TOWN OF WAKEFIELD, MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

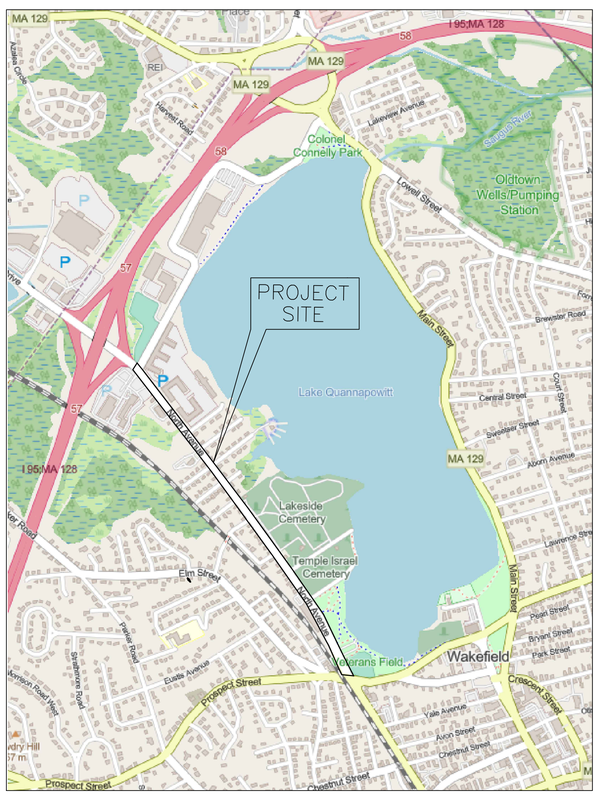
STEPHEN P. MAIO
TOWN ADMINISTRATOR

JOSEPH P. CONWAY
DIRECTOR OF PUBLIC WORKS

WILLIAM J. RENAULT, P.E.
TOWN ENGINEER

BICYCLE & PEDESTRIAN IMPROVEMENTS
NORTH AVE
MASSWORKS GRANT

APRIL 2023



LOCUS PLAN
NOT TO SCALE

WILLIAM J. LEE MEMORIAL TOWN HALL
ONE LAFAYETTE STREET
WAKEFIELD, MA 01880
(781) 246-6300 tele
(781) 246-6266 fax

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GENERAL NOTES

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 2020, THE 2020 SUPPLEMENTAL SPECIFICATIONS, THE STANDARD SPECIAL PROVISIONS, THE 2017 MASS DOT CONSTRUCTION STANDARD DETAILS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, AND THE CONTRACT SPECIAL PROVISIONS.

2. ALL LOCATIONS OF SUBSURFACE UTILITIES AND STRUCTURES ON THE ATTACHED PLANS WERE OBTAINED FROM AVAILABLE UTILITY RECORDS. THE SIZE, TYPE, AND LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING ALL UTILITIES ON SITE PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING UTILITIES SHOWN ON THE PLANS AND SHALL BE RESPONSIBLE FOR LOCATING ANY ADDITIONAL UTILITIES NOT SHOWN. THE CONTRACTOR IS REQUIRED TO CONTACT DIG–SAFE (888–344–7233) 72 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY UTILITY LINE LOCATIONS AS NECESSARY. IF NECESSARY, THE CONTRACTOR SHALL HIRE A PRIVATE MARKING COMPANY TO LOCATE ON–SITE UTILITIES AT NO ADDITIONAL COST TO THE OWNER. THE TOWN OF WAKEFIELD DOES NOT WARRANT OR GUARANTEE THE THE LOCATION OF ANY UTILITIES, HEREON.

3. IN CASE OF DISCREPANCY BETWEEN PLAN SET NOTES AND SPECIFICATIONS THE SPECIFICATIONS SHALL GOVERN.

4. LOCATION OF PROPOSED UTILITIES MAY BE ALTERED IN THE FIELD BY THE ENGINEER TO SUIT FIELD CONDITIONS.

5. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A CONSTRUCTION SCHEDULE DELINEATING THE SEQUENCE OF WORK AND ESTIMATED TIME OF COMPLETION OF EACH SEGMENT OF WORK, PRIOR TO THE COMMENCEMENT OF WORK.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE RESTORATION AND CLEAN UP UPON COMPLETION OF THE PROJECT.

7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND PROCEDURES, AND FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ALL WORK INCLUDED UNDER THIS CONTRACT. THE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL SAFETY BARRIERS, WARNING FLASHERS, ETC., AS REQUIRED BY THE CONDUCT OF THE WORK FOR THE PROTECTION OF WORKERS AND NON– WORKERS ALIKE. THE CONTRACTOR'S ATTENTION IS DIRECTED TO OSHA AND MA DLS REQUIREMENTS.

8. THE CONTRACTOR SHALL PLAN AND PERFORM TEST PIT EXCAVATION WELL IN ADVANCE OF COMMENCING CONSTRUCTION AND ORDERING MATERIALS TO ALLOW TIME TO REVIEW ACTUAL CONDITIONS ENCOUNTERED. TEST PITS NOT SPECIFICALLY IDENTIFIED SHALL BE EXCAVATED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER.

9. ACCESS TO ALL EXISTING BUILDINGS SHALL BE MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION BY THE CONTRACTOR.

10. DURING THE COURSE OF CONSTRUCTION ANY DAMAGE TO FENCES, GUARD RAILS, PATHS, DRIVEWAYS, STAIRS, AND VEGETATION SHALL BE REPAIRED OR REPLACED AND RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE TOWN.

11. THE CONTRACTOR SHALL RESET ALL WATER, SEWER, AND DRAINAGE FRAMES, GRATES, AND BOXES TO THE PROPOSED FINISH SURFACE GRADE.

12. THE CONTRACTOR IS RESPONSIBLE FOR SETTING AND MAINTAINING ALL GRADES AND GRADE STAKES. CPW MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO PAVING IN ORDER TO ENSURE ADEQUATE TIME TO VERIFY THE GRADES AND ENSURE PROPER PITCH OF ROADWAYS AND DRIVEWAYS. ANY DISCREPANCIES OR DEVIATIONS FROM THE DESIGN PLANS MAY RESULT IN THE RE–GRADING OF SAID DEVIATIONS. THIS SHALL BE DONE AT NO ADDITIONAL EXPENSE TO THE TOWN, REGARDLESS OF THE SIZE OF THE AREA, TIME NEEDED, OR RE–MOBILIZATION EFFORTS.

13. PLANS AND TOPOGRAPHIC INFORMATION ARE PREPARED FROM FIELD SURVEY PERFORMED BY VARIOUS SOURCES.

14. RIGHT OF WAY INFORMATION OBTAINED FROM PLANS RECORDED IN SOUTH MIDDLESEX REGISTRY OF DEEDS.

15. LOCATION OF UNDERGROUND UTILITIES OBTAINED FROM WAKEFIELD GIS AND ARE REFERENCE INFORMATION ONLY. "DIG–SAFE" SHALL BE UTILIZED AS SPECIFIED.

LEGEND:

- EXISTING DRAINAGE CATCH BASIN
- EXISTING DRAIN MANHOLE
- EXISTING SEWER MANHOLE
- **PROPOSED SEWER MANHOLE**
- **PROPSED DRAINAGE CATCH BASIN**
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- EXISTING MAIL BOX
- EXISTING WATER GATE VALVE
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF
- EXISTING GAS VALVE
- EXISTING DRAIN LINE
- EXISTING SEWER LINE
- **PROPOSED 8" PVC SEWER LINE**
- EXISTING SEWER SERVICE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- **EXISTING RIGHT OF WAY**
- HEDGE LINE
- STONE WALL
- EXISTING GRANITE CURB
- EXISTING SLOPED VERTICAL GRANITE CURB
- EXISTING FENCE
- EXISTING 5' CONTOURS
- EXISTING 1' CONTOURS
- **PROPOSED CONTOUR WITH ELEVATION**
- **EXISTING BOUND**
- 130.56 EXISTING GRADE
- **EXISTING MAG NAIL**
- **EXISTING IRON ROD OR PIPE**
- EXISTING PUBLIC LIGHT POST
- EXISTING PRIVATE LIGHT POST
- EXISTING ELECTRIC BOX
- EXISTING CATV BOX
- EXISTING CONCRETE SIDEWALK
- EXISTING BRICK SIDEWALK
- EXISTING FLAGSTONE WALKWAY
- EXISTING GRAVEL OR STONEDUST WALKWAY
- EXISTING TREE W/TRUNK DIAMETER

EROSION AND SEDIMENTATION CONTROL PLAN

SEDIMENTATION CONTROL SYSTEM – THE SEDIMENTATION CONTROL SYSTEM SHALL CONSIST OF EROSION CONTROL FIBER ROLLS. THE SEDIMENTATION CONTROL SYSTEM SHALL BE INSTALLED IMMEDIATELY AFTER A CUT SLOPE HAS BEEN GRADED, BEFORE A FILL SLOPE HAS BEEN CREATED AND AS INDICATED ON THE PLANS. THE SYSTEM DESIGNED TO INTERCEPT SILT AND SEDIMENT BEFORE IT REACHES THE WETLANDS OR WATERCOURSES. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FOR THE UPSTREAM SIDE OF THE ROLL. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. THE SEDIMENTATION CONTROL SYSTEM IS TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE SYSTEM ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. ENVIRONMENTAL MONITORING REPORTS, AS REQUIRED BY THE TOWN'S STORMWATER REGULATIONS SHALL BE PROVIDED TO THE ENGINEERING DIVISION, REGARDING EROSION CONTROL INSPECTION AND MAINTENANCE.

EROSION CONTROL SILT SACKS SHALL BE PLACED IN EXISTING CATCH BASINS WHERE SEDIMENT MAY ENTER THE CATCH BASIN OR AS DIRECTED BY THE RESIDENT ENGINEER. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED ROM THE SACKS. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. SILT SACKS ARE TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE EROSION CHECKS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. THE RE BAR NEEDED TO LIFT AND DUMP THE SACKS TO REMOVE SEDIMENT SHALL NOT BE LEFT IN THE ROADWAY UNATTENDED FOR ANY AMOUNT OF TIME.

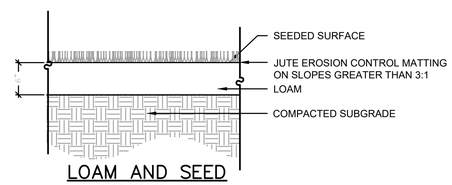
IN ALL AREAS, REMOVAL OF TREES, BUSHES, AND OTHER VEGETATION, AND DISTURBANCE TO THE SOIL, SHALL BE APPROVED BY THE RESIDENT ENGINEER OR ITS DESIGNEE.

EROSION AND SEDIMENT CONTROL MAINTENANCE PROCEDURES

DURING CONSTRUCTION, AS SMALL AN AREA OF SOIL AS POSSIBLE SHOULD BE EXPOSED FOR AS SHORT A TIME AS POSSIBLE. AFTER CONSTRUCTION, GRADE, RE–SPREAD TOPSOIL, AND STABILIZE SOIL BY SEEDING AND MULCHING AS TO PREVENT EROSION.

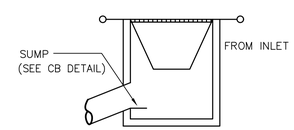
ALL SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE INSPECTED DURING CONSTRUCTION ON A DAILY BASIS AND FOLLOWING ALL STORMS BY THE CONTRACTOR OR ITS DESIGNATED ENVIRONMENTAL MONITOR. THE CONTRACTOR SHALL MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT AS REQUESTED BY THE ENVIRONMENTAL MONITOR OR THE RESIDENT ENGINEER. THIS WORK SHALL BE PERFORMED WITHIN 24 HOURS OF REQUEST.

THE CONTRACTOR SHALL CLEAN SEDIMENT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, AND PIPES AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REPAIR ALL ERODED AREAS AND ENSURE A GOOD STAND OF TURF IS ESTABLISHED THROUGHOUT. THE CONTRACTOR SHALL REPAIR ALL ERODED OR DISPLACED RIPRAP, AND CLEAN SEDIMENT COVERED STONES.

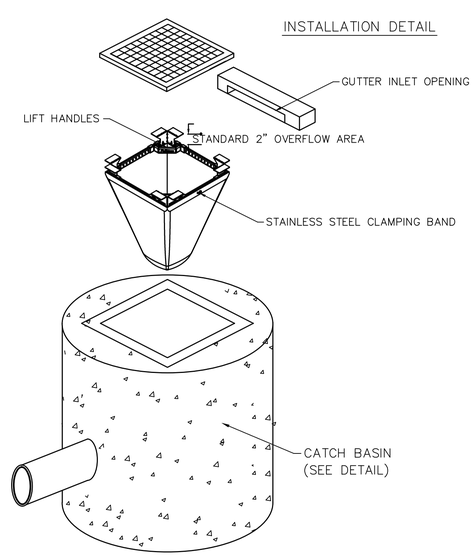


LOAM AND SEED

NOT TO SCALE



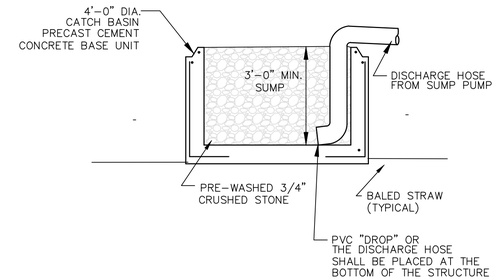
INSTALLATION DETAIL



NOTE:
1. SILTSACKS SHALL BE FLEXSTORM CATCH–IT OR APPROVED EQUAL
2. SILTSACKS SHALL BE INSTALLED IN ALL CATCH BASIN UNTIL DRAINAGE AREA HAS BEEN FULLY STABILIZED.

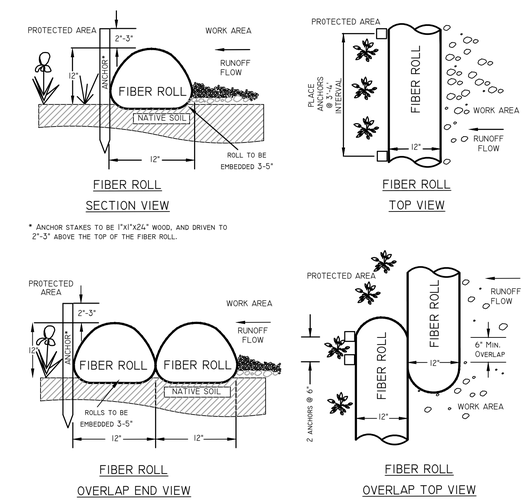
EROSION CONTROL SILT SACK

N.T.S.



DEWATERING BASIN

N.T.S.



EROSION CONTROL

FIBER ROLL

N.T.S.

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

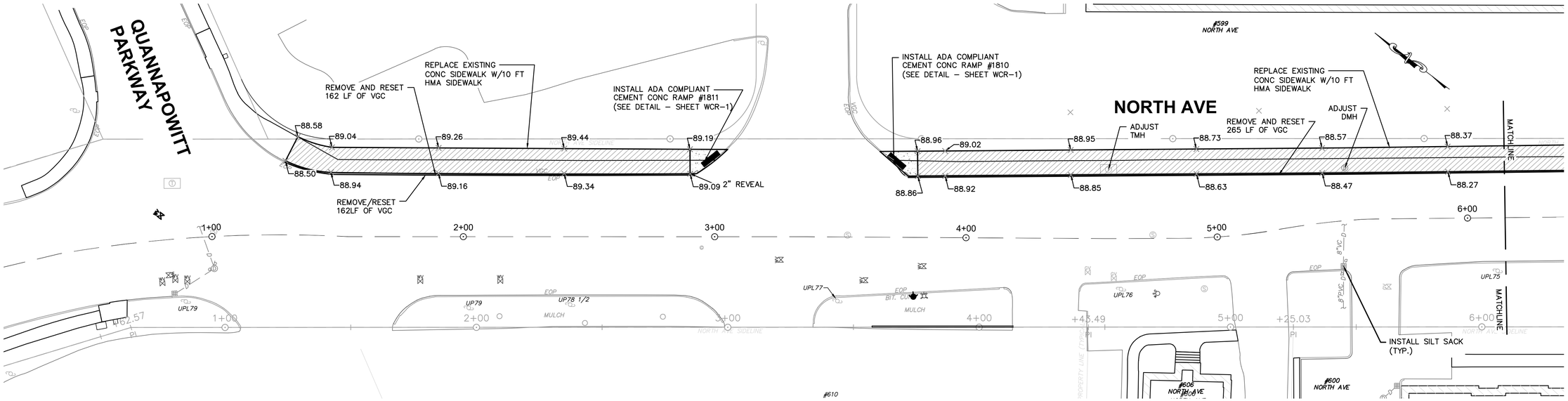
DESIGNED: N/A
DRAWN: N/A
CHECKED: WJR
SCALE: AS SHOWN

NOTES & LEGEND
NORTH AVE
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

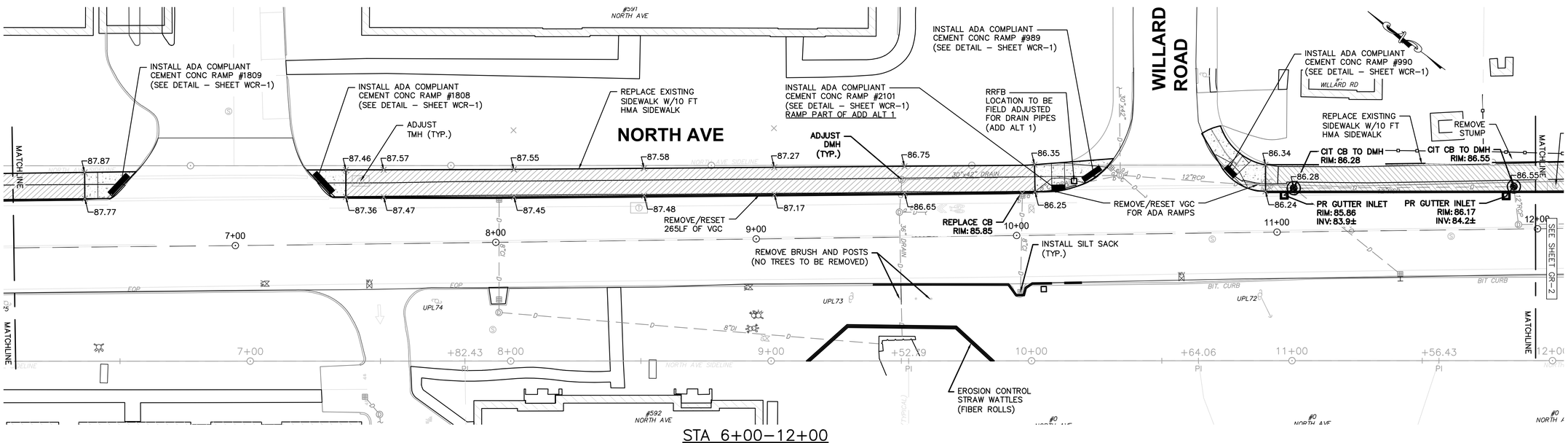
SHEET
2 OF 24

NL-1



STA 1+00–6+00

SCALE: 1" = 20'



STA 6+00–12+00

SCALE: 1" = 20'

REVISIONS

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

DESIGNED TWW
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

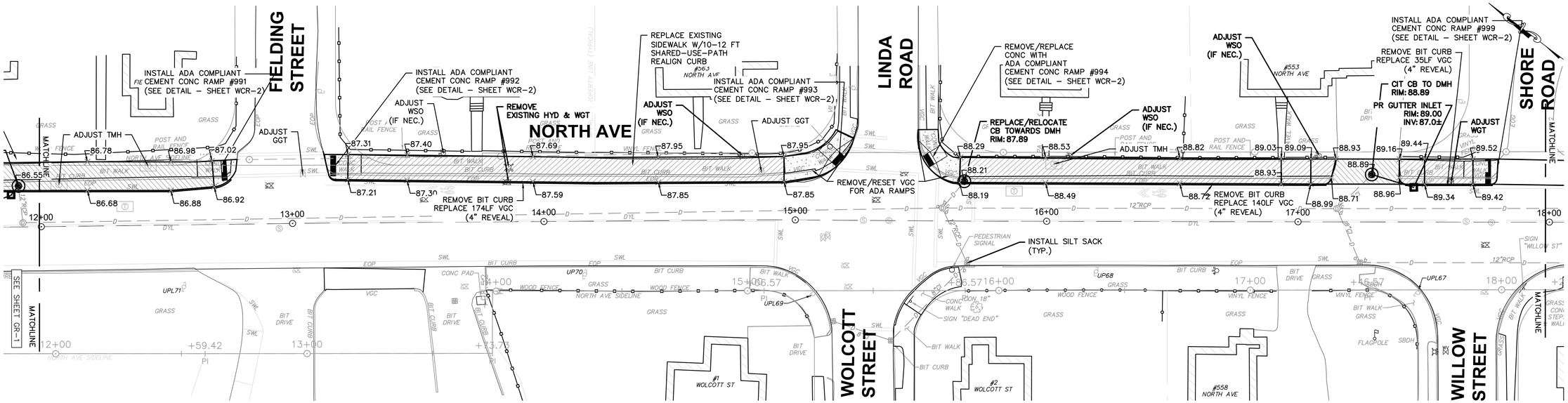
GRADING & DRAINAGE

NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

SHEET 3 OF 24

GR-1



STA 12+00–18+00

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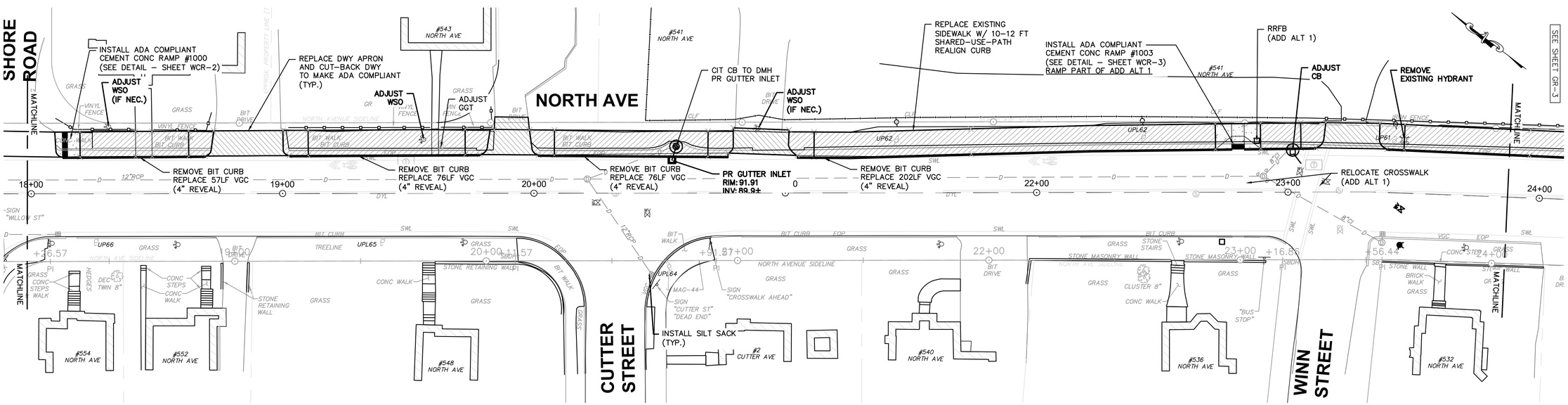


STA 18+00–24+00

SCALE: 1" = 20'

REVISIONS

TOWN OF WAKEFIELD
Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

DESIGNED TTWW
DRAWN TTWW
DRAFTED TWW
CHECKED WJR
SCALE AS SHOWN

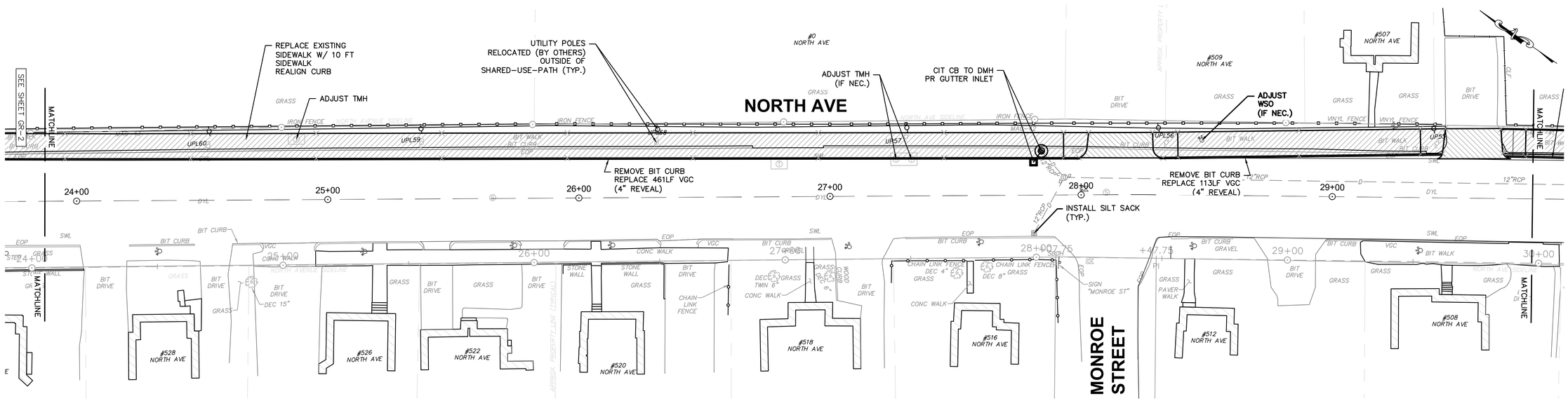
GRADING & DRAINAGE

NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

SHEET 4 OF 24

GR-2



STA 24+00–30+00

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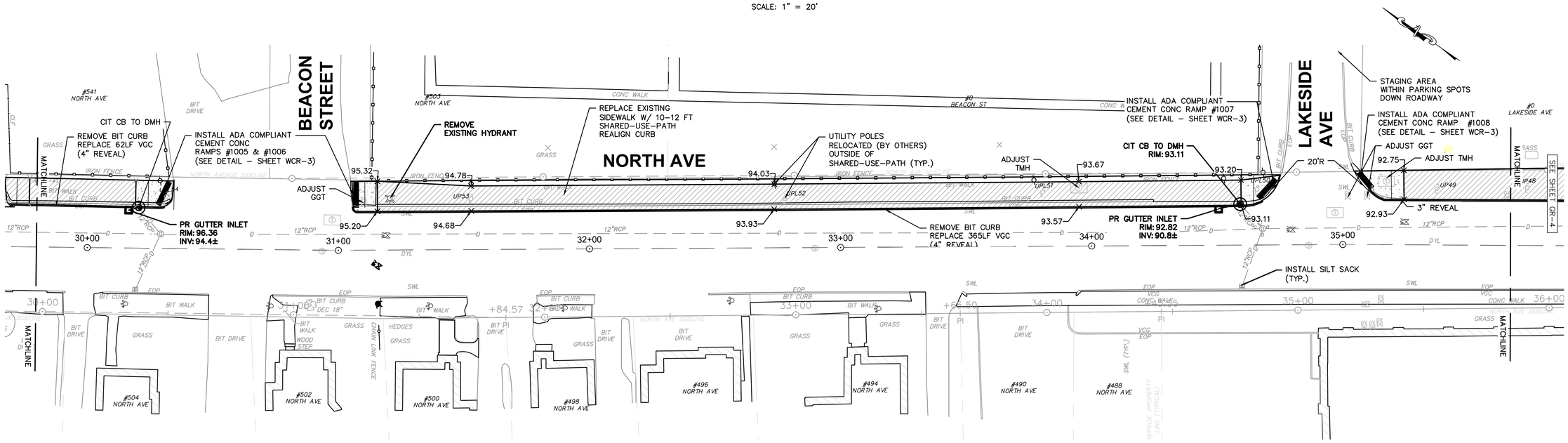


STA 30+00–35+50

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DESIGNED TWW	SCALE AS SHOWN
DRAWN TWW	
CHECKED WJR	

GRADING & DRAINAGE

NORTH AVE (BASE BID)

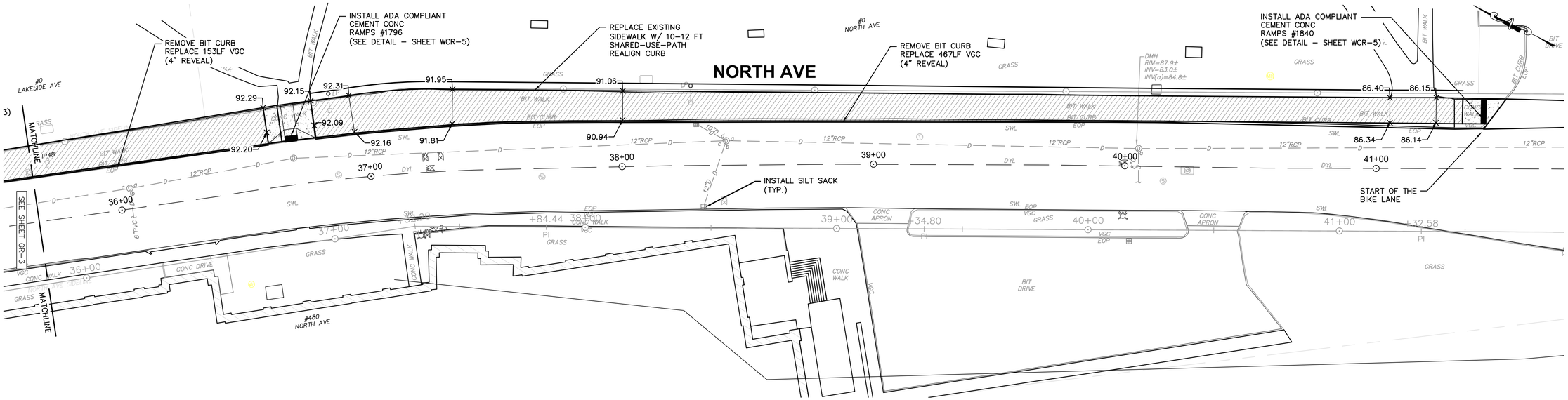
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

SHEET 5 OF 24

GR-3



STA 35+50–41+50

SCALE: 1" = 20'

REVISIONS

DESIGNED TWW
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

GRADING & DRAINAGE

NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

SHEET
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GR-4

TOWN OF WAKEFIELD
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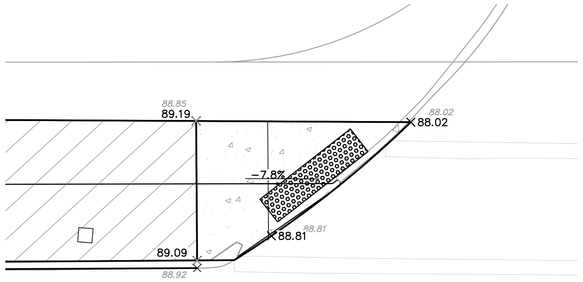
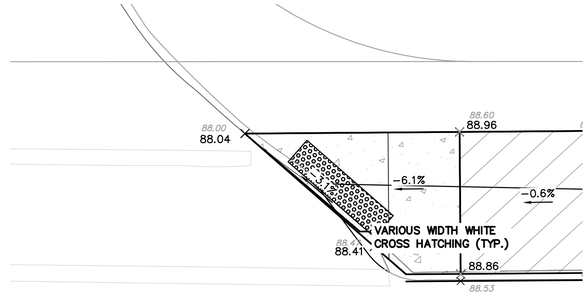


WCR #1811 – GRADING PLAN
(NEAR LAKESIDE PARK)
SCALE: 1" = 5'



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(NEAR LAKESIDE PARK)
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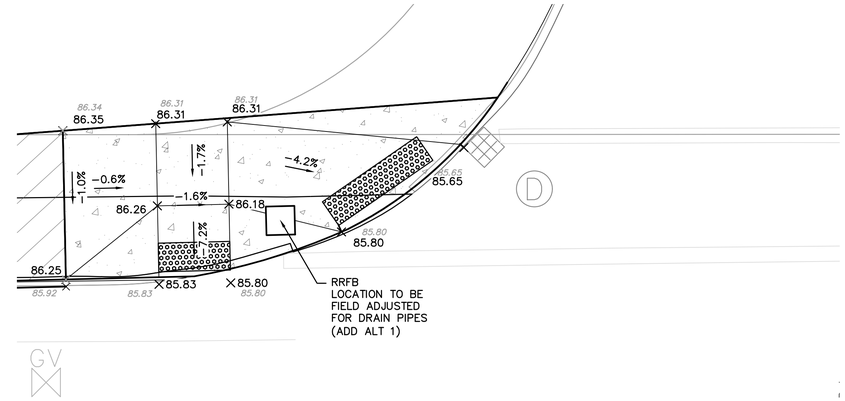
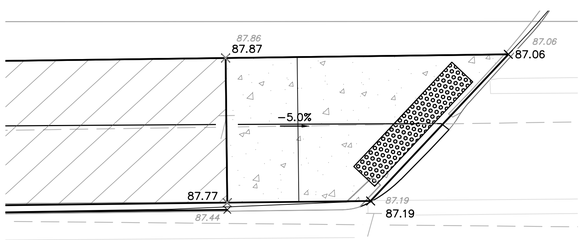


WCR #2101 – GRADING PLAN
(NEAR WILLARD ROAD)
ADD ALT 1
SCALE: 1" = 5'

WCR #989 – GRADING PLAN
(NEAR WILLARD ROAD)
SCALE: 1" = 5'



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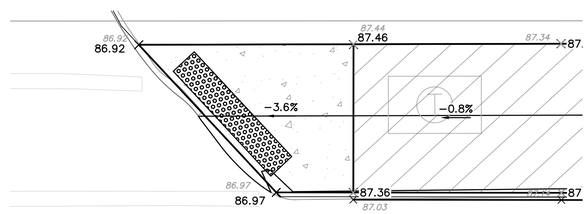
(NEAR THE SAVINGS BANK)
SCALE: 1" = 5'



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(NEAR THE SAVINGS BANK)
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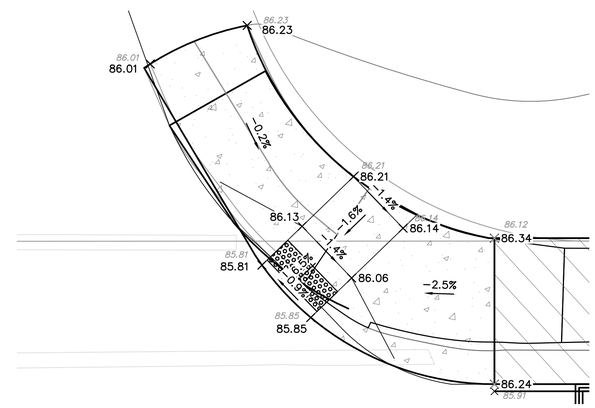


WCR #990 – GRADING PLAN
(NEAR WILLARD ROAD)
SCALE: 1" = 5'

TOWN OF WAKEFIELD
Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

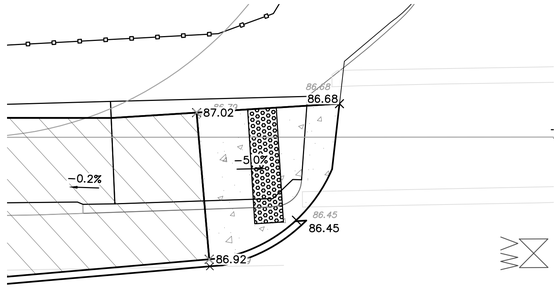
DESIGNED TWW
DRAWN BY TWW
CHECKED WJR
SCALE AS SHOWN

WHEELCHAIR RAMP DETAILS
NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

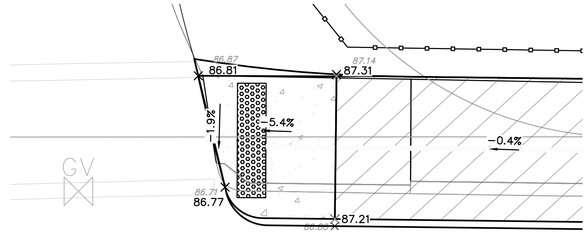
2023-02

SHEET
7 OF 24

WCR-1

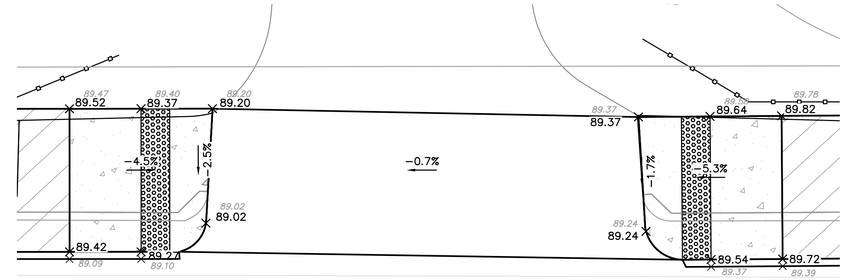


WCR #991 – GRADING PLAN
(NEAR FIELDING STREET)
SCALE: 1" = 5'



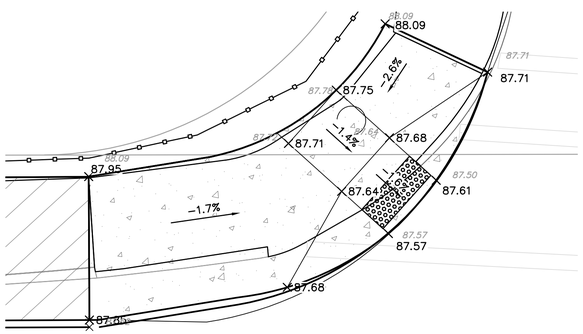
WCR #992 – GRADING PLAN
(NEAR FIELDING STREET)
SCALE: 1" = 5'

REMOVE BIT CURB
REPLACE 35LF VGC
(4" REVEAL)



WCR #999 – GRADING PLAN
(NEAR SHORE ROAD)
SCALE: 1" = 5'

WCR #1000 – GRADING PLAN
(NEAR SHORE ROAD)
SCALE: 1" = 5'



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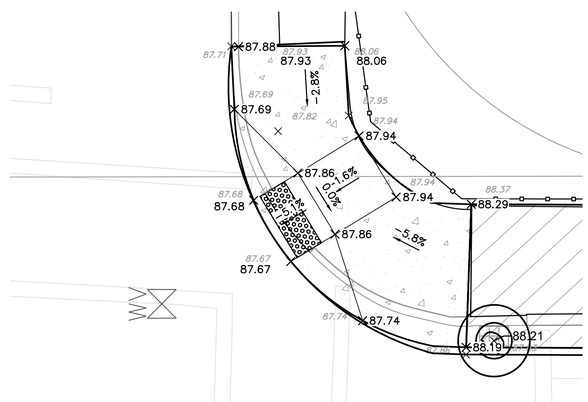

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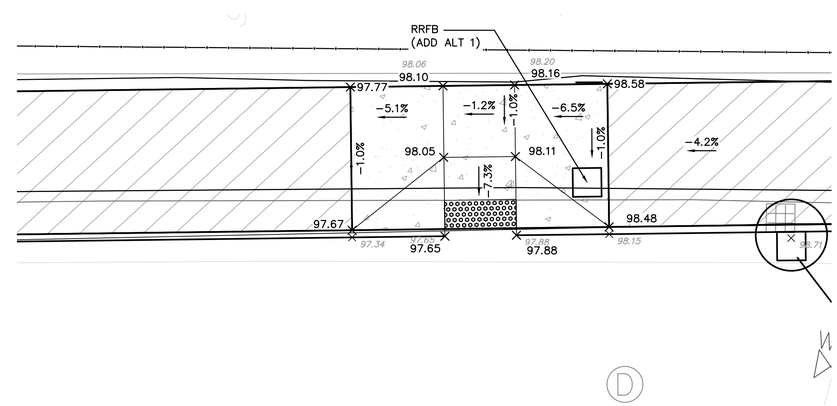


WCR #1003– GRADING PLAN
(ACROSS FROM WINN STREET)
ADD ALT 1
SCALE: 1" = 5'

TOWN OF WAKEFIELD
Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

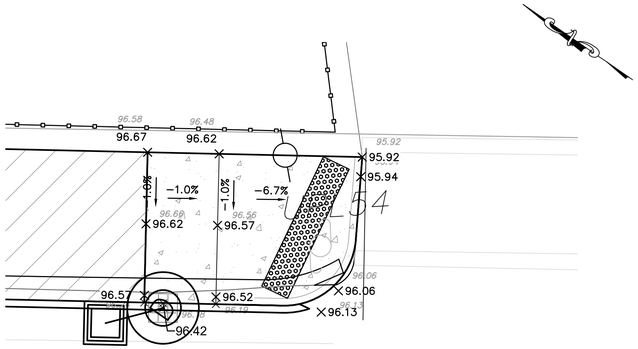
DESIGNED TWW
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

WHEELCHAIR RAMP DETAILS
NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

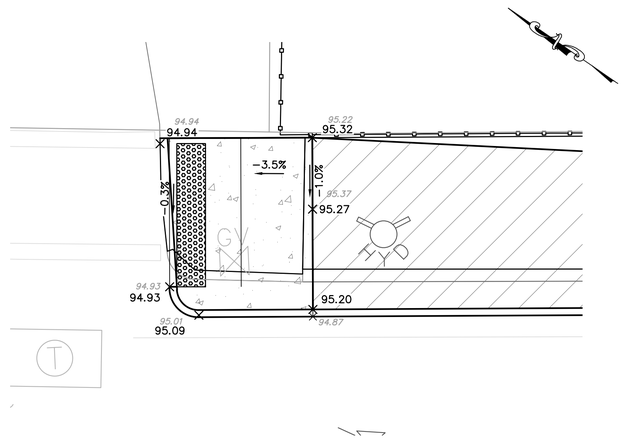
2023-02

SHEET
8 OF 24

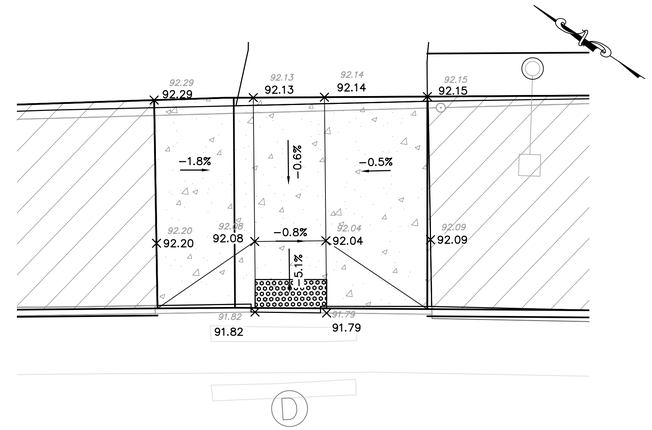
WCR-2



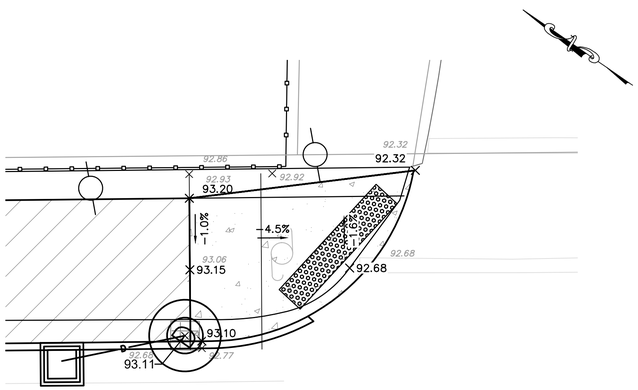
WCR #1005 – GRADING PLAN
(NEAR BEACON STREET)
SCALE: 1" = 5'



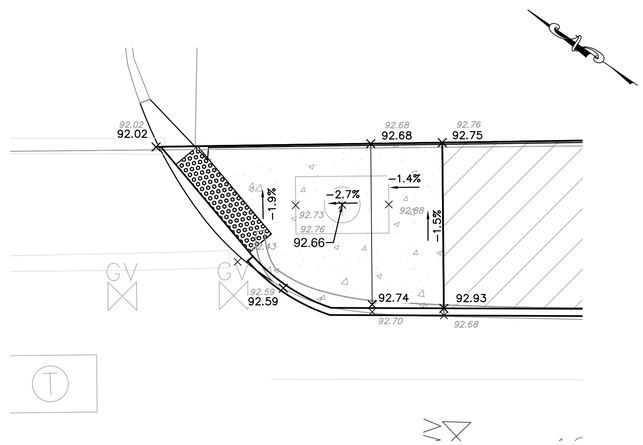
WCR #1006 – GRADING PLAN
(NEAR BEACON STREET)
SCALE: 1" = 5'



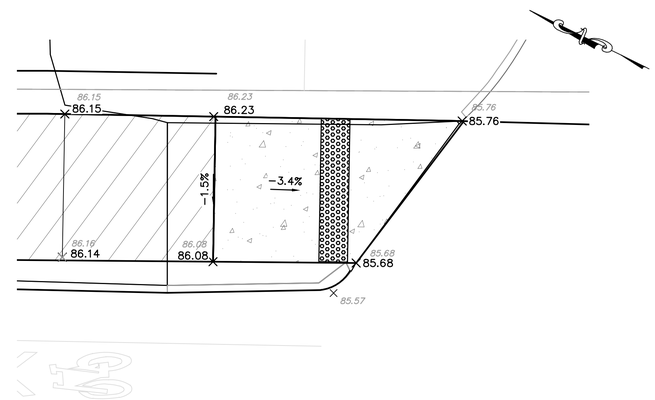
WCR #1796 – GRADING PLAN
(ACROSS FROM WMGLD)
SCALE: 1" = 5'



WCR #1007 – GRADING PLAN
(NEAR LAKESIDE AVE)
SCALE: 1" = 5'



WCR #1008 – GRADING PLAN
(NEAR LAKESIDE AVE)
SCALE: 1" = 5'



WCR #1840 – GRADING PLAN
(NEAR VETS FIELD LOT)
SCALE: 1" = 5'

TOWN OF WAKEFIELD
Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

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DRAWN TWW
DRAFTED TWW
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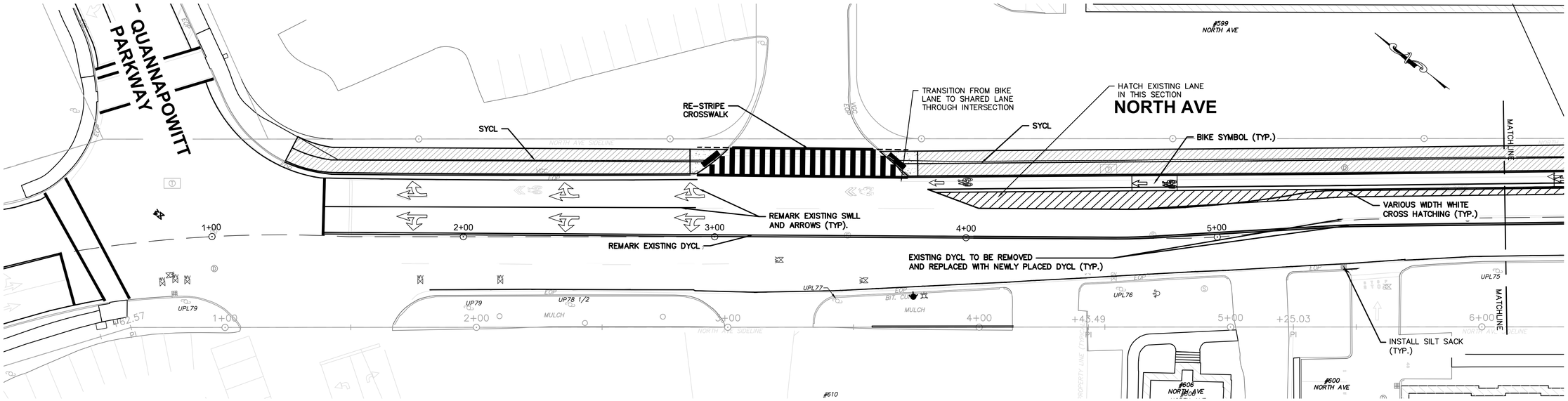
SCALE AS SHOWN

WHEELCHAIR RAMP DETAILS
NORTH AVE (BASE BID)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

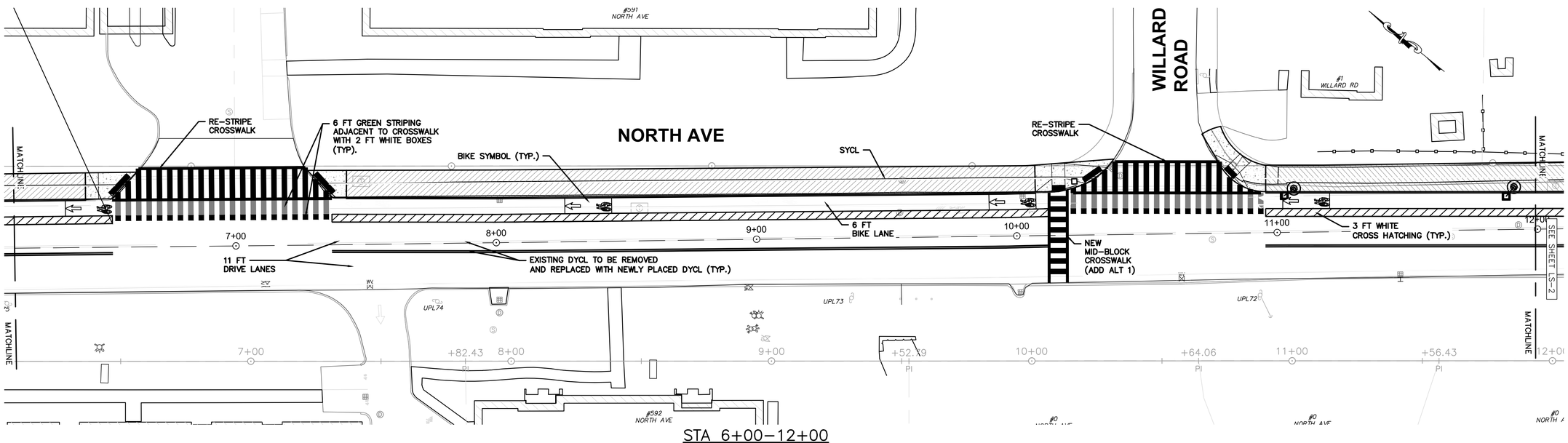
SHEET
9 OF 24

WCR-3



STA 1+00–6+00

SCALE: 1" = 20'



STA 6+00–12+00

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DESIGNED WJR
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

LINE STRIPING

NORTH AVE (BASE BID)

BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

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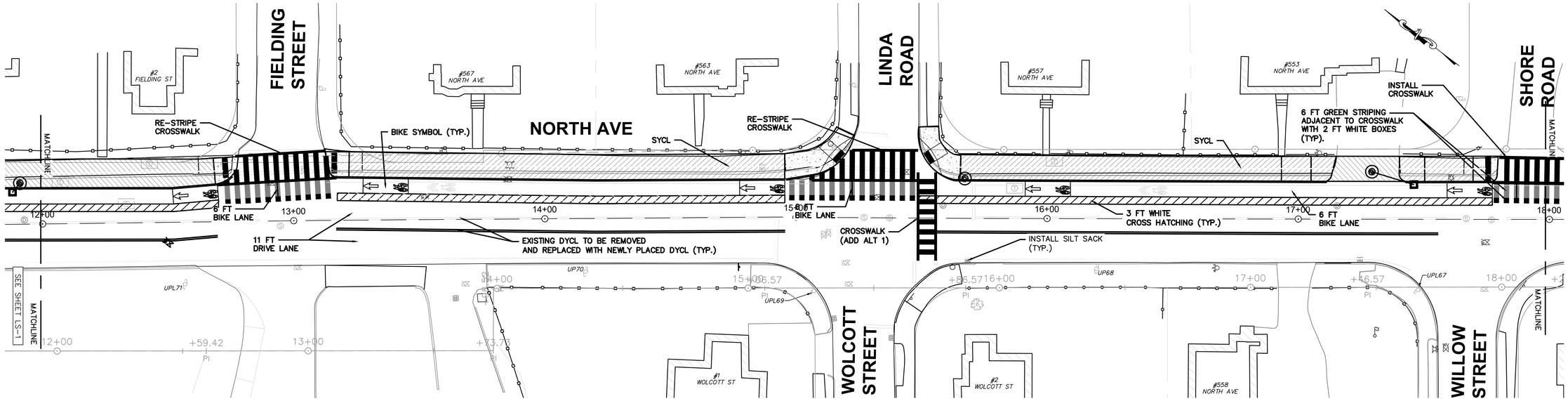
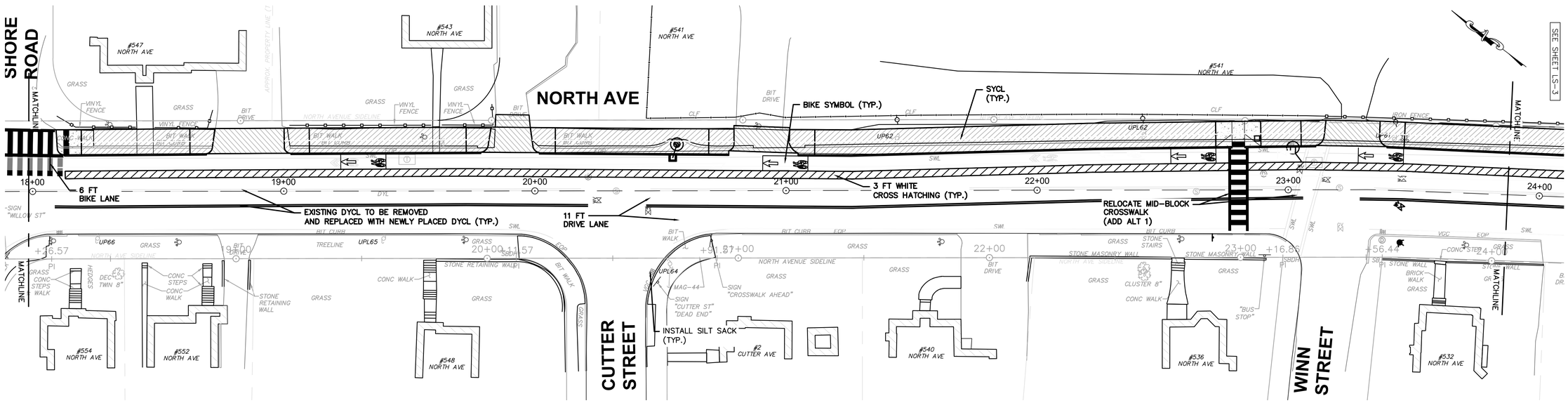
SHEET 10 OF 24

LS-1



STA 12+00–18+00

SCALE: 1" = 20'



STA 18+00–24+00

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DRAWN TWW
DESIGNED TWW
CHECKED WJR
SCALE AS SHOWN

LINE STRIPING

NORTH AVE (BASE BID)

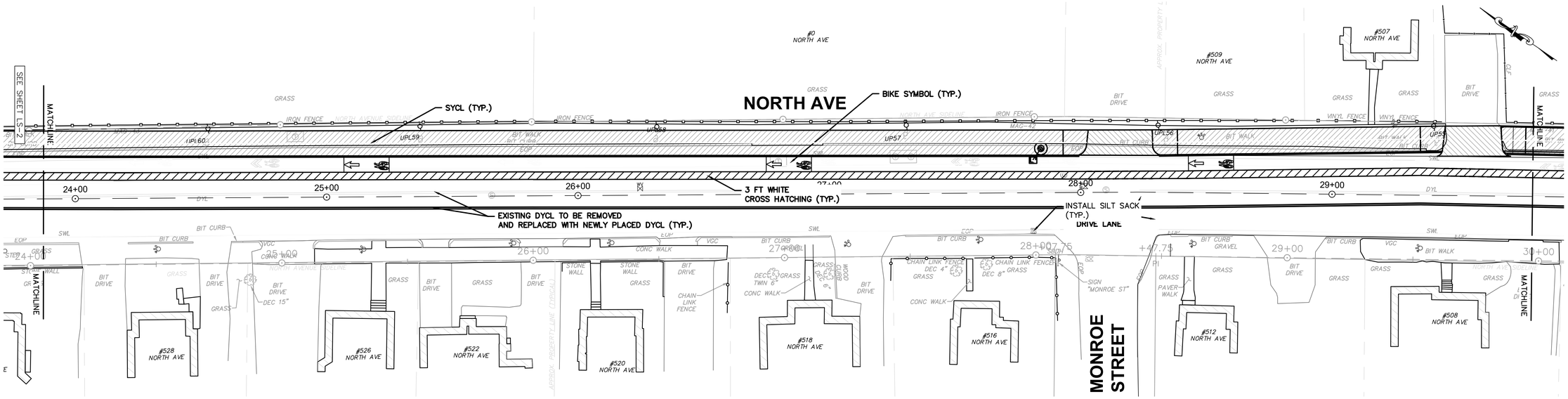
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

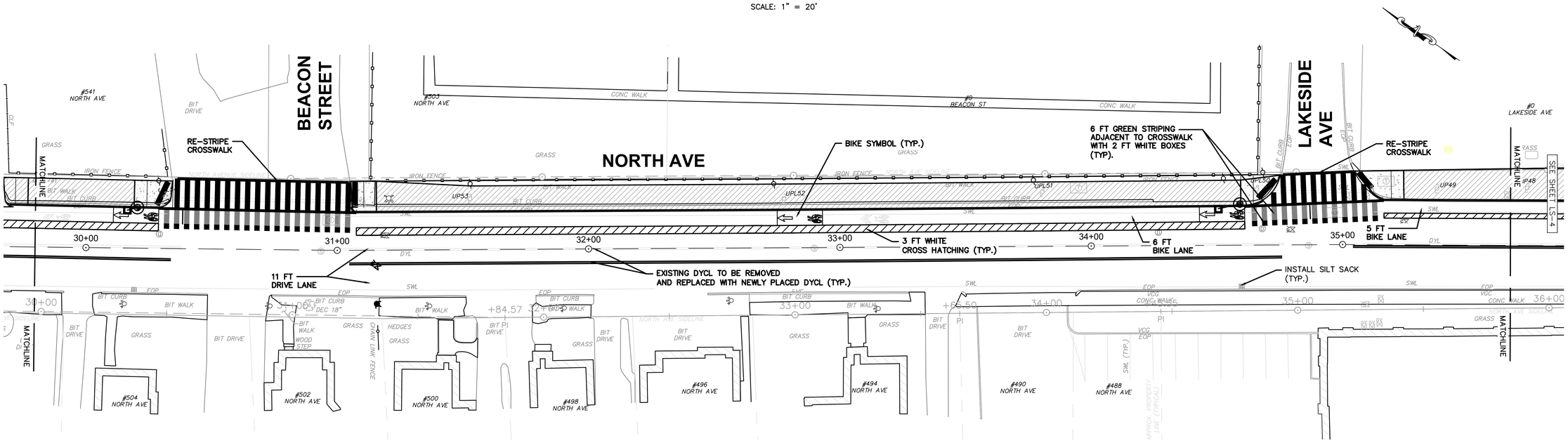
SHEET 11 OF 24

LS-2



STA 24+00–30+00

SCALE: 1" = 20'



STA 30+00–35+50

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DESIGNED TWW
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

LINE STRIPING

NORTH AVE (BASE BID)

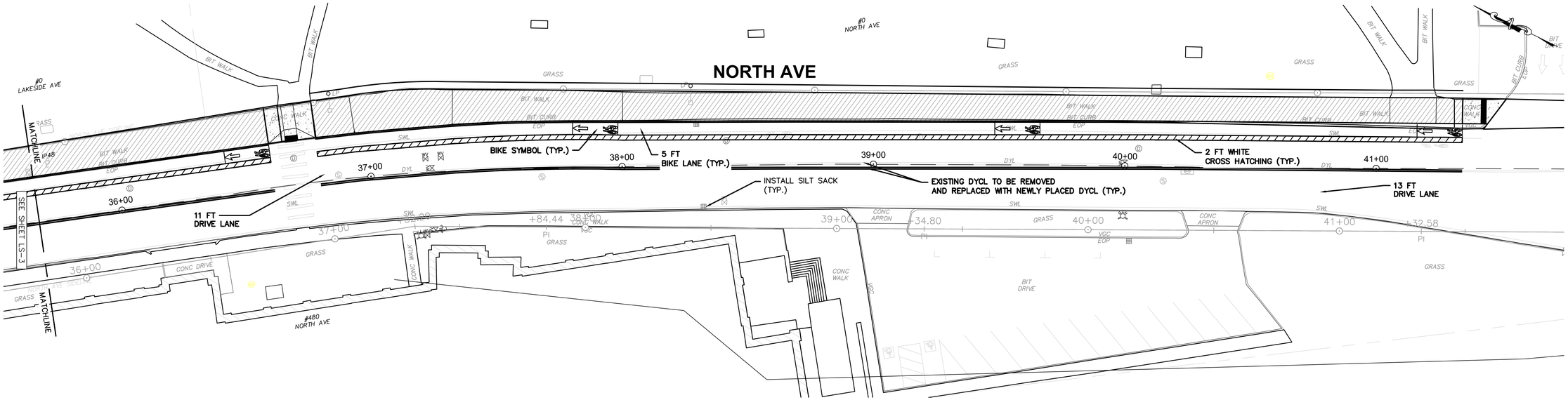
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

SHEET 12 OF 24

LS-3



STA 35+50–41+50

SCALE: 1" = 20'

REVISIONS

DESIGNED TWW
DRAFTED TWW
CHECKED WJR
SCALE AS SHOWN

LINE STRIPING

NORTH AVE (BASE BID)

BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

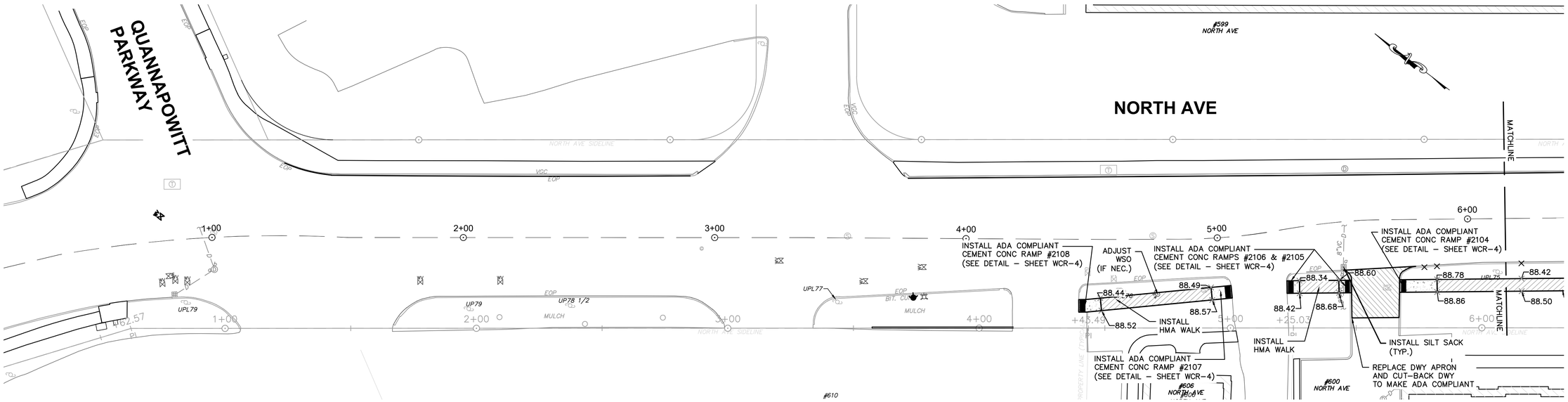
2023-02

SHEET 13 OF 24

LS-4

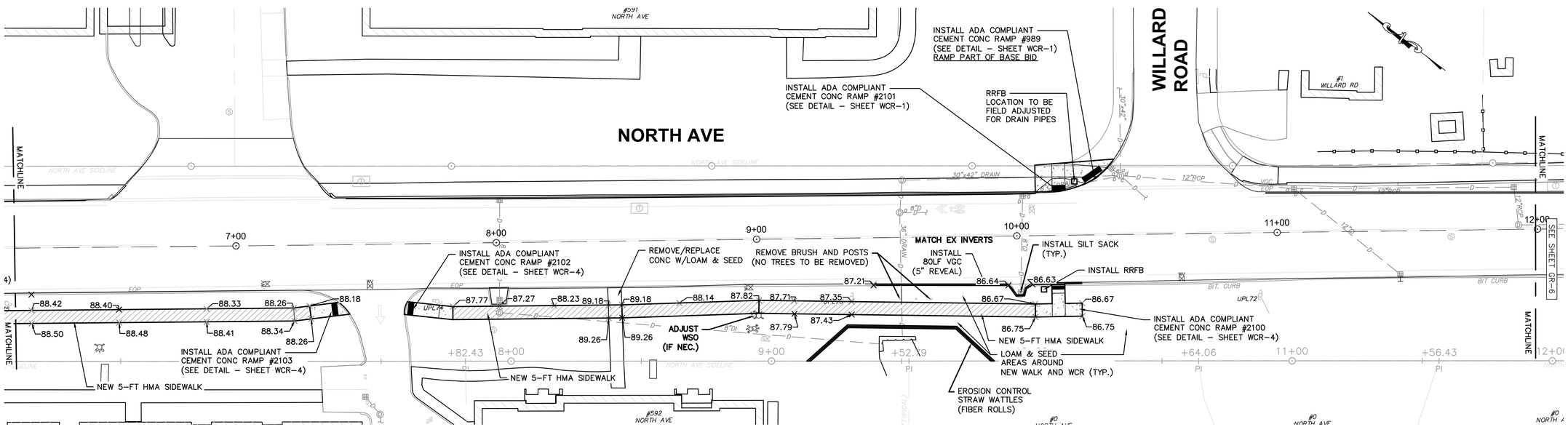
TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880



STA 1+00–6+00

SCALE: 1" = 20'



STA 6+00–12+00

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DESIGNED: TWW
DRAWN: TWW
CHECKED: WJR
SCALE: AS SHOWN

GRADING & DRAINAGE

NORTH AVE (ADD ALT 1)

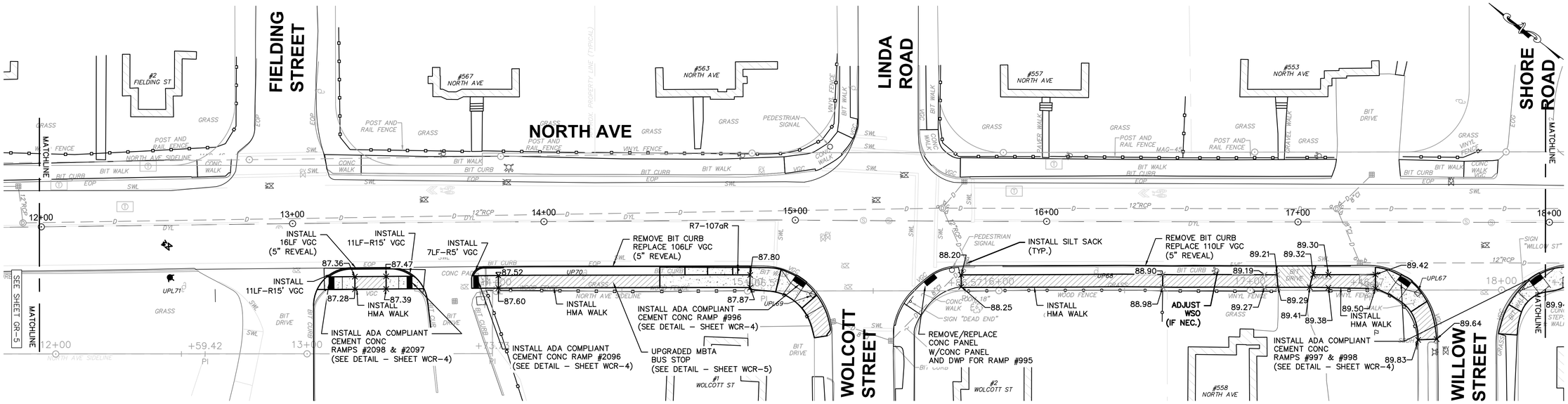
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

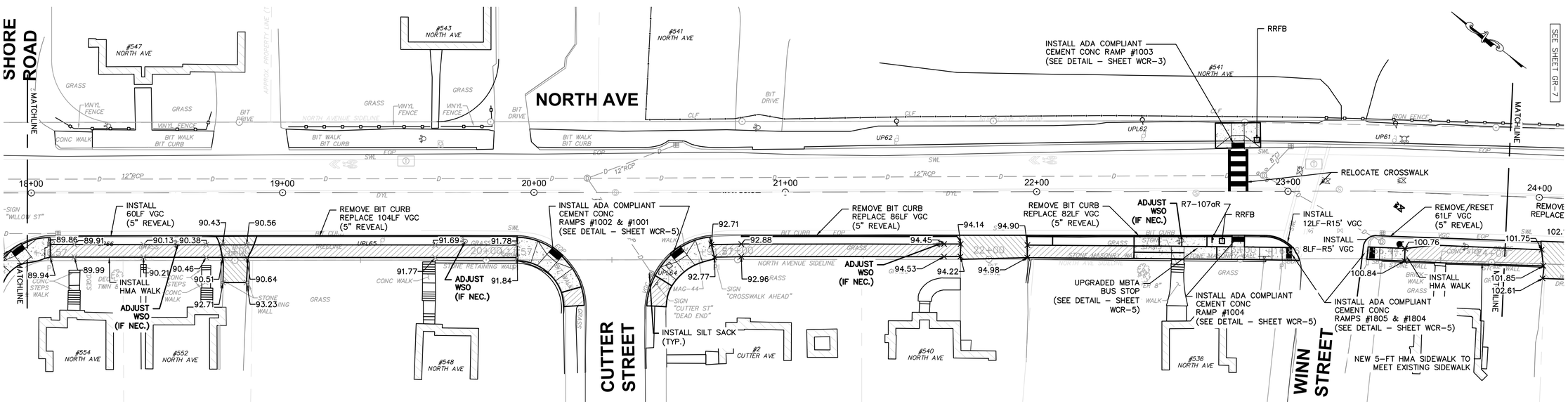
SHEET 14 OF 24

GR-5



STA 12+00–18+00

SCALE: 1" = 20'



STA 18+00–24+00

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

DESIGNED TYW
REVIEWED TYW
DRAFTED TWW
CHECKED WJR
SCALE AS SHOWN

GRADING & DRAINAGE

NORTH AVE (ADD ALT 1)

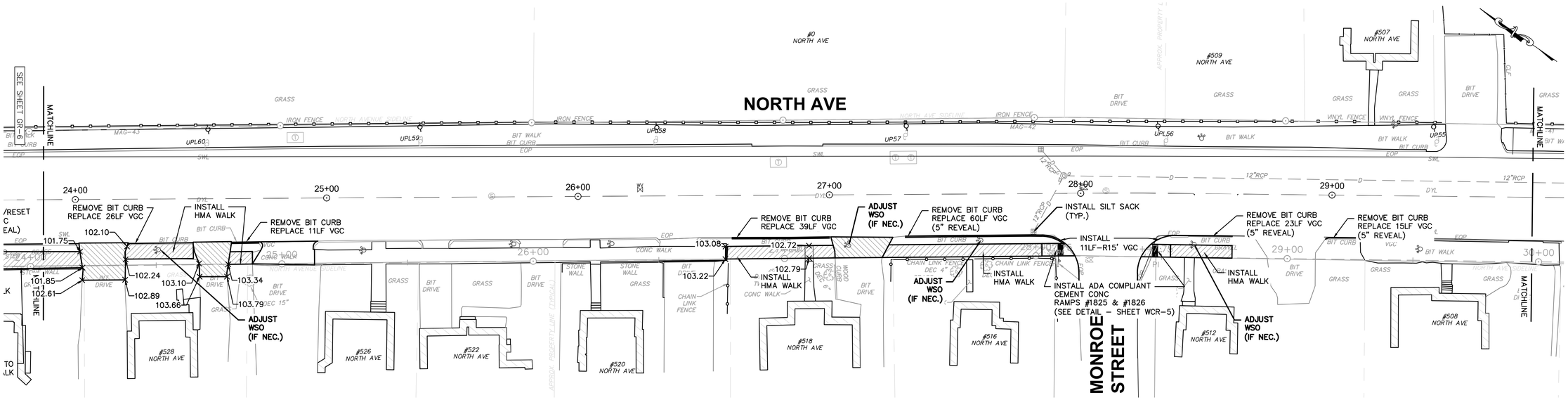
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

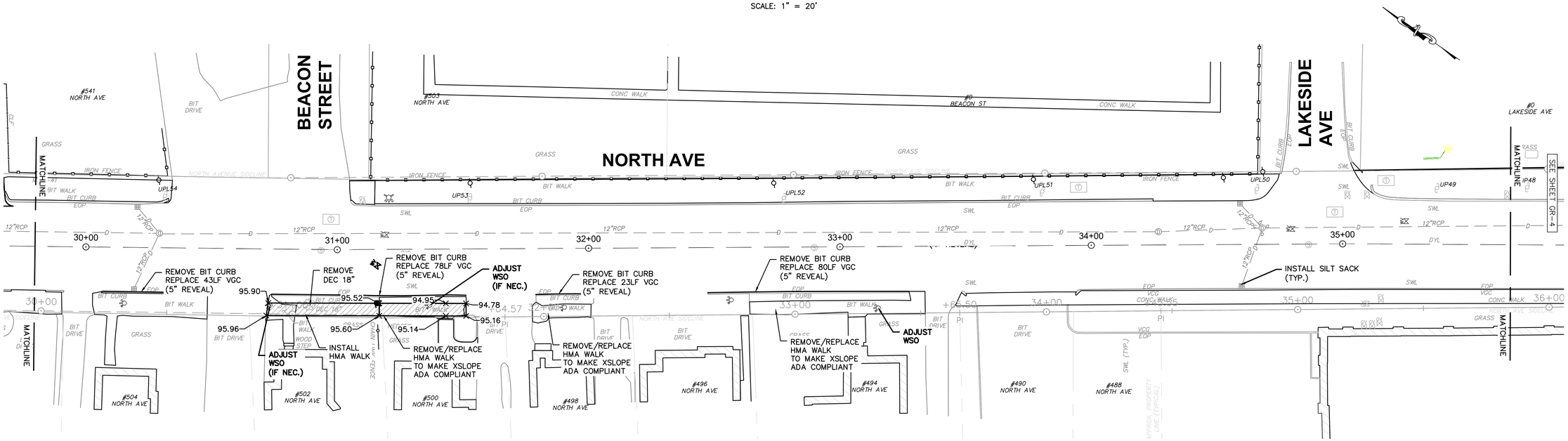
SHEET 15 OF 24

GR-6



STA 24+00–30+00

SCALE: 1" = 20'



STA 30+00–35+50

SCALE: 1" = 20'

TOWN OF WAKEFIELD

Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

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SCALE AS SHOWN

GRADING & DRAINAGE

NORTH AVE (ADD ALT 1)

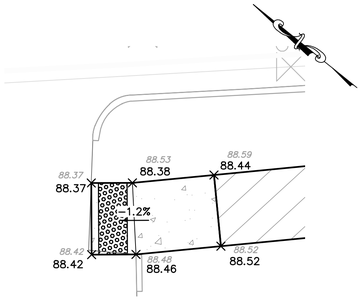
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

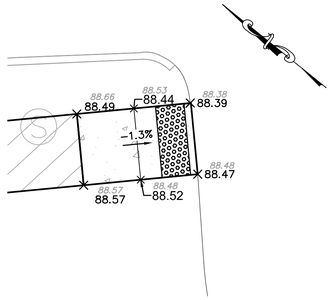
2023-02

SHEET 16 OF 24

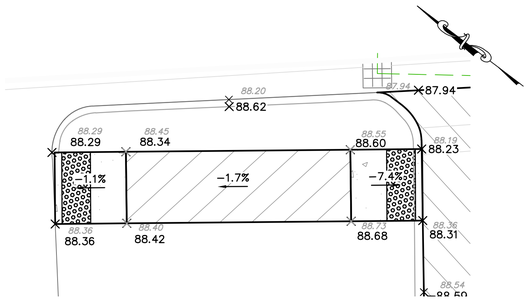
GR-7



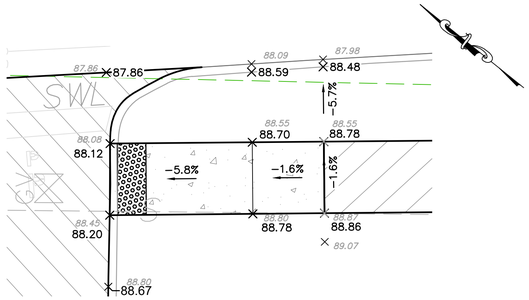
WCR #2108 – GRADING PLAN
(NEAR 606 NORTH AVE)
SCALE: 1" = 5'



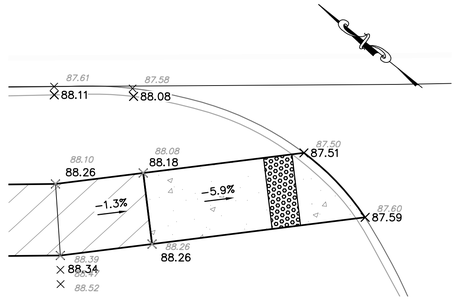
WCR #2107 – GRADING PLAN
(NEAR 606 NORTH AVE)
SCALE: 1" = 5'



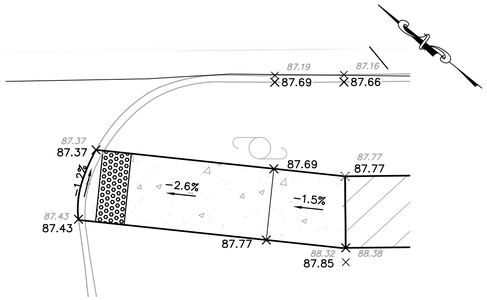
WCR #2106 & #2105
– GRADING PLAN
(BETWEEN 606/600 NORTH AVE)
SCALE: 1" = 5'



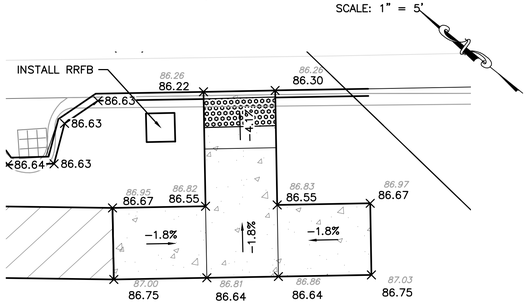
WCR #2104 – GRADING PLAN
(NEAR 600 NORTH AVE)
SCALE: 1" = 5'



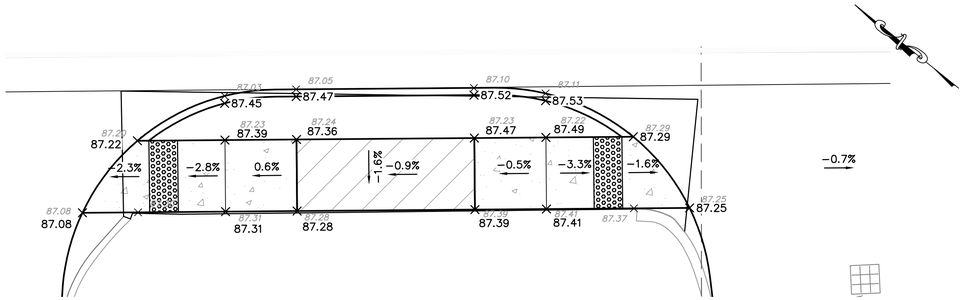
WCR #2103 – GRADING PLAN
(NEAR 600 NORTH AVE)
SCALE: 1" = 5'



WCR #2102 – GRADING PLAN
(NEAR 592 NORTH AVE)
SCALE: 1" = 5'

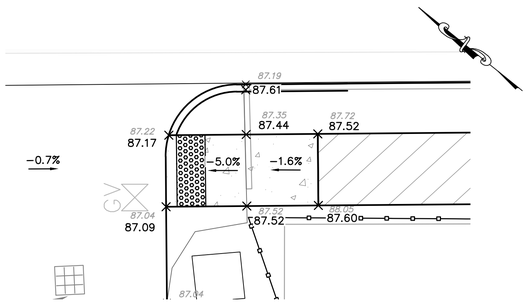


WCR #2100 – GRADING PLAN
(ACROSS FROM 541 NORTH AVE)
SCALE: 1" = 5'

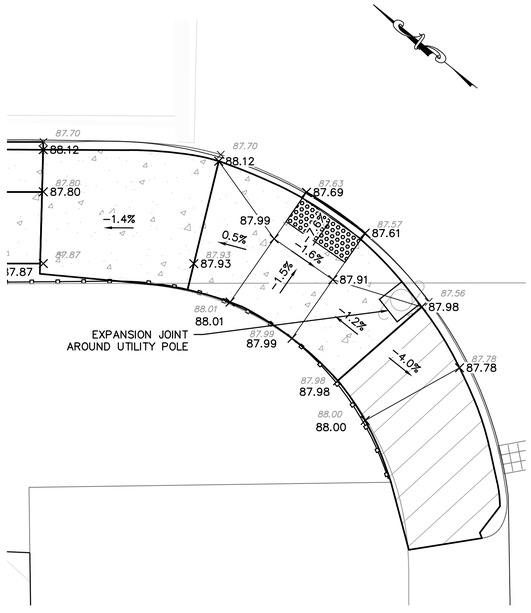


WCR #2098 – GRADING PLAN
(NEAR KNIGHTS OF COLUMBUS)
SCALE: 1" = 5'

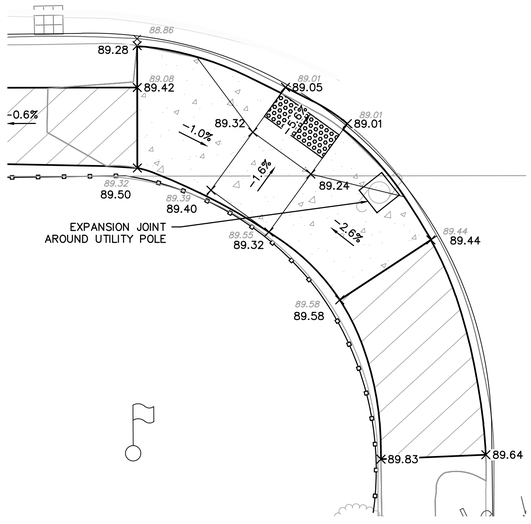
WCR #2097 – GRADING PLAN
(NEAR KNIGHTS OF COLUMBUS)
SCALE: 1" = 5'



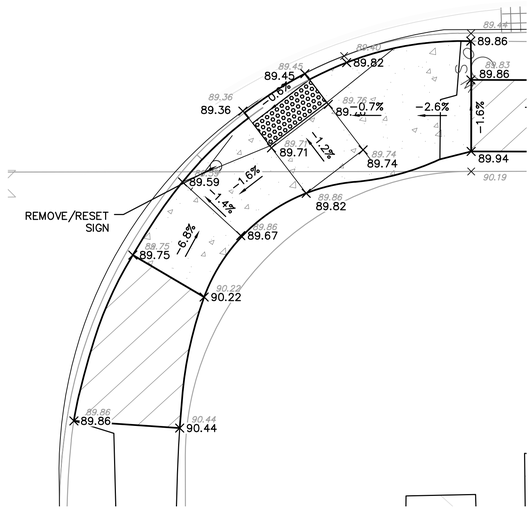
WCR #2096 – GRADING PLAN
(NEAR KNIGHTS OF COLUMBUS)
SCALE: 1" = 5'



WCR #996 – GRADING PLAN
(NEAR WOLCOTT STREET)
SCALE: 1" = 5'



WCR #997 – GRADING PLAN
(NEAR WILLOW STREET)
SCALE: 1" = 5'



WCR #998 – GRADING PLAN
(NEAR WILLOW STREET)
SCALE: 1" = 5'

TOWN OF WAKEFIELD
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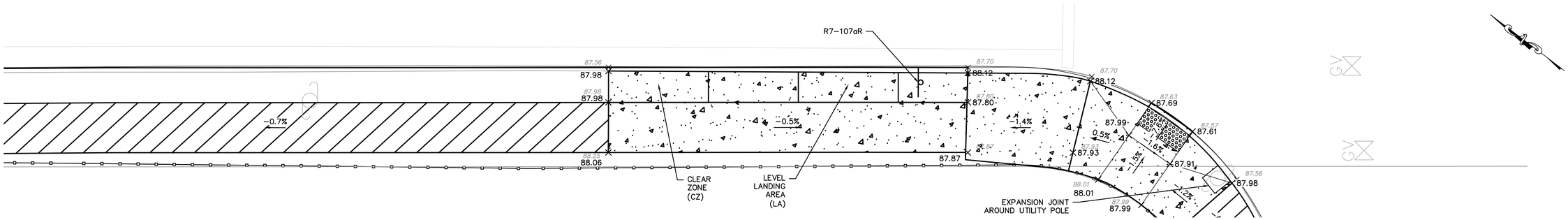
WHEELCHAIR RAMP DETAILS
NORTH AVE (ADD ALT 1)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

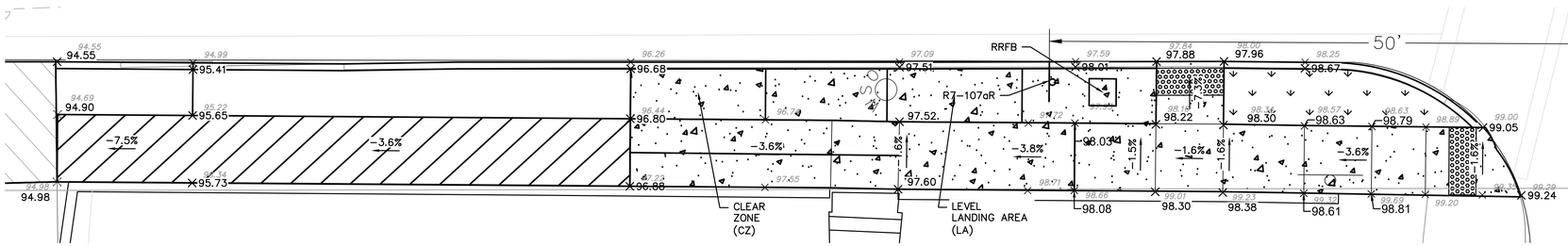
2023-02

SHEET
17 OF 24

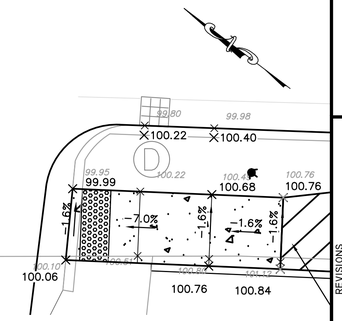
WCR-4



MBTA BUS STOP – GRADING PLAN
(NEAR WOLCOTT STREET)
SCALE: 1" = 5'



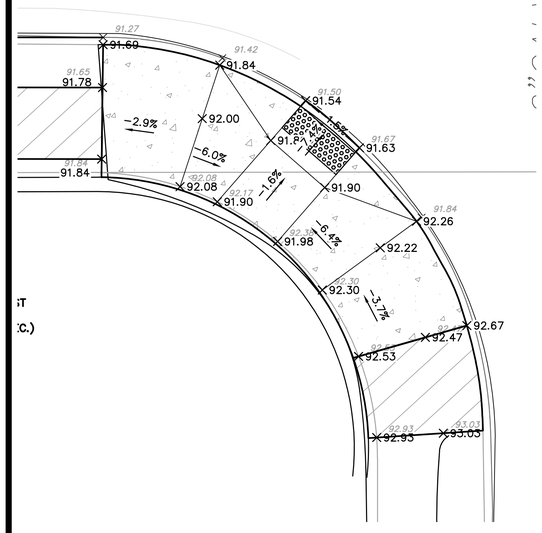
MBTA BUS STOP – GRADING PLAN
(NEAR WINN STREET)
SCALE: 1" = 5'



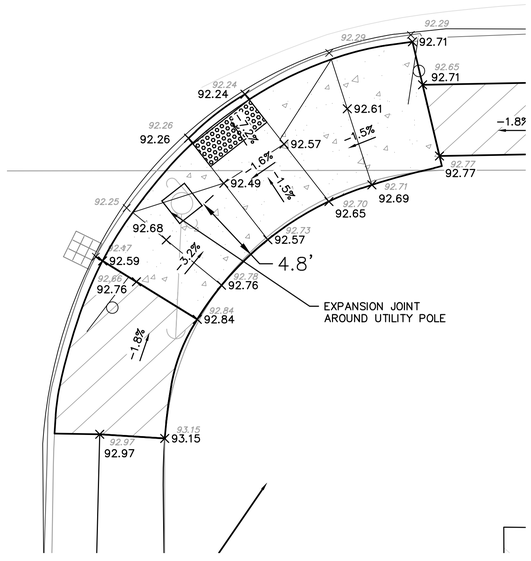
WCR #1004 – GRADING PLAN
(NEAR WINN STREET)
SCALE: 1" = 5'

WCR #1805 – GRADING PLAN
(NEAR WINN STREET)
SCALE: 1" = 5'

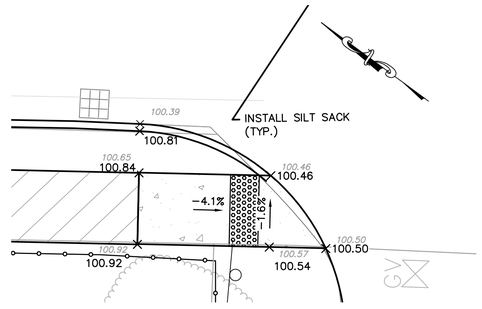
WCR #1804 – GRADING PLAN
(NEAR WINN STREET)
SCALE: 1" = 5'



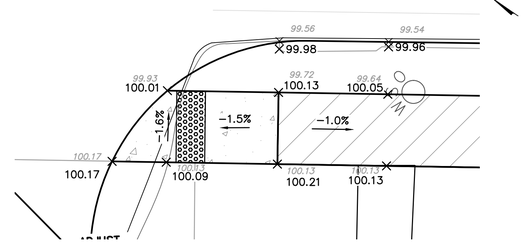
WCR #1002 – GRADING PLAN
(NEAR CUTTER STREET)
SCALE: 1" = 5'



WCR #1001 – GRADING PLAN
(NEAR CUTTER STREET)
SCALE: 1" = 5'



WCR #1825 – GRADING PLAN
(NEAR MONROE STREET)
SCALE: 1" = 5'



WCR #1826 – GRADING PLAN
(NEAR MONROE STREET)
SCALE: 1" = 5'

TOWN OF WAKEFIELD
Public Works • Engineering Division • 1 Lafayette Street Wakefield, MA 01880

REVISIONS

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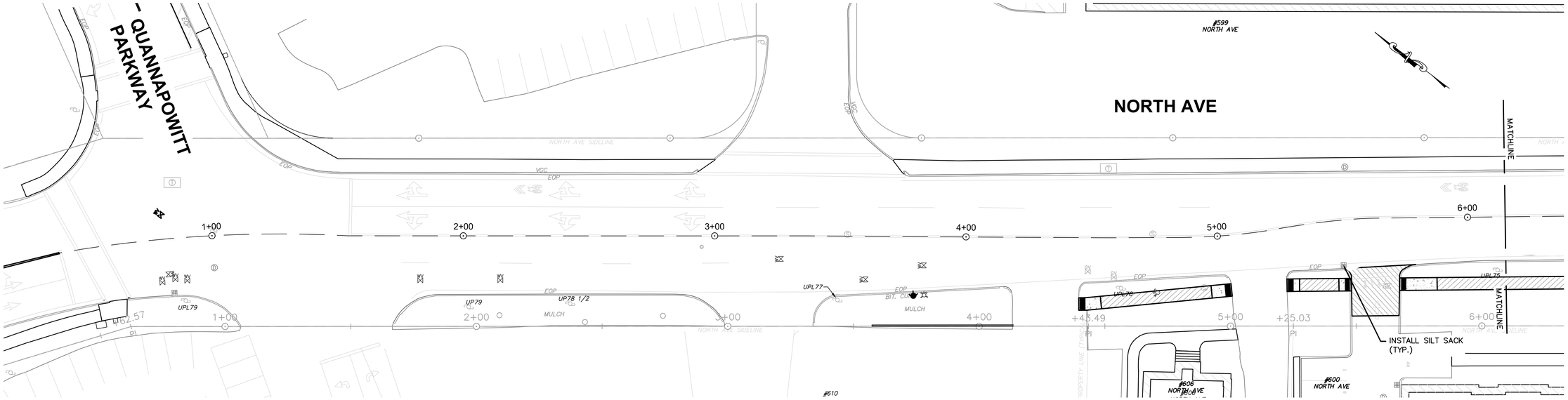
DRAWN TWW
DRAFTED TWW
CHECKED WJR
SCALE AS SHOWN

WHEELCHAIR RAMP DETAILS
NORTH AVE (ADD ALT 1)
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

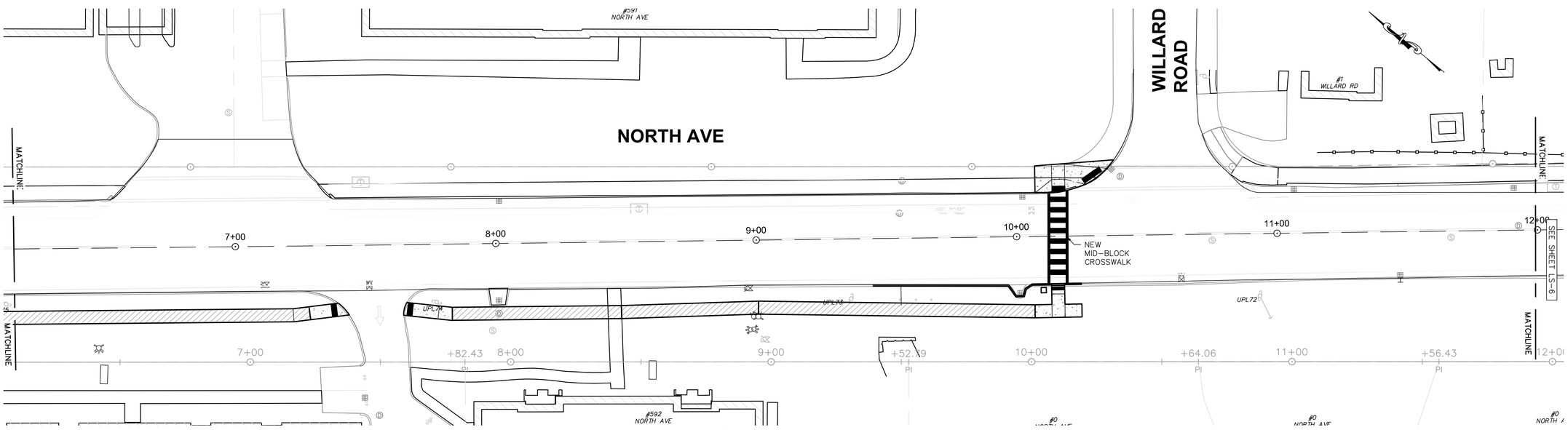
SHEET
18 OF 24

WCR-5



STA 1+00–6+00

SCALE: 1" = 20'



STA 6+00–12+00

SCALE: 1" = 20'

REVISIONS

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DESIGNED WWA
DRAWN TWW
CHECKED WJR
SCALE AS SHOWN

LINE STRIPING

NORTH AVE (ADD ALT 1)

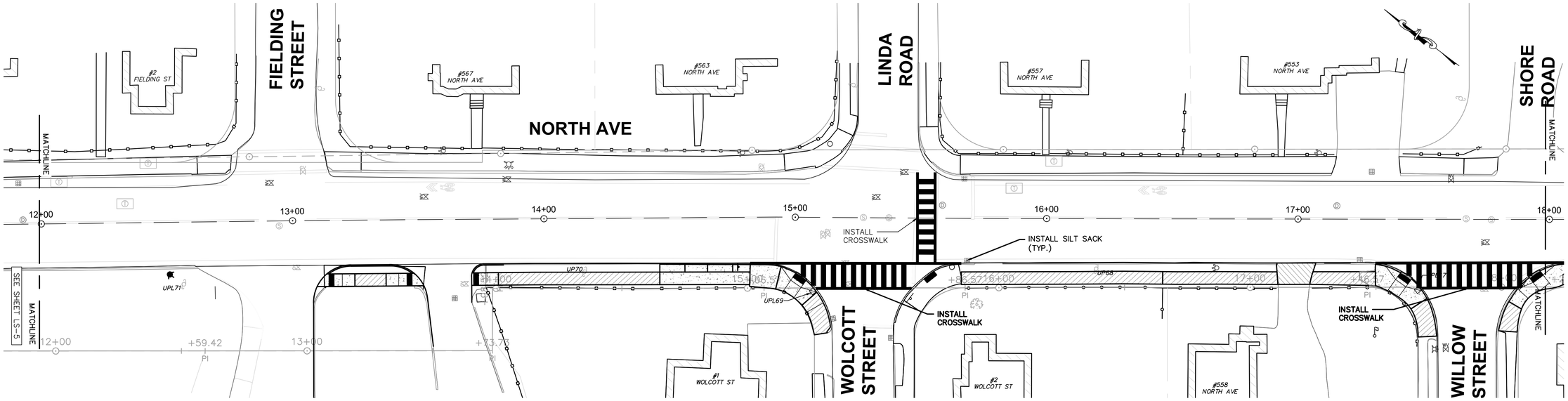
BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

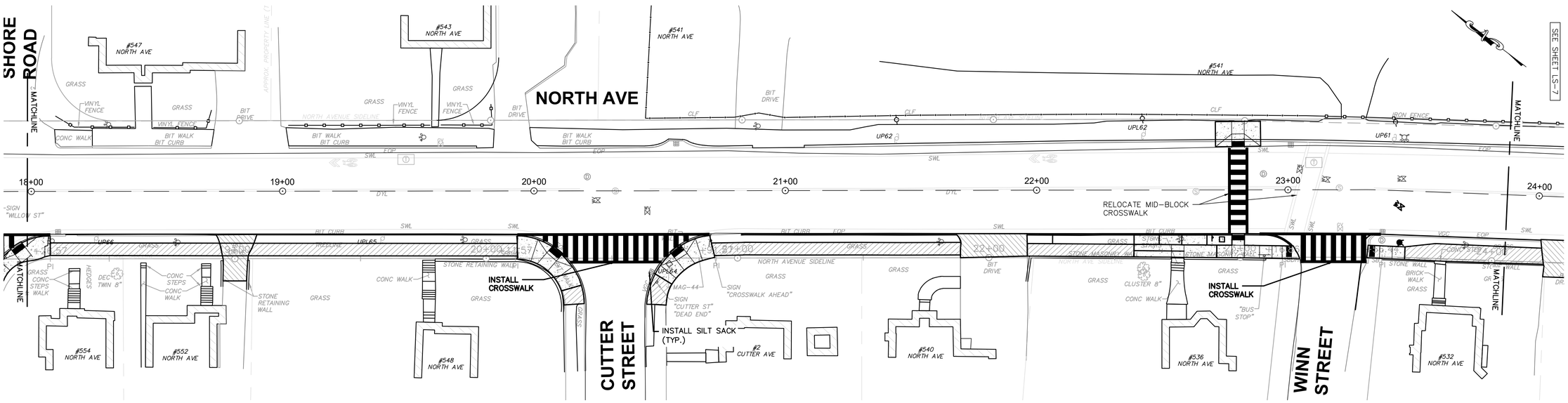
SHEET 19 OF 24

LS-5



STA 12+00–18+00

SCALE: 1" = 20'



STA 18+00–24+00

SCALE: 1" = 20'

TOWN OF WAKEFIELD

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REVISIONS

DRAWN TTWW
DESIGNED TTWW
CHECKED TWW
CHECKED WJR

SCALE AS SHOWN

LINE STRIPING

NORTH AVE (ADD ALT 1)

BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

2023-02

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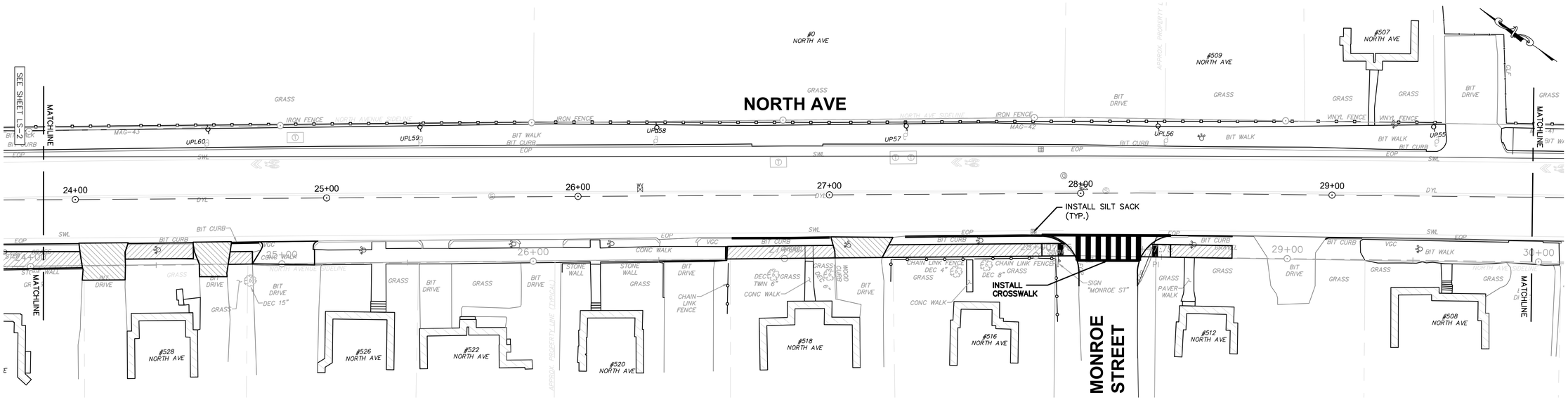
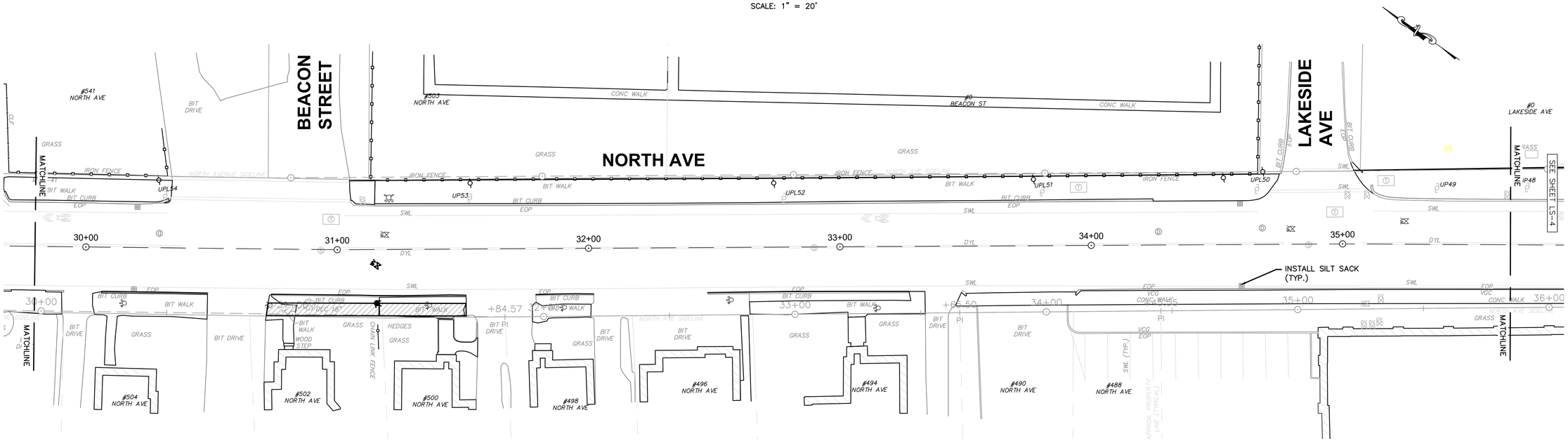


STA 24+00–30+00

SCALE: 1" = 20'



STA 30+00–35+50

SCALE: 1" = 20'

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REVISIONS

DESIGNED TWW
DRAWN TWW
REVIEWED TWW
APPROVED TWW

SCALE AS SHOWN

LINE STRIPING

NORTH AVE (ADD ALT 1)

BICYCLE & PEDESTRIAN IMPROVEMENTS

APRIL 2023

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SHEET 21 OF 24

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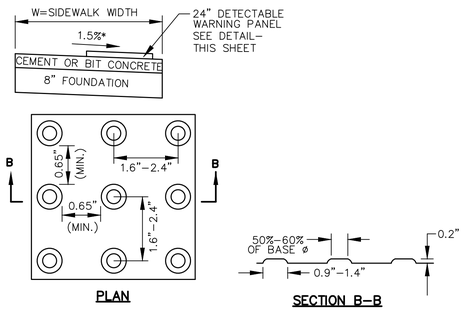
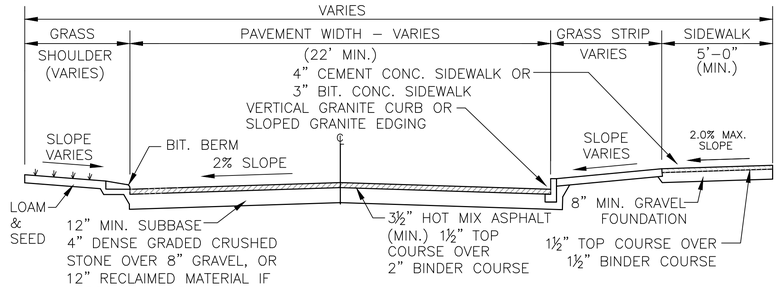


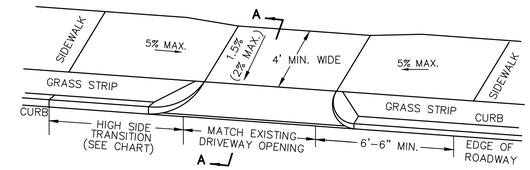
NOTE:
WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES.

DETECTABLE WARNING PANEL TO BE WEATHERED CAST IRON AS MANUFACTURED BY NEENAH FOUNDRY COMPANY OR APPROVED EQUAL.

DETECTABLE WARNING PANEL
NOT TO SCALE

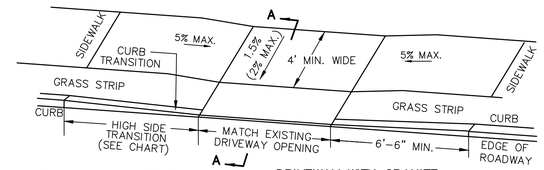


TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE



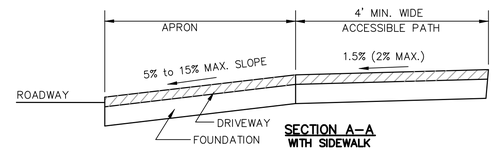
NOTE: GRAN. CURB CORNERS SHALL BE TYPE A UNLESS OTHERWISE NOTED

DRIVEWAY WITH GRANITE CURB CORNER

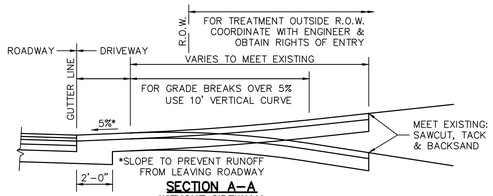


NOTE: MAINTAIN EXISTING DRAINAGE PATTERN ACROSS DRIVEWAY APRON

DRIVEWAY WITH GRANITE TRANSITION CURB

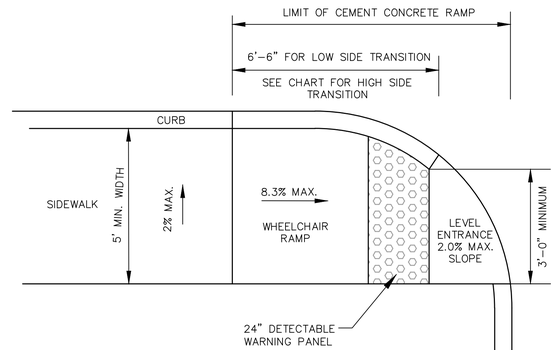


SECTION A–A WITH SIDEWALK

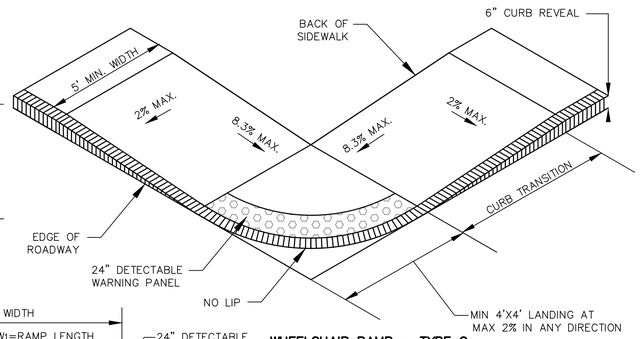


SECTION A–A WITHOUT SIDEWALK

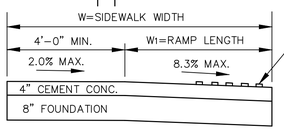
TYPICAL DRIVEWAY
NOT TO SCALE



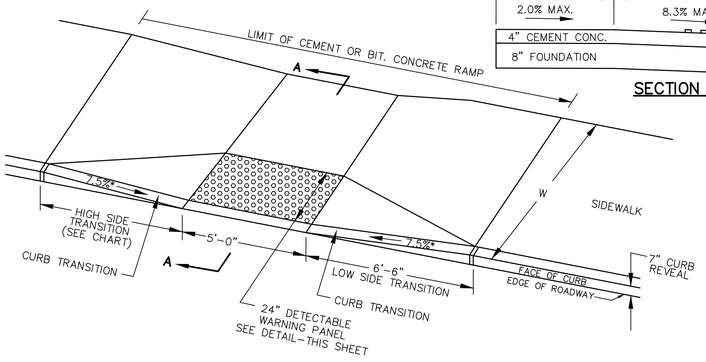
WHEELCHAIR RAMP – TYPE B



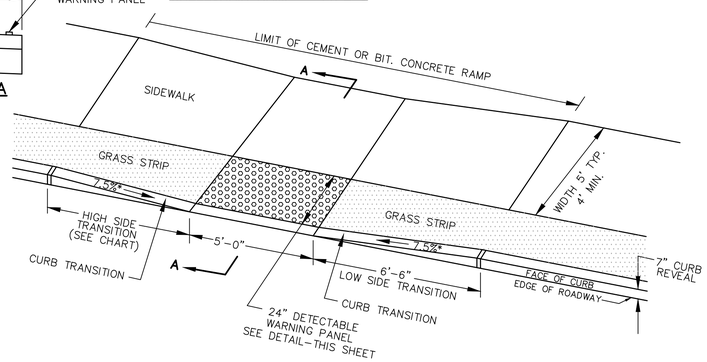
WHEELCHAIR RAMP – TYPE C



SECTION A–A

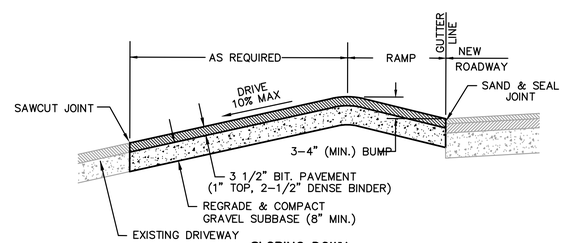


WHEELCHAIR RAMP – TYPE A



WHEELCHAIR RAMP – TYPE D

CONCRETE WHEELCHAIR RAMPS
NOT TO SCALE



SLOPING DOWN

DRIVEWAY BERM TREATMENT
NOT TO SCALE

TOWN OF WAKEFIELD
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DETAILS
NORTH AVE
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

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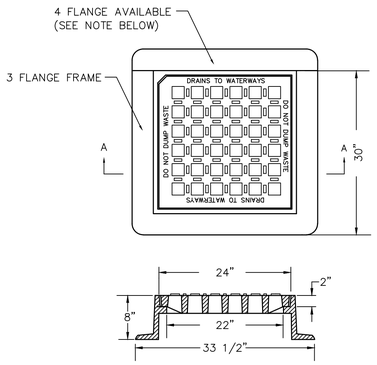
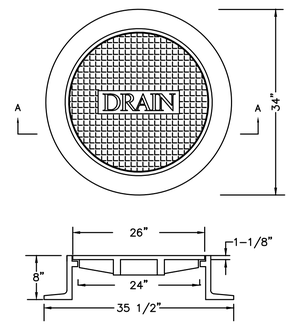


NOTE:
FRAME EJ CATALOG NO. 0MA552000029
GRATE EJ CATALOG NO. 0MA552000075
OR APPROVED EQUAL.

3 FLANGE FRAMES TO BE USED WHERE INLET IS ADJACENT TO CURB STONES, 4 FLANGE FRAME TO BE USED ELSEWHERE.

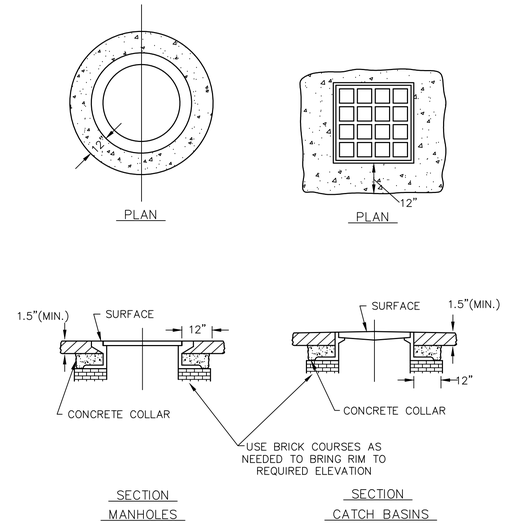
"DO NOT DUMP WASTE, DRAINS TO WATERWAYS" SHALL BE FORGED INTO THE GRATE.

CATCH BASIN FRAME & GRATE
NOT TO SCALE

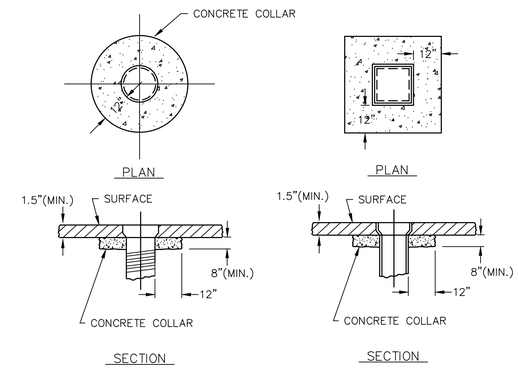


NOTE:
FRAME EJ CATALOG NO. 0MA211000038
COVER EJ CATALOG NO. 0MA211000041
OR APPROVED EQUAL.

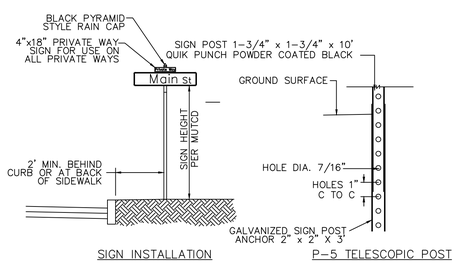
DRAIN MANHOLE FRAME & COVER
NOT TO SCALE



RAISING CASTINGS – DRAINAGE STRUCTURES
NOT TO SCALE



RAISING CASTINGS – WATER SERVICE BOXES
NOT TO SCALE

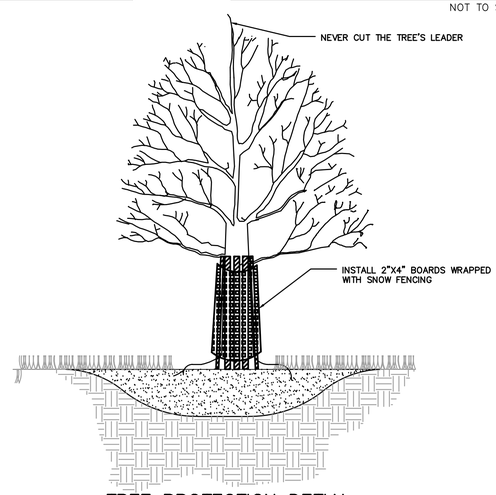


ABBREVIATIONS:

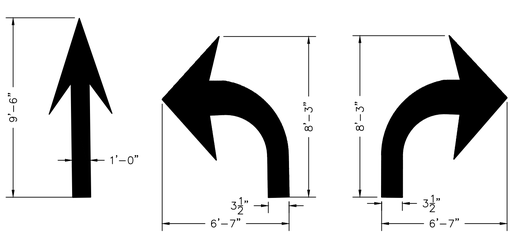
STREET =	ST
AVENUE =	AVE
PLACE =	PL
WAY =	WAY
BOULEVARD =	BLVD
PARKWAY =	PKWY
LANE =	LN
COURT =	CT
DRIVE =	DR
ROAD =	RD
CIRCLE =	CIR
RIDGE =	RDG

OTHER ABBREVIATIONS USE MUTCD TABLE 1A–1

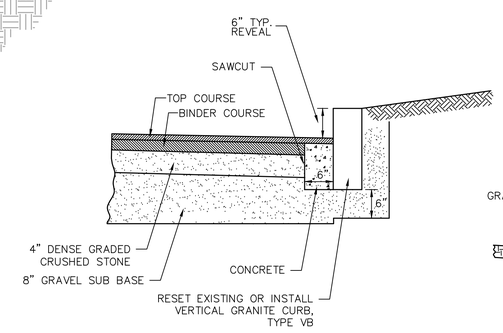
SIGN INSTALLATION
NOT TO SCALE



TREE PROTECTION DETIAL
NOT TO SCALE



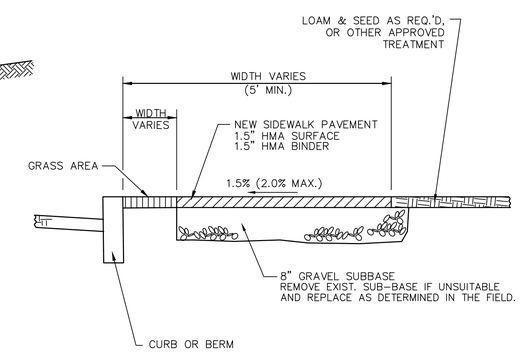
PAVEMENT MARKING (ARROWS)
NOT TO SCALE



NOTE:

1. RECLAIMED ASPHALT PAVEMENT MATERIAL MAY BE SUBSTITUTED FOR DENSE GRADED CRUSHED STONE AND GRAVEL SUB–BASE IF APPROVED BY TOWN ENGINEER.

VERTICAL GRANITE CURB
NOT TO SCALE



HOT MIX ASPHALT SIDEWALK WITH GRASS STRIP
NOT TO SCALE

TOWN OF WAKEFIELD
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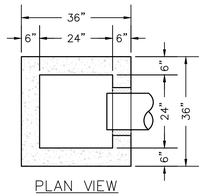
SCALE AS SHOWN

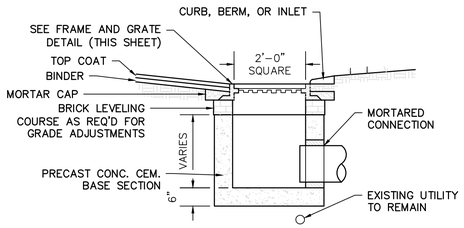
DETAILS
NORTH AVE
BICYCLE & PEDESTRIAN IMPROVEMENTS
APRIL 2023

2023-02

DTL-2



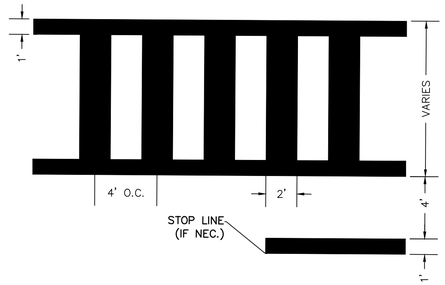
PLAN VIEW



SECTION VIEW

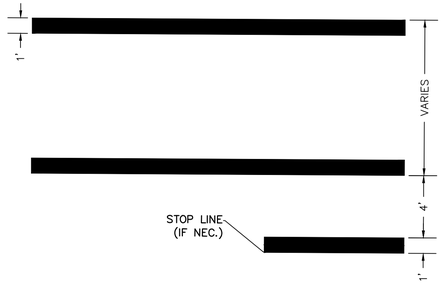
NOTES:
1. PRECAST REINFORCED CONCRETE GUTTER INLET TO BE CAPABLE OF SUPPORTING H-20 LOADING.
2. GUTTER INLET MUST OUTLET TO STRUCTURE WITH MIN. 4' SUMP

GUTTER INLET DETAIL
NOT TO SCALE



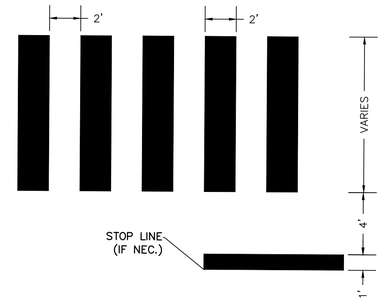
NOTES:
1. CROSSWALK WIDTH TO BE ONE FOOT (1-FT) WIDER THAN ITS RESPECTIVE RAMP OPENING UNLESS OTHERWISE SPECIFIED.
2. CROSSWALK PAVEMENT MARKING MATERIAL SHALL BE PER CONTRACT STANDARDS UNLESS OTHERWISE SPECIFIED
3. CROSSWALKS SHALL CONFROM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH ALL REVISIONS.

CROSSWALK (TYPE A)
NOT TO SCALE



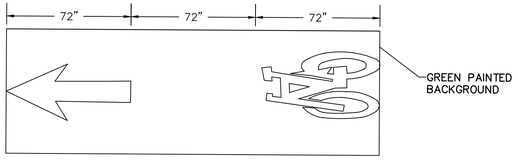
NOTES:
1. CROSSWALK WIDTH TO BE ONE FOOT (1-FT) WIDER THAN ITS RESPECTIVE RAMP OPENING UNLESS OTHERWISE SPECIFIED.
2. CROSSWALK PAVEMENT MARKING MATERIAL SHALL BE PER CONTRACT STANDARDS UNLESS OTHERWISE SPECIFIED
3. CROSSWALKS SHALL CONFROM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH ALL REVISIONS.

CROSSWALK (TYPE B)
NOT TO SCALE



NOTES:
1. CROSSWALK WIDTH TO BE ONE FOOT (1-FT) WIDER THAN ITS RESPECTIVE RAMP OPENING UNLESS OTHERWISE SPECIFIED.
2. CROSSWALK PAVEMENT MARKING MATERIAL SHALL BE PER CONTRACT STANDARDS UNLESS OTHERWISE SPECIFIED
3. CROSSWALKS SHALL CONFROM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH ALL REVISIONS.

CROSSWALK (TYPE C)
NOT TO SCALE

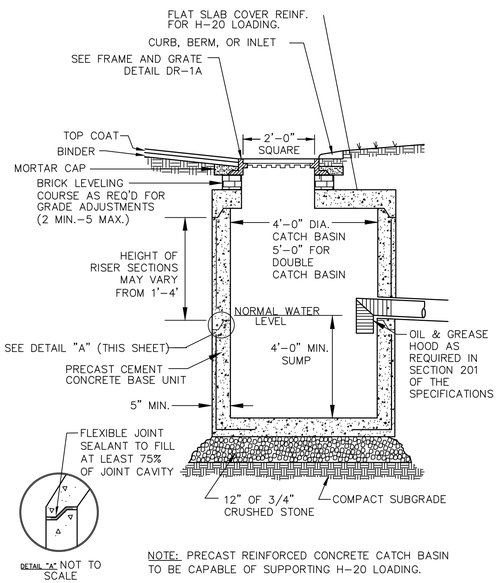


BIKE SYMBOL
NOT TO SCALE

TRAFFIC SIGN SUMMARY

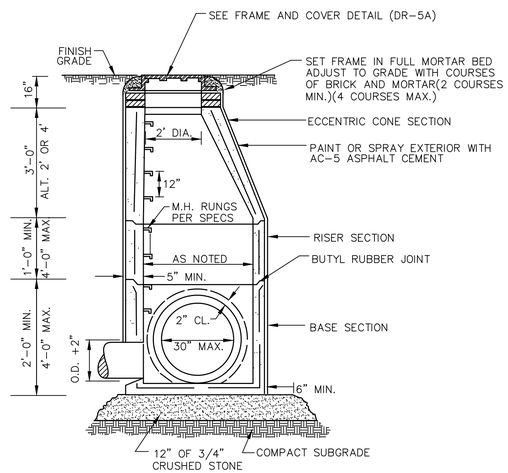
IDENTIFI-CATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	TEXT DIMEN-SIONS	COLOR	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT						
W11-2	30in	30in		12 NEW	SEE MUTCD		6.25	75
W16-7P	24in	12in		12 NEW	SEE MUTCD		2	24
R7-107aR	12in	30in		2 NEW	SEE MUTCD		2.5	5

1. POSTS ANCHOR SLEEVES AND ANCHOR HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.
2. ALL STREET NAME SIGNS SHALL CONSIST OF 2 SINGLE SIDED SIGNS MOUNTED BACK TO BACK 9" x VARIES FLAT ALUMINUM, 0.080 GAUGE BACKGROUND AND COPY: 6" WHITE LETTERS ON GREEN BACKGROUND WITH WHITE BORDER. HIGH INTENSITY PRISMATIC SHEETING. TYPEFACE AND SPACING TO MEET MUTCD STANDARDS



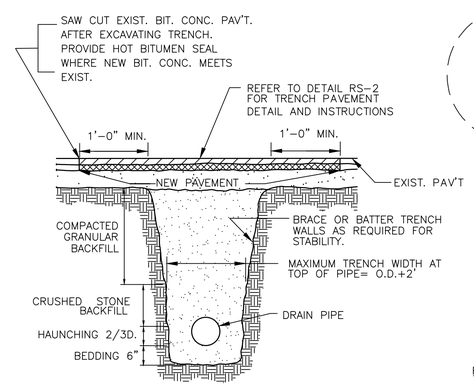
NOTE: PRECAST REINFORCED CONCRETE CATCH BASIN TO BE CAPABLE OF SUPPORTING H-20 LOADING.

STANDARD PRECAST CATCH BASIN
NOT TO SCALE



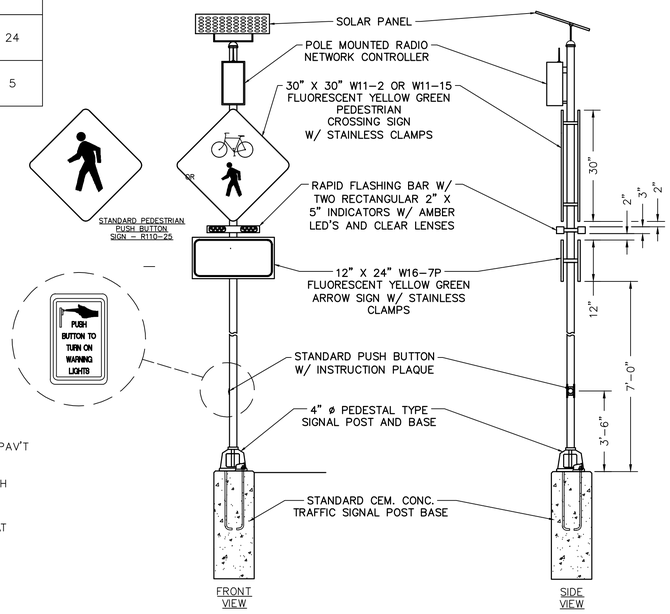
NOTE:
PRECAST REINFORCED CONCRETE MANHOLE TO BE CAPABLE OF SUPPORTING H-20 LOADING

STANDARD PRECAST DRAIN MANHOLE
NOT TO SCALE



NOTE:
BEDDING AND HAUNCHING SHALL BE 3/4" STONE

DRAIN PIPE TRENCH DETAIL
NOT TO SCALE



RRFB NOTES:

1. RECTANGULAR RAPID FLASHING BEACON (RRFB) SHALL BE SUPPLIED FROM A MANUFACTURER LISTED ON THE MASSDOT APPROVED EQUIPMENT LIST.
2. EACH LOCATION SHALL HAVE TWO (2) RRFB INSTALLED (ONE ON EACH SIDE OF THE CROSSWALK).
3. R10-25 SIGNS SHALL BE INSTALLED ABOVE ALL PEDESTRIAN PUSH BUTTONS.
4. OPERABLE CONTROLS ON RRFB SHALL BE LOCATED PER ADA STANDARDS 305-309.

RECTANGULAR RAPID FLASHING BEACON (RRFB)
NOT TO SCALE

TOWN OF WAKEFIELD
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REVISIONS

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