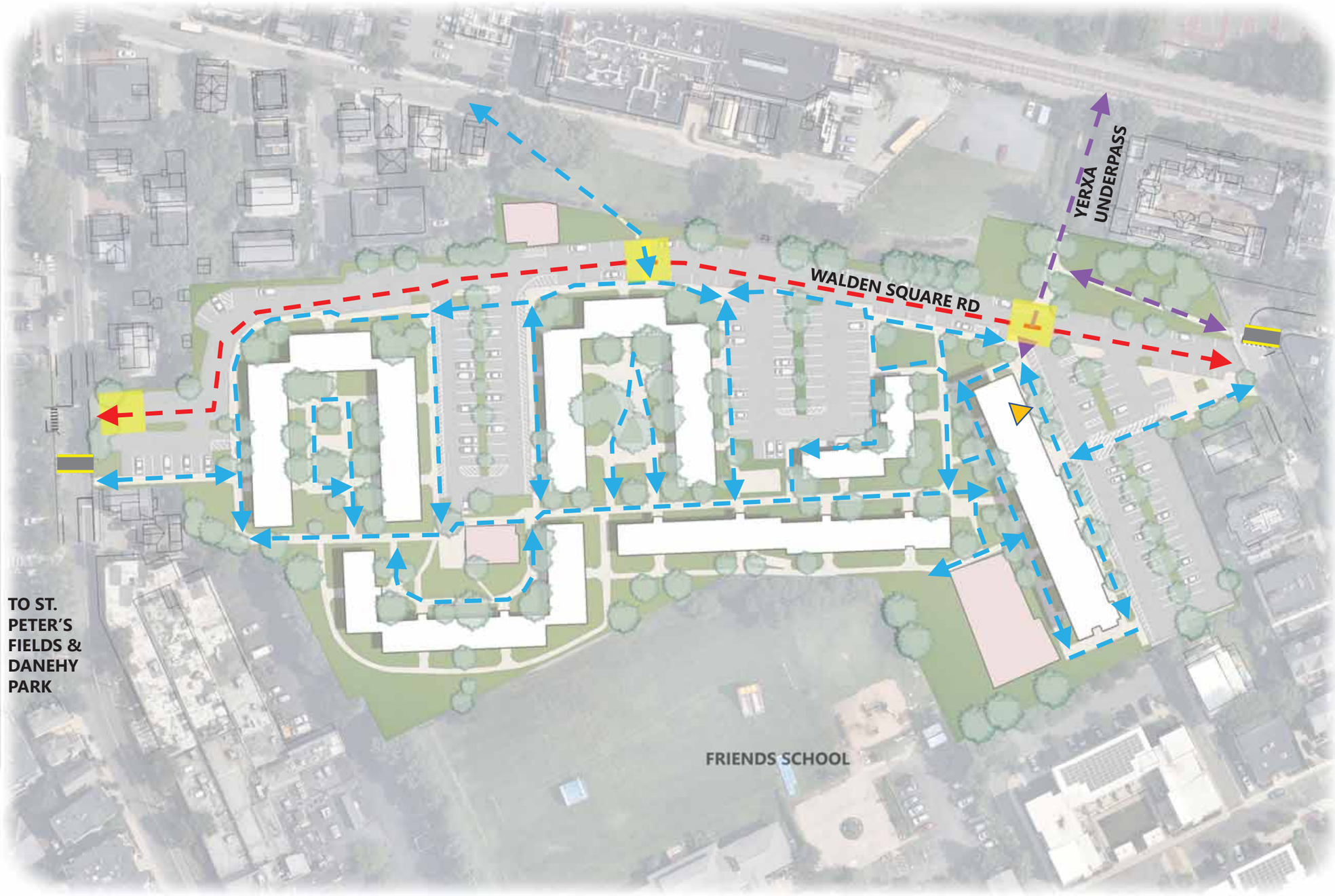
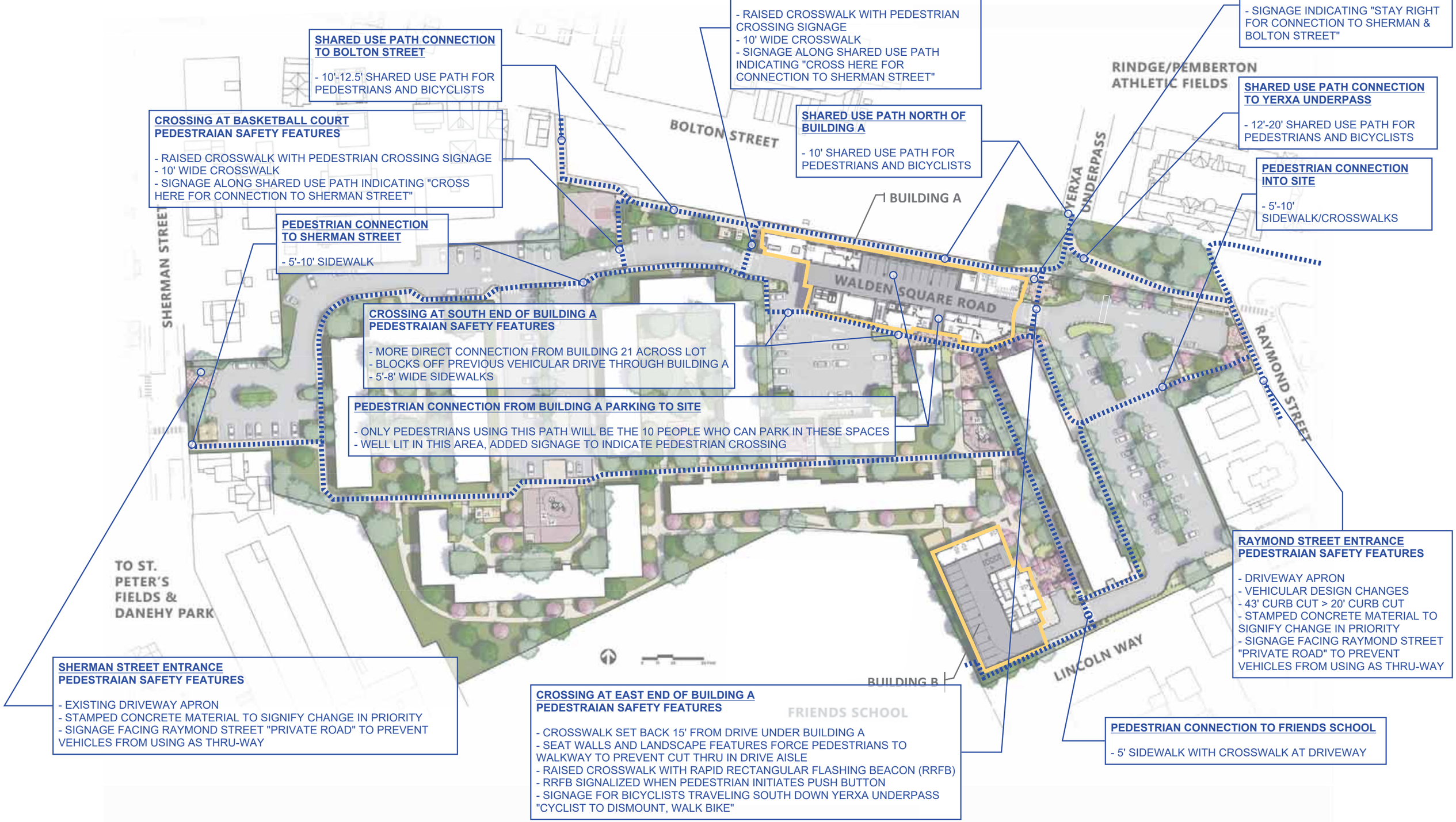
03 Existing Conditions Plan

Pedestrian and Bicycle Circulation



03 Illustrative Site Plan - Pedestrian Circulation



SHARED USE PATH CONNECTION TO BOLTON STREET

- 10'-12.5' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

CROSSING AT BASKETBALL COURT PEDESTRAIAN SAFETY FEATURES

- RAISED CROSSWALK WITH PEDESTRIAN CROSSING SIGNAGE
- 10' WIDE CROSSWALK
- SIGNAGE ALONG SHARED USE PATH INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

PEDESTRIAN CONNECTION TO SHERMAN STREET

- 5'-10' SIDEWALK

CROSSING AT WEST END OF BUILDING A PEDESTRAIAN SAFETY FEATURES

- RAISED CROSSWALK WITH PEDESTRIAN CROSSING SIGNAGE
- 10' WIDE CROSSWALK
- SIGNAGE ALONG SHARED USE PATH INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

SHARED USE PATH NORTH OF BUILDING A

- 10' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

CONNECTION TO SHERMAN STREET & BOLTON STREET

- SIGNAGE INDICATING "STAY RIGHT FOR CONNECTION TO SHERMAN & BOLTON STREET"

SHARED USE PATH CONNECTION TO YERXA UNDERPASS

- 12'-20' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

PEDESTRIAN CONNECTION INTO SITE

- 5'-10' SIDEWALK/CROSSWALKS

CROSSING AT SOUTH END OF BUILDING A PEDESTRAIAN SAFETY FEATURES

- MORE DIRECT CONNECTION FROM BUILDING 21 ACROSS LOT
- BLOCKS OFF PREVIOUS VEHICULAR DRIVE THROUGH BUILDING A
- 5'-8' WIDE SIDEWALKS

PEDESTRIAN CONNECTION FROM BUILDING A PARKING TO SITE

- ONLY PEDESTRIANS USING THIS PATH WILL BE THE 10 PEOPLE WHO CAN PARK IN THESE SPACES
- WELL LIT IN THIS AREA, ADDED SIGNAGE TO INDICATE PEDESTRIAN CROSSING

SHERMAN STREET ENTRANCE PEDESTRAIAN SAFETY FEATURES

- EXISTING DRIVEWAY APRON
- STAMPED CONCRETE MATERIAL TO SIGNIFY CHANGE IN PRIORITY
- SIGNAGE FACING RAYMOND STREET "PRIVATE ROAD" TO PREVENT VEHICLES FROM USING AS THRU-WAY

CROSSING AT EAST END OF BUILDING A PEDESTRAIAN SAFETY FEATURES

- CROSSWALK SET BACK 15' FROM DRIVE UNDER BUILDING A
- SEAT WALLS AND LANDSCAPE FEATURES FORCE PEDESTRIANS TO WALKWAY TO PREVENT CUT THRU IN DRIVE AISLE
- RAISED CROSSWALK WITH RAPID RECTANGULAR FLASHING BEACON (RRFB)
- RRFB SIGNALIZED WHEN PEDESTRIAN INITIATES PUSH BUTTON
- SIGNAGE FOR BICYCLISTS TRAVELING SOUTH DOWN YERXA UNDERPASS "CYCLIST TO DISMOUNT, WALK BIKE"

RAYMOND STREET ENTRANCE PEDESTRAIAN SAFETY FEATURES

- DRIVEWAY APRON
- VEHICULAR DESIGN CHANGES
- 43' CURB CUT > 20' CURB CUT
- STAMPED CONCRETE MATERIAL TO SIGNIFY CHANGE IN PRIORITY
- SIGNAGE FACING RAYMOND STREET "PRIVATE ROAD" TO PREVENT VEHICLES FROM USING AS THRU-WAY

PEDESTRIAN CONNECTION TO FRIENDS SCHOOL

- 5' SIDEWALK WITH CROSSWALK AT DRIVEWAY

03 Illustrative Site Plan - Bicycle Circulation

SHARED USE PATH CONNECTION TO BOLTON STREET

- 10'-12.5' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

SHARED USE PATH NORTH OF BUILDING A

- 10' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

CONNECTION TO SHERMAN STREET & BOLTON STREET

- SIGNAGE INDICATING "STAY RIGHT FOR CONNECTION TO SHERMAN & BOLTON STREET"

SHARED USE PATH CONNECTION TO YERXA UNDERPASS

- 12'-20' SHARED USE PATH FOR PEDESTRIANS AND BICYCLISTS

BICYCLIST CONNECTION TO SHERMAN STREET

- SHARROWS WITHIN DRIVE
- SPEED BUMPS AND RAISED CROSSINGS TO SLOW VEHICLES DOWN

CROSSING AT BASKETBALL COURT BICYCLIST SAFETY FEATURES

- PEDESTRIAN CROSSING SIGNAGE
- SIGNAGE INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

CROSSING AT WEST END OF BUILDING A BICYCLIST SAFETY FEATURES

- PEDESTRIAN CROSSING SIGNAGE TO SHARROWS IN DRIVE
- SIGNAGE INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

CROSSING AT EAST END OF BUILDING A BICYCLIST SAFETY FEATURES

- SIGNAGE FOR BICYCLISTS TRAVELING SOUTH DOWN YERXA UNDERPASS "CYCLIST TO DISMOUNT, WALK BIKE"

CONNECTION FROM RAYMOND STREET TO YERXA UNDERPASS & SITE

- EXISTING CROSSWALK

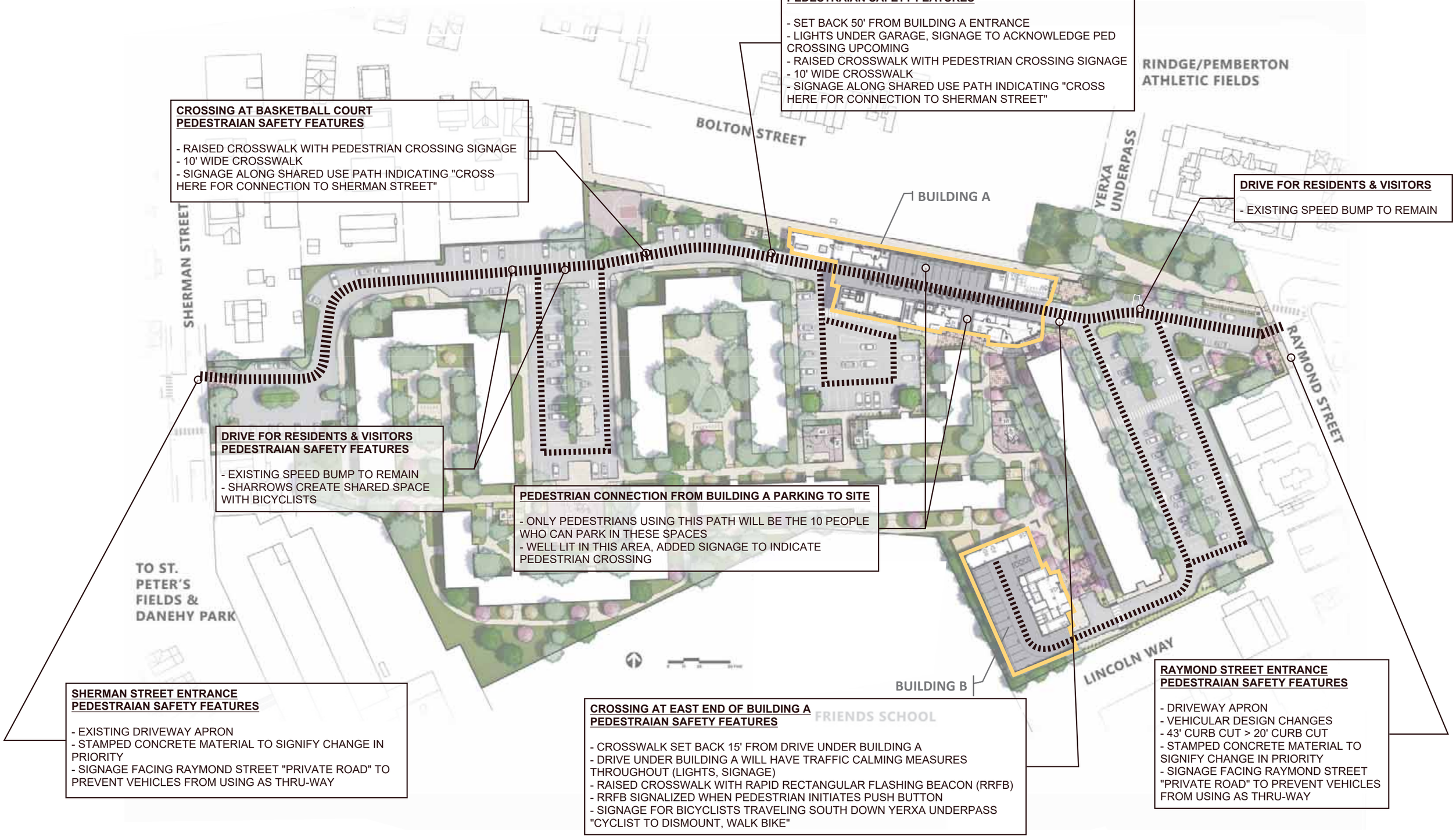
CONNECTION FROM SITE TO SHERMAN STREET & DANEHY PARK

- EXISTING CROSSWALK & PED SIGNAL

RAYMOND STREET ENTRANCE PEDESTRAIAN SAFETY FEATURES

- DRIVEWAY APRON
- VEHICULAR DESIGN CHANGES
- 43' CURB CUT > 20' CURB CUT
- STAMPED CONCRETE MATERIAL TO SIGNIFY CHANGE IN PRIORITY
- SIGNAGE FACING RAYMOND STREET "PRIVATE ROAD"

03 Illustrative Site Plan - Vehicular Circulation



CROSSING AT BASKETBALL COURT
PEDESTRAIAN SAFETY FEATURES

- RAISED CROSSWALK WITH PEDESTRIAN CROSSING SIGNAGE
- 10' WIDE CROSSWALK
- SIGNAGE ALONG SHARED USE PATH INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

CROSSING AT WEST END OF BUILDING A
PEDESTRAIAN SAFETY FEATURES

- SET BACK 50' FROM BUILDING A ENTRANCE
- LIGHTS UNDER GARAGE, SIGNAGE TO ACKNOWLEDGE PED CROSSING UPCOMING
- RAISED CROSSWALK WITH PEDESTRIAN CROSSING SIGNAGE
- 10' WIDE CROSSWALK
- SIGNAGE ALONG SHARED USE PATH INDICATING "CROSS HERE FOR CONNECTION TO SHERMAN STREET"

DRIVE FOR RESIDENTS & VISITORS

- EXISTING SPEED BUMP TO REMAIN

DRIVE FOR RESIDENTS & VISITORS
PEDESTRAIAN SAFETY FEATURES

- EXISTING SPEED BUMP TO REMAIN
- SHARROWS CREATE SHARED SPACE WITH BICYCLISTS

PEDESTRIAN CONNECTION FROM BUILDING A PARKING TO SITE

- ONLY PEDESTRIANS USING THIS PATH WILL BE THE 10 PEOPLE WHO CAN PARK IN THESE SPACES
- WELL LIT IN THIS AREA, ADDED SIGNAGE TO INDICATE PEDESTRIAN CROSSING

SHERMAN STREET ENTRANCE
PEDESTRAIAN SAFETY FEATURES

- EXISTING DRIVEWAY APRON
- STAMPED CONCRETE MATERIAL TO SIGNIFY CHANGE IN PRIORITY
- SIGNAGE FACING RAYMOND STREET "PRIVATE ROAD" TO PREVENT VEHICLES FROM USING AS THRU-WAY

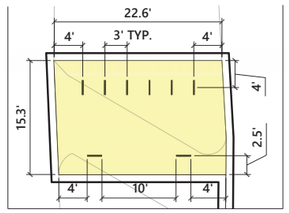
CROSSING AT EAST END OF BUILDING A
PEDESTRAIAN SAFETY FEATURES

- CROSSWALK SET BACK 15' FROM DRIVE UNDER BUILDING A
- DRIVE UNDER BUILDING A WILL HAVE TRAFFIC CALMING MEASURES THROUGHOUT (LIGHTS, SIGNAGE)
- RAISED CROSSWALK WITH RAPID RECTANGULAR FLASHING BEACON (RRFB)
- RRFB SIGNALIZED WHEN PEDESTRIAN INITIATES PUSH BUTTON
- SIGNAGE FOR BICYCLISTS TRAVELING SOUTH DOWN YERXA UNDERPASS "CYCLIST TO DISMOUNT, WALK BIKE"

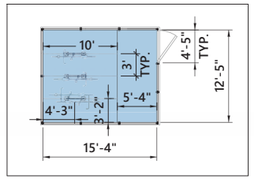
RAYMOND STREET ENTRANCE
PEDESTRAIAN SAFETY FEATURES

- DRIVEWAY APRON
- VEHICULAR DESIGN CHANGES
- 43' CURB CUT > 20' CURB CUT
- STAMPED CONCRETE MATERIAL TO SIGNIFY CHANGE IN PRIORITY
- SIGNAGE FACING RAYMOND STREET "PRIVATE ROAD" TO PREVENT VEHICLES FROM USING AS THRU-WAY

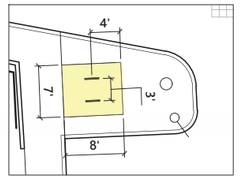
03 Site Plan - Bicycle Parking Enlargement



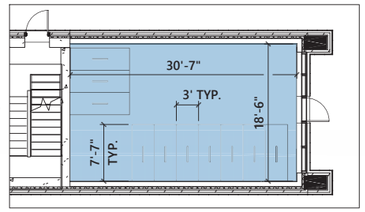
8 SHORT TERM BIKE RACKS (16 BIKES)



BIKE SHELTER 1 (6 BIKES)



2 SHORT TERM BIKE RACKS (4 BIKES)



BUILDING A BIKE ROOM (20 BIKES)

Blair Place
35' WIDE - PRIVATE WAY

Walden Square Road

Yerxa Underpass

PROPOSED RESIDENTIAL A

Walden Square Road

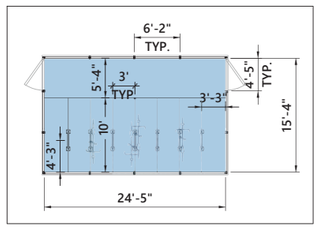
Raymond Street
40' WIDE - PUBLIC WAY

Sherman Street
40' WIDE - PUBLIC WAY

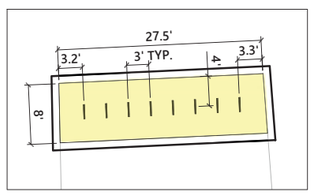
PROPOSED RESIDENTIAL B

Lincoln Way

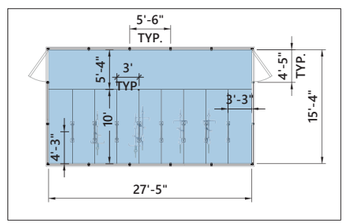
BIKE SHELTER 4 (14 BIKES)



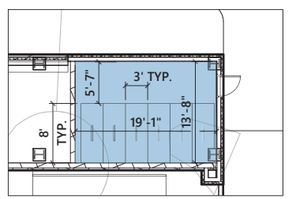
8 SHORT TERM BIKE RACKS (16 BIKES)



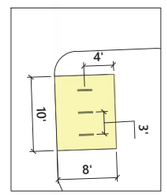
BIKE SHELTER 2 (16 BIKES)



BUILDING B BIKE ROOM (12 BIKES)



3 SHORT TERM BIKE RACKS (6 BIKES)



AHO REQUIREMENTS (Calculated for New Buildings Only):
1.00 space per unit for the first 20 units in a building.
1.05 spaces per unit for additional units.
Building A: 60 Units 20+42 = 62 required
Building B: 35 Units 20+16 = 36 required
Required Long Term Bicycle Spaces = 98 Spaces
70 Spaces* 74 Provided

**includes 28-space reduction per Section 11.207.6.4 of the AHO zoning bylaws*

Required Short Term Bicycle Spaces = 10 Spaces 10 Provided

Note: 32 Short Term spaces (16 bikeracks) provided
to replace existing bike racks in the two large courtyards .

Bike Parking Summary Chart

Description	Size	Capacity
BIKE SHELTER 1	16 x 13	6
BIKE SHELTER 2	16 x 28	16
BIKE SHELTER 3	16 x 13	6
BIKE SHELTER 4	16 x 25	14
BIKE ENCLOSURE IN BUILDING A	20 x 21	20
BIKE ENCLOSURE IN BUILDING B	15 x 21	12
EXTERIOR BIKE RACKS		10
TOTAL SPACES		84

0 20 40 80 Feet

03 Illustrative Site Plan - Bicycle Parking Details

NOTE

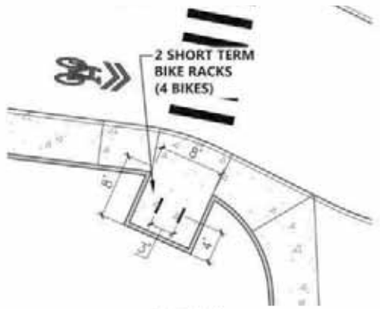
BIKE RACK TO BE ORION STYLE WITH SQUARE TUBING BY BELSON OUTDOOR PRODUCTS.

Bike Rack 06/21

N.T.S. Source: VHB

Bike Shelter Concept 8/20

N.T.S. Source: Kenworth

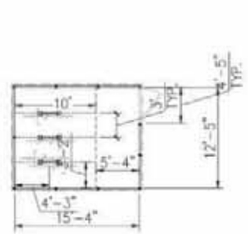


BR 'A'

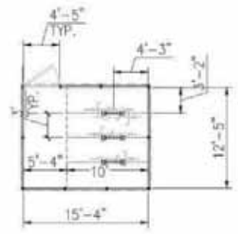
BR 'B'

Bike Rack Layouts 8/20

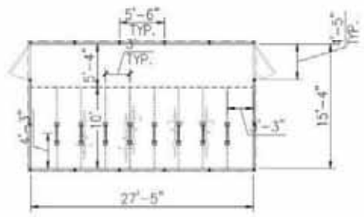
1" = 10'-0" Source: VHB



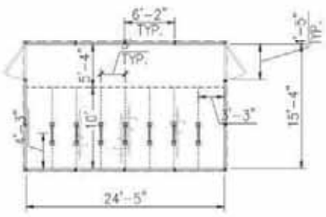
16x13 BS 1 **6 Bikes**



16x13 BS 3 **6 Bikes**



16x28 BS 2 **16 Bikes**



16x25 BS 4 **14 Bikes**

Note: Building dimensions are between interior walls.

Bike Shelter Layouts 8/20

1" = 10'-0" Source: VHB

C1.00 Legend & General Notes

Legend

Exist.	Prop.	
		PROPERTY LINE
		PROJECT LIMIT LINE
		RIGHT-OF-WAY/PROPERTY LINE
		EASEMENT
		BUILDING SETBACK
		PARKING SETBACK
10+00	10+00	BASELINE
		CONSTRUCTION LAYOUT
		ZONING LINE
		TOWN LINE
		LIMIT OF DISTURBANCE
		WETLAND LINE WITH FLAG
		FLOODPLAIN
BLSF		BORDERING LAND SUBJECT TO FLOODING
BZ		WETLAND BUFFER ZONE
NDZ		NO DISTURB ZONE
200'RA		200' RIVERFRONT AREA
		GRAVEL ROAD
EOP	EOP	EDGE OF PAVEMENT
BB	BB	BITUMINOUS BERM
BC	BC	BITUMINOUS CURB
CC	CC	CONCRETE CURB
CG	CG	CURB AND GUTTER
ECC	ECC	EXTRUDED CONCRETE CURB
MCC	MCC	MONOLITHIC CONCRETE CURB
PCC	PCC	PRECAST CONC. CURB
SGE	SGE	SLOPED GRAN. EDGING
VGC	VGC	VERT. GRAN. CURB
		LIMIT OF CURB TYPE
		SAWCUT
		BUILDING
	EN	BUILDING ENTRANCE
	LD	LOADING DOCK
		BOLLARD
D	D	DUMPSTER PAD
		SIGN
		DOUBLE SIGN
		STEEL GUARDRAIL
		WOOD GUARDRAIL
		PATH
		TREE LINE
		WIRE FENCE
		FENCE
		STOCKADE FENCE
		STONE WALL
		RETAINING WALL
		STREAM / POND / WATER COURSE
		DETENTION BASIN
		HAY BALES
		SILT FENCE
		SILT SOCK / STRAW WATTLE
4	4	MINOR CONTOUR
20	20	MAJOR CONTOUR
10	10	PARKING COUNT
	C10	COMPACT PARKING STALLS
DYL	DYL	DOUBLE YELLOW LINE
SL	SL	STOP LINE
		CROSSWALK
		ACCESSIBLE CURB RAMP
		ACCESSIBLE PARKING
VAN	VAN	VAN-ACCESSIBLE PARKING

Exist.	Prop.	
		CONCRETE
		HEAVY DUTY PAVEMENT
		BUILDINGS
		RIPRAP
		CONSTRUCTION EXIT
27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
132.75 ×	132.75 ×	SPOT ELEVATION
45.0 TW× 38.5 BW	45.0 TW× 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		BORING LOCATION
		TEST PIT LOCATION
MW	MW	MONITORING WELL
UD	UD	UNDERDRAIN
12"D	12"D	DRAIN
6"RD	6"RD	ROOF DRAIN
12"S	12"S	SEWER
FM	FM	FORCE MAIN
OHW	OHW	OVERHEAD WIRE
6"W	6"W	WATER
4"FP	4"FP	FIRE PROTECTION
	2"DW	DOMESTIC WATER
3"G	G	GAS
E	E	ELECTRIC
STM	STM	STEAM
T	T	TELEPHONE
FA	FA	FIRE ALARM
CATV	CATV	CABLE TV
		CATCH BASIN CONCENTRIC
		CATCH BASIN ECCENTRIC
		DOUBLE CATCH BASIN CONCENTRIC
		DOUBLE CATCH BASIN ECCENTRIC
		GUTTER INLET
		DRAIN MANHOLE CONCENTRIC
		DRAIN MANHOLE ECCENTRIC
TD		TRENCH DRAIN
		PLUG OR CAP
CO	CO	CLEANOUT
		FLARED END SECTION
		HEADWALL
		SEWER MANHOLE CONCENTRIC
		SEWER MANHOLE ECCENTRIC
CS	CS	CURB STOP & BOX
WV	WV	WATER VALVE & BOX
TSV	TSV	TAPPING SLEEVE, VALVE & BOX
		SIAMESE CONNECTION
HYD	HYD	FIRE HYDRANT
WM	WM	WATER METER
PIV	PIV	POST INDICATOR VALVE
W	W	WATER WELL
GG	GG	GAS GATE
GM	GM	GAS METER
EMH	EMH	ELECTRIC MANHOLE
EM	EM	ELECTRIC METER
		LIGHT POLE
TMH	TMH	TELEPHONE MANHOLE
T	T	TRANSFORMER PAD
		UTILITY POLE
		GUY POLE
		GUY WIRE & ANCHOR
HH	HH	HAND HOLE
PB	PB	PULL BOX
		MATCHLINE

Abbreviations

General

ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL

Utility

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes

General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE [##] INCHES LOAM AND SEED.
5. WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
6. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
14. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
   A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
   B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
   C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
   A. WATER PIPES SHALL BE DUCTILE IRON (DI) THICKNESS CLASS 52
   B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 SEWER PIPE
   C. STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE)
   D. PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO BEGINNING WORK.
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PRECAST CONCRETE CURB (PCC) WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

1. THE PROJECT PRESENTED HEREIN IS THE REDEVELOPMENT OF AN EXISTING SITE. TO THE EXTENT REQUIRED TO BUILD THE PROJECT, CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUT NOT LIMITED TO BUILDINGS, FOUNDATIONS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, UTILITIES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. THE CONTRACTOR SHALL CONSULT THE ENGINEER WHERE UTILITIES OR STRUCTURES NOT SHOWN ON THIS PLAN ARE ENCOUNTERED PRIOR TO REMOVAL.
2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
4. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Existing Conditions Information

1. BASE PLAN: "EXISTING CONDITION PLAN OF LAND": PREPARED BY VHB, DATED FEBRUARY 25, 2021.
2. TOPOGRAPHY: ELEVATIONS ARE BASED ON CAMBRIDGE CITY BASE (CCB).
3. GEOTECHNICAL DATA INCLUDING DRAFT TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM MCPHAIL ASSOCIATES DATED APRIL 7, 2021.

Document Use

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

Sheet Index

C2.00 Overall Site Plan

Parking Summary Chart

Description	Size Required[B]	Provided	Spaces Existing	Provided
STANDARD SPACES	8.5 x 18	8.5 x 18		
HEAD-IN			60	93
PARALLEL			34	14
COMPACT SPACES (50% ALLOWED)	7.5 x 16	7.5 x 16		
HEAD-IN			75	70
PARALLEL			8	5
STANDARD ACCESSIBLE SPACES[A]	8.5 x 18	8.5 x 18	13	14
VAN ACCESSIBLE SPACES	8.5 x 18	8.5 x 18	0	2
TOTAL SPACES			190	198

A. ADA/STATE/LOCAL REQUIREMENTS
B. PER SECTION 11.207.6.1 OF THE AHO ZONING BYLAWS, THERE SHALL BE NO REQUIRED MINIMUM NUMBER OF OFF-STREET PARKING SPACES
C. PARKING RATIO CALCULATION:
EXISTING UNITS: 168 SPACES / 240 EXISTING UNITS = 0.7
(0.7 RATIO REQUIRED PER 1969 URBAN RENEWAL PLAN)

PROPOSED UNITS: 30 SPACES / 95 PROPOSED UNITS = 0.32

Zoning Summary Chart - Entire Site

Zoning District(S): Residence C-2
Overlay District(S): Affordable Housing Overlay

Zoning Regulation Requirements	Required (C-2)[A]	Required (AHO)[A]	Provided (Entire Site)
MINIMUM LOT AREA	600 SF Per D.U. (205,800 SF)	N/A	925 SF Per D.U. (319,049 SF)
FRONTAGE (RAYMOND)	20 Feet	N/A	70 Feet
FRONTAGE (SHERMAN)	20 Feet	N/A	91 Feet
FRONTAGE (BLAIR)	20 Feet	N/A	35 Feet
MINIMUM LOT WIDTH	50 Feet	N/A	275.8 Feet
MAXIMUM IMPERVIOUS	85 %	85 %	69 %
MINIMUM PRIVATE OPEN SPACE	15 %	15 %	20 %
INTERIOR PARKING LANDSCAPING PERCENTAGE	5.0 %	N/A	5.0 %

A. Zoning regulation requirements as specified in the 10/30/2020 Cambridge Zoning Ordinance and the 2020 Affordable Housing Overlay Ordinances

B. On-grade parking spaces may be located within five (5) feet of a side or rear property line without requiring a special permit, provided that screening is provided in the form of a fence or other dense year-round visual screen at the property line, unless such screening is waived by mutual written agreement of the owner of the lot and the owner of the abutting lot.

C. Existing and Proposed Parking within 5-feet of property boundary is screened by a combination of existing and proposed fencing.

D. Dimension provided is to proposed structure.

Zoning Summary Chart - Building A

Zoning District(S): Residence C-2
Overlay District(S): Affordable Housing Overlay

Zoning Regulation Requirements	Required (C-2)[A]	Required (AHO)[A]	Provided (Building A)
FRONT YARD SETBACK: RAYMOND STREET	33.5'	0 Feet	196.1 Feet[D]
FRONT YARD SETBACK: RAYMOND STREET	33.5'	0 Feet	606.3 Feet[D]
SIDE YARD SETBACK: BOLTON STREET PARTNERS	59.2'	0 Feet	9.0 Feet[D]
SIDE YARD SETBACK: FRIENDS SCHOOL	56.4'	0 Feet	189.4 Feet[D]
PARKING SETBACK	5 Feet	0 Feet[B]	1.3 Feet[C]
MAXIMUM BUILDING HEIGHT	85 Feet	150 Feet	85 Feet

A. Zoning regulation requirements as specified in the 10/30/2020 Cambridge Zoning Ordinance and the 2020 Affordable Housing Overlay Ordinances

B. On-grade parking spaces may be located within five (5) feet of a side or rear property line without requiring a special permit, provided that screening is provided in the form of a fence or other dense year-round visual screen at the property line, unless such screening is waived by mutual written agreement of the owner of the lot and the owner of the abutting lot.

C. Existing and Proposed Parking within 5-feet of property boundary is screened by a combination of existing and proposed fencing.

D. Dimension provided is to proposed structure.

Zoning Summary Chart - Building B

Zoning District(S): Residence C-2
Overlay District(S): Affordable Housing Overlay

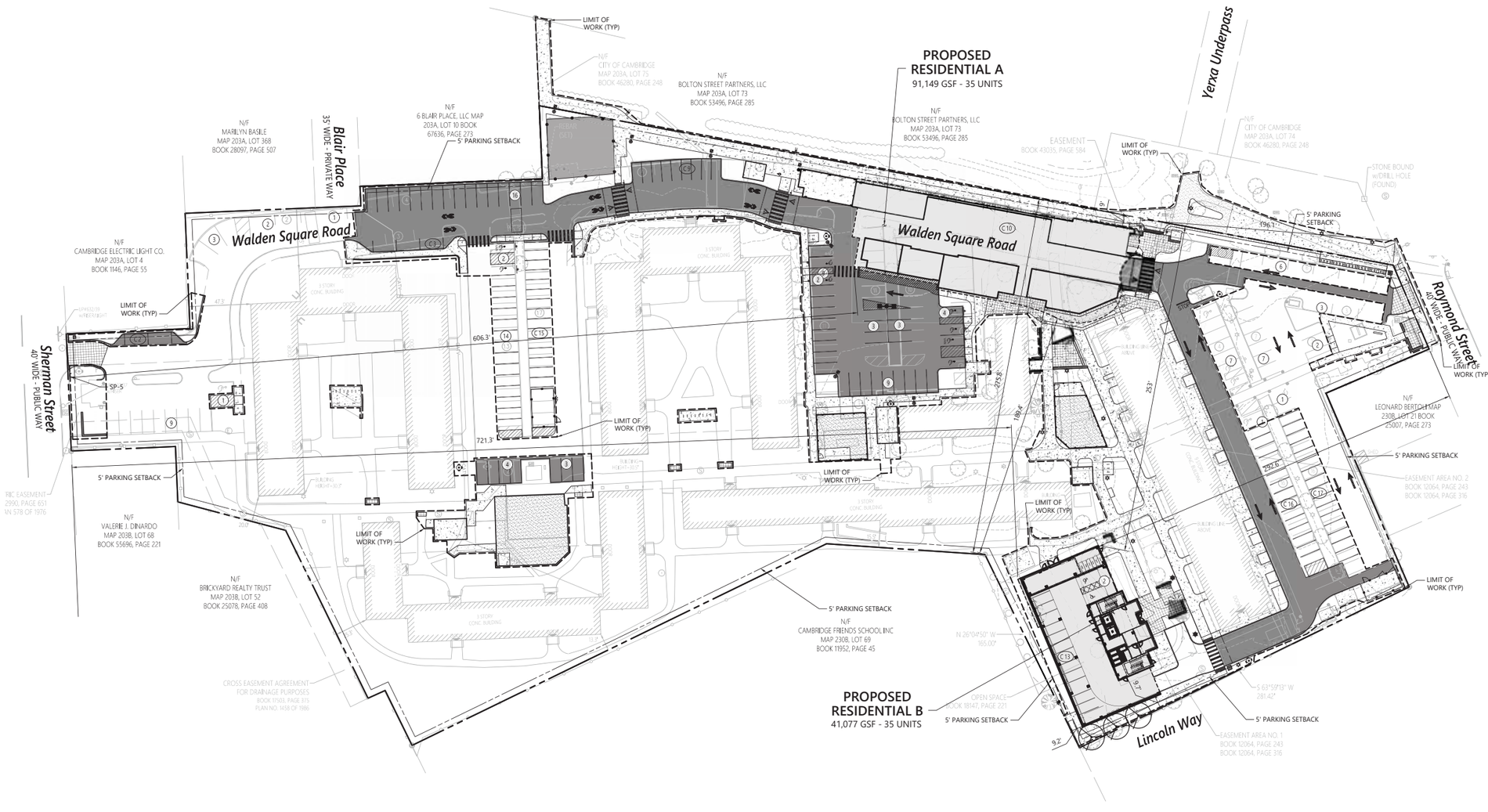
Zoning Regulation Requirements	Required (C-2)[A]	Required (AHO)[A]	Provided (Building B)
FRONT YARD SETBACK: RAYMOND STREET	39.0 Feet	0 Feet	292.6 Feet[D]
FRONT YARD SETBACK: SHERMAN STREET	39.0 Feet	0 Feet	721.3 Feet[D]
SIDE YARD SETBACK: LINCOLN WAY	27.6 Feet	0 Feet	9.7 Feet[D]
SIDE YARD SETBACK: FRIENDS SCHOOL	27.2 Feet	0 Feet	9.2 Feet[D]
PARKING SETBACK	5 Feet	0 Feet[B]	9.0 Feet
MAXIMUM BUILDING HEIGHT	85 Feet	150 Feet	70 Feet

A. Zoning regulation requirements as specified in the 10/30/2020 Cambridge Zoning Ordinance and the 2020 Affordable Housing Overlay Ordinances

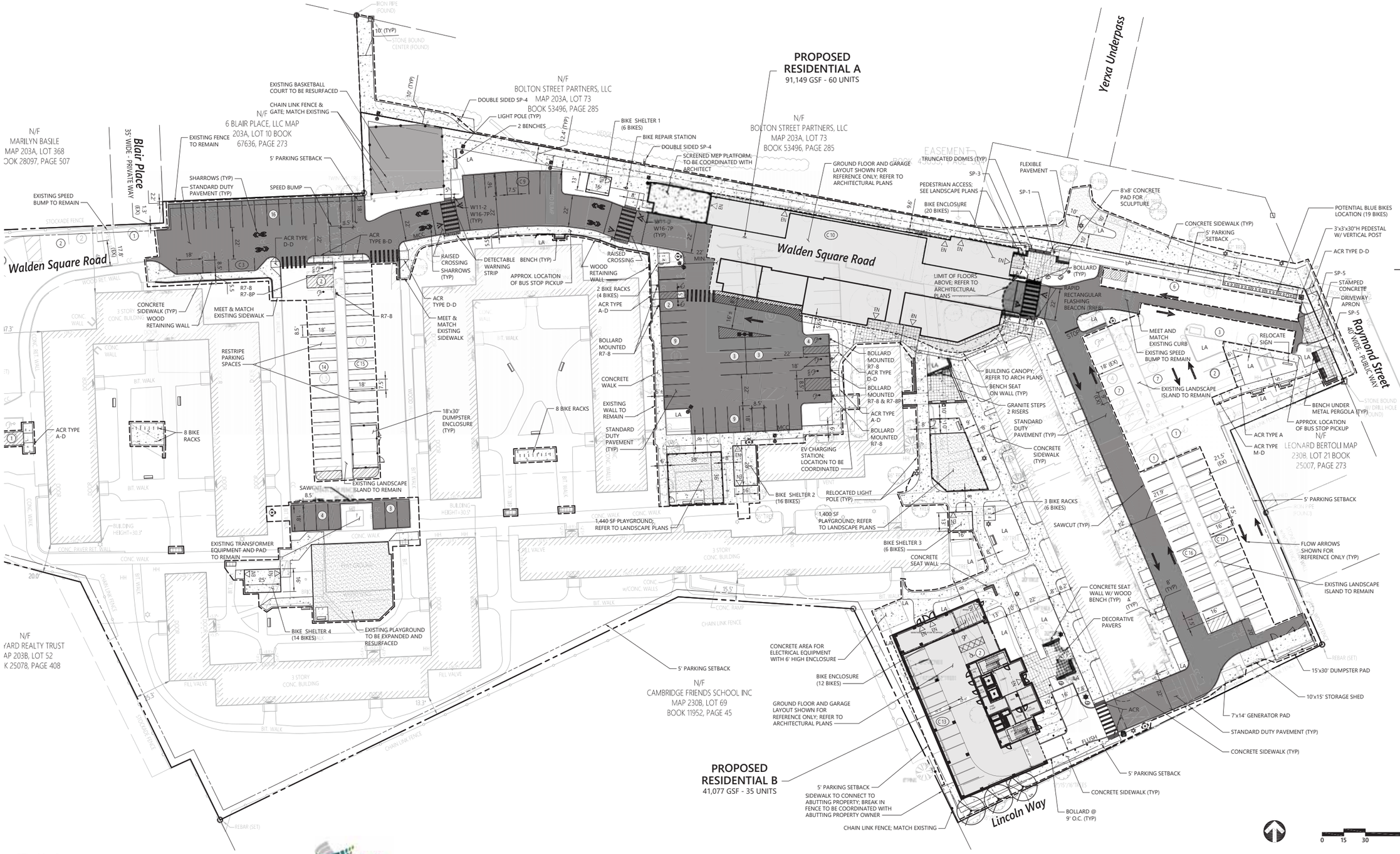
B. On-grade parking spaces may be located within five (5) feet of a side or rear property line without requiring a special permit, provided that screening is provided in the form of a fence or other dense year-round visual screen at the property line, unless such screening is waived by mutual written agreement of the owner of the lot and the owner of the abutting lot.

C. Existing and Proposed Parking within 5-feet of property boundary is screened by a combination of existing and proposed fencing.

D. Dimension provided is to proposed structure.



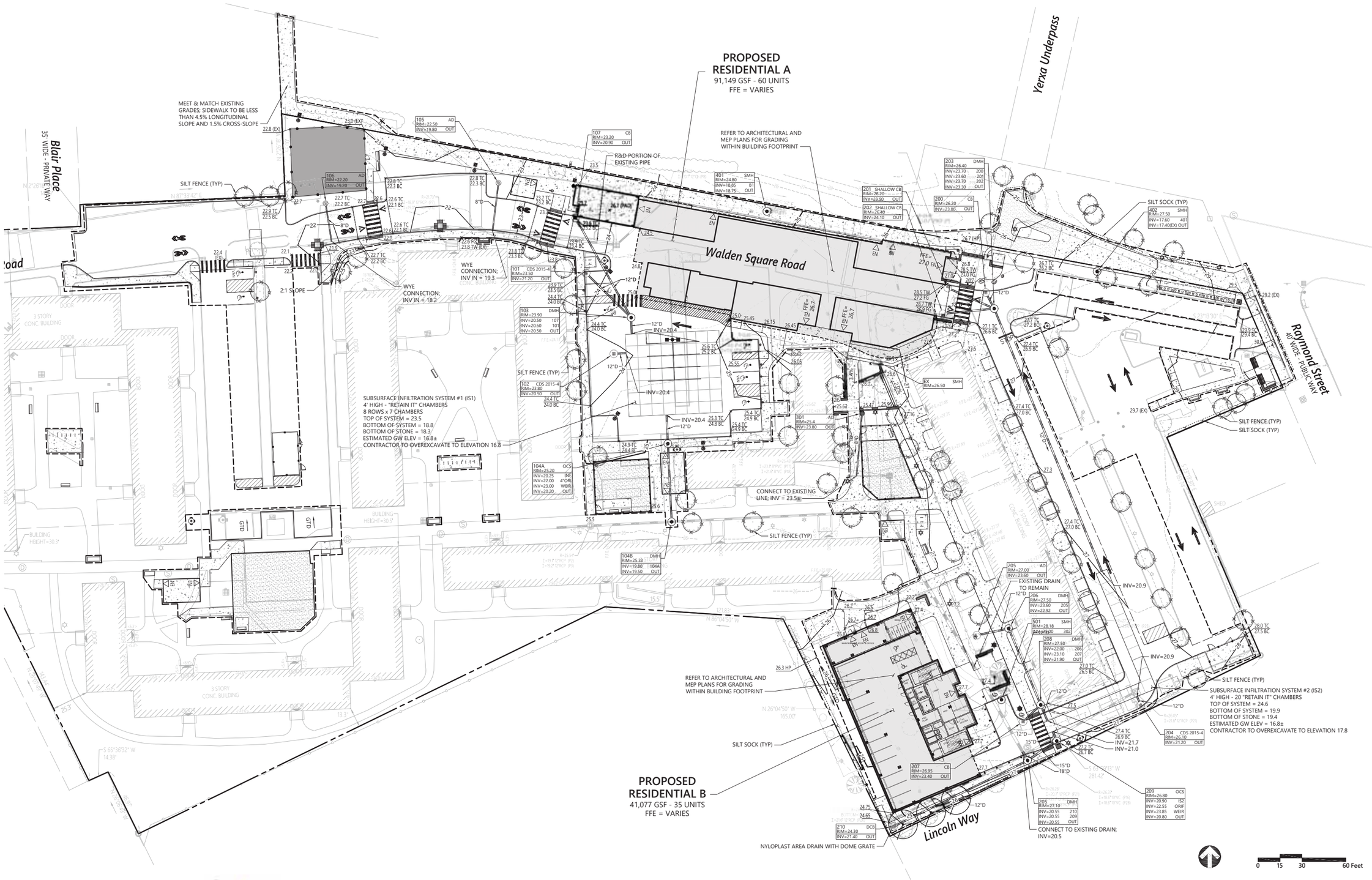
C3.01 Layout & Materials Plan



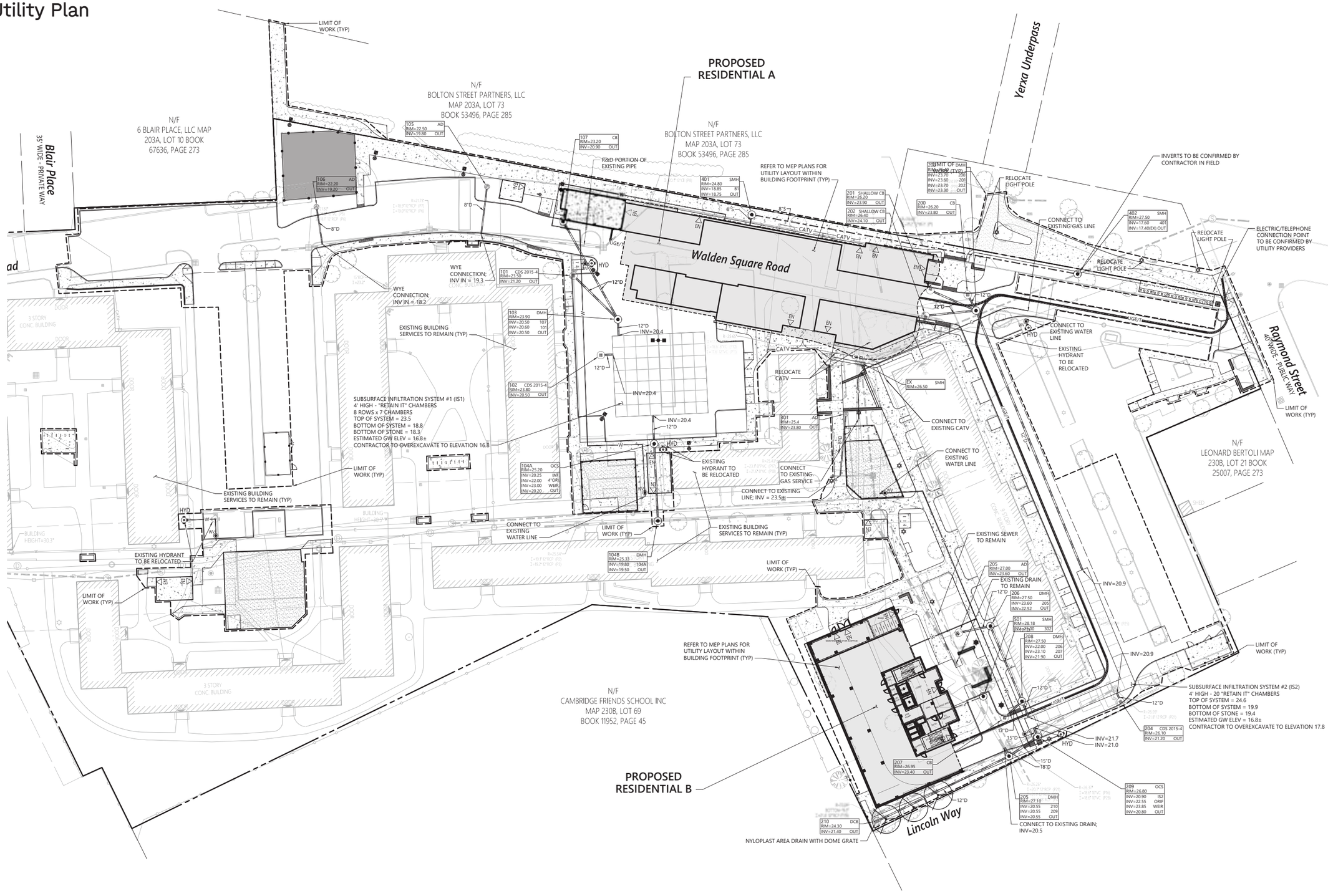
Sign Summary

M.U.T.C.D. Number	Specification Width	Specification Height	Desc.
R7-8	12"	18"	RESERVED PARKING
R7-8P	12"	6"	VAN ACCESSIBLE
SP-1	12"	18"	"CYCLISTS TO DISMOUNT AND WALK BIKE"
SP-2	12"	18"	Directional/ way finding signage - TBD
SP-3	12"	18"	"KEEP RIGHT FOR CONNECTION TO BOLTON STREET & SHERMAN STREET"
SP-4	12"	18"	"CROSS HERE FOR CONNECTION TO SHERMAN STREET"
SP-5	12"	18"	""
R5-1	30"	30"	DO NOT ENTER

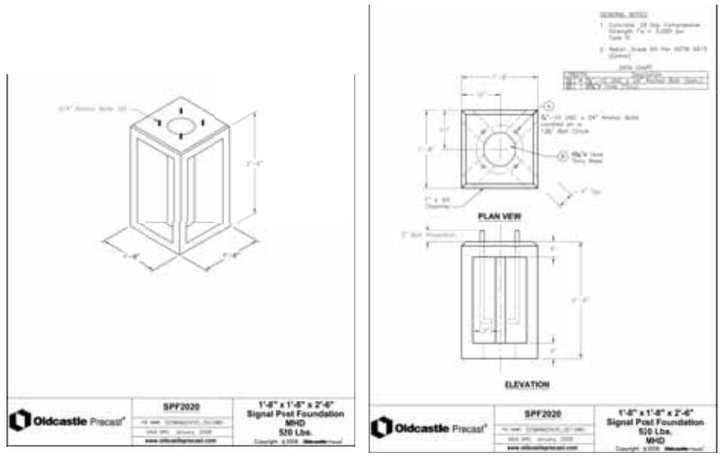
C4.01 Grading, Drainage, & Erosion Control Plan



C5.01 Utility Plan



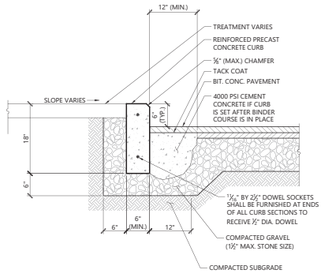
C6.01 Site Details



Rectangular Rapid Flashing Beacon (RRFB) - Concrete Base

1/16

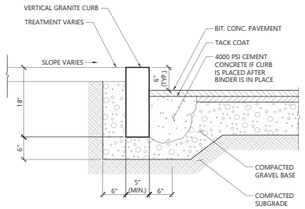
N.T.S.



Precast Concrete Curb (PCC)

1/16

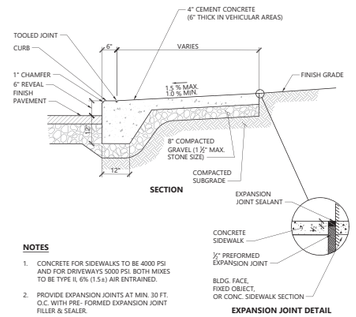
N.T.S. Source: VHB LD_404



Vertical Granite Curb (VGC)

1/16

N.T.S. Source: VHB LD_402



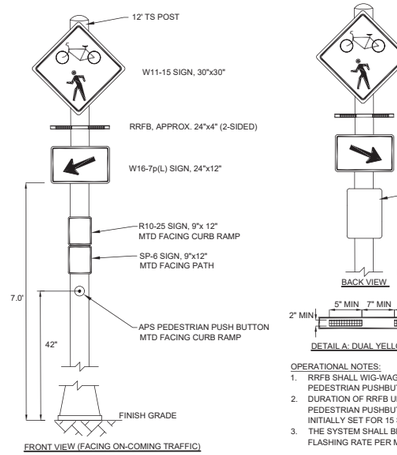
NOTES

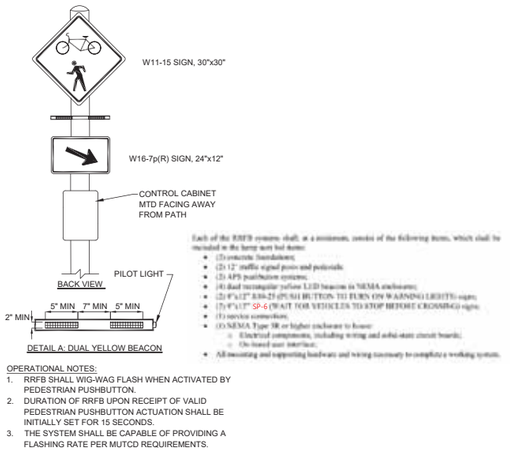
1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS, 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE TOOLED CONTROL JOINTS AT 6' O.C.
4. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

Monolithic Concrete Curb (MCC) & Sidewalk

1/16

N.T.S. Source: VHB LD_421





Each of the RRFB systems shall, as a minimum, consist of the following items, which shall be included in the lump sum bid items:

- (2) cabinets (hardshell);
- (2) 12" traffic signal poles and pedestals;
- (2) APS pushbutton systems;
- (4) dual rectangular yellow LED beacons in NEMA enclosures;
- (2) 9"x12" R10-25 (PUSH BUTTON TO TURN ON WARNING LIGHTS) signs;
- (2) 9"x12" SP-6 (WAIT FOR VEHICLES TO STOP BEFORE CROSSING) signs;
- (1) service connection;
- (1) NEMA Type 3R or higher enclosure to house:
  - Electrical components, including wiring and solid-state circuit boards;
  - On-board user interface;
- All mounting and supporting hardware and wiring necessary to complete a working system.

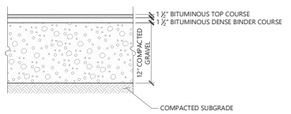
OPERATIONAL NOTES:

1. RRFB SHALL WIG-WAG FLASH WHEN ACTIVATED BY PEDESTRIAN PUSHBUTTON.
2. DURATION OF RRFB UPON RECEIPT OF VALID PEDESTRIAN PUSHBUTTON ACTUATION SHALL BE INITIALLY SET FOR 15 SECONDS.
3. THE SYSTEM SHALL BE CAPABLE OF PROVIDING A FLASHING RATE PER MUTCD REQUIREMENTS.

Rectangular Rapid Flashing Beacon (RRFB) - Post Mounted

1/16

N.T.S. Source: VHB



STANDARD DUTY FLEXIBLE PAVEMENT

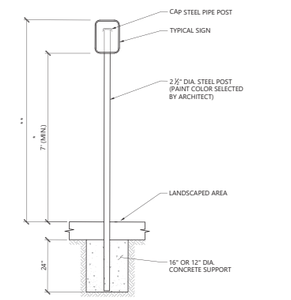
NOTES

PAVEMENT SECTIONS ARE SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF FURTHER GEOTECHNICAL INVESTIGATIONS.

Bituminous Concrete Pavement Section

1/16

N.T.S. Source: VHB LD_430



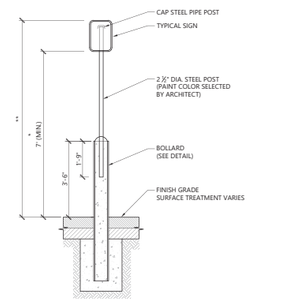
* THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.

* * THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE.

Sign Post - Type 'A'

1/16

N.T.S. Source: VHB LD_701



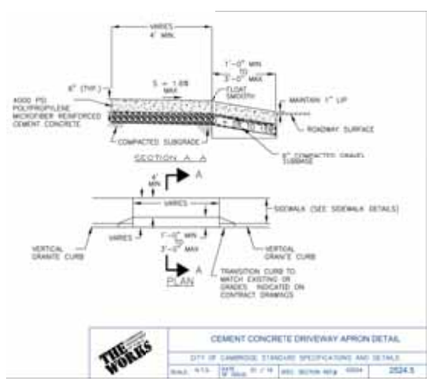
* THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.

* * THIS DIMENSION SHALL BE A A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE.

Bollard Mounted Sign

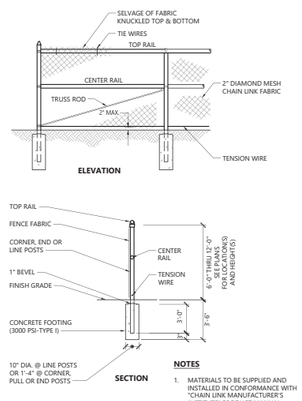
1/16

N.T.S. Source: VHB LD_703



Driveway Apron

N.T.S. Source: Cambridge DPW



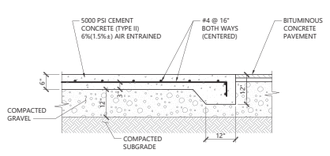
NOTES

1. MATERIALS TO BE SUPPLIED AND INSTALLED IN CONFORMANCE WITH "CHAIN LINK MANUFACTURER'S INSTITUTE" PRODUCT MANUAL.

6' to 12' Chain Link Fence

10/20

N.T.S. Source: VHB LD_480



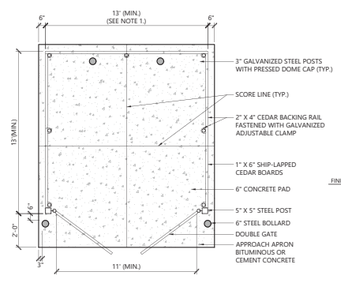
NOTES

1. SIZE OF PAD TO BE AS INDICATED ON PLANS.
2. CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 30 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

Concrete Pad for Transformer

1/16

N.T.S. Source: VHB REV LD_710



NOTES

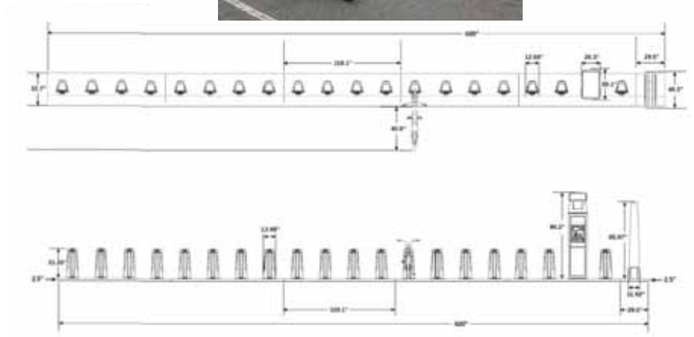
1. DUMPSTER PAD DIMENSIONS SHOWN AS MINIMUM. REFER TO PLAN FOR ACTUAL DIMENSION.

Dumpster Pad w/ Enclosure

1/16

N.T.S. Source: VHB LD_713

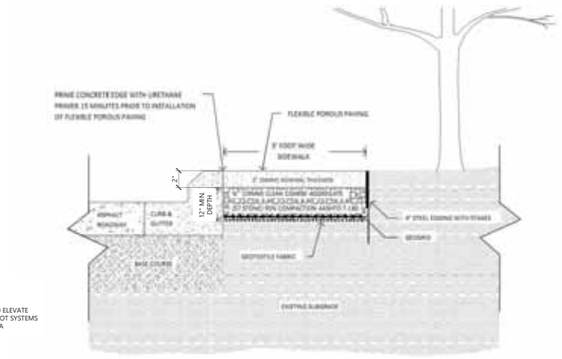
C6.02 Site Details



Blue Bikes Station

3/21

N.T.S. Source: VHB LD_



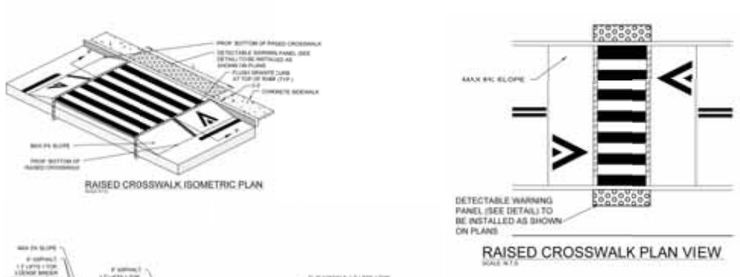
NOTES:

1. FLEXI-PAVE SHALL BE HD2000.
2. ADDITIONAL GRAVEL SHALL BE ADDED TO ELEVATE FLEXI-PAVE AND METAL EDGING OVER ROOT SYSTEMS AS NEEDED, BUT MUST MAINTAIN ALL ADA COMPLIANCE REQUIREMENTS.

Flex-Pave Surface

4/13

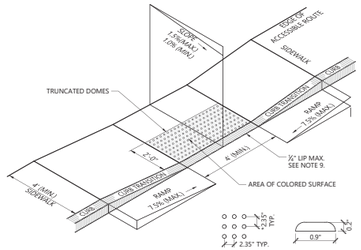
N.T.S. Source: Capitol Flex-Pave, LLC



Raised Crosswalk Isometric Plan

2/6

N.T.S. Source: Cambridge Department of Public Works



TRUNCATED DOMES

*DIMENSIONS ARE CENTER TO CENTER

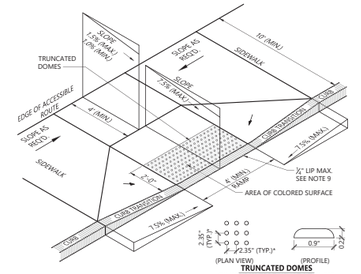
NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'A-D'

1/16

N.T.S. Source: VHB LD_500



TRUNCATED DOMES

*DIMENSIONS ARE CENTER TO CENTER

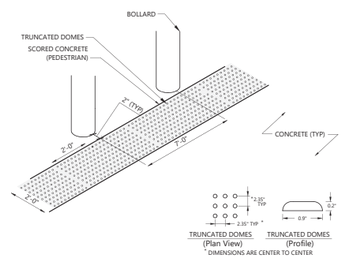
NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY. EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'D-D'

1/16

N.T.S. Source: VHB LD_503



* DIMENSIONS ARE CENTER TO CENTER

Notes:

THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.

A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).

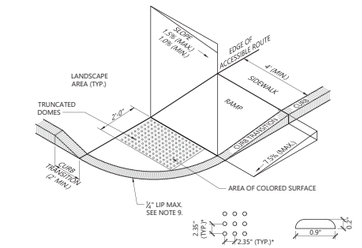
DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES; COLOR AND MATERIAL TO BE DETERMINED BY ARCHITECT.

DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO ACCESSIBLE ROUTE.

Detectable Warning Pavers at Bollards

11/15

N.T.S. Source: VHB LD_



TRUNCATED DOMES

*DIMENSIONS ARE CENTER TO CENTER

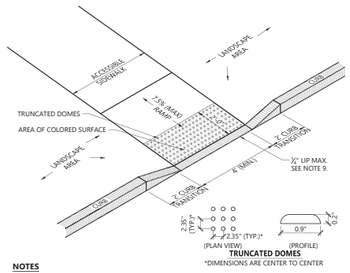
NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY. EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) - Type 'B-D'

1/16

N.T.S. Source: VHB LD_501



TRUNCATED DOMES

*DIMENSIONS ARE CENTER TO CENTER

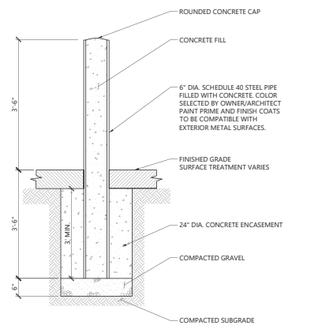
NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAYS.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'M-D'

1/16

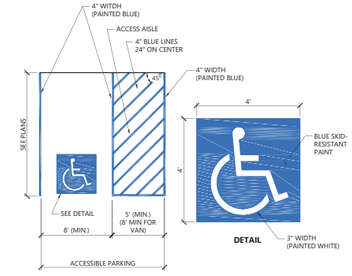
N.T.S. Source: VHB LD_512



Bollard

9/17

N.T.S. Source: VHB LD_700



DETAIL

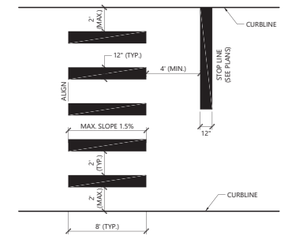
NOTES

1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
2. 8' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.
4. ACCESS AISLE MEASURED BETWEEN OUTSIDE EDGES OF PAVEMENT MARKINGS.

Accessible Parking Space

1/16

N.T.S. Source: VHB LD_552B



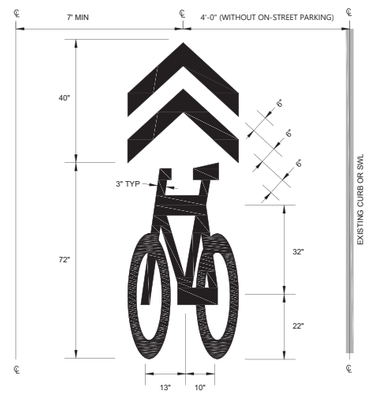
NOTES

1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
3. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY ALIGNED.
4. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.

Crosswalk

1/16

N.T.S. Source: VHB LD_553



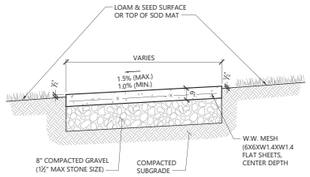
NOTES:
1. REFER TO FIGURE 9C-9 IN THE MUTCD FOR MORE DETAIL.
2. SHARED LANE MARKINGS SHALL BE PREFORMED THERMOPLASTIC.
3. SHARED LANE PAVEMENT MARKING TO BE LOCATED PER MASSDOT AND MUTCD STANDARDS ALONG ORCHARD WAY

Shared Lane Pavement Marking

7/2019

N.T.S. Source: VHB

C6.03 Site Details



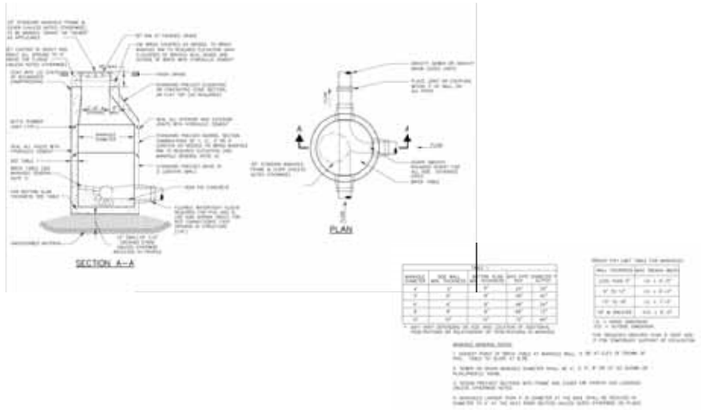
SECTION

NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. OR AS NOTED ON PLANS.
4. PROVIDE MEDIUM BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

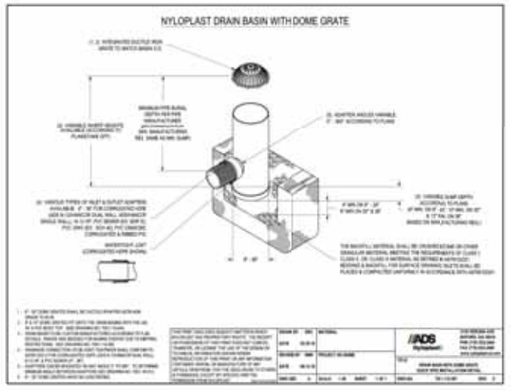
Concrete Sidewalk in Landscape Area 3/21

N.T.S. Source: VHB LD_426



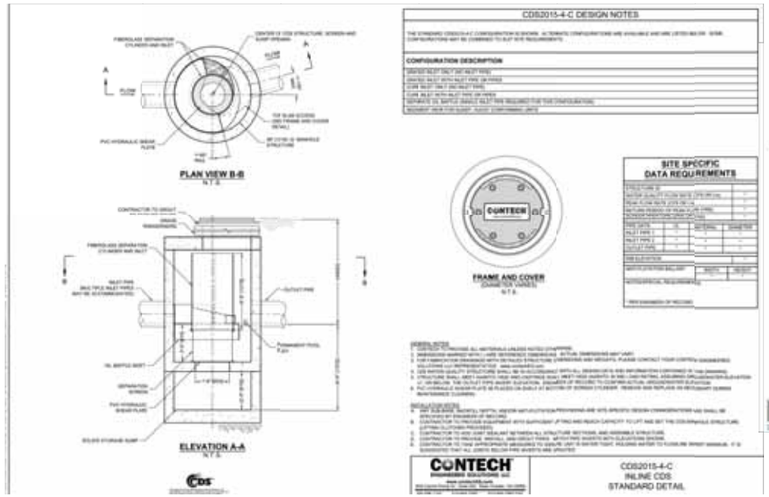
Manhole Structure

N.T.S. Source: Cambridge DPW



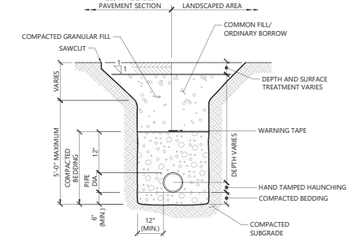
Area Drain

N.T.S. Source: ADS



Water Quality Unit CDS 2015-4

N.T.S. Source: Contech

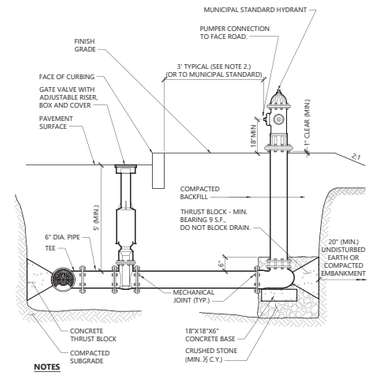


NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.

Utility Trench 1/16

N.T.S. Source: VHB LD_300

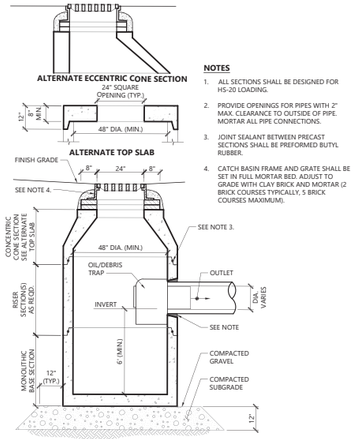


NOTES

1. CONCRETE THRUST BLOCKS TO BE USED ONLY WHERE THEY CAN BEAR ON UNDISTURBED EARTH AS SHOWN. USE CLAMPS AND TIE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOIL CONDITIONS PROHIBIT THE USE OF THRUST BLOCKS.
2. HYDRANT IN SIDEWALK AREAS TO BE LOCATED TO PROVIDE MINIMUM CLEAR SIDEWALK PASSAGE WIDTH OF 3 FEET AT HYDRANT.
3. A 36-INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT UNLESS OTHERWISE APPROVED BY AUTHORITY HAVING JURISDICTION.

Hydrant Construction 12/18

N.T.S. Source: VHB LD_250

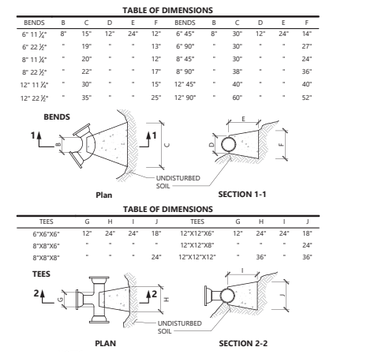


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB) With Oil/Debris Trap 1/16

N.T.S. Source: VHB REV LD_101

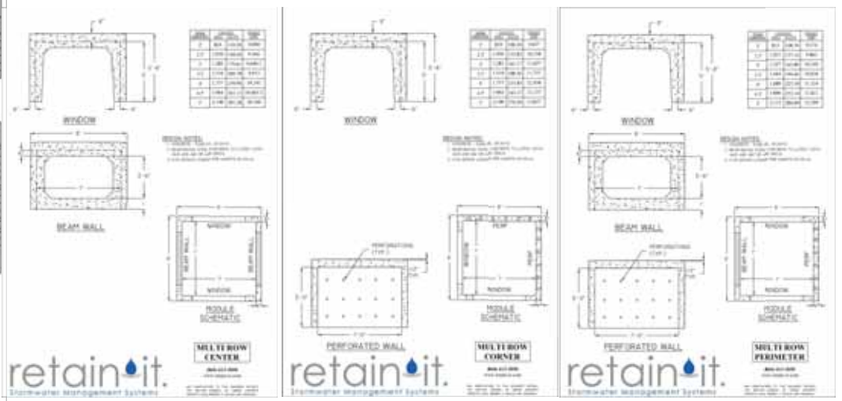


NOTES

1. PROVIDE BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAME SIZE AS REQUIRED FOR TEES). PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES.
2. CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING.
3. CONCRETE SHALL BE 3,000 PSI-TYPE I.

Concrete Thrust Block 1/16

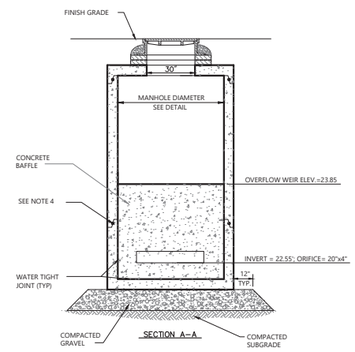
N.T.S. Source: VHB LD_260

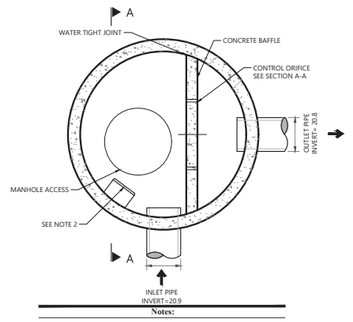


Retain-It 4' High Chambers

N.T.S. Source: Retain-It

C6.04 Site Details



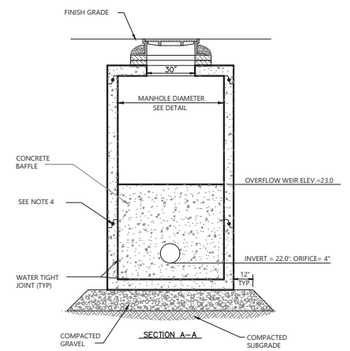


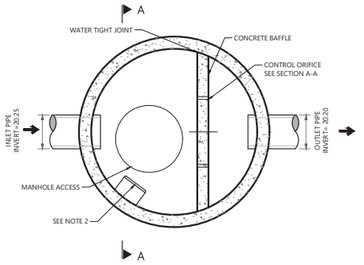
Notes:

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM.)

Outlet Control Structure (OCS) - Infiltration System '2' 7/06

N.T.S. Source: VHB LD_



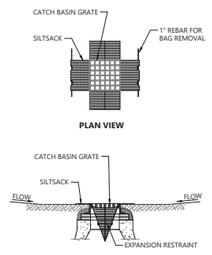


Notes:

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM.)

Outlet Control Structure (OCS) - Infiltration System '1' 7/06

N.T.S. Source: VHB LD_



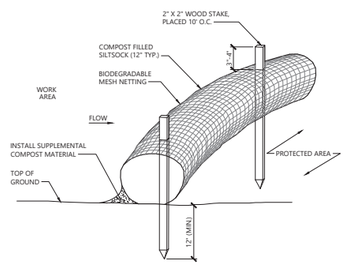
SECTION VIEW

NOTES

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap 1/16

N.T.S. Source: VHB LD_674

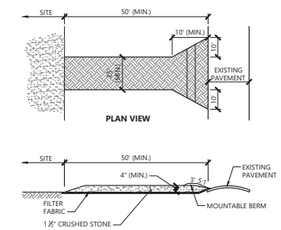


NOTES

1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsock - Erosion Control Barrier 1/16

N.T.S. Source: VHB LD_658



CROSS-SECTION

NOTES

1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit 1/16

N.T.S. Source: VHB LD_682