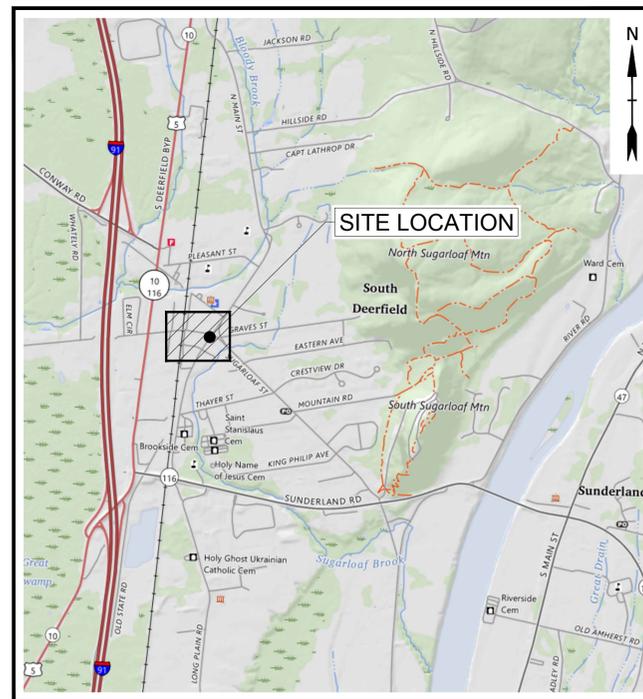


# TOWN OF DEERFIELD, MASSACHUSETTS ELM STREET COMPLETE STREETS & MOBILITY IMPROVEMENTS

## PRELIMINARY DESIGN JUNE 2025

LIST OF DRAWINGS		
SHEET NO.	DRAWING NO.	DRAWING TITLE
GENERAL		
1	G-001	COVER
2	G-101	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
CIVIL		
3	C-001	EXISTING CONDITIONS PLAN
4 - 5	C-101 - C-102	CONSTRUCTION PLAN & PROFILE
6	C-301	PAVEMENT MARKING AND SIGNAGE PLAN
7 - 10	C-401 - C-404	CONSTRUCTION DETAILS
11 - 13	C-501 - C-503	ROADWAY CROSS SECTIONS
14	C-601	TEMPORARY TRAFFIC CONTROL PLAN



LOCATION MAP  
SCALE: 1" = 2000'

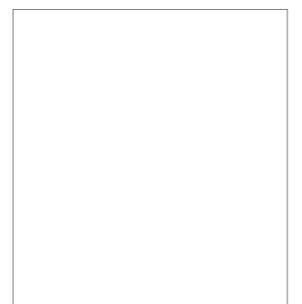
PREPARED BY:

**Tighe & Bond**

53 Southampton Road  
Westfield, MA 01085  
(413) 562-1600



DANIEL S. HOLMES, PE, LEED AP



ALEX G. BOUTHILLETTE, PE

PREPARED FOR:

TOWN OF DEERFIELD  
CHRISTOPHER DUNNE, TOWN ADMINISTRATOR

SELECT BOARD

TREVOR D. McDANIEL, CHAIR  
BLAKE GILMORE, VICE CHAIR  
TIM HILCHEY, CLERK

**COMPLETE SET 14 SHEETS**

**GENERAL SYMBOLS**

EXISTING	PROPOSED	DESCRIPTION
		CATCH BASIN
		CATCH BASIN CURB INLET
		GAS PUMP
		POST SQUARE
		FENCE GATE POST
		GAS GATE
		HYDRANT
		LIGHT POLE
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		TRAVERSE OR TRIANGULATION STATION
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		CHAIN LINK OR METAL FENCE
		TREE LINE
		SAWCUT LINE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		COUNTY LAYOUT
		EASEMENT

**ABBREVIATIONS**

GENERAL	DESCRIPTION
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
BIT.	BITUMINOUS
BLDG	BUILDING
BM	BENCHMARK
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CCW	CEMENT CONCRETE WALK
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CONC	CONCRETE
CONST	CONSTRUCTION
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DYCL	6" DOUBLE YELLOW CENTER LINE
ELEV (or EL.)	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
HMA	HOT MIX ASPHALT
HYD	HYDRANT
INV	INVERT
L	LENGTH OF CURVE

**ABBREVIATIONS (CONT.)**

GENERAL	DESCRIPTION
LP	LIGHT POLE
LT	LEFT
MH	MANHOLE
PI	POINT OF INTERSECTION
PROJ	PROJECT
PROP	PROPOSED
PROT	PROTECT
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SWL	6" SINGLE WHITE LINE
SYL	6" SINGLE YELLOW LINE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
PCR	PEDESTRIAN CURB RAMP
WG	WATER GATE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

**GENERAL NOTES**

- NOTIFY DIGSAFE AT 1-888-344-7233 AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE DIGSAFE LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IN ADDITION, SOME UTILITIES MAY NOT BE SHOWN. DETERMINE THE EXACT LOCATION OF UTILITIES BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND/OR INTERRUPTIONS IN UTILITY SERVICE. PERFORM TEST PIT EXCAVATIONS AND OTHER INVESTIGATIONS TO LOCATE UTILITIES, AND PROVIDE THIS INFORMATION TO THE ENGINEER, PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS. LOCATE ALL EXISTING UTILITIES TO BE CROSSED BY HAND EXCAVATION.
- NOT ALL OF THE UTILITY SERVICES TO BUILDINGS ARE SHOWN. THE CONTRACTOR SHALL ANTICIPATE THAT EACH PROPERTY HAS SERVICE CONNECTIONS FOR THE VARIOUS UTILITIES.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK. LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.
- EXCAVATE ADDITIONAL TEST PITS TO LOCATE EXISTING UTILITIES AS DIRECTED OR APPROVED BY THE ENGINEER.
- NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
- OBTAIN, PAY FOR AND COMPLY WITH PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK. ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE JURISDICTIONAL AUTHORITIES.
- SHORE UTILITY TRENCHES WHERE FIELD CONDITIONS DICTATE AND/OR WHERE REQUIRED BY LOCAL, STATE AND FEDERAL HEALTH AND SAFETY CODES.
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE OBSERVED THAT VARY SIGNIFICANTLY FROM THOSE SHOWN ON THE DRAWINGS, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION OF THE CONFLICTING INFORMATION.
- PROTECT AND MAINTAIN ALL UTILITIES IN THE AREAS UNDER CONSTRUCTION DURING THE WORK. LEAVE ALL PIPES AND STRUCTURES WITHIN THE LIMITS OF THE CONTRACT IN A CLEAN AND OPERABLE CONDITION AT THE COMPLETION OF THE WORK. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SAND AND SILT FROM DISTURBED AREAS FROM ENTERING THE DRAINAGE SYSTEM.
- NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
- TAKE NECESSARY MEASURES AND PROVIDE CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE, AND STRENGTH TO PREVENT ACCESS TO ALL WORK AND STAGING AREAS AT THE COMPLETION OF EACH DAYS WORK.
- NO OPEN TRENCHES WILL BE ALLOWED OVER NIGHT. THE USE OF ROAD PLATES TO PROTECT THE EXCAVATION WILL BE CONSIDERED UPON REQUEST, BUT BACKFILLING IS PREFERRED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
- MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
- WHEN WORKING IN THE ROAD, PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS. PROVIDE COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
- REMOVE AND DISPOSE OF ALL CONSTRUCTION-RELATED WASTE MATERIALS AND DEBRIS IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.
- THE TERM "ABANDON" USED ON THE DRAWINGS MEANS TO LEAVE IN PLACE AND TAKE APPROPRIATE MEASURES TO DECOMMISSION AS SPECIFIED OR NOTED ON THE DRAWINGS.
- ALL PROPOSED WORK MAY BE ADJUSTED IN THE FIELD BY THE OWNER'S PROJECT REPRESENTATIVE TO MEET EXISTING CONDITIONS.

**SURFACE RESTORATION NOTES**

- ALL PAVEMENT DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- PROVIDE SITE GRADING AT HANDICAPPED RAMPS, SIDEWALKS, AND BUILDING ENTRANCES THAT IS CONSISTENT WITH THE RELEVANT ACCESS REQUIREMENTS OF THE ARCHITECTURAL BARRIERS ACT (ABA), THE AMERICANS WITH DISABILITIES ACT (ADA), AND MA ARCHITECTURAL ACCESS BOARD REQUIREMENTS (AAB). SMALL CHANGES IN GRADE OVER RELATIVELY SHORT DISTANCES (E.G. AT PARKING SPACES, ACCESSIBLE ROUTES, AND RAMPS) MIGHT NOT BE CLEARLY DEPICTED WITHIN THE CONTOUR INTERVAL SHOWN. COMPLY WITH THE CRITERIA IN THESE STANDARDS. SELECT MAXIMUM SLOPE CRITERIA ARE REPRODUCED BELOW:
  - ACCESSIBLE PARKING STALL AND PASSENGER LOADING ZONE (ANY DIRECTION) SLOPE < 2.0%
  - LONGITUDINAL SLOPE ALONG ACCESSIBLE ROUTES < 5.0%
  - CROSS SLOPE ALONG ACCESSIBLE ROUTES < 2.0%
- PROTECT PROJECT FEATURES (E.G., WALLS, FENCES, MAIL BOXES, SIGNS, SIDEWALKS, CURBING, STAIRS, WALKWAYS, TREES, ETC.) FROM DAMAGE DURING CONSTRUCTION, INCLUDING PROVIDING TEMPORARY SUPPORTS, WHEN APPROPRIATE.
- IF REMOVAL OF PROJECT FEATURES IS REQUIRED IN ORDER TO PERFORM THE PROPOSED WORK, REMOVE THOSE SITE FEATURES ONLY UPON APPROVAL OF ENGINEER. REPLACE ALL REMOVED PROJECT FEATURES; NEW ITEMS SHALL BE EQUAL OR BETTER IN QUALITY AND CONDITION TO THE ITEMS REMOVED.
- EXISTING SURVEY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE REPLACED BY A LAND SURVEYOR LICENSED IN THE STATE IN WHICH THE WORK IS PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE THE ADJUSTMENT OF EXISTING UTILITY STRUCTURES WITH EACH RESPONSIBLE UTILITY OWNER PRIOR TO RECONSTRUCTION AND/OR PAVING OPERATIONS. RAISE ALL STRUCTURES TO FINISHED GRADES PRIOR TO THE END OF THE CONSTRUCTION SEASON AND PRIOR TO FINISHED PAVING.
- REPAIR DISTURBED PAVED SURFACES AT THE END OF EACH WORK WEEK, UNLESS OTHERWISE APPROVED/REQUIRED BY THE OWNER.
- PLACE TEMPORARY BITUMINOUS CONCRETE PAVEMENT AT DISTURBED PORTLAND CEMENT CONCRETE SIDEWALKS AND DRIVEWAYS AT THE END OF EACH WORK WEEK, UNLESS OTHERWISE APPROVED/REQUIRED BY THE OWNER.
- TRANSFER ALL TEMPORARY BENCHMARKS, AS NECESSARY.
- ACCOMMODATE PEDESTRIAN TRAFFIC WHERE A SIDEWALK IS TO BE CLOSED FOR SAFETY. "SIDEWALK CLOSED HERE" SIGNS SHALL BE USED AT THE NEAREST SAFE INTERSECTION. SEE TRAFFIC CONTROL DETAILS FOR SIGN INFORMATION.
- RESTORE ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE PAYLINE LIMITS TO ORIGINAL CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- REGRADE ALL UNPAVED AREAS DISTURBED BY THE WORK AS REQUIRED. REPAIR/REPLACE PAVED SURFACES DISTURBED BY THE WORK IN-KIND, UNLESS OTHERWISE NOTED. RESTORE SURFACES TO EXISTING OR PROPOSED CONDITIONS AS INDICATED ON THE DRAWINGS.
- PROVIDE A SMOOTH, FLUSH TRANSITION BETWEEN ALL NEW AND EXISTING PAVEMENTS AND WALKING SURFACES.

**BASE PLAN NOTES**

- THE EXISTING CONDITIONS INFORMATION SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING:
  - SURVEY DRAWINGS PROVIDED BY NORTHEAST SURVEY CONSULTANTS TITLED "PLAN OF LAND IN DEERFIELD, MA" AND DATED 9/13/2024.
- UTILITY LOCATIONS SHOWN WERE PLOTTED FROM INFORMATION SUPPLIED BY RESPECTIVE UTILITY COMPANIES AND DATA OBTAINED FROM FIELD SURVEYS AND AS BUILT DRAWINGS. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS IS NOT GUARANTEED. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL UTILITIES WHICH MAY AFFECT CONSTRUCTION OPERATIONS.
- THE DRAWINGS ARE BASED ON THE FOLLOWING DATUMS: HORIZONTAL-MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NAD83 ; VERTICAL-NAVD88
- THE EXISTING CONDITIONS SHOWN ARE APPROXIMATE. FIELD VERIFY EXISTING CONDITIONS.
- THE RIGHT OF WAYS SHOWN ON THE DRAWINGS ARE BASED ON STREET MONUMENTATION AND LAYOUT PLANS. THE PROPERTY LINES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BASED ON DEED AND PLAN RESEARCH.

**DRAINAGE SYSTEM IMPROVEMENTS NOTES**

- LOCATIONS OF PROPOSED STORM DRAINS AND STRUCTURES ARE APPROXIMATE AND MAY BE ADJUSTED DURING CONSTRUCTION AFTER INVESTIGATIVE WORK. FINAL STORM DRAIN LOCATIONS, AND ASSOCIATED STRUCTURES, WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ADJUSTMENTS TO THE PROPOSED STORM DRAIN LAYOUTS AND ELEVATIONS SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL PAYMENTS. THE CONTRACTOR SHALL NOT MAKE PROPOSED STORM DRAIN LAYOUT AND ELEVATION ADJUSTMENTS WITHOUT APPROVAL FROM THE ENGINEER.
- MANHOLES SHALL BE 48-INCH DIAMETER, UNLESS NOTED OTHERWISE.
- UNLESS OTHERWISE NOTED, PROPOSED CATCH BASIN LATERALS SHALL BE 12-INCH DIAMETER. WHERE THE MAINLINE STORM DRAIN IS SMALLER THAN 12-INCHES IN DIAMETER, THE CATCH BASIN LATERAL SHALL MATCH THE SIZE OF THE MAINLINE STORM DRAIN. MINIMUM COVER OVER CATCH BASIN LATERALS SHALL BE 3 FEET, UNLESS SHOWN OR APPROVED OTHERWISE.
- ACTUAL LOCATION OF PROPOSED STORM DRAIN TERMINAL MANHOLES MAY BE ADJUSTED IN THE FIELD BASED ON THE LOCATION OF STORM DRAIN SERVICE CONNECTIONS.
- MAINTAIN OPERATION OF DRAINAGE SYSTEM DURING CONSTRUCTION.
- MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF AT LEAST 10 FEET FROM ANY EXISTING OR PROPOSED WATER MAIN. IF SITE CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET, A LESSER DISTANCE WILL BE ALLOWED IF THE STORM DRAIN IS CONSTRUCTED IN A SEPARATE TRENCH WITH THE TOP OF THE STORM DRAIN AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN.
- WHENEVER A PROPOSED STORM DRAIN MUST CROSS A WATER MAIN, CONSTRUCT THE STORM DRAIN SO THE TOP OF THE STORM DRAIN IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. THE STORM DRAIN JOINTS SHALL BE EQUIDISTANT AND LOCATED AS FAR AWAY AS POSSIBLE FROM THE WATER MAIN JOINTS. WHEN THE PROPOSED STORM DRAIN CANNOT MEET THE ABOVE REQUIREMENTS, ENCASE THE PROPOSED STORM DRAIN IN CONCRETE.

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**Elm Street Complete Streets and Mobility Improvements**

Town of Deerfield

Deerfield, Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO: D5017-002		
DATE: 06/2025		
FILE: D5017-002 GENERAL NOTES.dwg		
DRAWN BY: J. Leventis		
DESIGNED BY: M. Mottolose		
CHECKED BY: J. Cigal, A. Bouthillette		
APPROVED BY: D. Holmes		

**LEGEND, ABBREVIATIONS, AND GENERAL NOTES**

SCALE: AS SHOWN

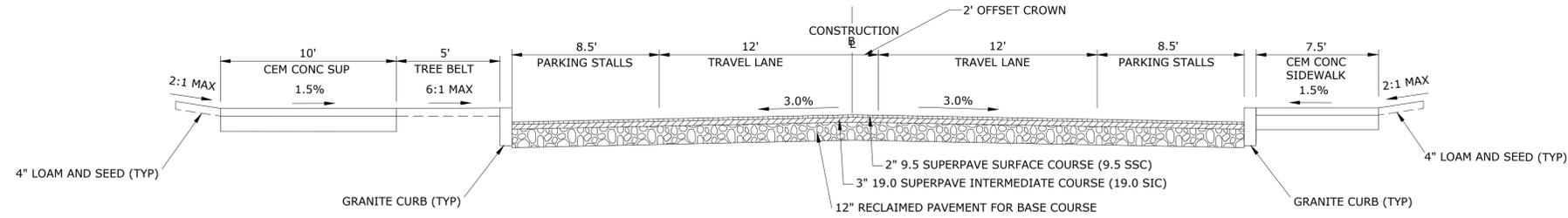
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 Plotted On: Jun 03 2025 11:48am  
 Tighe & Bond; J:\D5017 town of deerfield\002 - complete streets\002a - tier 3 - elm street\drawings - figures\AutoCAD\Sheet\D5017-002 GENERAL NOTES.dwg





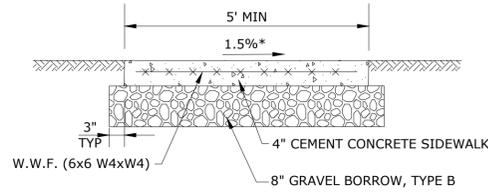




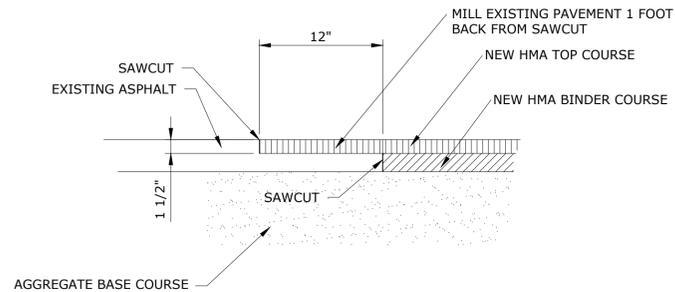


**NOTE:**  
 1. ROAD SECTION SHOWN IS CONSIDERED TYPICAL. FIELD MODIFICATIONS TO MATCH EXISTING CONDITIONS ARE ANTICIPATED. SEE CROSS SECTIONS FOR ADDITIONAL DETAIL.  
 2. MODIFIED HMA BERM TO BE INSTALLED AS SHOWN ON THE PLANS.

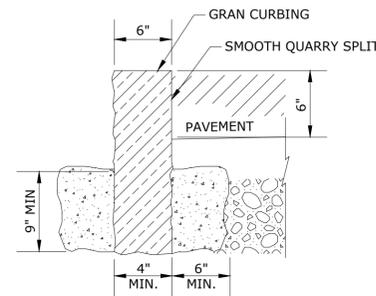
**TYPICAL SECTION  
 PAVEMENT RECLAMATION - ELM STREET**  
 NO SCALE



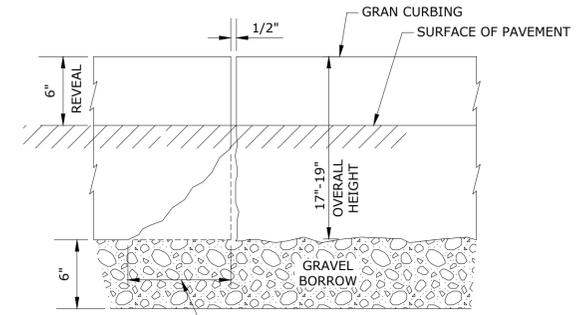
**CEMENT CONCRETE SIDEWALK SECTION**  
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 \* TOLERANCE FOR CONSTRUCTION ±0.5%



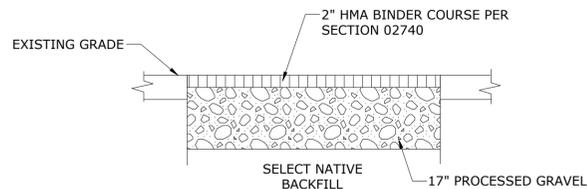
**TYPICAL BUTT JOINT  
 TO EXISTING PAVEMENT**  
 NO SCALE



**GRANITE CURB - TYPE VA4**  
 NO SCALE

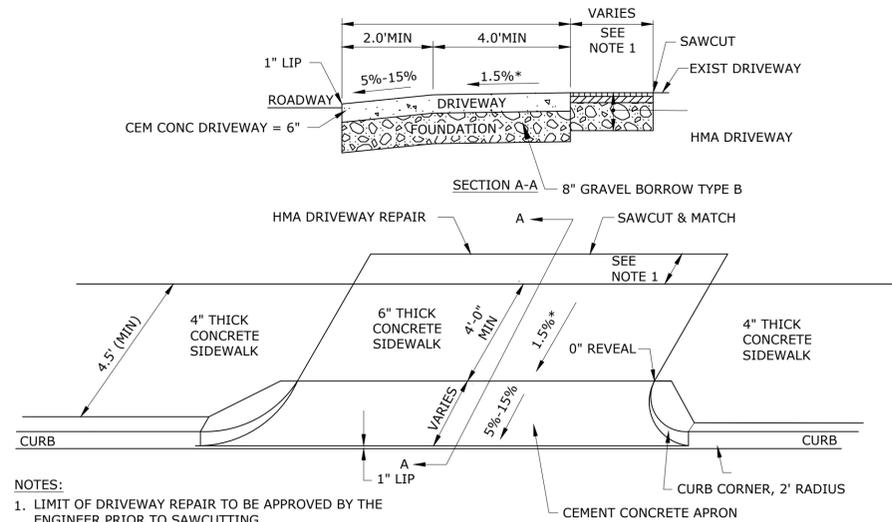


MAXIMUM ALLOWABLE BREAK BACK  
 9\"/>



**NOTE:**  
 1. TEMPORARY TRENCH REPAIR TO BE INSTALLED AT THE END OF THE WEEK AND PRIOR TO ANTICIPATED RAIN.  
 2. MAINTAIN TEMPORARY TRENCH REPAIR. IF DISPLACEMENT OR SETTLEMENT OF TRENCH REPAIR IS DEEMED UNACCEPTABLE BY THE OWNER OR ENGINEER, CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER.

**TEMPORARY TRENCH REPAIR**  
 NO SCALE



**NOTES:**  
 1. LIMIT OF DRIVEWAY REPAIR TO BE APPROVED BY THE ENGINEER PRIOR TO SAWCUTTING.

\* TOLERANCE FOR CONSTRUCTION ±0.5%

**SIDEWALK ADJACENT TO CURB  
 THROUGH DRIVEWAY**  
 NO SCALE

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**Elm Street  
 Complete Streets and  
 Mobility  
 Improvements**

Town of  
 Deerfield

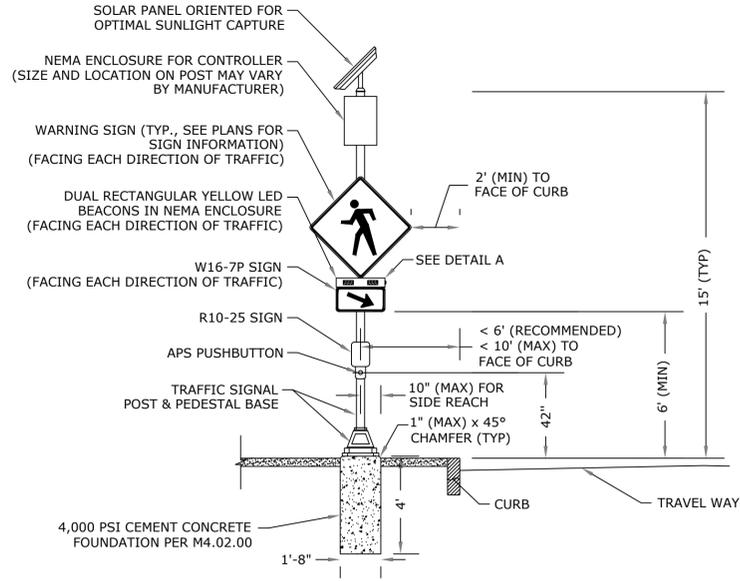
Deerfield,  
 Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO: D5017-002		
DATE: 06/2025		
FILE: D5017-002 CONST DETAILS.dwg		
DRAWN BY: J. Leventis		
DESIGNED BY: M. Mottolose		
CHECKED BY: J. Cigal, A. Bouthillette		
APPROVED BY: D. Holmes		

CONSTRUCTION DETAILS

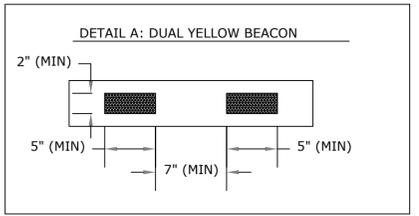
SCALE: AS SHOWN

**C-401**  
 SHEET 7 OF 14



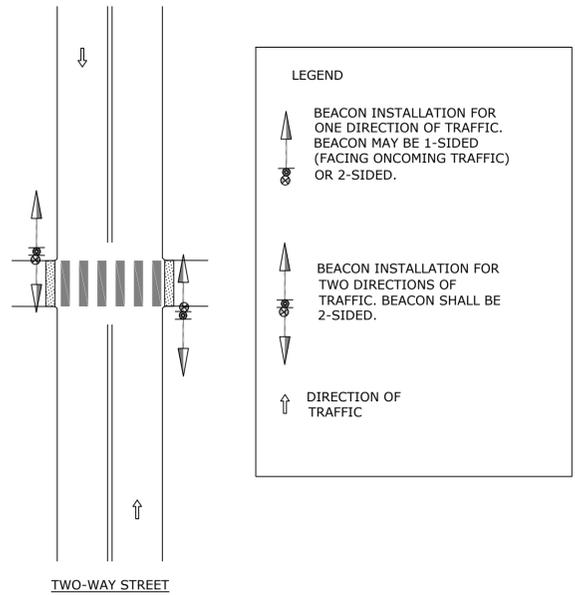
**ELEVATION VIEW**

- NOTES:**
- CROSSWALK AND ADA/AAB-COMPLIANT RAMPS NOT SHOWN. SEE PLANS FOR LOCATIONS.
  - APS PUSHBUTTONS SHALL BE POSITIONED TO MEET ALL ADA/AAB REQUIREMENTS.

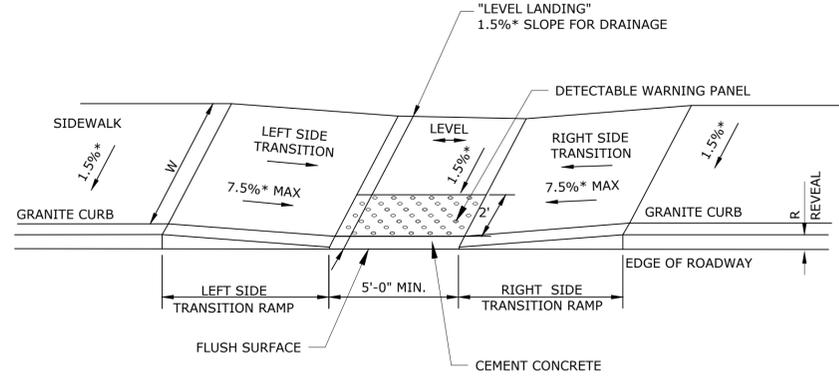


**RECTANGULAR RAPID FLASHING BEACON**  
NOT TO SCALE

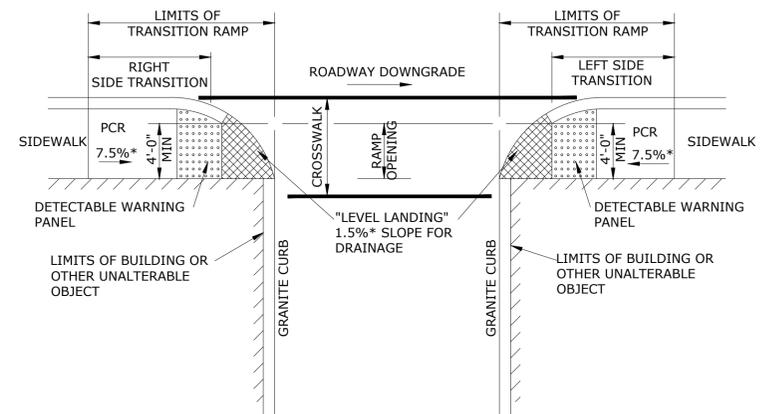
- NOTES:**
- WHERE EXISTING SIDEWALK IS PRESENT ON SIDE STREETS, PANELS SHOULD BE REBUILT TO BLEND GRADES FROM EXISTING SIDEWALK TO NEW RAMPS.



**RECTANGULAR RAPID FLASHING BEACON TYPICAL LAYOUT**  
NOT TO SCALE



**PEDESTRIAN CURB RAMP - TYPE 1**  
NO SCALE

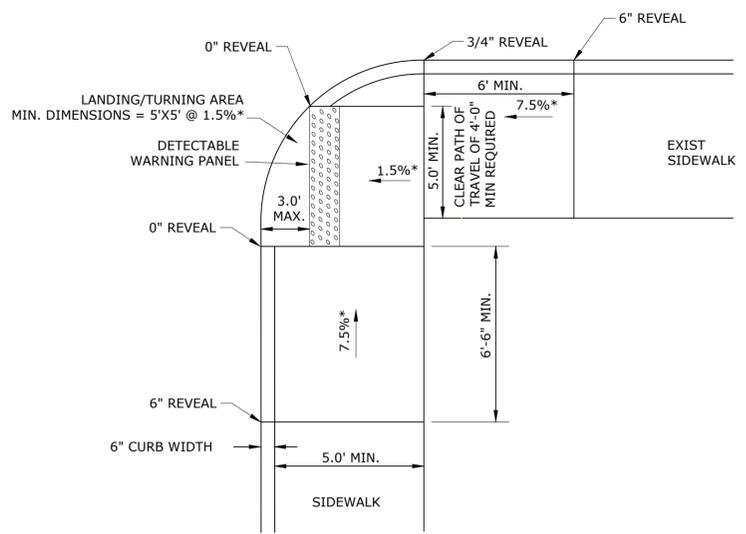


**PEDESTRIAN CURB RAMP - TYPE 2**  
NO SCALE

\*TOLERANCE FOR CONSTRUCTION ±0.5%

**SIDEWALK AND PEDESTRIAN CURB RAMP NOTES:**

- WALKWAY CROSS SLOPES, FOR BRICK, CEMENT CONCRETE AND BITUMINOUS CONCRETE, AS INDICATED IN THE STANDARD SPECIFICATIONS, SHALL BE 1.5%. A CONSTRUCTION TOLERANCE OF 0.5% IS ACCEPTABLE ON WALKWAYS. (REFER TO STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, SECTION 700.) IN ACCORDANCE WITH 521 CMR THE RULES AND REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD (AAB), THE WALKWAY CROSS SLOPE CANNOT EXCEED 2.0%.
- LOW SIDE TRANSITION LENGTH SHALL BE A MINIMUM OF 6'-6".
- AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" (EXCLUSIVE OF CURB WIDTH) SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (UTILITY POLES, SIGNS, SIGNAL FOUNDATIONS AND MASTS, MAILBOXES, ALONG DRIVE OPENINGS, ETC.).
- THE PEDESTRIAN CURB RAMP SLOPES AND SIDE SLOPES (TRANSITIONS) WILL BE 7.5% WITH A CONSTRUCTION TOLERANCE OF 0.5%±. HOWEVER, THESE SLOPES MAY BE FLATTER WHEN WARRANTED BY SURROUNDING CONDITIONS.
- IN NO CASE WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED ON THE TRAFFIC APPROACH SIDE OF THAT STOP LINE.
- FIXED OBJECTS (I.E. UTILITY POLES, HYDRANTS, SIGN, SIGNAL FOUNDATIONS, ETC.) MUST NOT ENCROACH ON ANY PART OF THE PEDESTRIAN CURB RAMP INCLUDING TRANSITION SLOPES.
- AT NO TIME IS ANY PART OF THE PEDESTRIAN CURB RAMP, EXCLUDING CURB TRANSITIONS, TO BE LOCATED OUTSIDE THE CROSSWALK. THE PEDESTRIAN CURB RAMP ENTRANCE IS TO BE CENTERED IN THE CROSSWALK WHENEVER POSSIBLE.
- CATCH BASINS WHICH ARE TO BE LOCATED IN THE VICINITY OF A PEDESTRIAN CURB RAMP SHALL BE LOCATED UPGRADE OF THE RAMP ENTRANCE. THE ENTRANCE OF A PEDESTRIAN CURB RAMP SHALL BE FLUSH WITH THE ROADWAY.
- TESTING SURFACE: WHEN TESTING WITH A STRAIGHTEDGE, PLACED PARALLEL TO THE LINE OF SLOPE, THERE SHALL BE NO DEVIATION FROM A TRUE SURFACE IN EXCESS OF 1/4".
- DETECTABLE WARNING PANELS ARE REQUIRED ON ALL OF THE PROPOSED PEDESTRIAN CURB RAMPS AND ARE TO BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION STANDARD E 107.6.5 (OCTOBER 2017).
- BLENDDED DRIVEWAY TRANSITION RAMPS SHALL NOT EXCEED 5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.



**PEDESTRIAN CURB RAMP - TYPE 3**  
NO SCALE

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**Elm Street Complete Streets and Mobility Improvements**

Town of Deerfield

Deerfield, Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO: D5017-002		
DATE: 06/2025		
FILE: D5017-002 CONST DETAILS.dwg		
DRAWN BY: J. Leventis		
DESIGNED BY: M. Mottolose		
CHECKED BY: J. Cigal, A. Bouthilllette		
APPROVED BY: D. Holmes		

**CONSTRUCTION DETAILS**

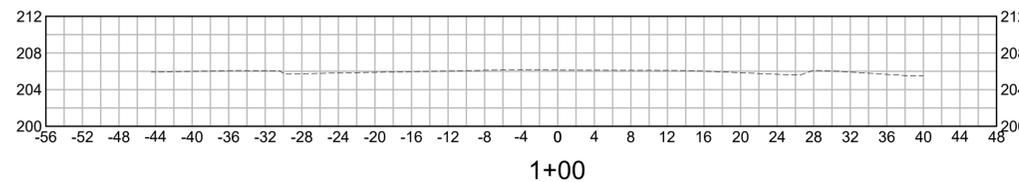
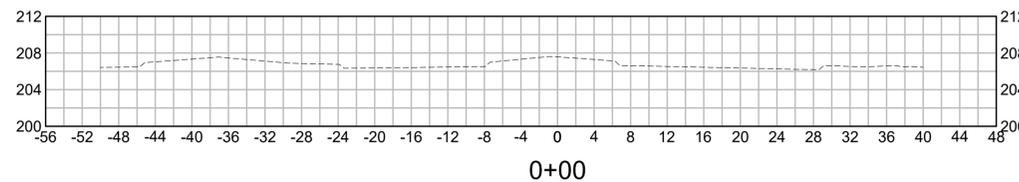
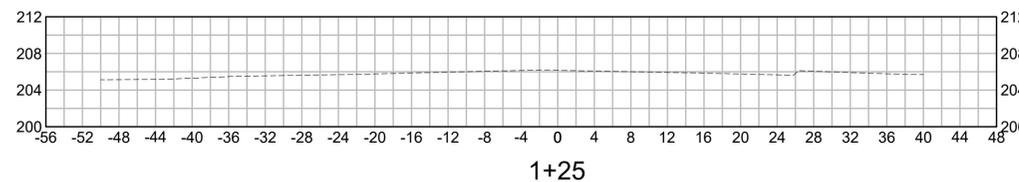
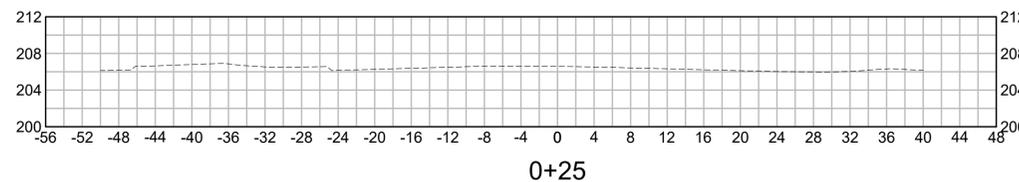
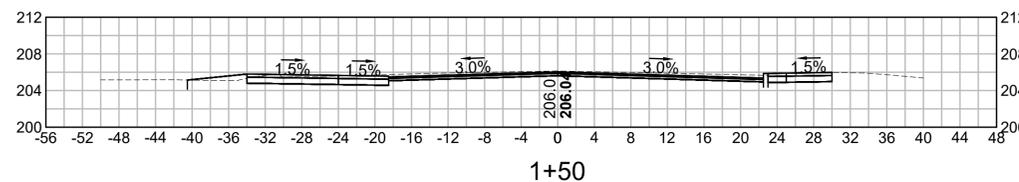
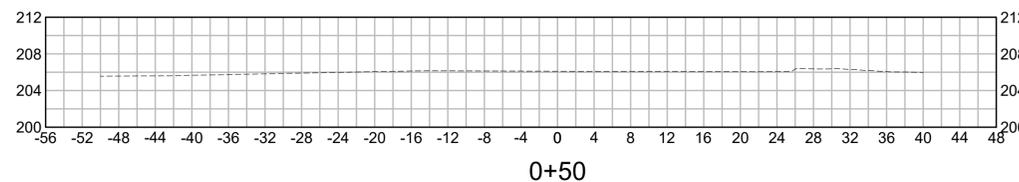
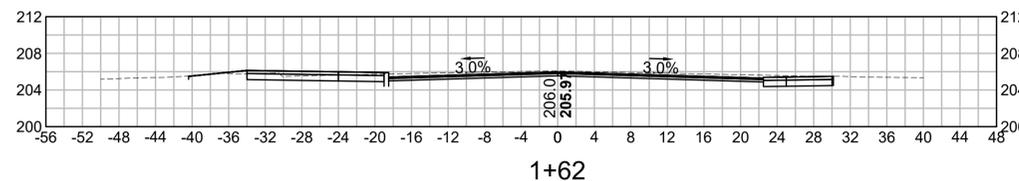
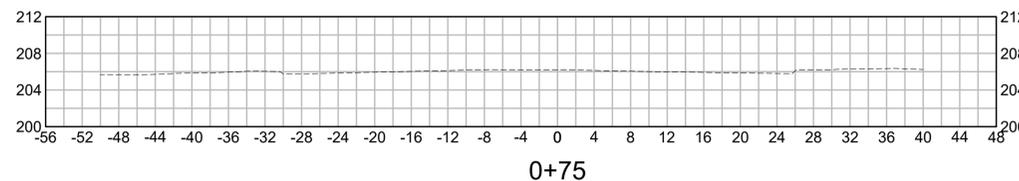
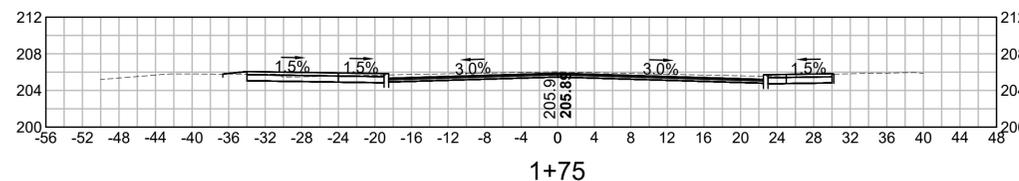
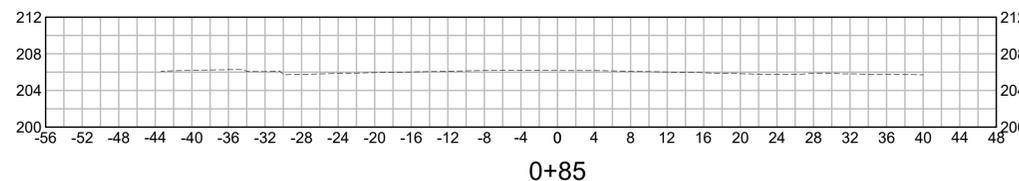
SCALE: AS SHOWN

**C-402**  
SHEET 8 OF 14

Last Saved: 6/7/2025 11:49am By: M.Mottolose  
 Plotted On: Jun 03 2025 11:49am  
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**Elm Street Complete Streets and Mobility Improvements**

Town of Deerfield

Deerfield, Massachusetts

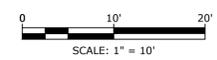
MARK	DATE	DESCRIPTION

PROJECT NO:	D5017-002
DATE:	06/2025
FILE:	D5017-002 Cross Sections.dwg
DRAWN BY:	J. Leventis
DESIGNED BY:	M. Mottolise
CHECKED BY:	J. Cigal, A. Bouthillette
APPROVED BY:	D. Holmes

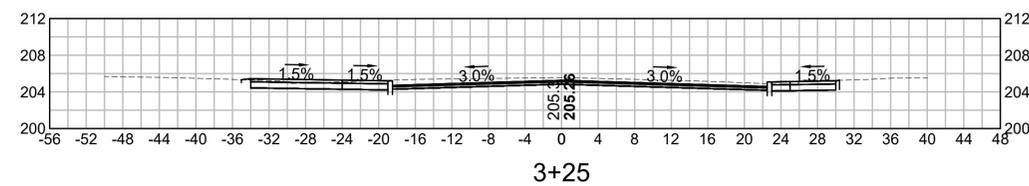
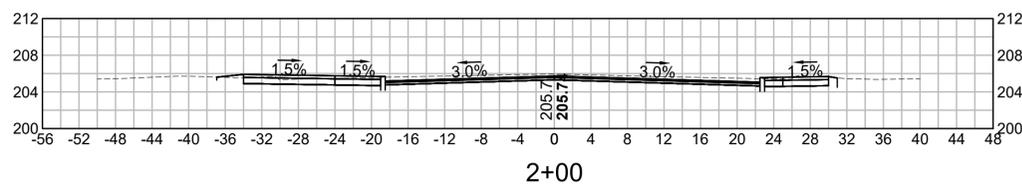
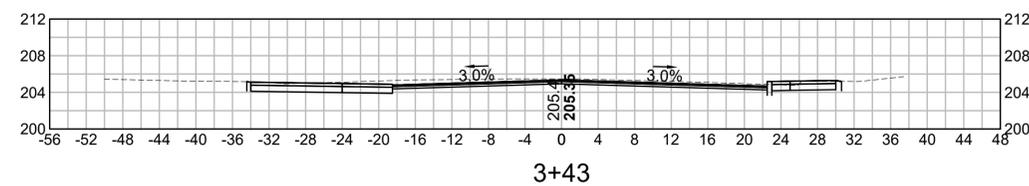
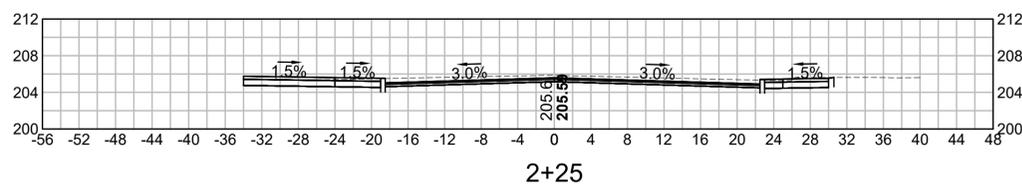
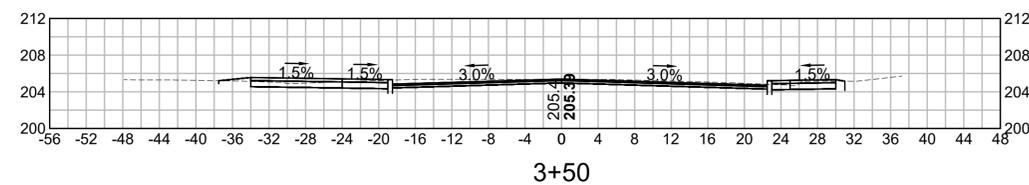
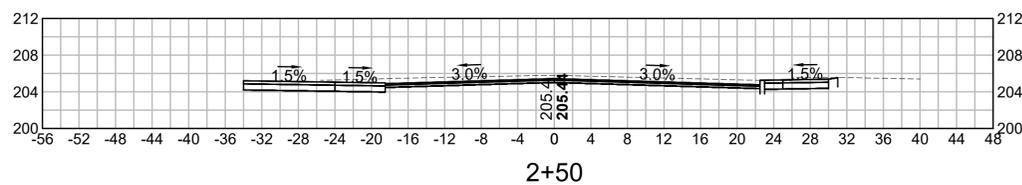
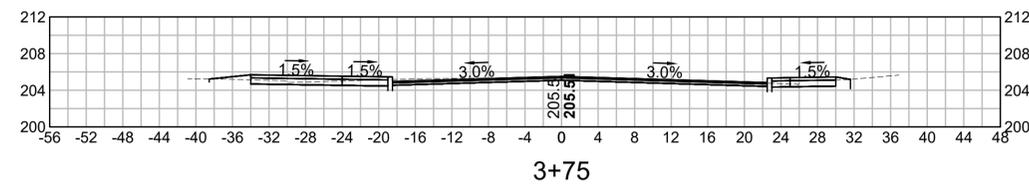
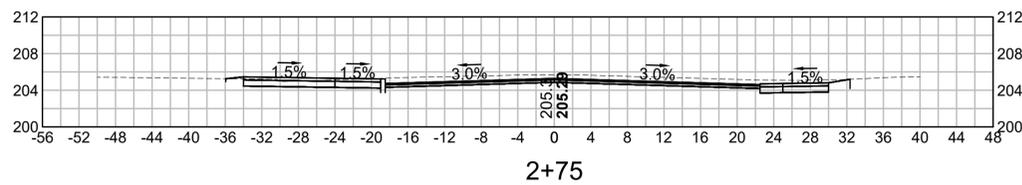
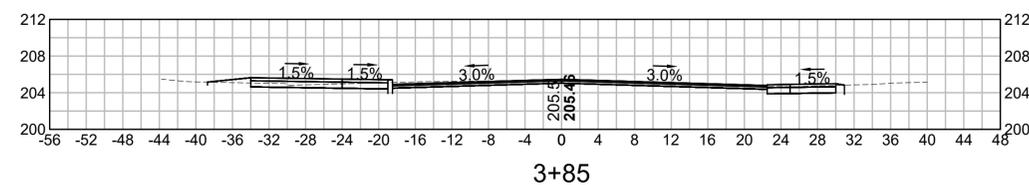
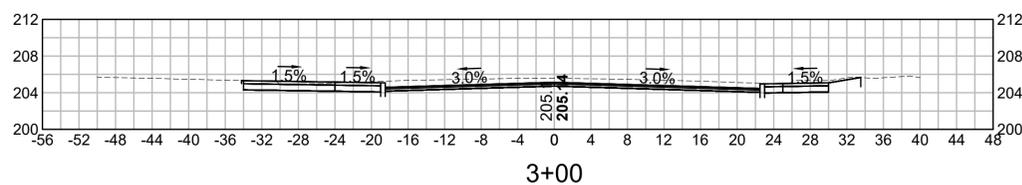
**ROADWAY CROSS SECTIONS**

SCALE: 1" = 10'

**C-501**  
SHEET 11 OF 14



Last Saved: 6/3/2025 12:18pm By: Mottolise  
Plotted On: Jun 03, 2025 12:18pm  
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**Elm Street Complete Streets and Mobility Improvements**

Town of Deerfield

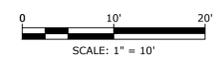
Deerfield, Massachusetts

MARK	DATE	DESCRIPTION

PROJECT NO:	D5017-002
DATE:	06/2025
FILE:	D5017-002 Cross Sections.dwg
DRAWN BY:	J. Leventis
DESIGNED BY:	M. Mottolese
CHECKED BY:	J. Cigaj, A. Bouthilllette
APPROVED BY:	D. Holmes

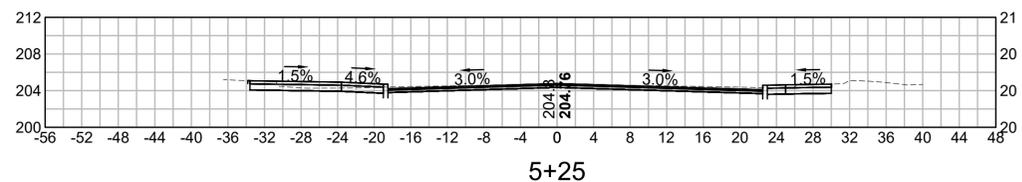
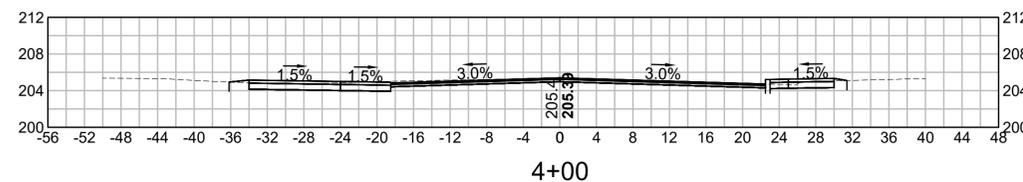
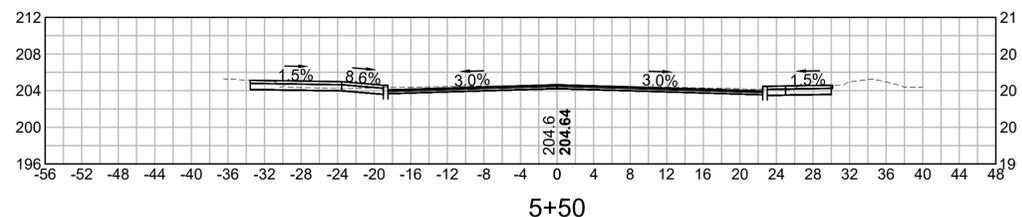
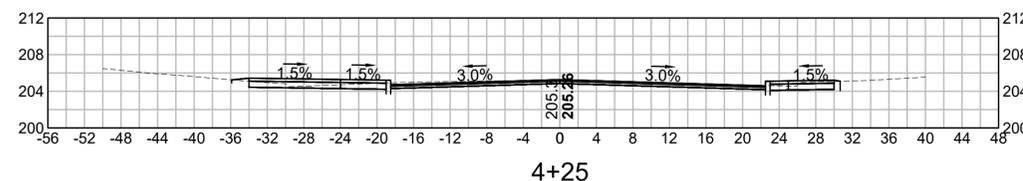
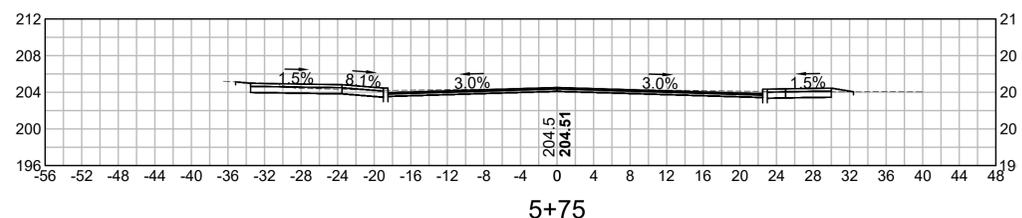
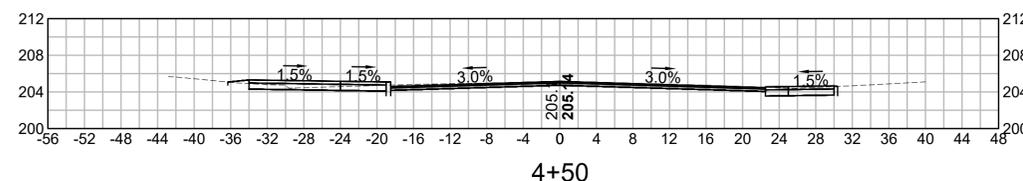
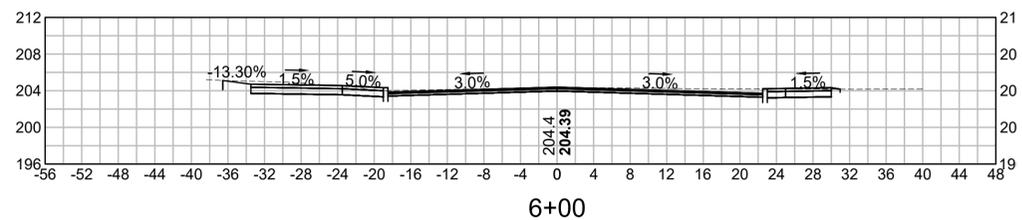
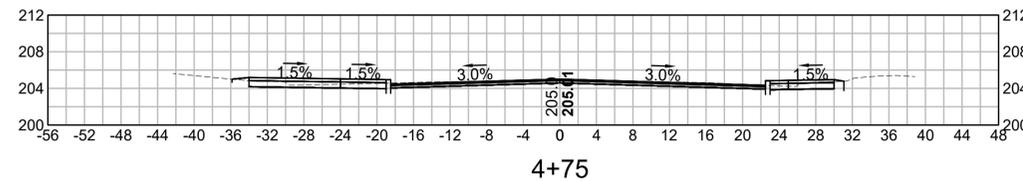
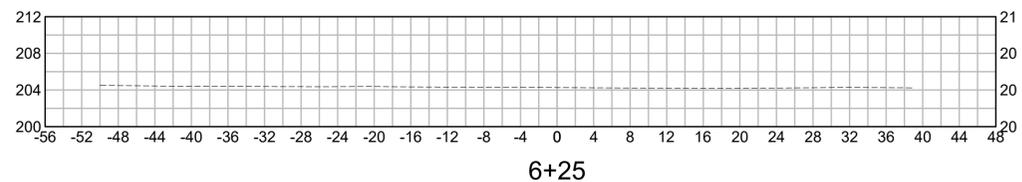
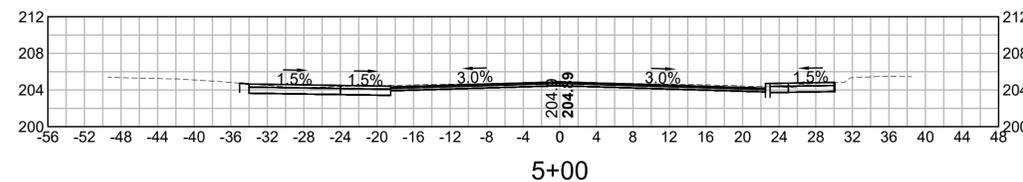
**ROADWAY CROSS SECTIONS**

SCALE: 1" = 10'



**C-502**  
SHEET 12 OF 14

Last Saved: 6/3/2025 12:18pm By: M.Mottolese  
Plotted On: Jun 03, 2025 12:18pm By: M.Mottolese  
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**Elm Street Complete Streets and Mobility Improvements**

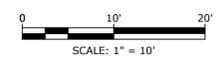
Town of Deerfield

Deerfield, Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO:	D5017-002	
DATE:	06/2025	
FILE:	D5017-002 Cross Sections.dwg	
DRAWN BY:	J. Leventis	
DESIGNED BY:	M. Mottolise	
CHECKED BY:	J. Cigaj, A. Bouthilllette	
APPROVED BY:	D. Holmes	

**ROADWAY CROSS SECTIONS**

SCALE: 1" = 10'



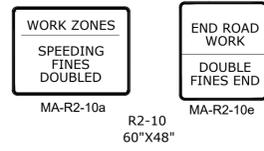
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Plotted On: Jun 03, 2025 12:12:18 PM By: M. Mottolise  
Tighe & Bond | D:\2025\17 Town of Deerfield\002 - complete streets\002a - tier 3 - elm street\drawings - figures\AutoCAD\Sheet\0017-002 Cross Sections.dwg

**GENERAL NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- CONTRACTORS SHALL NOTIFY EACH ADJUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- THE FIRST FIVE PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- SIGN MA-R2-10a AND MA-R2-10e SHALL BE LOCATED AT THE PROJECT LIMITS FOR THE DURATION OF THE WORK. PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PROVIDED ON WEST STREET AT BOTH ENDS OF THE PROJECT LIMITS.

**LEGEND**

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- WORK ZONE
- WORK VEHICLE
- P/F POLICE/FLAGGER DETAIL
- DIRECTION OF TRAFFIC
- TRUCK MOUNTED ATTENUATOR
- TYPE III BARRICADE
- IMPACT ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- CHANGEABLE MESSAGE SIGN
- MEDIAN BARRIER
- SIGN
- MEDIAN BARRIER WITH WARNING LIGHTS
- ARROW BOARD

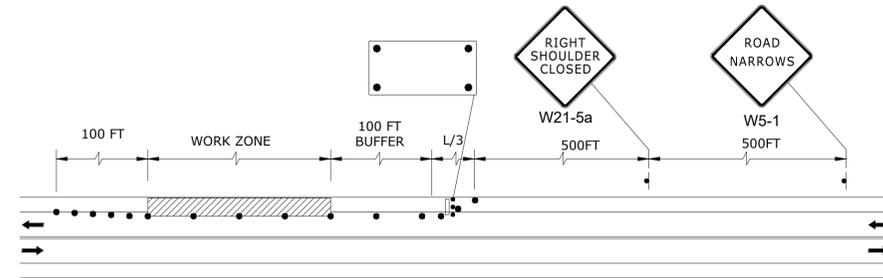


**WORK ZONE LIMIT SIGNS**  
SEE NOTE 12

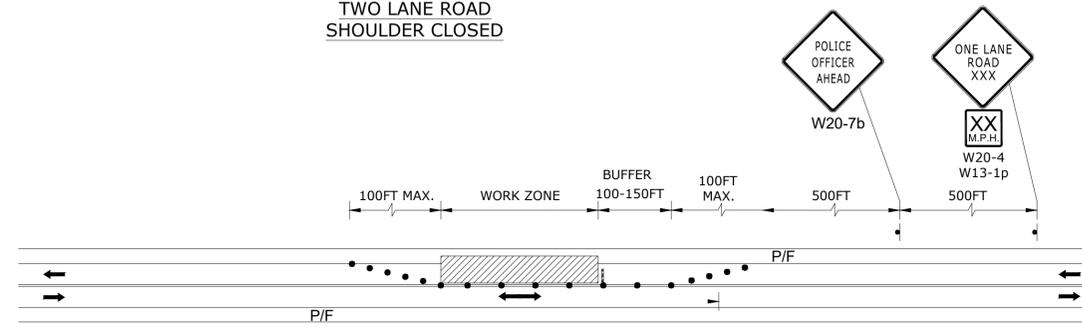
**FORMULAS FOR DETERMINING TAPER LENGTHS**

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

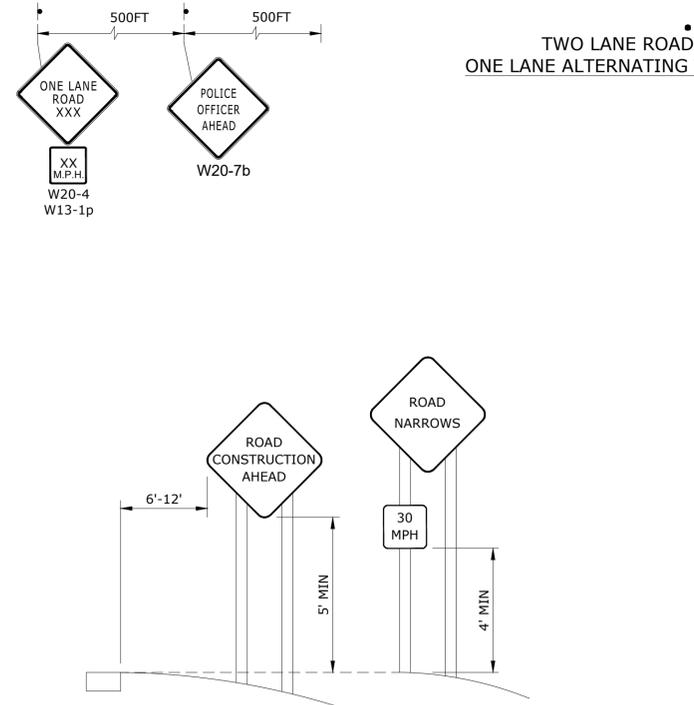
WHERE:  
L = TAPER LENGTH IN FEET  
W = WIDTH OF OFFSET IN FEET  
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH



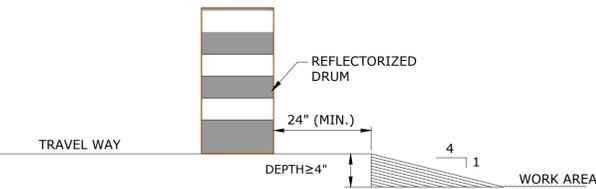
**TWO LANE ROAD SHOULDER CLOSED**



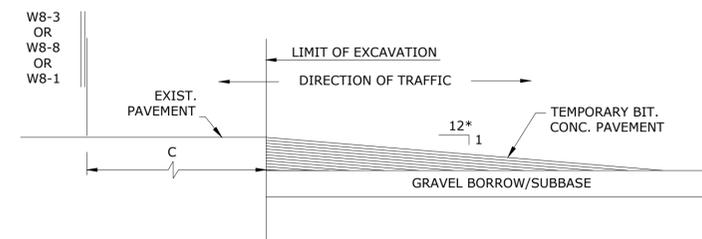
**TWO LANE ROAD ONE LANE ALTERNATING TRAFFIC**



**TYPICAL INSTALLATION OF PROJECT SIGNS**



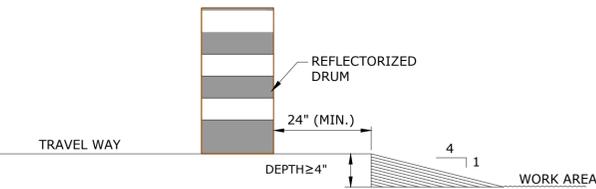
**LATERAL DROP-OFF DETAIL**  
NO SCALE



**LONGITUDINAL DROP-OFF DETAIL**  
NO SCALE

\* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS

**LATERAL AND LONGITUDINAL DROP-OFF DETAILS**



**PLASTIC DRUMS**

- NOTES:**
- DRUM DESIGN AND APPLICATION SHALL BE AS PER THE CURRENT EDITION OF THE MUTCD.
  - DRUMS SHALL BE APPROXIMATELY 36" IN HEIGHT, HAVING A MINIMUM WALL THICKNESS OF 3/32" AND A MINIMUM DIAMETER OF 18" REGARDLESS OF ORIENTATION.
  - DRUM MATERIAL MUST BE APPROVED UV RESISTANT, LOW DENSITY, IMPACT RESISTANT, LINEAR POLYETHYLENE (OR APPROVED EQUIVALENT).
  - SHEETING SHALL BE APPROVED ORANGE AND WHITE TYPE IV REFLECTORIZED SHEETING CONFORMING TO M9.30.0.
  - ALL DRUMS SHALL BE WELL MAINTAINED INCLUDING REMOVAL OF DUST OR ROAD FILM, SO AS NOT TO REDUCE REFLECTIVE EFFICIENCY. WHEN A DRUM LOSES TARGET VALUE IT SHALL BE REPLACED.
  - STORE UNUSED DRUMS IN ONE LOCATION, AWAY FROM ALL TRAFFIC, OR REMOVE FROM SITE ENTIRELY.

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**Elm Street Complete Streets and Mobility Improvements**

Town of Deerfield

Deerfield, Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO:	D5017-002	
DATE:	06/2025	
FILE:	D5017-002 TTCP.dwg	
DRAWN BY:	J. Leventis	
DESIGNED BY:	M. Mottolose	
CHECKED BY:	J. Cigal, A. Bouthillette	
APPROVED BY:	D. Holmes	

**TEMPORARY TRAFFIC CONTROL PLAN**

SCALE: NO SCALE

**C-601**  
SHEET 14 OF 14