

GENERAL SYMBOLS

EXISTING

PROPOSED

□ CB (OR GI, LB)

■ CB

CATCH BASIN (OR GUTTER INLET, OR LEACHING BASIN)

□ CB/CI (OR GIC)

■ CB/CI (OR GIC)

CATCH BASIN (OR GUTTER INLET) WITH CURB INLET (GUTTERMOUTH)

EDGE OF ROAD

○ EHH

● EHH

ELECTRIC HANDHOLE (NUMBER AS NOTED)

○ EMH

● EMH

ELECTRIC MANHOLE (NUMBER AS NOTED)

○ TMH

● TMH

TELEPHONE MANHOLE (NUMBER AS NOTED)

○ WMH

● WMH

WATER MANHOLE (NUMBER AS NOTED)

○ SMH

● SMH

SEWER MANHOLE (NUMBER AS NOTED)

○ DMH

● DMH

DRAINAGE MANHOLE (NUMBER AS NOTED)

○ GG

● GG

GAS GATE

○ WG

● WG

WATER GATE

○ CS

● CS

CURB STOP

Hyd

Hyd

HYDRANT

○ FA

● FA

FIRE ALARM BOX

○ PM

● PM

PARKING METER

LP

LP

STREET LIGHT POLE

○ UP

● UP

UTILITY POLE

○ Guy

● GUY

GUY POLE

12" RCP

D 21"-12"RCP

DRAIN PIPE (UNDER 24")

21"-24"RCP

D 21"-24"RCP

DRAIN PIPE (DOUBLE LINE 24" AND OVER)

8" VCP

S 82"-8"VCP

SEWER MAIN (UNDER 24")

E

E

ELECTRIC DUCT (UNDER 24")

4" HP

G 8"GAS

GAS MAIN (UNDER 24")

8" C.I.

W 12"DI

WATER MAIN (UNDER 24")

T

T

TELEPHONE DUCT (UNDER 24")

MB

■ MB

MAIL BOX

x

x

HIGHWAY GUARD (TYPE NOTED)

○

○

FENCE (SIZE AND TYPE NOTED)

MB

■ MHB

HIGHWAY/PROPERTY BOUND (TYPE NOTED)

MB

MB

CITY, TOWN, OR COUNTY LAYOUT

MB

MB

STATE HIGHWAY LAYOUT (S.H.L.O.)

MB

MB

EASEMENT LINE

MB

MB

PROPERTY LINE

MB

MB

BASE OR SURVEY LINE

MB

MB

CONSTRUCTION BASELINE

MB

MB

TREE (SIZE AND TYPE NOTED)

MB

MB

SLOPE LIMIT

MB

MB

TRAVERSE TIE

MB

MB

WOOD RAIL FENCE

MB

MB

EROSION CONTROL BARRIER

MB

MB

RIPRAP

CONCORD RIVER GREENWAY PRIMARY BASELINE

(STATION 2+00 TO 14+00 UNDER SEPARATE CONTRACT)

| STATION | LENGTH | COURSE | ELEVATION |
|---------------|--------|----------------------|-------------|
| BEGIN 2+00.00 | 37.22 | COURSE: N 26-54-48 W | 710316.3275 |
| PC 2+37.22 | 200.00 | 3055345.3508 | 710299.4786 |
| PT 2+66.58 | 29.35 | 3055378.5429 | 710284.3222 |
| PC 5+46.91 | 280.34 | COURSE: N 35-19-21 W | 710122.2377 |
| PT 6+08.94 | 62.03 | 3055403.6502 | 710079.1599 |
| PC 6+49.07 | 80.00 | COURSE: N 38-43-09 W | 709974.2625 |
| PT 6+87.89 | 38.82 | 3055676.6671 | 709945.7969 |
| PC 7+83.50 | 154.89 | COURSE: N 22-41-54 W | 709934.6621 |
| PT 8+39.42 | 40.12 | 3055707.6405 | 709927.3885 |
| PC 8+68.28 | 95.61 | COURSE: N 38-43-09 W | 709724.4382 |
| PT 8+79.11 | 38.82 | 3055740.6418 | 709686.0223 |
| PC 11+04.82 | 200.00 | COURSE: N 39-35-30 W | 709645.7415 |
| PT 11+82.24 | 28.86 | 3055889.7871 | 709636.1130 |
| AP 12+45.44 | 176.92 | COURSE: N 20-23-33 W | 709603.2701 |
| PC 12+73.07 | 27.63 | 3056028.2519 | 709553.4880 |
| PT 13+04.82 | 56.35 | COURSE: N 20-23-33 W | 709465.5243 |
| PC 13+29.43 | 64.60 | 3056076.9574 | 709460.1633 |
| PT 13+94.02 | 176.92 | COURSE: N 35-39-12 W | 709428.6011 |
| PC 15+70.94 | 100.00 | 3056102.8582 | 709410.0037 |
| PT 15+80.88 | 54.34 | COURSE: N 50-24-41 W | 709409.6834 |
| PC 16+35.22 | 100.00 | 3056189.8096 | 709415.8654 |
| PT 16+96.96 | 135.28 | COURSE: N 29-48-55 W | 709429.5821 |
| PC 18+32.24 | 100.00 | 3056343.3084 | 709433.9479 |
| PT 18+67.82 | 39.63 | COURSE: N 35-30-33 W | 709446.3256 |
| PC 19+07.45 | 100.00 | 3056351.6713 | 709422.8057 |
| PT 19+23.71 | 65.24 | COURSE: N 00-08-08 W | 709329.1330 |
| PC 19+88.94 | 25.00 | 3056395.9049 | |
| PT 20+31.96 | 93.75 | COURSE: N 35-30-33 W | |
| END 21+25.71 | | COURSE: N 61-74 | |

GENERAL

| PROP | PROPOSED |
|----------|--------------------|
| ADJ | ADJUST |
| ABAN | ABANDON |
| REM | REMOVE |
| BOS | BOTTOM OF SLOPE |
| REMOD | REMODEL |
| RET | RETAIN |
| CIT | CHANGE IN TYPE |
| TOS | TOP OF SLOPE |
| MIN | MINIMUM |
| MAX | MAXIMUM |
| EXIST | EXISTING |
| R&R | REMOVE AND RESET |
| R&S | REMOVE AND STACK |
| R&D | REMOVE AND DISCARD |
| CONST | CONSTRUCT |
| BND | BOUND |
| RECONSTR | RECONSTRUCT(ION) |
| HMA | HOT MIX ASPHALT |
| HDWL | HEADWALL |
| CEM | CEMENT |
| CONC | CONCRETE |
| WCR | WHEEL CHAIR RAMP |
| GRAN | GRANITE |
| EOP | EDGE OF PAVEMENT |

UTILITIES

| | |
|-------|--------------------------------------|
| ACCMP | ASPHALT COATED CORRUGATED METAL PIPE |
| CAP | CORRUGATED ALUMINUM PIPE |
| CIP | CAST IRON PIPE |
| CIT | CHANGE IN TYPE |
| COND | CONDUIT |
| DIP | DUCTILE IRON PIPE |
| FES | FLARED END SECTION |
| F&C | FRAME AND COVER |
| F&G | FRAME AND GRATE |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE |
| HW | HEADWALL |
| HYD | HYDRANT |
| INV | INVERT |
| PVC | POLYVINYL CHLORIDE PIPE |
| PWW | PAVED WATER WAY |
| RCP | REINFORCED CONCRETE PIPE |
| TSV&B | TAPPING SLEEVE VALVE AND BOX |
| UP | UTILITY POLE |

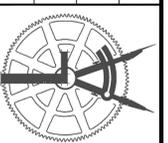
ALIGNMENT/GRADING

| | |
|------|----------------------------------|
| PC | POINT OF CURVE |
| PI | POINT OF INTERSECTION |
| PCC | POINT OF COMPOUND CURVE |
| PRC | POINT OF REVERSE CURVE |
| PT | POINT OF TANGENT |
| PVC | POINT OF VERTICAL CURVE |
| PVT | POINT OF VERTICAL TANGENT |
| PVRC | POINT OF VERTICAL REVERSE CURVE |
| PVCC | POINT OF VERTICAL COMPOUND CURVE |
| PVI | POINT OF VERTICAL INTERSECTION |

GENERAL NOTES:

- LOCATION OF ALL UTILITIES AND SUBSURFACE STRUCTURES ARE FROM SURVEY AND RECORDS OF THE MUNICIPALITY OR PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION, AND ARE INDICATED ON THESE DRAWINGS TO GIVE BIDDERS A GENERAL IDEA OF EXISTING CONDITIONS TO BE INVESTIGATED BY THE BIDDER. IT IS UNDERSTOOD AND AGREE THAT EACH BIDDER WILL NOT RELY UPON THESE DRAWINGS FOR SUCH INFORMATION, BUT THAT EACH BIDDER SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY CORPORATIONS AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
- HORIZONTAL CONTROLS ARE BASED ON THE NORTH AMERICAN DATUM (NAD 83) ENGLISH UNITS. VERTICAL CONTROLS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, ENGLISH UNITS (NAVD 88).
- PEDESTRIAN AND VEHICLE ACCESS TO ABUTTING PREMISES MUST BE MAINTAINED IN A SAFE CONDITION AT ALL TIMES.
- EXISTING PAVEMENTS AND /OR SIDEWALKS SHALL BE SAW CUT WHERE THEY MEET PROPOSED SURFACE TREATMENTS. SAW CUTS SHALL BE SMOOTH AND STRAIGHT. WHERE NEW H.M.A. MEETS EXISTING H.M.A. SURFACES, SAW CUT EDGES ARE TO BE SEALED WITH BITUMEN AND BACKSANDDED.
- AREAS OUTSIDE THE LIMITS OF WORK DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
- LIMITS OF WORK HAVE BEEN SET ON THE PLANS. HOWEVER, THESE MAY BE EXTENDED OR REDUCED AT THE DISCRETION OF THE ENGINEER TO MEET WITH FIELD CONDITIONS.
- AT ALL POSTS AND POLES, PROPOSED CEMENT CONCRETE SIDEWALK SHALL BE BOXED AND PROVIDED WITH EXPANSION JOINT FILLER. ALSO, EXPANSION JOINT FILLER SHALL BE USED AT ALL BACK OF SIDEWALK LOCATIONS WHERE LOCATIONS MEET EXISTING BUILDINGS, WALLS OR OTHER STRUCTURES AND AS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS, AND ELEVATIONS BEFORE PROCEEDING WITH NEW WORK. THE CONTRACTOR SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES OR CONFLICTS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- ALL EXISTING SURFACES SUCH AS CEMENT CONCRETE, H.M.A. PAVEMENT, BRICK, ECT., SHALL BE COMPLETELY REMOVED FROM AREAS OF PROPOSED WORK INCLUDING PROPOSED PLANTING AREAS.
- THE CONTRACTOR SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
- IF REQUIRED BY THE CONTRACTOR, OVERHEAD LINES SHALL BE RELOCATED BY THE UTILITY COMPANY AT THE CONTRACTORS EXPENSE.
- ALL PROPOSED GRANITE CURB SHALL BE TYPE VA-4 OR EXISTING CURB, REMOVED AND RESET, UNLESS OTHERWISE NOTED.
- ALL CURB TIES WHICH ARE NOTED BY A STATION ARE FROM THE CONSTRUCTION BASELINE.
- LOCATIONS OF PROPOSED SIGNS, TREES, ECT. ARE APPROXIMATE ONLY; THE EXACT LOCATION SHALL BE DETERMINED BY THE ENGINEER.
- ALL CEMENT CONCRETE SUBBASE SURFACES SHALL BE TREATED WITH A BITUMEN TACK COAT PRIOR TO THE APPLICATION OF A H.M.A. MATERIAL.
- SURVEY COMPLIED FROM USGS TOPOGRAPHIC MAPPING, LOWELL GIS, AND ON-GROUND SURVEY PERFORMED BY GREATER LOWELL ENGINEERING ASSOCIATES

| REV | DESCRIPTION | DATE (MO/Y) |
|-----|-----------------|-------------|
| 2 | MINOR REVISIONS | 4/28/2014 |
| 1 | REV | 2/26/2014 |



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LOWELL, MASSACHUSETTS
 LOWELL - CONCORD RIVER GREENWAY
 PHASE 3A - CENTENNIAL APARTMENTS TO ROGERS ST.
 LEGEND AND GENERAL NOTES