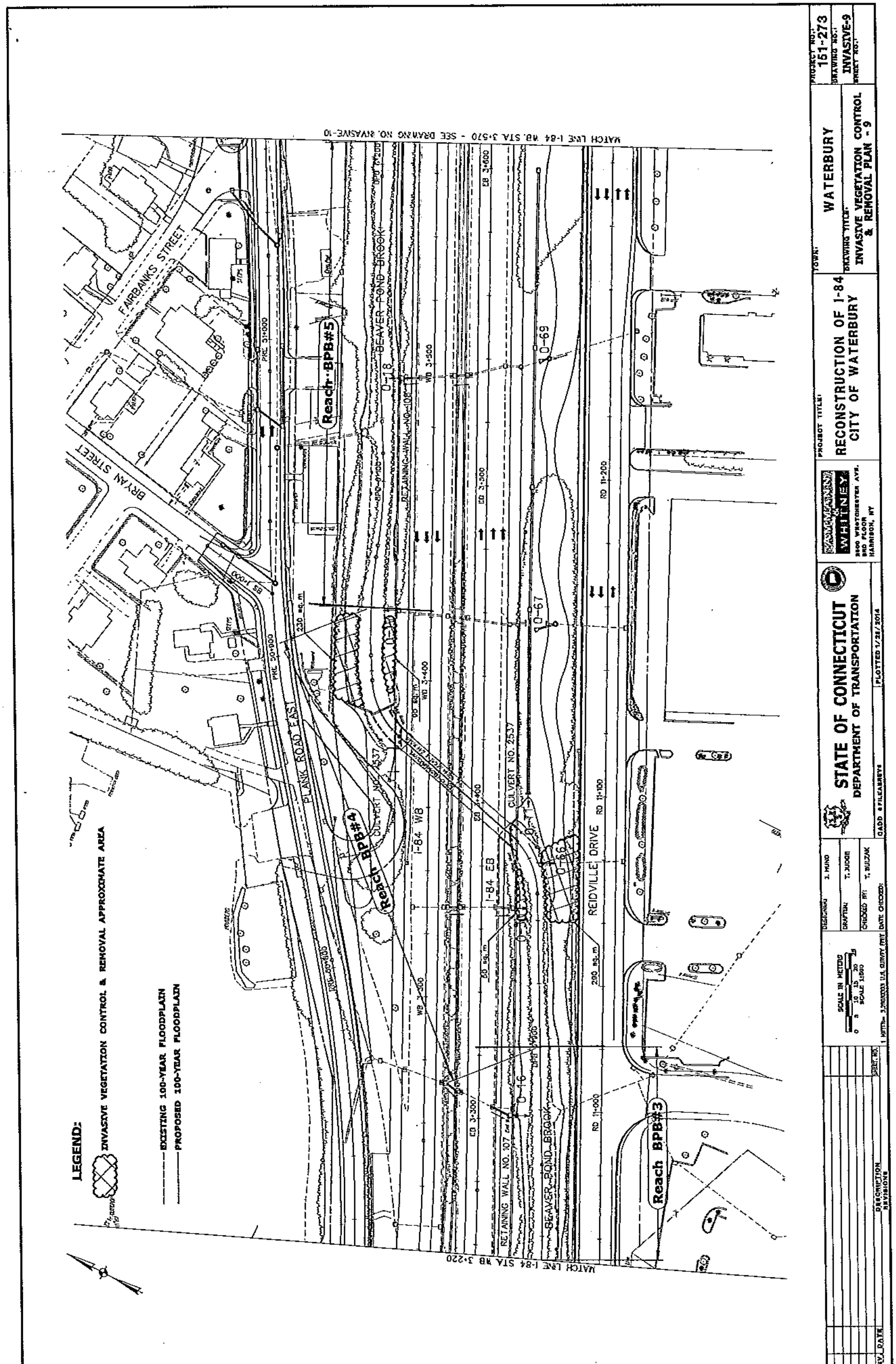
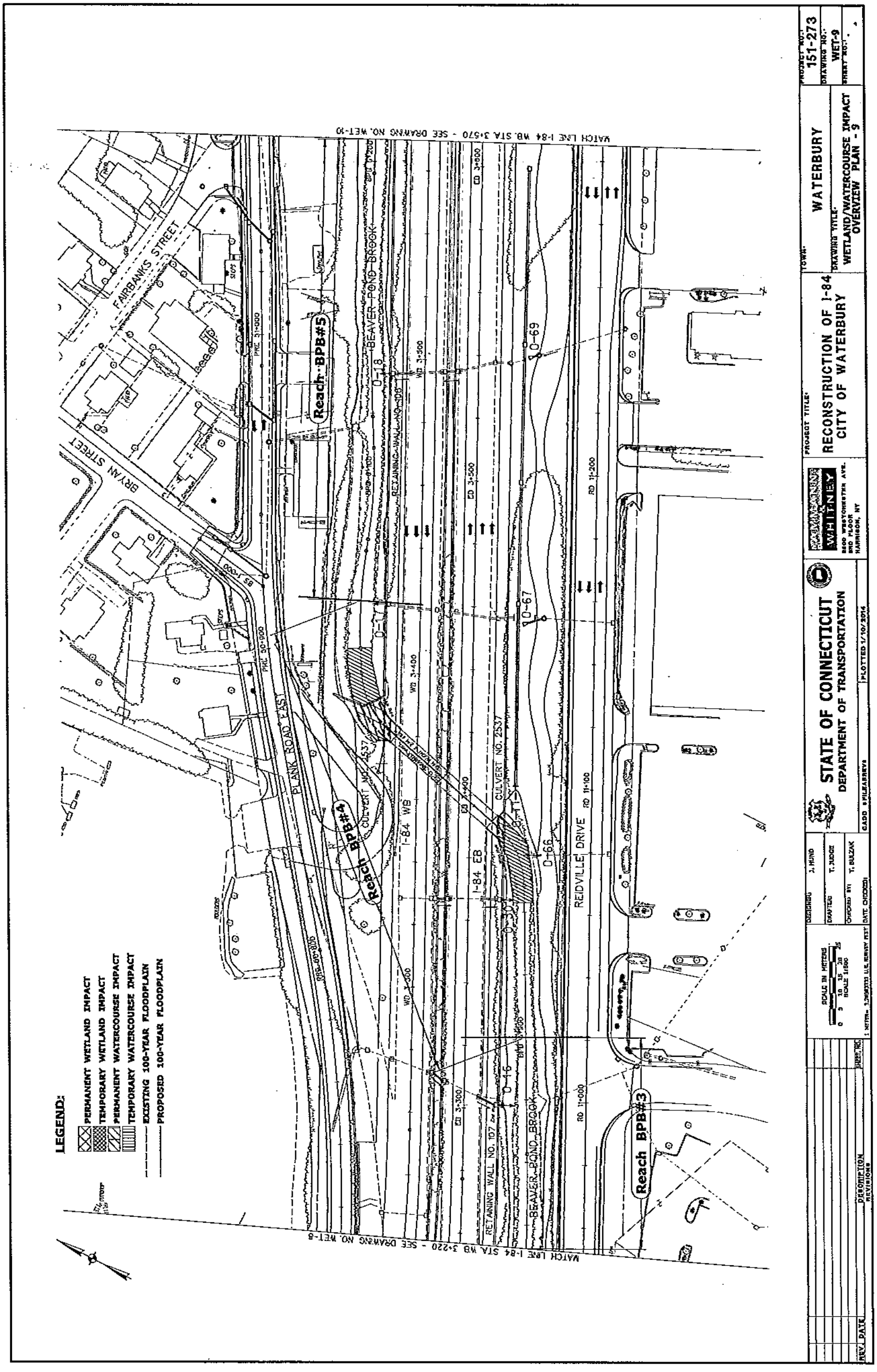
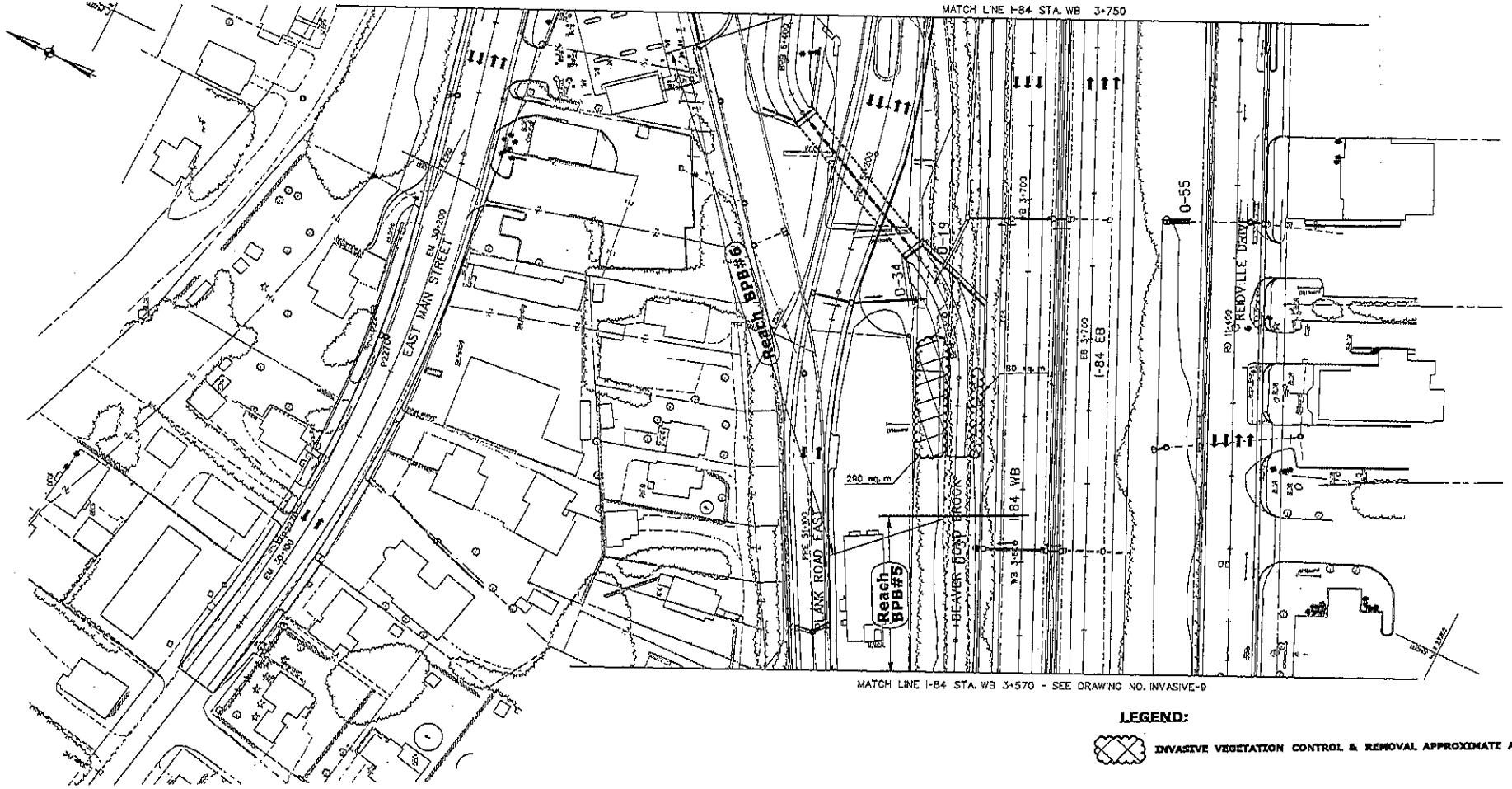
MATCH LINE - SEE DRAWING NO. INVASIVE-17
STA WB 2+540 - SEE DRAWING NO. INVASIVE-6
MATCH LINE I-84
MATCH LINE I-84 STA WB 2+880
BEAVER POND BROOK
PLANK ROAD
PLANK ROAD EAST
CULVERT NO. 01227
CULVERT NO. 003
Reach BPB#2
I-84 WB
I-84 EB
REIDVILLE DRIVE
RELOCATED
0-11
0-50
0-36
130 sq. m
230 sq. m
DESIGNER: J. HUND
DRAFTER: T. JUDGE
CHECKED BY: T. BULZAK
DATE CHECKED:
SCALE IN METERS
SCALE 1:500
1 METER= 3.28083333 U.S. SURVEY FEET
REV. DATE
DESCRIPTION
REVISIONS
SHEET NO.
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PLOTTED 1/28/2014
HARDESTY & HANOVER
WHITNEY
2800 WESTCHESTER AVE.
3RD FLOOR
HARRISON, NY
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 7
PROJECT NO.:
151-273
DRAWING NO.:
INVASIVE-7
SHEET NO.:


LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE - SEE DRAWING NO. WET-17
MATCH LINE - SEE DRAWING NO. WET-17
STA. NB 2+540 - SEE DRAWING NO. WET-8
MATCH LINE I-84
SEE DRAWING NO. WET-16
BEAVER BROOK
PLANK ROAD
PLANK ROAD EAST
CULVERT NO. 01227
Reach BPB#2
I-84 WB
REIDVILLE DRIVE
CULVERT NO. 003
MATCH LINE I-84 STA. NB 2+860 - SEE DRAWING NO. WET-8
SCALE IN METERS
SCALE 1:1000
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PARSONS BRINCKERHOFF
WHITNEY
2500 WESTCHESTER AVE.
3RD FLOOR
HARRISON, NY
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 7
PROJECT NO.:
151-273
DRAWING NO.:
WET-7
SHEET NO.:
DESIGNED: J. HUND
DRAFTED: T. JUDGE
CHECKED BY: T. MULZAK
DATE CHECKED:
PLOTTED 1/10/2014
REV. DATE
DESCRIPTION
REVISIONS
SHEET NO.


MATCH LINE I-84 STA WB 3+220 - SEE DRAWING NO WET-9
MATCH LINE I-84 STA WB 2+860 - SEE DRAWING NO. WET-7
PLANK ROAD EAST
I-84 WB
I-84 EB
BEAVER POND BROOK
REIDVILLE DRIVE
Reach BPB#3
Reach BPB#2
LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 8
PROJECT NO.:
151-273
DRAWING NO.:
WET-8


LEGEND:
INVASIVE VEGETATION CONTROL & REMOVAL APPROXIMATE AREA
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 WB STA 3+570 - SEE DRAWING NO. INVASIVE-10
MATCH LINE I-84 STA WB 3+220
FAIRBANKS STREET
BRYAN STREET
PLANK ROAD EAST
REIDVILLE DRIVE
BEAVER POND BROOK
I-84 WB
I-84 EB
CULVERT NO. 2537
RETAINING WALL NO. 107
RETAINING WALL NO. 108
Reach BPB#5
Reach BPB#4
Reach BPB#3
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 9
151-273
INVASIVE-9
PLOTTED 1/28/2014


LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
FAIRBANKS STREET
BRYAN STREET
PLANK ROAD EAST
BEAVER POND BROOK
RETAINING WALL NO. 107
CULVERT NO. 2537
I-84 WB
I-84 EB
REIDVILLE DRIVE
Reach BPB#3
Reach BPB#4
Reach BPB#5
WATCH LINE I-84 WB. STA 3+570 - SEE DRAWING NO. WET-10
WATCH LINE I-84 STA WB 3+220 - SEE DRAWING NO. WET-8
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 9
PROJECT NO.
151-273
DRAWING NO.
WET-9
PLOTTED 1/10/2014



LEGEND:

INVASIVE VEGETATION CONTROL & REMOVAL APPROXIMATE AREA

EXISTING 100-YEAR FLOODPLAIN

PROPOSED 100-YEAR FLOODPLAIN

NO./ DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:250	DESIGNED: J. HUNG	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CAMMANN & WHITNEY 3500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
			1 METER= 3.2808333 U.S. SURVEY FEET	DRAFTED: T. JUDGE			
				CHECKED BY: T. BULZAK			
				DATE CHECKED:	CADD #FILENAME#	PLOTTED 1/28/2014	

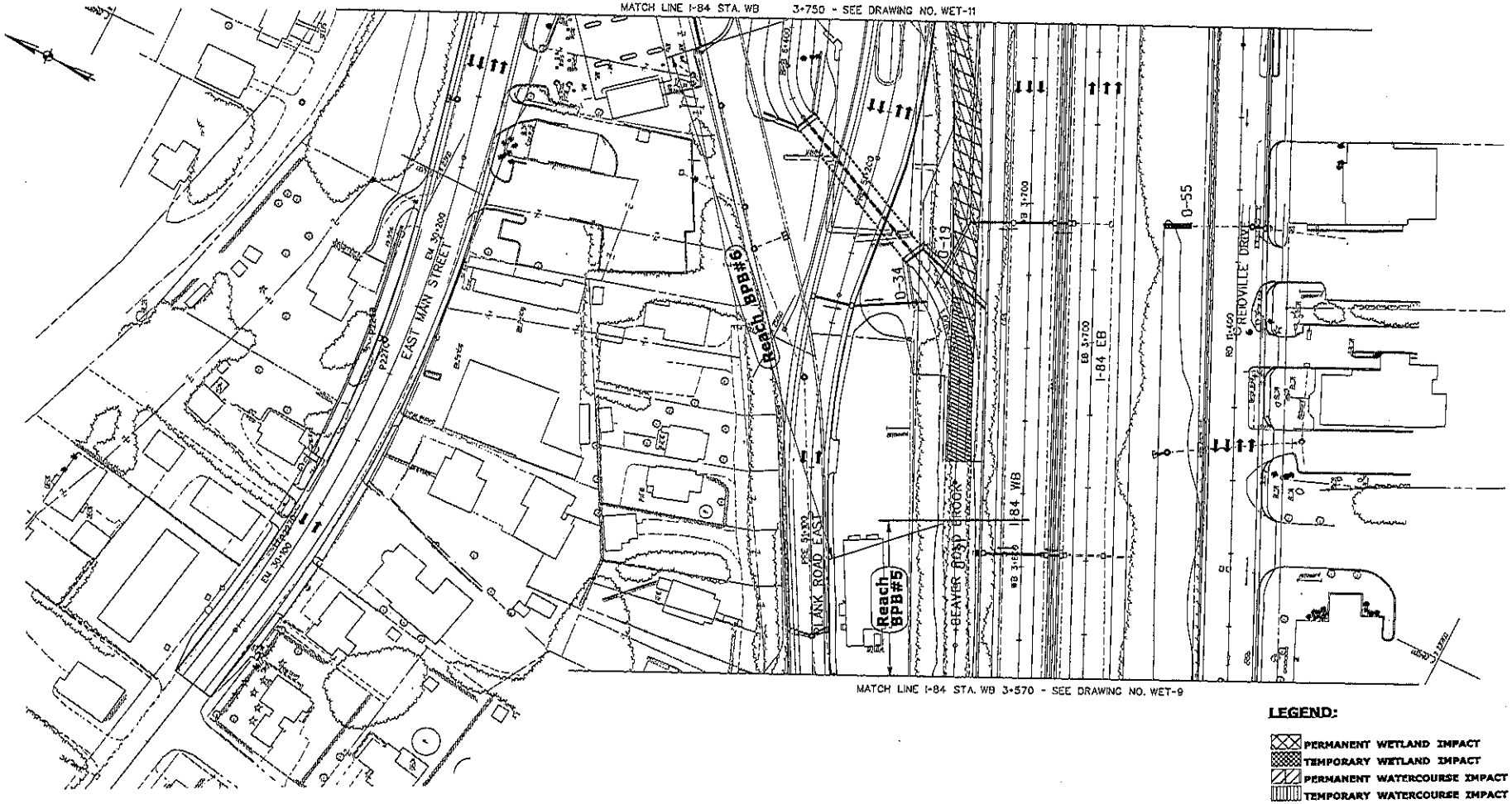
TOWN: WATERBURY

DRAWING TITLE: INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 10

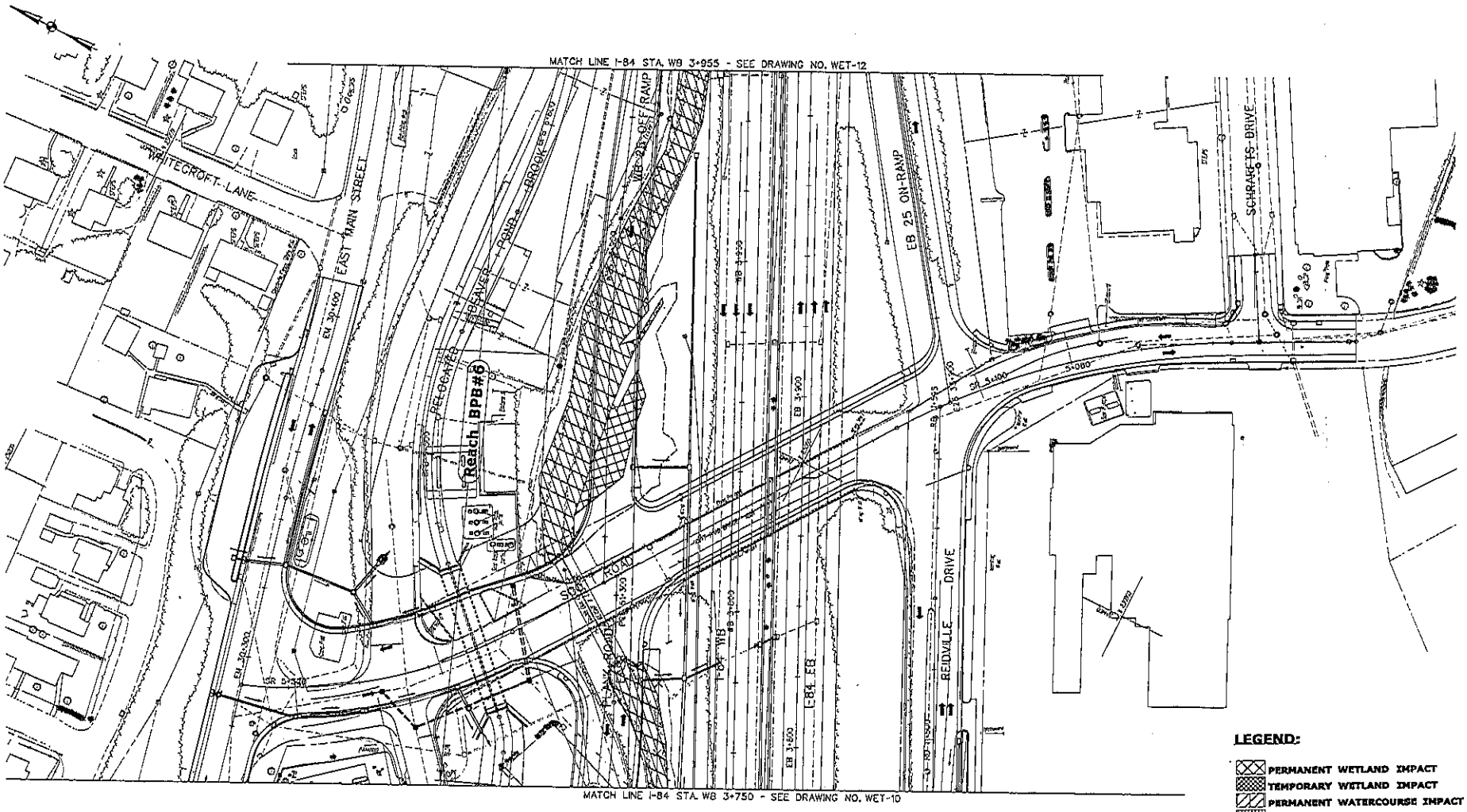
PROJECT NO.: 151-273

DRAWING NO.: INVASIVE-10

SHEET NO.:

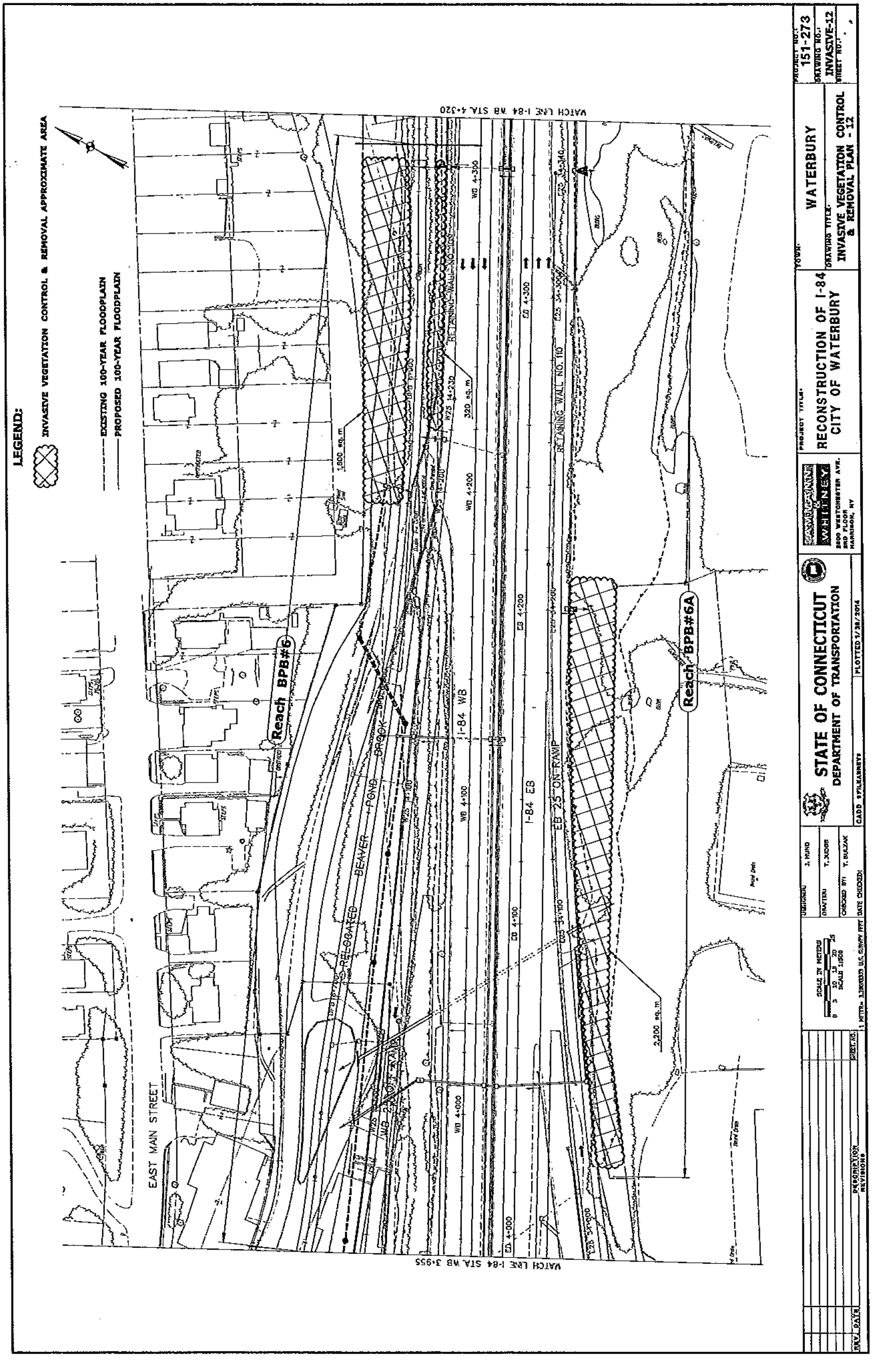


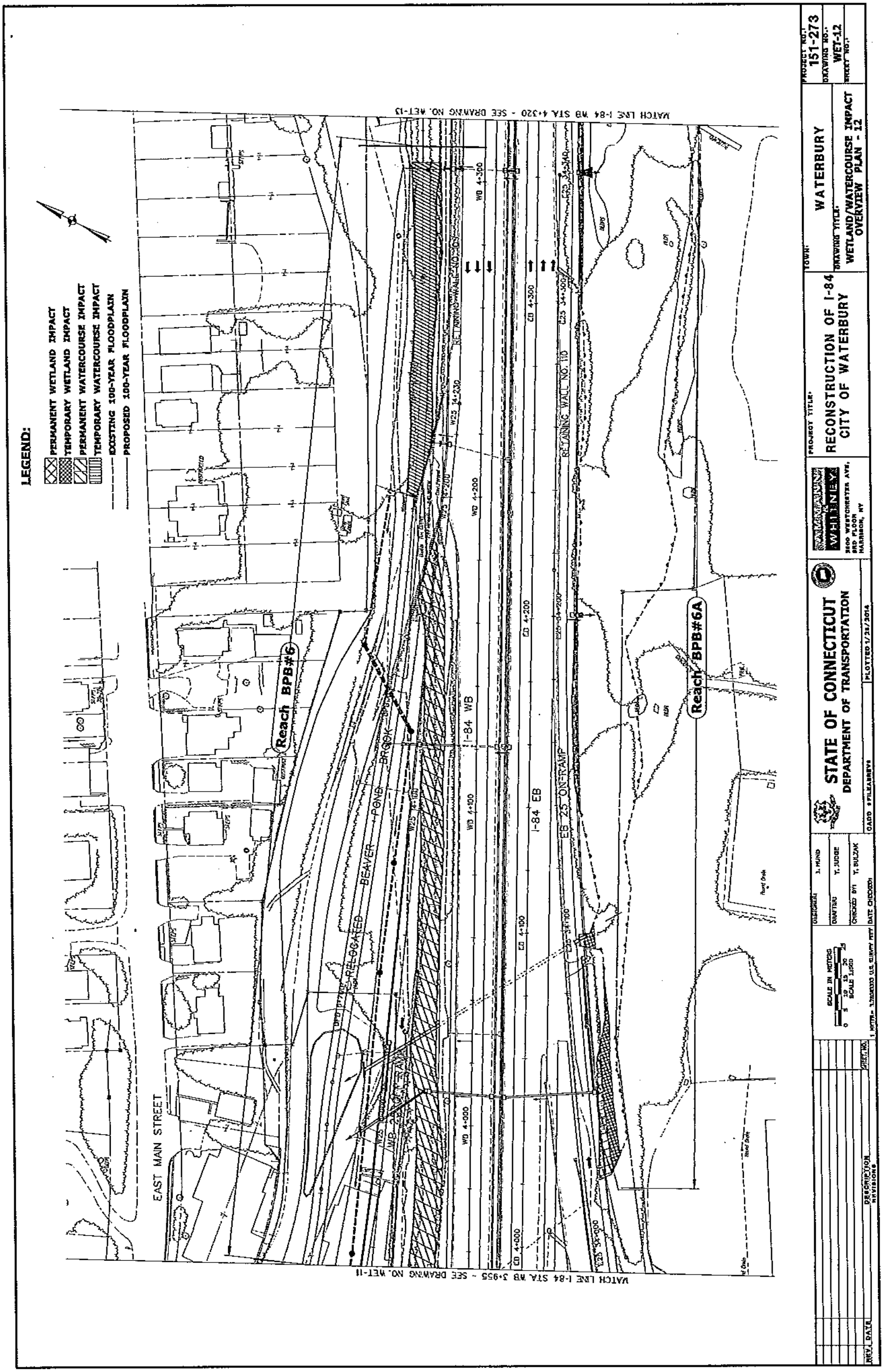
REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:200	DESIGNED: J. MUNO	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
				1 METER= 3.2808333 U.S. SURVEY FEET	DRAFTED: T. JUDGE		TOWN: WATERBURY
					CHECKED BY: T. BULZAK		DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 10
					DATE CHECKED:		PROJECT NO.: 151-273
					CADD #FILNAMREV#	PLOTTED 1/10/2014	DRAWING NO.: WET-10
						WHITNEY 2500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY	SHEET NO.:



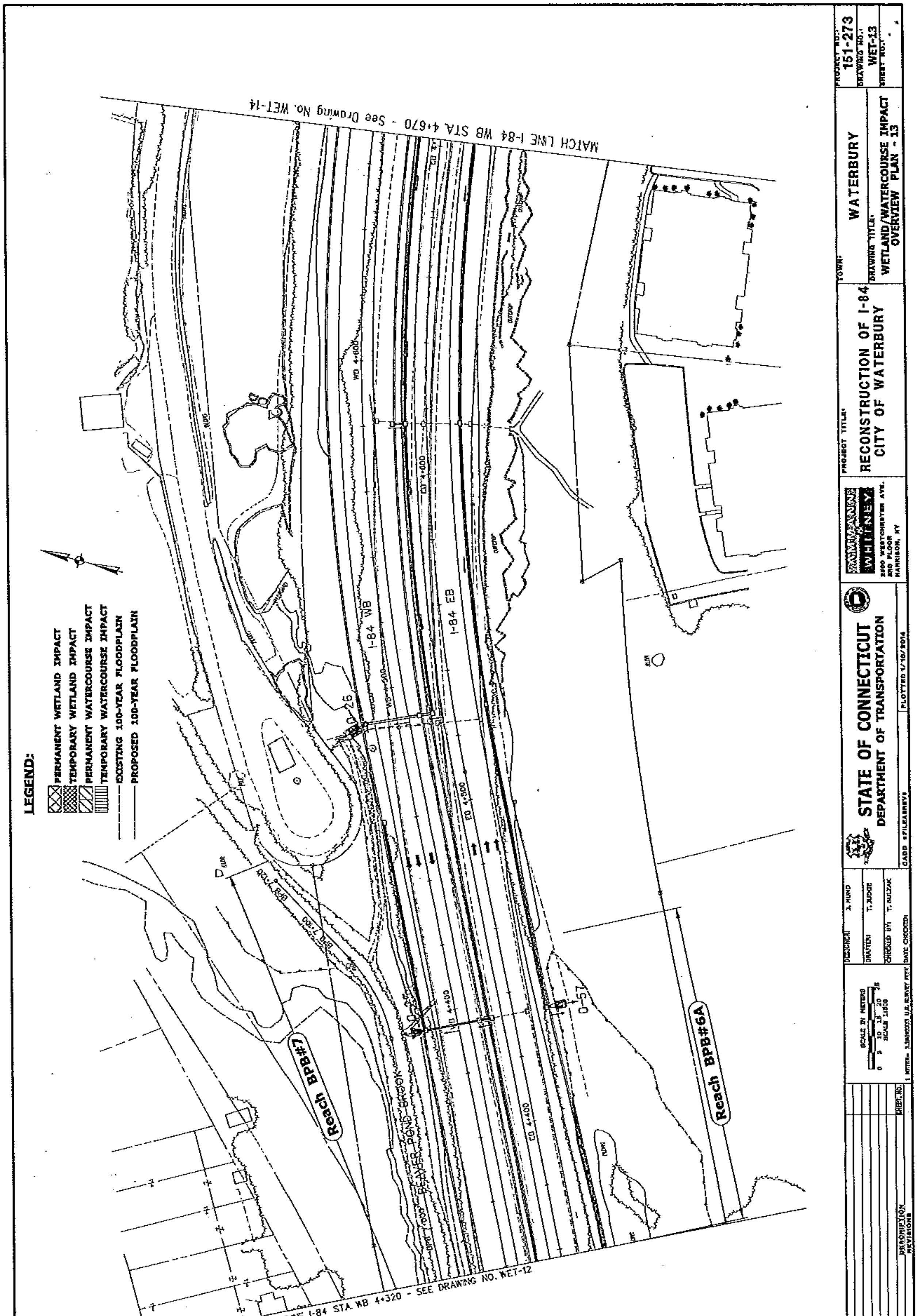
REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:500	DESIGNED: J. HUND	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
				1 METER= 3.280833 U.S. SURVEY FEET	DRAFTED: T. JUDGE		TOWN: WATERBURY
					CHECKED BY: T. SULZAK		DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 11
					DATE CHECKED:	CADD #FILEABBREV# PLOTTED 1/10/2014	PROJECT NO.: 151-273 DRAWING NO.: WET-11 SHEET NO.:

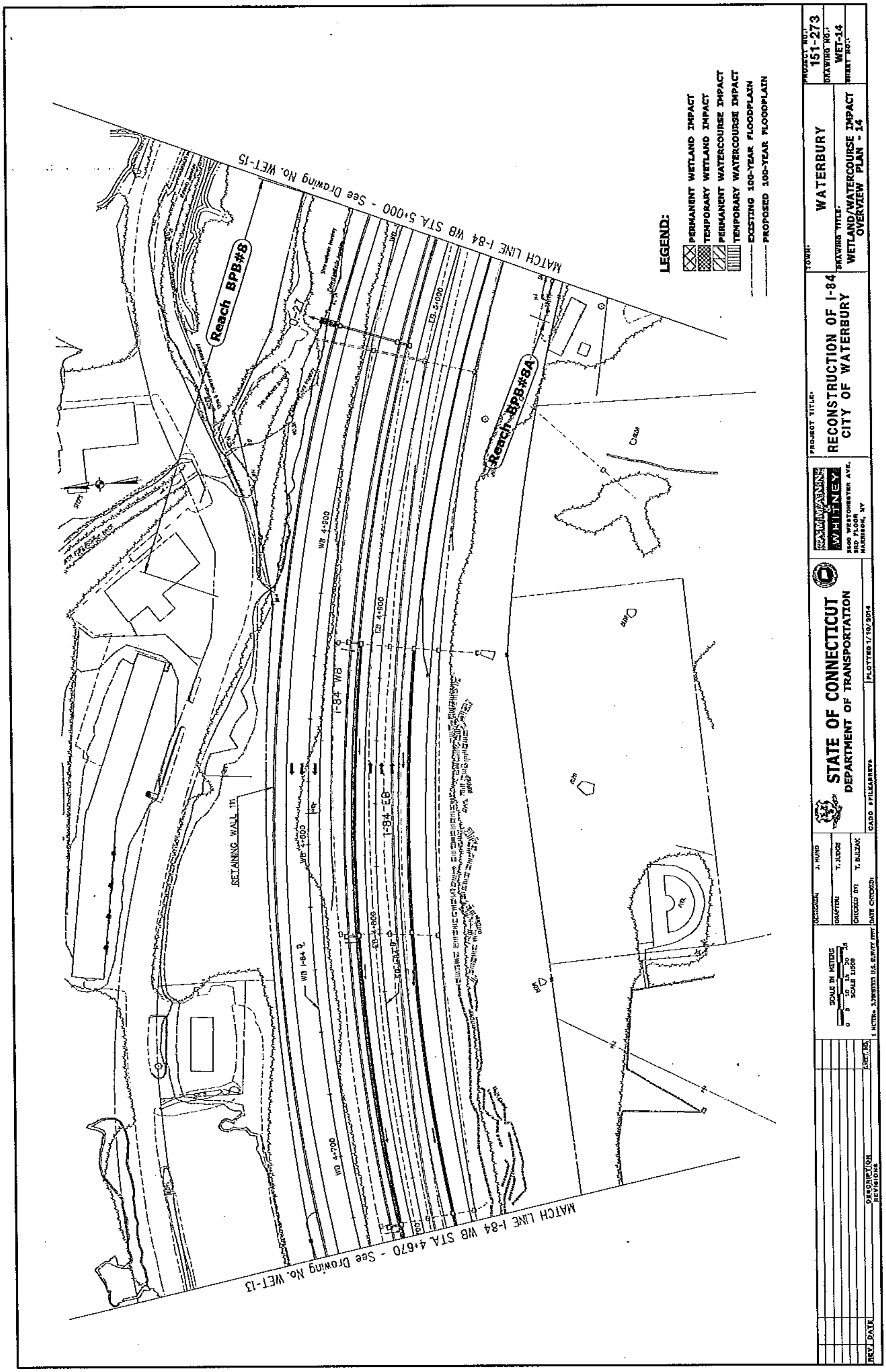
HAMMETT & WHITNEY
2000 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY

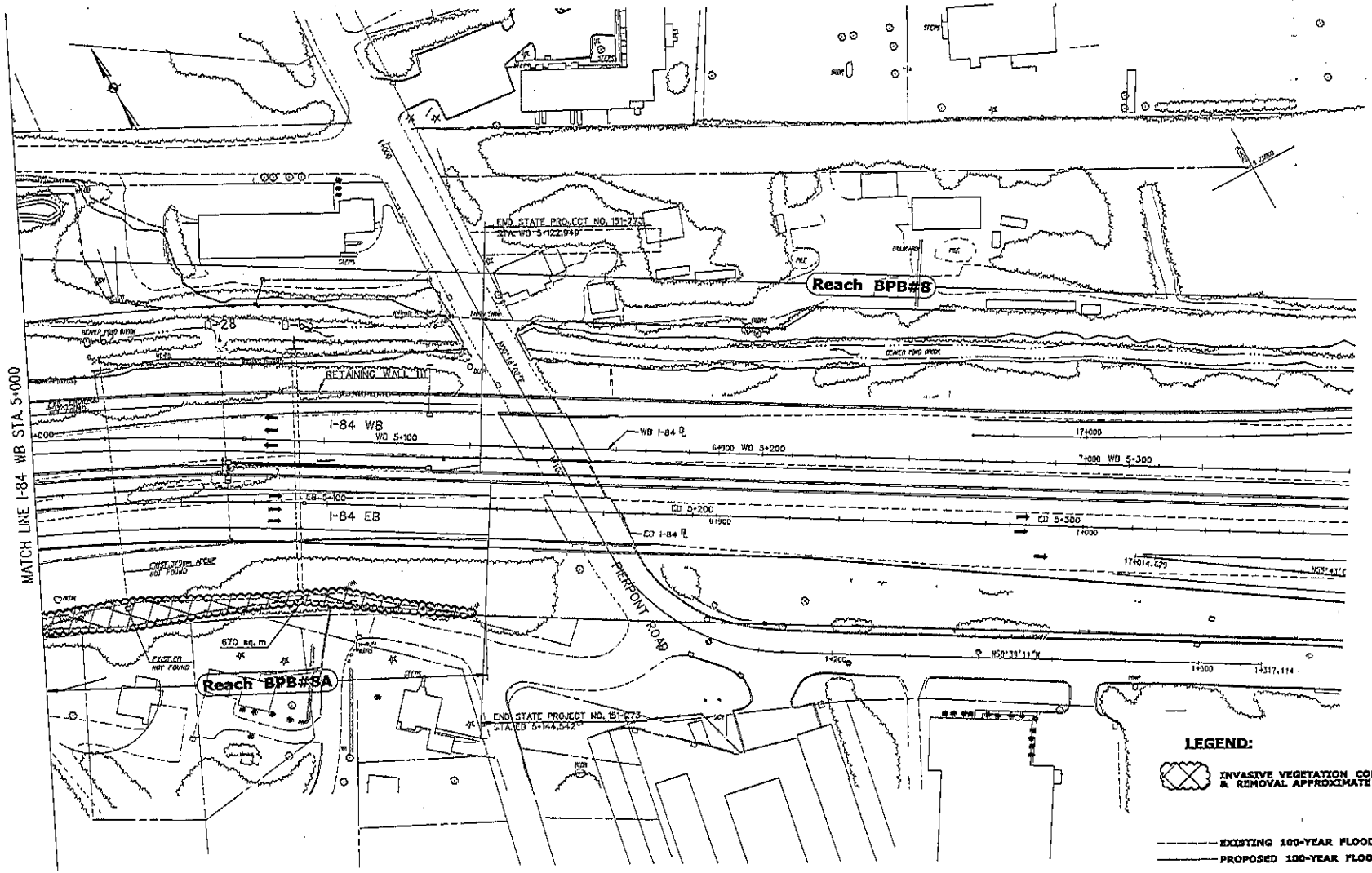

LEGEND:
INVASIVE VEGETATION CONTROL & REMOVAL APPROXIMATE AREA
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
EAST MAIN STREET
Reach BPB#6
Reach BPB#6A
I-84 WB
I-84 EB
RELOCATED BEAVER POND BROOK
RETAINING WALL NO. 110
EB 25 ON RAMP
1,600 sq. m
320 sq. m
2,200 sq. m
WATCH LINE I-84 WB STA 4+320
WATCH LINE I-84 WB STA 3+955
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
INVASIVE VEGETATION CONTROL
& REMOVAL PLAN - 12
PROJECT NO.
151-273
DRAWING NO.
INVASIVE-12



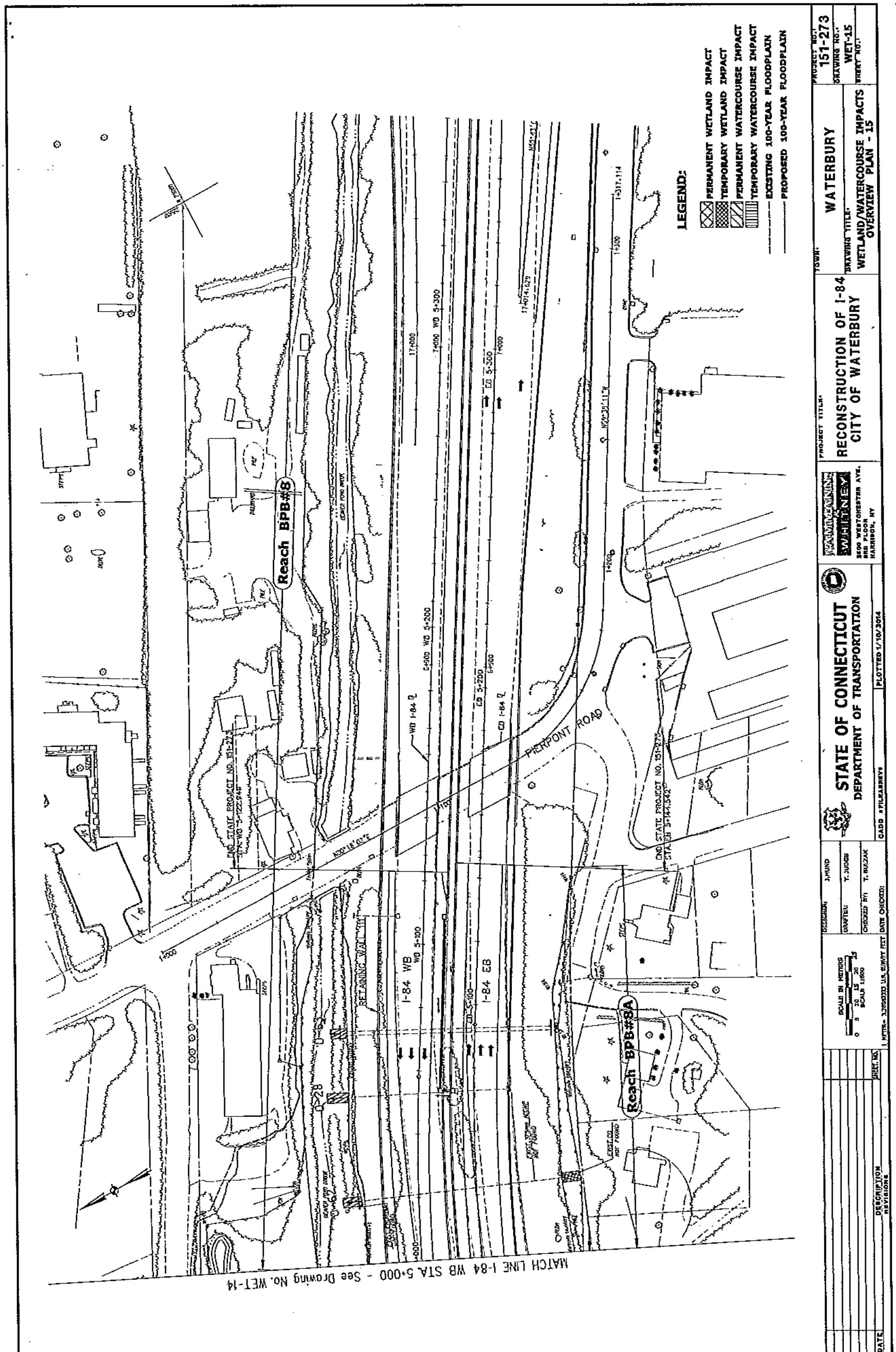
LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
EAST MAIN STREET
Reach BPB#6
Reach BPB#6A
RELOCATED BEAVER POND BROOK
WB 25 OFF RAMP
I-84 WB
I-84 EB
EB 25 ON-RAMP
RETAINING WALL NO. 110
WB 4+000
WB 4+100
WB 4+200
WB 4+300
CD 4+000
CD 4+100
CD 4+200
CD 4+300
MATCH LINE I-84 STA. WB 3+955 - SEE DRAWING NO. WET-11
MATCH LINE I-84 WB STA 4+320 - SEE DRAWING NO. WET-13
SCALE IN METERS
SCALE 1:500
DESIGNER J. MUND
DRAFTER T. JUDGE
CHECKED BY T. BULZAK
REV. DATE
DESCRIPTION REVISIONS
SHEET NO.
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PLOTTED 1/28/2014
WHITNEY
3200 WESTCHESTER AVE, 3RD FLOOR HARRISON, NY
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 12
PROJECT NO.:
151-273
DRAWING NO.:
WET-12
SHEET NO.:

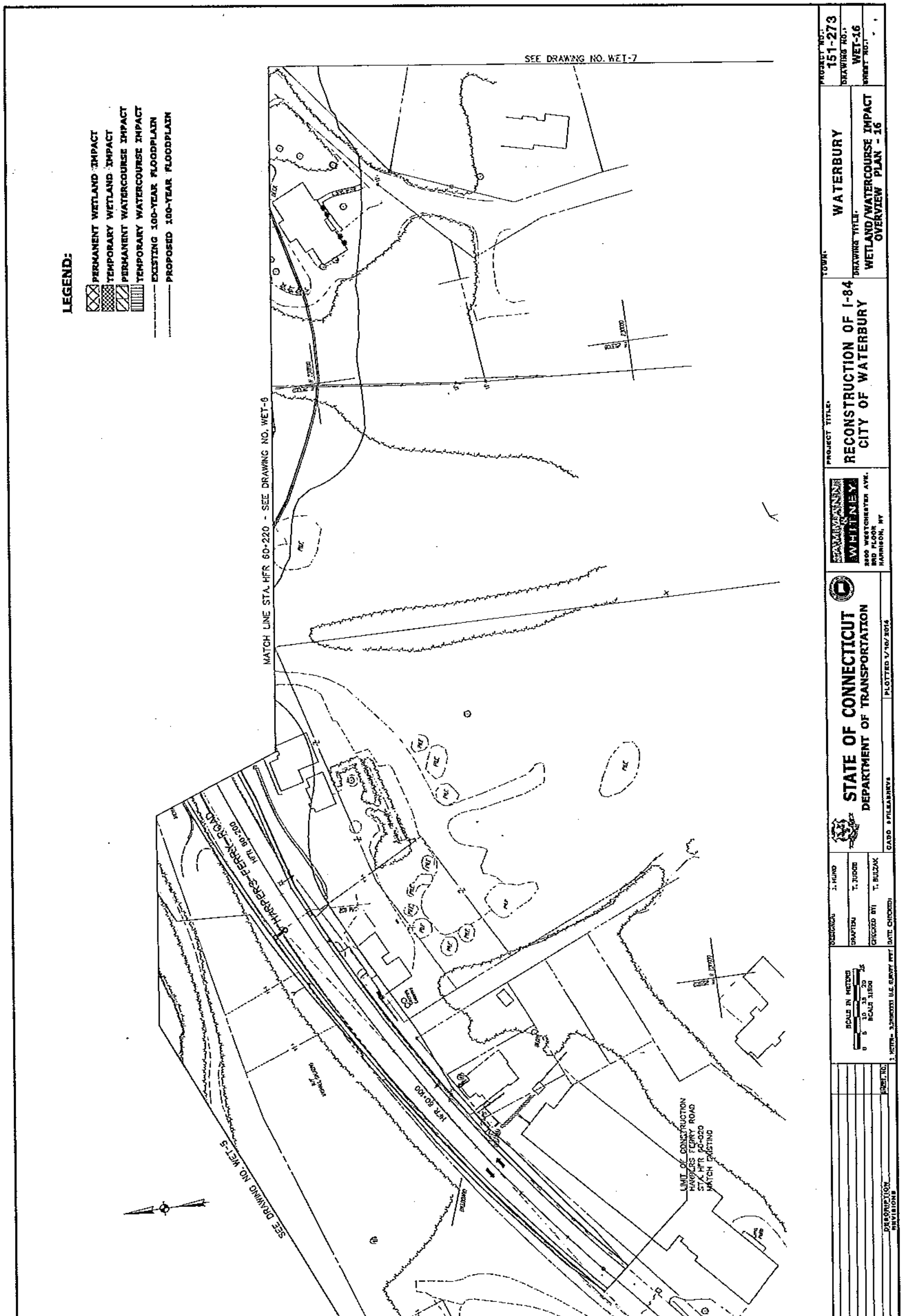

LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 WB STA 4+670 - See Drawing No. WET-14
MATCH LINE I-84 STA WB 4+320 - SEE DRAWING NO. WET-12
I-84 WB
I-84 EB
BEAVER POND BROOK
Reach BPB#7
Reach BPB#6A
WATERBURY
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 13
151-273
WET-13
WHITNEY

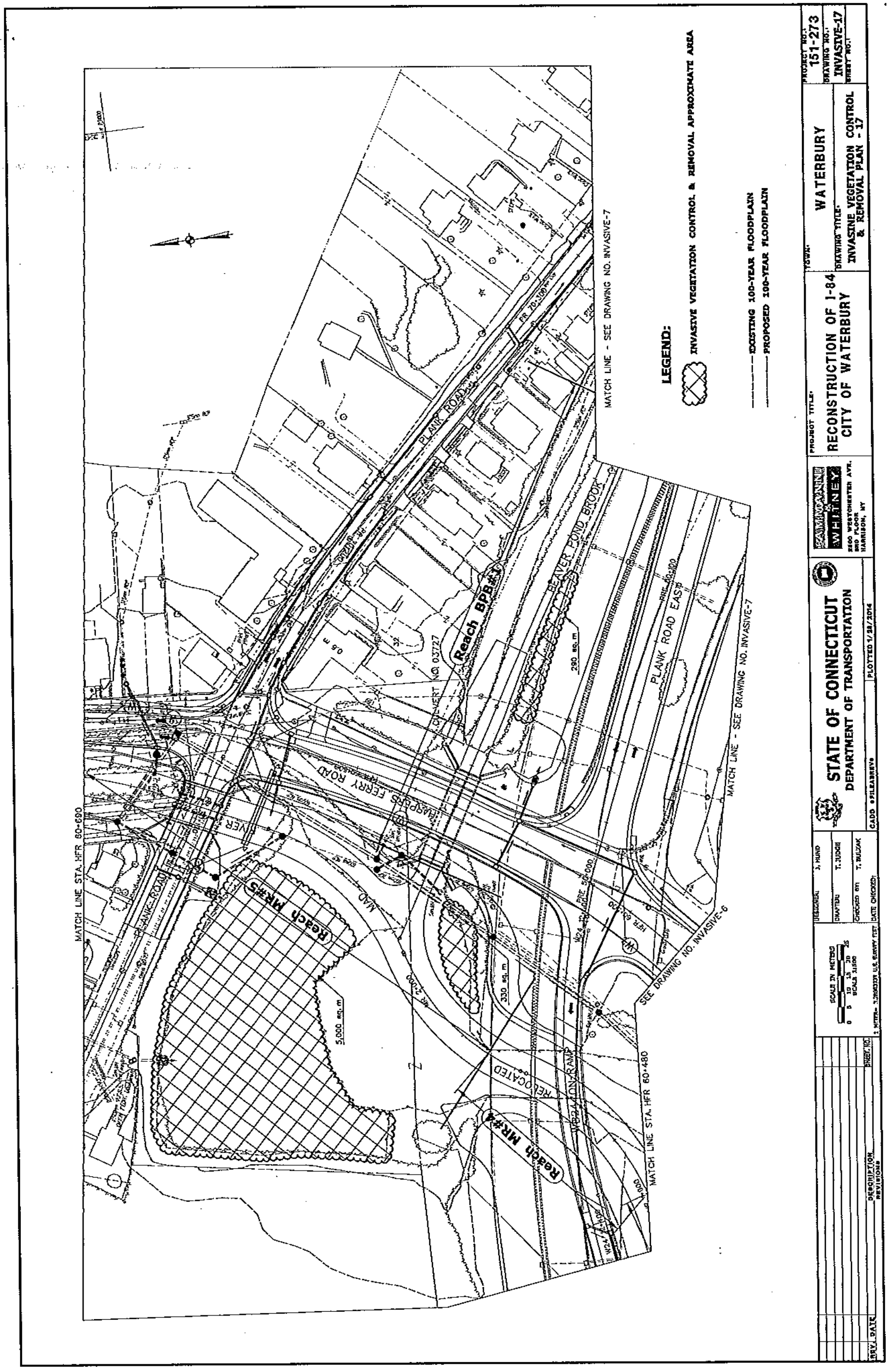

LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE I-84 WB STA 5+000 - See Drawing No. WET-15
MATCH LINE I-84 WB STA 4+670 - See Drawing No. WET-13
Reach BPB#8
Reach BPB#8A
RETAINING WALL 111
I-84 WB
I-84 EB
WB 4+900
WB 4+800
WB 4+700
EB 5+000
EB 4+900
EB 4+800
WB I-84 ℄
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 14
PROJECT NO.:
151-273
DRAWING NO.:
WET-14
SHEET NO.:
WHITNEY
PLOTTED 1/10/2014
DESIGNER J. HUND
DRAFTER T. JUDGE
CHECKED BY T. BULZAK
SCALE IN METERS
SCALE 1:500
REV. DATE
DESCRIPTION
REVISIONS

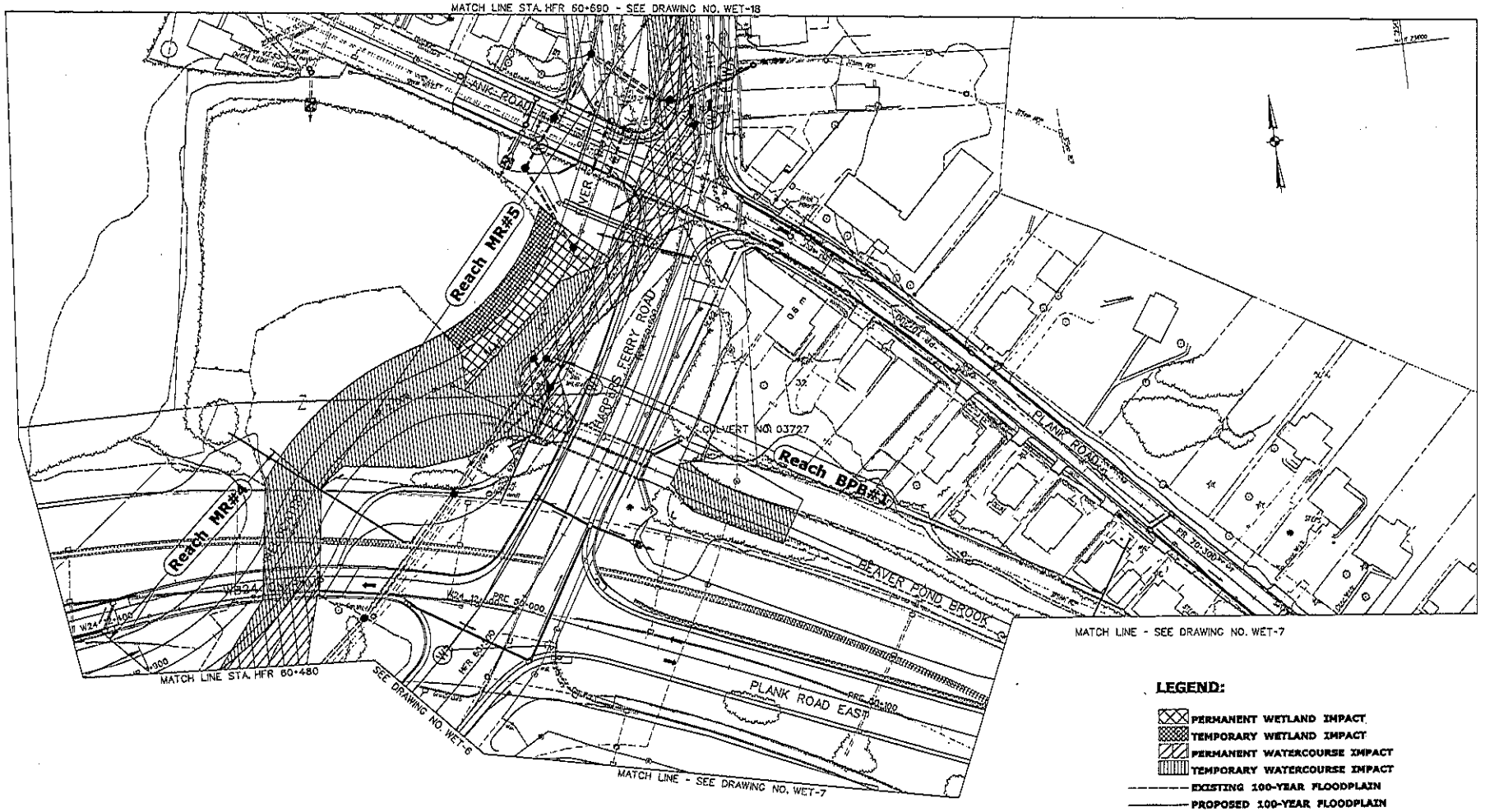


REV.	DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:1000	DESIGNED: J.HUND	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
				1 METER= 3.24083333 U.S. SURVEY FOOT	DRAFTED: T. JUDGE		TOWN: WATERBURY
					CHECKED BY: T. SULZAK		DRAWING TITLE: INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 15
					DATE CHECKED:		PROJECT NO.: 151-273
					CADD FILEARREVS	PLOTTED 1/28/2014	DRAWING NO.: INVASIVE-15
						HAMMONS & WHITNEY 2500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY	SHEET NO.:


MATCH LINE I-84 WB STA 5+000 - See Drawing No. WET-14
Reach BPB#8
Reach BPB#8A
PIERPONT ROAD
I-84 WB
I-84 EB
RETAINING WALL
LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
WETLAND/WATERCOURSE IMPACTS
OVERVIEW PLAN - 15
151-273
WET-15


LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
SEE DRAWING NO. WET-7
MATCH LINE STA. HFR 60+220 - SEE DRAWING NO. WET-6
SEE DRAWING NO. WET-5
HARPERS FERRY ROAD
HFR 60+200
HFR 60+100
LIMIT OF CONSTRUCTION HARPERS FERRY ROAD STA. HFR 60+020 MATCH EXISTING
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PLOTTED 1/10/2014
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
WATERBURY
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 16
PROJECT NO.:
151-273
DRAWING NO.:
WET-16
REVISIONS


LEGEND:
INVASIVE VEGETATION CONTROL & REMOVAL APPROXIMATE AREA
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
MATCH LINE - SEE DRAWING NO. INVASIVE-7
PLANK ROAD
BEAVER POND BROOK
PLANK ROAD EAST
Reach BPB#1
290 sq.m
HARPERS FERRY ROAD
Reach MR#5
5,000 sq.m
330 sq.m
RELOCATED
Reach MR#4
MATCH LINE STA. HFR 60+690
MATCH LINE STA. HFR 60+480
SEE DRAWING NO. INVASIVE-6
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
INVASIVE VEGETATION CONTROL & REMOVAL PLAN - 17
151-273
INVASIVE-17



REV. DATE	DESCRIPTION REVISIONS	SHEET NO.	SCALE IN METERS 0 5 10 15 20 25 SCALE 1:500	DESIGNED J. HUND	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY	TOWN: WATERBURY
			1 METER = 3.2808333 U.S. SURVEY FEET	DRAFTER T. DUGGE			DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 17
				CHECKED BY T. BULZAK			PROJECT NO.: 151-273
				DATE CHECKED	CADD # FILENAME=	PLOTTED 1/10/2014	DRAWING NO.: WET-17
							SHEET NO.: -

FAY, SPOFFORD & THORNDIKE WHITNEY
8500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY

MATCH LINE STA. HFR 60+590 - SEE DRAWING NO. WET-17

REV	DATE	DESCRIPTION REVISIONS	SHEET NO.

SCALE IN METERS
0 5 10 15 20 25
SCALE 1:500
1 METER= 3.28083333 U.S. SURVEY FEET

DESIGNED: J. HUND
DRAFTED: T. JUDGE
CHECKED BY: T. SULZAK
DATE CHECKED:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

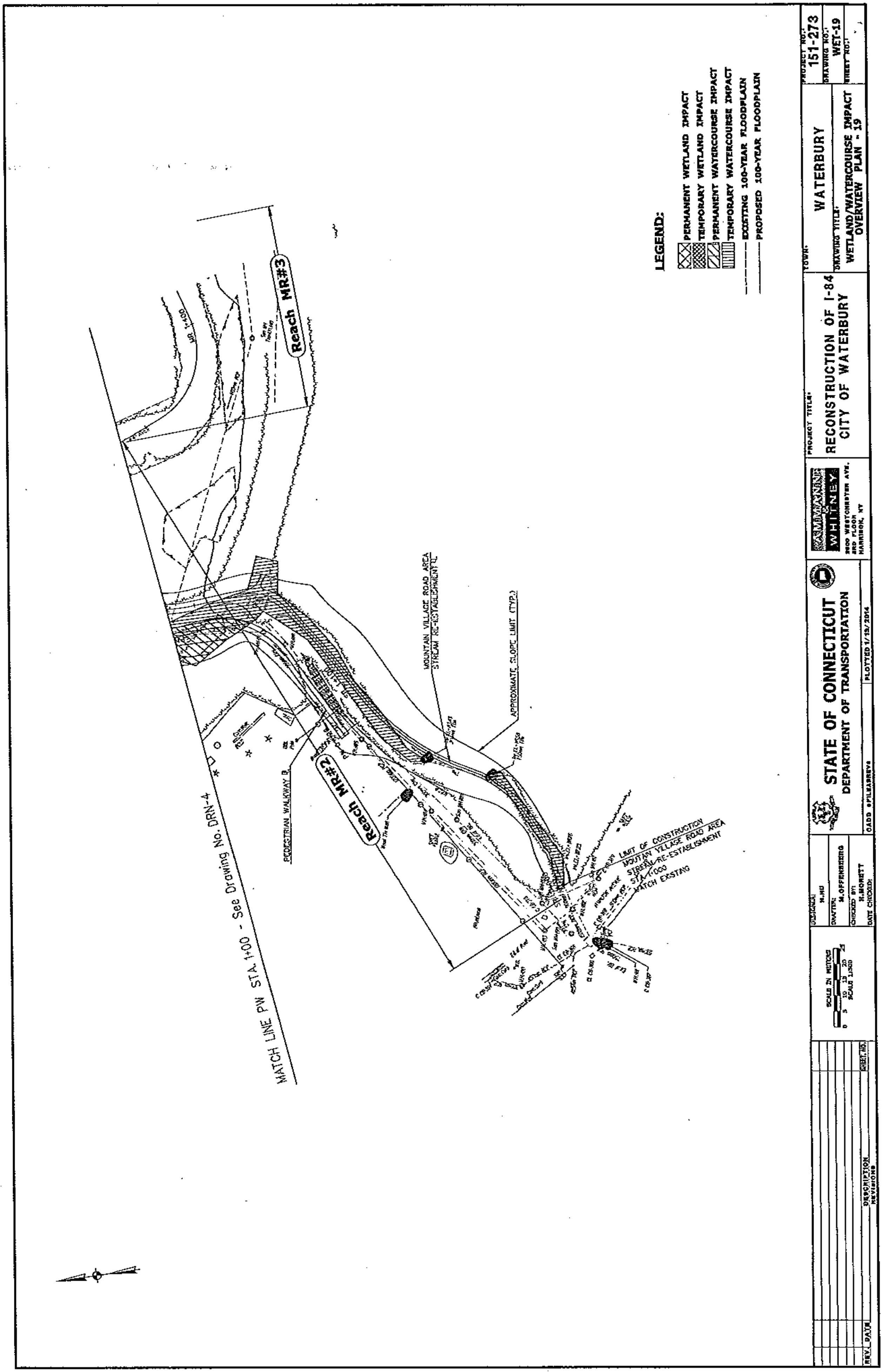
CADD #FILEADNEV8 | PLOTTED 1/10/2014

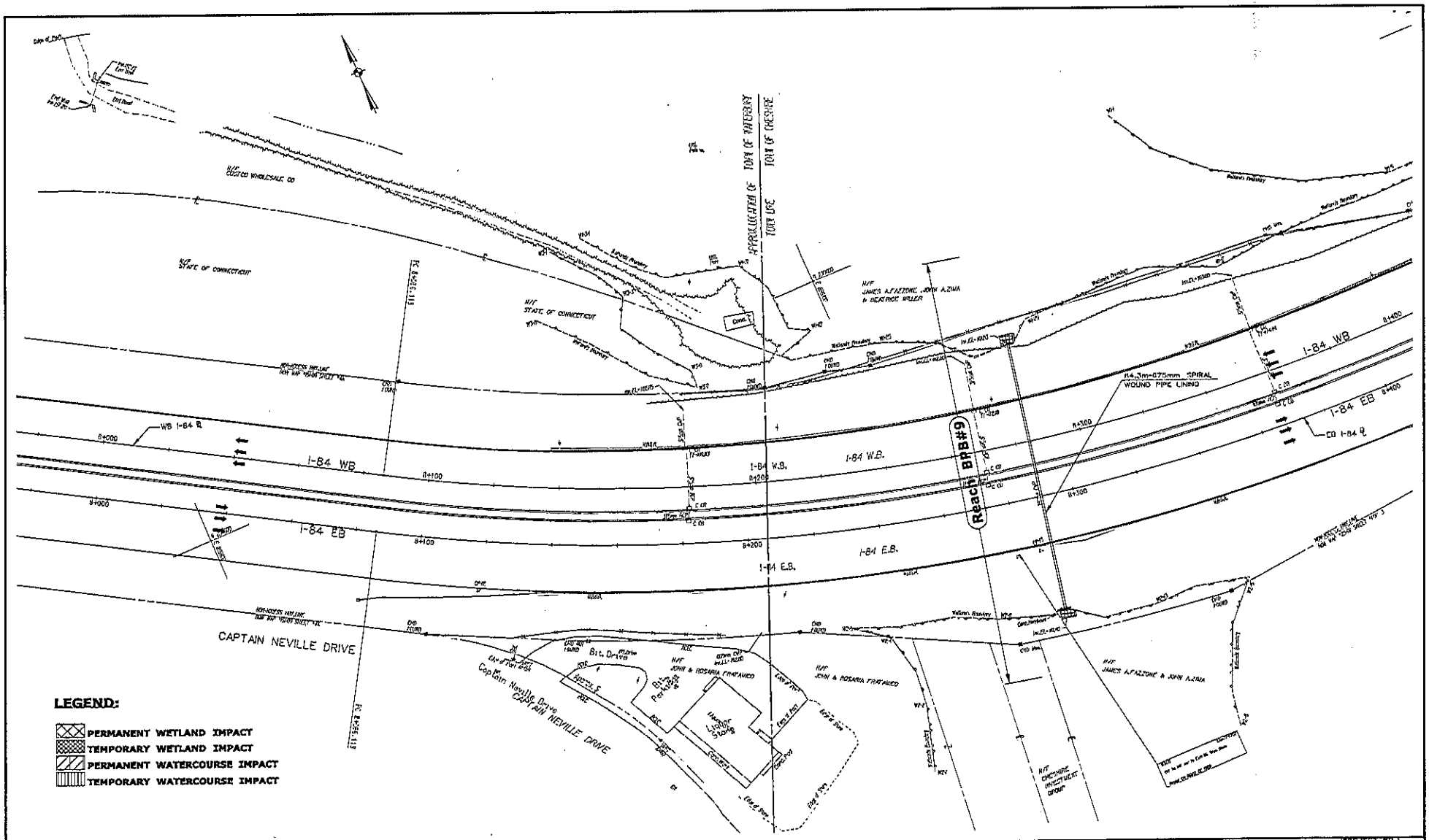
PARSONS BRINCKERHOFF WHITNEY
2500 WESTCHESTER AVE. 3RD FLOOR HARRISON, NY

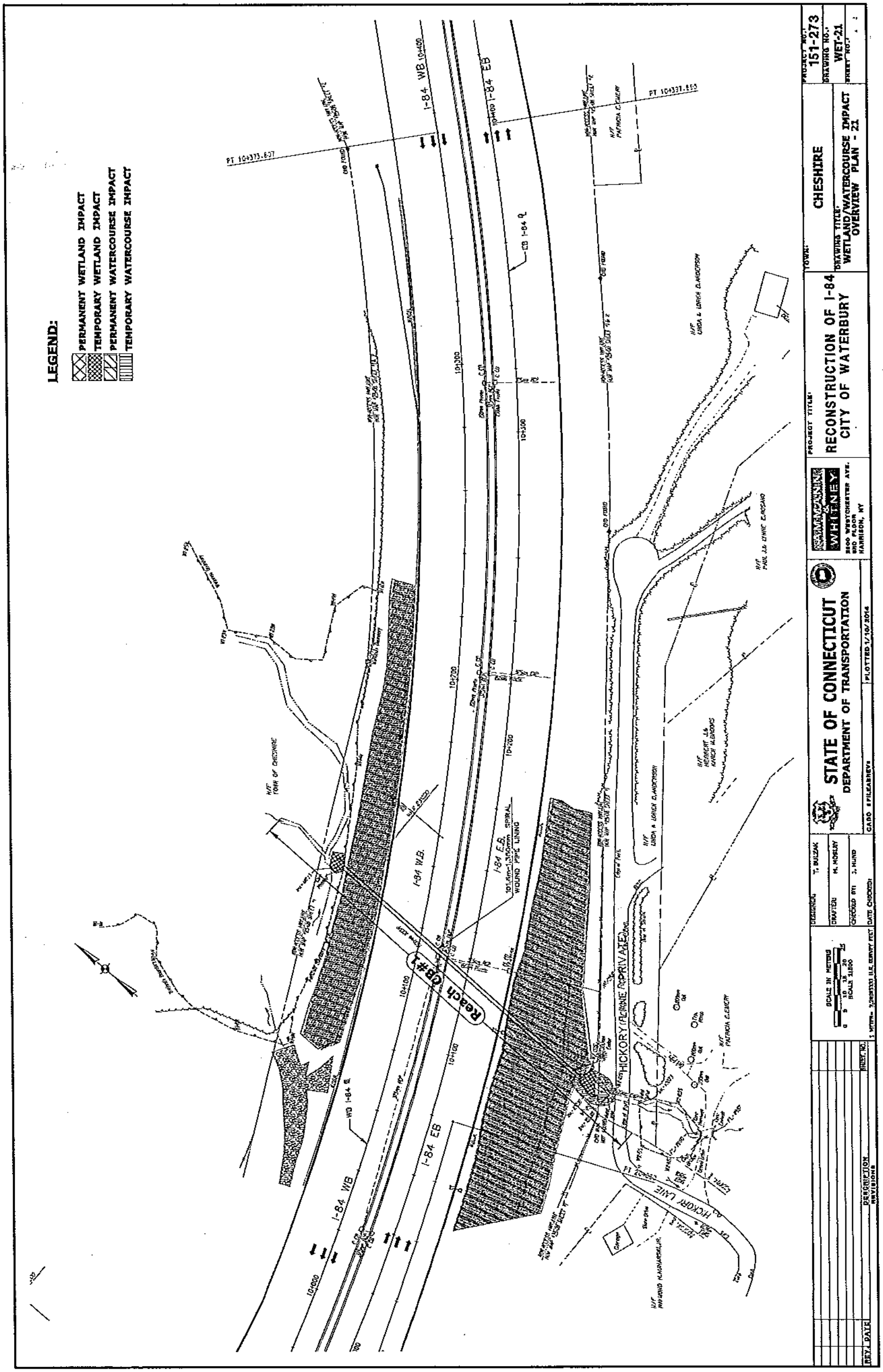
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY

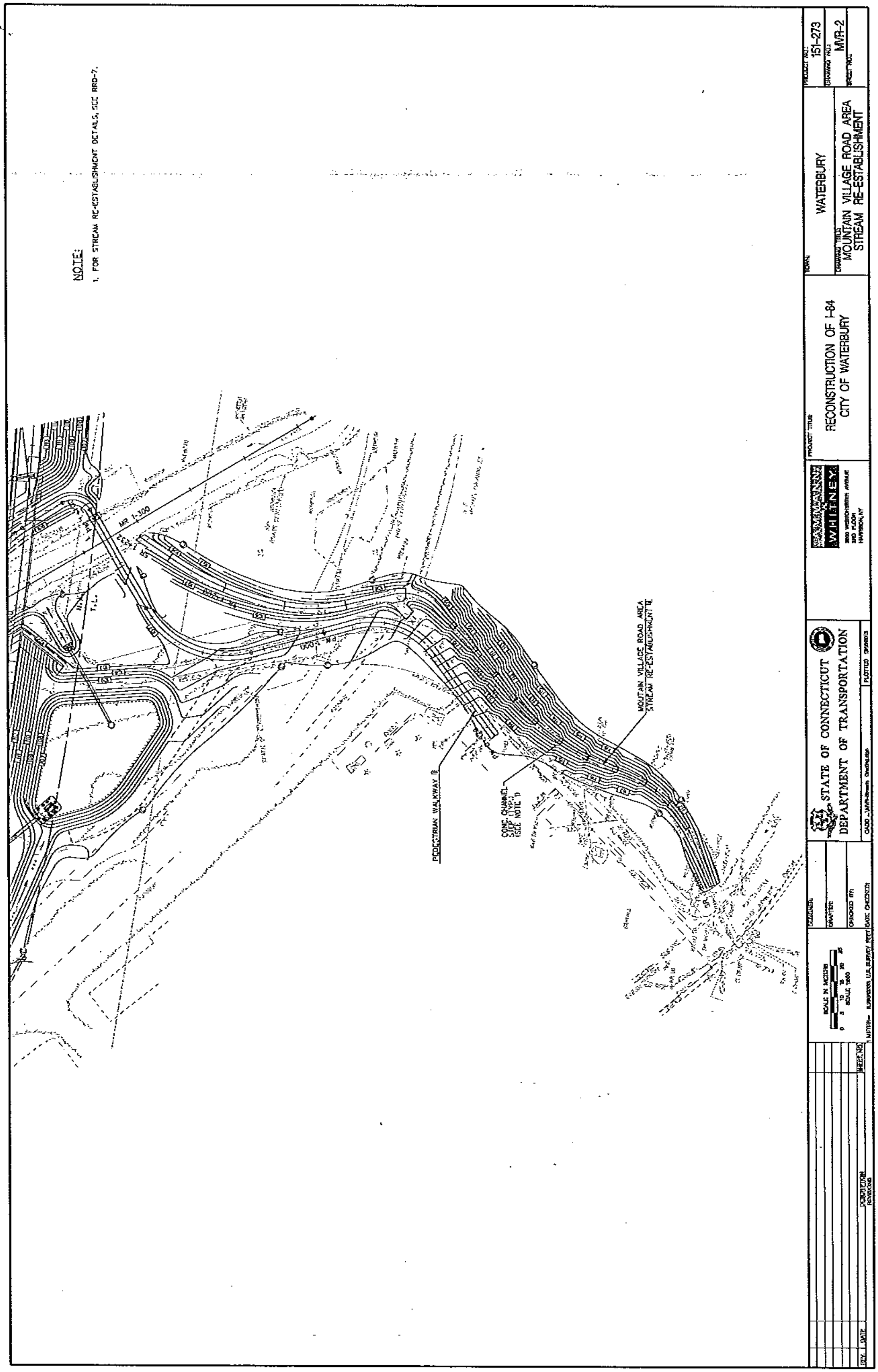
TOWN: **WATERBURY**
DRAWING TITLE: **WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 18**

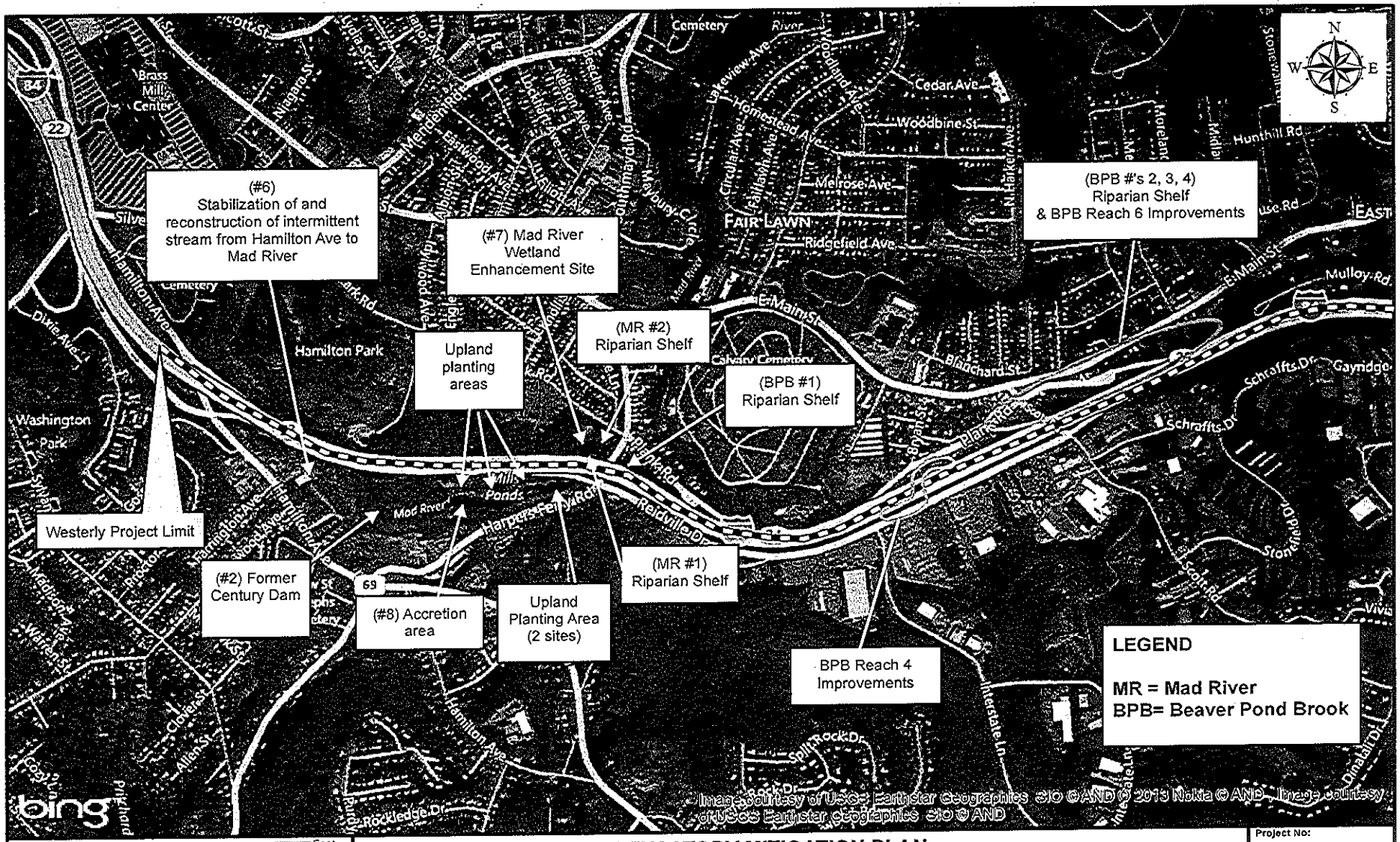
PROJECT NO.: **151-273**
DRAWING NO.: **WET-18**
SHEET NO.:


LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
EXISTING 100-YEAR FLOODPLAIN
PROPOSED 100-YEAR FLOODPLAIN
Reach MR#3
Reach MR#2
MATCH LINE PW STA. 1+00 - See Drawing No. DRN-4
PEDESTRIAN WALKWAY B
MOUNTAIN VILLAGE ROAD AREA STREAM RE-ESTABLISHMENT
APPROXIMATE SLOPE LIMIT (TYP.)
LIMIT OF CONSTRUCTION
MOUNTAIN VILLAGE ROAD AREA STREAM RE-ESTABLISHMENT STA 1+000 MATCH EXISTING
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PLOTTED 1/19/2014
PROJECT TITLE: RECONSTRUCTION OF I-84 CITY OF WATERBURY
TOWN: WATERBURY
DRAWING TITLE: WETLAND/WATERCOURSE IMPACT OVERVIEW PLAN - 19
PROJECT NO: 151-273
DRAWING NO: WET-19
SHEET NO:
DESIGNER: M.HU
DRAFTER: M.OFFENBERG
CHECKED BY: H.MORETT
SCALE IN METERS
REV. DATE
DESCRIPTION
REVISIONS
SHEET NO.


I-84 WB
I-84 EB
I-84 W.B.
I-84 E.B.
CAPTAIN NEVILLE DRIVE
Captain Neville Drive
CAPTAIN NEVILLE DRIVE
Reach BPB#9
TOWN OF WATERBURY
TOWN OF CHESHIRE
APPROXIMATION OF
TOWN LINE
LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
HAMMAINN & WHITNEY
2400 WESTCHESTER AVE.
3RD FLOOR
HARRISON, NY
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
CHESHIRE
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 20
PROJECT NO.:
151-273
DRAWING NO.:
WET-20
SHEET NO.:
DESIGNED: T. BULKAK
DRAFTED: M. MOSLEY
CHECKED BY: J. HUNO
DATE CHECKED:
CADD FILE#:
PLOTTED: 1/10/2014
SCALE IN METERS
SCALE: 1:1500
REV. DATE
DESCRIPTION
REVISIONS
SHEET NO.


LEGEND:
PERMANENT WETLAND IMPACT
TEMPORARY WETLAND IMPACT
PERMANENT WATERCOURSE IMPACT
TEMPORARY WATERCOURSE IMPACT
I-84 WB
I-84 EB
I-84 W.B.
I-84 E.B.
Reach CB #1
HICKORY (PRIVATE)
HICKORY LANE
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
PROJECT TITLE:
RECONSTRUCTION OF I-84
CITY OF WATERBURY
TOWN:
CHESHIRE
DRAWING TITLE:
WETLAND/WATERCOURSE IMPACT
OVERVIEW PLAN - 21
PROJECT NO.:
151-273
DRAWING NO.:
WET-21
SCALE IN METERS
REVISIONS
WHITNEY


NOTE:
1. FOR STREAM RE-ESTABLISHMENT DETAILS, SEE RRD-7.
MR 1-300
PEDESTRIAN WALKWAY B
CONC. CHANNEL
STEP (TYP.)
(SEE NOTE 1)
MOUTAIN VILLAGE ROAD AREA
STREAM RE-ESTABLISHMENT
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BAUMANNS
WHITNEY
RECONSTRUCTION OF I-84
CITY OF WATERBURY
WATERBURY
MOUNTAIN VILLAGE ROAD AREA
STREAM RE-ESTABLISHMENT
151-273
MVR-2



	COMPENSATORY MITIGATION PLAN	Project No: 15.0166290.00
	I-84 Habitat Enhancement Sites **Mad River and Beaver Pond Brook** **Waterbury, Connecticut**	Drawn by: KDC Checked by: PGD Date: 1/29/2014
	BASE MAP: BING MAPS	Figure No: 1
GZA GeoEnvironmental, Inc. Springfield, MA / Glastonbury, CT	Data obtained from University of Connecticut Map and Geographic Information Center	

Compensatory Wetland and Waters of the U.S. Mitigation Plan

for

Reconstruction of I-84 in Waterbury, Connecticut

State Project No. 151-273

Federal Aid Project No. NHI-84-2 (172)33

for

Army Corps of Engineers

Section 404

Application for Individual Permit

Applicant: State of Connecticut, Department of Transportation

January 31, 2014

CONNECTICUT IN-LIEU FEE (ILF)

PROJECT IMPACT WORKSHEET

1. Corps Permit Number: **NAE-2012-01062**
2. Permittee(s): Connecticut Department of Transportation
3. Project location/address: I-84 between Washington Ave. and Pierpont Rd./Waterbury, CT (State Project No. 151-273)
4. Impact area subject to compensation: 48,124 SF (47,544 permanent; 580 temporary)
5. Service Area/rate per square foot: Housatonic River/$7.56
6. ILF Amount: $363,817.00
7. # of credits to be purchased (impact area (SF)/43,560 = credits): 48,124/43,560) = 1.1 credits
8. Resources Impacted: See below.
9. Corps Project Manager: Susan Lee
10. Date: 09/24/2014

Resource(s) Impacted:

Resource Type: Cowardin, et.al, classification (PFO, PSS, PEM, M1, M2, E2, etc.), vernal pool (VP), and/or river, stream, or brook (R).

Types of impacts: May include one or more of the following: fill, conversion (e.g., forested to shrub/scrub), discharge associated with excavation, etc.

TABLE OF RESOURCES IMPACTED

Resource Type (list all that apply)	**Type of Impact** (by resource type)	**Square Feet of Aquatic Resources Impacted** (by resource type)	**Linear Feet Streams Impacted**
PSS	Fill	10,905 (0.25 ac.)	0
PSS/PEM	Fill	27,043 (0.62 ac.)	0
PFO	Fill	9,596 (0.22 ac.)	0
	TOTAL IMPACTS:	**48,124** (47,544 perm.; 580 temp.)	

US Army Corps
of Engineers ®
New England District

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

1. **Report completion date for Preliminary Jurisdictional Determination (JD): 09/23/14**

2. **Name and Address of Person Requesting Preliminary JD:**
Mark Alexander
Connecticut Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

3. **District office, file name and number**: New England District, CTDOT/Reconstruction of I-84-Waterbury, NAE-2012-01062

4. **Project location(s) and background information:**

See attached table of waters and wetlands

State: CT County: New Haven City: Waterbury/Cheshire
Coordinates of site (lat/long in degree decimal format):
Beginning Lat. 41.539869 ° N, Long. 73.017492 ° W (@ Mad River resource)
End Lat. 41.538° N, Long. 73.002 ° W (@ Beaver Pond Brook resource)
Universal Transverse Mercator: 18

Name of nearest water body: Mad River

Identify (estimate) amount of waters in the review area: **see attached Table**
Non-wetland waters: 14,100 linear feet: width (ft) and/or acres.
Cowardin Class: R2UB1
Stream Flow:
Wetlands: acres
Cowardin Class:

Name of any water bodies on the site that have been identified as Section 10 waters:
Tidal:
Non-Tidal:

5. **Review performed for site evaluation (check all that apply):**
☒ Office (Desk) Determination. Date: 09/23/14
☐ Field Determination. Date(s):

a. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

b. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

c. **Supporting Data. Data reviewed for Preliminary JD** - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Appendix 2 of the application materials (Wetlands Delineation and Assessment Report, January 31, 2014)
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant. See above (data taken 2011-2012)
☒ Office concurs with data sheets/delineation report. Wetlands Delineation and Assessment Report, January 31, 2014
☐ Office does not concur with data sheets/delineation report.

- ☐ Data sheets prepared by the Corps:
- ☐ Corps navigable waters' study:
- ☐ U.S. Geological Survey Hydrologic Atlas:
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps. 01100005 (Mad River and Beaver Pond Brook)
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 1;24000, WATERBURY, CONN.
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
- ☐ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☒ FEMA/FIRM maps: FIRM MAP NUMBER 09009C0117H, MAP NUMBER 09009C0136H
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Bing Aerial Maps 2013 Image /Application information or ☐ Other (Name & Date):
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

9/23/14
Susan K. Lee Date
Regulatory Project Manager

9/30/14
Mark Alexander Date
CTDOT
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

WETLAND AND WATERS TABLE

Water #	Water Name	Cowardin	Type (optional)	Lat.	Long.	Estimate aquatic resource in review area		Class of aquatic resource
						SF	LF	
MR #1	Mad River	R2UB1	Perennial-RPW	41° 32'27.38" N	73°01'06.17"W	X	1,500	Non-Sec 10-RPW
MR #2	Mad River	R2UB1 R4UB1	Perennial-RPW	41° 32'19.73" N	73°01'00.72"W	X	700	Non-Sec 10-RPW
MR #3	Mad River	R2UB1	Perennial-RPW	41° 32'20.039" N	73°00'52.69"W	X	700	Non-Sec 10-RPW
MR #4	Mad River	R2UB1	Perennial-RPW	41° 32'22.29" N	73°00'37.59"W	X	1,400	Non-Sec 10-RPW
MR #5	Mad River	R2UB1	Perennial-RPW	41° 32'31.88" N	73°00'32.49"W	X	1,000	Non-Sec 10-RPW
BPB #1	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'20.78" N	73°00'26.13"W	X	500	Non-Sec 10-RPW
BPB #2	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'19.10" N	73°00'26.21"W	X	1,000	Non-Sec 10-RPW
BPB #3	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'19.57"N	73°59'59.00"W	X	1,500	Non-Sec 10-RPW
BPB #4	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'21.36"N	73°59'58.51"W	X	500	Non-Sec 10-RPW
BPB #5	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'23.79"N	73°59'52.11"W	X	600	Non-Sec 10-RPW
BPB #6	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'32.75"N	73°59'27.41"W	X	2,300	Non-Sec 10-RPW
BPB#6A	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'32.80"N	73°59'27.23"W	X	See above	Non-Sec 10-RPW
BPB #7	Beaver Pond Brook	R2UB1	Perennial-RPW	41° 32'37.71"N	73°59'17.15"W	X	600	Non-Sec 10-RPW
BPB #8	Beaver Pond Brook	R2UB1	Perennial-RPW	41° '32'58.40"N	73°58'80.80"W	X	800	Non-Sec 10-RPW
BPB#8A	Beaver Pond Brook	R4UB1	Perennial-RPW	41° '32'58.40"N	73°58'80.80"W	X	See above	Non-Sec 10-RPW
BPB #9	Beaver Pond Brook	R3UB1	Perennial-RPW	41° '32'16.14"N	73°57'91.53"W	X	500	Non-Sec 10-RPW
CB #1	Cuff Brook	R3UB1	Perennial-RPW	41° '32'50.93"N	73°56'72.89"W	X	500	Non-Sec 10-RPW
						X	14,100	

Notes:

1. Water ID can be either the applicant's or the Corps number.

2. Cowardin info can be found at:
   R:\REGDOCS\Jurisdiction
   R:\REGDOCS\Guidance & Useful Information
   R:\General\Resource-Reference Materials\Cowardin
3. Only use LF if applicable (e.g., pipeline project)

US Army Corps
of Engineers ®
New England District

INDIVIDUAL PERMIT
WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

****
* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Permits and Enforcement Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *
****

Corps of Engineers Permit No. **NAE-2012-1062** was issued to **CTDOT, 2800 Berlin Turnpike, P.O. Box 317546, Newington, CT 06131-7546** on September 24, 2014. This work is located in the Mad River, Beaver Pond Brook and in an unnamed tributary to the Mad River, and in associated adjacent wetlands, alongside the I-84 corridor extending from Washington Street to Pierpont Road in Waterbury, CT. The permit authorized the permittee to perform excavation/fill in approximately 1.27 acres (permanent and temporary) of wetlands/waters areas, including realignment/relocation of portions of the Mad River, the Beaver Pond Brook and an unnamed tributary to the Mad River in the project area, and culvert replacement and rehabilitation along I-84 (in Waterbury and Cheshire) in association with the widening and reconstruction of a 2.7-mile section of I-84 in Waterbury, CT.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

_____

_____

Telephone Numbers: (___) _____ (___) _____

Proposed Work Dates: **Start:** _____ **Finish:** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: 09/24/2014 **Date Permit Expires:** 12/31/2019

****

FOR USE BY THE CORPS OF ENGINEERS

PM: Susan Lee **Submittals Required:** yes

Inspection Recommendation: yes

US Army Corps
of Engineers ®
New England District

(Minimum Notice: Permittee must sign and return notification within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

Permit Number: NAE-2012-1062

Project Manager Susan Lee

Name of Permittee: CTDOT

Permit Issuance Date: September 24, 2014

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

****
* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *
****

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____
Signature of Permittee Date

_____ _____
Printed Name Date of Work Completion

(____) _____ (____) _____
Telephone Number Telephone Number

US Army Corps of Engineers®
New England District

MITIGATION
WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before mitigation work begins)

****
* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy Analysis/Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *
****

Corps of Engineers Permit No. **NAE-2012-1062** was issued to **CTDOT, 2800 Berlin Turnpike, P.O. Box 317546, Newington, CT 06131-7546** on September 24, 2014. This work is located in the Mad River and a tributary stream to Mad River, in Beaver Pond Brook, and within associated adjacent wetlands alongside the I-84 corridor extending from Washington Street to Pierpont Road in Waterbury, CT. The permit authorized the permittee to perform excavation/fill in approximately 1.27 acres (permanent and temporary) of wetlands/waters areas, including realignment/relocation of portions of the Mad River, the Beaver Pond Brook and an unnamed tributary to the Mad River in the project area, and culvert replacement and rehabilitation along I-84 (in Waterbury and Cheshire) in association with the widening and reconstruction of a 2.7-mile section of I-84 in Waterbury, CT.

The permit required compensatory mitigation consisting of ILF mitigation and permitttee-responsible mitigation. Permittee-responsible mitigation consists of approximately 0.57 acres of onsite wetland enhancement area at the confluence of Beaver Pond Brook and Mad River; and onsite stream/habitat enhancement sites on approximately 3,383 LF of the Mad River and Beaver Pond Brook in association with the reconstruction and reconfiguration of segments of the Mad River and Beaver Pond Brook stream systems within the project area.

Those listed below will perform the mitigation, including monitoring and remediation if required. They understand the requirements of the permit and the mitigation and monitoring plan.

PLEASE PRINT OR TYPE

	Environmental Consultant/Scientist	**Mitigation Contractor**
Name of Person/Firm:	_____	_____
Business Address:	_____	_____
	_____	_____
	_____	_____
Telephone Number:	( ) _____	( ) _____

Proposed Mitigation Work Dates: **Start** _____ **Finish** _____

Permittee's Signature: _____ **Date:** _____

Printed Name: Susan Lee **Title:** Project Manager

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **CTDOT**	File Number: CENAE-R-**NAE-2012-1062**	Date: 09/24/2014
Attached is:		See Section below
☐	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
☒	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
☐	PERMIT DENIAL	C
☐	APPROVED JURISDICTIONAL DETERMINATION	D
☒	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the New England District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the New England District Engineer. Your objections must be received by the New England District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the New England District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the New England District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the New England District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the New England District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

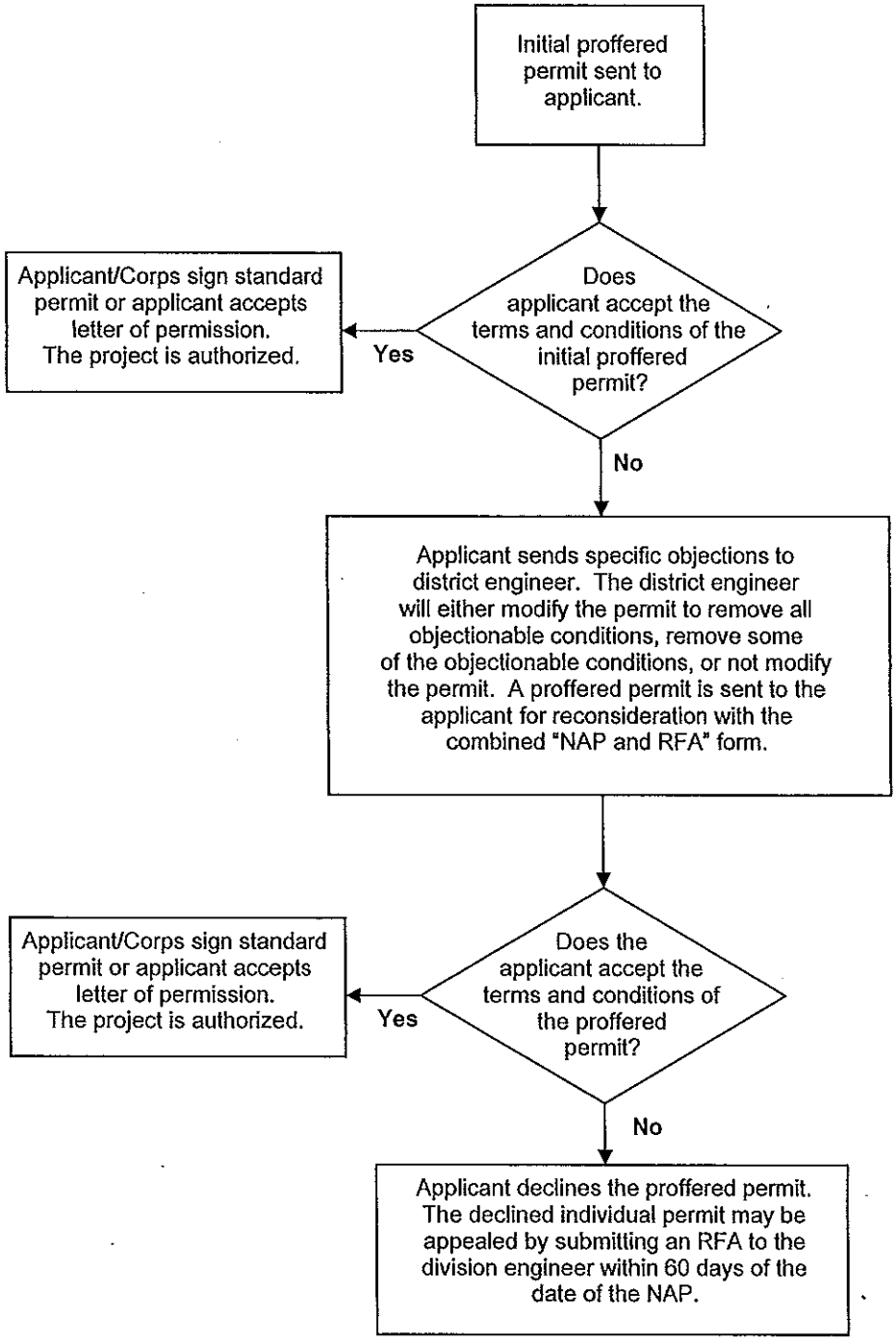
POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Ruth M. Ladd CENAE-R U.S. Army Corps of Engineers, New England District 696 Virginia Road Concord, MA 01742-2751 Telephone: (978) 318-8818 Email: ruth.m.ladd@usace.army.mil	If you only have questions regarding the appeal process you may also contact: Mr. Michael G. Vissichelli Administrative Appeals Review Officer North Atlantic Division, Corps of Engineers Fort Hamilton Military Community Bldg. 301, General Lee Avenue Brooklyn, NY 11252-6700 Telephone: (347) 370-4663 Email: michael.g.vissichelli@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

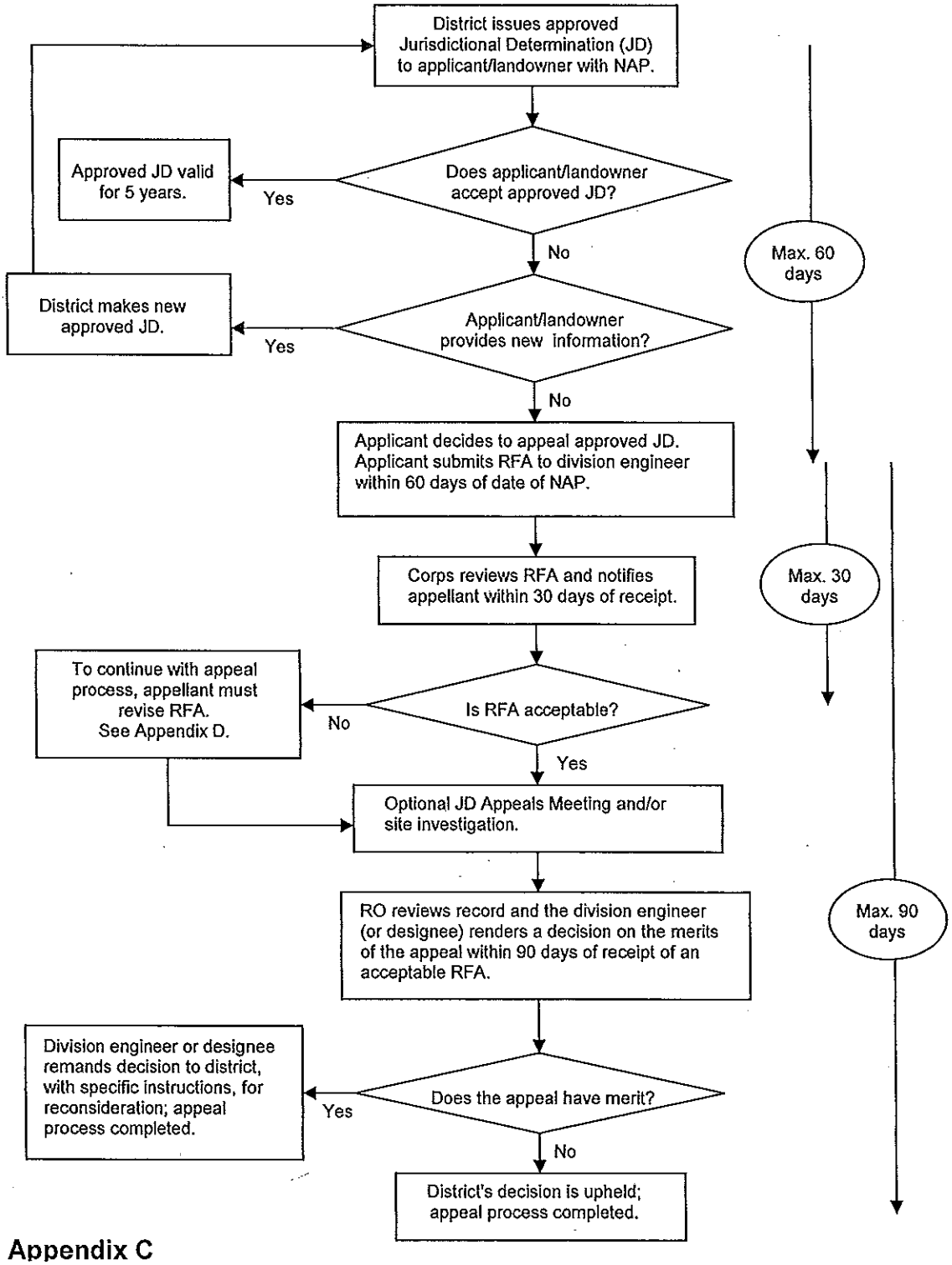
_____ Signature of appellant or agent.	Date:	Telephone number:

Applicant Options with Initial/Proffered Permit



Appendix B

Administrative Appeal Process for Approved Jurisdictional Determination



Appendix C