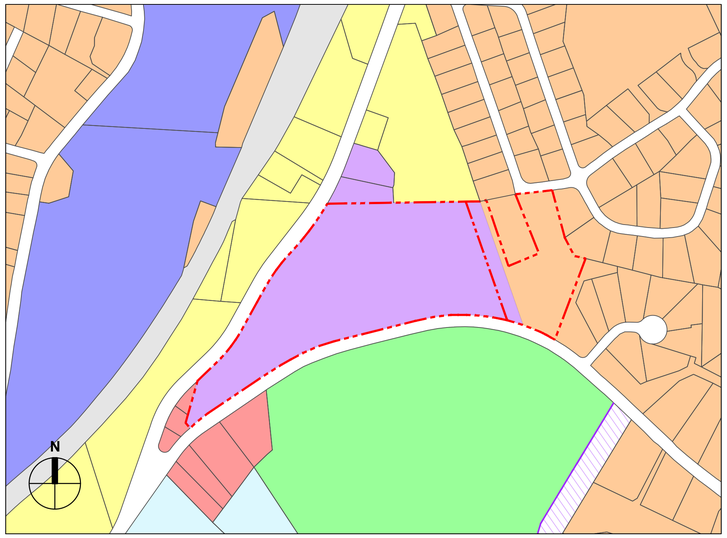
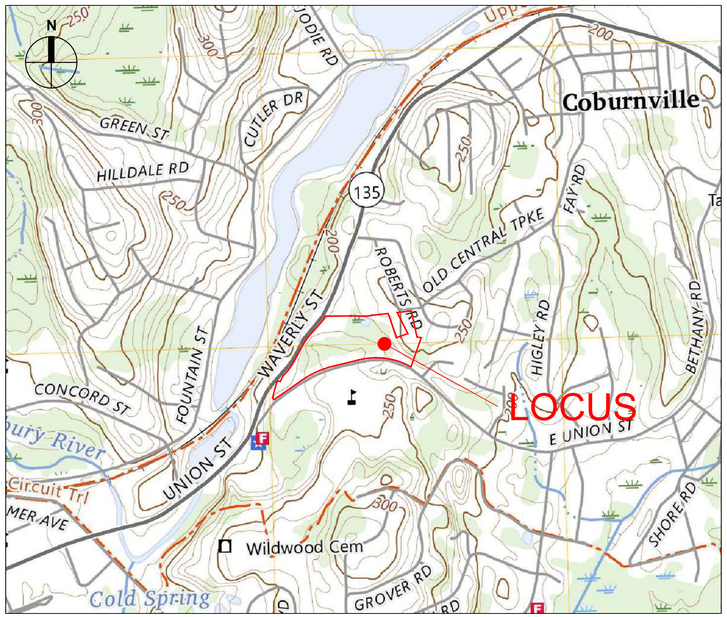


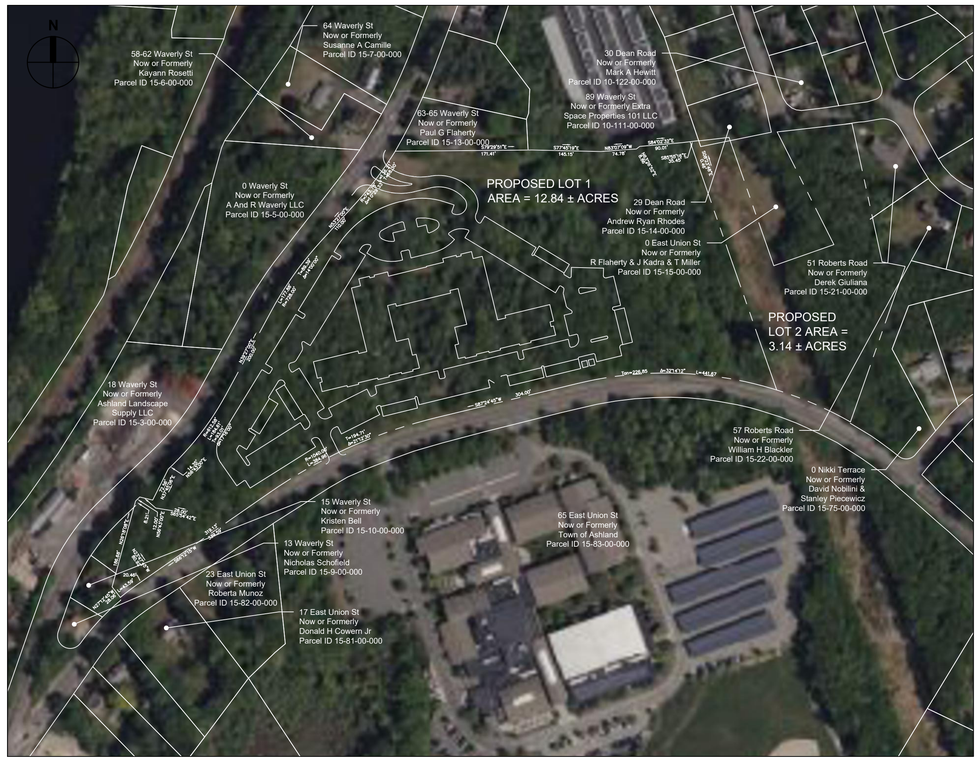
ZONING MAP
SCALE: 1"=300'

LEGEND

- WILDWOOD MIXED USE DISTRICT B
- WILDWOOD MIXED USE DISTRICT C
- WILDWOOD MIXED USE DISTRICT D
- WILDWOOD MIXED USE DISTRICT E
- WILDWOOD MIXED USE DISTRICT BUFFER
- RESIDENTIAL A
- SURFACE WATER BODY
- RAIL RIGHT OF WAY
- HIGHWAY COMMERCE



USGS-LOCUS
SCALE: 1"=800'



KEY PLAN
SCALE: 1"=150'

PROJECT TEAM:

APPLICANT / DEVELOPER
THE GUTIERREZ COMPANY
200 SUMMIT DRIVE, SUITE 400
BURLINGTON, MA 01803

CIVIL ENGINEER / LANDSCAPE ARCHITECT
SMMA
1000 MASSACHUSETTS AVENUE
CAMBRIDGE, MA 02138

ARCHITECT
CUBE3
56 HIGH STREET
ANDOVER, MA 01845

TRAFFIC ENGINEER
LANGAN
100 CAMBRIDGE STREET, SUITE 1310
BOSTON, MA 02114

WETLAND SCIENTIST
GODDARD CONSULTING, LLC
291 MAIN STREET, SUITE 8
NORTHBOROUGH, MA 01532

GEOTECHNICAL ENGINEER
SANBORN, HEAD & ASSOCIATES, INC.
6 BEDFORD FARMS DRIVE
BEDFORD, NH 03110

SURVEYOR
GLM ENGINEERING CONSULTANTS, INC.
19 EXCHANGE STREET
HOLLISTON, MA 01746

the Gutierrez company

THE RESIDENCES AT ASHLAND
61 WAVERLY STREET
ASHLAND, MA

RESPONSE TO COMMENTS #2 FEBRUARY 13, 2026

smma

LEGEND

FES	FLARED END SECTION
	PROPOSED TREELINE
D	DRAIN LINE
CB	CATCH BASIN
DMH	DRAIN MANHOLE
x97.25	SPOT GRADE
95	EXISTING CONTOUR
95	PROPOSED CONTOUR
	RIPRAP
CPE	CORRUGATED POLYETHYLENE PIPE
LOW	LIMIT OF WORK
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
	VEHICLE ACCESS
X X	SILT FENCE WITH STRAW WATTLE
	BUILDING
	EDGE OF PAVEMENT
	DIRECTION OF SURFACE RUNOFF
	REMOVE BITUMINOUS PAVEMENT AND ADJACENT CURBING
	REMOVE LIGHT POLE
	REMOVE TREES
	TEMPORARY OUTLET STRUCTURE

GENERAL EROSION CONTROL NOTES:

1. CONFORM TO CONDITIONS LISTED IN THE ORDER OF CONDITIONS ISSUED FOR THIS PROJECT. A COPY OF THE ORDER OF CONDITIONS IS TO BE KEPT ON-SITE.

2. CONFORM TO CONDITIONS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND THE NPDES GENERAL PERMIT. A COPY OF THE SWPPP IS TO BE KEPT ON-SITE.

3. STABILIZE SOIL STOCKPILES AND EXPOSED SOIL AREAS WHERE CONSTRUCTION ACTIVITIES WILL CEASE FOR 14 DAYS OR MORE, IN ACCORDANCE WITH THE NPDES GENERAL PERMIT.

4. PERFORM EARTHWORK ACTIVITY ON THE SITE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO TEMPORARY DRAINAGE SWALES AND TEMPORARY SEDIMENTATION BASINS. TEMPORARY DRAINAGE FEATURES ARE TO BE ADJUSTED AND RELOCATED AS NECESSARY THROUGHOUT CONSTRUCTION.

5. FOLLOWING THE INSTALLATION OF PROPOSED CATCH BASINS AS SHOWN ON SHEET C-131, INSTALL SEDIMENT BAGS FOR INLET PROTECTION.

GENERAL EROSION CONTROL NOTES (CONTINUED):

5. THE DETENTION BASINS AND FOREBAYS DESIGNATED ON THE PLANS MAY BE USED AS TEMPORARY SEDIMENTATION BASINS THROUGHOUT CONSTRUCTION AND ARE TO BE PERIODICALLY CLEANED DURING CONSTRUCTION. AT THE END OF CONSTRUCTION, CLEAN AND REFURBISH PERMANENT BASINS USED DURING CONSTRUCTION, INCLUDING LAYERS OF SOIL CONTAINING SILT DEPOSITS AND RE-VEGETATE SURFACES. ADDITIONAL TEMPORARY SEDIMENTATION BASINS ARE TO BE CONSTRUCTED AND USED THROUGHOUT THE SITE AS NECESSARY TO CONTROL RUNOFF DURING CONSTRUCTION.

6. CONSTRUCT TEMPORARY SEDIMENTATION BASINS TO CONTAIN A VOLUME OF RUNOFF EQUAL TO THE RESULTANT VOLUME OF RUNOFF FROM A 2-YEAR, 24-HOUR STORM EVENT FOR THE AREA THAT IS TRIBUTARY TO THE BASIN.

7. ALL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL SHALL CONFIRM TO THE TOWN OF ASHLAND CONSERVATION COMISSION REQUIREMENTS AS STATED IN THE ORDER OF CONDITIONS.

8. SAFETY FENCING SHALL BE PROVIDED FOR ALL STOCKPILES OVER 10 FT IN HEIGHT.

9. TO PROVIDE SLOPE STABILIZATION, EROSION CONTROL BLANKETS (DETAIL C7 / C-501) SHALL BE PROVIDED ALONG SLOPES ADJACENT TO THE WETLAND 25-FOOT NO DISTURB BUFFER ZONE AS REQUIRED BASED ON CONSTRUCTION SEQUENCING.

GENERAL NOTES:

1. NO DISTURB ZONE: EXTENDING 25-FEET BEYOND THE BORDERING VEGETATED WETLANDS, A VEGETATED BUFFER SHALL BE MAINTAINED. ALTERATIONS INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, LANDSCAPING, MOWING, AND EXCAVATION, ARE NOT PERMITTED WI THIN THE 25-FOOT NO DISTURB BUFFER ZONE.

CONCEPTUAL CONSTRUCTION SEQUENCING:

1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL AND RELOCATE AS CONSTRUCTION PROGRESSES.

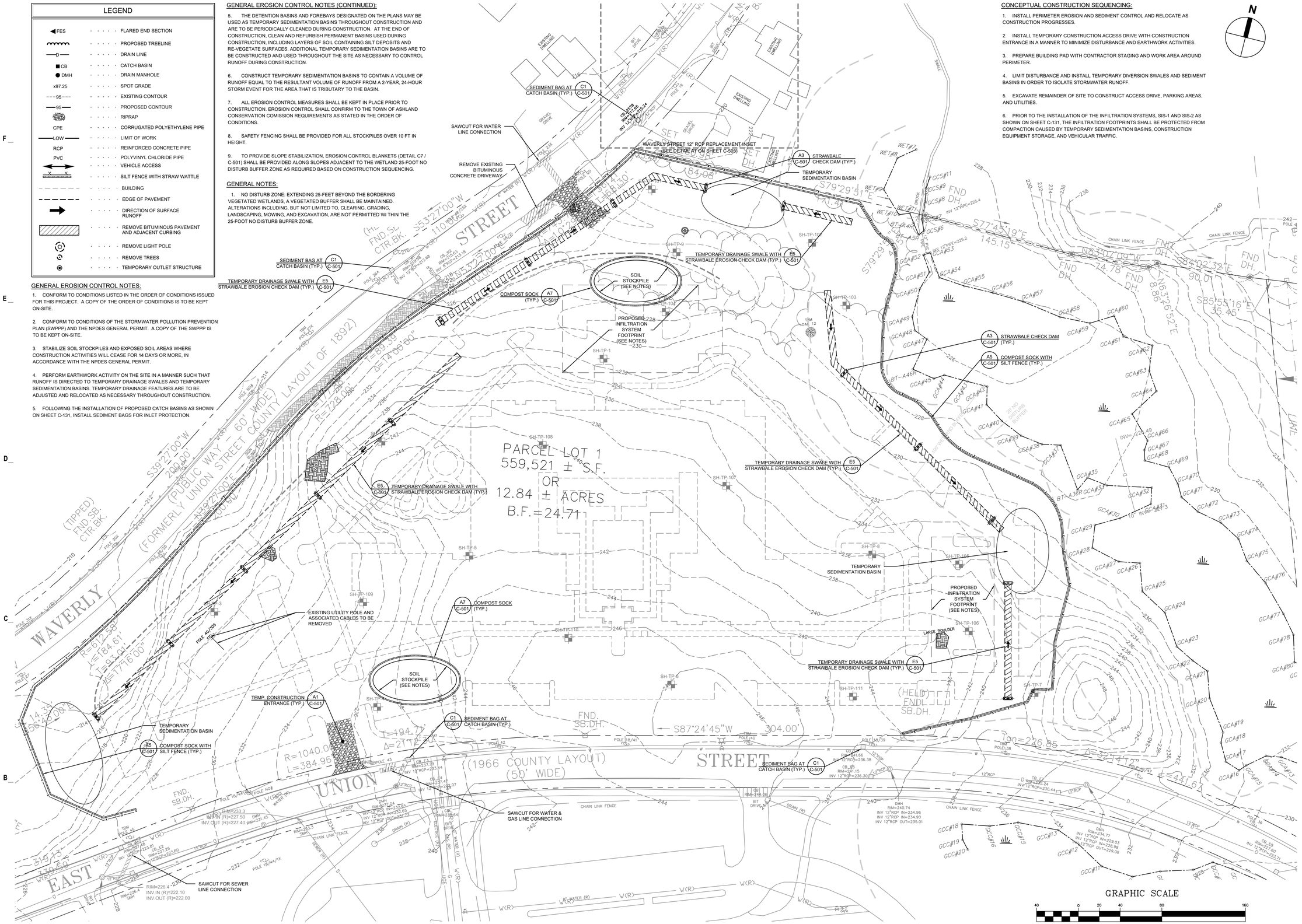
2. INSTALL TEMPORARY CONSTRUCTION ACCESS DRIVE WITH CONSTRUCTION ENTRANCE IN A MANNER TO MINIMIZE DISTURBANCE AND EARTHWORK ACTIVITIES.

3. PREPARE BUILDING PAD WITH CONTRACTOR STAGING AND WORK AREA AROUND PERIMETER.

4. LIMIT DISTURBANCE AND INSTALL TEMPORARY DIVERSION SWALES AND SEDIMENT BASINS IN ORDER TO ISOLATE STORMWATER RUNOFF.

5. EXCAVATE REMAINDER OF SITE TO CONSTRUCT ACCESS DRIVE, PARKING AREAS, AND UTILITIES.

6. PRIOR TO THE INSTALLATION OF THE INFILTRATION SYSTEMS, SIS-1 AND SIS-2 AS SHOWN ON SHEET C-131, THE INFILTRATION FOOTPRINTS SHALL BE PROTECTED FROM COMPACTION CAUSED BY TEMPORARY SEDIMENTATION BASINS, CONSTRUCTION EQUIPMENT STORAGE, AND VEHICULAR TRAFFIC.



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the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

MARK:	DATE:	DESCRIPTION:
	02/12/2026	RESPONSE TO COMMENTS #2
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	05/20/2025	RESPONSE TO COMMENTS
	02/10/2025	COMPREHENSIVE PERMIT

ISSUE LOG

△ = CLOUDED CHANGE

SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

SITE PREPARATION PLAN

C-111

LEGEND

- BOLLARD
- SIGN
- RETAINING WALL
- VERTICAL GRANITE CURB
- SLOPED GRANITE CURB
- ACCESS GRANITE CURB
- PRECAST CONCRETE CURB
- CROSSWALK
- WHEELCHAIR ACCESSIBLE CURB RAMP
- HANDICAP PARKING
- WOOD GUARDRAIL
- METAL GUARDRAIL
- CHAIN LINK FENCE
- PICKET FENCE
- (14) PARKING COUNTS (REGULAR)
- SNOW STORAGE AREA
- EVSE/ EV-READY SPACES
- POROUS PAVEMENT

ZONING
WILDWOOD MIXED USE SPECIAL DISTRICT (WMUSD D)

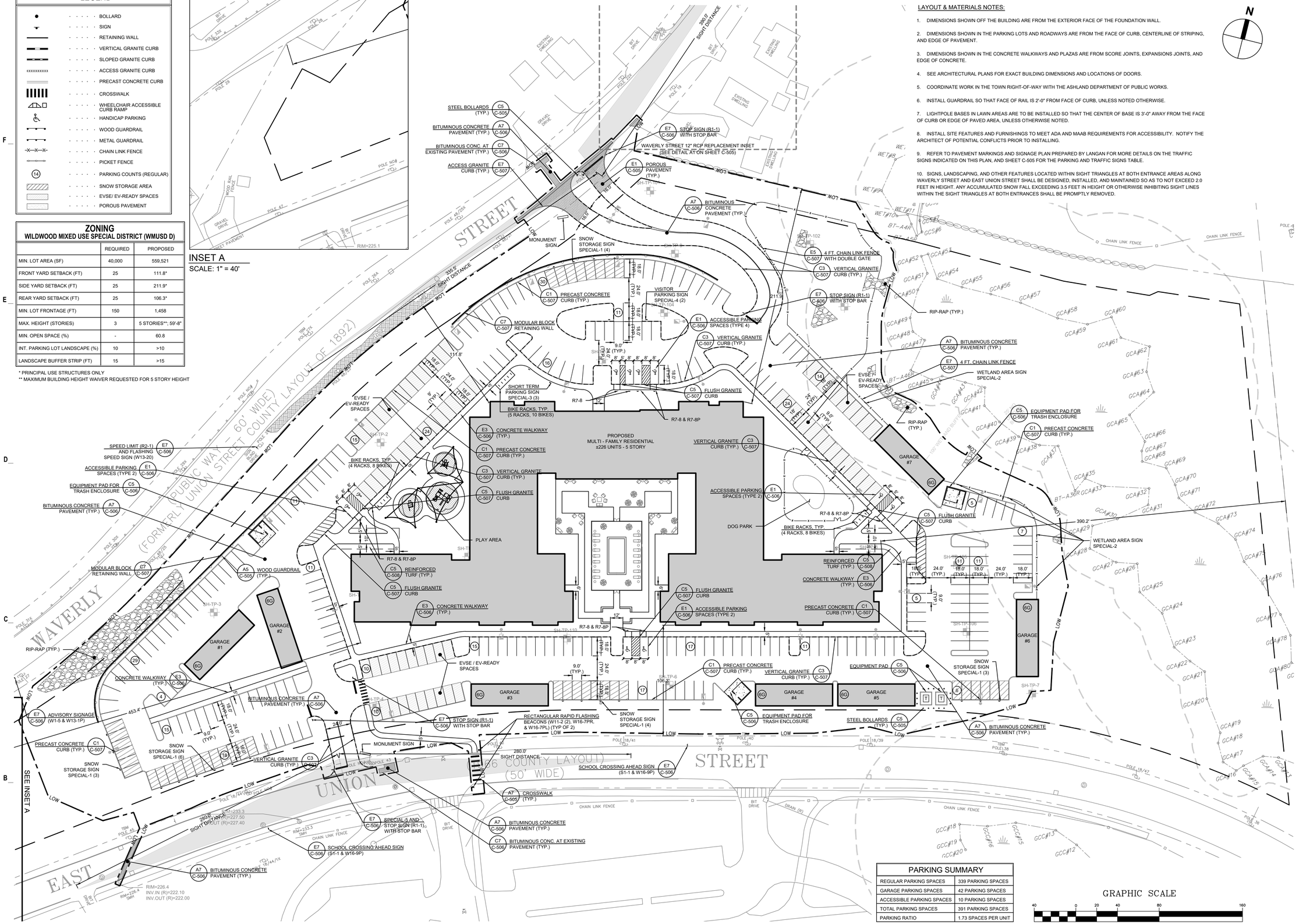
	REQUIRED	PROPOSED
MIN. LOT AREA (SF)	40,000	559,521
FRONT YARD SETBACK (FT)	25	111.8*
SIDE YARD SETBACK (FT)	25	211.9*
REAR YARD SETBACK (FT)	25	106.3*
MIN. LOT FRONTAGE (FT)	150	1,458
MAX. HEIGHT (STORIES)	3	5 STORIES**; 59'-8"
MIN. OPEN SPACE (%)	-	60.8
INT. PARKING LOT LANDSCAPE (%)	10	>10
LANDSCAPE BUFFER STRIP (FT)	15	>15

* PRINCIPAL USE STRUCTURES ONLY
** MAXIMUM BUILDING HEIGHT WAIVER REQUESTED FOR 5 STORY HEIGHT

INSET A
SCALE: 1" = 40'

LAYOUT & MATERIALS NOTES:

1. DIMENSIONS SHOWN OFF THE BUILDING ARE FROM THE EXTERIOR FACE OF THE FOUNDATION WALL.
2. DIMENSIONS SHOWN IN THE PARKING LOTS AND ROADWAYS ARE FROM THE FACE OF CURB, CENTERLINE OF STRIPING, AND EDGE OF PAVEMENT.
3. DIMENSIONS SHOWN IN THE CONCRETE WALKWAYS AND PLAZAS ARE FROM SCORE JOINTS, EXPANSIONS JOINTS, AND EDGE OF CONCRETE.
4. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF DOORS.
5. COORDINATE WORK IN THE TOWN RIGHT-OF-WAY WITH THE ASHLAND DEPARTMENT OF PUBLIC WORKS.
6. INSTALL GUARDRAIL SO THAT FACE OF RAIL IS 2'-0" FROM FACE OF CURB, UNLESS NOTED OTHERWISE.
7. LIGHTPOLE BASES IN LAWN AREAS ARE TO BE INSTALLED SO THAT THE CENTER OF BASE IS 3'-0" AWAY FROM THE FACE OF CURB OR EDGE OF PAVED AREA, UNLESS OTHERWISE NOTED.
8. INSTALL SITE FEATURES AND FURNISHINGS TO MEET ADA AND MAAB REQUIREMENTS FOR ACCESSIBILITY. NOTIFY THE ARCHITECT OF POTENTIAL CONFLICTS PRIOR TO INSTALLING.
9. REFER TO PAVEMENT MARKINGS AND SIGNAGE PLAN PREPARED BY LANGAN FOR MORE DETAILS ON THE TRAFFIC SIGNS INDICATED ON THIS PLAN, AND SHEET C-505 FOR THE PARKING AND TRAFFIC SIGNS TABLE.
10. SIGNS, LANDSCAPING, AND OTHER FEATURES LOCATED WITHIN SIGHT TRIANGLES AT BOTH ENTRANCE AREAS ALONG WAVERLY STREET AND EAST UNION STREET SHALL BE DESIGNED, INSTALLED, AND MAINTAINED SO AS TO NOT EXCEED 2.0 FEET IN HEIGHT. ANY ACCUMULATED SNOW FALL EXCEEDING 3.5 FEET IN HEIGHT OR OTHERWISE INHIBITING SIGHT LINES WITHIN THE SIGHT TRIANGLES AT BOTH ENTRANCES SHALL BE PROMPTLY REMOVED.



PARKING SUMMARY

REGULAR PARKING SPACES	339 PARKING SPACES
GARAGE PARKING SPACES	42 PARKING SPACES
ACCESSIBLE PARKING SPACES	10 PARKING SPACES
TOTAL PARKING SPACES	391 PARKING SPACES
PARKING RATIO	1.73 SPACES PER UNIT

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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SCALE	1"=40'
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

LAYOUT & MATERIALS PLAN

C-121

LEGEND

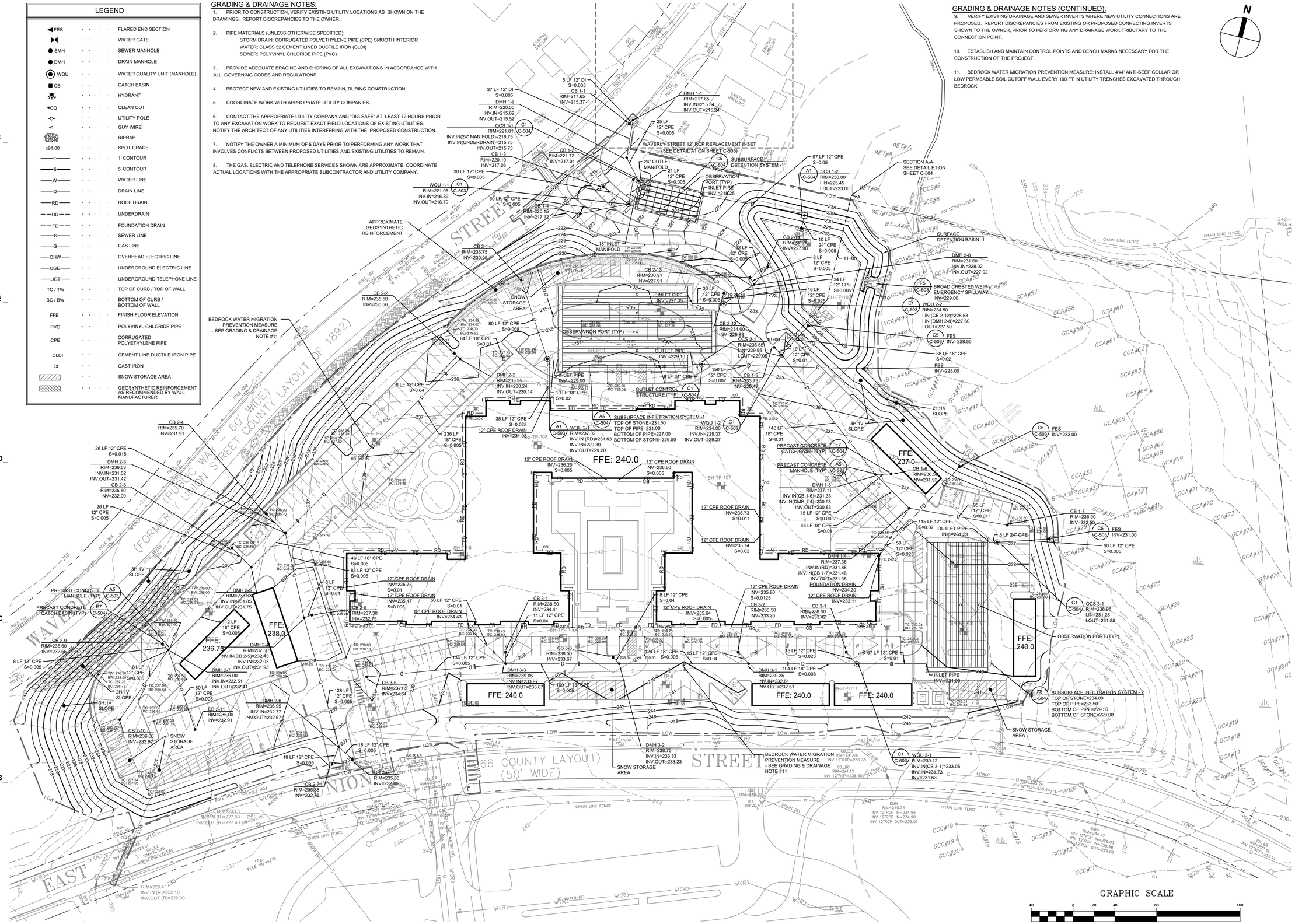
FES	FLARED END SECTION
	WATER GATE
SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE
WQU	WATER QUALITY UNIT (MANHOLE)
CB	CATCH BASIN
	HYDRANT
CO	CLEAN OUT
	UTILITY POLE
	GUY WIRE
	RIPRAP
x91.00	SPOT GRADE
1	1' CONTOUR
5	5' CONTOUR
W	WATER LINE
D	DRAIN LINE
RD	ROOF DRAIN
UD	UNDERDRAIN
FD	FOUNDATION DRAIN
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD ELECTRIC LINE
UGE	UNDERGROUND ELECTRIC LINE
UGT	UNDERGROUND TELEPHONE LINE
TC / TW	TOP OF CURB / TOP OF WALL
BC / BW	BOTTOM OF CURB / BOTTOM OF WALL
FFE	FINISH FLOOR ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
CPE	CORRUGATED POLYETHYLENE PIPE
CLDI	CEMENT LINE DUCTILE IRON PIPE
CI	CAST IRON
	SNOW STORAGE AREA
	GEOSYNTHETIC REINFORCEMENT AS RECOMMENDED BY WALL MANUFACTURER

GRADING & DRAINAGE NOTES:

1. PRIOR TO CONSTRUCTION, VERIFY EXISTING UTILITY LOCATIONS AS SHOWN ON THE DRAWINGS. REPORT DISCREPANCIES TO THE OWNER.
2. PIPE MATERIALS (UNLESS OTHERWISE SPECIFIED):
   STORM DRAIN: CORRUGATED POLYETHYLENE PIPE (CPE) SMOOTH INTERIOR
   WATER: CLASS 52 CEMENT LINED DUCTILE IRON (CLDI)
   SEWER: POLYVINYL CHLORIDE PIPE (PVC)
3. PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATIONS IN ACCORDANCE WITH ALL GOVERNING CODES AND REGULATIONS.
4. PROTECT NEW AND EXISTING UTILITIES TO REMAIN, DURING CONSTRUCTION.
5. COORDINATE WORK WITH APPROPRIATE UTILITY COMPANIES.
6. CONTACT THE APPROPRIATE UTILITY COMPANY AND "DIG SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. NOTIFY THE ARCHITECT OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION.
7. NOTIFY THE OWNER A MINIMUM OF 5 DAYS PRIOR TO PERFORMING ANY WORK THAT INVOLVES CONFLICTS BETWEEN PROPOSED UTILITIES AND EXISTING UTILITIES TO REMAIN.
8. THE GAS, ELECTRIC AND TELEPHONE SERVICES SHOWN ARE APPROXIMATE. COORDINATE ACTUAL LOCATIONS WITH THE APPROPRIATE SUBCONTRACTOR AND UTILITY COMPANY.

GRADING & DRAINAGE NOTES (CONTINUED):

9. VERIFY EXISTING DRAINAGE AND SEWER INVERTS WHERE NEW UTILITY CONNECTIONS ARE PROPOSED. REPORT DISCREPANCIES FROM EXISTING OR PROPOSED CONNECTING INVERTS SHOWN TO THE OWNER, PRIOR TO PERFORMING ANY DRAINAGE WORK TRIBUTARY TO THE CONNECTION POINT.
10. ESTABLISH AND MAINTAIN CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT.
11. BEDROCK WATER MIGRATION PREVENTION MEASURE: INSTALL 4'x4' ANTI-SEEP COLLAR OR LOW PERMEABLE SOIL CUTOFF WALL EVERY 100 FT IN UTILITY TRENCHES EXCAVATED THROUGH BEDROCK.



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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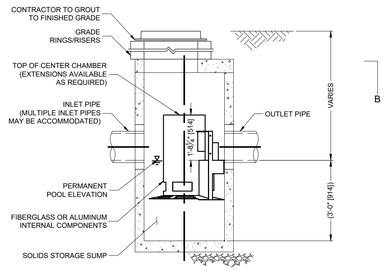
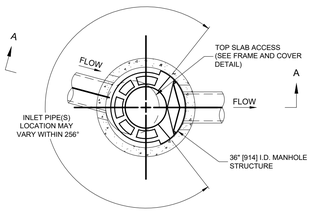
SCALE	1"=40'
DRAWN BY	KC
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

GRADING & DRAINAGE PLAN

C-131



ELEVATION A-A
NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE

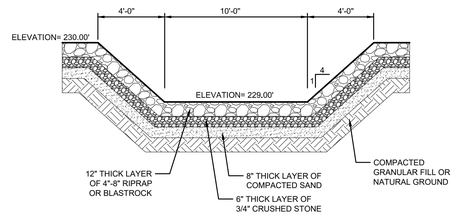
E1 WATER QUALITY UNIT - CS-3
N.T.S.

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

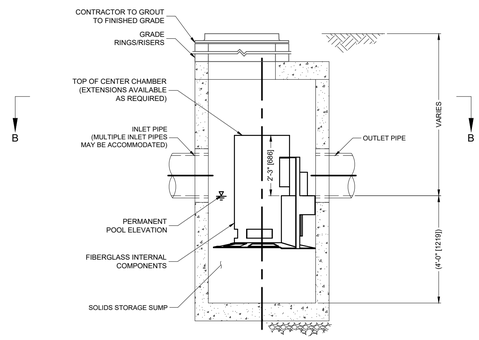
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
5660 Greenwood Plaza Blvd., Suite 455, Englewood, CO 80111
800-526-3999 303-796-2233 303-796-2239 FAX

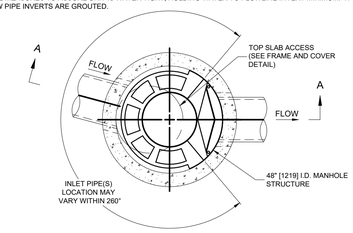
CS-3
CASCADE SEPARATOR
STANDARD DETAIL



E5 SPILLWAY SECTION
N.T.S.



ELEVATION A-A
NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE

C1 WATER QUALITY UNIT - CS-4
N.T.S.

GENERAL NOTES
1. CS-4 RATED TREATMENT CAPACITY IS 2.0 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
2. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
5. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
6. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
7. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
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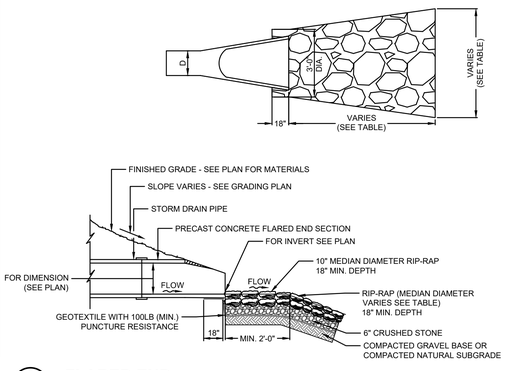
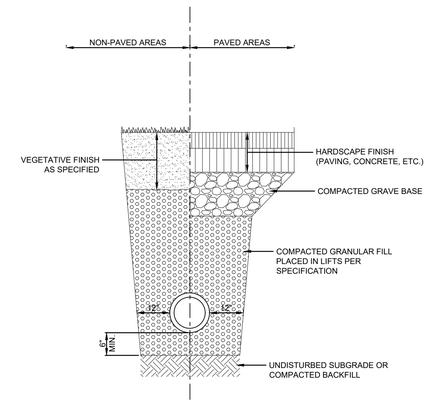
CS-4
CASCADE SEPARATOR
STANDARD DETAIL

	DETENTION BASIN INLET	FOUNDATION DRAIN OUTLET	INFILTRATION BASIN 1 OUTLET	INFILTRATION BASIN 2 OUTLET
LENGTH OF APRON, FT	22'-4"	16'-0"	7'-5"	7'-2"
WIDTH OF APRON, FT	26'-10"	10'-0"	10'-5"	10'-2"
MEDIAN STONE DIAMETER, IN	8"	6"	6"	6"

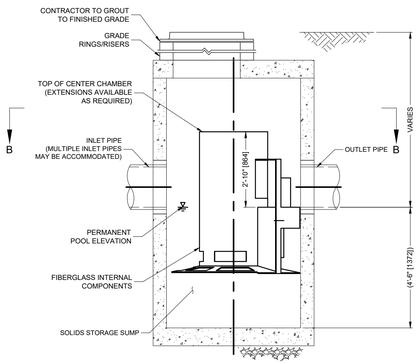


C5 FLARED END
N.T.S.

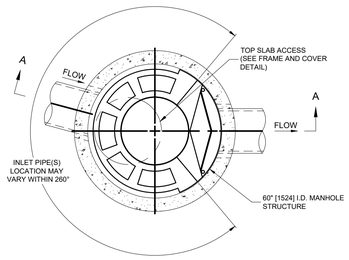
NOTE:
1. SEE APPLICABLE HARDSCAPE DETAIL FOR THICKNESS OF HARDSCAPE MATERIAL AND GRAVEL BASE COURSE.



C7 TRENCH SECTION - STORM DRAINS
N.T.S.



ELEVATION A-A
NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE

A1 WATER QUALITY UNIT - CS-5
N.T.S.

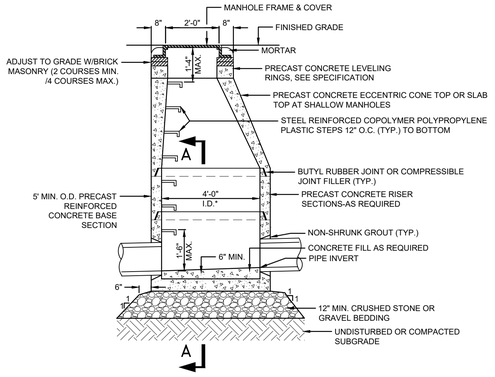
GENERAL NOTES
1. CS-5 RATED TREATMENT CAPACITY IS 3.50 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CS-5 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
2. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
5. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
6. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
7. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

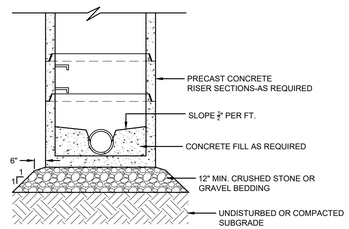
CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
5660 Greenwood Plaza Blvd., Suite 455, Englewood, CO 80111
800-526-3999 303-796-2233 303-796-2239 FAX

CS-5
CASCADE SEPARATOR
STANDARD DETAIL

NOTE:
1. STRUCTURE ADEQUATE FOR H-20 LOADING.
2. * PROVIDE 5' I.D, OR 6' I.D, SECTIONS AS REQUIRED FOR MULTIPLE/LARGE DIAMETER PIPES.



A5 PRECAST CONCRETE DRAIN MANHOLE
N.T.S.



SECTION A

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the Gutierrez company

THE RESIDENCES AT ASHLAND

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ASHLAND, MA

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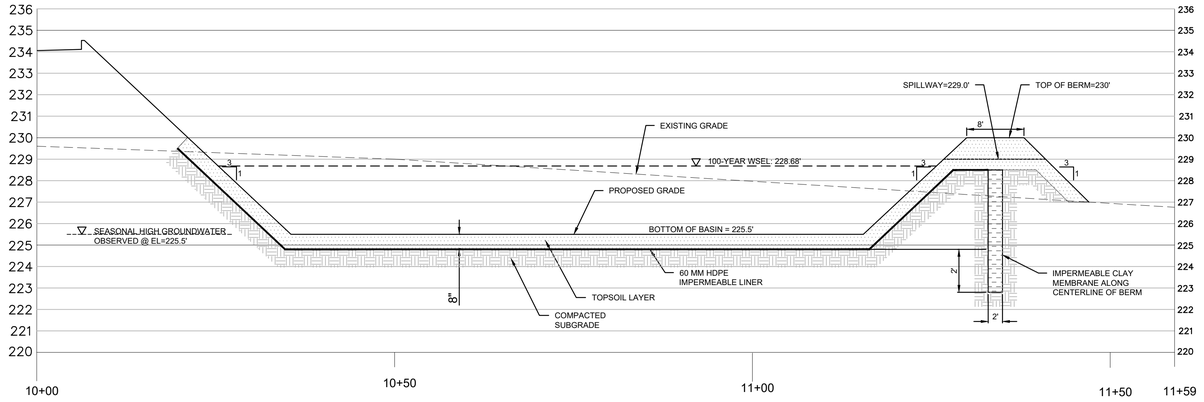
ISSUE LOG
△ = CLOUDED CHANGE

SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

DETAILS III

C-503

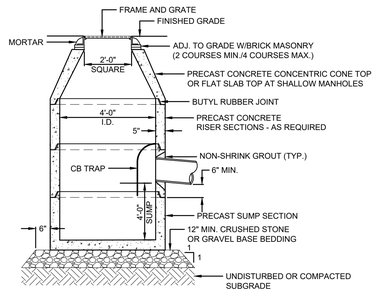


E1 SURFACE DETENTION BASIN - 1 SECTION A-A

H: 1"=10'; V: 1"=3.33' (3:1 VERTICAL EXAGGERATION)

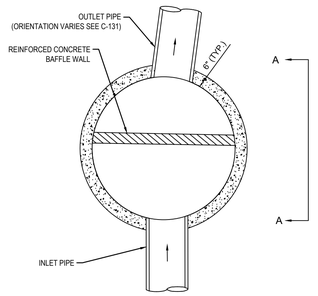
NOTES:

1. STRUCTURE ADEQUATE FOR H-20 LOADING.

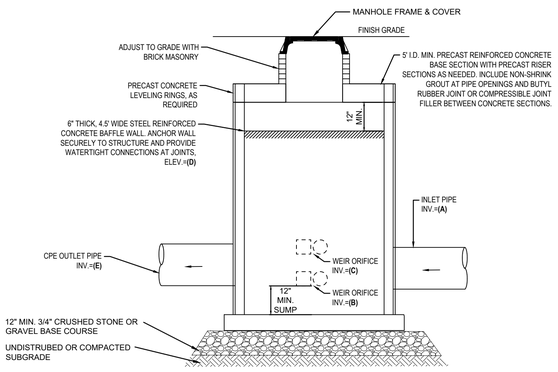


E7 PRECAST CONCRETE CATCH BASIN

N.T.S.



PLAN VIEW



ELEVATION (A-A SECTION)

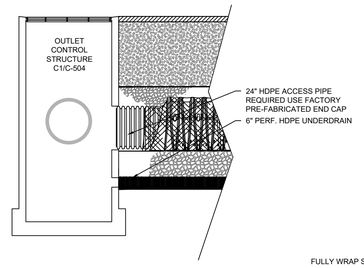
ELEVATION TABLE	"A"	"B"	"C"	"D"	"E"
OCS 1-1	216.75' 215.75'	215.75'	1/2"Ø	216.85	3"x3" (3) 219.80	215.75'
OCS 2-1	228.95'	229.00'	2"x2"	N/A	N/A	231.45	228.95'
OCS 3-1	231.25'	231.29'	2"Ø	N/A	N/A	233.95	231.25'

NOTES

1. STRUCTURE SHALL HAVE 5' INTERNAL DIAMETER
2. STRUCTURE MUST CONFORM WITH H-20 LOADING REQUIREMENTS
3. REFER TO GRADING AND DRAINAGE PLAN

C1 OUTLET CONTROL STRUCTURE

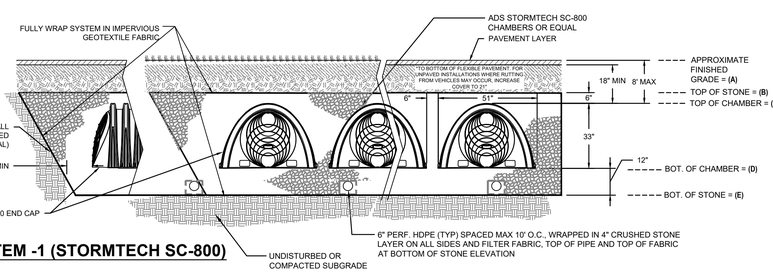
N.T.S.



NOTE:

1. REFER TO C-131 GRADING & DRAINAGE PLAN FOR MANIFOLD AND STUB LOCATIONS.
2. SC-800 CHAMBERS (OR APPROVED EQUAL) SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. SC-800 CHAMBERS (OR APPROVED EQUAL) SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

SUBSURFACE DETENTION SYSTEM (SDS) INFORMATION TABLE	
	SDS-1
TOTAL STORAGE	4,577 CF (60.70'x30.00')
INLET MANIFOLD PIPE ELEVATION	18" HDPE @ 216.75'
OUTLET MANIFOLD PIPE ELEVATION	24" HDPE @ 216.75'
APPROXIMATE FINISH GRADE RANGE **(A)**	221.75'-227.50'
TOP OF STONE **(B)**	220.0'
TOP OF CHAMBER **(C)**	219.50'
BOTTOM OF CHAMBER **(D)**	216.75'
BOTTOM OF STONE **(E)**	215.75'



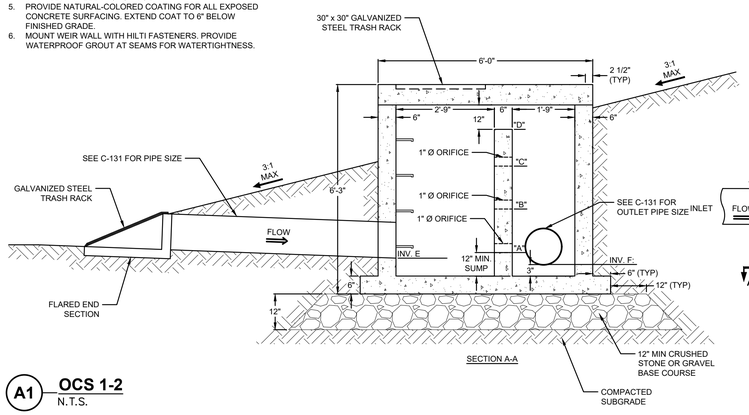
C5 SUBSURFACE DETENTION SYSTEM -1 (STORMTECH SC-800)

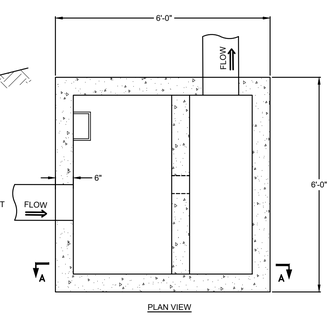
N.T.S.

NOTE:

1. STRUCTURE AND CASTINGS ADEQUATE FOR H-20 LOADING
2. SEE GRADING AND UTILITY PLAN FOR PIPE SIZES
3. GALVANIZED STEEL 19W4 TOP GRATE SECURED WITH 1/2"Ø STAINLESS STEEL ANCHOR BOLTS.
4. GALVANIZED STEEL TRASH RACK SECURED WITH 1/2"Ø STAINLESS STEEL ANCHOR BOLTS.
5. PROVIDE NATURAL-COLORED COATING FOR ALL EXPOSED CONCRETE SURFACING. EXTEND COAT TO 6" BELOW FINISHED GRADE.
6. MOUNT WEIR WALL WITH HILTI FASTENERS. PROVIDE WATERPROOF GROUT AT SEAMS FOR WATERTIGHTNESS.

ELEVATION TABLE	"A"	"B"	"C"	"D"	INV. E	INV. F	RIM
OCS 2-1	225.50	227.00	227.50	228.50	225.45	223.00'	230.00

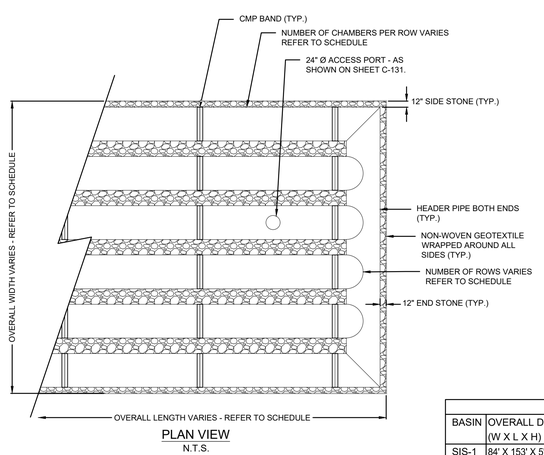




PLAN VIEW

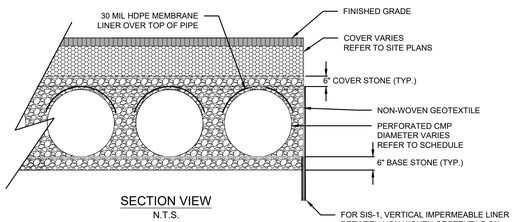
A1 OCS 1-2

N.T.S.



PLAN VIEW

N.T.S.



SECTION VIEW

N.T.S.

NOTES:

1. STRUCTURE SHALL MEET HS20 (AASHTO M 306) LOAD RATING.
2. CMP PIPE WALL TYPE: PERFORATED
3. STEEL GAGE: 14
4. COATING: ALUMINIZED STEEL
5. PROVIDE TWO (2) 1.5" Ø GALVANIZED STEEL DRIVE-POINT WELLS PER CHAMBER SYSTEM OUTSIDE THE FOOTPRINT OF THE SYSTEM. COORDINATE LOCATIONS WITH CIVIL ENGINEER PRIOR TO INSTALLATION.

SYSTEM DIMENSIONS AND ELEVATIONS SCHEDULE								
BASIN	OVERALL DIM. (W X L X H)	STORAGE VOL.	CMP PIPE INV.	NO. OF ROWS	CHAMBERS PER ROW	CMP PIPE DIAM.	BOTTOM OF STONE ELEV.	ESHGW (EL. FT)
SIS-1	84' X 153' X 5'	38,889 C.F.	227.00'	14	VARIES (REFER TO C-131)	48"	226.50'	<218.00'
SIS-2	60' X 130' X 5'	25,522 C.F.	229.50'	10	6	48"	229.00'	<225.00'*

*NO GROUND WATER OR REDOXIMORPHIC FEATURES OBSERVED IN TEST PITS. ESTIMATED SEASONAL HIGH GROUND WATER (ESHGW) ELEVATION NOT DETERMINED DUE TO REFUSAL AT LARGE BOULDERS. ESHGW ELEVATION BASED ON ADJACENT TEST PIT SH-TP-8.

A5 SUBSURFACE INFILTRATION SYSTEM (SIS)

N.T.S.

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the Gutierrez company

THE RESIDENCES AT ASHLAND

61 WAVERLY STREET
ASHLAND, MA

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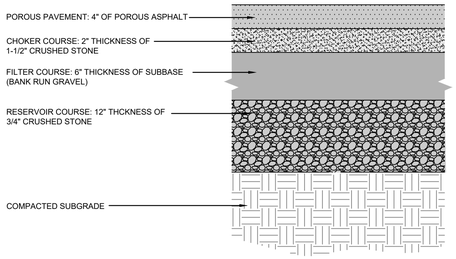
ISSUE LOG

△ = CLOUDED CHANGE

SCALE	NTS
DRAWN BY	JMK
CHECK BY	WWP
PROJ.ARCH./ENGR.	JAH
PROJ. MRG.	SAV
JOB NO.	24142.00

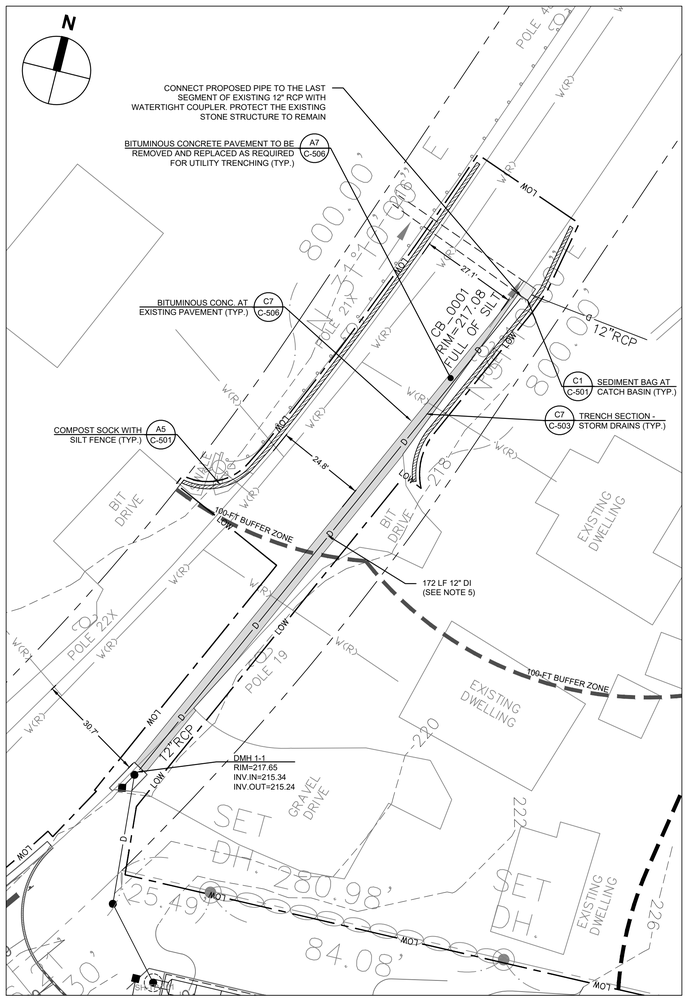
DETAILS IV

C-504



SECTION

E1 POROUS PAVEMENT
N.T.S.



A1 WAVERLY STREET 12" RCP REPLACEMENT
SCALE: 1" = 20'

NOTES:

1. THE 12" RCP REPLACEMENT SCOPE OF WORK SHOWN IS SCHEMATIC AND REQUIRES COORDINATION WITH AND APPROVAL BY THE ASHLAND DEPARTMENT OF PUBLIC WORKS PRIOR TO CONSTRUCTION.
2. COORDINATE WORK IN THE TOWN RIGHT-OF-WAY WITH THE ASHLAND DEPARTMENT OF PUBLIC WORKS.
3. REFER TO SHEET C-111 FOR EROSION CONTROL NOTES AND SHEET C-131 FOR UTILITY NOTES.
4. A MINIMUM COVER OF 24 INCHES SHALL BE MAINTAINED, WHERE PRACTICABLE DEPENDING ON EXISTING INVERTS.
5. PRIOR TO INSTALLATION CONFIRM THE INLET AND OUTLET ELEVATIONS AND INSTALL PROPOSED PIPE AT UNIFORM SLOPE

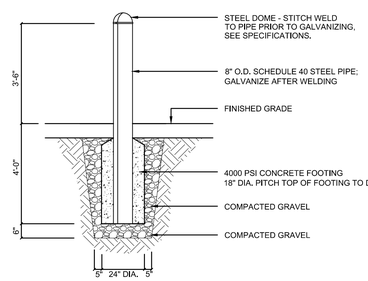
LEGEND

D	DRAIN LINE
CB	CATCH BASIN
DMH	DRAIN MANHOLE
LOW	LIMIT OF WORK
X X	SILT FENCE WITH STRAW WATTLE

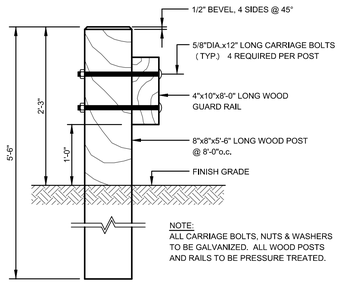
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



C5 STEEL BOLLARD
N.T.S.

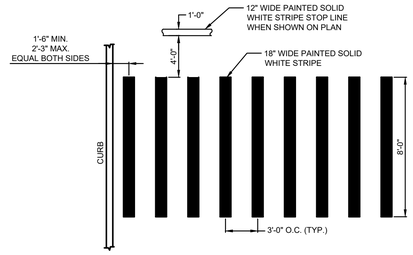


NOTE:
ALL CARRIAGE BOLTS, NUTS & WASHERS TO BE GALVANIZED. ALL WOOD POSTS AND RAILS TO BE PRESSURE TREATED.

A5 WOOD GUARDRAIL
N.T.S.

PARKING AND TRAFFIC SIGNS

SIGN	SIGN NUMBER	DIMENSIONS OF SIGN		DESCRIPTION	MOUNT HEIGHT (TO BOTTOM)
		WIDTH	HEIGHT		
STOP	R1-1	30"	30"	WHITE ON RED	7'-0"
RESERVED PARKING	R7-8	12"	18"	BLUE & GREEN ON WHITE	5'-6"
VAN ACCESSIBLE	R7-8P	18"	6"	GREEN ON WHITE	5'-0"
SPEED LIMIT 30	R2-1	24"	30"	BLACK ON WHITE	9'-4"
YOUR SPEED 42	W13-20	40"	40"	BLACK ON YELLOW	6'-0"
	W1-5	30"	30"	BLACK ON YELLOW	7'-6"
30 MPH	W13-1P	18"	18"	BLACK ON YELLOW	6'-0"
S1-1 AHEAD W16-9P	S1-1/ W16-9P	36"/ 24"	36"/ 12"	BLACK ON FLUORESCENT YELLOW	7'-0"/ 6'-0"
	W11-2	36"	36"	BLACK ON FLUORESCENT YELLOW	7'-9"
	W16-7PL	21"	15"	BLACK ON FLUORESCENT YELLOW	6'-0"
	W16-7PR	21"	15"	BLACK ON FLUORESCENT YELLOW	6'-0"
NO PARKING WHEN SNOW REMOVAL CONDITIONS EXIST	SPECIAL-1	12"	18"	RED ON WHITE	5'-0"
NOTICE NO LOADING NO DISCHARGE, DUMPING OR CLEANING	SPECIAL-2	18"	12"	BLUE AND BLACK ON WHITE	5'-0"
SHORT TERM PARKING 15 MINUTES MAXIMUM	SPECIAL-3	12"	18"	BLACK ON WHITE	5'-0"
RESERVED VISITOR PARKING	SPECIAL-4	12"	18"	BLACK ON WHITE	5'-0"
7 AM - 9 AM MON - FRI	SPECIAL-5	12"	18"	BLACK AND RED ON WHITE	6'-0"



A7 CROSSWALK
N.T.S.

smma

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DETAILS V

C-505