SOUTHGATE PLAZA - 7TH STREET APARTMENTS PARKING LOT & FRONTAGE IMPROVEMENTS

CIVIL CONSTRUCTION PLANS

CONTACTS

OWNER
ALEXANDER INVESTORS
PO BOX 448
MONTVILLE, NJ 07045
745-216-8982

ARCHITECT
MY ARCHITECT
504 MAIN ST, SUITE 480
LEWISTON, ID 83501
208-743-5902

GEOTECHNICAL SERVICES
ALLWEST TESTING & ENGINEERING, LLC
2705 E. MAIN STREET
LEWISTON, IDAHO

UTILITY PROVIDERS

SANITARY SEWER	LOSD (Urban Wessels)	208-791-9346
WATER	L.O.I.D. (Barney Metz)	208-746-8235
POWER	AVISTA (Colby Witters)	509-780-1475
TELECOM.	CENTURY LINK (Julio Mendez)	208-798-8380
CABLE T.V.	CABLEONE (Tom Donahue)	208-791-5032

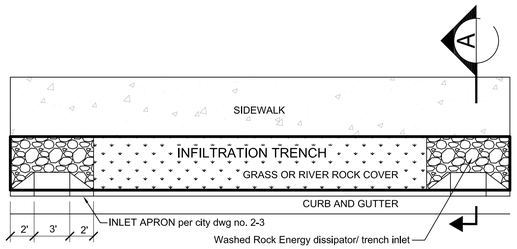
811 Know what's below. Call before you dig.

LEGEND

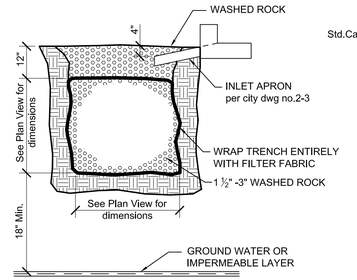
PROPOSED SAN. SEWER	EXISTING SAN. SEWER
PROPOSED STORM SEWER	EXISTING STORM SEWER
PROPOSED WATER LINE	EXISTING WATER LINE
PROPOSED FIRE PROTECTION	EXISTING FIRE PROTECTION
PROPOSED FENCE LINE	EXISTING OVERHEAD ELECTRICAL LINE
PROPOSED CATCH BASIN	EXISTING UNDERGROUND ELECTRICAL LINE
PROPOSED MANHOLE	EXISTING FENCE LINE
PROPOSED GATE VALVE	EXISTING CATCH BASIN
PROPOSED FIRE HYDRANT	EXISTING MANHOLE
PROPOSED THRUST BLOCK	EXISTING GATE VALVE
PROPOSED CONTOUR LINE	EXISTING FIRE HYDRANT
PROPOSED SPOT ELEVATION	EXISTING THRUST BLOCK
PROPOSED CENTERLINE MONUMENT	EXISTING WATER METER
PROPOSED CENTERLINE	EXISTING POWER POLE
PROPOSED EASEMENT LINE	EXISTING CONTOUR LINE
PROPERTY LINE	EXISTING SPOT ELEVATION
PROJECT BOUNDARY	EXISTING UTILITY
SILT FENCE	EXISTING PROPERTY LINE
	EXISTING CENTERLINE MONUMENT

CITY INSPECTION CHECKLIST

ITEM	MATERIAL	TEST / STANDARD	ACCEPTANCE	TEST FREQUENCY	INSPECTOR/CO.	DATE	INITIAL
1. ALL UTILITY TRENCHES & STRUCTURES							
TRENCH SUBGRADE	Native (6" to 8" Lifts Max.)	Moisture Density Relationship of Soils (AASHTO T 180) In-Place Density and Moisture Content (AASHTO 319 Method B)	90% Max. Dry Density	One in-place density test every lift per 100 linear feet. If project is less than 100 linear feet, one in-place density test per day OR per lift (whichever test frequency is more restrictive).	Allwest		
PIPE BEDDING	3/4" minus Crushed Aggregate (6" to 6" Max. Lift) (Current ITD Spec 703.64) OR 5/8" minus Crushed Aggregate (6" to 6" Max. Lift) (Current WDOT/M41-10 Spec 9-03.9)	Moisture Density Relationship of Soils (AASHTO T 180) In-Place Density and Moisture Content (AASHTO 319 Method B)	95% Max. Dry Density	One in-place density test every lift per 100 linear feet. If project is less than 100 linear feet, one in-place density test per day OR per lift (whichever test frequency is more restrictive).	Allwest		
1st FOOT (12") OF FILL OVER PIPE	3/4" minus Crushed Aggregate (6" to 6" Max. Lift) (Current ITD Spec 703.64) OR 5/8" minus Crushed Aggregate (6" to 6" Max. Lift) (Current WDOT/M41-10 Spec 9-03.9)	Moisture Density Relationship of Soils (AASHTO T 180) In-Place Density and Moisture Content (AASHTO 319 Method B)	95% Max. Dry Density	One in-place density test every lift per 100 linear feet. If project is less than 100 linear feet, one in-place density test per day OR per lift (whichever test frequency is more restrictive).	Allwest		
TRENCH BACKFILL UNDER PROPOSED ROAD & SIDEWALK	3/4" minus Crushed Aggregate (6" to 6" Max. Lift) (Current ITD Spec 703.64) OR 5/8" minus Crushed Aggregate (6" to 6" Max. Lift) (Current WDOT/M41-10 Spec 9-03.9)	Moisture Density Relationship of Soils (AASHTO T 180) In-Place Density and Moisture Content (AASHTO 319 Method B)	95% Max. Dry Density	One in-place density test every lift per 100 linear feet. If project is less than 100 linear feet, one in-place density test per day OR per lift (whichever test frequency is more restrictive).	Allwest		
STRUCTURAL FILLS	As Spec'd by Engineer	As Spec'd by Engineer		As Spec'd by Engineer			
2. STORM DRAIN MAINS							
Certified PE Storm Sewer Pipe	Polyethylene, ADS N-12 or Equal		Certified & Visual by City		Certified & Visual by City		
ALIGNMENT AND GRADE	N/A	Per Manufacturer's Instructions		Per Plan			
JOINTS (Deflection/Proper Pipe Embedment)	N/A	Per Manufacturer's Instructions		Each Joint			
PRESSURE TEST	N/A	4 PSI for 15 Minutes, 1/2 PSI Drop	If required by City Engineer	Between Access Holes			
MANHOLES	Concrete	City Standard		N/A	Certified & Visual by City		
VIDEO INSPECTION	N/A		Public Works Policy No 2012-2				
3. WATER MAINS							
DUCTILE IRON or PVC WATER MAIN	AWWA C-151, C-900, C-905 (Class as Req'd)		Certified & Visual by City		Certified & Visual by L.O.I.D.		
ALIGNMENT AND GRADE	N/A	AWWA C-600, AWWA C-605		Per Plan			
JOINTS (Deflection/Proper Pipe Embedment)	N/A	AWWA C-600, AWWA C-605		Each Joint			
THRUST BLOCKS	Concrete, 2500 PSI Min	Per Approved Plan/or City Std Eng # 4-4		Each Joint	Certified & Visual by L.O.I.D.		
HYDROSTATIC PRESSURE	N/A	2 Hrs, NTE Allowable Leakage Per AWWA C-600, AWWA C-605		150% Working Pressure OR 1½ times the Working Pressure in the Water System			
CHLORINATION/BACTERIA	N/A	AWWA C-651		Bacterial Testing: two negative testing samples 24 hours apart.	L.O.I.D.		
4. WASTEWATER MAINS							
PVC WASTEWATER MAIN	PVC, SDR 35	ASTM 3034		N/A			
ALIGNMENT AND GRADE	N/A	N/A		Per Plan			
JOINTS (Deflection/Proper Pipe Embedment)	N/A	Per Manufacturer's Instructions		Each Joint			
MANHOLES	Concrete	Hydrostatic Test		Each Joint			
PRESSURE TEST	N/A	4 PSI for 15 Minutes, 1/2 PSI Drop		Between Access Holes			
VIDEO INSPECTION	N/A	No Perforations, Dents or Dimples, No Belles > 0.02"	Public Works Policy No 2012-2	Between Access Holes			
5. CONCRETE CURB, GUTTER & SIDEWALK							
CONCRETE	CLASS 3SB - Approved Mix Design (Required with Min Cement Content of 560 LB/CY, Max Water/Cement Ratio of .44, w/WRA, and an AEA	AASHTO T-22 Compressive Strength of Concrete AASHTO T-23 Making Test Specimens AASHTO T-119 Slump of Hydraulic Cement Concrete AASHTO T-152 Air Content of Freshly Mixed Concrete AASHTO T-309 Temperature of Freshly Mixed Concrete WAQTC TM-2 Sampling Freshly Mixed Concrete	Min. 28 day Compressive Strength = 3000 psi, Water/Cement Ratio shall be 0.5 lb/lb Max. Slump = 5 inches Air Content Percent = 6.5% ± 1.5 Temperature = 50°F - 90°F	1 of Each Test Minimum per Day, or 1 of Each Test per 50 CY	Allwest		
CRUSHED AGGREGATE BASE COURSE	3/4" minus Crushed Aggregate (4" Max. Lift) (Current ITD Spec 703.64) OR 5/8" minus Crushed Aggregate (4" Max. Lift) (Current WDOT/M41-10 Spec 9-03.9)	Moisture Density Relationship of Soils (AASHTO T 180) In-Place Density and Moisture Content (AASHTO 319 Method B)	95% Max. Dry Density	1 Tests Per 500 LF-Min 2 Tests	Allwest		
ALIGNMENT AND GRADE	N/A	Visual	± 0.02' from Design Grade/Alignment	Per 10' Section	City Approval		
JOINTS/FLATNESS/SMOOTHNESS	N/A	Visual	± 0.02'/10' Segment	Per 10' Section			
FINISH	N/A	Visual	Floated, Uniform, Light Broom Finish	Entire Surface Area	City Approval		
6. ASPHALTIC CONCRETE PAVING							
SUPERPAVE HOT MIX ASPHALT	ITD 406 Superpave Class SP2, SP3 and SP5 (2012 ITD Spec 405 and 703.09)	**Class SP2:** AASHTO T-308, Asphalt Content AASHTO T-27 & T-11, Sieve Analysis WAQTC TM-8, In-Place Density of Bituminous Mixes AASHTO T-209, Theoretical Maximum Density (RICE) **Class SP3 and SP5:** AASHTO T-308, Asphalt Content AASHTO T-27 & T-11, Sieve Analysis AASHTO T-164 Method A, Air Voids, and Voids in Mineral Aggregates (VMA) WAQTC TM-8, In-Place Density of Bituminous Mixes AASHTO T-209, Theoretical Maximum Density (RICE)	**ITD Section 405.03** Asphalt Content - CJMF Value +/- 0.3% Sieve Analysis - Table 405.03-5 Air Voids - 4.0 +/- 1.0% Voids in Mineral Aggregates, at N design, 703.06 Minimum Value 0.060 Voids Filled with Asphalt - Table 703.05-1 +/- 5 In-Place Density - 90.66% of Maximum Theoretical	1Test Per 750 Ton, Minimum of 1 Test per Project. Random Sample Locations Determined by City Engineer	Allwest		
CRUSHED AGGREGATE BASE COURSE*	Same test requirement as under **5. Concrete Curb, Gutter & Sidewalk**						
7. EROSION & SEDIMENT CONTROLS	Per Approved Plan	Per Plan and Manufacturers' Instructions		1/Wk or After Every Rainfall	Contractor		
8. TRAFFIC CONTROL	Per Approved Plan	Current Adopted MUTCD/ITSSA		Continuous	Contractor		
9. PRIVATE STORMWATER SYSTEM	Per Approved Plan	City Resolution #80-109	Certified & Visual by City		Certified & Visual by City - Underground Infrastructure elements must be approved by City prior to backfill		
10. RECORD DRAWINGS	AutoCAD Effect File, Bond Paper, 22" x 34" Min Size	City Checklist		Before Public Improvements Accepted	HEDCO, Inc.		
11. ENGINEER'S CERTIFICATION							
Date Last: Revised September 2016							



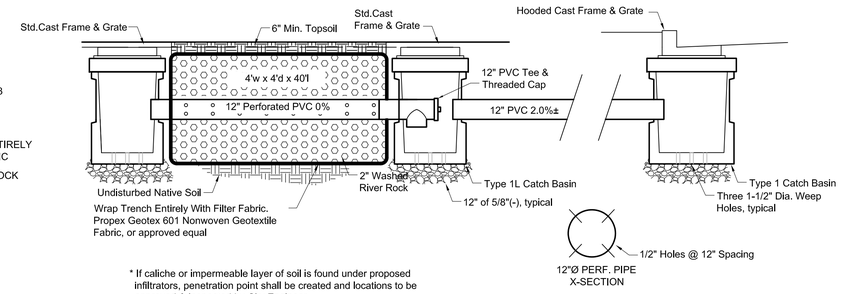
* If caliche or impermeable layer of soil is found under proposed infiltrators, penetration point shall be created and locations to be approved & inspected by City Engineer.



TYPICAL INFILTRATION TRENCH DETAIL

SECTION A

NTS 1636-C8

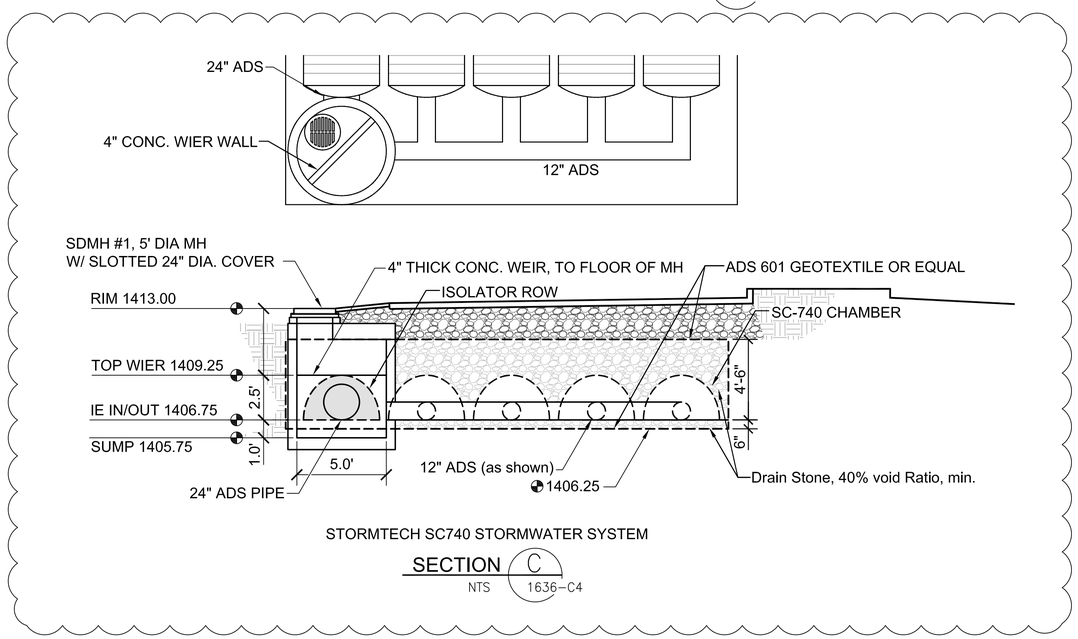


* If caliche or impermeable layer of soil is found under proposed infiltrators, penetration point shall be created and locations to be approved & inspected by City Engineer.

INFILTRATION TRENCH SYSTEM

SECTION B

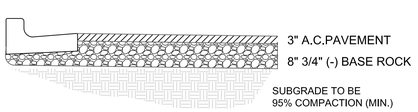
NTS 1636-C9



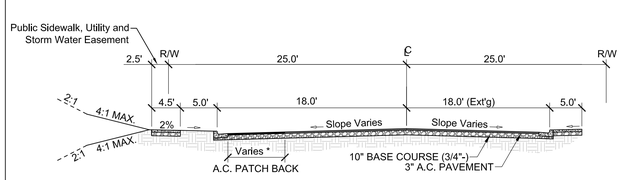
STORMTECH SC740 STORMWATER SYSTEM

SECTION C

NTS 1636-C4



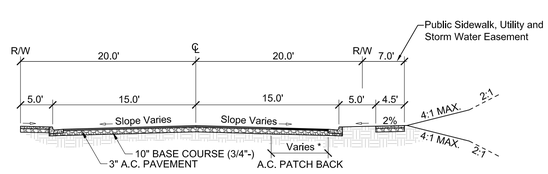
PARKING LOT SECTION



LOCAL RESIDENTIAL STREET

****MODIFIED STD. DWG. NO. 3-9**

(7TH STREET)



LOCAL RESIDENTIAL STREET

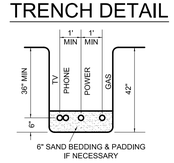
****MODIFIED STD. DWG. NO. 3-4**

(LINDEN AVENUE)

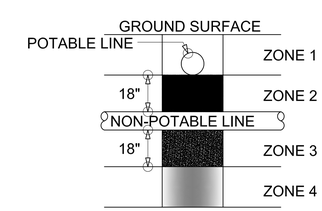
NOTES:

1. ALL EARTHWORK SHALL BE COMPACTED TO 95% OF AASHTO T-99 PROCTOR VALUE.
2. ALL POTABLE WATER LINES RUNNING FROM MAIN TO METERS WILL BE 2" AND METERS WILL BE 1" TYP.
3. SANITARY SEWERS SHALL HAVE 3.0' MIN. COVER & SERVICE LATERALS SHALL HAVE 2.0% MIN. GRADE. STORM DRAINS SHALL HAVE 2.0' MIN. COVER
4. ALL PARKING & DRIVEWAY AREAS ARE TO BE PAVED WITH 2.5" A.C. & 8" AGGREGATE BASE ROCK OVER GEOTEXTILE FABRIC.
5. ALL PARKING STALLS ARE TO BE PERMANENTLY MARKED WITH STRIPES AND SIGNS AT THE HANDICAP STALLS, TO LEWISTON CITY STANDARDS.
6. ALL WORK DONE WITHIN CITY RIGHT OF WAY TO BE DONE IN ACCORDANCE WITH CITY STANDARDS.
7. SANITARY SEWER PIPING AND MANHOLES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH CITY OF LEWISTON STANDARDS.
8. ALL AVISTA CONDUITS WILL BE SCHEDULE 40 GRAY ELECTRICAL CONDUIT (LARGE SWEEPS, LONG COUPLERS)
9. A RIGHT-OF-WAY PEMIT SHALL BE OBTAINED THROUGH THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY WORK WITHIN PUBLIC RIGHT-OF-WAY.
10. SITE DISTANCES FOR ABUTTING PROPERTIES, DRIVEWAYS AND INTERSECTIONS SHALL BE MAINTAINED.
11. EROSION AND DUST CONTROL MEASURES MUST BE USED DURING CONSTRUCTION TO REDUCE OR ELIMINATE BLOWING DUST, EXCESSIVE RUNOFF AND SOIL EROSION ACROSS PROPERTY LINES AND INTO STREET RIGHT-OF-WAY, AN TO ELIMINATE TRACKING SOIL AND MUD ONTO STREETS FROM CONSTRUCTION EQUIPMENT AND VEHICLES. THE CONTRACTOR IS RESPONSIBLE FOR STREET CLEANUP AT THE END OF EACH SHIFT.
12. ALL CONSTRUCTION NOT SPECIFICALLY MENTIONED OR SHOWN SHALL CONFORM TO CITY ORDINANCES AND STANDARDS.

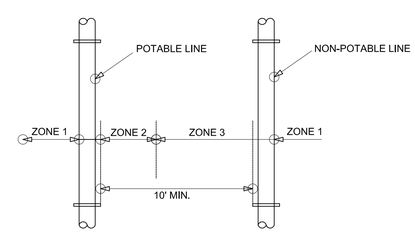
FRANCHISE UTILITIES TRENCH DETAIL



LINE CROSSINGS



LINE SEPARATIONS



ZONE 1: (MORE THAN 10 FEET APART)

ZONE 2: (FROM 6 TO 10 FEET APART)
* Potable and Non-Potable mains separated by at least 6 feet at outside walls and
* Potable main higher in elevation than Non-Potable mains and
* Non-Potable mains constructed to with Potable water class pipe and pressure tested for water-tightness.

Zone 3 : (CLOSER THAT 6 FEET APART)
* For Mains and Services, Design Engineer to submit data to Department for review and approval that this intuallation will protect public health and environment and non-potable line constructed with potable water class pipe.

ZONE 1:
A) Potable Water and Non-potable Mains and Service Lines must be separated by at least 18 inches and

B) One full, uncut length of Non-Potable pipe must be centered so that the joints are as far as possible from the crossing.

ZONE 2: Potable line<18" over the top of Non-Potable line (Main and Services).

A) One full, uncut length of Non-Potable Water pipe must be centered on the crossing so that the joints are as far as possible from the Non-Potable line and

either B)

Non-Potable line must be constructed to Potable water pipe standards and pressure tested for water tightness for a horizontal distance of 10 feet on both sides of crossing,

or C)

Non-Potable or potable line must be cased in a larger diameter carrier pipe for a horizontal distance of 10 feet on both sides of the crossing, with no joints.

ZONE 3: Same requirements as Zone 2 except the Non-Potable line must also be supported above the crossing to prevent settling.

ZONE 4: Same requirements as Zone 1 except the Non-potable line must also be supported above the crossing to prevent settling.

Sewage mains shall have at least eighteen inches of clearance from Potable Water mains and Zones 2 and 3 placements are prohibited. Separation requirements also apply to Potable and Non-Potable service lines controlled by the system owner and extending to the property line, service meter, or cleanout. Refer to IDAPA 58.01.01.542.07: Idaho Rules for Public Drinking Water Systems and IDAPA 58.01.16.430.o Idaho Wastewater Rules.

REV NO	DATE	REVISION DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inc, Watermain, FH location		

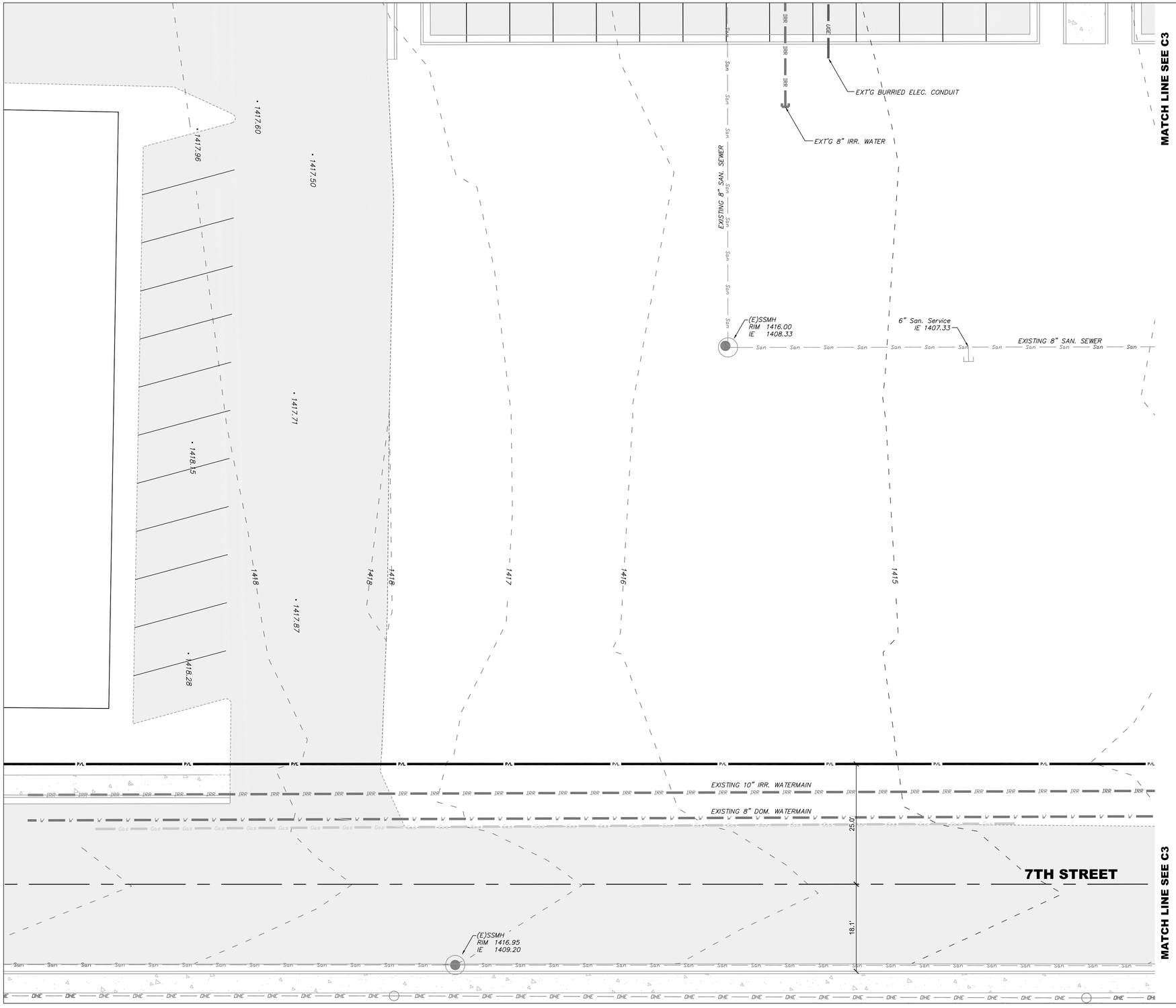
REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, AND PROFESSIONAL GEOLOGIST — STATE OF IDAHO — JOHN SHAMMEN — #21092 — 11/01/17

SCALE	SHEET SIZE D	CHECKED BY JSH
DRAWN BY MEE	JOB # 1636	
DATE 7-06-17	SHEET C0	
DRAWING # 1603-C0		

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
DETAILS & NOTES
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET **C1**



10 0 10 20 30

Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)

REV NO	DATE	REVISION DESCRIPTION	CHECKED	APPD.

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, AND OFFICIAL
#21092
STATE OF IDAHO
JACK SHAMMO
7/6/17

SCALE	1"=20'
SHEET SIZE	D
DRAWN BY	MEE
CHECKED BY	JSH
DATE	7-06-17
JOB #	1636
SHEET	C2
DRAWING #	1603-C2

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
EXISTING SITE DEVELOPMENT PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C2

MATCH LINE SEE C6

S1

S1

EXISTING 8" SAN. SEWER

6" San. Serice
IE 1405.36

6' San. Service
IE 1403.87

(E)SSMH
RIM 1410.60
IE 1403.05

LINDEN AVENUE

8" CONC. San. Sewer @ 0.48%

20.0'

14.9'

1414

1413

1412

1411

1410

EXT'G FIBER OPTIC H.H.

EXT'G FH
14-62
(RELOCATE)

EXT'G UTILTIY POLE
(RELOCATE)

2" G.S. IRR.

6" C900 DOM.

8" C900 IRR.

10" STL. IRR.

8" STL. IRR.

8" C900 DOM.

8" C900 DOM.

25.0'

18.1'

7TH STREET

MATCH LINE SEE C6

321 L.F. 8" CONC. San. Sewer @ 2.22%

(E)SSMH
RIM 1410.36
IE W 1402.43
IE N/S 1402.06

10 0 10 20 30

Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)

REV NO	DATE	REVISION DESCRIPTION	CHECKED	APPD.

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR AND PROJECT MANAGER
#21092
STATE OF IDAHO
JACK SHAMMO
7/6/17

SCALE	1"=20'
SHEET SIZE	D
DRAWN BY	MEE
CHECKED BY	JSH
DATE	7-06-17
JOB #	1636
SHEET	C3
DRAWING #	1603-C3

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
EXISTING SITE DEVELOPMENT PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO

HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE, LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C3

Ext'g 8" C900 WATERLINE
C 1336-C1
S1
MATCH LINE SEE C5
EXISTING 8" SAN. SEWER
25 L.F. 8" C900 WATERLINE
31 L.F. 8" C900 WATERLINE
(E)SSMH
RIM 1415.10
IE 1408.33
StormTech SC740 Stormwater System
(5 rows of 4 chamber sections)
SDMH# 1
w/ Slotted Cover
6" San. Service
IE 1407.33
60 L.F. 10" PVC
EXISTING 8" SAN. SEWER
6" PVC Tightline
8" PVC Tightline
96 L.F. 8" C900 WATERLINE
BLDG. SOUTH
FF 1414.5
BLDG. NORTH
FF 1413.5
S2
New Public Stormwater Easement
New FH & 6" G.V.
2"HDPE Water Service
EXISTING 10" IRR. WATERMAIN
EXISTING 8" DOM. WATERMAIN
7TH STREET
(E)SSMH
RIM 1416.95
IE 1409.20
Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)

REV NO	DATE	REVISION DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inc, Watermain, FH location		

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, AND PROFESSIONAL AGRONOMIST
#21102
STATE OF IDAHO
7/6/17

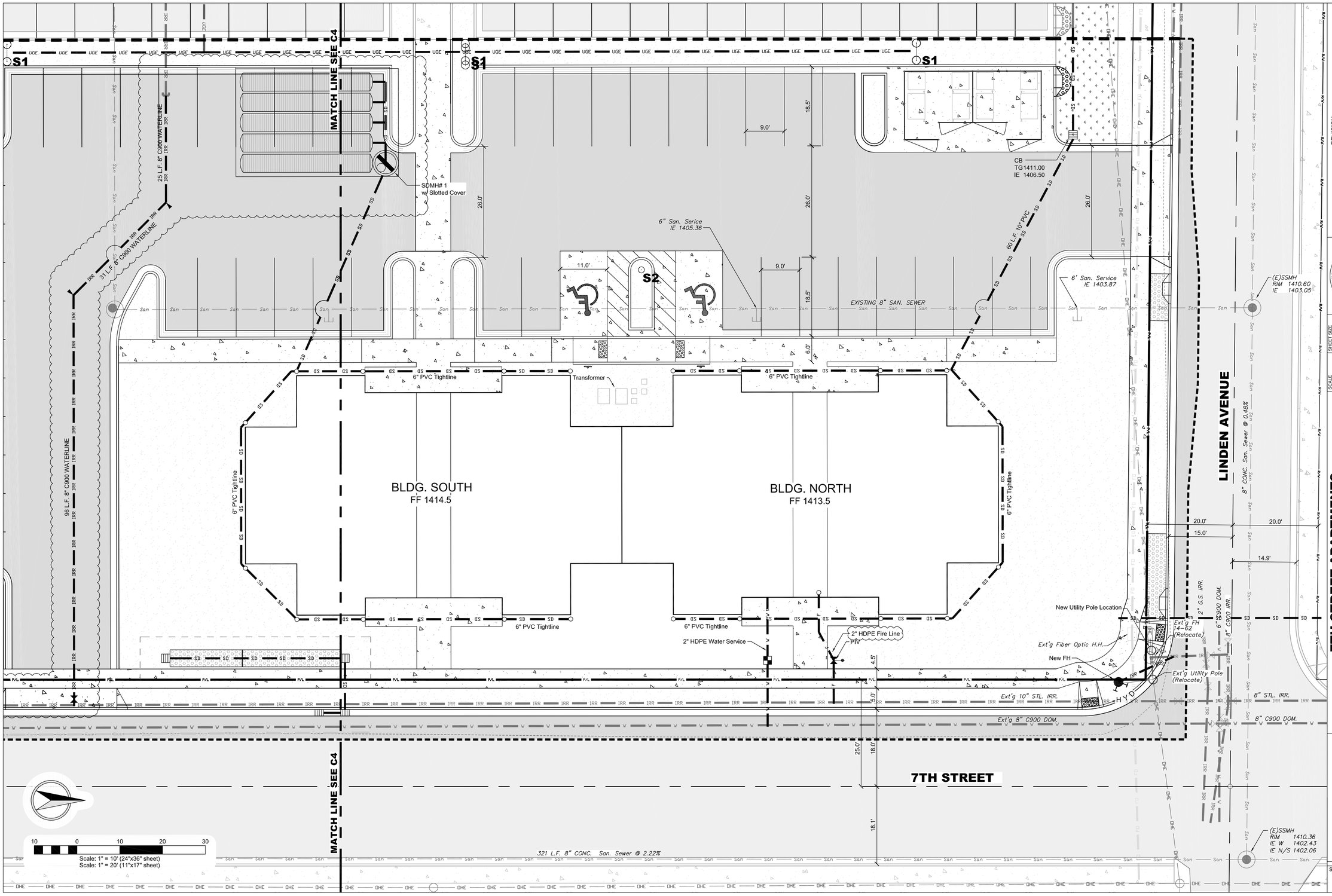
SCALE	1"=20'
DRAWN BY	MEE
DATE	7-06-17
SHEET	C4
DRAWING #	1603-C4
SHEET SIZE	D
CHECKED BY	JSH
JOB #	1636

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
SITE DEVELOPMENT PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO

HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C4



REV NO	DATE	DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inv, Watermain, FH location		

REVISION

ENGINEER, LAND SURVEYOR, OFFICIAL REGISTERED PROFESSIONAL STATE OF IDAHO #21102

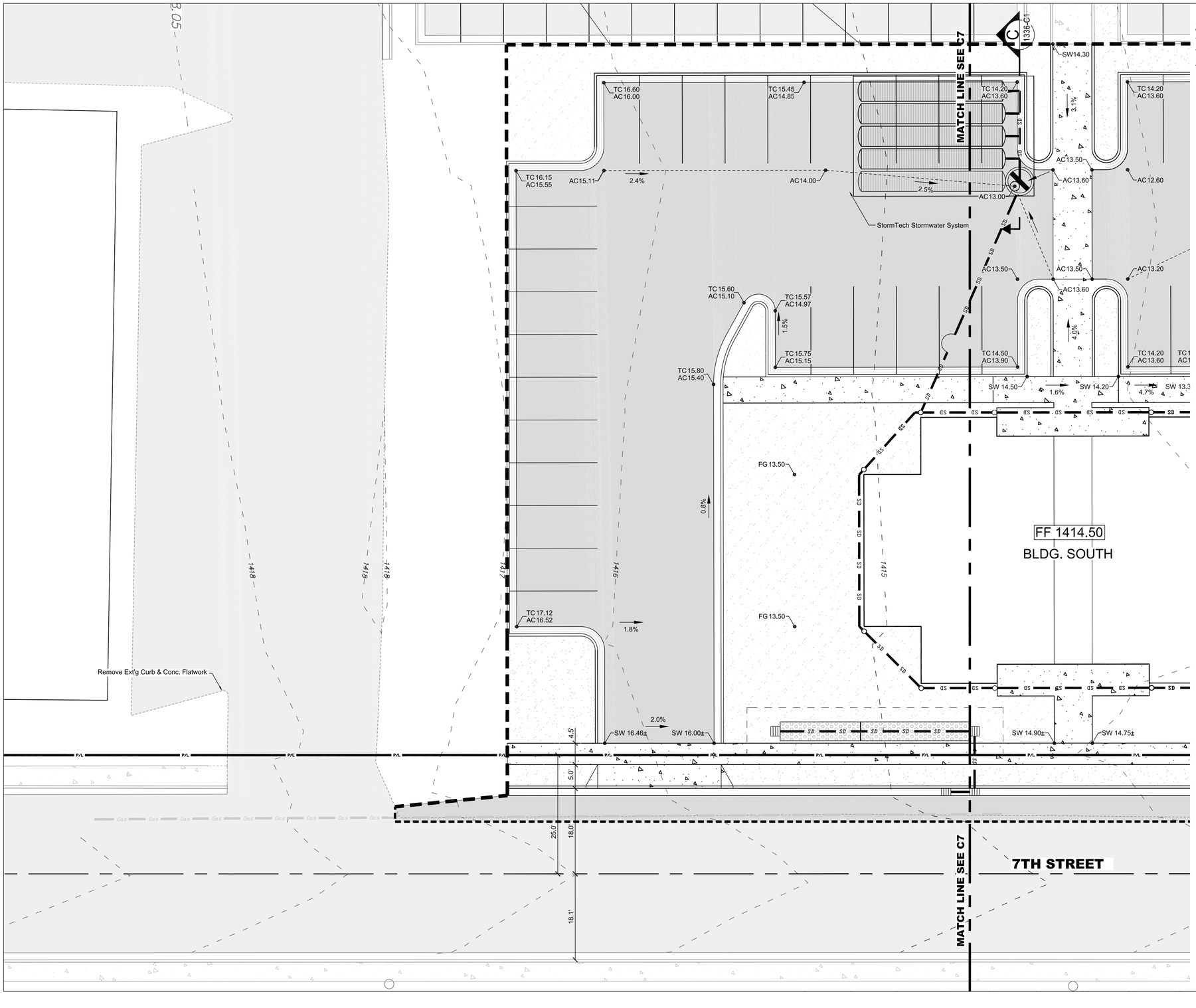
SCALE	1"=20'
DRAWN BY	MEE
DATE	7-06-17
SHEET	C5
SHEET SIZE	D
CHECKED BY	JSH
JOB #	1636
DRAWING #	1603-C5

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
SITE DEVELOPMENT PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO

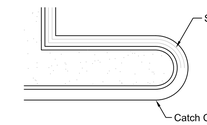
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE, LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C5



NOTES:

1. Open face gutter shall be constructed where drainage is directed away from curb.
2. Transitions from open face to standard curb and gutter are to be smooth. Hand form these areas if necessary.
3. Open face gutter locations are indicated by shading and notes on the grading plan.



10 0 10 20 30

Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)

REV TYPE	DATE	REVISION DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inc. Watermain, FH location		

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, AND PROFESSIONAL GEOLOGIST
STATE OF IDAHO
JACK SHAMMAS
#21102
APPROVED
7/6/17

SCALE 1"=20'	SHEET SIZE D		
DRAWN BY MEE	CHECKED BY JSH		
DATE 7-06-17	JOB # 1636		
SHEET C6			
DRAWING # 1603-C6			

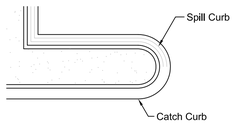
7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
SITE GRADING PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE, LEWISTON, IDAHO 83501
(208) 799-5422

SHEET
C6

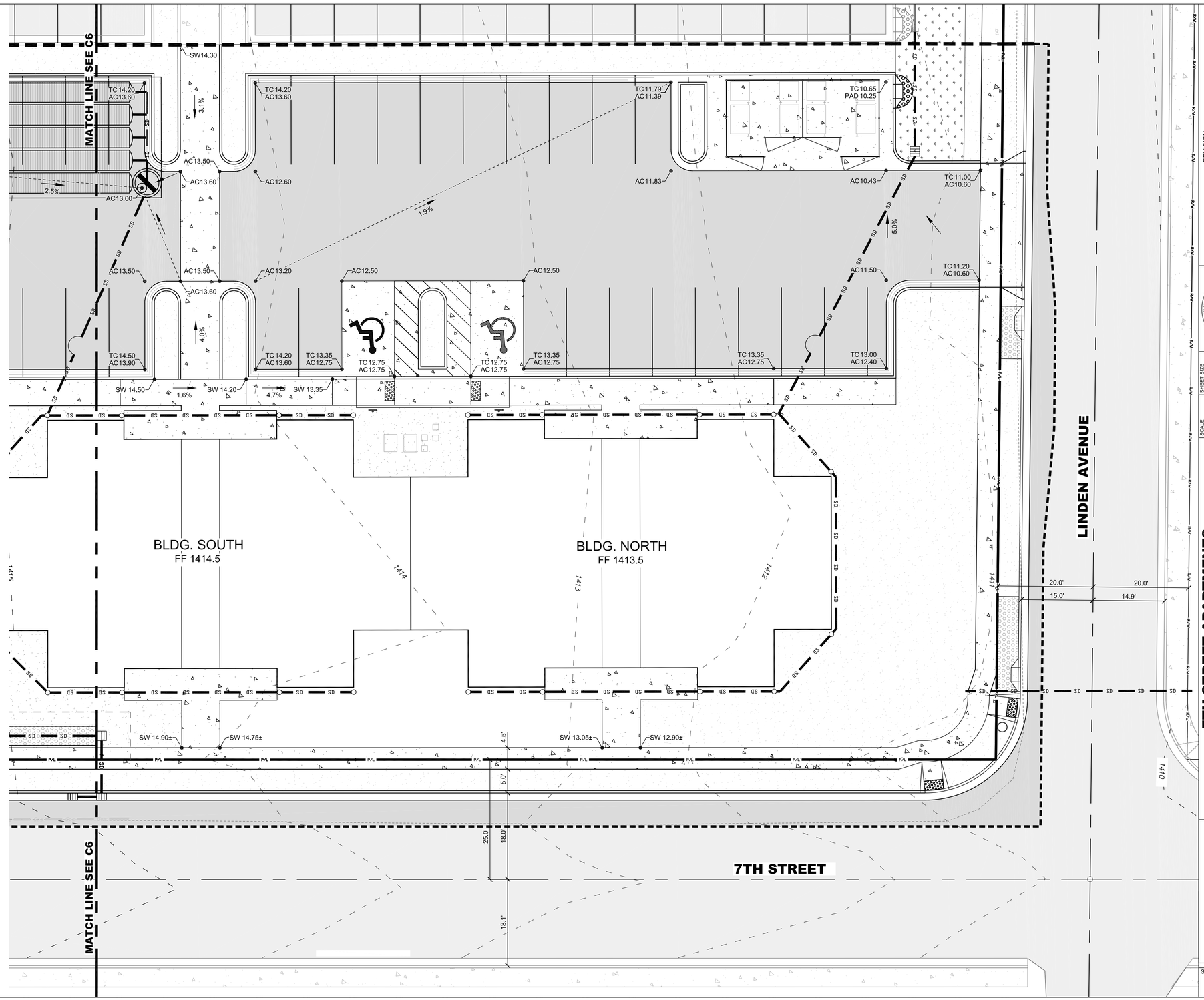
NOTES:

1. *Open face gutter shall be constructed where drainage is directed away from curb.*
2. *Transitions from open face to standard curb and gutter are to be smooth. Hand form these areas if necessary.*
3. *Open face gutter locations are indicated by shading and notes on the grading plan.*



10 0 10 20 30

Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)



REV NO	DATE	REVISION DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inc, Watermain, FH location		

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR AND PROFESSIONAL SOIL SCIENTIST
#21102
STATE OF IDAHO
JACK SHAMMO
7/6/17

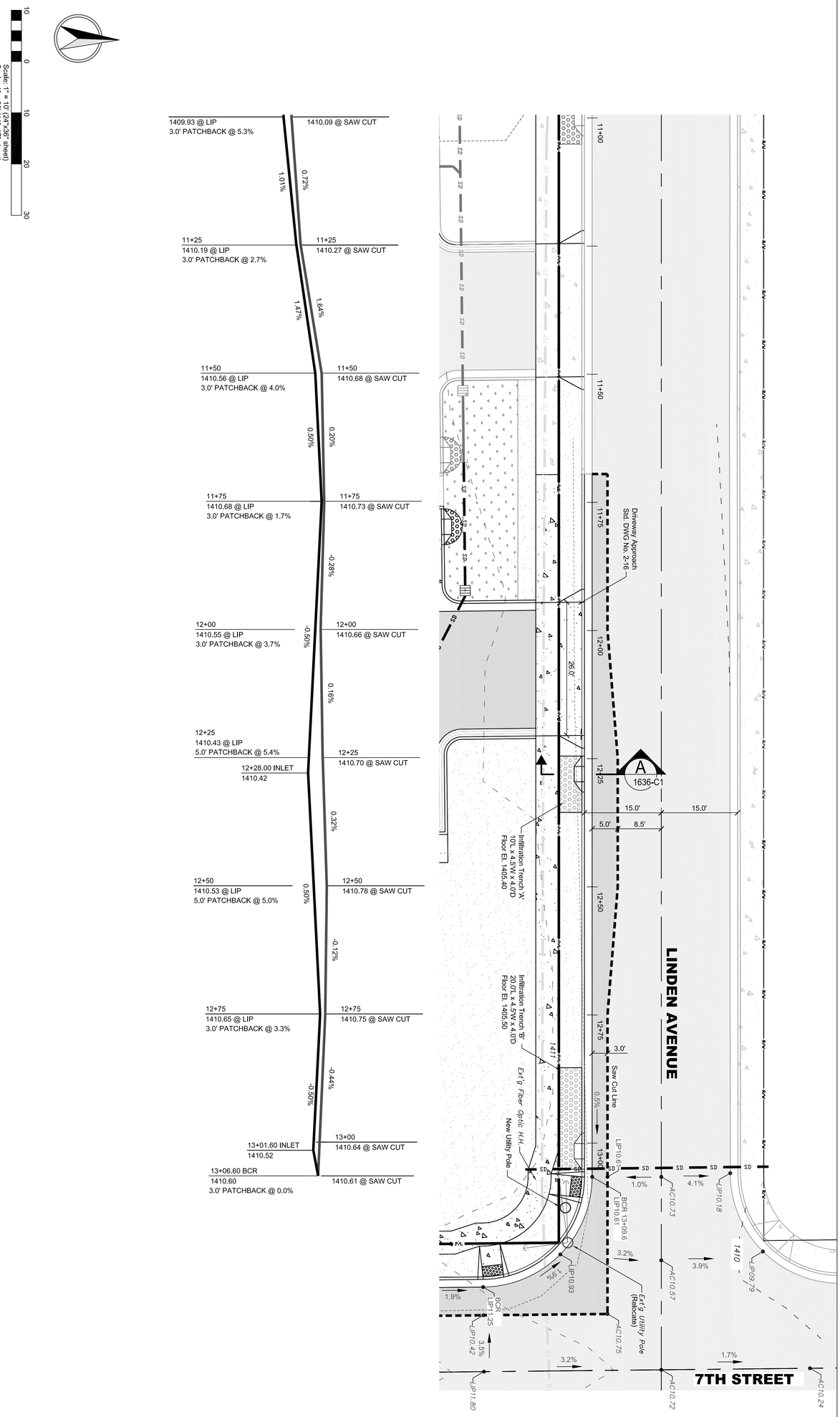
SCALE 1"=20'	SHEET SIZE D	CHECKED BY JSH	
DRAWN BY MEE		JOB # 1636	
DATE 7-06-17		SHEET C7	
DRAWING # 1636-C7			

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
SITE GRADING PLAN
ALEXANDER INVESTORS
LEWISTON, IDAHO

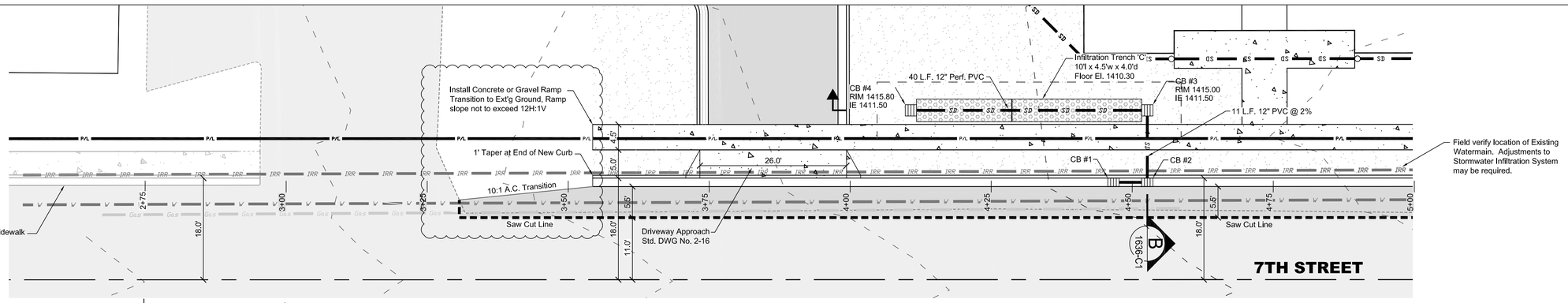
HEDCO

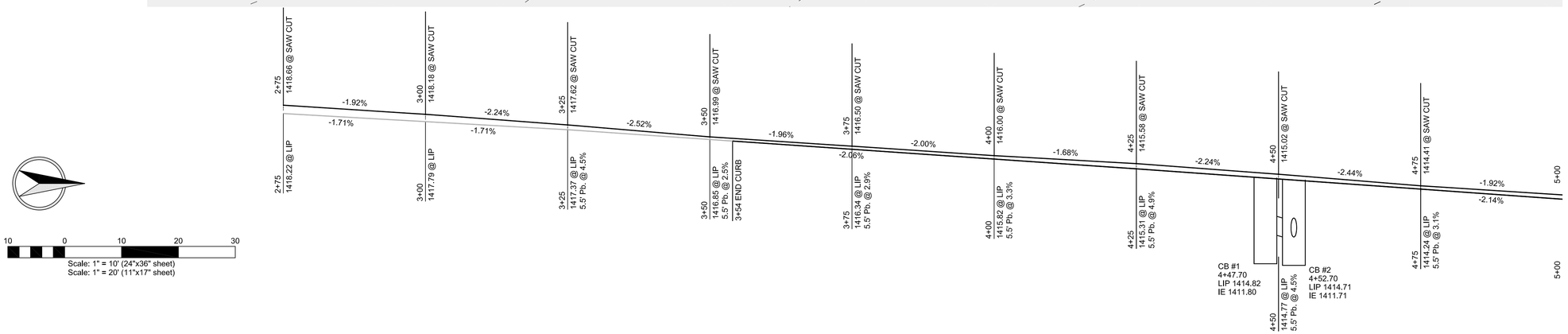
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE, LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C7

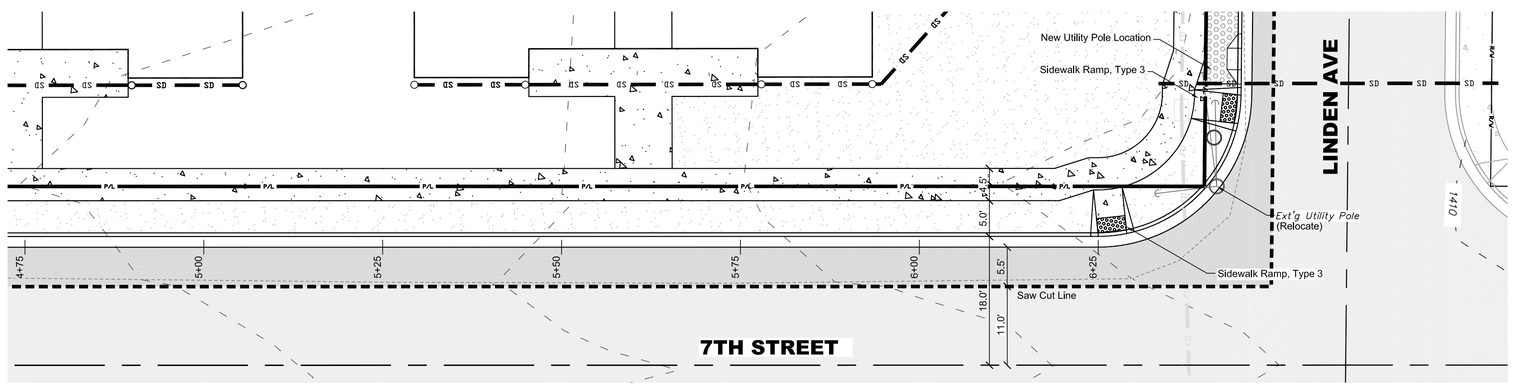


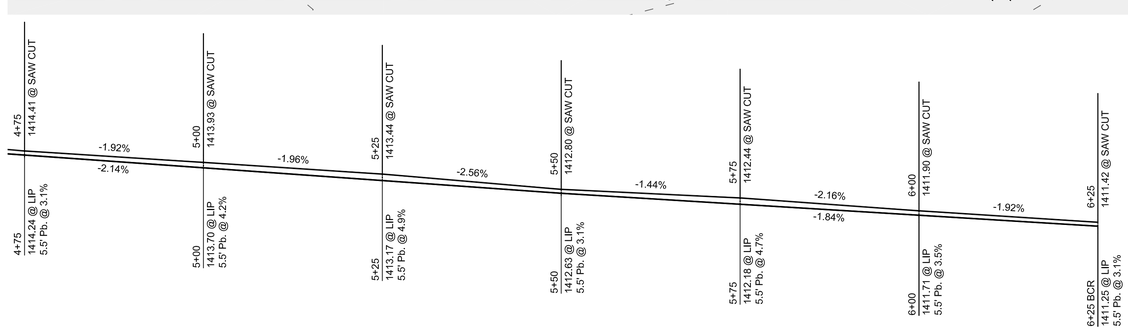
SHEET						
C8	HEDCO HAMMOND ENGINEERING & DEVELOPMENT CO. 528 BRYDEN AVENUE LEWISTON, IDAHO 83501 (208) 798-5422	**7TH STREET APARTMENTS** **PARKING LOT & FRONTAGE IMPROVEMENTS** **LINDEN AVE FRONTAGE IMPROVEMENT PLANS** **ALEXANDER INVESTORS** **LEWISTON, IDAHO**	SCALE 1"=20' SHEET SIZE D DRAWN BY MEE CHECKED BY JSH DATE 7-06-17 JOB # 1636 SHEET C8 DRAWING # 1636-C8	REGISTERED PROFESSIONAL ENGINEER #2102 JACK S. HAMMOND STATE OF IDAHO 7/6/17	REVISION REV TR / DATE / DESCRIPTION / CHECKED / APPD. A / 11-01-17 / Revised Project Boundary, Stormtech System, Irr, Watermain, FH location	





Scale: 1" = 10' (24"x36" sheet)
Scale: 1" = 20' (11"x17" sheet)





REV NO.	DATE	REVISION DESCRIPTION	CHECKED	APPD.
A	11-01-17	Revised Project Boundary, Stormtech System, Inc. Watermain, FH location		

REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, AND PROFESSIONAL SOLE PROPRIETOR
STATE OF IDAHO
JACK SHAMMAS
#21102
7-6-17

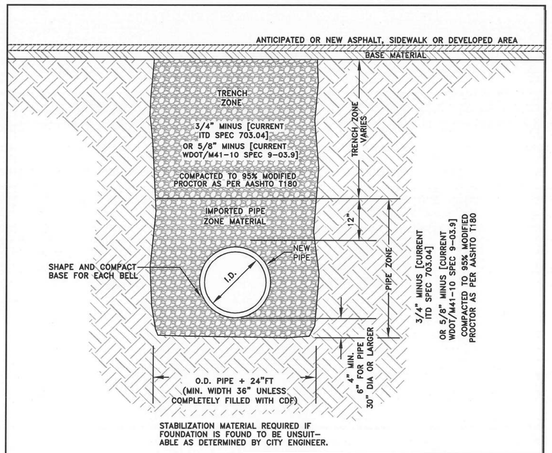
SCALE	1"=20'
DRAWN BY	MEE
DATE	7-06-17
SHEET	C9
SHEET SIZE	D
CHECKED BY	JSH
JOB #	1636
DRAWING #	1636-C9

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
7TH ST FRONTAGE IMPROVEMENT PLANS
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO

HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE, LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C9



CLASS 'D' 'NEW STREET CONSTRUCTION' BACKFILL SHALL BE USED IN AREAS WHERE ASPHALT PAVEMENT, CONCRETE CURB, SIDEWALK, DRIVEWAYS & GRAVEL SURFACING IS ANTICIPATED.

NOTES:

1. CONTRACTOR SHALL COMPLY WITH THE MOST CURRENT OSHA REQUIREMENTS FOR EXCAVATIONS.
2. CLASS 'D' BACKFILL SHALL COMPLY WITH REQUIREMENTS OF THE CITY'S STANDARDS CONSTRUCTION SPECIFICATIONS.
3. TRENCH MATERIAL SHALL BE PLACED IN MAX. OF 6" LIFTS.
4. IN EXISTING RIGHT-OF-WAY TRENCH EXCAVATION SHALL NOT BE MORE THAN 100 FEET AHEAD OF THE PIPE LAYING OPERATION.
5. TRENCHES ARE TO BE BACKFILLED AT THE END OF EACH DAY.
6. ANY ALTERATIONS TO THIS STANDARD MUST HAVE WRITTEN APPROVAL BY CITY ENGINEER.

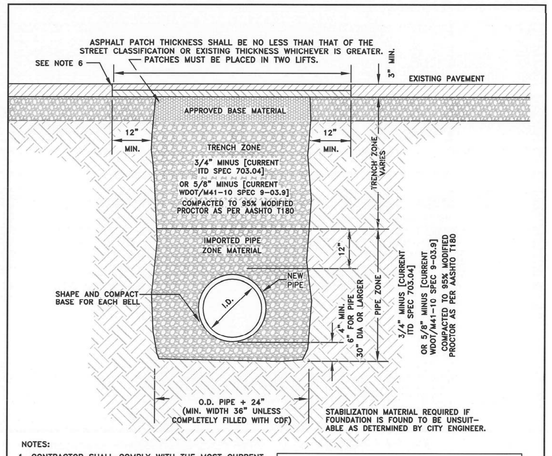
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

BACKFILL
CLASS 'D'

APPROVED FOR PUBLICATION 3/5/13
City Engineer Date

DWG. NO. 1-6

...\Current Stds\1-General\BackFill_ClassD.dwg



NOTES:

1. CONTRACTOR SHALL COMPLY WITH THE MOST CURRENT OSHA REQUIREMENTS FOR EXCAVATIONS.
2. ALL TRENCHES EXCAVATED WITHIN EXISTING PAVED STREETS SHALL BE BACKFILLED AND SURFACED THE SAME DAY WITH A 2" THICK COMPACTED COLD MIX ASPHALT PATCH (SMOOTH) - TO BE REPLACED WITH THE CITY'S STANDARD HOT MIX ASPHALT SURFACING AS SOON AS SCHEDULING ALLOWS; UNLESS SPECIFICALLY APPROVED OTHERWISE BY THE CITY ENGINEER.
3. THE NEW ASPHALT PATCH SHALL MATCH THE EXISTING PAVEMENT GRADE. ACROSS THE WIDTH OF THE TRENCH THE NEW SURFACE SHALL BE FLUSH OR UP TO 1/4" ABOVE THE EXISTING PAVEMENT GRADE.
4. EXISTING PAVEMENT SHALL BE SAWCUT FULL DEPTH AND IN CONTINUOUS, STRAIGHT LINES. BROKEN EDGES WILL NOT BE ALLOWED. PAVEMENT CUTS SHALL BE 'TACKED' IMMEDIATELY PRIOR TO INSTALLATION OF THE HOT MIX PATCH.
5. AFTER BACKFILLING TRENCH REMOVE ALL BROKEN OR LOOSE ASPHALT OR CONCRETE BEYOND IN THE INITIAL TRENCH.
6. PATCH CANNOT OVERLAP ANOTHER PARALLEL PATCH AND CANNOT LEAVE EXISTING ASPHALT LESS THAN 36" WIDE.
7. JOINTS TO BE TACKED AND SANDED WITH EMULSIFIED TACK.
8. ANY ALTERATIONS TO THIS STANDARD MUST HAVE WRITTEN APPROVAL BY CITY ENGINEER.

CLASS 'F' 'EXISTING STREETS BACKFILL SHALL BE USED IN AREAS WHERE ASPHALT PAVEMENT CONCRETE CURB, SIDEWALK, DRIVEWAY, GRAVEL SURFACING WILL BE REPLACED.

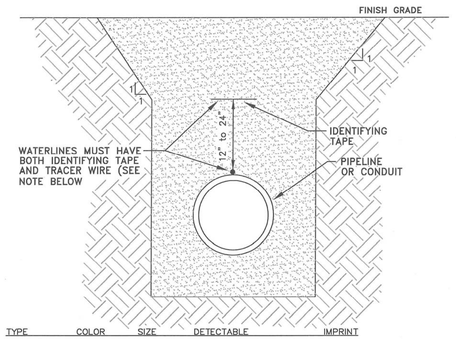
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

BACKFILL-
CLASS 'F'

APPROVED FOR PUBLICATION 3/5/13
City Engineer Date

DWG. NO. 1-7

...\Current Stds\1-General\BackFill_ClassF.dwg



TYPE	COLOR	SIZE	DETECTABLE	IMPRINT
WATER	BLUE	3"	NO	CAUTION BURIED WATER LINE BELOW

NO. 12 AWG. COPPER TRACER WIRE INSULATED WITH 30 MIL OF HIGH DENSITY POLYETHYLENE (HDPE) CLASSIFIED AS HIGH MOLECULAR WEIGHT POLYETHYLENE (HMWPE) IN 500 FT REELS. WIRE SHALL BE ATTACHED TO WATERLINE AT INTERVALS NOT TO EXCEED 15 FT SEPARATION.

ALL SPLICES SHALL BE 3M DIRECT BURY SPLICE KIT DBR/Y-6 AND CONTRACTOR SHALL CONDUCT A CONDUCTIVITY TEST ON ALL LOCATING WIRE SPLICES.

TYPE	COLOR	SIZE	DETECTABLE	IMPRINT
STORM SEWER	GREEN	3"	NO	CAUTION BURIED STORM SEWER LINE BELOW
SANITARY SEWER	GREEN	3"	NO	CAUTION BURIED SEWER LINE BELOW
GAS	YELLOW	3"	NO	CAUTION BURIED GAS LINE BELOW
CABLE	ORANGE	3"	NO	CAUTION BURIED CABLE LINE BELOW
ELECTRICAL	RED	3"	NO	CAUTION BURIED ELECTRIC LINE BELOW

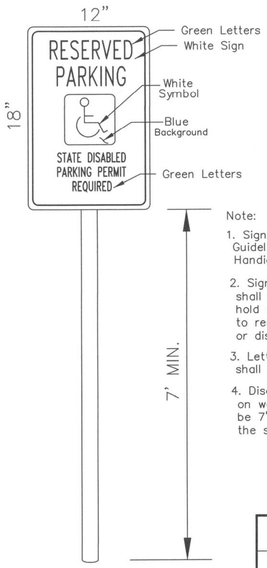
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

IDENTIFYING
TAPE DETAIL

APPROVED FOR PUBLICATION 2/11/16
City Engineer Date

DWG. NO. 1-8

...\Current Stds\1-General\Identifying Tape.dwg



Note:

1. Sign follows the State Specific Guidelines for 12x18 Washington Handicapped Parking
2. Sign posts and their foundation shall be constructed as to hold signs in a proper position to resist swaying in the wind or displacement by vandalism.
3. Lettering & reflectorization shall conform to MUTCD
4. Disabled parking sign mounted on walls or buildings shall also be 7' min. to the bottom of the sign to finished grade.

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

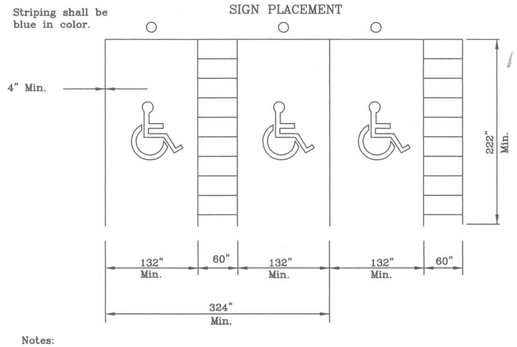
DISABLED
PARKING SIGN
INSTALLATION

APPROVED FOR PUBLICATION 2-5-09
City Engineer Date

DWG. NO. 1-13

M:\Standards\2008 - Standards\1__General\Disabled__Parking

TYPICAL DISABLED PARKING STALL



Notes:

1. The international accessibility symbol as provided in section 49-410 Idaho Code shall be painted in each space.
2. Disabled parking stalls and access aisles shall not slope more than 2% in any direction.
3. If a curb ramp is required, it cannot project into the access aisle.
4. Each access aisle must connect directly to an accessible route.
5. Intent of this standard is to conform to ADA and ANSI requirements. These requirements shall take precedence over this standard.

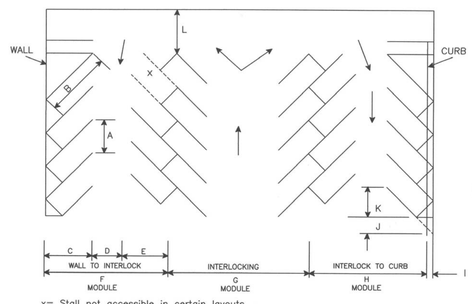
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DISABLED PARKING
STALLS

APPROVED FOR PUBLICATION 2-5-09
City Engineer Date

DWG. NO. 1-14

M:\Standards\2008 - Standards\1__General\Disabled__Stalls.dwg



x= Stall not accessible in certain layouts
Parking layout dimension (in ft.) for 9' x 18.5' stalls at various angles.

Dimension	On diagram	Angle 45°	60°	75°	90°
Stall width, parallel to aisle	A	12.7	10.4	9.3	9.0
Stall length of line	B	27.5	23.7	20.9	18.5
Stall depth to wall	C	19.5	20.5	20.0	18.5
Aisle width between stall lines	D	12.0	16.0	23.0	26.0
Stall depth, interlock	E	16.5	18.5	18.5	18.5
Module, wall to interlock	F	48.0	55.0	62.0	63.0
Module, interlocking	G	45.0	53.0	61.0	63.0
Module, interlock to curb face	H	46.0	53.2	59.5	60.5
Bumper overhang (typical)	I	2.0	2.3	2.5	2.5
Offset	J	6.4	2.6	0.6	0.0
Setback	K	13.1	9.3	4.8	0.0
Cross aisle, one-way	L	14.0	14.0	14.0	14.0
Cross aisle, two-way	_	24.0	24.0	24.0	24.0

The minimum width of parking stalls is 9 ft., however the recommended stall width for high turnover parking lots is 10 ft.The inclusion of handicapped parking is required by City Code Sec. 37-148.

Parallel parking stalls shall be 8' wide x 23' long.

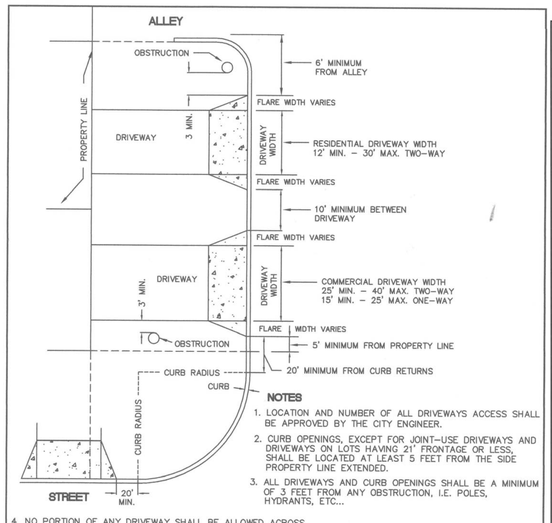
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

PARKING LAYOUT
DIMENSIONS

APPROVED FOR PUBLICATION 2-5-09
City Engineer Date

DWG. NO. 1-15

M:\Standards\2008-Standards\1-General\Parking__Layout.dwg



NOTES

1. LOCATION AND NUMBER OF ALL DRIVEWAYS ACCESS SHALL BE APPROVED BY THE CITY ENGINEER.
2. CURB OPENINGS, EXCEPT FOR JOINT-USE DRIVEWAYS AND DRIVEWAYS ON LOTS HAVING 21' FRONTAGE OR LESS, SHALL BE LOCATED AT LEAST 5 FEET FROM THE SIDE PROPERTY LINE EXTENDED.
3. ALL DRIVEWAYS AND CURB OPENINGS SHALL BE A MINIMUM OF 3 FEET FROM ANY OBSTRUCTION, I.E. POLES, HYDRANTS, ETC...
4. NO PORTION OF ANY DRIVEWAY SHALL BE ALLOWED ACROSS A PROPERTY LINE EXTENDED NORMAL TO THE ROADWAY FROM THE FRONT CORNER OF THE PROPERTY, EXCEPT THAT JOINT-USE DRIVEWAYS MAY BE PERMITTED IN SPECIAL INSTANCES WHERE WRITTEN APPROVAL OF BOTH PROPERTY OWNERS IS FILED WITH THE COUNTY RECORDER'S OFFICE.
5. APPROACH ALIGNMENT: APPROACH ANGLES OF LESS THAN 45° OR GREATER THAN 135° WILL NOT BE PERMITTED.
6. DRIVEWAYS MUST BE POSITIONED TO PRESERVE A CLEAR VIEW TRIANGLE OF 20 FEET ALONG THE PROPERTY LINE.
7. ON CORNER LOTS, DRIVEWAYS MUST BE ALONG THE PROPERTY LINE FURTHEST FROM THE INTERSECTION. LEAVE A TWO FOOT SPACE BETWEEN THE DRIVEWAY AND PROPERTY LINE FOR THE WATER METER.

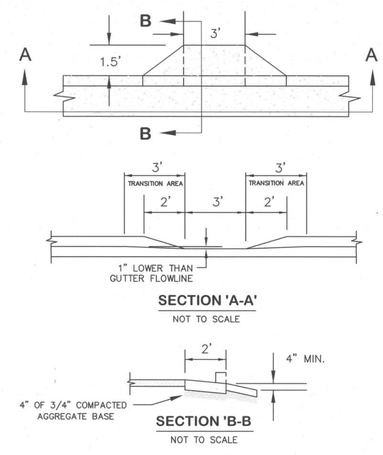
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DRIVEWAY LOCATION
& WIDTH REQUIREMENT

APPROVED FOR PUBLICATION 2-5-09
City Engineer Date

DWG. NO. 2-1

M:\Standards\2008 - Standards\2__Concrete \Driveway__Location.dwg



NOTES:

1. SET APRON ENTRANCE 1" LOWER THAN PROPOSED FLOWLINE TO ENSURE POSITIVE DRAINAGE INTO CATCH BASIN. CURB FLOWLINE SHALL BE TRANSITION TO 3' ON EACH SIDE OF INLET APRON TO ADJUST FOR 1" DROP. GUTTER LIP AND TOP OF CURB ARE NOT TO BE DEPRESSED.
2. NOT TO BE USED WHEN BUILDING ELEVATION IS LOWER THAN THE EXISTING CENTERLINE ELEVATION OF THE ADJACENT ROADWAY.
3. APRON TO SLOPE TO BOTTOM OF SWALE.

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

INLET APRON

APPROVED FOR PUBLICATION 6/8/10
City Engineer Date

DWG. NO. 2-3

M:\Standards\2010- Standards\2-Concrete\Inlet Apron.dwg

REV NO.	DATE	REVISION DESCRIPTION	CHECKED	APPD.

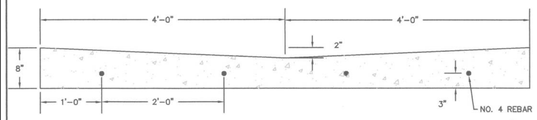
REGISTERED PROFESSIONAL ENGINEER, LAND SURVEYOR, GROUND WATER PROFESSIONAL
#21102
STATE OF IDAHO
JOHN SHAMMEN
7/6/17

SHEET SIZE	D
CHECKED BY	JSH
JOB #	1636
DATE	7-06-17
SHEET	C10
DRAWING #	1603-C10
SCALE	
DRAWN BY	MEE

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
STANDARD DETAILS
ALEXANDER INVESTORS
LEWISTON, IDAHO

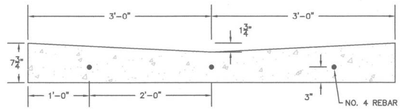
HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C10



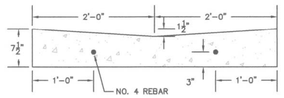
COMPACTED GRAVEL BASE TO BOTTOM OF STREET SECTION.

TYPICAL 8' CROSS-SECTION



COMPACTED GRAVEL BASE TO BOTTOM OF STREET SECTION.

TYPICAL 6' CROSS-SECTION



COMPACTED GRAVEL BASE TO BOTTOM OF STREET SECTION.

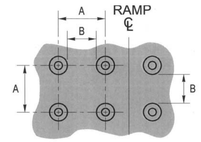
TYPICAL 4' CROSS-SECTION

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

VALLEY GUTTER

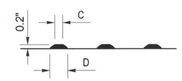
APPROVED FOR PUBLICATION — City Engineer — Date 2-5-09 — DWG. NO. 2-4

M:\Standards\2008 - Standards\2__Concrete\Valley Gutter.dwg



PLAN

	MIN.	MAX.
A	1.6"	2.4"
B	.65"	1.5"
C	50% -65% OF BASE DIA.	
D	.9"	1.4"



SECTION VIEW

THIS PATTERN AREA SHALL BE YELLOW IN COLOR

Notes:

1. Detectable truncated-dome warning, 2 ft wide, must be provided for the full width of ramps and blended connections to mark the street edge and fully approved by current ADA requirements.
2. At least one corner of the detectable warning panel shall be coincident to the back of curb

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DETECTABLE WARNING FOR PEDESTRIAN ACCESS

APPROVED FOR PUBLICATION — City Engineer — Date 9/1/10 — DWG. NO. 2-5

\Standards\2010-Standards\2-Concrete\Detectable Dome.dwg

GENERAL NOTES FOR ALL TYPES OF CURB AND GUTTER

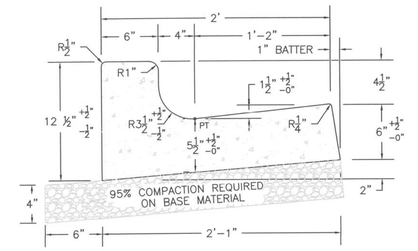
1. SECURE A PERMIT FOR CONSTRUCTION, BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT-OF-WAY.
2. GRADE, ALIGNMENT AND CURB TYPE SHALL BE AS APPROVED BY THE CITY ENGINEER.
3. ALIGNMENT AND GRADE STAKED TO LIP OF GUTTER (LIP) SHALL BE ESTABLISHED OR APPROVED BY THE CITY ENGINEER.
4. THE TOLERANCE FOR FINISHED CURB AND GUTTER –
   MAX. VARIATION OF SURFACE FLATNESS: 1/4 INCH IN 10 FEET
   MAX. VARIATION FROM TRUE POSITION (DESIGN GRADE): 1/2 INCH
5. BASE MATERIAL SHALL BE 4" OF 3/4 INCH MINUS [CURRENT ITD SPEC 703.04] OR 5/8 INCH MINUS [CURRENT WDOT/M41-10 SPEC 9-03.9] CRUSHED AGGREGATE BASE MATERIAL COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AS PER AASHTO T180. ALL FILL OR BACKFILL AREAS SHALL BE PLACED IN 6" TO 8" MAXIMUM LIFTS. IN AREAS OF SMALL PROJECTS, LIMITED HEAVY TRUCK TRAFFIC OR WHERE COMPACTION EQUIPMENT HAS LIMITED ACCESS A REDUCED % COMPACTION MAY BE ALLOWED WITH WRITTEN APPROVAL FROM PUBLIC WORK DIRECTOR.
6. CONCRETE SHALL BE 3,000 PSI MINIMUM AT 28 DAYS, MAXIMUM WATER/CEMENT RATIO SHALL BE 0.5 (LB/LB), 5" MAX. SLUMP, AIR CONTENT (%) 6.5 ±1.5.
7. DUMMY JOINTS AT 10 FOOT INTERVALS AND AT CURB RADII, 3/4" TO 1" DEEP. CONSTRUCTION JOINTS LOCATIONS AS DIRECTED BY CITY ENGINEER. DIFFERENTIAL ELEVATION BETWEEN ADJACENT SECTIONS SHALL NOT EXCEED 1/4".
8. THE CONTRACTOR ARE REQUIRED BY THE PUBLIC WORKS DEPARTMENT TO MARK STUB-OUTS AND VALVES IN THE UNCURED CONCRETE.
9. THE CONTRACTOR OR OWNER SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT FOR INSPECTION AFTER THE FORMS ARE SET AND THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED NO LESS THAN 2 WORKING DAYS BEFORE PLACEMENT OF CONCRETE FOR A FINAL INSPECTION. FAILURE TO NOTIFY THE PUBLIC WORKS DEPARTMENT IS GROUNDS FOR REJECTION OF CURB AND GUTTER.
10. CONCRETE SURFACE TO HAVE A LIGHT BROOM FINISH PARALLEL WITH THE LENGTH OF THE CURB.
11. APPLY UNIFORM COAT OF REZ-SEAL OR APPROVED EQUIVALENT CURING COMPOUND TO EXPOSED CONCRETE IMMEDIATELY AFTER FINISHING..
12. ROLLED CURB AND GUTTER SHALL NOT BE USED:
    A. ON STREETS IN COMMERCIAL AND INDUSTRIAL ZONED AREAS.
    B. ON STREETS WITH LONGITUDINAL (LENGTHWISE) GRADES IN EXCESS OF 6%
    C. ON ANY ARTERIAL OR COLLECTOR
    D. WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
    E. WHEN SIDEWALK IS LOCATED AT THE BACK OF CURB.

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

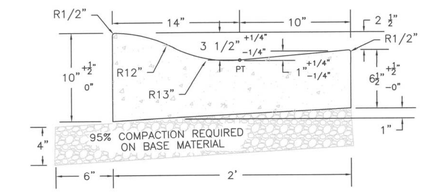
GENERAL NOTES FOR ALL TYPES OF CURB AND GUTTER

APPROVED FOR PUBLICATION — City Engineer — Date 2/24/13 — DWG. NO. 2-6

M:\Standards\2010-Standards\2-Concrete\General__Notes__Concrete.dwg



HIGH BACK CURB & GUTTER



ROLLED CURB & GUTTER

ALL TOLERANCES ARE ±1/4" UNLESS OTHERWISE NOTED

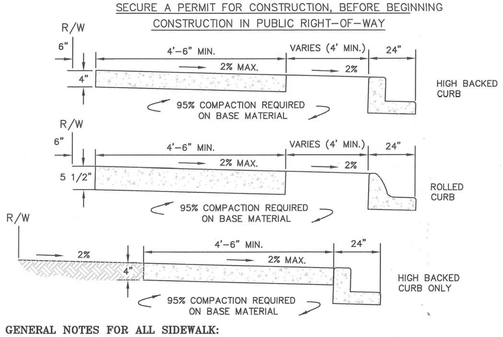
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

HIGH BACK CURB & GUTTER
ROLLED CURB & GUTTER

APPROVED FOR PUBLICATION — City Engineer — Date 2-5-09 — DWG. NO. 2-7

M:\Standards\2008 - Standards\2__Concrete\HighBack__Rolled__Curb.dwg

SECURE A PERMIT FOR CONSTRUCTION, BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT-OF-WAY



GENERAL NOTES FOR ALL SIDEWALK:

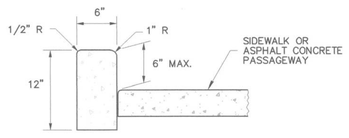
1. LINE AND GRADE STAKED T.S., TOP OF SIDEWALK, B.S., BACK OF SIDEWALK.
2. GRADE AND ALIGNMENT TO BE APPROVED BY THE CITY ENGINEER.
3. THE TOLERANCE FOR FINISHED SIDEWALK –
   MAX. VARIATION OF SURFACE FLATNESS: 1/4 INCH IN 10 FEET
   MAX. VARIATION FROM TRUE POSITION (DESIGN GRADE): 1/2 INCH
   NO PONDING IS ALLOWED ON SIDEWALKS, STEPS OR PEDESTRIAN RAMPS.
4. BASE MATERIAL SHALL BE 4" OF 3/4" MINUS [CURRENT ITD SPEC 703.04] OR 5/8" MINUS [CURRENT WDOT/M41-10 SPEC 9-03.9] CRUSHED AGGREGRATE BASE MATERIAL COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AS PER AASHTO T180. ALL FILLS OR BACKFILL AREAS SHALL BE PLACED IN 6" MAX. LIFTS.
5. CONTRACTION/DUMMY JOINTS SHALL BE PLACED AT 5' INTERVALS, 3/4" TO 1" DEEP; INSTALL A PERFORMED EXPANSION JOINT FILLER TO THE FULL DEPTH & WIDTH EVERY 100 FEET.
6. CONCRETE SHALL BE 3,000 PSI MIN. AT 28 DAYS, MAX. WATER/CEMENT RATIO SHALL BE RATIO SHALL BE 0.5 (LB.LB), 5" MAX. SLUMP, AIR CONTENT (%) 6.5 ±1.5.
7. THE CONTRACTOR OR OWNER SHALL NOTIFY THE PUBLIC WORKS DEPT. FOR INSPECTION OF BASE MATERIAL AFTER FORMS ARE SET AND THE PUBLIC WORKS DEPT. WILL BE NOTIFIED NO LESS THAN 2 WORKING DAYS BEFORE PLACEMENT OF CONCRETE, FOR FINAL INSPECTION.
8. CONCRETE SURFACE SHALL HAVE LIGHT BROOM FINISH PERPENDICULAR TO LENGTH OF S/W.
9. APPLY UNIFORM COAT OF REZ-SEAL OR APPROVED EQUIVALENT CURING COMPOUND TO EXPOSED CONCRETE IMMEDIATELY AFTER FINISHING.
10. NAME OF CONTRACTOR AND YEAR TO BE STAMPED AT EACH END OF WORK AND AT INTERVALS OF 300 FT.
11. CONCRETE SURFACE SHALL BE FREE OF SURFACE BLEMISHES OR VOIDS GREATER THAN 1/4", JOINTS AND EDGES SHALL BE CLEAN AND FREE OF EXCESS SPALLING OR VOIDS.
12. A 6" STRIP TO BE LOCATED BETWEEN RIGHT-OF-WAY LINE AND SIDEWALK FOR PLACEMENT OF PROPERTY PINS WHEN PLANTING STRIP OR RETENTION SWALES ARE PLACED BEHIND CURB AND GUTTER.

M:\Standards\2008 – Standards\2_Concrete\Concrete Sidewalk.dwg

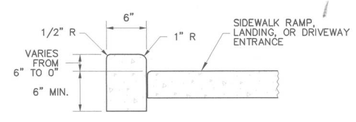
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

CONCRETE SIDEWALK

APPROVED FOR PUBLICATION — City Engineer — Date 8/22/15 — DWG. NO. 2-8

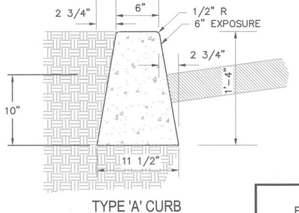


PEDESTRIAN CURB



PEDESTRIAN CURB

AT SIDEWALK RAMPS & LANDINGS, AND DRIVEWAY ENTRANCES



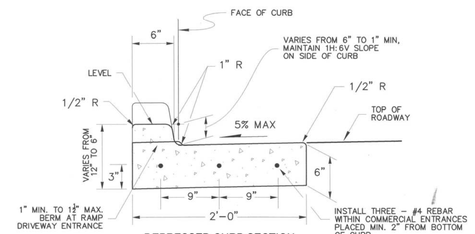
TYPE 'A' CURB

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

PEDESTRIAN CURB AND TYPE 'A' CURB

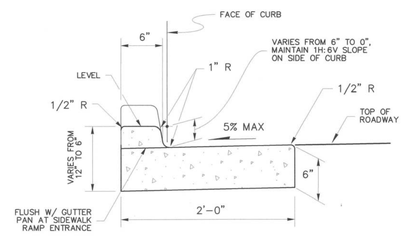
APPROVED FOR PUBLICATION — City Engineer — Date 2-5-09 — DWG. NO. 2-9

M:\Standards\2008 - Standards\2__Concrete\Pedestrian__Type 'A' Crub.dwg



DEPRESSED CURB SECTION

AT DRIVEWAY ENTRANCES



DEPRESSED CURB SECTION

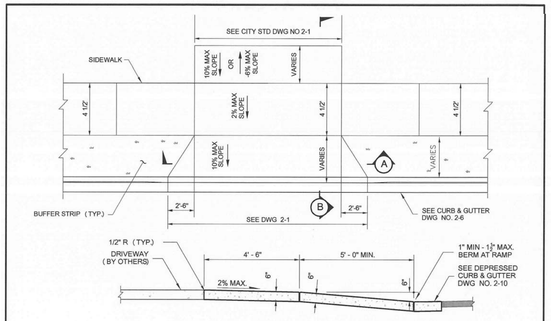
AT SIDEWALK RAMPS

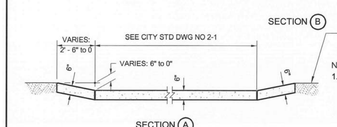
CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DEPRESSED CURB SECTION

APPROVED FOR PUBLICATION — City Engineer — Date 3-9-00 — DWG. NO. 2-10

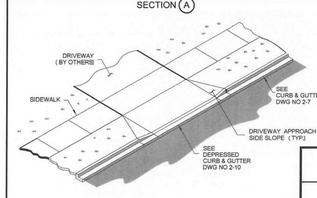
M:\Standards\2008 - Standards\2__Concrete\Depressed Curb Section.dwg





NOTES:

1. BASE MATERIAL SHALL BE 4" OF 3/4 INCH MINUS CRUSHED AGGREGATE BASE MATERIAL COMPACTED 95% MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AS PER AASHTO T180. ALL FILL OR BACKFILL AREAS SHALL BE PLACED IN 6" LIFTS.
2. PLACEMENT OF DRAINAGE STRUCTURES JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF DRIVEWAY ENTRANCES IS PROHIBITED.
3. THIS RAMP SHALL BE USED WITH HIGH BACK AND ROLLED CURB.
4. ALL ALLEYS, COMMERICAL DRIVEWAYS AND PRIVATE ROADWAYS ACCESSING MORE THAN THREE DWELLING UNITS WILL BE REQUIRED TO PLACE 3 - # 4 REBARS WITHIN CURB & GUTTER (CENTER AND 9" OFF CENTER) OF THE DRIVEWAY APPROACH.



CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DRIVEWAY APPROACH SPLIT APRON SIDEWALK

APPROVED FOR PUBLICATION — City Engineer — Date 2/26/13 — DWG. NO. 2-16

M:\Standards\2010-Standards\2-Concrete\Split__Apron__Sidewalk.dwg

REV NO.	DATE	REVISION DESCRIPTION	CHECKED	APPD.

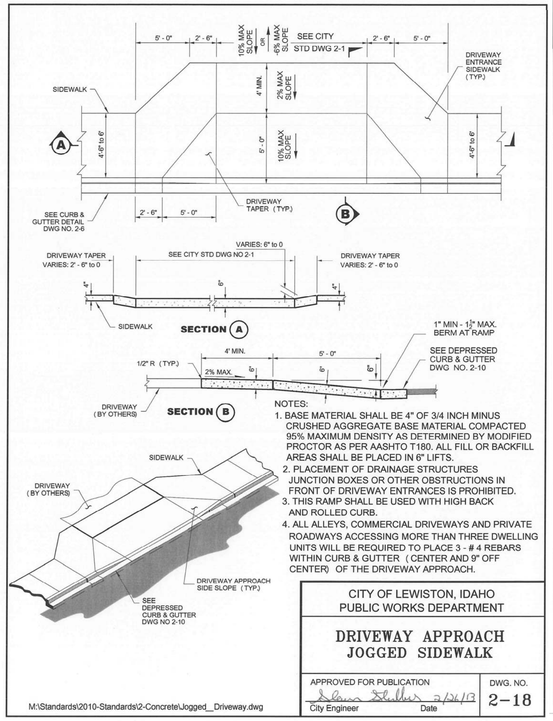
REGISTERED PROFESSIONAL ENGINEER – LAND SURVEYOR – STATE OF IDAHO – #21092 – JOHN SHAMMEN – 7/16/17

SHEET SIZE	D
CHECKED BY	JSH
JOB #	1636
SHEET	C11
DRAWING #	1603-C11
SCALE	
DRAWN BY	MEE
DATE	7-06-17

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
STANDARD DETAILS
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET C11



NOTES:

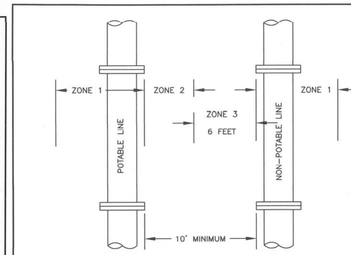
1. BASE MATERIAL SHALL BE 4" OF 3/4 INCH MINUS CRUSHED AGGREGATE BASE MATERIAL COMPACTED 95% MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR AS PER AASHTO T180. ALL FILL OR BACKFILL AREAS SHALL BE PLACED IN 6" LIFTS.
2. PLACEMENT OF DRAINAGE STRUCTURES JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF DRIVEWAY ENTRANCES IS PROHIBITED.
3. THIS RAMP SHALL BE USED WITH HIGH BACK AND ROLLED CURB.
4. ALL ALLEYS, COMMERCIAL DRIVEWAYS AND PRIVATE ROADWAYS ACCESSING MORE THAN THREE DWELLING UNITS WILL BE REQUIRED TO PLACE 3 - # 4 REBARS WITHIN CURB & GUTTER (CENTER AND 9" OFF CENTER) OF THE DRIVEWAY APPROACH.

CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

DRIVEWAY APPROACH
JOGGED SIDEWALK

APPROVED FOR PUBLICATION		DWG. NO.
City Engineer	Date 2/26/13	2–18

M:\Standards\2010-Standards\2-Concrete\Jogged_ Driveway.dwg



VERTICAL REQUIREMENTS:

ZONE 1: POTABLE LINE 18" OVER NON–POTABLE LINE

Potable water and non–potable mains and service lines must be separated by at least 18 inches and
One full, uncut length of non–potable pipe must be centered on the crossing so that the joints are as far as possible from the crossing.

ZONE 2: POTABLE LINE < 18" OVER NON–POTABLE LINE

One full, uncut length of non–potable pipe must be centered on the crossing so that the joints are as far as possible from the non–potable line and either a or b
a) Non–potable line must be constructed to potable water pipe standards and pressure tested for water tightness for a horizontal distance of ten feet on both sides of the crossing.
b) Non–potable or potable line must be cased in a larger diameter carrier pipe for a horizontal distance of ten feet on both sides of the crossing, with no joints.

ZONE 3: POTABLE WATER < 18" UNDER NON–POTABLE LINE

Same requirements as Zone 2 except the non–potable line must also be supported above the crossing to prevent settling.

ZONE 4: POTABLE WATER 18" UNDER NON–POTABLE LINE

Same requirements as Zone 1 except the non–potable line must also be supported above the crossing to prevent settling.

GENERAL NOTES:

1. Sewage force mains shall have at least ten feet of horizontal separation and eighteen inches of clearance from potable water mains. Zone 2 and 3 placements are prohibited.
2. Separation requirements also apply to potable and non–potable service lines controlled by the system owner and extending the main line to the property line, service meter, or cleanout.

HORIZONTAL REQUIREMENTS:

ZONE 1: MORE THAN 10 FEET APART

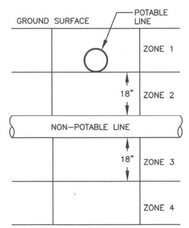
NO SPECIAL REQUIREMENTS

ZONE 2: FROM 6 TO 10 FEET APART

A. No special requirements for service lines.
B. Potable and non–potable mains separated by at least 6 feet at outside walls and
i. Potable mains higher in elevation than the non–potable mains and
ii. Non–potable mains constructed to with potable water class pipe and pressure tested for water tightness.

ZONE 3: CLOSER THAN 6 FEET APART

NOT ALLOWED

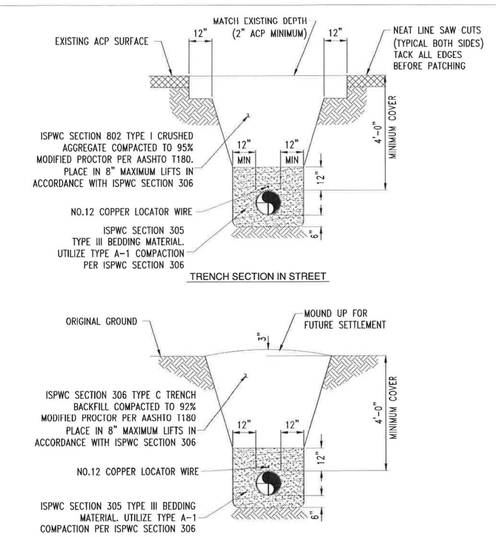


CITY OF LEWISTON, IDAHO
PUBLIC WORKS DEPARTMENT

POTABLE & NON–POTABLE
WATERLINE SEPARATION

APPROVED FOR PUBLICATION		DWG. NO.
City Engineer	Date 11-9-09	4–1

M:\Standards\2010-Standards\4-Water\Potable Nonpotable.dwg



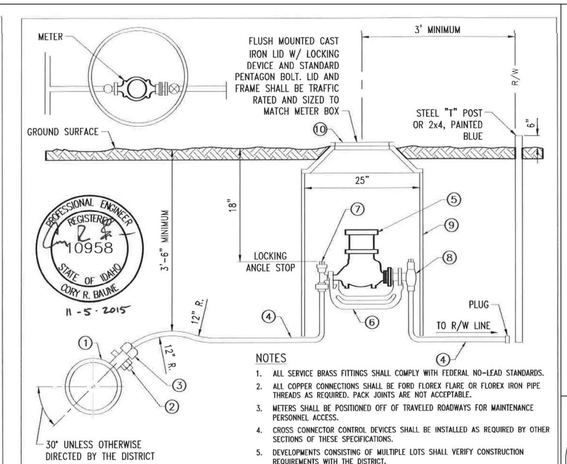
NOTES:

1. IF EXISTING SURFACE IS BITUMINOUS SURFACE TREATMENT, A 2 SHOT OIL–CHIP SURFACE SHALL EXTEND FULL WIDTH OF EXISTING PAVED AREA.
2. ACP = ASPHALT CONCRETE PAVEMENT

PROFESSIONAL ENGINEER REGISTERED 10958 STATE OF IDAHO CORY R. BAUNE 11-5-2015

JUB J-U-B ENGINEERS, INC.

SINGLE PIPE TRENCH SECTIONS
STANDARD DETAIL
LOID SD-306



PROFESSIONAL ENGINEER REGISTERED 10958 STATE OF IDAHO CORY R. BAUNE 11-5-2015

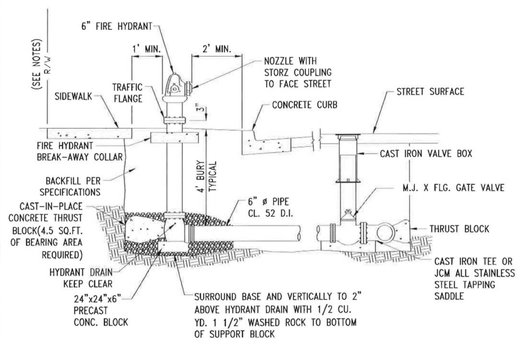
NOTES

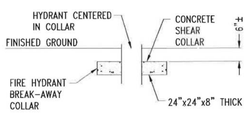
1. ALL SERVICE BRASS FITTINGS SHALL COMPLY WITH FEDERAL NO–LEAD STANDARDS.
2. ALL COPPER CONNECTIONS SHALL BE FORD FLOREX FLARE OR FLOREX IRON PIPE THREADS AS REQUIRED. PACK JOINTS ARE NOT ACCEPTABLE.
3. METERS SHALL BE POSITIONED OFF OF TRAVELED ROADWAYS FOR MAINTENANCE PERSONNEL ACCESS.
4. CROSS CONNECTOR CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY OTHER SECTIONS OF THESE SPECIFICATIONS.
5. DEVELOPMENTS CONSISTING OF MULTIPLE LOTS SHALL VERIFY CONSTRUCTION REQUIREMENTS WITH THE DISTRICT.

EQUIPMENT NOTE	DESCRIPTION	MANUFACTURER	DETAIL			
			3/4"	1"	1 1/2"	2"
1	DOUBLE STRAP SERVICE SADDLE	ROMAC	202NS			
2	CORPORATION STOP IN TOP 1/4 OF PIPE	FORD	FS00 SERIES		FB500 SERIES	
3	CONNECTOR	FORD	LA21 SERIES			
4	ASTM B88 SEAMLESS COPPER SERVICE LINE	-	TYPE K ANNEALED			
5	WATER METER, 3/4" MINIMUM	SENSUS	IPERL, 100 FT3 READ		OMNI R2, 100 FT3 READ	
6	YOKE BAR	FORD	Y502	Y504	—	—
7	METER SETTER INLET VALVE	FORD	AV92 WITH PADLOCK WINGS			
8	METER SETTER OUTLET VALVE	FORD	HHA92 DUAL CHECK VALVE			
9	METER BOX	-	26" DEPTH 20" DIAMETER PVC 1120 PIP	24" DEPTH 24" DIAMETER PVC 1120 PIP, 80 PSI	30" DEPTH 17" X 30" OLDCASTLE METER BOX MINUS MOUSE HOLES	
10	METER BOX COVER	-	TYLER 6150TR METER COVER	TYLER 6150TR WITH O&L 24" TO 20" ADAPTER RING	OLDCASTLE 17" X 30" COVER WITH READER HOLE	

JUB J-U-B ENGINEERS, INC.

METER INSTALLATION
STANDARD DETAIL
LOID SD-401





PROFESSIONAL ENGINEER REGISTERED 10958 STATE OF IDAHO CORY R. BAUNE 11-5-2015

NOTES:

1. EACH HYDRANT IS TO BE RESTRAINED BY MEANS OF ROMAC GRIP RINGS CONNECTING THE HYDRANT AND THE VALVE TO HYDRANT LATERAL PIPE.
2. IN NO CASE SHALL HYDRANTS BE PLACED ON PRIVATE PROPERTY. THE ABOVE DIMENSIONS SHOULD BE CONSIDERED A GUIDE ONLY.
3. HYDRANT SHALL BE LOCATED 3 FT. MINIMUM FROM ANY OBSTACLE.
4. FIRE HYDRANT ON IRRIGATION MAINS SHALL BE PAINTED YELLOW. FIRE HYDRANT ON DOMESTIC MAINS SHALL BE PAINTED RED.

JUB J-U-B ENGINEERS, INC.

FIRE HYDRANT ASSEMBLY
STANDARD DETAIL
LOID SD-404

REV NO.	DATE	REVISION DESCRIPTION	CHECKED	APPD.

ENGINEER, LAND SURVEYOR, OWNER REGISTERED #21027 STATE OF IDAHO JOHN SHAMMEN 7/16/17

SCALE	SHEET SIZE D		
DRAWN BY MEE	CHECKED BY JSH		
DATE 7-06-17	JOB # 1636		
SHEET C12			
DRAWING # 1603-C12			

7TH STREET APARTMENTS
PARKING LOT & FRONTAGE IMPROVEMENTS
STANDARD DETAILS
ALEXANDER INVESTORS
LEWISTON, IDAHO

HEDCO
HAMMOND ENGINEERING & DEVELOPMENT CO.
528 BRYDEN AVENUE LEWISTON, IDAHO 83501
(208) 798-5422

SHEET
C12