Print Form

TOWN OF ERIE
Community Development Department – Planning Division
645 Holbrook Street – PO Box 750 – Erie, CO 80516
Tel: 303.926.2770 – Fax: 303.926.2706 – Web: www.erieco.gov

LAND USE APPLICATION

Please fill in this form completely. Incomplete applications will not be processed.

STAFF USE ONLY		
FILE NAME:		
FILE NO:	DATE SUBMITTED:	FEES PAID:

PROJECT/BUSINESS NAME: Olde Town Living

PROJECT ADDRESS: 0 High Street

PROJECT DESCRIPTION: To subdivide the property into 23 lots and 12 tracts plus dedicate ROW for High Street , Main Street and Anderson Street.

LEGAL DESCRIPTION *(attach legal description if Metes & Bounds)*

Subdivision Name: See attached

Filing #: Lot #: Block #: Section: 18 Township: 1N Range: 68W

OWNER *(attach separate sheets if multiple)*

Name/Company: Old Town Living, LLC
Contact Person: Steve Poppitz
Address: 1036 Walnut Street
City/State/Zip: Louisville, CO 80027
Phone: 303 419-8337 Fax: 0
E-mail: sbpoppitz@gmail.com

AUTHORIZED REPRESENTATIVE

Company/Firm: Jehn Engineering, Inc.
Contact Person: Mark Bishop, P.E.
Address: 5690 Webster Street
City/State/Zip: Arvada, Colorado 80002
Phone: 303 423-6036 Fax: 303 467-9438
E-mail: mbishop@jehnengineerig.com

MINERAL RIGHTS OWNER *(attach separate sheets if multiple)*

Name/Company: Old Town Living LLC
Address: 1036 Walnut Street
City/State/Zip: Louisville, Colorado 80027

MINERAL LEASE HOLDER *(attach separate sheets if multiple)*

Name/Company: Encana Oil and Gas
Address: 370 17th Street , Ste 1700
City/State/Zip: Denver, Colorado 80202

LAND-USE & SUMMARY INFORMATION

Present Zoning: OTR
Proposed Zoning: OTR
Gross Acreage: 4.235
Gross Site Density (du/ac): 6.1
Lots/Units Proposed: 26
Gross Floor Area:

SERVICE PROVIDERS

Electric: XCEL
Metro District: N/A
Water *(if other than Town)*:
Gas: XCEL
Fire District: Mountain View Fire Rescue
Sewer *(if other than Town)*:

PAGE TWO MUST BE SIGNED AND NOTARIZED

DEVELOPMENT REVIEW FEES

ANNEXATION		SUBDIVISION	
☐ Major (10+ acres)	$ 4000.00	☐ Sketch Plan	$ 1000.00 + 10.00 per lot
☐ Minor (less than 10 acres)	$ 2000.00	☒ Preliminary Plat	$ 2000.00 + 40.00 per lot
☐ Deannexation	$ 1000.00	☐ Final Plat	$ 2000.00 + 20.00 per lot
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☐ Major	$ 3000.00	☐ Minor Amendment Plat	$ 1000.00 + 10.00 per lot
☐ Minor	$ 1200.00	☐ Road Vacation (constructed)	$ 1000.00
ZONING/REZONING		☐ Road Vacation (paper)	$ 100.00
☐ Rezoning	$ 1700.00 + 10.00 per acre	**SITE PLAN**	
☐ PUD Rezoning	$ 1700.00 + 10.00 per acre	☐ Residential	$ 1400.00 + 10.00 per unit
☐ PUD Amendment	$ 1700.00 + 10.00 per acre	☐ Non-Resi. (>10,000 sq. ft.)	$ 2200.00
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SPECIAL REVIEW USE		☐ Amendment (major)	$ 1100.00
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☐ Minor	$ 400.00	**VARIANCE**	$ 600.00
☐ Oil & Gas	$ 1200.00	**SERVICE PLAN**	$ 10,000.00

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Owner: _____ Date: 12 7 2016

Owner: _____ Date: _____

Applicant: OldeTown Living, LLC Date: 12 7 2016

STATE OF COLORADO)
) ss.
County of Jefferson)

The foregoing instrument was acknowledged before me this 7th day of December, 2016 by Steven B Poppitz

My commission expires: 10-26-2017

Witness my hand and official seal.

SANDRA MOORE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20014033485
MY COMMISSION EXPIRES OCTOBER 26, 2017

Notary Public

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STATE OF COLORADO)
) ss.
County of Jefferson)

The foregoing instrument was acknowledged before me this 7th day of December, 2016 by Louis D Pappitz.

My commission expires: 10/26/2017
Witness my hand and official seal.

SANDRA MOORE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20014033485
MY COMMISSION EXPIRES OCTOBER 26, 2017

Sandra Moore
Notary Public

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PROJECT ADDRESS: 0 High Street

PROJECT DESCRIPTION: Construct an Accessory Dwelling Unit (ADU)

LEGAL DESCRIPTION *(attach legal description if Metes & Bounds)*

Subdivision Name: Main Street Subdivision

Filing #: Lot #: 2 Block #: 1 Section: 18 Township: 1N Range: 68W

OWNER *(attach separate sheets if multiple)*

Name/Company: Olde Town Living, LLC
Contact Person: Steve Poppitz
Address: 1036 Walnut St.
City/State/Zip: Louisville, CO 80027
Phone: 303-419-8337 Fax: 0
E-mail: sbpoppitz@gmail.com

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Company/Firm: Jehn Engineering, Inc.
Contact Person: Mark Bishop, PE
Address: 5690 Webster St.
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Phone: 303-403-2421 Fax:
E-mail: mbishop @jehn engineering.com

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Name/Company: Encana Oil and Gas
Address: 370 17th St., Suite 1700
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LAND-USE & SUMMARY INFORMATION

Present Zoning: OTR
Proposed Zoning: OTR
Gross Acreage:

Gross Site Density (du/ac):
Lots/Units Proposed: 1
Gross Floor Area: 748

SERVICE PROVIDERS

Electric: XCEL
Metro District: N/A
Water *(if other than Town)*:

Gas: XCEL
Fire District: Mountain View Fire and Rescue
Sewer *(if other than Town)*:

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Owner: _____ Date: 2/8/17

Owner: FOR OLD TOWN LIVING, LLC Date: _____

Applicant: _____ Date: _____

STATE OF COLORADO)
) ss.
County of _____)

The foregoing instrument was acknowledged before

me this _____ day of _____, 20___,

by _____.

My commission expires: _____.

Witness my hand and official seal.

_____
Notary Public

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PROJECT ADDRESS: 0 High Street

PROJECT DESCRIPTION: Construct an Accessory Dwelling Unit (ADU)

LEGAL DESCRIPTION *(attach legal description if Metes & Bounds)*

Subdivision Name: Main Street Subdivision

Filing #: Lot #: 1 Block #: 4 Section: 18 Township: 1N Range: 68W

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Contact Person: Steve Poppitz
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LAND-USE & SUMMARY INFORMATION

Present Zoning: OTR
Proposed Zoning: OTR
Gross Acreage:

Gross Site Density (du/ac):
Lots/Units Proposed: 1
Gross Floor Area: 748

SERVICE PROVIDERS

Electric: XCEL
Metro District: N/A
Water *(if other than Town)*:

Gas: XCEL
Fire District: Mountain View Fire and Rescue
Sewer *(if other than Town)*:

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Owner: FOR OLD TOWN LIVING, LLC Date: _____

Applicant: _____ Date: _____

STATE OF COLORADO)
) ss.
County of _____)

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by _____.

My commission expires: _____.

Witness my hand and official seal.

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Notary Public

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Filing #: Lot #: 1 Block #: 5 Section: 18 Township: 1N Range: 68W

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) ss.
County of _____)

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PROJECT DESCRIPTION: Construct a club house

LEGAL DESCRIPTION *(attach legal description if Metes & Bounds)*

Subdivision Name: Main Street Subdivision

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☐ Major (10+ acres)	$ 4000.00	☐ Sketch Plan	$ 1000.00 + 10.00 per lot
☐ Minor (less than 10 acres)	$ 2000.00	☐ Preliminary Plat	$ 2000.00 + 40.00 per lot
☐ Deannexation	$ 1000.00	☐ Final Plat	$ 2000.00 + 20.00 per lot
COMPREHENSIVE PLAN AMENDMENT		☐ Minor Subdivision Plat	$ 2000.00
☐ Major	$ 3000.00	☐ Minor Amendment Plat	$ 1000.00 + 10.00 per lot
☐ Minor	$ 1200.00	☐ Road Vacation (constructed)	$ 1000.00
ZONING/REZONING		☐ Road Vacation (paper)	$ 100.00
☐ Rezoning	$ 1700.00 + 10.00 per acre	**SITE PLAN**	
☐ PUD Rezoning	$ 1700.00 + 10.00 per acre	☐ Residential	$ 1400.00 + 10.00 per unit
☐ PUD Amendment	$ 1700.00 + 10.00 per acre	☐ Non-Resi. (>10,000 sq. ft.)	$ 2200.00
☐ Major PD Amendment	$ 3700.00 + 10.00 per acre	☐ Non-Resi. (>2,000 sq. ft.)	$ 1000.00
☐ Minor PD Amendment	$ 500.00	☐ Non-Resi. (<2,000 sq. ft.)	$ 200.00
SPECIAL REVIEW USE		☐ Amendment (major)	$ 1100.00
☐ Major	$ 1000.00	☐ Amendment (minor)	$ 350.00
☐ Minor	$ 400.00	**VARIANCE**	**$ 600.00**
☐ Oil & Gas	$ 1200.00	**SERVICE PLAN**	**$ 10,000.00**

*All fees **include** both Town of Erie Planning & Engineering review. These fees **do not include** referral agency review fees, outside consultant review fees, or review fees incurred by consultants acting on behalf of staff. See Town of Erie Municipal Code, Title 2-10-5 for all COMMUNITY DEVELOPMENT FEES.*

The undersigned is fully aware of the request/proposal being made and the actions being initiated on the referenced property. The undersigned understand that the application must be found to be complete by the Town of Erie before the request can officially be accepted and the development review process initiated. The undersigned is aware that the applicant is fully responsible for all reasonable costs associated with the review of the application/request being made to the Town of Erie. Pursuant to Chapter 7 (Section 7.2.B.5) of the Unified Development Code (UDC) of the Town of Erie, applicants shall pay all costs billed by the Town for legal, engineering and planning costs incurred by staff, including consultants acting on behalf of staff, necessary for project review. By this acknowledgement, the undersigned hereby certify that the above information is true and correct.

Owner: _____ Date: 2/8/17

Owner: FOR OLD TOWN LIVING, LLC Date: _____

Applicant: _____ Date: _____

STATE OF COLORADO)
) ss.
County of _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 20___, by _____.

My commission expires: _____.
Witness my hand and official seal.

_____
Notary Public

Main Street

Erie, Colorado

Site Plan/Preliminary Plat Narrative

a. General project concept and purpose of request:

Our "Main Street" project expands Erie's original old town grid and extends Main Street, High Street, and Anderson Street (from Main to Carr). Our "intentional community" design brings people together, encourages civic involvement, and preserves quality of life. Street-side porches will encourage neighbor conversations with garages, parking and cars de-emphasized in rear alleys. New, highly desirable, high quality, carefully neighborhood-integrated homes will also help satisfy Erie's underserved residential rental market.

We seek to plat this land, develop it, build homes, and retain them for rental income.

b. Discuss how the proposed development is in compliance with the five approval criteria of the Municipal Code Title 10 – UDC for Site Plan review:

Criteria 1. The Site Plan is consistent with the Town of Erie Comprehensive Master Plan;

Erie's Vision Statement talks about enhancing its historic small town character, and building a caring community which offers a high quality of life. Its Guiding Principles speak of coordinated growth, quality design, economic and downtown vitality, trails and recreation, and "Stable, Cohesive Neighborhoods Offering a Variety of Housings Types".

We proudly believe our project adds value in all of these areas. The Erie Commons Design Guidelines, that became the basis for our architecture, matches our own design approach for which we named ourselves "Old Town Living". Our neighborhood layout encourages community involvement. We're integrating our look/feel/layout/flavor with neighboring streets and houses. Our design and construction is a significant step up in quality while borrowing from existing neighborhood flavor. Our tenants will bring substantial disposable income into downtown. We connect old town with the Erie Recreation Center with a new pedestrian/bike path for all old town neighbors and school children to use – and it integrates into the town's bike trail system. And we are bringing a variety of housing options, with single family homes, duplexes, and a few smaller Accessory Dwelling Units to Erie's underserved rental market.

In short, we believe we are helping improve the quality of life for all of old town Erie as it urbanizes. We believe our presence will encourage further restaurant/entertainment/retail and old town development as more people live walking distance from both the downtown commercial businesses and the Erie Recreational Center / Library.

Criteria 2. The Site Plan is consistent with any previously approved subdivision plat, planned development, or any other precedent plan or land use approval as applicable;

Our long-forgotten piece of Erie's Old Town Residential district is peculiar in its existing form – an odd left over farm in the middle of town – with all surrounding previously approved platting completed decades before. Our Site Plan aims to bring our land in line with, and as closely integrated as possible, with its neighborhood. We are aligning our roads and alley's with the existing town grid. Sizing and spacing of structures and amenities are scaled to match. Existing infrastructure is carefully integrated. Rear-loaded alleys, like the existing neighborhood alleys, are intentionally designed in to preserve neighborhood character.

Criteria 3. The Site Plan complies with all applicable development and design standards set forth in the Municipal Code Title 10 – UCD, including but not limited to Chapters 2, 3, 4, and 6 (paraphrasing);

Zoning, Districts: Our subject 4.25 acres (currently non-platted) is in Erie's Old Town Residential District (OTR) that allows for Single-Family Detached or Multi-Family development up to 16 domestic units per acre. We are fully compliant here.

Use Regulations: 96% of the new living space (single-family detached homes and duplexes) will be developed under Permitted "use by right" guidelines with only 3 Accessory Development Units requiring a Special Review Use review. We will be fully compliant with all of these units.

Dimensional Requirements: All lot sizes, lot widths, building heights, setbacks, and (minor) projections into setbacks will fully comply with Erie's UDC guidelines. Nothing will encroach into any right of ways or easements.

Subdivision Standards: Main Street will be fully compliant on grading, stormwater, streets, sidewalks, curbs, gutters, alleys, and utility easements.

Development and Design Standards: Addressing key subsections:

10.6.2: Our property currently has very little to protect as it lacks *any* trees, native vegetation, standing water of any sort, ditches, or wildlife habitat. It's basically a large vacant lot. Our neighborhood design takes into account its scenic value through open "view corridors" and shared open-air amenities.

10.6.3: After our Sketch Plan review, we abandoned building homes on our previous Block 3 and are now dedicating that area to our open space - recreational space (the west-most part of our land) with a connecting paths to our Garden Court and Community Garden. Our Garden Court is a generously wide, green, park-like area with strolling paths that assures an attractive view corridor to open space to the south for our new residents as well as existing neighbors. We will utilize the 30' railroad setback as a Community Garden, complete with a low see through "bunny fence" to protect vegetables, which will be available for nearby neighbors to

use as well. Lastly, we are eager to coordinate with the town on a potential bicycle pathway connection across the railroad ROW.

10.6.4: Landscaping plans will fully comply with street trees, water efficient irrigation, plants, mulch, and selective xeriscaping appropriate for the OTR district. Landscaping for all lots and common areas will be maintained by Old Town Living. Code-compliant fencing will be used for attractive design throughout the neighborhood, to hide mechanical equipment and garbage and facilitate its collection.

10.6.5: Our traffic impact report shows minimal impact on nearby neighborhood streets and intersections regardless of whether we extend Anderson Street across the PL&I land or not. We are willing to build Anderson across the PL&I land, as the town desires, but are concerned this may generate new complaints from Anderson neighbors to the east who have become accustomed to their current "dead end" street. We simply wish to remain neutral on that detail. We have designed in walkways and a tie-in to the town's bicycle trails to encourage pedestrian and bicycle travel to local facilities like the Erie Community Center. It's accessibility to the entire OTR district may help offset (reduce) a modest amount of car traffic.

10.6.6: Our lots will be built with, on average, more off street parking than required. Additionally we recently added a significant amount of offsite parking in Alley Tracts 4 and 5.

10.6.10: See our Lighting plan for streetlights, parking lot lights, and exterior building lights.

Criteria 4. Any significant adverse impacts reasonably anticipated to result from the use will be mitigated or offset to the maximum extent practicable;

Traffic became a focal concern during our earlier Sketch Plan review, mostly by neighbors, but also by Council and Trustees. At the request of Planning Staff we conducted a full traffic study (submitting now) that says that our small neighborhood addition will have minimal impact on the town's roads. It further declares that it is unnecessary to add the Anderson Street extension across the town's PLI land (from High to Carr) making Anderson a through street towards downtown. However, we are willing to build this extension if that is the town's desire for other purposes.

Parking, understandably, also became a focal concern because our Sketch Plan design hadn't yet called out enough detail. With this submittal we show that our design includes more than the required amount of both on-site (lots) and off-site (street) parking. We fully expect that we'll have fewer, not more, cars parked on the streets in our neighborhood than are typical on the surrounding streets now.

Renters: Recent discussions with neighbors have shown concerns about bringing renters into the neighborhood. Hopefully the following will help put some concerns to rest:

- Steve Poppitz, one of our company's principal partners, will be permanently moving into one of the ADU units that we are building. He will be your neighbor. Besides

demonstrating our personal commitment to Erie's future, it also means that we are directly overseeing (experiencing) the quality of our tenants firsthand going forward.

- Our target demographic for rental clients is young professional families with kids and semi-elderly (senior friendly lower half of our duplexes). Of course this cannot exclusive, but it has been the basis for our planning (site plan, architecture, landscaping, amenities, parking, rental pricing, etc).
- Both partners of Old Town Living have decades of experience managing rental properties. We thoroughly understand the corrosive effect of any potentially bad tenant. We screen our tenants thoroughly and look for long term renters that act like good neighbors. We write and inforce our leases for that same purpose. Having happy tenants, and happy neighbors, is just good business for us.

Criteria 5. The development proposed on the Site Plan and its general location is or will be compatible with the character of surrounding land uses;

The Old Town Residential district generally has smaller houses with small lots. Our lots and houses roughly match that character in scale. This pairs very well with our favorite "New Urbanism" design approach, which is actually largely a return to old town design with alleys, open porches, ornate designs, gathering places, cars hidden away, etc. Contrast this to most modern construction with large plain homes, front garages, fenced-away backyard entertainment, and spread out lawns to see the difference.

Picket fencing, strolling walkways, and other neo-traditional neighborhood details also create typical small town flavor and attempt to further integrate with historic OTR residential flavor.

c. Discuss how the proposed building architecture provides visual interest consistent with the community's identity, character and scale. Explain how building facades and rooflines are articulated to reduce the mass, scale, uniform and monolithic appearances of large buildings. Describe how architectural features, patterns and details provide visual interest at the scale of the pedestrian;

Per the Erie Planning Department's suggestion, our design language starts from the Erie Commons Design Guidelines (Oct 2001). In particular we focused on their "Craftsman", "Four-Square", "Shingle", and "Farmhouse" architectural approaches, omitting Victorian influences. For our duplex buildings, we further ignored their "Multi-Family" designs, instead opting to make our duplexes appear as close to single family homes in appearance as possible – half of which even share a single front door.

Design influences on siding materials, roofing, as well as window, trim, column and stone choices are again borrowed from those same familiar architectural approaches. Covered porches encourage outdoor enjoyment and attempt to integrate architecturally with details like the pavilion and clubhouse on the common grounds.

None of our buildings attempt to "max out" permissible building sizes, but instead opt for human-scale living, optimal floorplans, and encouraging indoor-outdoor activities. Our Bungalow design further

downsizes the visual mass of the building with its story and a half design especially familiar in popular Craftsman and Shingle architectures.

d. Provide a development schedule indicating the approximate date when construction of the proposed development, and when applicable, phases of the proposed development can be expected to begin and be completed:

We will start our infrastructure development (sewers, water lines, streets, curbs, sidewalks, etc.) immediately after receiving Final Plat (early 2017), and promptly proceed into building our first homes.

Our project phasing on buildings will then attempt to develop a "street wall" – building the first homes near existing neighbors - which will then help buffer those same neighbors from the continuing construction further to the south. Our northern most Main Street homes will be early for that reason.

e. Provide general business related data including the total number of employees, the square footage of building(s), lot area, and total project value (building and site costs excluding land value):

Old Town Living, LLC, consisting of two partners, will contract the actual construction to local contractors. We anticipate total neighborhood costs to be approximately $5.4 million. Our 16 lots average over 6400 square feet with none less than 6000. See below for building sizes.

f. If residential units are proposed, the number of units and how they are being integrated into the proposed development:

Our Main Street project will consist of **26** domestic units with the following mix of building types.

Building Types	**# of bldgs**	***Dwellings* per bldg**	***Dwellings* total**	**Ave Sq.ft interiors**	**Est. *Dwelling* Sq.ft total**
Single Family (3+BD/2.5ba)	9	1	9	2,180	19,620
Duplex (3BD/2.5ba and 3BD/2ba)	7	2	14	1,560	21,840
ADU (1BD/1ba over garages)	3	1	3	610	1,830
Detached Garages	13			600	
Clubhouse	1			300	
	33		26		43,290

g. A brief description regarding the location, function and ownership/maintenance of public and private open space, parks, trails, common areas, and common buildings:

Our common spaces including the alley tracts, railroad landscape buffer, the Garden Court and open space (west side) will be maintained directly by Old Town Living. Likewise the clubhouse, the pavilion, bocce courts, community gardens, and common amenities will be maintained by Old Town Living also.

h. A brief description regarding the status of mineral rights and the substance of any existing or proposed covenants, special conditions, grants of easements, or other restrictions applying to the proposed subdivision:

Our land is free of any covenants or restrictions that would restrict our development plans.

Currently the only easement across the land is for a town water line – and town access to this utility line will be protected via ROW (under our Main Street extension) and a dedicated utility easement through our Garden Court tract.

We permanently resolved an old coal reservation issue when we purchased it (recorded Weld County 2/25/16). Those documents are again provided with this submittal.

New extensions of Main Street, Anderson Street and High Street will be public streets and their Right of Way formally dedicated to the Town of Erie after completion.

Old Town Living will maintain ownership of all alley tracts unless the town discovers a reason to consider otherwise (now or in the future). Easements will be granted, as necessary, across our private property for access and maintenance of utilities such as sewer, water, power, IT, and garbage collection.

Main Street

Erie, Colorado

Special Review Use Narrative -- ADUs

a. General project concept and purpose of the request;

This request is in coordination with our "Main Street" project currently (separately) going through Preliminary Plat review – that plan includes 9 single family homes, 7 duplexes, and 13 detached garages. This is a request for Special Review Use approval to build 3 Accessory Dwelling Units (ADUs) along with that master plan. Our Main Street Site Plan shows these ADUs located on the lots Block 1 – Lot 2, Block 4 – Lot 1, and Block 5 – Lot 1, each with a single family home. See enclosed 11x17 architectural drawings. Our Main Street Site Plan also shows larger architectural drawings of these ADUs on pages 19 and 20 of that submittal.

b. Proposed development time-line;

Shortly after Final Plat approval (Spring 2017) we'll build out our infrastructure (Summer 2017), and then start building the homes closest to existing neighbors. This minimizes the impact on neighbors by creating a "street wall" (buildings) that help buffer them from the continuing construction further to the south. Our northern most Main Street homes will be early for that reason. We'll include our first ADU on Block 1 - Lot 2 as part of that early construction. The other two ADUs will come later as we build out the rest of the project Block by Block.

c. How the proposal relates to the existing land-use of the subject property and the zoning and land-use of adjacent properties, including statements describing areas of compatibility and conflict and the mitigation measures utilized;

Our request for building ADUs is no different than if one of our neighbors were asking for the same permission to build. The only difference is that we are proactively requesting it at the same time as the single family home that we are building on the same lot – whereas neighbors would typically add an ADU long after the original single family home was built. There are no conflicts regarding permitted land-use regulations, zoning, or design and building standards.

d. How the proposal complies with the Town's Comprehensive Master Plan and approval criteria of the Municipal Code Title 10 – UDC;

Comprehensive Master Plan:

The Guiding Principles in Erie's Comprehensive Master Plan speak of coordinated growth, quality design, economic and downtown vitality, and "Stable, Cohesive Neighborhoods Offering a Variety of Housings Types".

We believe our nicely appointed ADUs will play a role in those aims. They offer the variety of (smaller) housing that Erie is lacking, while bringing more typically-young professionals with disposable income into the community. That in turn vitalizes the local economy with restaurant, bar, retail, and entertainment spending. Their architecture will closely reflect the single family homes they are share a lot with via rooflines, siding, landscaping, etc.

Municipal Code Title 10 – UDC:

Use Regulations: Our 3 Accessory Development Units require a Special Review Use review. They will be located (each) on a lot with a primary use single family home, with the same ownership and utility metering, and be subordinate in size and use to that home. All 3 ADUs are well under the 33%-of-primary structure rule - averaging 610 square feet – detached from the home and build above garages. All 3 of these ADUs will have easy access to off-site parking, but we are providing an on-site parking spot for each of them anyway. They will maintain the appearance, architectural style and appearance of the primary structure including siding, roofing, and trim. They will share the same exterior materials, with scale, roof lines, and windows all complementing the home they share the lot with.

Dimensional Requirements: All building heights, setbacks, and potential projections into setbacks will fully comply with Erie's UDC guidelines. Nothing will encroach into any right of ways or easements. The ADUs (including the garage under them) will all be at, or less than, the height of the principal residence on their lot.

Development and Design Standards: Addressing key subsections:

10.6.5: The traffic study we submitted for our bigger Main Street plan shows minimal impact on nearby neighborhood streets. That report included these 3 ADU units as well.

10.6.6: Our lots will haves, on average, more on and off street parking than required. We included these 3 ADUs in that parking planning.

e. A description regarding the status of mineral rights and the substance of any existing or proposed covenants, special conditions, grants of easements, or other restrictions applying to the proposed subdivision:

As spelled out in our bigger Main Street submittal, there are no mineral rights, covenants, special conditions, easements grants, or restrictions that restrict our development plans.

The town's water line easement across our land will remain and be protected via ROW (under our Main Street extension) and a dedicated utility easement running through our Garden Court tract.

We permanently resolved an old coal reservation issue when we purchased it (recorded Weld County 2/25/16). Those documents are again provided with our Site Plan submittal.

Main Street

Erie, Colorado

Special Review Use Narrative -- Clubhouse

a. General project concept and purpose of the request;

This request is in coordination with our "Main Street" project currently (separately) going through Preliminary Plat review – that plan includes 9 single family homes, 7 duplexes, and 13 detached garages. Those are all use-by-right. This application is a request for Special Review Use approval for building a clubhouse along with that master plan. Our Main Street Site Plan shows this small 381 square foot clubhouse located on Track K. See enclosed 11x17 architectural drawings. Our Main Street Site Plan shows larger architectural drawings of these ADUs on page 21 of that submittal.

b. Proposed development time-line;

Shortly after Final Plat approval (Spring 2017) we'll build out our infrastructure (Summer 2017), and then start building the homes closest to existing neighbors. This minimizes the impact on neighbors by creating a "street wall" (buildings) that help buffer them from the continuing construction further to the south. Our northern most Main Street homes will be early for that reason.

We anticipate building the clubhouse towards the end of our construction phases perhaps in late 2018.

c. How the proposal relates to the existing land-use of the subject property and the zoning and land-use of adjacent properties, including statements describing areas of compatibility and conflict and the mitigation measures utilized;

Clubhouses, which have become common in planned communities, are admittedly a bit unique in old town districts. Adjacent properties (existing neighbors) could also apply to build one, but lack the space due to their historic planning. We seek the best of both worlds here – to offer this "modern" amenity to our tenants (and encourage existing neighbors to join in) while mitigating any potential negative effects.

Our clubhouse is intentionally located on the south-most side of our Main Street project. This was largely so that its users could enjoy the open view, but that serves a second purpose. That location best buffers the existing neighbors from any potential noise (chatting, music) that might accompany the clubhouse's use. We will post hours-of-use to control any after-hours noise. Steve Poppitz, owner/partner, will also be living onsite and will inforce hours. Furthermore, we will strictly enforce lease provisions regarding clubhouse use, attention to noise, and good neighbor policies. Happy tenant and happy neighbors is good business for us. We are serious about being good neighbors.

d. How the proposal complies with the Town's Comprehensive Master Plan and approval criteria of the Municipal Code Title 10 – UDC;

Erie's Vision Statement talks about enhancing its historic small town character, and building a caring community which offers a high quality of life. In our Main Street Site Plan submittal we talk about how our neighborhood layout encourages community involvement. We believe these two goals are completely compatible. Our design philosophy of 'intentional community' is best achieved through site amenities that attract residents to something that gives them reason to stay and commune – amenities like benches, bocce courts, and our community garden. Even birdhouses offer neighbors a reason to chat. Our clubhouse offers a prime focal location that offers our tenants and neighbors a place to stop, mingle, enjoy the scenery, and build community. It also includes a storage shed for the garden tools for the community garden nearby. An indoor/outdoor kitchen aims to extend, by months, the usable seasons that the clubhouse can attract neighbors to share time, food, and good cheer. Locating the clubhouse at the south-most end of our neighborhood harnesses the best south exposure for views, and seasonal warmth.

Use Regulations: Our Clubhouse requires Special Review Use approval as classified under "Residential Assembly – HOA".

e. A description regarding the status of mineral rights and the substance of any existing or proposed covenants, special conditions, grants of easements, or other restrictions applying to the proposed subdivision:

As spelled out in our bigger Main Street submittal, there are no mineral rights, covenants, special conditions, easements grants, or restrictions that restrict our development plans.

The town's water line easement across our land will remain and be protected via ROW (under our Main Street extension) and a dedicated utility easement running through our Garden Court tract.

We permanently resolved an old coal reservation issue when we purchased it (recorded Weld County 2/25/16). Those documents are again provided with our Site Plan submittal.

Main Street

Neighborhood Meeting Minutes

Abstract: The town of Erie required us to hold a Neighborhood meeting as part of the Preliminary Plat process. We held that meeting **Tuesday 10/23/18 6:00pm to 8:00pm** in the **Erie Public Library** after mailing notices to everyone living within 300 feet of our project and posting multiple announcement signs well in advance.

Attendance (not including Tom and Steve Poppitz as presenters): 17 people signed in as we requested (list attached below). We counted 19 people in attendance during our presentation. More people arrived afterwards, but it was difficult to get an accurate count – we estimate our maximum attendance was between 22 and 25 people.

Meeting Flow: We spent roughly the first ½ hour on a formal PowerPoint presentation, followed by open-room discussions about our plans. We had approximately 45 drawings (mostly 11"x17", the most important on 24"x36") posted around the room on walls to facilitate open discussions.

Presentation Agenda: Topics we proactively covered with the entire group

- Who we are - focusing on small downtown zones, and building communities
- Availability of plans - all available at Erie Planning Department
- Overview of project, including:
  - Site Improvements (our project)
  - "Linear Park" improvements (town project)
  - How the pieces fit together
  - Example Buildings (architecture)
  - Landscaping
- Concerns - addressing loss of field, density, parking, and renting
- Next Steps - Planning Commission and Board of Trustee meetings TBD.
- And then opened viewing details around the room

Tone: The crowd was clearly appreciative of how we carefully and fully we disclosed as much detail as possible - "Thank you for sharing all these details with us" was volunteered by almost everyone we talked to. The overwhelming majority voiced approval of our example architecture and site design. Some voiced opinions on colors and architectural details. Compliments were many and sincere. Concerns were few and muted. One person, David (who apparently didn't sign in), voiced concerns about density during our presentation, but was interestingly discouraged by other neighbors in the room. Another discussed parking, but the more he studied our site plan, the more comfortable he became that we had more than sufficient on-site and off-site spaces. It's safe to characterize the meeting as extremely friendly and that our project was warmly received. By 7:30pm the crowd was largely gone, but we stayed until our scheduled 8:00pm ending.

Sign-In List: Here's the list of those that formally signed in:

Lois Joyce

Mardell Chilon

Cammie Arneson

Jima Wendzel

Linda Geiling

Richard A Korbe

Cynthia Ferrer

Chris McGrath

Mary Montano

Joseph Montano

Juli MacKenzie

Paul Paasch

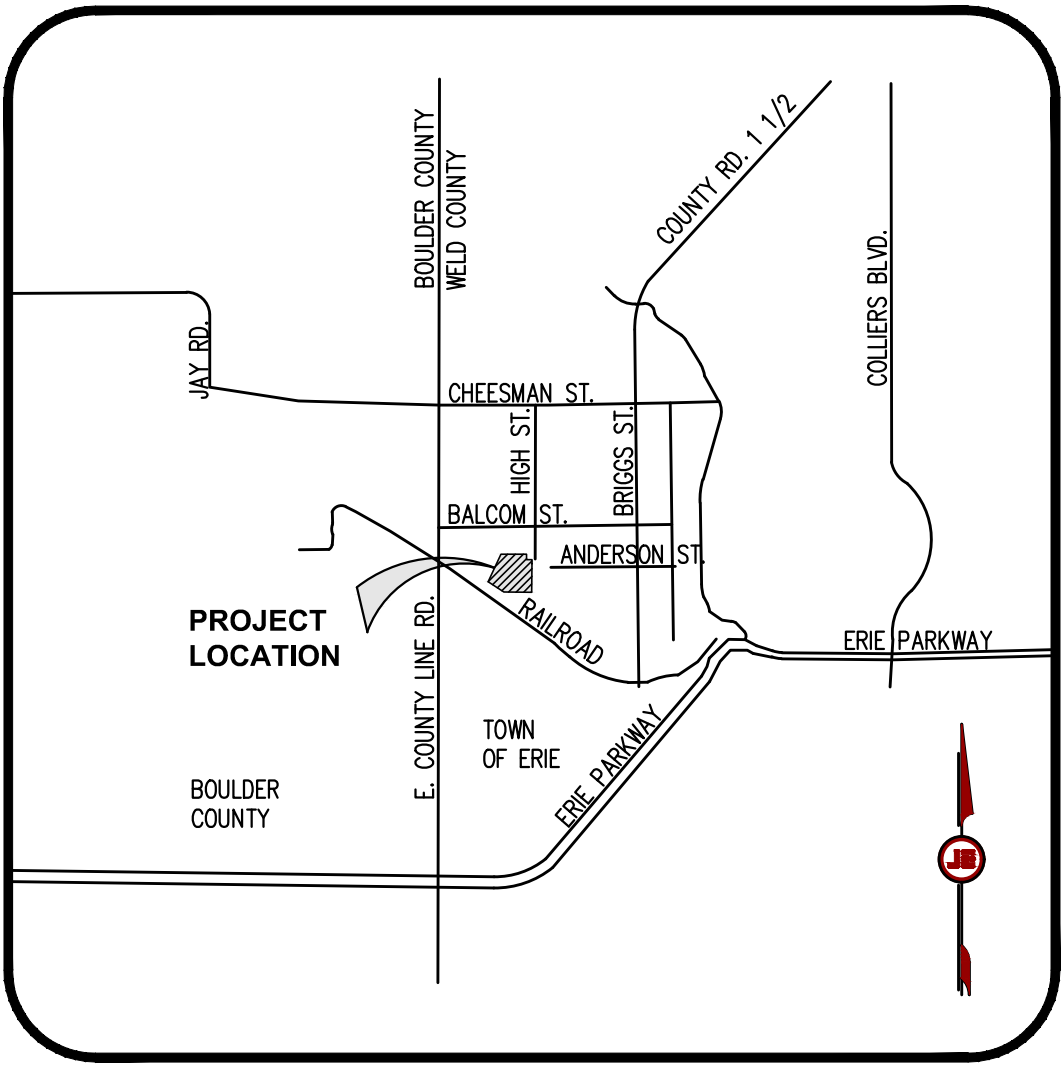
Donna Geithman

Greg Dickinson

Gwen Dickinson

Sarah Pound

Ann Marie Covington



VICINITY MAP

SCALE: 1"=2000'

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M. CITY OF ERIE, COUNTY OF WELD, STATE OF COLORADO

SHEET 1 OF 2

LEGAL DESCRIPTION: (PROVIDED BY TITLE COMPANY)

LOTS 1 THROUGH 10, INCLUSIVE, BLOCK 1 AND LOT 1, BLOCK 3, ERIE HEIGHTS AS RECORDED ON MAY 22ND, 1889 AT RECEPTION No. 32997, TOGETHER WITH PART OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF WELD, STATE OF COLORADO. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF SPARKS SUBDIVISION AS RECORDED MAY 11TH, 1971 AT RECEPTION No. 1567605, POINT ALSO BEING ON THE NORTH RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD; THENCE N24°41'07"E ALONG THE EAST LINE OF SAID SPARKS SUBDIVISION A DISTANCE OF 382.10 FEET TO A POINT ON THE SOUTH LINE OF LOT 5, SILVRANT'S ADDITION; THENCE N89°09'44"E ALONG THE SOUTH LINES OF SAID SILVRANT'S ADDITION AND FLETCHER ADDITION A DISTANCE OF 249.15 FEET TO THE NORTHWEST CORNER LOT 6, BLOCK 3 OF SAID ERIE HEIGHTS; THENCE S00°01'30"W ALONG THE WEST LINE OF BLOCK 3 OF SAID ERIE HEIGHTS A DISTANCE OF 81.35 FEET TO A POINT OF A NON-TANGENT CURVATURE; THENCE CONTINUING ALONG SAID WEST LINE AND ALONG A 3041.64 RADIUS CURVE TO THE RIGHT (SAID CURVE HAVING A CENTRAL ANGLE OF 00°50'18" AND A CHORD BEARING S11°55'26"E A DISTANCE OF 44.47 FEET) AN ARC LENGTH OF 44.47 FEET; THENCE N89°07'14"E ALONG THE SOUTH LINE OF LOT 2, BLOCK 3 OF SAID ERIE HEIGHTS A DISTANCE OF 115.95 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF HIGH STREET; THENCE S00°02'16"E ALONG SAID WEST LINE A DISTANCE OF 25.00 FEET TO THE SOUTHEAST CORNER OF LOT 1, BLOCK 3, OF SAID ERIE HEIGHTS; THENCE S89°07'15"W ALONG THE SOUTH LINE OF SAID LOT 1 A DISTANCE OF 111.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 1 TO A POINT OF A NON-TANGENT CURVATURE; THENCE ALONG A 3041.64 RADIUS CURVE TO THE RIGHT (SAID CURVE HAVING A CENTRAL ANGLE OF 01°08'46" AND A CHORD BEARING S10°27'12"E A DISTANCE OF 60.84 FEET) AN ARC LENGTH OF 60.84 FEET TO THE NORTHWEST CORNER OF LOT 10, BLOCK 1, SAID ERIE HEIGHTS; THENCE N89°07'17"E ALONG SAID NORTH LINE A DISTANCE OF 100.00 FEET TO THE NORTHEAST CORNER OF SAID LOT 10, POINT ALSO BEING ON THE WEST RIGHT OF WAY LINE OF HIGH STREET; THENCE S00°02'16"E ALONG SAID WEST LINE A DISTANCE OF 248.19 FEET TO THE SOUTHEAST CORNER LOT 1, BLOCK 1 OF SAID ERIE HEIGHTS; THENCE S89°28'01"W A DISTANCE OF 365.63 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF UNION PACIFIC RAILROAD; THENCE N57°07'26"W ALONG SAID NORTH LINE A DISTANCE OF 200.51 FEET TO THE POINT OF BEGINNING; COUNTY OF WELD, STATE OF COLORADO

LEGAL DESCRIPTION PREPARED BY EHRHART LAND SURVEYING, JOHN P. EHRHART, COLORADO P.L.S. #29414, DATED JANUARY 15, 2015, PROJECT S095094

TOGETHER WITH LOTS 2, 3, 4 AND 5, BLOCK 3, ERIE HEIGHTS, A SUBDIVISION OF THE TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
CONTAINING 12,292 SQUARE FEET OR 0.282 ACRES, MORE OR LESS
BEING A TOTAL AREA OF 197,535 SQUARE FEET OR 4.535 ACRES, MORE OR LESS.

TITLE REPORT (H0512429-820-GRO-LVV) SCHEDULE B EXCEPTION NOTES:

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY JEHN ENGINEERING, INC., TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD, FOR ALL INFORMATION REGARDING EASEMENT, RIGHT-OF-WAY AND TITLE OR RECORD, JEHN ENGINEERING, INC. RELIED UPON TITLE REPORT NO. H0512429-820-GRO-LVV, EFFECTIVE DATE OF POLICY: JANUARY 8, 2018 AT 6:00 P.M. PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY.

THIS PROPERTY MAY BE SUBJECT TO THE TERMS, PROVISIONS, COVENANTS, CONDITIONS, RESTRICTIONS, OBLIGATIONS, AND RESERVATIONS CONTAINED IN THE FOLLOWING RECORDED INSTRUMENTS:

(#) –INDICATES THE EXCEPTION NUMBER WITH SCHEDULE B-2 OF THE ABOVE MENTIONED TITLE COMMITMENT.

8. ANY EXISTING LEASES OR TENANCIES, AND ANY AND ALL PARTIES CLAIMING BY, THROUGH OR UNDER SAID LESSEES.
NOT A SURVEY ISSUE.

9. NOTES AND OTHER ITEMS SET FORTH ON THE PLAT OF ERIE HEIGHTS RECORDED MAY 22, 1889 AT RECEPTION NUMBER 32997.
NECESSARY PORTIONS OF THE PLAT ARE SHOWN HEREON.

10. A COAL RIGHT HELD BY DRINKWATER, AS DISCLOSED BY THE DEED RECORDED MARCH 11, 1954 IN BOOK 1384 AT PAGE 258, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS. THE DOCUMENT IS A WARRANTY DEED TO THE PROPERTY AND MENTIONS THE COAL RIGHT IN PASSING. IT DOES NOT DISCLOSE THE LEGAL BOUNDS OF ANY MINERAL RIGHTS. NOT GRAPHICALLY DEPICTED.

11. RIGHT OF WAY FOR A WATER MAIN HELD BY THE TOWN OF ERIE ACROSS SAID LAND, AS DISCLOSED BY THE DEED RECORDED MARCH 11, 1954 IN BOOK 1384 AT PAGE 258, WHEREIN THE LOCATION OF THE WATER MAIN IS NOT SPECIFICALLY DESCRIBED, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
THE DOCUMENT IS A WARRANTY DEED AND MENTIONS THE RIGHT-OF-WAY FOR WATER IN PASSING. IT DOES NOT DISCLOSE THE LEGAL BOUNDS OF THIS RIGHT-OF-WAY. DOES NOT DIRECTLY AFFECT LOTS 2-5 BLOCK 3. RIGHT-OF-WAY NOT GRAPHICALLY DEPICTED, HOWEVER THE LOCATED WATERLINE IS SHOWN HEREON.

12. AN OIL AND GAS LEASE, EXECUTED BY THE HEIRS OF MIKE CASTRO, DECEASED, AS LESSOR(S) AND BY THE VESSELS COMPANY, AS LESSEE(S), FOR A PRIMARY TERM OF THREE YEARS, RECORDED MARCH 27, 1984 AT RECEPTION NO. 1960603, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
AFFECTS LOTS 3-5 BLOCK 3 ERIE HEIGHTS. THIS SURVEYOR DID NOT OBSERVE ANY OIL OR GAS WELLS ON THE PROPERTY NOR ANY DRILLING RIGS. JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS.

TITLE REPORT (H0512429-820-GRO-LVV) SCHEDULE B EXCEPTION NOTES CONTINUED:

13. AN OIL AND GAS LEASE, EXECUTED BY THE HEIRS OF MIKE CASTRO, DECEASED, AS LESSOR(S) AND BY THE VESSELS COMPANY, AS LESSEE(S), FOR A PRIMARY TERM OF THREE YEARS, RECORDED MARCH 27, 1984 AT RECEPTION NO. 1960604, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
AFFECTS LOTS 1-10 BLOCK 1 ERIE HEIGHTS AND LOTS 1-2 BLOCK 3 ERIE HEIGHTS. DOCUMENT CONTAINS CONDITIONAL LANGUAGE LIMITING THE CONTRACT TO 10 YEARS UNLESS CERTAIN CONDITIONS ARE MET. THIS SURVEYOR DID NOT OBSERVE ANY OIL OR GAS WELLS ON THE PROPERTY NOR ANY DRILLING RIGS. JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS.

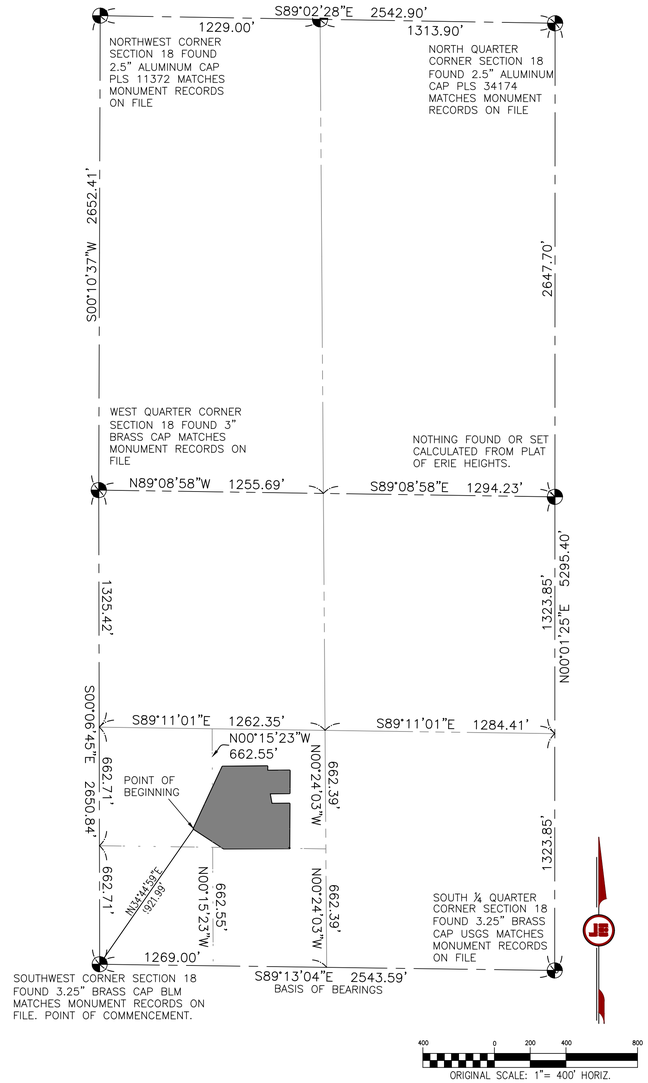
14. ALL MATTERS SHOWN ON THE MAPS RECORDED MAY 19, 2010 AT RECEPTION NO. 3694195 AND RECORDED FEBRUARY 28, 2013 AT RECEPTION NO. 3913570.
AFFECTS LOT 2 BLOCK 3. THIS SURVEYOR IS UNAWARE OF ANY PLANS TO VACATE THE WESTERLY RIGHT-OF-WAY OF ANDERSON STREET. BUILDING (SHED) IN THE SOUTHEASTERLY PORTION OF THE PROPERTY HAS BEEN MOVED.

15. ANY RIGHTS, INTERESTS, OR CLAIMS WHICH MAY EXIST OR ARISE BY REASON OF THE FOLLOWING MATTERS DISCLOSED BY SURVEY,

JOB NO.: S095094
DATED: JANUARY 15, 2015
PREPARED BY: EHRHART LAND SURVEYING
MATTERS SHOWN: FENCE LINES AND SHED. (AFFECTS LOT 2)
SHED HAS BEEN MOVED AND EXISTING FENCES ARE GRAPHICALLY DEPICTED ON THIS SURVEY. SOME FENCING HAS BEEN REMOVED.

16. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE AMOUNT SHOWN BELOW, AMOUNT: $216,900.00
TRUSTOR/GRANTOR TERESA E. CASTRO AND JESS CASTRO TRUSTEE
TRUSTEE: PUBLIC TRUSTEE OF WELD COUNTY
BENEFICIARY: AMERICAN FINANCING CORPORATION
LOAN NO.: 20130066173
RECORDING DATE: FEBRUARY 4, 2016
RECORDING NO: 4178577.
AFFECTS: LOTS 3, 4 AND 5.
NOT A SURVEY ISSUE.

17. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE AMOUNT SHOWN BELOW, AMOUNT: $219,450.00
TRUSTOR/GRANTOR TERESA E. CASTRO AND JESS CASTRO
TRUSTEE: PUBLIC TRUSTEE OF WELD COUNTY
BENEFICIARY: AMERICAN FINANCING CORPORATION
LOAN NO.: 20130173978
RECORDING DATE: DECEMBER 19, 2017
RECORDING NO: 4361408.
AFFECTS: 300 HIGH STREET (CASTRO PROPERTY)
ADDRESS ONLY, NO FULL LEGAL DESCRIPTION IS CONTAINED IN THE DOCUMENT. NOT A SURVEY ISSUE.



TITLE COMMITMENT SCHEDULE B EXCEPTION NOTES:

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY JEHN ENGINEERING, INC., TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD, FOR ALL INFORMATION REGARDING EASEMENT, RIGHT-OF-WAY AND TITLE OR RECORD, JEHN ENGINEERING, INC. RELIED UPON TITLE COMMITMENT POLICY NO. CO-FFAH-IMP-81306-1-15-H0420858, EFFECTIVE DATE OF POLICY: AUGUST 14, 2017 AT 6:00 P.M. AS MODIFIED BY PRO FORMA ENDORSEMENT PRO FORMA-CO-FFAH-IMP-81COPPO-1-17-H0420858 PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY,

THIS PROPERTY MAY BE SUBJECT TO THE TERMS, PROVISIONS, COVENANTS, CONDITIONS, RESTRICTIONS,M OBLIGATIONS, AND RESERVATIONS CONTAINED IN THE FOLLOWING RECORDED INSTRUMENTS:

(#) –INDICATES THE EXCEPTION NUMBER WITH SCHEDULE B-2 OF THE ABOVE MENTIONED TITLE COMMITMENT.

3. NOTES AND ALL OTHER ITEMS SET FORTH ON THE PLAT OF ERIE HEIGHTS.

4. A COAL RIGHT HELD BY DRINKWATER, AS DISCLOSED BY THE DEED RECORDED MARCH 11, 1954 IN BOOK 1384 AT PAGE 258, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS. THE DOCUMENT IS A WARRANTY DEED TO THE PROPERTY AND MENTIONS THE COAL RIGHT IN PASSING. IT DOES NOT DISCLOSE THE LEGAL BOUNDS OF ANY MINERAL RIGHTS. NOT GRAPHICALLY DEPICTED.

5. RIGHT OF WAY FOR A WATER MAIN HELD BY THE TOWN OF ERIE ACROSS SAID LAND, AS DISCLOSED BY THE DEED RECORDED MARCH 11, 1954 IN BOOK 1384 AT PAGE 258, WHEREIN THE LOCATION OF THE WATER MAIN IS NOT SPECIFICALLY DESCRIBED, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
THE DOCUMENT IS A WARRANTY DEED TO THE PROPERTY AND MENTIONS THE RIGHT-OF-WAY FOR WATER IN PASSING. IT DOES NOT DISCLOSE THE LEGAL BOUNDS OF THIS RIGHT-OF-WAY. RIGHT-OF-WAY NOT GRAPHICALLY DEPICTED, HOWEVER THE LOCATED WATERLINE IS SHOWN HEREON.

6. AN OIL AND GAS LEASE, EXECUTED BY MIKE AND DORA CASTRO, AS LESSOR(S) AND BY THE VESSELS COMPANY, AS LESSEE(S), FOR A PRIMARY TERM OF THREE YEARS, RECORDED JUNE 18, 1982 AT RECEPTION NO. 1895064, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
AFFECTS ALL OF THE PARCEL EXCEPT THE PORTIONS GRAPHICALLY DEPICTED (NOTED) ON THIS SURVEY. DOCUMENT CONTAINS CONDITIONAL LANGUAGE LIMITING THE CONTRACT TO 3 YEARS UNLESS CERTAIN CONDITIONS ARE MET. THIS SURVEYOR DID NOT OBSERVE ANY OIL OR GAS WELLS ON THE PROPERTY NOR ANY DRILLING RIGS. JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS.

7. AN OIL AND GAS LEASE, EXECUTED BY THE HEIRS OF MIKE CASTRO, DECEASED, AS LESSOR(S) AND BY VESSELS OIL & GAS COMPANY, AS LESSEE(S), FOR A PRIMARY TERM OF THREE YEARS, RECORDED MARCH 27, 1984 AT RECEPTION NO. 1960604, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
AFFECTS LOTS 1-10 BLOCK 1 ERIE HEIGHTS AND LOTS 1-2 BLOCK 3 ERIE HEIGHTS. DOCUMENT CONTAINS CONDITIONAL LANGUAGE LIMITING THE CONTRACT TO 10 YEARS UNLESS CERTAIN CONDITIONS ARE MET. THIS SURVEYOR DID NOT OBSERVE ANY OIL OR GAS WELLS ON THE PROPERTY NOR ANY DRILLING RIGS. JEHN ENGINEERING DOES NOT EXAMINE WATER OR MINERAL RIGHTS.

8. ALL MATTERS SHOWN ON THE MAPS RECORDED MAY 19, 2010 AT RECEPTION NO. 3694195 AND RECORDED FEBRUARY 28, 2013 AT RECEPTION NO. 3913570.
AFFECTS ALL OF THE PARCEL. THE EXCEPTED PARCEL NOTED ON THE MAPPING IS A PART OF THIS SURVEY AND INCLUDED WITHIN THE LEGAL DESCRIPTION OF THIS PARCEL BY THE TITLE COMPANY. THIS SURVEYOR IS UNAWARE OF ANY PLANS TO VACATE THE WESTERLY RIGHT-OF-WAY OF ANDERSON STREET. BUILDING IN THE SOUTHEASTERLY PORTION OF THE PROPERTY HAS BEEN MOVED.

9. ANY RIGHTS, INTERESTS, OR CLAIMS WHICH MAY EXIST OR ARISE BY REASON OF THE FOLLOWING MATTERS DISCLOSED BY IMPROVEMENT LOCATION CERTIFICATE,
JOB NO.: S095094
DATED: JANUARY 15, 2015
PREPARED BY: EHRHART LAND SURVEYING
MATTERS SHOWN: FENCES, WATERLINE AND SHED (AFFECTS LOT 1, BLOCK 3)
ALL ITEMS AFFECTING SUBJECT PARCEL ARE GRAPHICALLY DEPICTED ON THIS SURVEY. SHED HAS BEEN MOVED AND EXISTING FENCES ARE GRAPHICALLY DEPICTED ON THIS SURVEY. SOME FENCING HAS BEEN REMOVED. WATERLINE IS SHOWN.

SURVEYOR'S CERTIFICATE:

TO: OLD TOWN LIVING, LLC
COMMONWEALTH LAND TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 7a, 8, 11, 13, AND 17 OF TABLE A THEREOF. THE ACCOMPANYING PLAT ACCURATELY AND PROPERLY WITHIN APPLICABLE STANDARDS OF PRACTICE SHOWS SAID SURVEY BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF. THIS SURVEY IS NOT A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

THE FIELD WORK WAS ORIGINALLY COMPLETED ON 8/19/13.
SUBSEQUENT FIELD WORK COMPLETED ON 9/6/17
DATE OF PLAT OR MAP; 1/15/2018

_____
ROBERT HENNESSY
REGISTERED COLORADO LAND SURVEYOR NO. 34580
FOR AND ON BEHALF OF JEHN ENGINEERING, INC.

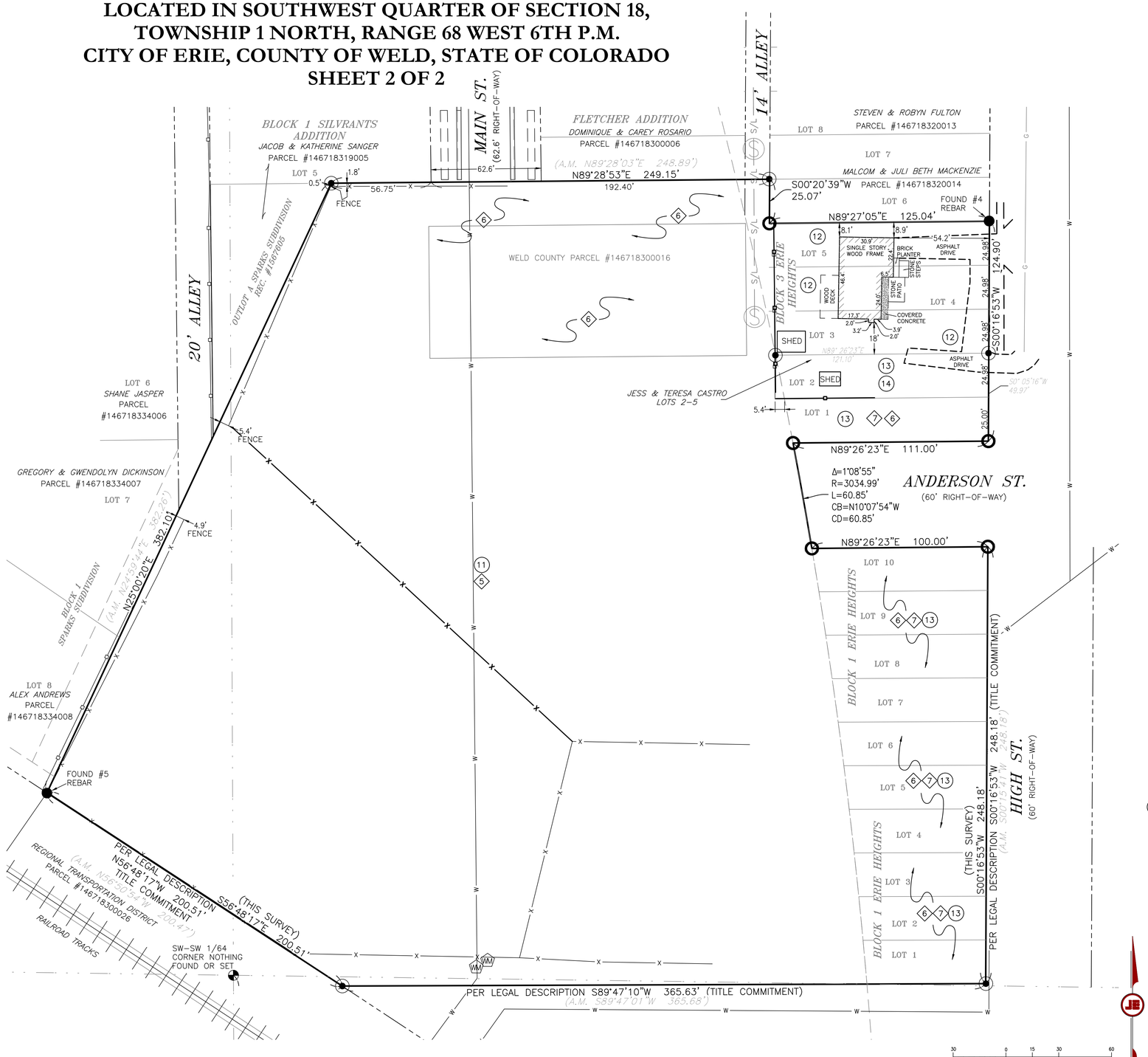
JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

J:\0619\215-018\SURVEY\ALTA\DRAWINGS\5018 CASTRO ALTA UPDATE 9-7-17.DWG

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M. CITY OF ERIE, COUNTY OF WELD, STATE OF COLORADO

SHEET 2 OF 2



GENERAL NOTES:

1. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY JEHN ENGINEERING TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY AND TITLE OF RECORD, JEHN ENGINEERING RELIED UPON COMMITMENT FOR TITLE COMMITMENT POLICY NO.CO-FFAH-IMP-81306-1-15-H0420858, EFFECTIVE DATE OF POLICY: AUGUST 14, 2017 AT 6:00 P.M. AS MODIFIED BY PRO FORMA ENDORSEMENT PRO FORMA-CO-FFAH-IMP-81COPPO-1-17-H0420858 PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, AND TITLE REPORT NO. H0512429-820-GRO-LVV, EFFECTIVE DATE OF POLICY: AUGUST 14, 2017 AT 6:00 P.M. PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY.

2. NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.

3. THIS SURVEY IS VALID ONLY IF PRINT HAS ORIGINAL SEAL AND SIGNATURE OF SURVEYOR.

4. BASIS OF BEARINGS: BEARINGS ARE BASED UPON THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 18, BEING CONSIDERED TO BEAR S89°13'04"E BETWEEN THE FOUND MONUMENTS SHOWN AND DESCRIBED HEREON.

5. UNITS: ALL DIMENSIONS SHOWN HEREON ARE IN U.S. SURVEY FEET. ALL BEARINGS SHOWN HERE ON ARE IN DEGREE-MINUTES-SECONDS.

6. ADDRESS (TABLE A #2)
300 HIGH STREET (TITLE COMMITMENT)
0 HIGH STREET (VACANT LAND, TITLE COMMITMENT)

7. GROSS LAND AREA (TABLE A #4): THE SUBJECT PROPERTY IS 196,777 SQ. FT OR 4.517 ACRES ±.

8. UTILITIES (TABLE A #11) UTILITIES SHOWN HEREON ARE FROM VISIBLE FIELD INFORMATION ONLY. JEHN ENGINEERING DOES NOT GUARANTEE THESE LOCATIONS, OR THAT THE UTILITIES SHOWN HEREON COMPRISE ALL UTILITIES IN THIS AREA, EITHER IN SERVICE OR ABANDONED. FOR THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES, CONTACT THE APPROPRIATE UTILITY COMPANY PRIOR TO CONSTRUCTION.

9. CHANGES TO STREET RIGHT OF WAYS (TABLE A #17)
THIS SURVEYOR IS UNAWARE OF ANY PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WERE OBSERVED.

10. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND SURVEY BOUNDARY MONUMENT OR ACCESSORY COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUE 18-4-508, C.R.S.

11. THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTIES NAMED IN THE CERTIFICATE HEREON. SAID CERTIFICATE DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITY WITHOUT AN EXPRESS RE-CERTIFICATION BY THE SURVEYOR NAMING SUCH PERSON OR ENTITY.

12. THE LEGAL DESCRIPTION PER THIS SURVEY DIFFERS FROM THE PROVIDED LEGAL AS PREPARED BY EHRHART LAND SURVEYING ALONG THE SOUTHERLY BOUNDARY DUE TO A BREAKDOWN OF THE SECTION TO DETERMINE THE LOCATION OF THE SOUTHERLY LINE OF THE PLAT OF ERIE HEIGHTS. THE PIN AT THE SOUTHEAST CORNER OF SPARKS SUBDIVISION (WESTERLY END OF LINE ALONG RIGHT-OF-WAY) WAS FOUND TO BE WITHIN 0.1 OF THE ACCEPTED POSITION (FALLING SLIGHTLY INSIDE THE RAILROAD RIGHT-OF-WAY). THE PIN AT THE SOUTHEASTERLY END OF THE LINE ALONG THE RIGHT-OF-WAY WAS FOUND TO LIE TO THE SOUTH OF THE PLATTED SUBDIVISION LINE AND THE NEW POINT IS THE INTERSECTION OF THE ALIQUOT LINE AND THE RIGHT-OF-WAY. THE FOUND PIN AT THE SOUTHEASTERLY CORNER OF THE SUBJECT PROPERTY WAS FOUND TO LIE NORTH OF THE ALIQUOT LINE AND THE NEW POSITION IS AT THE INTERSECTION OF THE WEST RIGHT-OF-WAY OF HIGH STREET AND THE ALIQUOT LINE.

LEGEND

- SET #5x18"REBAR AND 1" YELLOW PLASTIC CAP PLS 34580
- FOUND #5 REBAR AND 1" YELLOW PLASTIC CAP PLS 29414
- FOUND OR CALCULATED SECTION CORNER AS DESCRIBED HEREON
- SANITARY MANHOLE
- CARSONITE WATERLINE MARKER
- TITLE EXCEPTION #

FENCES
ADJOINER LOT LINE
SECTION LINE
QUARTER SECTION LINE
BOUNDARY LINE
RIGHT-OF-WAY LINE
GAS LINE
SANITARY SEWER LINE
WATERLINE

STANDARD TEXT IS PER LEGAL DESCRIPTION CALL.
ITALICIZED TEXT IS AS MEASURED BETWEEN FOUND MONUMENTS

Δ=27°49'03"	*Δ=27°49'03"*
R=186.75'	*R=186.75'*
L=90.67'	*L=90.67'*
CB=S89°14'00"E	*CB=S89°14'00"E*
CD=89.78'	*CD=89.78'*
N90°00'00"E 96.18'	*(A.M. N90°00'00"E 96.18')*

ROBERT HENNESSY
REGISTERED COLORADO LAND SURVEYOR NO. 34580
FOR AND ON BEHALF OF JEHN ENGINEERING, INC.

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

J:\0619\215-018\SURVEY\ALTA\DRAWINGS\5018 CASTRO ALTA UPDATE 9-7-17.DWG

PHASE III DRAINAGE REPORT

SOUTH MAIN STREET

Erie, Colorado

PREPARED FOR:

Old Town Living, LLC
1036 Walnut Street
Louisville, Colorado 80027
Attn: Steve Poppitz
(303)-419-8337

PREPARED BY:

JēHN ENGINEERING
5690 Webster Street
Arvada, Colorado 80002
Attn: Arnold Niemeyer
(303) 423-6036

DATE: MAY 2016
DECEMBER 2016
NOVEMBER 2017
JULY 2018
NOVEMBER, 2018
JANUARY, 2019

"I hereby that this Phase III Drainage Report for the design of South Main Street was prepared by me (or under my direct supervision) in accordance with the provisions of the *Town of Erie Standards and Specifications for Design and Construction* for the owners hereof. I understand that the Town of Erie does not and will not assume liability for drainage facilities designed by others, including the designs presented in this report"

_____ _____

Arnold Niemeyer, PE Date
For and on behalf of
JēHN Engineering
Registered Professional Engineer
State of Colorado No. 22281

This report has been reviewed and found to be in general compliance with the *Town of Erie Standards and Specifications for Design and Construction* and other Town requirements. **THE ACCURACY AND VALIDITY OF THE ENGINEERING DESIGN, DETAILS, DIMENSIONS, QUANTITIES, AND CONCEPTS IN THIS REPORT REMAIN THE SOLE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE APPEAR HEREON.**

Accepted by: _____ _____

Deputy Public Works Director Date

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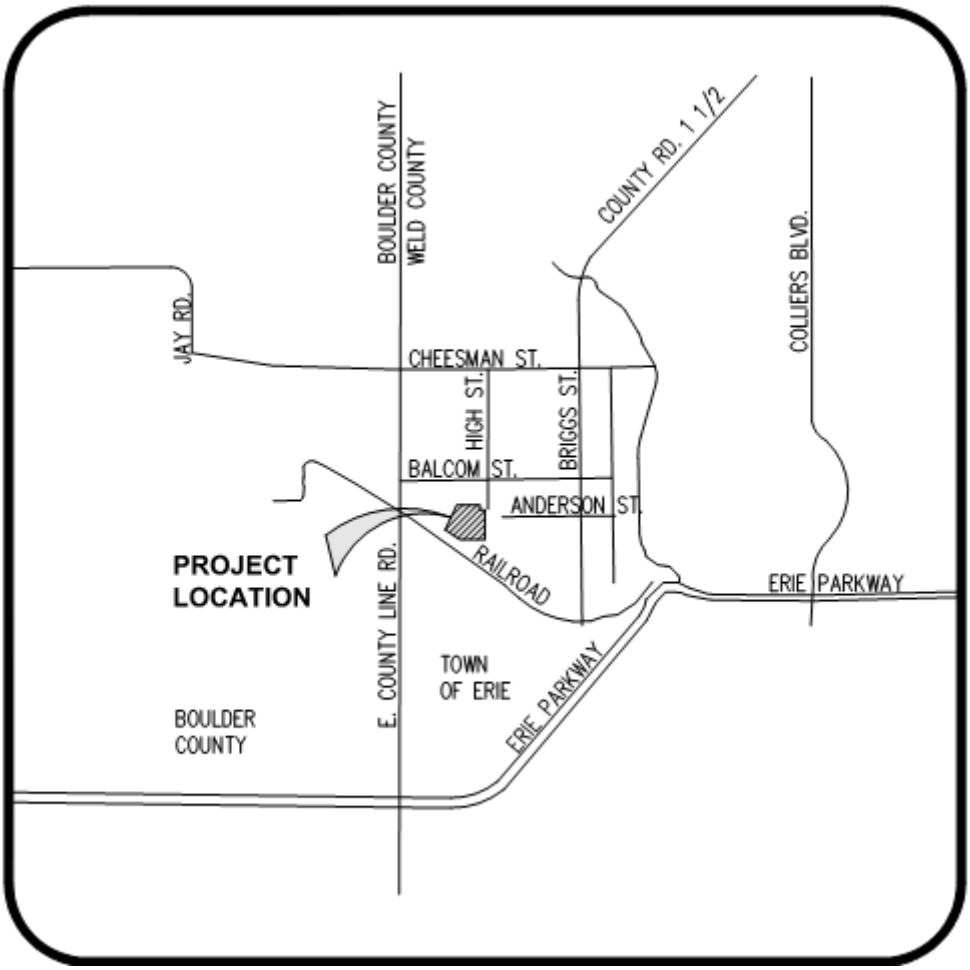
Appendix B – NRCS Soil Survey Report
Appendix C – Hydrologic Calculations
Appendix D – Hydraulic Calculations
Appendix E – Detention & WQCV Calculations
Appendix F – Underground Detention O&M Manual
Appendix G – Underground Detention Maintenance Plan

Figure A – Historic Conditions Drainage Map
Figure B – Proposed Conditions Drainage Map

I. General Location and Description



Scale: 1" = 2000'

Site Location

South Main Street is located in the Southwest ¼ of Section 18, Township 1 North, Range 68 West of the 6th P.M., City of Erie, Weld County and is at the south end of Main Street.

The property is bounded by Main Street and residential housing to the north, residential housing to the west, Union Pacific Railroad to the south, and High Street and undeveloped land to the east.

Site Description

The Site is approximately 4.25 Acres in size and does not currently contain any structures. The property is currently zoned Old Town Residential (OTR).

The existing topography of the area is relatively flat, but generally slopes from west to east and south to north. The existing topography on the property forms a depression located near the middle of the property. Most of the runoff generated on the site is collected at this low point.

A soils report was generated using the NRCS Web Soil Survey. The entirety of the site is classified as Ascalon Sandy Loam which is classified as hydrologic soil group B. See Appendix B for the NRCS Soil Survey Report.

The existing ground cover is comprised mainly of native grass and gravel.

Major Drainageways

There are no major drainageways on the Site. The closest major drainageway is Coal Creek which is located approximately 2,000 feet to the east.

Proposed Project Description

South Main Street is a 26-unit residential development. The project will consist of residential lots with single family homes or duplexes with detached garages. Additional accessory dwelling units will be over some of the detached garages. The development also includes a community garden, alleys, drives and landscape/open space. Also included as part of the proposed development is the extension of High, Main and Anderson Streets. A portion of these road extensions are located off the property to east.

II. Drainage Basins and Sub-basins

ERIE MAIN STREET- SURROUNDING
SUBDIVISION MAP

Major Drainage Basin

The Site is part of the Coal Creek drainage basin per the Urban Drainage and Flood Control District's Regional Major Drainage Map. As shown on the FEMA FIRM Map Panel 08013C0441J last revised December 18, 2012, the subject site is outside of the 100-year flood zone. See Appendix A for the FEMA Firm Map.

Existing On-site and Off-site drainage basin Flow Patterns, and Paths

Existing runoff currently flows from southwest to northeast across the property. Upstream of the property is an abandoned railroad line with a drainage ditch on the southwest side of the tracks. There is approximately 1.60 acres of area upstream of the site between the property line and the abandoned railroad to the southwest where runoff could potentially flow into the property. In the middle of the property is a depression where runoff concentrates before infiltrating and/or evaporating. During larger storm events, excessive ponding at the depression eventually causes flows to continue moving northeast off the property. Once runoff leaves the property it flows

overland and eventually enters the existing curb and gutter on Anderson Street.

There are no existing drainage or water quality features on the Site. Currently the land is vacant.

See Figure A for the Existing Conditions drainage map.

Proposed On-site and Off-site drainage basin Flow Patterns, and Paths

Runoff generated on the property will generally follow existing drainage patterns. Detention will be provided by one underground detention system (Detention Basin A) and one surface pond (Detention Basin B).

Outflows from both Detention Basin A and B will be conveyed to the north via a proposed 18-inch storm sewer in Main Street that connects to the existing storm sewer system at the intersection of Main Street and Balcolm Street. Please refer to the Detention section for more information on the proposed detention ponds.

There are no irrigation facilities proposed.

Existing Sub-basin and Design Point Descriptions

The proposed condition is comprised of "H" Sub-basins (H1 and H2) and "OS" Sub-basins (OS1, OS2, OS3, and OS4). The "H" designated sub-basins represent the existing on-site sub-basins and the "OS" designated sub-basins represent those that are located off-site.

The following is a summary of the sub-basins in the existing condition:

Sub-Basin OS1 – Sub-basin OS1 is located off-site of the development, in between the existing abandoned railroad and the south boundary. This sub-basin is comprised of native grasses. Runoff from this sub-basin flows On-site to Sub-basin H1.

Design Point 1 - Design Point 1 represents flows from Sub-basin OS1.

Sub-basin OS2 – Sub-basin OS2 is located off-site and east of the development. This sub-basin is made of roofs and landscape areas. Runoff from this sub-basin flow on-site to Sub-basin H1.

Design Point 2 - Design Point 2 represents flows from Sub-basin OS2.

Sub-basin H1 – Sub-Basin H1 makes up the majority of the Site and is comprised of native grasses. Runoff from this sub-basin concentrates at the low point at the center of the Site.

Design Point 3 - Design Point 3 represents flows that accumulate at the low-point of the property in the center of Sub-basin H1.

Sub-basin H2 – Sub-basin H2 is located at the northwestern portion of the development and is comprised of native grasses. Runoff generated from this sub-basin flows off-site to the northwest.

Design Point 4 - Design Point 4 represents flows from Sub-basin H2.

Sub-basin OS3 – Sub-basin OS3 is located off-site and to the east. This sub-basin is comprised of native grasses. Runoff from this sub-basin flows to the east down Anderson Street.

Design Point 5 - Design Point 5 represents flows from Sub-basin OS3.

Sub-basin OS4 – Sub-basin OS4 is located at the northwestern portion of the development and is comprised of native grasses. Runoff from this sub-basin flows to the east down Anderson Street.

Design Point 6 - Design Point 6 represents flows from Sub-basin OS4.

EXISTING RUNOFF SUMMARY TABLE					
		DIRECT RUNOFF		TOTAL RUNOFF	
DESIGN POINT	BASIN	Q2 (CFS)	Q100(CFS)	Q2 (CFS)	Q100(CFS)
1	OS1	0.12	5.10	0.12	5.10
2	OS2	0.06	0.55	0.06	0.55
3	H1	0.30	13.11	0.41	16.64
4	H2	0.00	0.13	0.00	0.13
5	OS3	0.04	1.54	0.04	1.54
6	OS4	0.05	2.02	0.05	2.02

Proposed Sub-basin and Design Point Descriptions

The proposed condition is comprised of "A" Sub-basins (A1, A2, and A3), "B" Sub-basins (B1, B2, and B3), "U" Sub-basins (U1, U2 and U3) and "OS" Sub-basins (OS1, OS2, OS3, and OS4). The

"A" designated sub-basins represent those tributary to Detention Basin A and the "B" designated sub-basins represent those tributary to Detention Basin B. The "U" designated sub-basins represent those that flow off the property undetained. The "OS" designated sub-basins represent those that are located off-site.

The following is a summary of the sub-basins in the proposed condition:

Sub-Basin OS1 – Sub-basin OS1 is located off-site of the development, in between the existing abandoned railroad and the south boundary. This sub-basin is comprised of native grasses. Runoff from this sub-basin flows on-site to Sub-basin A1.

Design Point 1 - Design Point 1 represents flows from Sub-basin OS1.

Sub-basin A1 – Sub-Basin A1 is located at the southern portion of the development and is comprised of concrete alleys, grass-crete, roofs, walks, driveways, and landscape areas.

Design Point 2 - Design Point 2 represents flows at the Type 13 inlet located within Alley C. Runoff collected by this inlet is conveyed directly to underground Detention Basin A.

Sub-basin A2 – Sub-basin A2 is located in the center of the development and is comprised of roofs, walks, driveways, and landscape areas.

Design Point 3 - Design Point 3 represents flows at an area inlet at the center of Sub-basin A2. Runoff collected by this inlet is conveyed directly to underground Detention Basin A.

Sub-basin A3 – Sub-basin A3 is located in the center of the development and is comprised of roofs, walks, and landscape areas.

Design Point 4 - Design Point 4 represents flows at an area inlet at the center of Sub-basin A3. Runoff collected by this inlet is conveyed directly to underground Detention Basin A.

Sub-basin B1 – Sub-Basin B1 is located at the western portion of the development and is comprised of concrete alleys, grass-crete, roofs, walks, driveways, and landscape areas.

Design Point 5 - Design Point 5 represents concentrated flows at the location where Alley C intersects Main Street.

Sub-basin B2 – Sub-Basin B2 is located at the north-central portion of the development and is comprised of concrete alleys, asphalt roads, roofs, walks, and landscape areas.

Design Point 6 - Design Point 6 represents flows at the Type R inlet located on the south side of Main Street. Runoff collected by this inlet is conveyed via an 18-inch storm sewer to Design Point 7.

Sub-basin B3 – Sub-Basin B3 is located at the north-central portion of the development and is comprised of asphalt road, walks, and landscape areas.

Design Point 7 - Design Point 7 represents flows at the Type R inlet located on the north side of Main Street. Runoff collected by this inlet is conveyed via an 18-inch storm sewer to Detention Basin B.

Sub-basin OS2 – Sub-basin OS2 is located off-site of the development, directly east of Alley A. This sub-basin is made of roofs and landscape areas. Runoff from this sub-basin flows on-site to Sub-basin B4.

Design Point 8 - Design Point 8 represents flows from Sub-basin OS2.

Sub-basin B4 – Sub-Basin B4 is located at the northeast portion of the development and is comprised of concrete alleys, roofs, walks, driveways, detention and landscape areas.

Design Point 9 - Design Point 9 represents flows that enter Detention Basin B.

Sub-basin U1 – Sub-basin U1 is located at the northwestern portion of the development and is comprised of landscape areas. Runoff generated from this sub-basin flows off-site to the northwest.

Design Point 10 - Design Point 10 represents flows from Sub-basin U1.

Sub-basin U2 – Sub-basin U2 is located at the northwestern portion of the development and is comprised of asphalt road, roofs, walks, driveway and landscape areas. Runoff generated from this sub-basin flows off-site to the north down Main Street.

Design Point 11 - Design Point 11 represents flows from Sub-basin U2.

Sub-basin OS3 – Sub-basin OS3 is located off-site of the development and encompasses portions of Anderson and High Streets. This sub-basin is comprised of asphalt roads, walks and landscape areas. Runoff from this sub-basin flows to the east down Anderson Street.

Design Point 12 - Design Point 12 represents flows from Sub-basin OS3.

Sub-basin U3 – Sub-basin U3 is located at the eastern edge of the development and is comprised of roofs and landscape areas. Runoff from this sub-basin flows off-site onto Sub-basin OS4.

Design Point 13 - Design Point 13 represents flows from Sub-basin U3.

Sub-basin OS4 – Sub-basin OS4 is located off-site of the development and encompasses portions of Anderson and High Streets. This sub-basin is comprised of asphalt roads, walks and landscape areas. Runoff from this sub-basin flows to the east down Anderson Street.

Design Point 14 - Design Point 14 represents flows from Sub-basin OS4.

POST-DEVELOPMENT RUNOFF SUMMARY TABLE					
DESIGN POINT	BASIN	DIRECT RUNOFF		TOTAL RUNOFF	
		Q2	Q100(CFS)	Q2 (CFS)	Q100(CFS)

		(CFS)			
1	OS1	0.1	5.1	0.1	5.1
2	A1	1.5	5.9	1.5	10.2
3	A2	0.3	1.7	0.3	1.7
4	A3	0.3	1.6	1.9	12.5
5	B1	0.8	2.8	0.8	2.8
6	B2	1.8	6.2	2.4	8.5
7	B3	0.4	1.1	3.3	11.5
8	OS2	0.1	0.5	0.1	0.5
9	B4	0.6	2.6	4.0	15.1
10	U1	0.0	0.1	0.0	0.1
11	U2	0.2	0.7	0.2	0.7
12	OS3	0.6	2.4	0.6	2.4
13	U3	0.1	0.8	0.1	0.8
14	OS4	1.2	3.8	1.3	4.6

III. Drainage Facility Design

Criteria

The criteria being followed is per the Town of Erie Storm Drainage Design and Technical Criteria and the Urban Drainage and Flood Control District (UDFCD) Drainage Criteria Manual. The StormTech Design Manual was used to assist in the design of the underground detention system.

Per the Erie Storm Drainage Manual (ESDM), the site will be required to provide Full Spectrum Detention. Full Spectrum Detention is intended to reduce the flooding and stream degradation impacts associated with urban development by controlling peak flows in the stream for a range of events.

The Town has a maximum allowable release rate for detention ponds. The maximum allowable release rate for soil Type B (per ESDM Table 800.4) is 0.85 cfs/acre for the 100-year event and 0.23 cfs/acre for 10-year event. The calculated release rates using the Town of Erie criteria will be compared with those computed using the UD-Detention spreadsheet and the more conservative values will be used.

Per ESDM Section 814.09, there are minimum detention volume criteria. Equations 802 and 803 are functions of imperviousness and tributary area and calculate minimum required 100-yr and 10-yr

volumes. The calculated detention volumes using the Town of Erie criteria are compared with those computed using the UD-Detention spreadsheet and the more conservative values are used.

See Appendix E for calculations to check criterion.

Stormwater Storage and Water Quality Facilities

Full spectrum detention is provided by one on-site underground detention basin (Detention Basin A), and one on-site surface pond (Detention Basin B). The detention basins provide storage the 10- and 100-year storms.

Detention Basin A

Detention Basin A provides detention for the on-site "A" designated sub-basins and the tributary sub-basin OS1 (total area of 3.37 acres with 25.8% Impervious). The intent of the design is to detain for this area and release at or below the allowable release rates.

Detention Basin A consists of a series of underground chambers (ADS Stormtech Model MC3500). The proposed chambers are laid out in rows and columns at least two feet underground and are surrounded by aggregate with 40% stone porosity. The storage volume is provided by the chambers and the voids within the surrounding aggregate.

The provided100-year storage volume of 0.268 acre-feet was calculated using UDFCD's UD-Detention Software. The 10-year storage volume of 0.12 acre-feet was also calculated using the UD-Detention Software. These calculated storage volumes are larger than the Town of Erie's minimum required detention volumes calculated using the V=KA equations. The 100-year water surface elevation occurs at approximately 5035.97. The 10-year water surface elevation occurs at approximately 5032.63.

Detention Basin A is equipped with an outlet structure which will control release rates for both the 10- and 100-year storms. The 10-year release rate of 0.7 cfs is controlled by a weir and the 100-year release rate of 2.9 cfs is controlled by a restrictor plate over the outlet pipe. The outlet structure discharges to a proposed 18-inch storm pipe in Main Street that is connected to the existing storm system at the intersection of Main and Balcolm Streets.

If the outlet works of the detention basin is clogged or a storm exceeding the 100-year event occurs, the water surface in the pond will continue to rise to an elevation of approximately 5037.19. At this elevation, stormwater in the pond will begin to flow over the sidewalk and enter Main Street. The

stormwater will then pond in Main Street until it reaches an approximate elevation of 5037.22 where it will begin to overtop the local high point in Main Street and flow to the east.

Please see Appendix E for stormwater detention and release calculations for Detention Basin A.

Detention Basin B

Detention Basin B provides detention and controls the release rates for the on-site "B" designated sub-basins and the tributary sub-basin OS2 (total area of 2.53 acres with 55.32% Impervious). In addition, this detention basin provides compensatory detention for the "U" designated sub-basins by reducing the 10- and 100-year release rates to those allowed by the Town of Erie for Type "B" soils. The Detention Basin also allows for pass-through flows from Sub-basin OS2.

The required 100-year storage volume of 0.327 acre-feet was calculated using UDFCD's UD-Detention Software. The 10-year storage volume of 0.195 acre-feet was also calculated using the UD-Detention Software. These calculated storage volumes are larger than the Town of Erie's minimum required detention volume calculated using the V=KA equations. The 100-year water surface elevation occurs at approximately 5035.86. The 10-year water surface elevation occurs at approximately 5034.34.

Detention Basin B is equipped with an outlet structure which will control release rates for both the 10- and 100-year storms. The release rates were calculated using the Town of Erie's maximum allowable release rates for 10- and 100-year storm events. The maximum 10-year release rate of 0.6 cfs is controlled by an overflow weir. The maximum 100-year release rate of 2.1 cfs is controlled by a restrictor plate over the outlet pipe. The outlet structure discharges to a proposed 18-inch storm pipe in Main Street that is connected to the existing storm system at the intersection of Main and Balcolm Streets.

If the outlet works of the pond is clogged or a storm exceeding the 100-year event occurs, the water surface in the pond will continue to rise to an elevation of approximately 5037.12. At this elevation, stormwater in the pond will begin to flow over the top of curb and enter Main Street. The stormwater will then pond in Main Street until it reaches an approximate elevation of 5037.22 where it will begin to overtop the local high point in Main Street and flow to the east.

Please see Appendix D for stormwater detention and release calculations for Detention Basin B.

Water Quality Facilities

Water quality enhancements are provided by both Detention Basin A and Detention Basin B. These detention basins provide storage and control the release rates for both the Water Quality Capture Volume (WQCV) and the Excess Urban Runoff Volume (EURV).

Detention Basin A

Detention Basin A provides water quality for the on-site "A" designated sub-basins.

Water quality enhancements are provided by two rows of chambers isolated from the rest of the system by flow-control weirs. These chambers are equipped with a filter fabric which will allow sediment and pollutants to settle out of storm runoff from smaller storm events before entering the other chambers and aggregate. During larger storm events, runoff will overflow the control weir and flow into the remaining chambers

The required WQCV of 0.04 acre-feet was calculated using UDFCD's UD-Detention Software. The required EURV of 0.08 acre-feet was also calculated using UD-Detention Software. The WQCV water surface elevation occurs at approximately 5031.23. The EURV water surface elevation occurs at approximately 5031.98.

The Detention Basin A outlet structure controls release rates for both the WQCV and the EURV. The outlet structure is equipped with a 3-hole orifice plate that was designed to release the WQCV in approximately 40 hours and the 5-year volume in 72 hours or less.

Detention Basin B

Detention Basin B provides water quality for the on-site "B" designated sub-basins.

The required WQCV of 0.044 acre-feet was calculated using UDFCD's UD-Detention Software. The required EURV of 0.144 acre-feet was also calculated using UD-Detention Software. The WQCV water surface elevation occurs at approximately 5031.89. The EURV water surface elevation occurs at approximately 5033.63.

The Detention Basin B outlet structure controls release rates for both the WQCV and the EURV. The outlet structure is equipped with a 3-hole orifice plate that was designed to release the WQCV in approximately 40 hours and the 5-year volume in 72 hours or less.

Roadway and Alley Drainage

Curb and gutter within the roadways and alleys with inverted crowns are used to convey runoff. See Appendix D for street and alley capacity calculations.

Storm Drains

Storm pipe and inlets are used to collect on-site runoff and direct flow to the detention pond. Storm sewer is also used to route flows from the two detention basins to the existing storm drain system at the intersection of Main and Balcolm Street. Autodesk's Hydroflow Storm Sewer Extension program was used to calculate the hydraulic grade line in the pipe. See Appendix D for inlet capacity and HGL calculations.

Maintenance & Inspection

Detention Basin A will be accessible to maintenance via manholes and inspection ports. A high-pressure water jetting process may be used for maintenance of isolator rows. Detention Basin B will be maintained through conventional means.

Downstream Impacts

The proposed on-site detention systems will provide storage for the majority of the Site. Runoff from Sub-Basins U1, U2, and U3 will flow off the site undetained. However, Detention Basin B has been designed to account for the runoff from these sub-basins.

Development within two off-site sub-basins (Sub-basins OS3 and OS4) will result in increased runoff downstream. The increased imperviousness in these off-site basins are due to the public infrastructure (roads and walks). Due to the topography of the site, it was not feasible to route runoff from these sub-basins to the on-site detention ponds. The increased runoff from these sub-basins is not accounted for in the on-site detention basins. The development within these sub-basins will result in an increase in flow in Anderson Street of 1.71 cfs and 2.64 cfs for the 2- and 100-year, respectively. Because this increased flow is relatively minor and will be confined within the limits of Anderson Street, it is not anticipated that this will have any measurable impact to downstream properties.

IV. Conclusion

The development of the property, despite increasing impervious area for the property, does not

adversely impact the surrounding area. The majority of the increased on-site runoff is detained by two on-site detention facilities and released at rates at or below historic rates. Compensatory detention is provided by the proposed detention basins for the small amount of the property where runoff flows off-site undetained.

There are some parts of the development where no detention or compensatory detention is provided. These areas are to off-site and to the east of the property and include the extension of High, Main and Anderson Streets. Because the increased runoff from these areas are relatively minor and the runoff is confined to the public right-of-way, it is anticipated that the development within these areas will have minimal impact to the areas downstream.

V. References

1. Urban Storm Drainage and Flood Control District Drainage Criteria Manual, Volumes 1, 2, and 3, Denver Regional Council of Governments, January 2016.

2. Flood Insurance Rate Map 08013C0441J, Federal Emergency Management Agency, December 2012.

3. Custom Soil Resource Report for Weld County. Southern Part, United States Department of Agriculture National Resources Conservation Service

4. Standards and Specifications for Design and Construction of Public Improvements 2016 Edition. Town of Erie, Colorado.

5. StormTech Design Manual for SC-310/ SC-740/ DC-780, A Division of ADS, www.stormtech.com,

APPENDIX A
FIRM MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided by the FEMA Map Service Centerand the Boulder Area Spatial Data Cooperative (BASIC). Additional input was provided by the Town of Erie and the City of Longmont. These data are current as of 2004

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

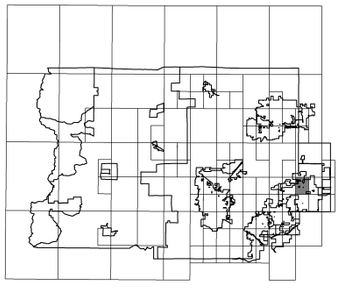
Accredited Levee Notes to Users: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at http://www.fema.gov/business/nfip.index.htm

Boulder County Vertical Datum Offset Table

Flooding Source	Vertical Datum Offset (ft)
Coal Creek (within Town of Erie)	3.0

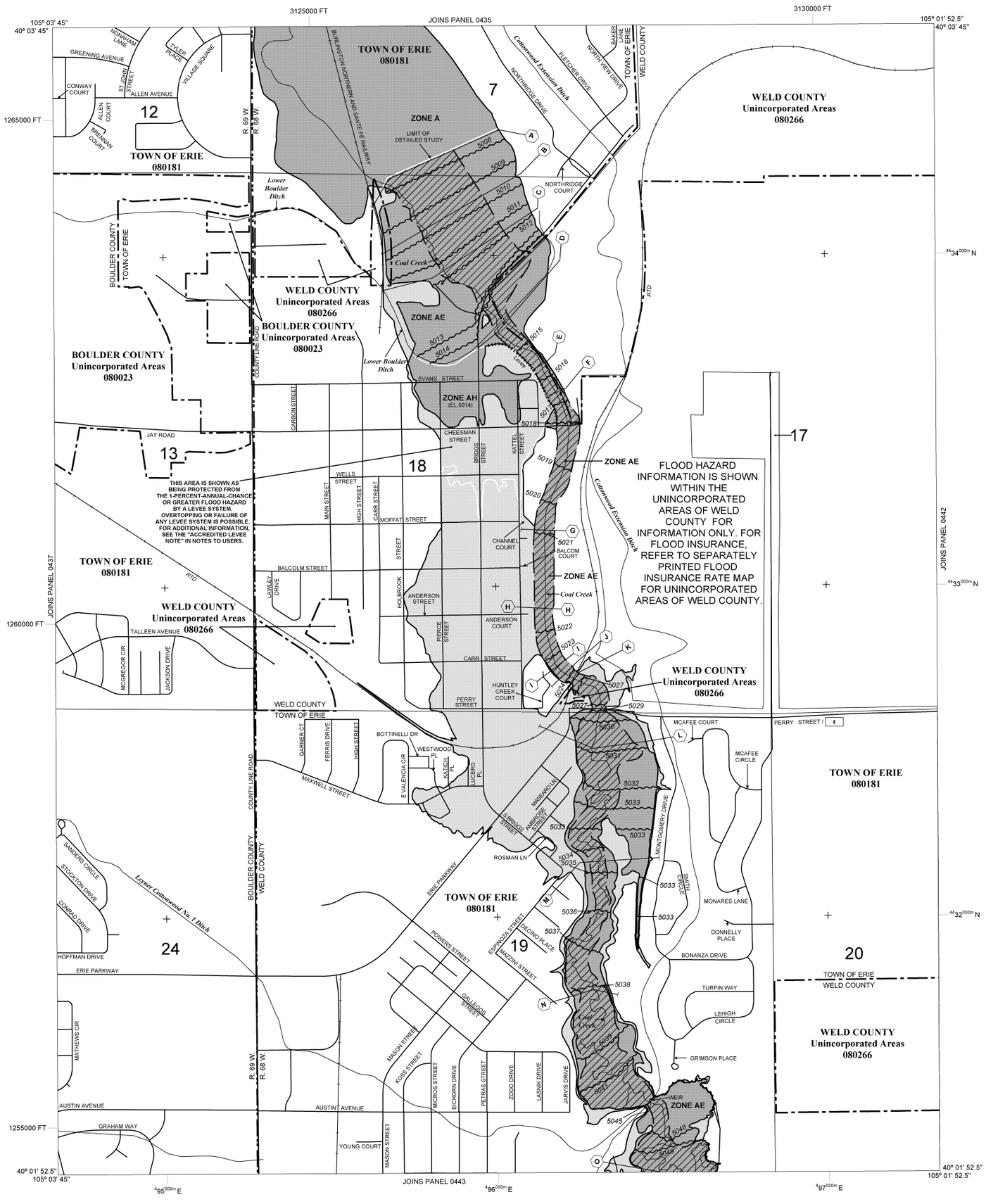
Example: To convert Coal Creek elevations to NAVD 88, 3.0 feet were added to the NGVD 29 elevations.

Panel Location Map



This digital Flood Insurance Rate map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner agreements with FEMA to produce this digital FIRM.

Additional Flood Hazard Information and resources are available from local communities, the Colorado Water Conservation Board, and the Urban Drainage and Flood Control District.



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 68 WEST, AND TOWNSHIP 1 NORTH, RANGE 69 WEST.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- (A)–(A) — Cross section line
- (23)–(23) — Transect line
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000mN — 1000-meter Universal Transverse Mercator grid values, zone 13
- 3180000 FT — 5000-foot ticks: Colorado State Plane North Zone (FIPS Zone 0501), Lambert Conformal Conic projection
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 2, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
May 6, 1996 - to incorporate previously issued Letters of Map Revision; to add roads and road names; and to update corporate limits.
October 4, 2002 - to change base flood elevations; to change special flood hazard areas; to change zone designations; to update roads and road names; to reflect updated topographic information; to incorporate previously issued Letters of Map Revision; and to change floodway.
December 18, 2012 - to update corporate limits; to update roads and road names; to add Special Flood Hazard Areas previously shown on Town of Erie, Colorado Flood Insurance Rate Map dated December 2, 2004; and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0441J

FIRM

FLOOD INSURANCE RATE MAP

BOULDER COUNTY, COLORADO AND INCORPORATED AREAS

PANEL 441 OF 615

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER COUNTY	080023	0441	J
ERIE, TOWN OF	080181	0441	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
08013C0441J

MAP REVISED
DECEMBER 18, 2012

Federal Emergency Management Agency

APPENDIX B
NRCS SOIL SURVEY REPORT

United States Department of Agriculture

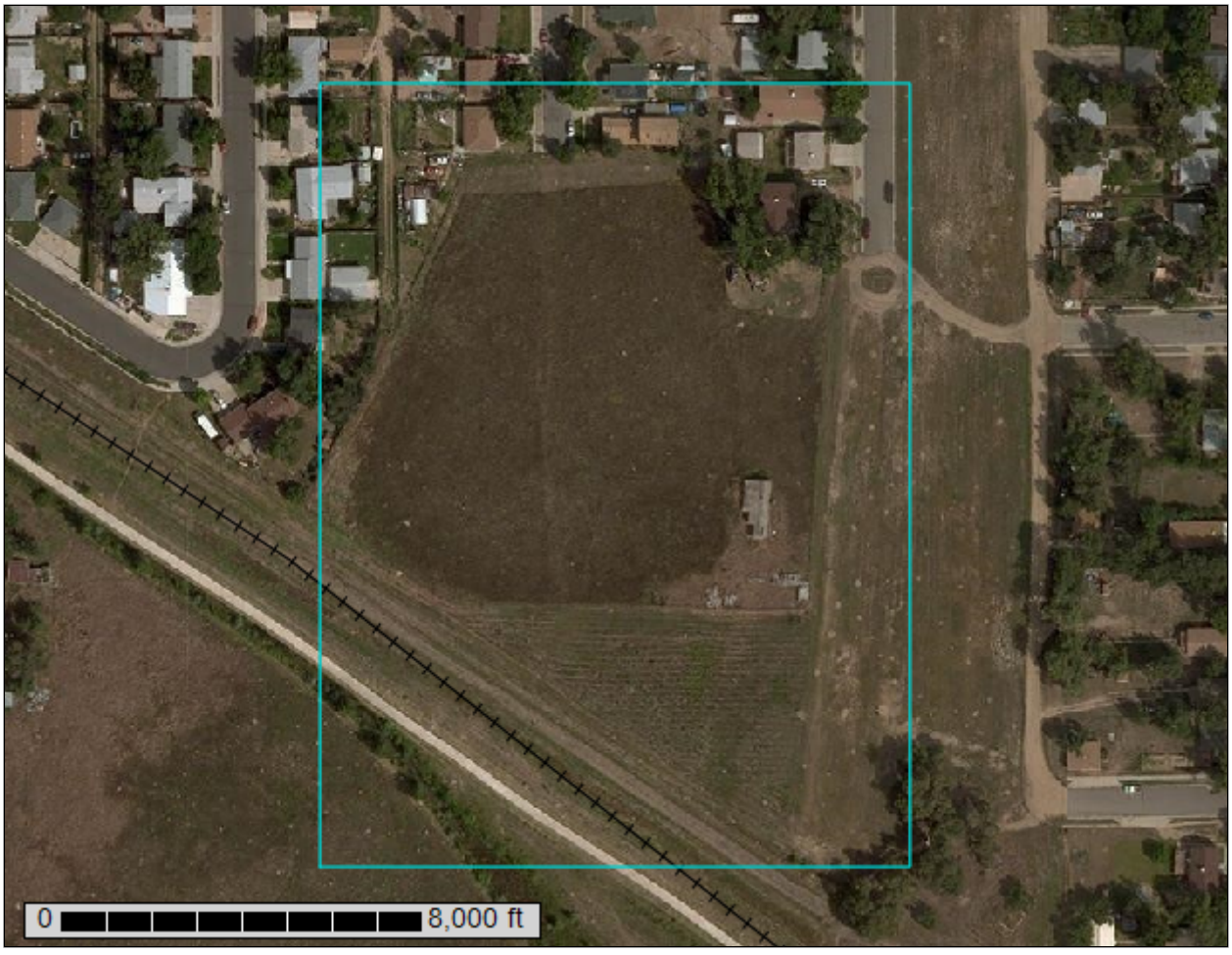
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Weld County, Colorado, Southern Part

Erie Main Street



January 11, 2016

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,370 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 14, Sep 22, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 30, 2014—Sep 18, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Weld County, Colorado, Southern Part (CO618)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
5	Ascalon sandy loam, 0 to 3 percent slopes	10.2	100.0%
Totals for Area of Interest		**10.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Weld County, Colorado, Southern Part

5—Ascalon sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2swl3
Elevation: 3,870 to 5,960 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Map Unit Composition

Ascalon and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ascalon

Setting

Landform: Interfluves, plains
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind-reworked alluvium and/or calcareous sandy eolian deposits

Typical profile

Ap - 0 to 6 inches: sandy loam
Bt1 - 6 to 12 inches: sandy clay loam
Bt2 - 12 to 19 inches: sandy clay loam
Bk - 19 to 35 inches: sandy clay loam
C - 35 to 80 inches: sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: Sandy Plains (R067BY024CO)

Minor Components

Olnest

Percent of map unit: 10 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO)

Vona

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO)

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APPENDIX C
HYDROLOGIC CALCULATIONS

PROJECT ERIE MAIN STREET-EXISTING CONDITIONS
SUBJECT IMPERVIOUS

JOB #: 216-038
DATE: 9/6/2017
BY: PAK

Basin Name	Square Footage	Acres	Lawns/ Landscaped (sf)	Lawns/ Landscaped (Acres)	Asphalt/ Concrete (sf)	Asphalt/ Concrete (Acres)	Roofs (sf)	Roofs (Acres)	Gravel & Grasscrete (sf)	Gravel & Grasscrete (Acres)	Soil Type "B" Composite Runoff Factors				
											C_2	C_5	C_{10}	C_{100}	I %
OS1	69,857	1.60	69,857	1.60	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
OS2	4,874	0.11	3,991	0.09	0	0.00	883	0.02	0	0.00	0.16	0.17	0.27	0.54	17.94
H1	180,927	4.15	180,927	4.15	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
H2	1,094	0.03	1,094	0.03	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
OS3	17,858	0.41	17,858	0.41	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
OS4	20,820	0.48	20,820	0.48	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00

Lans Use	Imp., I %
Lawns/landscaped	2%
Asphalt/Concrete	100%
Roofs	90%
Gravel/Grass-Crete	40%

PROJECT: ERIE MAIN STREET-EXISTING CONDITIONS
SUBJECT: TIME OF CONCENTRATION

JOB #: 216-038
DATE: 9/6/2017
BY: PAK

TIME OF CONCENTRATION

			TIME (Ti) *[Max. 300']*					TRAVEL TIME (Tt)								Tc CHECK (Urbanized Basins)			FINAL Tc	Time to Peak** Flow	Remarks
Basin No.	Area (acres)	5Yr. co-eff.	Elevations Upstream	Elevations Downstream	Dist. (ft)	Slope (%)	Ti (min)	Elevations Upstream	Elevations Downstream	Dist. (ft)	Slope (%)	*	Vel. (fps)	Tt (min)	Tc	Length (ft)	Tc (min)	(min)		
OS1	1.60	0.03	5044.15	5038.67	236	2.3	22.4	5038.67	5037.67	89	1.1	5	1.6	0.9	23.4	325	11.8	11.8	**11.8**	Undeveloped
OS2	0.11	0.17	USE MINIMUM TC																**5.0**	Developed
H1	4.15	0.03	5037.97	5036.74	300	0.4	44.8	5036.74	5036.36	103	0.4	5	0.5	3.4	48.3	403	12.2	12.2	**12.2**	Developed
H2	0.03	0.03	USE MINIMUM TC																**5.0**	Developed
OS3	0.41	0.59	5039.18	5036.55	86	3.1	5.9	5036.55	5032.28	262	1.6	5	1.9	2.3	8.2	348	11.9	8.2	**8.2**	Developed
OS4	0.48	0.59	5040.08	5039.37	14	5.1	2.0	5039.37	5032.28	416	1.7	5	1.9	3.6	5.7	430	12.4	5.7	**5.7**	Developed

**NOTE: ARVADA REQUIRES MIN. Tc=10 MIN.

* Type of Land Surface for Overland Travel Time	VELOCITY COEFFICIENTS	
1 = Heavy Meadow	1	2.5
2 = Tillage / Field	2	5
3 = Short pasture & lawns	3	7
4 = Nearly bare ground	4	10
5 = Grassed waterway	5	15
6 = Paved areas and shallow paved swales	6	20

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-EXISTING CONDITIONS
DESIGN STORM: 2 YEAR

BASIN	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		AREA DESIG.	AREA (Acres)	RUNOFF COEFF	Tc (min)	C A (Acres)	I (in/hour)	Q (cfs)	Tc (min)	Σ(C A) (Acres)	I (in/hour)	Q (cfs)	SLOPE (%)	STREET FLOW (cfs)	DESIGN FLOW (cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	Tt (min)	
OS	**1**	OS1	1.6	0.03	11.81	0.04	2.61	**0.12**				**0.12**									
OS	**2**	OS2	0.11	0.16	5.00	0.02	3.50	**0.06**				**0.06**									
H	**3**	H1	4.15	0.03	12.24	0.12	2.59	**0.30**	15.2	0.18	2.30	**0.41**						305	0.5	10.2	TOTAL FLOW AT DP3
H	**4**	H2	0.03	0.03	5.00	0.00	3.50	**0.00**				**0.00**									
OS	**5**	OS3	0.41	0.03	8.18	0.01	3.07	**0.04**				**0.04**									
OS	**6**	OS4	0.48	0.03	5.66	0.01	3.43	**0.05**				**0.05**									

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-EXISTING CONDITIONS
DESIGN STORM: 100 YEAR

BASIN	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		AREA DESIG.	AREA (Acres)	RUNOFF COEFF	Tc (min)	C A (Acres)	I (in/hour)	Q (cfs)	Tc (min)	Σ(C A) (Acres)	I (in/hour)	Q (cfs)	SLOPE (%)	STREET FLOW (cfs)	DESIGN FLOW (cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	Tt (min)	
OS	**1**	OS1	1.6	0.47	11.81	0.75	6.81	**5.10**				**5.10**									
OS	**2**	OS2	0.11	0.54	5.00	0.06	9.20	**0.55**				**0.55**									
H	**3**	H1	4.15	0.47	12.24	1.94	6.75	**13.11**	15.2	2.75	6.05	**16.64**						305	0.5	10.2	TOTAL FLOW AT DP3
H	**4**	H2	0.03	0.47	5.00	0.01	9.20	**0.13**				**0.13**									
H	**5**	OS3	0.41	0.47	8.18	0.19	8.01	**1.54**				**1.54**									
H	**6**	OS4	0.48	0.47	5.66	0.22	9.00	**2.02**				**2.02**									

PROJECT ERIE MAIN STREET-PROPOSED CONDITIONS
SUBJECT IMPERVIOUS

JOB #: 216-038
DATE: 9/6/2017
BY: PAK

Basin Name	Square Footage	Acres	Lawns/ Landscaped (sf)	Lawns/ Landscaped (Acres)	Asphalt/ Concrete (sf)	Asphalt/ Concrete (Acres)	Roofs (sf)	Roofs (Acres)	Gravel & Grasscrete (sf)	Gravel & Grasscrete (Acres)	Soil Type "B" Composite Runoff Factors				
											C_2	C_5	C_{10}	C_{100}	I %
OS1	69,857	1.60	69,857	1.60	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
A1	50,387	1.16	21,482	0.49	19,148	0.44	9,439	0.22	318	0.01	0.49	0.52	0.57	0.72	55.97
A2	13,679	0.31	9,193	0.21	1,162	0.03	3,324	0.08	0	0.00	0.28	0.30	0.38	0.61	31.71
A3	12,749	0.29	8,751	0.20	1,348	0.03	2,650	0.06	0	0.00	0.27	0.29	0.37	0.60	30.65
B1	19,578	0.45	6,307	0.14	7,188	0.17	5,617	0.13	466	0.01	0.57	0.59	0.64	0.77	64.13
B2	44,965	1.03	14,466	0.33	15,677	0.36	14,209	0.33	613	0.01	0.57	0.59	0.64	0.77	64.49
B3	5,867	0.13	644	0.01	5,223	0.12	0	0.00	0	0.00	0.79	0.83	0.84	0.89	89.25
OS2	4,874	0.11	3,991	0.09	0	0.00	883	0.02	0	0.00	0.16	0.17	0.27	0.54	17.94
B4	21,867	0.50	12,507	0.29	4,090	0.09	5,056	0.12	214	0.00	0.37	0.38	0.46	0.65	41.05
U1	1,093	0.03	1,093	0.03	0	0.00	0	0.00	0	0.00	0.03	0.03	0.15	0.47	2.00
U2	5,110	0.12	2,463	0.06	2,647	0.06	0	0.00	0	0.00	0.47	0.49	0.55	0.71	52.77
OS3	17,858	0.41	7,611	0.17	10,247	0.24	0	0.00	0	0.00	0.51	0.54	0.59	0.74	58.23
U3	6,726	0.15	5,174	0.12	351	500.00	1,201	0.03	0	0.00	0.20	0.21	0.31	0.57	22.83
OS4	20,820	0.48	3,582	0.08	17,238	0.40	0	0.00	0	0.00	0.74	0.77	0.79	0.86	83.14

Lans Use	Imp., I %
Lawns/landscaped	2%
Asphalt/Concrete	100%
Roofs	90%
Gravel/Grass-Crete	40%

		TRIBUTARY AREA (AC)	% IMPERVIOUS
DET A	A1, A2 & A3	1.76	47.45
DET B	B1, B2, B3	2.12	60.44
UNDETAINED	U1, U2, U3	0.30	32.72
OFF-SITE	OS1, OS2 & OS3	2.60	32.38

POND SIZING			
DET A including OS1	A1, A2, A3 + OS1	3.37	25.80
DET B Including OS2 & UNDETAINED	B1, B2, B3,U1, U2, U3 + OS2	2.53	55.32

PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS
SUBJECT: TIME OF CONCENTRATION

JOB #: 216-038
DATE: 9/6/2017
BY: PAK

TIME OF CONCENTRATION

			TIME (Ti) *[Max. 300']*					TRAVEL TIME (Tt)								Tc CHECK (Urbanized Basins)			FINAL Tc	Time to Peak Flow	Remarks
Basin No.	Area (acres)	5Yr. co-eff.	Elevations		Dist. (ft)	Slope (%)	Ti (min)	Elevations		Dist. (ft)	Slope (%)	*	Vel. (fps)	Tt (min)	Tc	Length (ft)	Tc (min)	(min)		
			Upstream	Downstream				Upstream	Downstream											
OS1	1.60	0.03	5044.15	5038.67	236	2.3	22.4	5038.67	5037.67	89	1.1	5	1.6	0.9	23.4	325	11.8	11.8	**11.8**	Undeveloped
A1	1.16	0.52	5042.55	5040.24	118	2.0	9.2	5040.24	5036.66	250	1.4	6	2.3	1.8	11.0	368	12.0	11.0	**11.0**	Developed
A2	0.31	0.30	5040.85	5040.19	16	4.1	3.6	5040.19	5036.65	129	2.7	5	2.5	0.9	4.5	145	10.8	4.5	**5.0**	Developed
A3	0.29	0.29	5040.85	5040.43	18	2.3	4.7	5040.43	5036.14	144	3.0	5	2.7	0.9	5.6	162	10.9	5.6	**5.6**	
B1	0.45	0.59	5040.49	5038.33	75	2.9	5.6	5038.33	5037.29	201	0.5	6	1.3	2.6	8.2	276	11.5	8.2	**8.2**	Developed
B2	1.03	0.59	5042.37	5039.87	109	2.3	7.3	5039.87	5036.48	167	2.0	6	2.7	1.0	8.3	276	11.5	8.3	**8.3**	Developed
B3	0.13	0.83	5039.58	5037.80	72	2.5	3.1	5037.80	5036.60	146	0.8	6	1.7	1.4	4.5	218	11.2	4.5	**5.0**	Developed
OS2	0.11	0.17	USE MINIMUM TC																**5.0**	Developed
B4	0.50	0.38	5039.31	5038.13	58	2.0	7.8	5038.13	5036.82	103	1.3	6	2.1	0.8	8.6	161	10.9	8.6	**8.6**	Developed
U1	0.03	0.03	USE MINIMUM TC																**5.0**	Developed
U2	0.12	0.49	5038.94	5037.60	67	2.0	7.2	5037.60	5037.52	11	0.7	6	1.6	0.1	7.3	78	10.4	7.3	**7.3**	Developed
OS3	0.41	0.54	5039.18	5036.55	86	3.1	6.5	5036.55	5032.28	262	1.6	6	2.4	1.8	8.3	348	11.9	8.3	**8.3**	Developed
U3	0.15	0.21	USE MINIMUM TC																**5.0**	
OS4	0.48	0.77	5040.08	5039.37	14	5.1	1.3	5039.37	5032.28	424	1.7	6	2.4	2.9	4.2	438	12.4	4.2	**5.0**	Developed

* Type of Land Surface for Overland Travel Time	VELOCITY COEFFICIENTS	
1 = Heavy Meadow	1	2.5
2 = Tillage / Field	2	5
3 = Short pasture & lawns	3	7
4 = Nearly bare ground	4	10
5 = Grassed waterway	5	15
6 = Paved areas and shallow paved swales	6	20

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS
DESIGN STORM: 2 YEAR

BASIN	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		AREA DESIG.	AREA (Acres)	RUNOFF COEFF	Tc (min)	C A (Acres)	I (in/hour)	Q (cfs)	Tc (min)	Σ(C A) (Acres)	I (in/hour)	Q (cfs)	SLOPE (%)	STREET FLOW (cfs)	DESIGN FLOW (cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	Tt (min)	
OS	**1**	OS1	1.6	0.03	11.81	0.04	2.61	**0.1**				**0.1**	0.6	0.1				150	1.4	1.7	
A	**2**	A1	1.16	0.49	11.02	0.57	2.68	**1.5**	13.5	0.62	2.44	**1.5**									
A	**3**	A2	0.31	0.28	5.00	0.09	3.50	**0.3**				**0.3**									
A	**4**	A3	0.29	0.27	5.61	0.08	3.43	**0.3**	13.5	0.78	2.44	**1.9**									TOTAL FLOW AT POND A
B	**5**	B1	0.45	0.57	8.18	0.26	3.07	**0.8**				**0.8**	0.5	0.8				94	1.3	1.2	
B	**6**	B2	1.03	0.57	8.31	0.59	3.03	**1.8**	9.4	0.84	2.89	**2.4**			2.4	0.5	18	41	4.6	0.1	
B	**7**	B3	0.13	0.79	5.00	0.10	3.50	**0.4**	5.1	0.95	3.50	**3.3**	0.5		3.3	0.5	18	21	4.7	0.1	
OS	**8**	OS2	0.11	0.16	5.00	0.02	3.50	**0.1**				**0.1**								0.0	
B	**9**	B4	0.5	0.37	8.63	0.18	3.00	**0.6**	5.1	1.15	3.50	**4.0**									TOTAL FLOW AT POND B
U	**10**	U1	0.03	0.03	5.00	0.00	3.50	**0.0**				**0.0**									
U	**11**	U2	0.12	0.47	7.29	0.06	3.18	**0.2**				**0.2**									
OS	**12**	OS3	0.41	0.51	8.29	0.21	3.03	**0.6**				**0.6**									
U	**13**	U3	0.15	0.20	5.00	0.03	3.50	**0.1**				**0.1**								0.0	
OS	**14**	OS4	0.48	0.74	5.00	0.36	3.50	**1.2**	5.0	0.39	3.50	**1.3**									

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS
DESIGN STORM: 100 YEAR

BASIN	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		AREA DESIG.	AREA (Acres)	RUNOFF COEFF	Tc (min)	C A (Acres)	I (in/hour)	Q (cfs)	Tc (min)	Σ(C A) (Acres)	I (in/hour)	Q (cfs)	SLOPE (%)	STREET FLOW (cfs)	DESIGN FLOW (cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	Tt (min)	
OS	**1**	OS1	1.60	0.47	11.81	0.75	6.81	**5.1**				**5.1**	0.6	5.1				150	1.4	1.7	
A	**2**	A1	1.16	0.72	11.02	0.84	6.99	**5.9**	13.5	1.59	6.40	**10.2**									
A	**3**	A2	0.31	0.61	5.00	0.19	9.20	**1.7**				**1.7**									
A	**4**	A3	0.29	0.60	5.61	0.17	9.00	**1.6**	13.5	1.95	6.40	**12.5**									TOTAL FLOW AT POND A
B	**5**	B1	0.45	0.77	8.18	0.34	8.01	**2.8**				**2.8**	0.5	2.8				94	1.3	1.2	
B	**6**	B2	1.03	0.77	8.31	0.79	7.91	**6.2**	9.4	1.13	7.52	**8.5**			8.5	0.5	18	41	4.6	0.1	
B	**7**	B3	0.13	0.89	5.00	0.12	9.20	**1.1**	5.1	1.25	9.20	**11.5**	0.5		11.5	0.5	18	21	4.7	0.1	
OS	**8**	OS2	0.11	0.54	5.00	0.06	9.20	**0.5**				**0.5**								0.0	
B	**9**	B4	0.5	0.65	8.63	0.33	7.81	**2.6**	5.1	1.64	9.20	**15.1**									TOTAL FLOW AT POND B
U	**10**	U1	0.03	0.47	5.00	0.01	9.20	**0.1**				**0.1**									
U	**11**	U2	0.12	0.71	7.29	0.09	8.31	**0.7**				**0.7**									
OS	**12**	OS3	0.41	0.74	8.29	0.30	7.91	**2.4**				**2.4**									
U	**13**	U3	0.15	0.57	5.00	0.08	9.20	**0.8**				**0.8**								0.0	
OS	**14**	OS4	0.48	0.86	5.00	0.41	9.20	**3.8**	5.0	0.50	9.20	**4.6**									

APPENDIX D
HYDRAULIC CALCULATIONS

POND B FOREBAY & TRICKLE CHANNEL CALCS

CALCULATED BY: PAK
DATE: 1/14/19
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS

	FLOW TO EACH FOREBAY (CFS)
FOREBAY 1 (DP9- BASIN B4)	12.5
FOREBAY 2 (50% OF FLOW IN BASIN B4+OS2)	1.55
FOREBAY 3 (50% OF FLOW IN BASIN B4+OS2)	1.55

FOREBAY 1

FOREBAY VOLUME	(SIZE TO BE 1% OF WQCV)		
WQCV (82.6% of 0.44 ac-ft)		0.036 AC-FT	
REQUIRED FOREBAY VOLUME		15.83 FT^3	
PROVIDED FOREBAY VOLUME		19.25 FT^3	
FOREBAY WSEL		0.82 FT	
FOREBAY RELEASE	(SIZE TO BE 2% OF 100-YR UNDETAINED RUNOFF)		
100-YR UNDETAINED RUNOFF		12.5 CFS	
REQUIRED FORBAY RELEASE		0.25 CFS	<---Use 1.5" wide weir (see weir calculation)
TRICKLE CHANNEL CAPACITY	(SIZE TO BE 3% OF 100-YR UNDETAINED RUNOFF OR 1 CFS MINIMUM)		
100-YR UNDETAINED RUNOFF		12.5 CFS	
REQUIRED TRICKLE CHANNEL CAPACITY		0.38 CFS	(USE MINIMUM=1 CFS)

FOREBAY 2 & FOREBAY 3

FOREBAY VOLUME	(SIZE TO BE 1% OF WQCV)		
WQCV (8.6% of 0.44 ac-ft)		0.004 AC-FT	
REQUIRED FOREBAY VOLUME		1.65 FT^3	
PROVIDED FOREBAY VOLUME		4.50 FT^3	
FOREBAY WSEL		0.37 FT	
FOREBAY RELEASE	(SIZE TO BE 2% OF 100-YR UNDETAINED RUNOFF)		
100-YR UNDETAINED RUNOFF		1.55 CFS	
REQUIRED FORBAY RELEASE		0.03 CFS	<---Use 1.0" wide weir (see weir calculation)
TRICKLE CHANNEL CAPACITY	(SIZE TO BE 3% OF 100-YR UNDETAINED RUNOFF OR 1 CFS MINIMUM)		
100-YR UNDETAINED RUNOFF		1.55 CFS	
REQUIRED TRICKLE CHANNEL CAPACITY		0.05 CFS	(USE MINIMUM=1 CFS)

Weir Report

POND B FOREBAY 1- RELEASE WEIR

Rectangular Weir

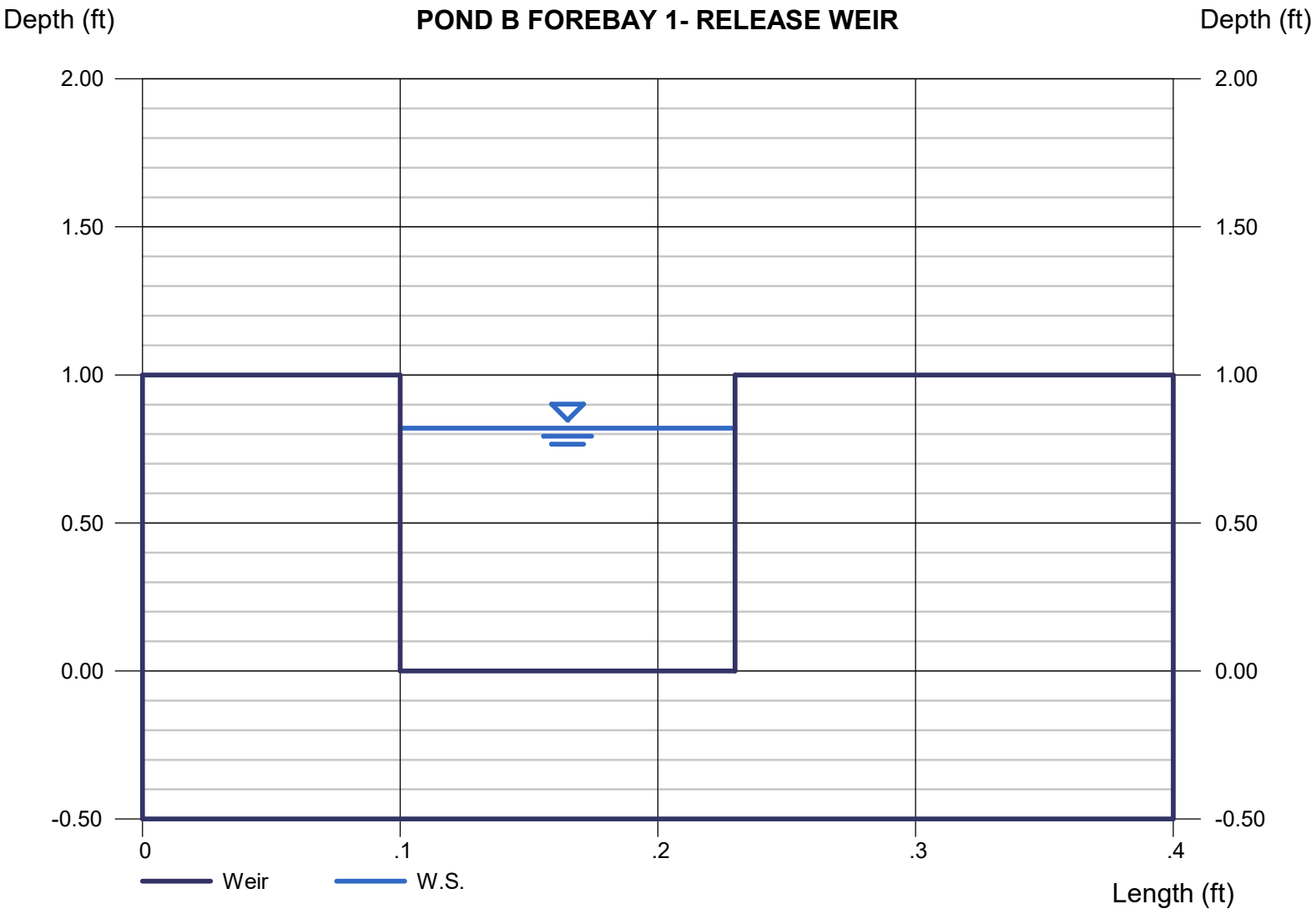
Crest	= Sharp
Bottom Length (ft)	= 0.13
Total Depth (ft)	= 1.00

Calculations

Weir Coeff. Cw	= 3.33
Compute by:	Known Depth
Known Depth (ft)	= 0.82

Highlighted

Depth (ft)	= 0.82
Q (cfs)	= 0.321
Area (sqft)	= 0.11
Velocity (ft/s)	= 3.02
Top Width (ft)	= 0.13



Weir Report

POND B FOREBAY 2 & 3 - RELEASE WEIR

Rectangular Weir

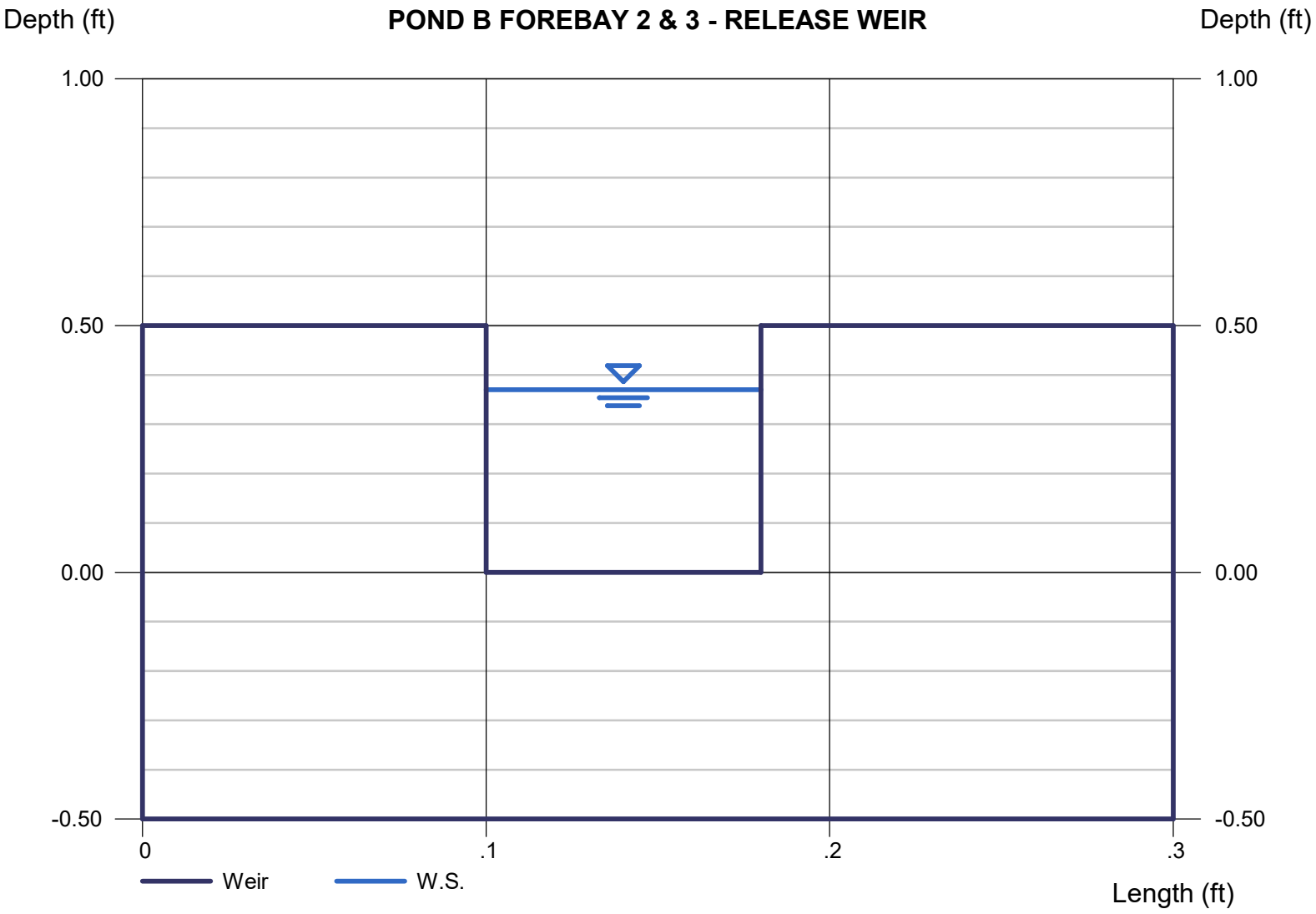
Crest	= Sharp
Bottom Length (ft)	= 0.08
Total Depth (ft)	= 0.50

Calculations

Weir Coeff. Cw	= 3.33
Compute by:	Known Depth
Known Depth (ft)	= 0.37

Highlighted

Depth (ft)	= 0.37
Q (cfs)	= 0.060
Area (sqft)	= 0.03
Velocity (ft/s)	= 2.03
Top Width (ft)	= 0.08



Channel Report

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POND B TRICKLE CHANNEL

Rectangular

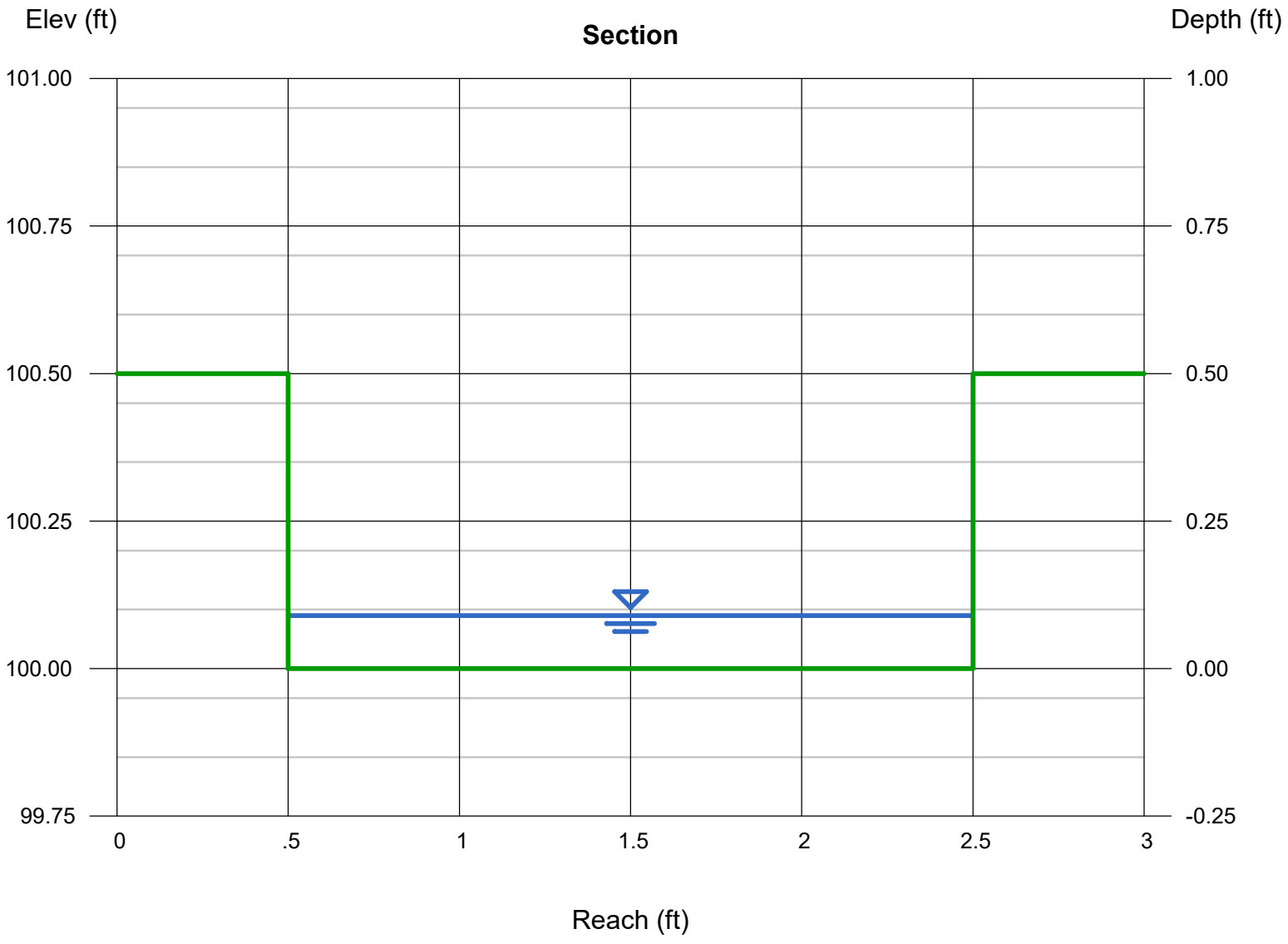
Bottom Width (ft)	= 2.00
Total Depth (ft)	= 0.50
Invert Elev (ft)	= 100.00
Slope (%)	= 1.00
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 0.38

Highlighted

Depth (ft)	= 0.09
Q (cfs)	= 0.380
Area (sqft)	= 0.18
Velocity (ft/s)	= 2.11
Wetted Perim (ft)	= 2.18
Crit Depth, Yc (ft)	= 0.11
Top Width (ft)	= 2.00
EGL (ft)	= 0.16



Channel Report

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SOUTH MAIN STREET ERIE-INITIAL STORM MAX STREET CAPACITY

User-defined

Invert Elev (ft)	= 100.00
Slope (%)	= 0.75
N-Value	= 0.016

Calculations

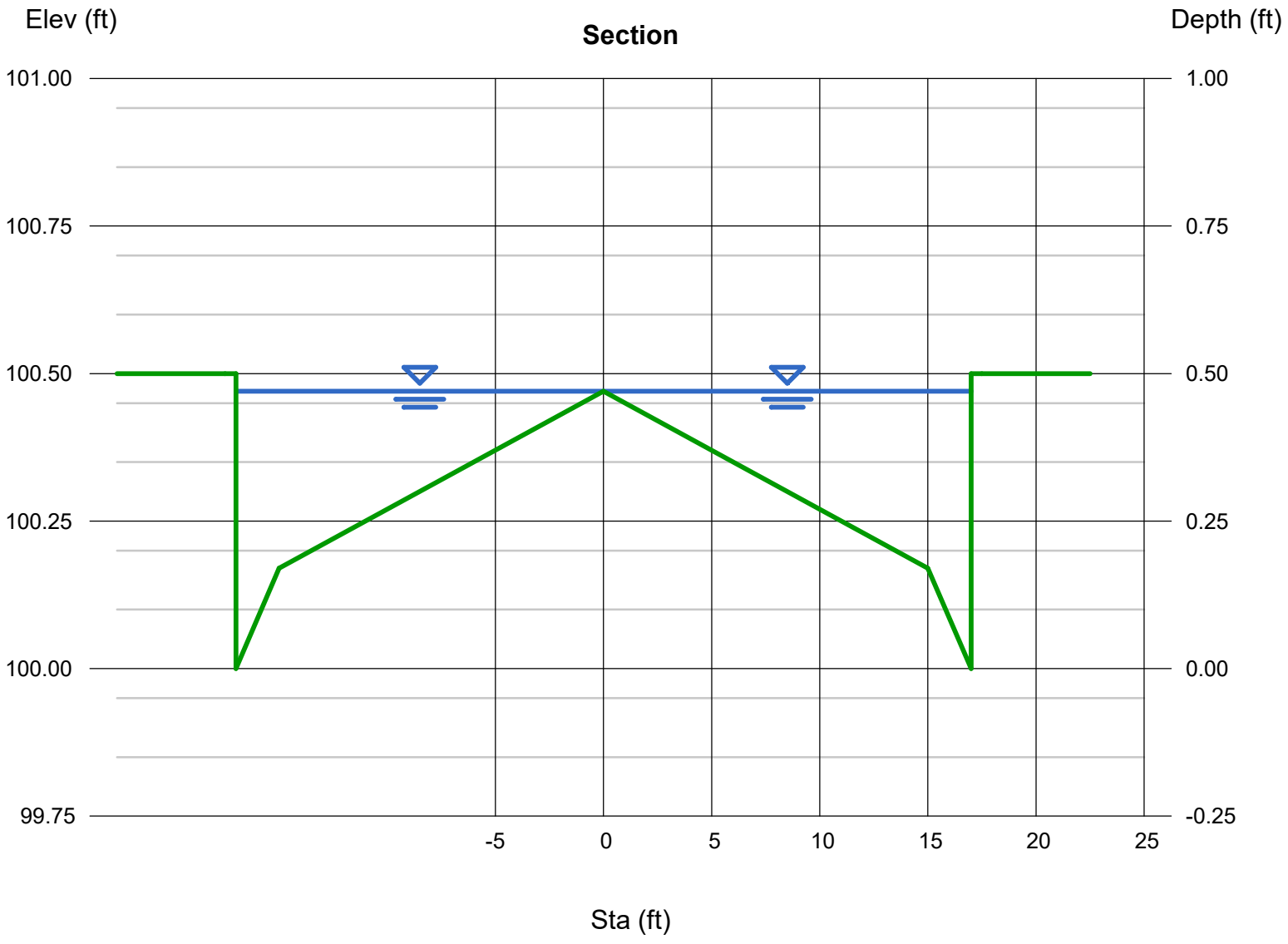
Compute by:	Known Depth
Known Depth (ft)	= 0.47

Highlighted

Depth (ft)	= 0.47
Q (cfs)	= 15.49
Area (sqft)	= 6.04
Velocity (ft/s)	= 2.56
Wetted Perim (ft)	= 34.96
Crit Depth, Yc (ft)	= 0.48
Top Width (ft)	= 34.00
EGL (ft)	= 0.57

(Sta, El, n)-(Sta, El, n)...

(-17.50, 100.50)-(15.00, 100.17, 0.016)-(17.00, 100.00, 0.013)-(17.00, 100.50, 0.013)-(17.50, 100.50, 0.013)



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Wednesday, Jun 7 2017

SOUTH MAIN STREET ERIE-MAJOR STORM MAX STREET CAPACITY

User-defined

Invert Elev (ft)	= 100.00
Slope (%)	= 0.75
N-Value	= 0.016

Calculations

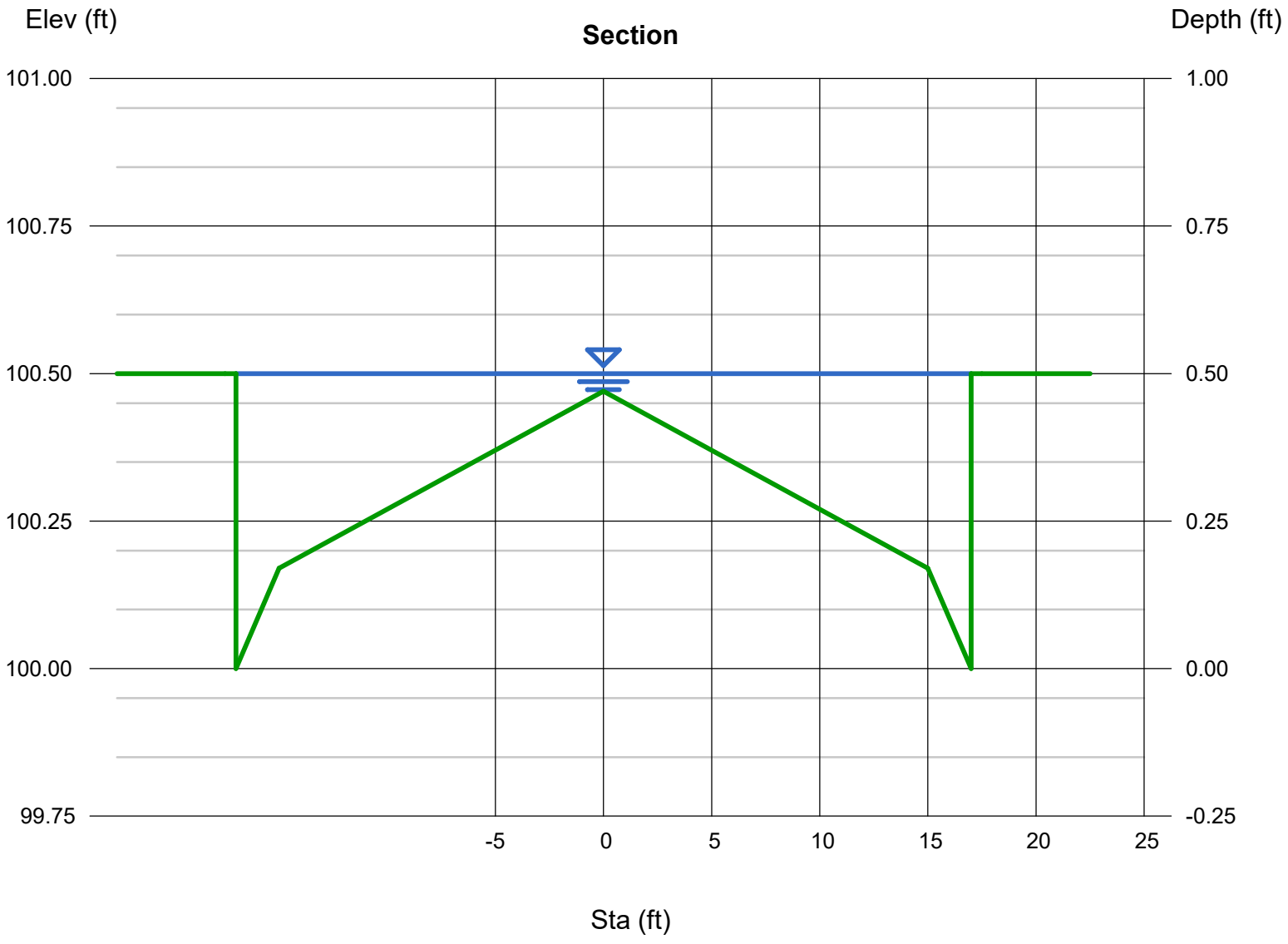
Compute by:	Known Depth
Known Depth (ft)	= 0.50

Highlighted

Depth (ft)	= 0.50
Q (cfs)	= 20.07
Area (sqft)	= 7.06
Velocity (ft/s)	= 2.84
Wetted Perim (ft)	= 35.02
Crit Depth, Yc (ft)	= 0.50
Top Width (ft)	= 34.00
EGL (ft)	= 0.63

(Sta, El, n)-(Sta, El, n)...

(-17.50, 100.50)-(15.00, 100.17, 0.016)-(17.00, 100.00, 0.013)-(17.00, 100.50, 0.013)-(17.50, 100.50, 0.013)



Channel Report

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SOUTH MAIN STREET ERIE-MAJOR STORM CAPACITY-20 FT ALLEY

User-defined

Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.017

Calculations

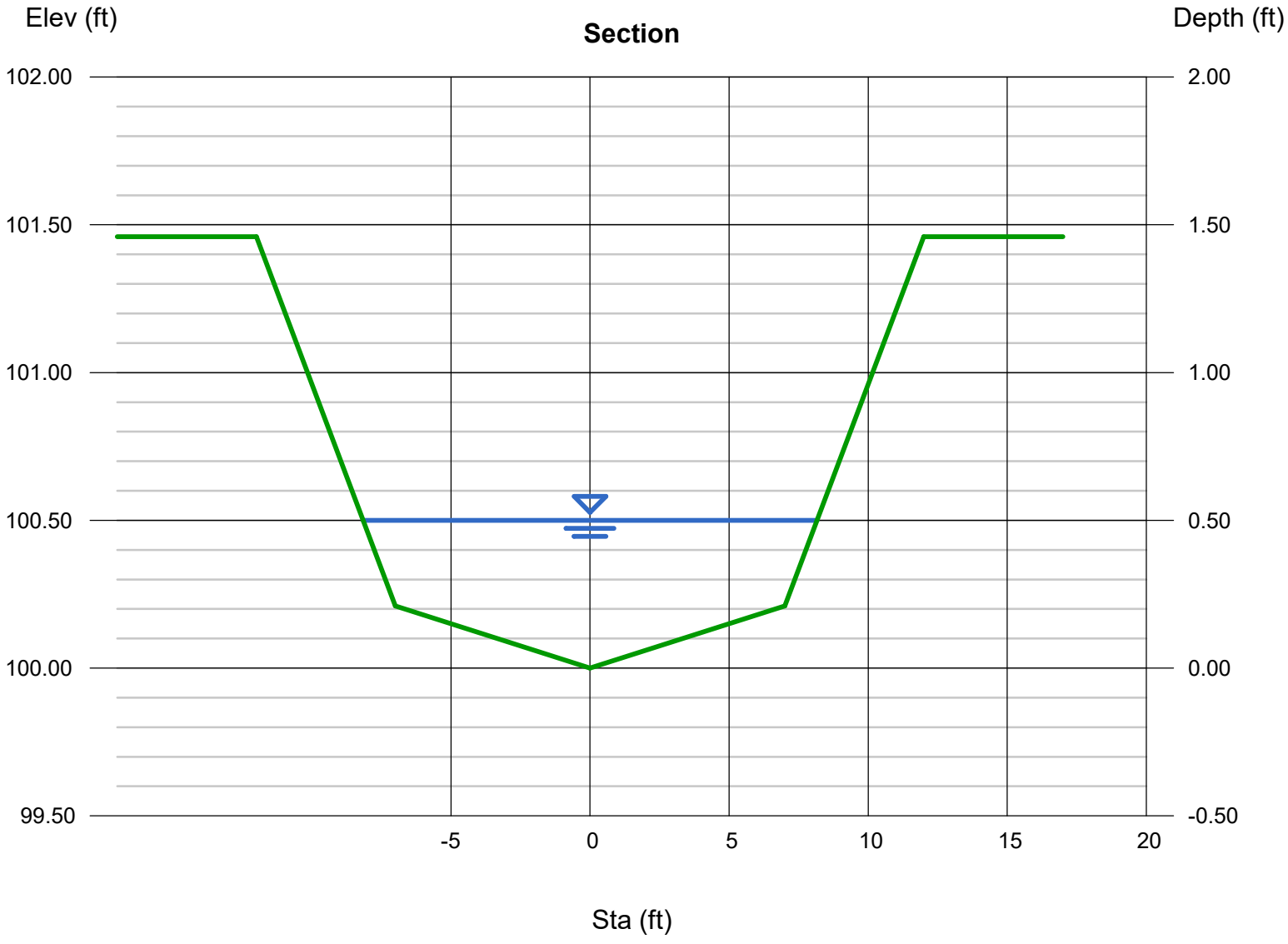
Compute by:	Known Depth
Known Depth (ft)	= 0.50

(Sta, El, n)-(Sta, El, n)...

(-12.00, 101.46)-(7.00, 100.21, 0.013)-(12.00, 101.46, 0.035)

Highlighted

Depth (ft)	= 0.50
Q (cfs)	= 18.28
Area (sqft)	= 5.87
Velocity (ft/s)	= 3.12
Wetted Perim (ft)	= 16.40
Crit Depth, Yc (ft)	= 0.48
Top Width (ft)	= 16.32
EGL (ft)	= 0.65



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Wednesday, Jun 7 2017

SOUTH MAIN STREET ERIE-MAJOR STORM CAPACITY-20 FT ALLEY

User-defined

Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.015

Calculations

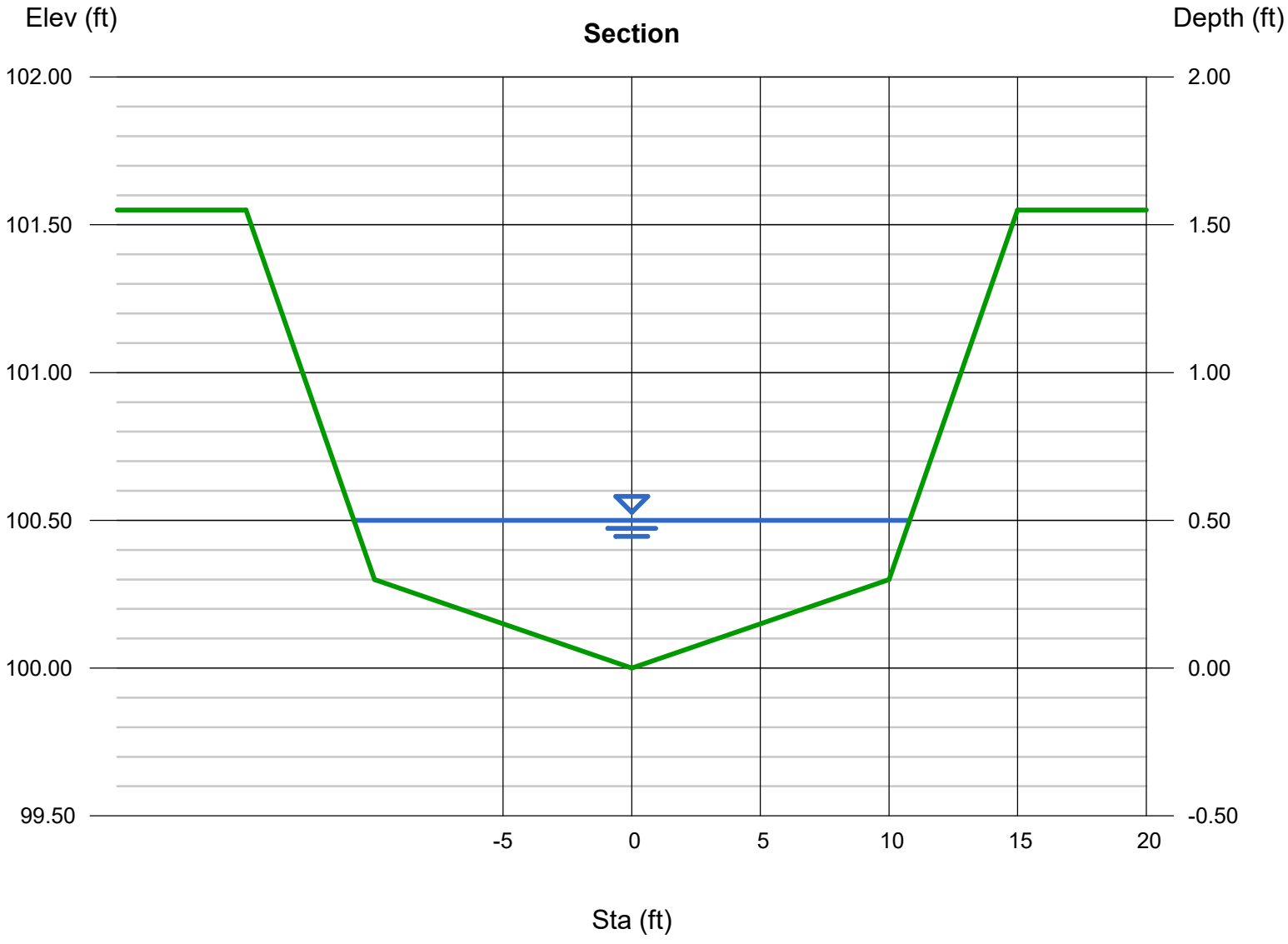
Compute by:	Known Depth
Known Depth (ft)	= 0.50

(Sta, El, n)-(Sta, El, n)...

(-15.00, 101.55)-(10.00, 100.30, 0.013)-(15.00, 101.55, 0.035)

Highlighted

Depth (ft)	= 0.50
Q (cfs)	= 23.76
Area (sqft)	= 7.16
Velocity (ft/s)	= 3.32
Wetted Perim (ft)	= 21.66
Crit Depth, Yc (ft)	= 0.51
Top Width (ft)	= 21.60
EGL (ft)	= 0.67



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Wednesday, Jun 7 2017

SOUTH MAIN STREET ERIE-MINOR STORM CAPACITY-14 FT ALLEY

Triangular

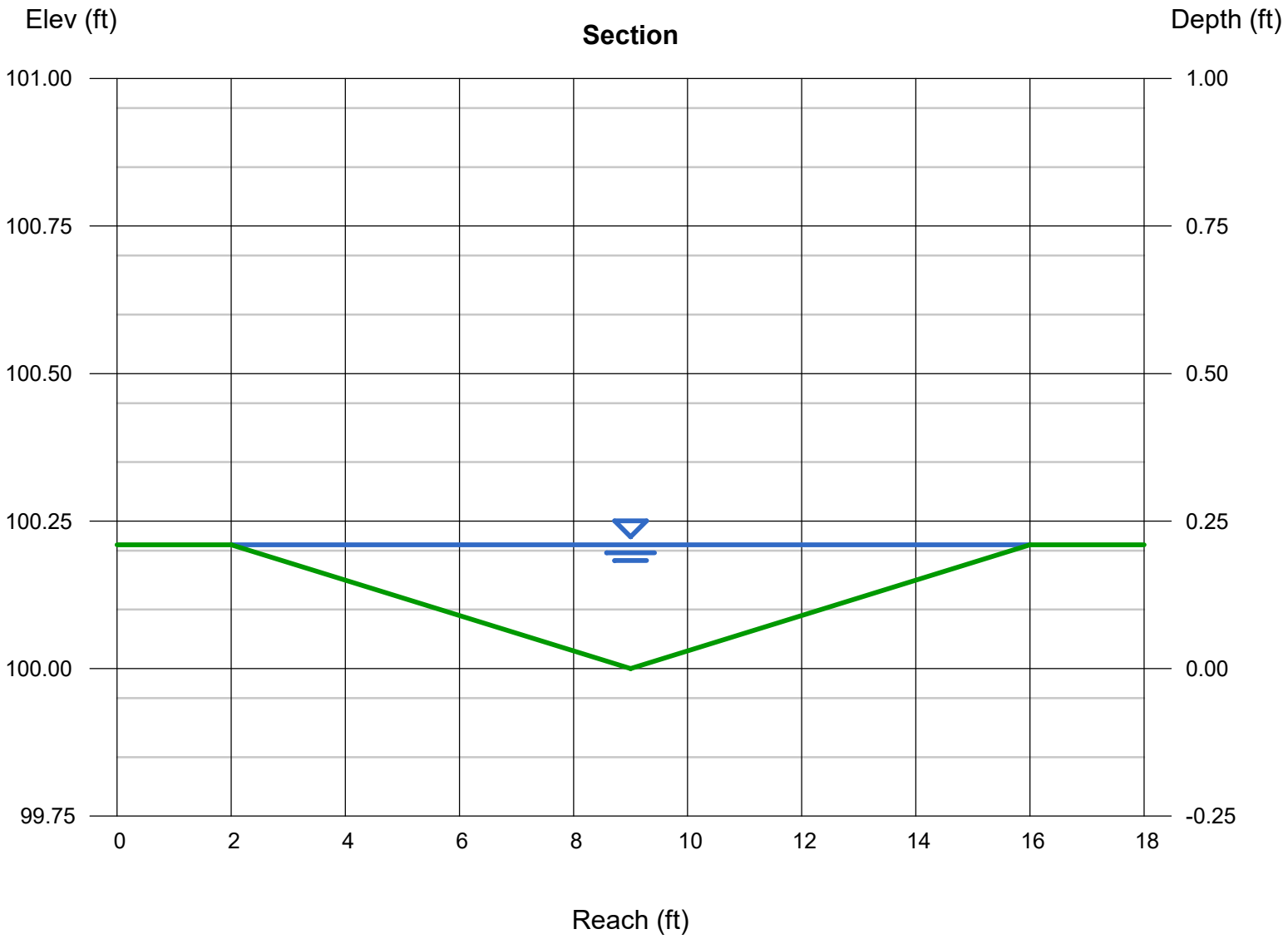
Side Slopes (z:1)	= 33.33, 33.33
Total Depth (ft)	= 0.21
Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.013

Calculations

Compute by:	Known Depth
Known Depth (ft)	= 0.21

Highlighted

Depth (ft)	= 0.21
Q (cfs)	= 2.641
Area (sqft)	= 1.47
Velocity (ft/s)	= 1.80
Wetted Perim (ft)	= 14.00
Crit Depth, Yc (ft)	= 0.21
Top Width (ft)	= 14.00
EGL (ft)	= 0.26



Channel Report

POND B RIP RAP CAPACITY CHECK

BASIN B4+OS2 DIRECT RUNOFF=3.1 CFS.
ASSUME HALF OF RUNOFF TO EACH
RIPRAP RUNDOWN (1.55 CFS)

Trapezoidal

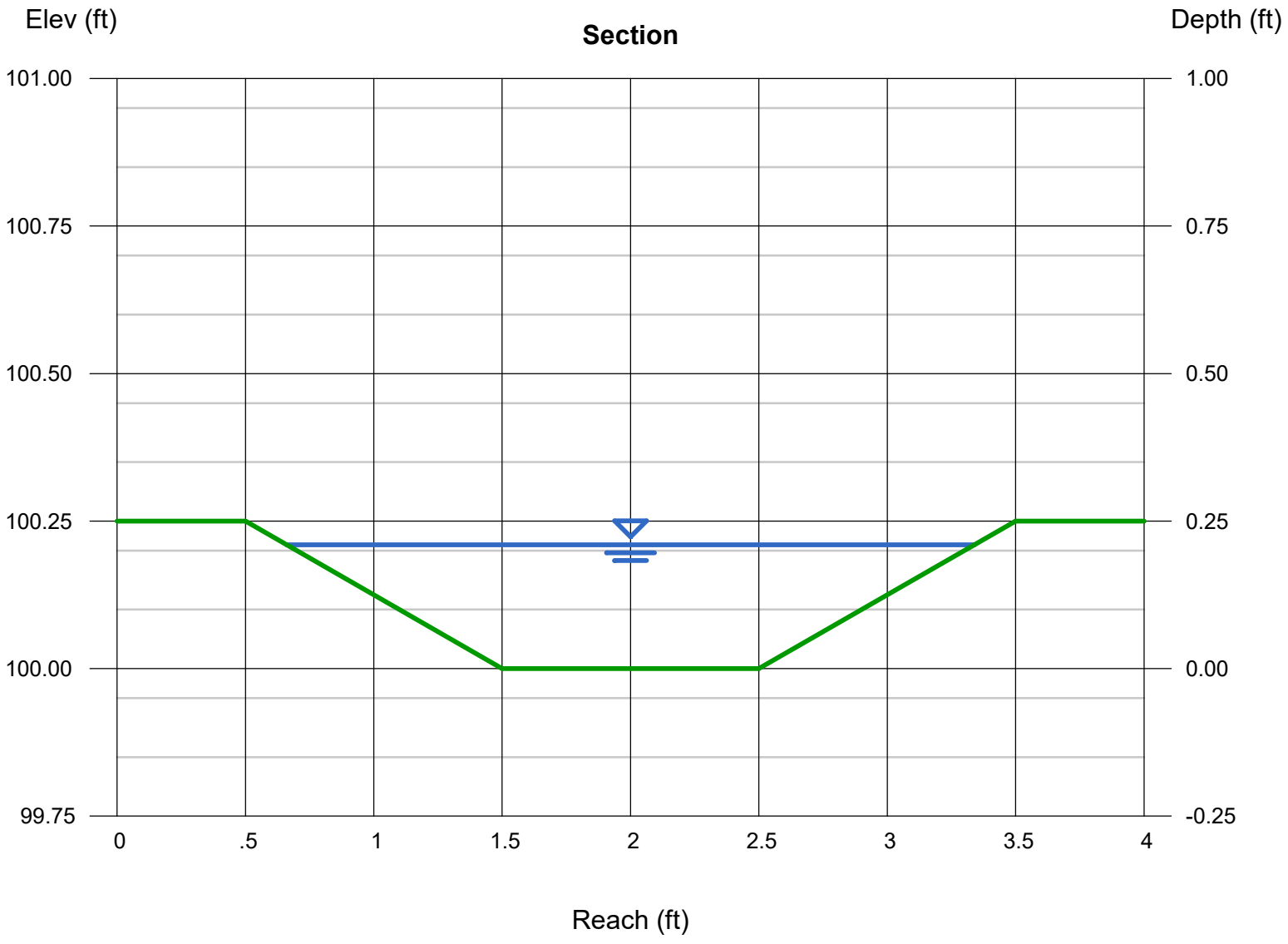
Bottom Width (ft)	= 1.00
Side Slopes (z:1)	= 4.00, 4.00
Total Depth (ft)	= 0.25
Invert Elev (ft)	= 100.00
Slope (%)	= 10.00
N-Value	= 0.030

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.55

Highlighted

Depth (ft)	= 0.21
Q (cfs)	= 1.550
Area (sqft)	= 0.39
Velocity (ft/s)	= 4.01
Wetted Perim (ft)	= 2.73
Crit Depth, Yc (ft)	= 0.25
Top Width (ft)	= 2.68
EGL (ft)	= 0.46



Project: **ERIE-SOUTH MAIN STREET**
Job # **216-038**
Date **9/6/2017**
By: **PAK**

Design Point 2, Type 13 inlet

Orifice Equation
Q=CoAo(2gH)^.5

Q= orifice flow rate (cfs)
Co= discharge coefficient (0.40 - 0.67) use 0.67
A= Area of orifice (ft^2)
Ho= effective head on orifice measured from centroid of the opening (ft)

Solve for Inlet Capacity (Q)

***Q*>=**	**12.0**	**cfs**	
Co=	0.67		
# Grates=	2		
Area per grate=	2.23	sq ft	*Type 13 Grate with 50% clogging factor*
Clogging Factor=	50%		
Ho=	1	ft	*Set Max Head = 12 inches*
Q=	**12.0**	**cfs**	

Weir Equation
Q=CbcwLH^1.5

Q=Discharge (cfs)
Cbcw=broad-crested weir coefficient (2.38 to 3.32) use 3
L=broad-crested weir length (ft)
H=head above weir crest (ft)

Cbcw=	3	
L=	15.09	ft
Ho=	1	ft
Q=	**45.3**	**cfs**

Inlet is Orifice controlled, use 2 Type 13 inlet Grates

Project: **ERIE-SOUTH MAIN STREET**
Job # **216-038**
Date **9/6/2017**
By: **PAK**

Design Point 3, Type 13 inlet

Orifice Equation
Q=CoAo(2gH)^.5

Q= orifice flow rate (cfs)
Co= discharge coefficient (0.40 - 0.67) use 0.67
A= Area of orifice (ft^2)
Ho= effective head on orifice measured from centroid of the opening (ft)

Solve for Inlet Capacity (Q)

Q>=	**1.7**	**cfs**	
Co=	0.67		
# Grates=	1		
Area per grate=	2.23	sq ft	*Type 13 Grate with 50% clogging factor*
Clogging Factor=	50%		
Ho=	1	ft	*Set Max Head = 12 inches*
Q=	**6.0**	**cfs**	

Weir Equation
Q=CbcwLH^1.5

Q=Discharge (cfs)
Cbcw=broad-crested weir coefficient (2.38 to 3.32) use 3
L=broad-crested weir length (ft)
H=head above weir crest (ft)

Cbcw=	3	
L=	9.13	ft
Ho=	1	ft
Q=	**27.4**	**cfs**

Inlet is Orifice controlled, use 1 Type 13 inlet Grates

Project: **ERIE-SOUTH MAIN STREET**
Job # **216-038**
Date **9/6/2017**
By: **PAK**

Design Point 4, Type 13 inlet

Orifice Equation
Q=CoAo(2gH)^.5

Q= orifice flow rate (cfs)
Co= discharge coefficient (0.40 - 0.67) use 0.67
A= Area of orifice (ft^2)
Ho= effective head on orifice measured from centroid of the opening (ft)

Solve for Inlet Capacity (Q)

***Q*>=**	**1.6**	**cfs**	
Co=	0.67		
# Grates=	1		
Area per grate=	2.23	sq ft	*Type 13 Grate with 50% clogging factor*
Clogging Factor=	50%		
Ho=	1	ft	*Set Max Head = 12 inches*
Q=	**6.0**	**cfs**	

Weir Equation
Q=CbcwLH^1.5

Q=Discharge (cfs)
Cbcw=broad-crested weir coefficient (2.38 to 3.32) use 3
L=broad-crested weir length (ft)
H=head above weir crest (ft)

Cbcw=	3	
L=	9.13	ft
Ho=	1	ft
Q=	**27.4**	**cfs**

Inlet is Orifice controlled, use 1 Type 13 inlet Grates

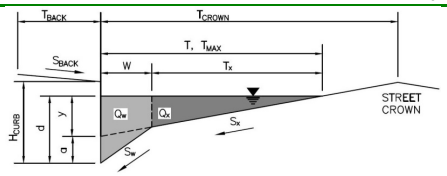
Version 4.05 Released March 2017

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project: SOUTH MAIN STREET-ERIE

Inlet ID: INLET AT DP 6



Gutter Geometry (Enter data in the blue cells)

Maximum Allowable Width for Spread Behind Curb	T_{BACK} =	13.0	ft
Side Slope Behind Curb (leave blank for no conveyance credit behind curb)	S_{BACK} =	0.020	ft/ft
Manning's Roughness Behind Curb (typically between 0.012 and 0.020)	n_{BACK} =	0.020	
Height of Curb at Gutter Flow Line	H_{CURB} =	6.00	inches
Distance from Curb Face to Street Crown	T_{CROWN} =	17.0	ft
Gutter Width	W =	2.00	ft
Street Transverse Slope	S_X =	0.020	ft/ft
Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)	S_W =	0.083	ft/ft
Street Longitudinal Slope - Enter 0 for sump condition	S_O =	0.000	ft/ft
Manning's Roughness for Street Section (typically between 0.012 and 0.020)	n_{STREET} =	0.016	

		Minor Storm	Major Storm	
Max. Allowable Spread for Minor & Major Storm	T_{MAX} =	17.0	17.0	ft
Max. Allowable Depth at Gutter Flowline for Minor & Major Storm	d_{MAX} =	6.0	12.0	inches
Check boxes are not applicable in SUMP conditions		☐	☐	

Maximum Capacity for 1/2 Street based On Allowable Spread

		Minor Storm	Major Storm	
Water Depth without Gutter Depression (Eq. ST-2)	y =	4.08	4.08	inches
Vertical Depth between Gutter Lip and Gutter Flowline (usually 2")	d_C =	2.0	2.0	inches
Gutter Depression (d_C - (W * S_x * 12))	a =	1.51	1.51	inches
Water Depth at Gutter Flowline	d =	5.59	5.59	inches
Allowable Spread for Discharge outside the Gutter Section W (T - W)	T_X =	15.0	15.0	ft
Gutter Flow to Design Flow Ratio by FHWA HEC-22 method (Eq. ST-7)	E_O =	0.350	0.350	
Discharge outside the Gutter Section W, carried in Section T_X	Q_X =	0.0	0.0	cfs
Discharge within the Gutter Section W (Q_T - Q_X)	Q_W =	0.0	0.0	cfs
Discharge Behind the Curb (e.g., sidewalk, driveways, & lawns)	Q_{BACK} =	0.0	0.0	cfs
Maximum Flow Based On Allowable Spread	**Q_T =**	**SUMP**	**SUMP**	**cfs**
Flow Velocity within the Gutter Section	V =	0.0	0.0	fps
V*d Product: Flow Velocity times Gutter Flowline Depth	V*d =	0.0	0.0	

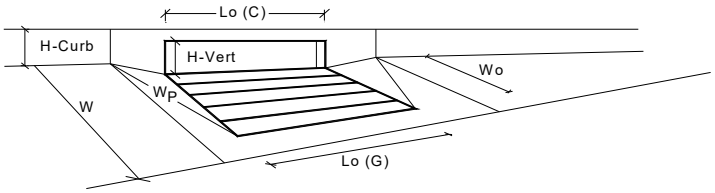
Maximum Capacity for 1/2 Street based on Allowable Depth

		Minor Storm	Major Storm	
Theoretical Water Spread	T_{TH} =	18.7	43.7	ft
Theoretical Spread for Discharge outside the Gutter Section W (T - W)	$T_{X\,TH}$ =	16.7	41.7	ft
Gutter Flow to Design Flow Ratio by FHWA HEC-22 method (Eq. ST-7)	E_O =	0.318	0.130	
Theoretical Discharge outside the Gutter Section W, carried in Section $T_{X\,TH}$	$Q_{X\,TH}$ =	0.0	0.0	cfs
Actual Discharge outside the Gutter Section W, (limited by distance T_{CROWN})	Q_X =	0.0	0.0	cfs
Discharge within the Gutter Section W (Q_d - Q_X)	Q_W =	0.0	0.0	cfs
Discharge Behind the Curb (e.g., sidewalk, driveways, & lawns)	Q_{BACK} =	0.0	0.0	cfs
Total Discharge for Major & Minor Storm (Pre-Safety Factor)	Q =	0.0	0.0	cfs
Average Flow Velocity Within the Gutter Section	V =	0.0	0.0	fps
V*d Product: Flow Velocity Times Gutter Flowline Depth	V*d =	0.0	0.0	
Slope-Based Depth Safety Reduction Factor for Major & Minor (d ≥ 6") Storm	R =	SUMP	SUMP	
Max Flow Based on Allowable Depth (Safety Factor Applied)	**Q_d =**	**SUMP**	**SUMP**	**cfs**
Resultant Flow Depth at Gutter Flowline (Safety Factor Applied)	d =			inches
Resultant Flow Depth at Street Crown (Safety Factor Applied)	d_{CROWN} =			inches

		Minor Storm	Major Storm	
MINOR STORM Allowable Capacity is based on Depth Criterion				
MAJOR STORM Allowable Capacity is based on Depth Criterion	**Q_{allow} =**	**SUMP**	**SUMP**	**cfs**

INLET IN A SUMP OR SAG LOCATION

Version 4.05 Released March 2017



Design Information (Input)		MINOR	MAJOR	
Type of Inlet	Type =	CDOT Type R Curb Opening		
Local Depression (additional to continuous gutter depression 'a' from above)	a_{local} =	3.00	3.00	inches
Number of Unit Inlets (Grate or Curb Opening)	No =	1	1	
Water Depth at Flowline (outside of local depression)	Ponding Depth =	6.0	9.0	inches
Grate Information		MINOR	MAJOR	☑ Override Depths
Length of a Unit Grate	L_o (G) =	N/A	N/A	feet
Width of a Unit Grate	W_o =	N/A	N/A	feet
Area Opening Ratio for a Grate (typical values 0.15-0.90)	A_{ratio} =	N/A	N/A	
Clogging Factor for a Single Grate (typical value 0.50 - 0.70)	C_f (G) =	N/A	N/A	
Grate Weir Coefficient (typical value 2.15 - 3.60)	C_w (G) =	N/A	N/A	
Grate Orifice Coefficient (typical value 0.60 - 0.80)	C_o (G) =	N/A	N/A	
Curb Opening Information		MINOR	MAJOR	
Length of a Unit Curb Opening	L_o (C) =	5.00	5.00	feet
Height of Vertical Curb Opening in Inches	H_{vert} =	6.00	6.00	inches
Height of Curb Orifice Throat in Inches	H_{throat} =	6.00	6.00	inches
Angle of Throat (see USDCM Figure ST-5)	Theta =	63.40	63.40	degrees
Side Width for Depression Pan (typically the gutter width of 2 feet)	W_p =	2.00	2.00	feet
Clogging Factor for a Single Curb Opening (typical value 0.10)	C_f (C) =	0.10	0.10	
Curb Opening Weir Coefficient (typical value 2.3-3.7)	C_w (C) =	3.60	3.60	
Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)	C_o (C) =	0.67	0.67	

Low Head Performance Reduction (Calculated)		MINOR	MAJOR	
Depth for Grate Midwidth	d_{Grate} =	N/A	N/A	ft
Depth for Curb Opening Weir Equation	d_{Curb} =	0.33	0.58	ft
Combination Inlet Performance Reduction Factor for Long Inlets	$RF_{Combination}$ =	0.77	1.00	
Curb Opening Performance Reduction Factor for Long Inlets	RF_{Curb} =	1.00	1.00	
Grated Inlet Performance Reduction Factor for Long Inlets	RF_{Grate} =	N/A	N/A	

		MINOR	MAJOR	
Total Inlet Interception Capacity (assumes clogged condition)	**Q_a =**	**5.4**	**10.7**	**cfs**
Inlet Capacity IS GOOD for Minor and Major Storms(>Q PEAK)	$Q_{PEAK\ REQUIRED}$ =	2.4	8.5	cfs

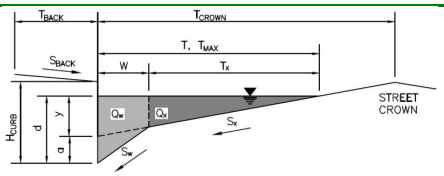
Version 4.05 Released March 2017

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project: SOUTH MAIN STREET-ERIE

Inlet ID: INLET AT DP7



Gutter Geometry (Enter data in the blue cells)

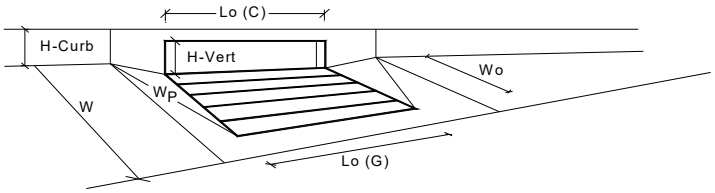
Maximum Allowable Width for Spread Behind Curb	T_{BACK} =	0.5	ft
Side Slope Behind Curb (leave blank for no conveyance credit behind curb)	S_{BACK} =	0.000	ft/ft
Manning's Roughness Behind Curb (typically between 0.012 and 0.020)	n_{BACK} =	0.020	
Height of Curb at Gutter Flow Line	H_{CURB} =	6.00	inches
Distance from Curb Face to Street Crown	T_{CROWN} =	17.0	ft
Gutter Width	W =	2.00	ft
Street Transverse Slope	S_X =	0.020	ft/ft
Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)	S_W =	0.083	ft/ft
Street Longitudinal Slope - Enter 0 for sump condition	S_O =	0.000	ft/ft
Manning's Roughness for Street Section (typically between 0.012 and 0.020)	n_{STREET} =	0.016	

		Minor Storm	Major Storm	
Max. Allowable Spread for Minor & Major Storm	T_{MAX} =	17.0	17.0	ft
Max. Allowable Depth at Gutter Flowline for Minor & Major Storm	d_{MAX} =	6.0	6.0	inches
Check boxes are not applicable in SUMP conditions		☐	☐	

		Minor Storm	Major Storm	
MINOR STORM Allowable Capacity is based on Depth Criterion				
MAJOR STORM Allowable Capacity is based on Depth Criterion	**Q_{allow} =**	**SUMP**	**SUMP**	**cfs**

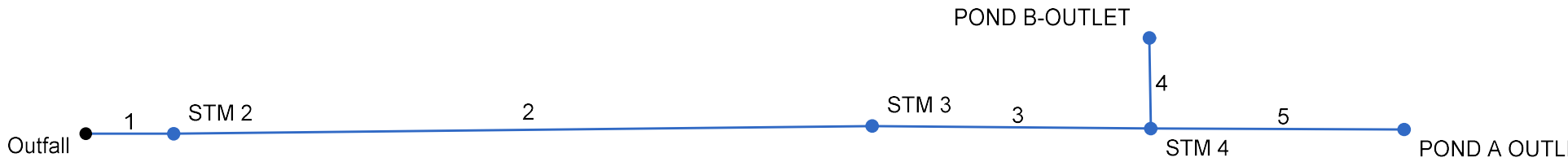
INLET IN A SUMP OR SAG LOCATION

Version 4.05 Released March 2017



Design Information (Input)		MINOR	MAJOR	
Type of Inlet	Type =	CDOT Type R Curb Opening		
Local Depression (additional to continuous gutter depression 'a' from above)	a_{local} =	3.00	3.00	inches
Number of Unit Inlets (Grate or Curb Opening)	No =	1	1	
Water Depth at Flowline (outside of local depression)	Ponding Depth =	5.6	5.6	inches
Grate Information		MINOR	MAJOR	Override Depths
Length of a Unit Grate	L_o (G) =	N/A	N/A	feet
Width of a Unit Grate	W_o =	N/A	N/A	feet
Area Opening Ratio for a Grate (typical values 0.15-0.90)	A_{ratio} =	N/A	N/A	
Clogging Factor for a Single Grate (typical value 0.50 - 0.70)	C_f (G) =	N/A	N/A	
Grate Weir Coefficient (typical value 2.15 - 3.60)	C_w (G) =	N/A	N/A	
Grate Orifice Coefficient (typical value 0.60 - 0.80)	C_o (G) =	N/A	N/A	
Curb Opening Information		MINOR	MAJOR	
Length of a Unit Curb Opening	L_o (C) =	5.00	5.00	feet
Height of Vertical Curb Opening in Inches	H_{vert} =	6.00	6.00	inches
Height of Curb Orifice Throat in Inches	H_{throat} =	6.00	6.00	inches
Angle of Throat (see USDCM Figure ST-5)	Theta =	63.40	63.40	degrees
Side Width for Depression Pan (typically the gutter width of 2 feet)	W_p =	2.00	2.00	feet
Clogging Factor for a Single Curb Opening (typical value 0.10)	C_f (C) =	0.10	0.10	
Curb Opening Weir Coefficient (typical value 2.3-3.7)	C_w (C) =	3.60	3.60	
Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)	C_o (C) =	0.67	0.67	
Low Head Performance Reduction (Calculated)		MINOR	MAJOR	
Depth for Grate Midwidth	d_{Grate} =	N/A	N/A	ft
Depth for Curb Opening Weir Equation	d_{Curb} =	0.30	0.30	ft
Combination Inlet Performance Reduction Factor for Long Inlets	$RF_{Combination}$ =	0.72	0.72	
Curb Opening Performance Reduction Factor for Long Inlets	RF_{Curb} =	1.00	1.00	
Grated Inlet Performance Reduction Factor for Long Inlets	RF_{Grate} =	N/A	N/A	
		MINOR	MAJOR	
Total Inlet Interception Capacity (assumes clogged condition)	**Q_a =**	**4.6**	**4.6**	**cfs**
Inlet Capacity IS GOOD for Minor and Major Storms(>Q PEAK)	$Q_{PEAK\ REQUIRED}$ =	0.4	1.1	cfs

ERIE-SD-1



Project File: ERIE-SD-1-2yr.stm	Number of lines: 5	Date: 11/22/2017

Storm Sewer Summary Report

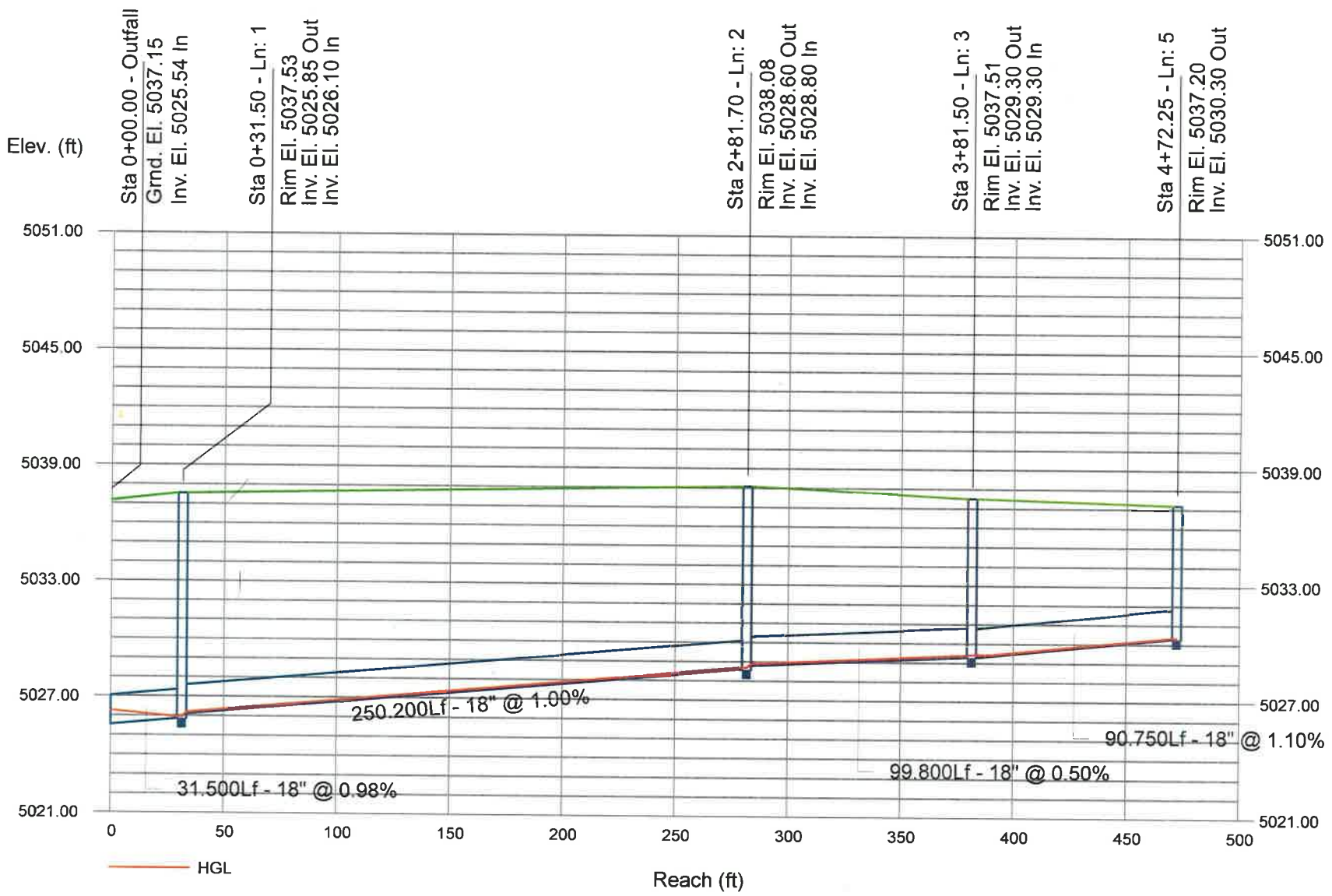
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		0.07	18	Cir	31.500	5025.54	5025.85	0.984	5026.27	5025.95	n/a	5025.95	End	Manhole
2		0.07	18	Cir	250.200	5026.10	5028.60	0.999	5026.19	5028.70	n/a	5028.70	1	Manhole
3		0.07	18	Cir	99.800	5028.80	5029.30	0.501	5028.90	5029.41	n/a	5029.43	2	Manhole
4		0.04	18	Cir	32.550	5029.50	5029.85	1.076	5029.57	5029.92	n/a	5029.92	3	Manhole
5		0.03	18	Cir	90.750	5029.30	5030.30	1.102	5029.43	5030.36	n/a	5030.36	3	Manhole

ERIE-SD-1 | Number of lines: 5 | Run Date: 11/22/2017

NOTES: Known Qs only

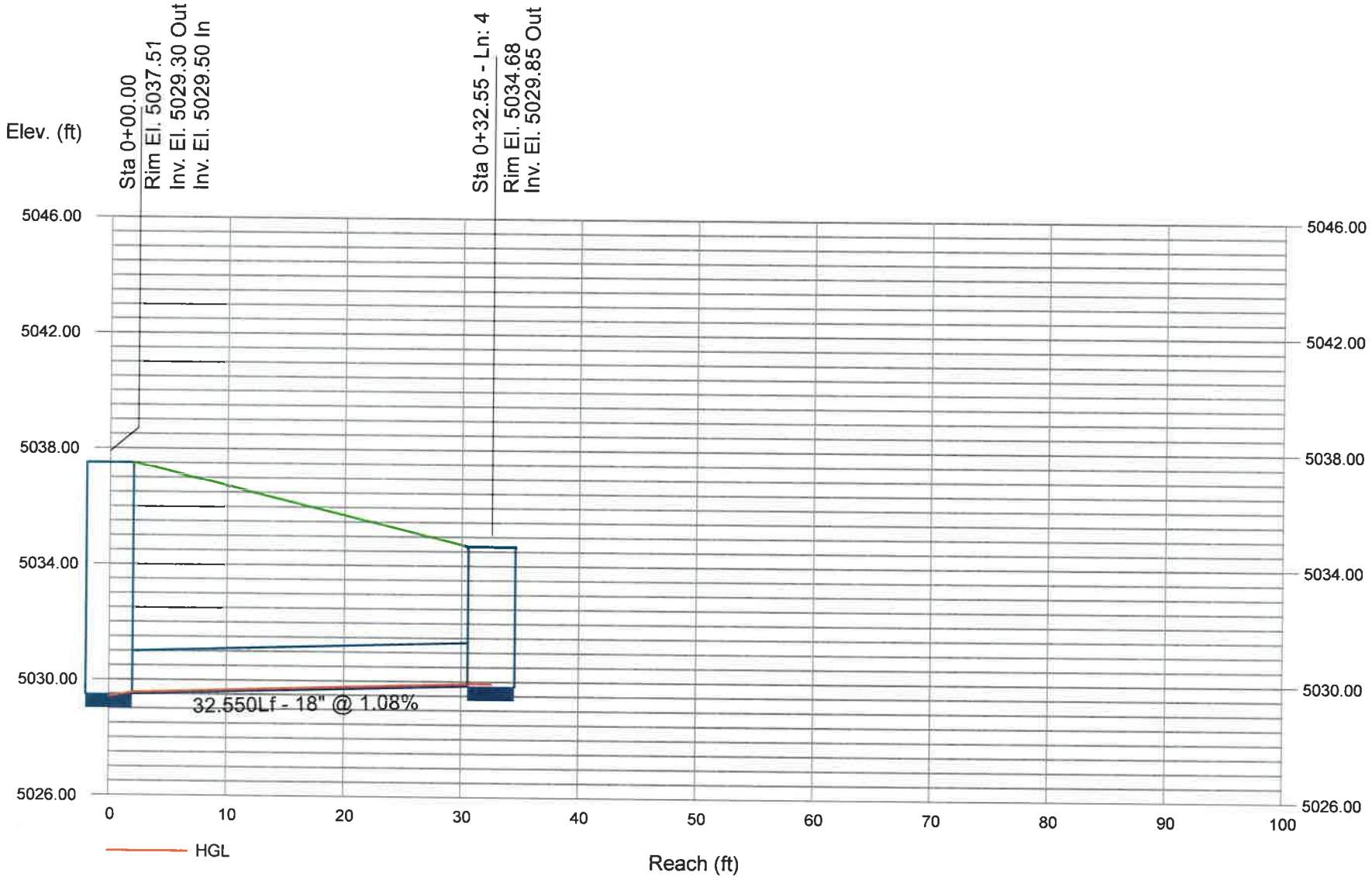
Storm Sewer Profile

Proj. file: ERIE-SD-1-2yr.stm

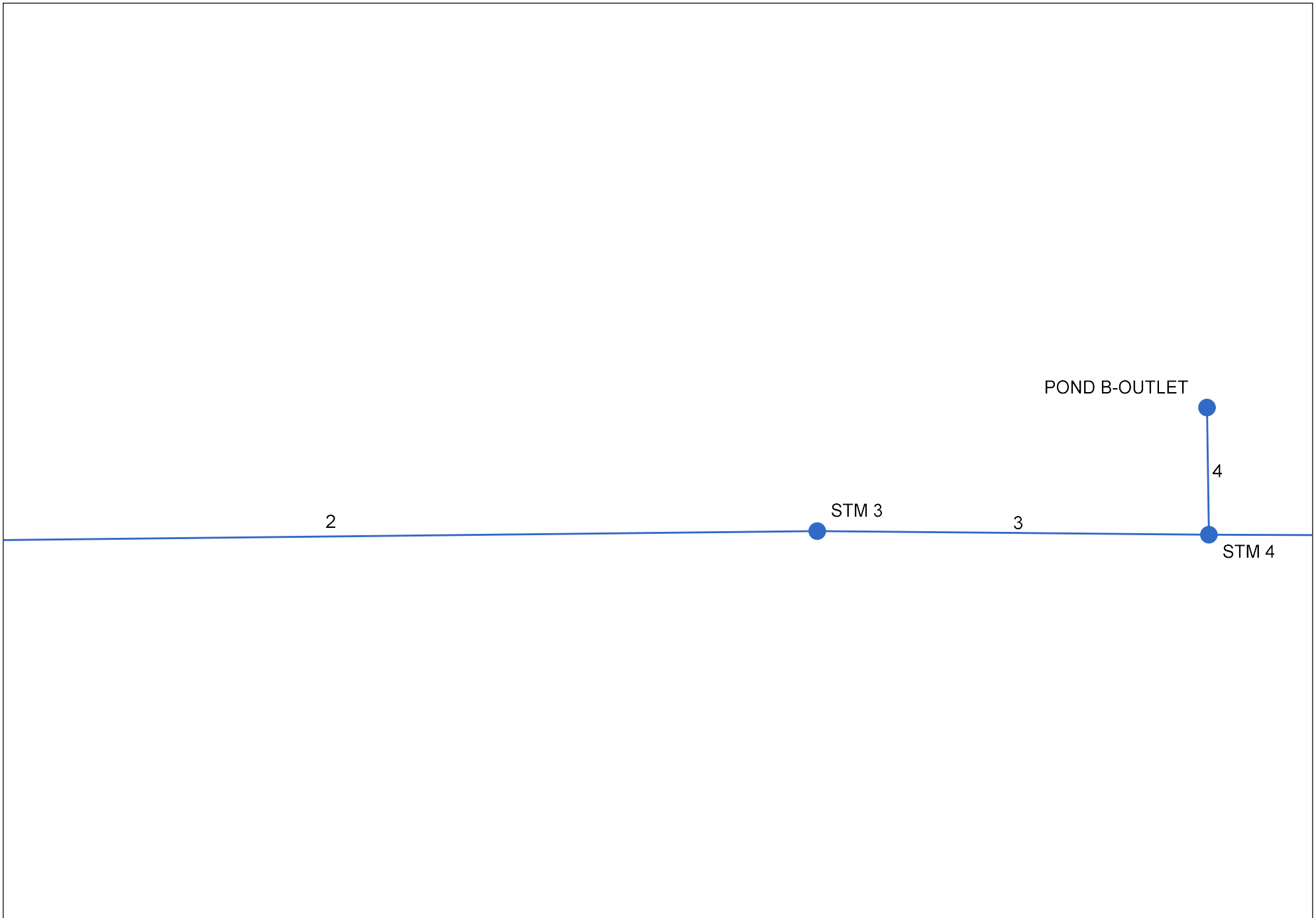


Storm Sewer Profile

Proj. file: ERIE-SD-1-2yr.stm



ERIE-SD-1



Project File: ERIE-SD-1-100yr.stm	Number of lines: 5	Date: 11/22/2017

Storm Sewer Summary Report

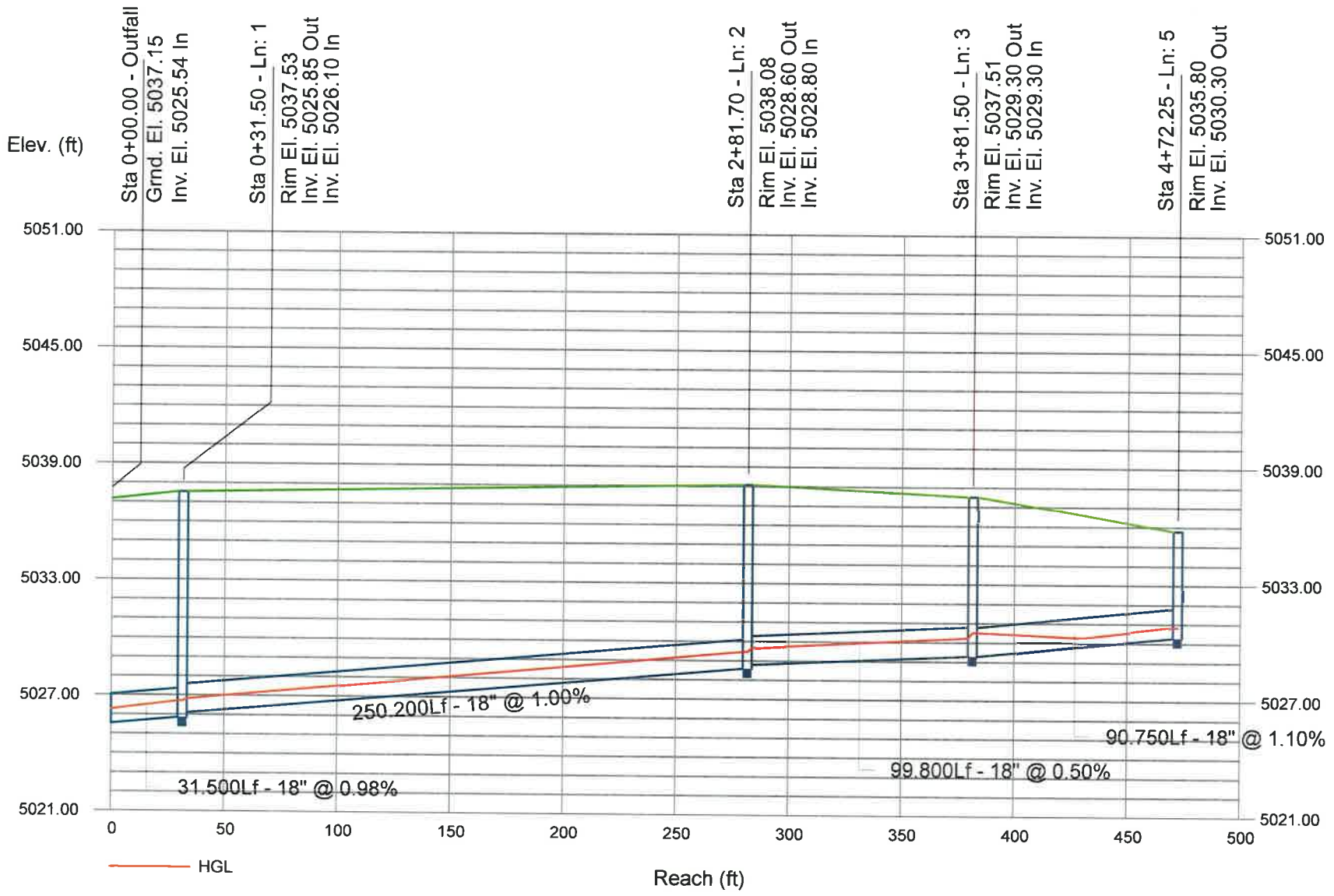
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		5.01	18	Cir	31.500	5025.54	5025.85	0.984	5026.27	5026.71	0.05	5026.71	End	Manhole
2		5.01	18	Cir	250.200	5026.10	5028.60	0.999	5026.83	5029.46	0.05	5029.46	1	Manhole
3		5.01	18	Cir	99.800	5028.80	5029.30	0.501	5029.66	5030.24	n/a	5030.53	2	Manhole
4		2.94	18	Cir	32.550	5029.50	5029.85	1.076	5030.53	5030.50	n/a	5030.50	3	Manhole
5		2.07	18	Cir	90.750	5029.30	5030.30	1.102	5030.53	5030.84	n/a	5030.84	3	Manhole

ERIE-SD-1 | Number of lines: 5 | Run Date: 11/22/2017

NOTES: Known Qs only

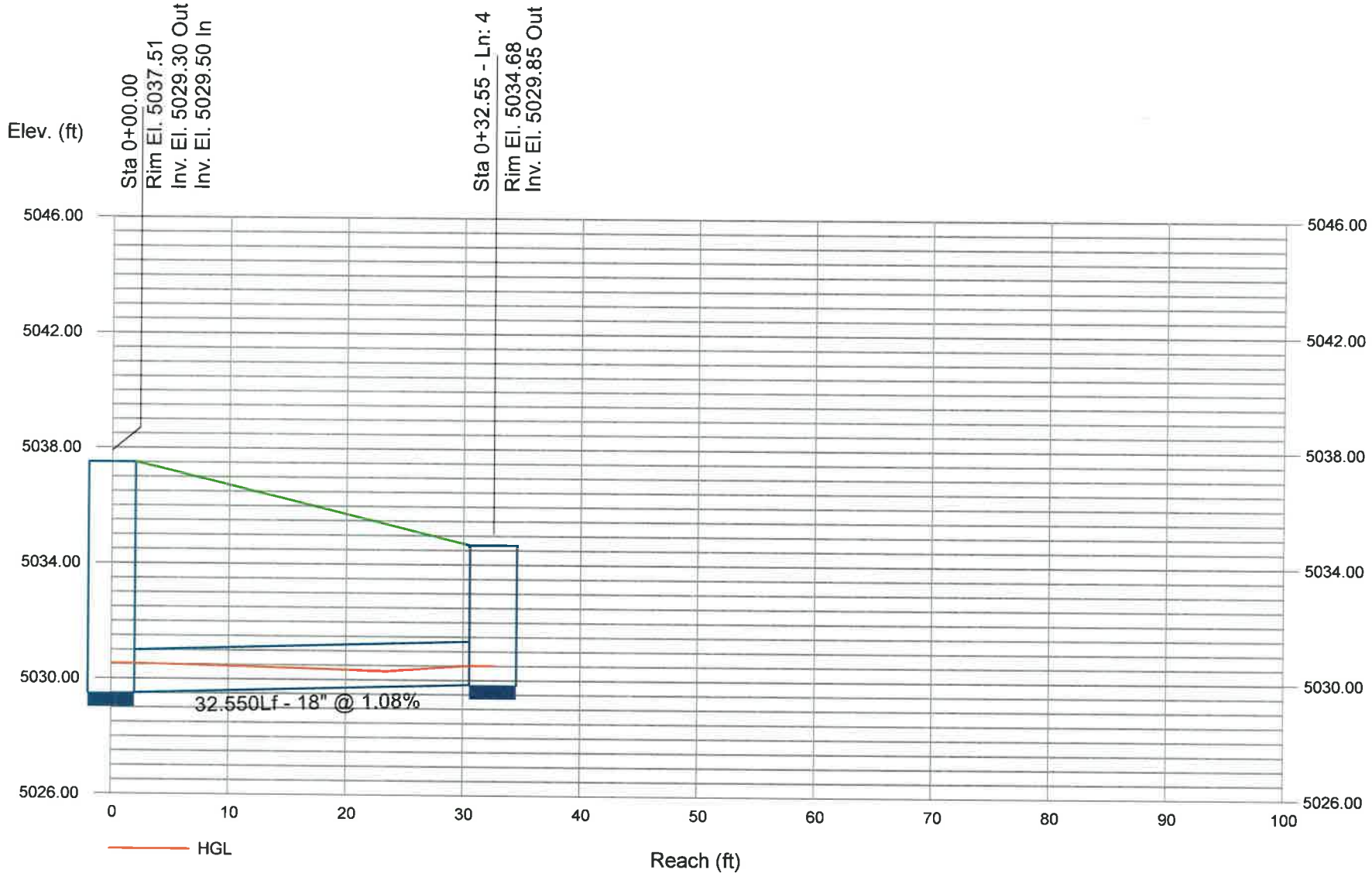
Storm Sewer Profile

Proj. file: ERIE-SD-1-100yr.stm

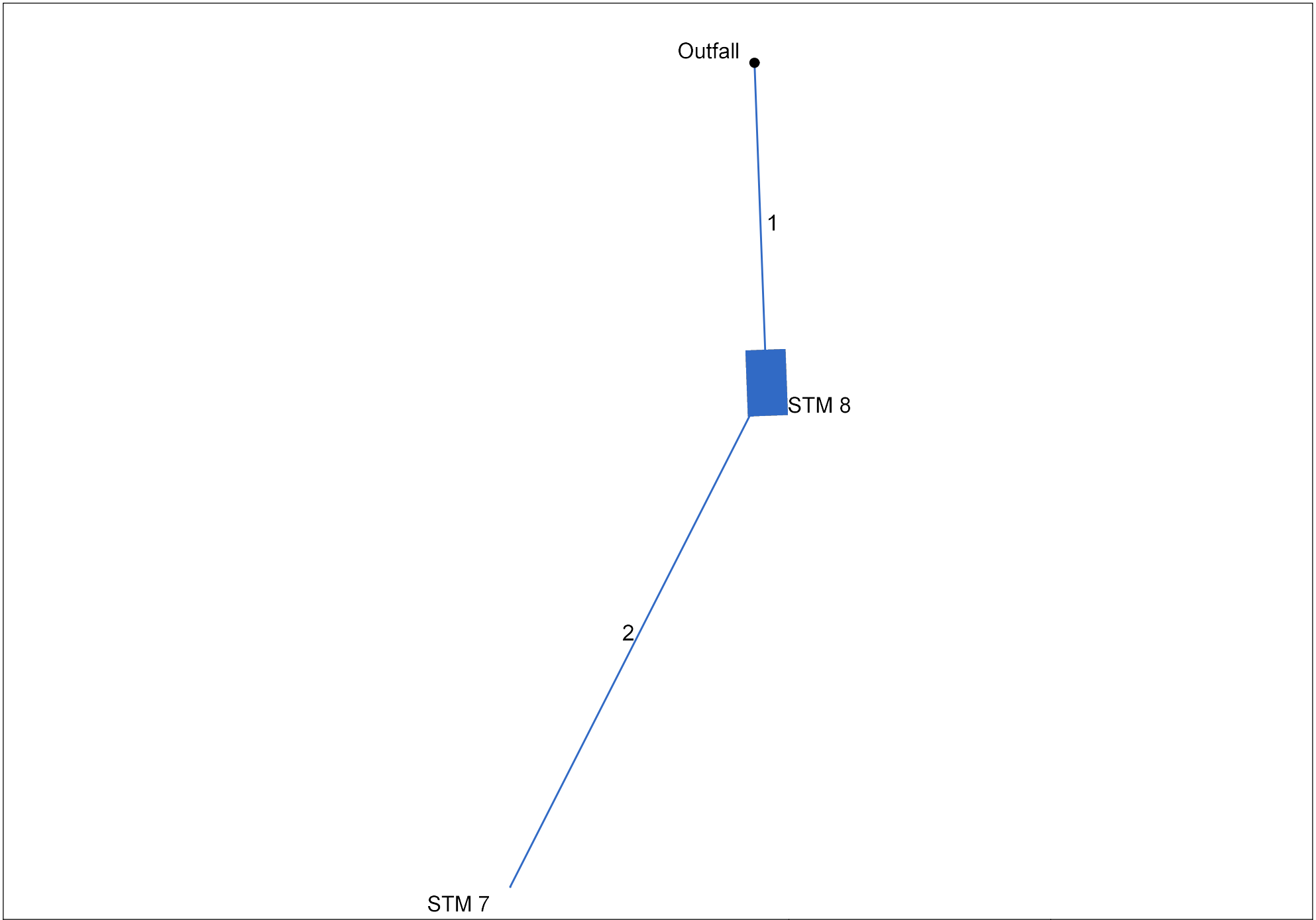


Storm Sewer Profile

Proj. file: ERIE-SD-1-100yr.stm



Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: ERIE SD-2-2YR.stm	Number of lines: 2	Date: 11/22/2017

Storm Sewer Summary Report

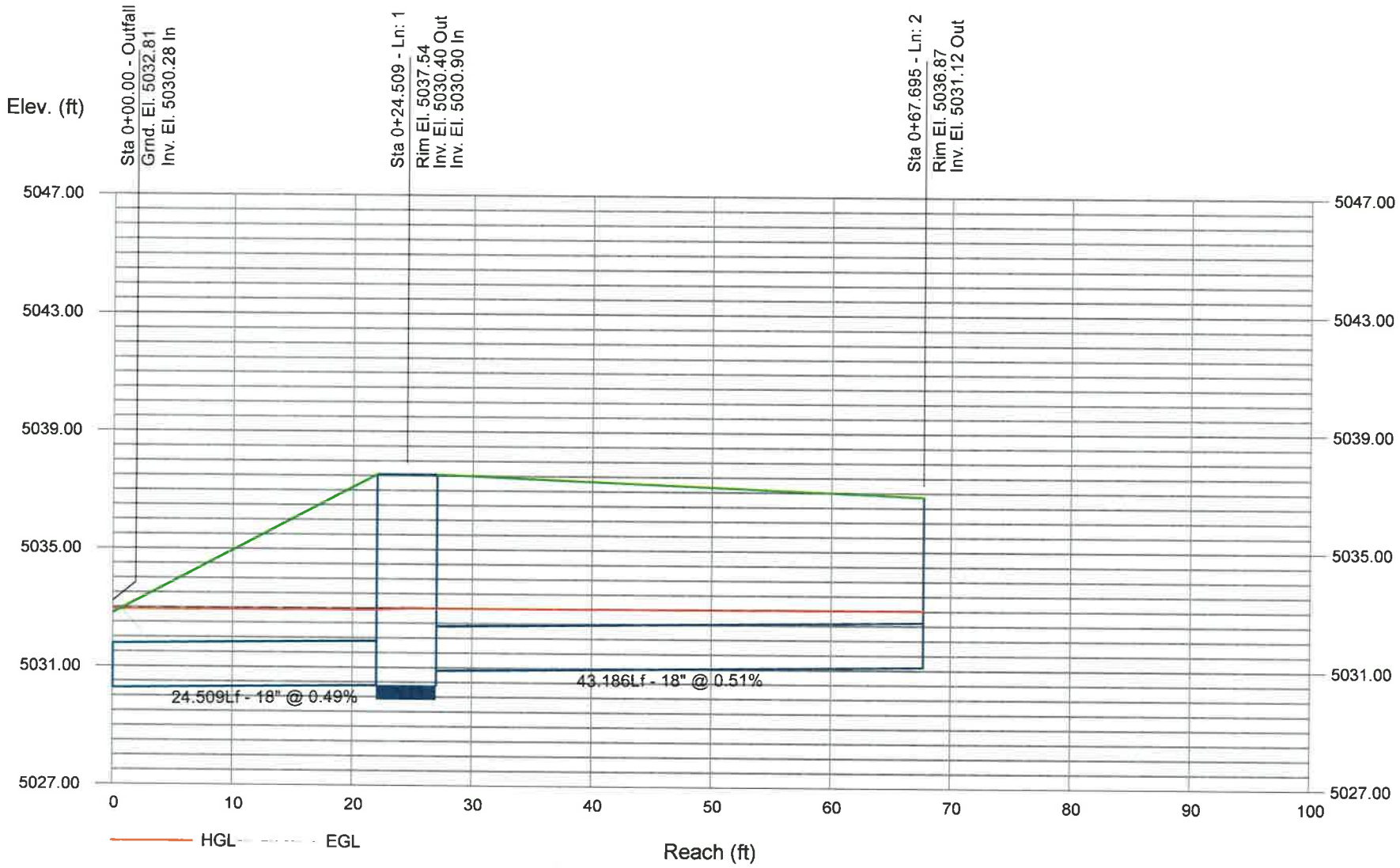
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	14	3.30	18	Cir	24.509	5030.28	5030.40	0.490	5032.93*	5032.96*	0.04	5033.00	End	Curb-Horiz
2	12	2.40	18	Cir	43.186	5030.90	5031.12	0.510	5033.00*	5033.02*	0.03	5033.05	1	Curb-Horiz

Project File: ERIE SD-2-2YR.stm | Number of lines: 2 | Run Date: 11/22/2017

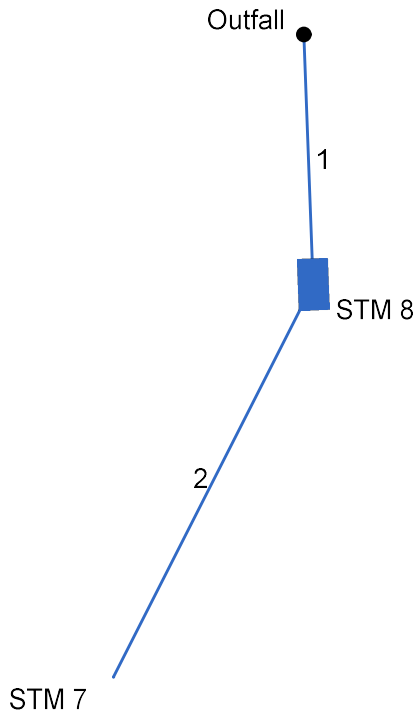
NOTES: Known Qs only ; *Surcharged (HGL above crown).

Storm Sewer Profile

Proj. file: ERIE SD-2-2YR.stm



Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: ERIE SD-2-100YR.stm	Number of lines: 2	Date: 11/22/2017

Storm Sewer Summary Report

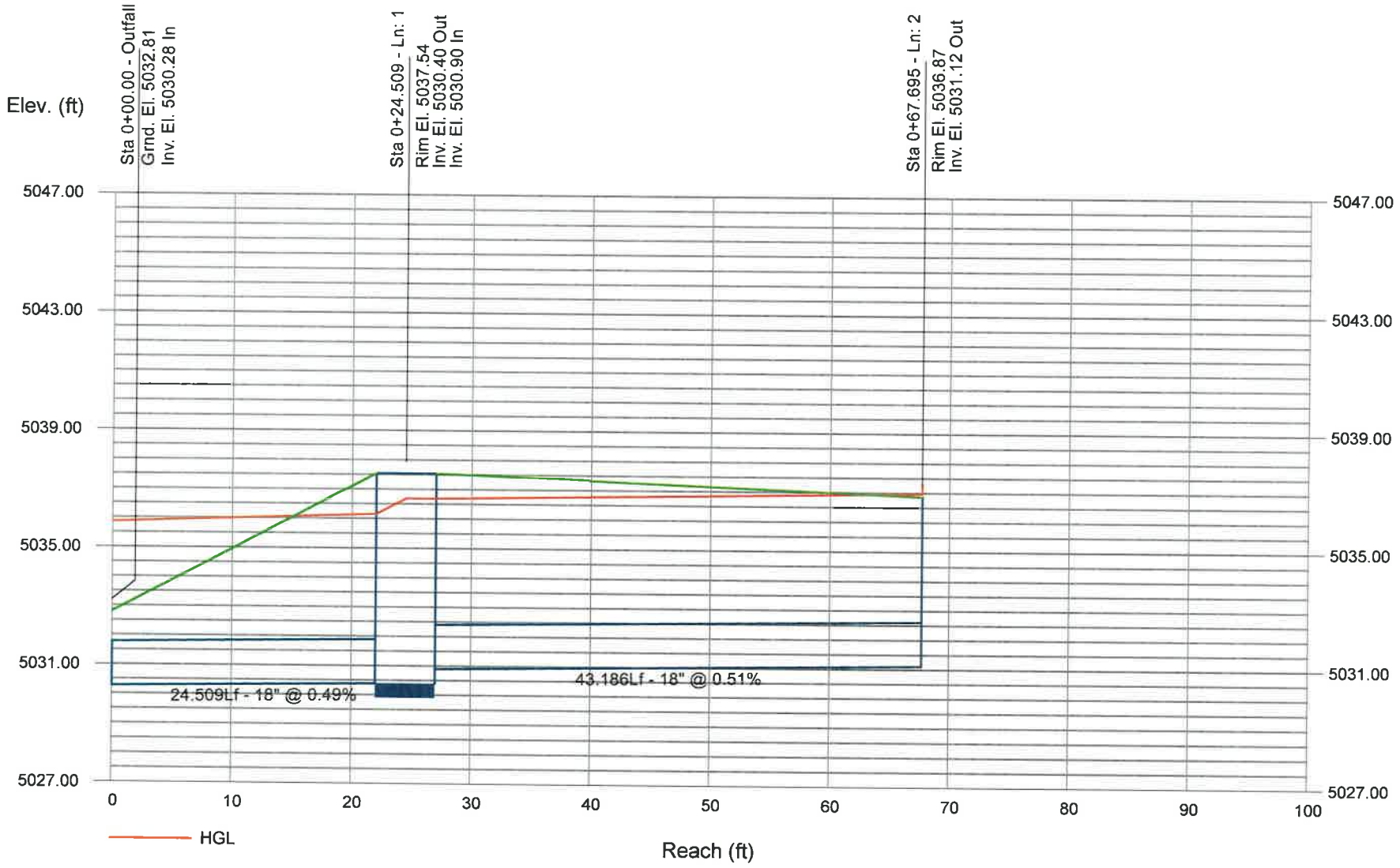
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	14	11.50	18	Cir	24.509	5030.28	5030.40	0.490	5035.86*	5036.15*	0.53	5036.69	End	Curb-Horiz
2	12	8.50	18	Cir	43.186	5030.90	5031.12	0.510	5036.69*	5036.97*	0.36	5037.33	1	Curb-Horiz

Project File: ERIE SD-2-100YR.stm | Number of lines: 2 | Run Date: 11/22/2017

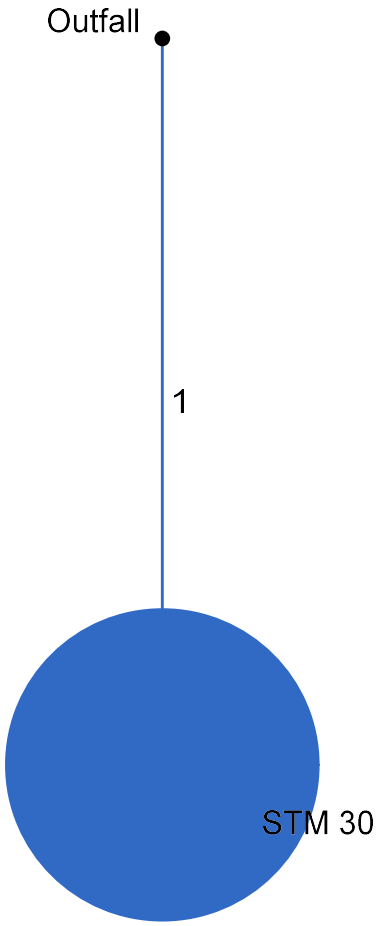
NOTES: Known Qs only ; *Surcharged (HGL above crown).

Storm Sewer Profile

Proj. file: ERIE SD-2-100YR.stm



ERIE SD-3



Project File: ERIE SD-3-2YR.stm	Number of lines: 1	Date: 11/22/2017

Storm Sewer Summary Report

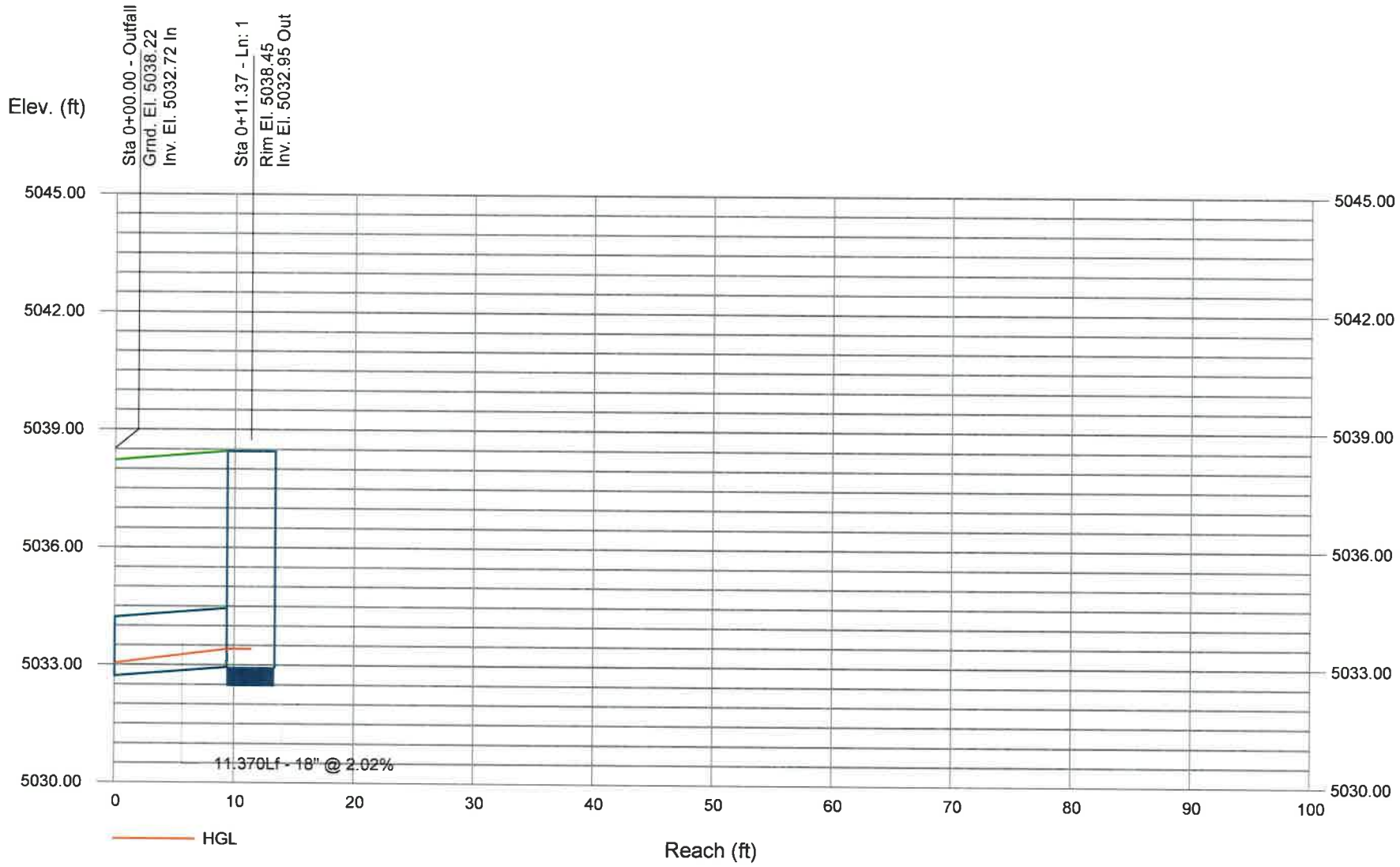
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		1.50	18	Cir	11.370	5032.72	5032.95	2.023	5033.04	5033.41	n/a	5033.41	End	Manhole

ERIE SD-3 | Number of lines: 1 | Run Date: 11/22/2017

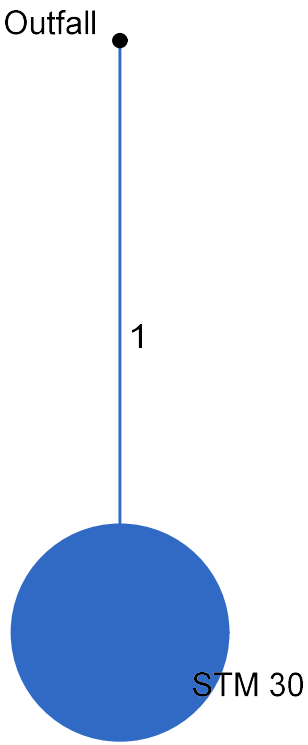
NOTES: Known Qs only

Storm Sewer Profile

Proj. file: ERIE SD-3-2YR.stm



ERIE SD-3



Project File: ERIE SD-3-100YR.stm	Number of lines: 1	Date: 11/22/2017

Storm Sewer Summary Report

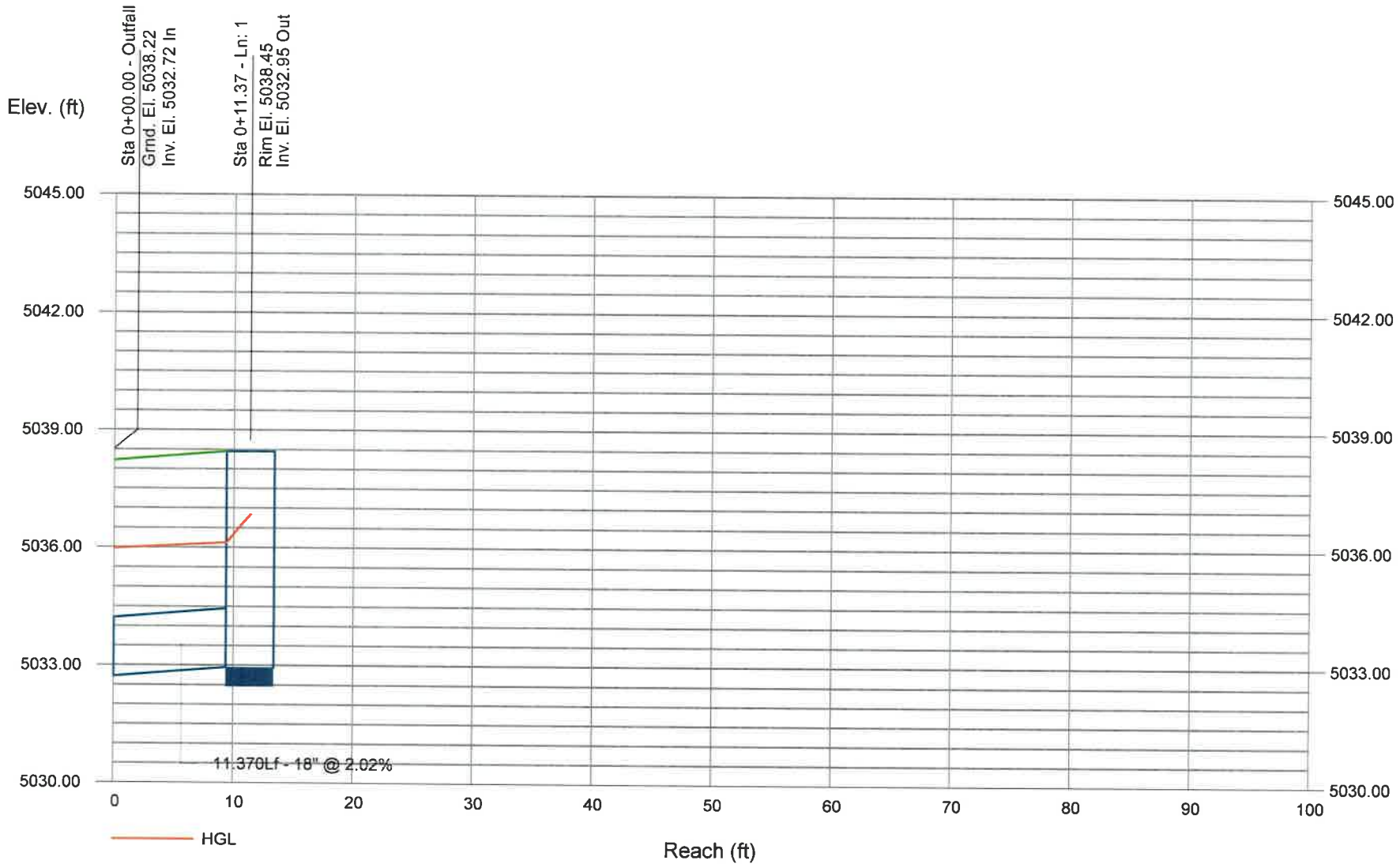
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		12.00	18	Cir	11.370	5032.72	5032.95	2.023	5035.97*	5036.12*	0.72	5036.84	End	Manhole

ERIE SD-3	Number of lines: 1	Run Date: 11/22/2017

NOTES: Known Qs only ; *Surcharged (HGL above crown).

Storm Sewer Profile

Proj. file: ERIE SD-3-100YR.stm



APPENDIX E
DETENTION AND WQCV CALCULATIONS

DETENTION POND RELEASE RATE CALCULATIONS

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS

DETENTION BASIN A (UNDERGROUND SYSTEM)

ALLOWABLE POST DEVELOPMENT RELEASE RATES (TYPE B SOILS)		
(PER TOWN OF ERIE STANDARDS)		
Q10 ALLOWABLE (cfs/ac)	0.23	
Q100 ALLOWABLE (cfs/ac)	0.85	4.529411765

BASIN AREAS		3.2725
"A"DESIGNATED SUB-BASINS (ac)	1.76	
OS1	1.60	
TOTAL	3.37	

"A" + OS1 ALLOWABLE RELEASE RATES	
10-YR (cfs)	0.8
100-YR (cfs)	2.9

*NOTE: The Total Required Detention Volume for On-Site Areas ("A" Designated Sub-basins) calculated using the UD-Detention Spreadsheet was approximately 0.19 acre-feet. With a factor of Safety of 1.25 this volume increases to 0.24 ac-feet. This volume is almost identical to the volume calculated by the UD-Detention Spreadhseet with Sub-basin OS1 included as part of the watershed area (with no factor of safety). For simplicity sake, the analysis for Detention Basin A uses the a watershed area that includes the OS1 Sub-Basin Area.

DETENTION BASIN B (POND)

ALLOWABLE POST DEVELOPMENT RELEASE RATES (TYPE B SOILS)	
(PER TOWN OF ERIE STANDARDS)	
Q10 ALLOWABLE (cfs/ac)	0.23
Q100 ALLOWABLE (cfs/ac)	0.85

BASIN AREAS	
"B"DESIGNATED SUB-BASINS (ac)	2.12
"U"DESIGNATED SUB-BASINS (ac)	0.30
SUB-BASINS OS2 (ac)	0.11
"B" + "U" DESIGNATED SUB-BASINS + OS2(ac)	2.53

"B" + "U" + OS2 ALLOWABLE RELEASE RATES	
10-YR (cfs)	0.6
100-YR (cfs)	2.1

Project: **MAIN STREET ERIE**

Chamber Model -	MC-3500	
Units -	**Imperial**	Click Here for Metric
Number of Chambers -	52	
Number of End Caps -	12	
Voids in the stone (porosity) -	40	%
Base of Stone Elevation -	5030.30	ft
Amount of Stone Above Chambers -	14	in
Amount of Stone Below Chambers -	9	in
Area of system -	3584	sf Min. Area - 2873 sf min. area

StormTech Detention • Retention • Water Quality
A division of ADS

☑ Include Perimeter Stone in Calculations

To be copied as stag new spreadsheet and delimited file) or cop into software]

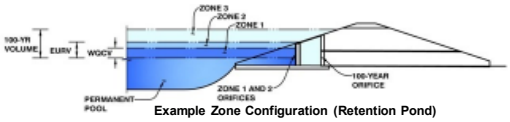
Height of System *(inches)*	Incremental Single Chamber *(cubic feet)*	Incremental Single End Cap *(cubic feet)*	Incremental Chambers *(cubic feet)*	Incremental End Cap *(cubic feet)*	Incremental Stone *(cubic feet)*	Incremental Ch, EC and Stone *(cubic feet)*	Cumulative System (cubic feet)	Elevation (feet)	*Depth (feet*	*Area (feet2)*
68	0.00	0.00	0.00	0.00	119.47	119.47	11661.77	5035.97	0.00	1433.60
67	0.00	0.00	0.00	0.00	119.47	119.47	11542.30	5035.88	0.08	1433.60
66	0.00	0.00	0.00	0.00	119.47	119.47	11422.84	5035.80	0.17	1433.60
65	0.00	0.00	0.00	0.00	119.47	119.47	11303.37	5035.72	0.25	1433.60
64	0.00	0.00	0.00	0.00	119.47	119.47	11183.90	5035.63	0.33	1433.60
63	0.00	0.00	0.00	0.00	119.47	119.47	11064.44	5035.55	0.42	1433.60
62	0.00	0.00	0.00	0.00	119.47	119.47	10944.97	5035.47	0.50	1433.60
61	0.00	0.00	0.00	0.00	119.47	119.47	10825.50	5035.38	0.58	1433.60
60	0.00	0.00	0.00	0.00	119.47	119.47	10706.04	5035.30	0.67	1433.60
59	0.00	0.00	0.00	0.00	119.47	119.47	10586.57	5035.22	0.75	1433.60
58	0.00	0.00	0.00	0.00	119.47	119.47	10467.10	5035.13	0.83	2797.31
57	0.00	0.00	0.00	0.00	119.47	119.47	10347.64	5035.05	0.92	2783.99
56	0.00	0.00	0.00	0.00	119.47	119.47	10228.17	5034.97	1.00	2775.64
55	0.00	0.00	0.00	0.00	119.47	119.47	10108.70	5034.88	1.08	2767.35
54	0.06	0.00	3.02	0.00	118.26	121.28	9989.24	5034.80	1.17	2758.36
53	0.19	0.02	10.09	0.29	115.31	125.69	9867.96	5034.72	1.25	2749.51
52	0.29	0.04	15.29	0.45	113.17	128.91	9742.26	5034.63	1.33	2739.93
51	0.40	0.05	20.99	0.62	110.82	132.43	9613.35	5034.55	1.42	2730.09
50	0.69	0.07	35.73	0.81	104.85	141.39	9480.92	5034.47	1.50	2719.60
49	1.03	0.09	53.47	1.06	97.65	152.18	9339.53	5034.38	1.58	2708.50
48	1.25	0.11	64.98	1.29	92.96	159.22	9187.34	5034.30	1.67	2696.94
47	1.42	0.13	73.96	1.52	89.28	164.75	9028.12	5034.22	1.75	2684.81
46	1.57	0.14	81.80	1.73	86.05	169.59	8863.37	5034.13	1.83	2672.14
45	1.71	0.16	88.77	1.95	83.18	173.90	8693.78	5034.05	1.92	2658.64
44	1.83	0.18	95.08	2.18	80.56	177.82	8519.88	5033.97	2.00	2644.63
43	1.94	0.20	100.76	2.41	78.20	181.37	8342.06	5033.88	2.08	2630.15
42	2.04	0.22	106.12	2.62	75.97	184.71	8160.69	5033.80	2.17	2613.86
41	2.13	0.23	111.00	2.82	73.94	187.76	7975.97	5033.72	2.25	2597.64
40	2.22	0.25	115.66	3.01	72.00	190.67	7788.21	5033.63	2.33	2580.74
39	2.31	0.27	119.95	3.19	70.21	193.35	7597.55	5033.55	2.42	2562.62
38	2.38	0.28	124.01	3.36	68.52	195.89	7404.20	5033.47	2.50	2543.38
37	2.46	0.29	127.87	3.53	66.91	198.31	7208.31	5033.38	2.58	2523.32
36	2.53	0.31	131.46	3.69	65.40	200.56	7010.00	5033.30	2.67	2502.27
35	2.59	0.32	134.87	3.85	63.98	202.70	6809.44	5033.22	2.75	2480.12
34	2.66	0.33	138.11	4.01	62.62	204.74	6606.74	5033.13	2.83	2456.92
33	2.72	0.35	141.19	4.16	61.33	206.68	6401.99	5033.05	2.92	2432.45
32	2.77	0.36	144.11	4.32	60.10	208.52	6195.32	5032.97	3.00	2406.75
31	2.82	0.37	146.88	4.47	58.93	210.28	5986.79	5032.88	3.08	2379.68
30	2.88	0.38	149.52	4.61	57.81	211.95	5776.52	5032.80	3.17	2350.65
29	2.92	0.40	152.06	4.75	56.74	213.55	5564.57	5032.72	3.25	2320.21
28	2.97	0.41	154.43	4.89	55.74	215.06	5351.02	5032.63	3.33	2287.99
27	3.01	0.42	156.65	5.02	54.80	216.47	5135.96	5032.55	3.42	2253.13
26	3.05	0.43	158.77	5.16	53.90	217.82	4919.49	5032.47	3.50	2216.54
25	3.09	0.44	160.90	5.28	52.99	219.18	4701.67	5032.38	3.58	2176.43
24	3.13	0.45	162.79	5.41	52.19	220.39	4482.49	5032.30	3.67	2133.89
23	3.17	0.46	164.61	5.53	51.41	221.55	4262.10	5032.22	3.75	2086.83
22	3.20	0.47	166.37	5.65	50.66	222.68	4040.55	5032.13	3.83	2035.06
21	3.23	0.48	168.02	5.76	49.96	223.73	3817.87	5032.05	3.92	1977.00
20	3.26	0.49	169.59	5.87	49.28	224.74	3594.13	5031.97	4.00	1910.68
19	3.29	0.50	171.09	5.98	48.64	225.71	3369.39	5031.88	4.08	1826.22
18	3.32	0.51	172.53	6.08	48.02	226.63	3143.68	5031.80	4.17	1696.72
17	3.34	0.51	173.89	6.17	47.44	227.51	2917.05	5031.72	4.25	1589.18
16	3.37	0.52	175.17	6.27	46.89	228.33	2689.54	5031.63	4.33	1546.91
15	3.39	0.53	176.41	6.35	46.36	229.13	2461.21	5031.55	4.42	1508.34
14	3.41	0.54	177.56	6.44	45.87	229.86	2232.09	5031.47	4.50	1455.35
13	3.44	0.54	178.72	6.52	45.37	230.61	2002.22	5031.38	4.58	1433.60
12	3.46	0.55	179.80	6.59	44.91	231.30	1771.61	5031.30	4.67	1433.60
11	3.48	0.56	180.89	6.66	44.44	232.00	1540.31	5031.22	4.75	1433.60
10	3.51	0.59	182.26	7.14	43.71	233.11	1308.31	5031.13	4.83	1433.60
9	0.00	0.00	0.00	0.00	119.47	119.47	1075.20	5031.05	4.92	1433.60
8	0.00	0.00	0.00	0.00	119.47	119.47	955.73	5030.97	5.00	1433.60
7	0.00	0.00	0.00	0.00	119.47	119.47	836.27	5030.88	5.08	1433.60
6	0.00	0.00	0.00	0.00	119.47	119.47	716.80	5030.80	5.17	1433.60
5	0.00	0.00	0.00	0.00	119.47	119.47	597.33	5030.72	5.25	1433.60
4	0.00	0.00	0.00	0.00	119.47	119.47	477.87	5030.63	5.33	1433.60
3	0.00	0.00	0.00	0.00	119.47	119.47	358.40	5030.55	5.42	1433.60
2	0.00	0.00	0.00	0.00	119.47	119.47	238.93	5030.47	5.50	1433.60
1	0.00	0.00	0.00	0.00	119.47	119.47	119.47	5030.38	5.58	1433.60
									5.67	1433.60

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

UD-Detention, Version 3.07 (February 2017)

Project: MAIN STREET ERIE

Basin ID: BASIN A (UG DETENTION)



Example Zone Configuration (Retention Pond)

Required Volume Calculation

Selected BMP Type =	EDB			
Watershed Area =	3.37	acres		
Watershed Length =	475	ft		
Watershed Slope =	0.015	ft/ft		
Watershed Imperviousness =	25.80%	percent		
Percentage Hydrologic Soil Group A =	0.0%	percent		
Percentage Hydrologic Soil Group B =	100.0%	percent		
Percentage Hydrologic Soil Groups C/D =	0.0%	percent		
Desired WQCV Drain Time =	40.0	hours		
Location for 1-hr Rainfall Depths =	User Input			
Water Quality Capture Volume (WQCV) =	0.039	acre-feet	Optional User Override 1-hr Precipitation	
Excess Urban Runoff Volume (EURV) =	0.088	acre-feet		
2-yr Runoff Volume (P1 = 1.01 in.) =	0.057	acre-feet	1.01	inches
5-yr Runoff Volume (P1 = 1.43 in.) =	0.091	acre-feet	1.43	inches
10-yr Runoff Volume (P1 = 1.73 in.) =	0.151	acre-feet	1.73	inches
25-yr Runoff Volume (P1 = 2.09 in.) =	0.284	acre-feet	2.09	inches
50-yr Runoff Volume (P1 = 2.4 in.) =	0.371	acre-feet	2.40	inches
100-yr Runoff Volume (P1 = 2.68 in.) =	0.477	acre-feet	2.68	inches
500-yr Runoff Volume (P1 = 3.89 in.) =	0.803	acre-feet	3.89	inches
Approximate 2-yr Detention Volume =	0.053	acre-feet		
Approximate 5-yr Detention Volume =	0.086	acre-feet		
Approximate 10-yr Detention Volume =	0.134	acre-feet		
Approximate 25-yr Detention Volume =	0.169	acre-feet		
Approximate 50-yr Detention Volume =	0.182	acre-feet		
Approximate 100-yr Detention Volume =	0.217	acre-feet		

Stage-Storage Calculation

Zone 1 Volume (WQCV) =	0.039	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.049	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.129	acre-feet
Total Detention Basin Volume =	0.217	acre-feet
Initial Surcharge Volume (ISV) =	user	ft^3
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H_{total}) =	user	ft
Depth of Trickle Channel (H_{TC}) =	user	ft
Slope of Trickle Channel (S_{TC}) =	user	ft/ft
Slopes of Main Basin Sides (S_{main}) =	user	H:V
Basin Length-to-Width Ratio ($R_{L/W}$) =	user	
Initial Surcharge Area (A_{ISV}) =	user	ft^2
Surcharge Volume Length (L_{ISV}) =	user	ft
Surcharge Volume Width (W_{ISV}) =	user	ft
Depth of Basin Floor (H_{FLOOR}) =	user	ft
Length of Basin Floor (L_{FLOOR}) =	user	ft
Width of Basin Floor (W_{FLOOR}) =	user	ft
Area of Basin Floor (A_{FLOOR}) =	user	ft^2
Volume of Basin Floor (V_{FLOOR}) =	user	ft^3
Depth of Main Basin (H_{MAIN}) =	user	ft
Length of Main Basin (L_{MAIN}) =	user	ft
Width of Main Basin (W_{MAIN}) =	user	ft
Area of Main Basin (A_{MAIN}) =	user	ft^2
Volume of Main Basin (V_{MAIN}) =	user	ft^3
Calculated Total Basin Volume (V_{total}) =	user	acre-feet

Depth Increment = ft

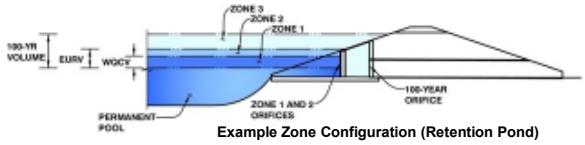
Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	1,434	0.033		
	--	0.08	--	--	--	1,434	0.033	115	0.003
	--	0.17	--	--	--	1,434	0.033	229	0.005
	--	0.25	--	--	--	1,434	0.033	358	0.008
	--	0.33	--	--	--	1,434	0.033	473	0.011
	--	0.42	--	--	--	1,434	0.033	588	0.013
	--	0.50	--	--	--	1,434	0.033	717	0.016
	--	0.58	--	--	--	1,434	0.033	831	0.019
	--	0.67	--	--	--	1,434	0.033	946	0.022
	--	0.75	--	--	--	1,434	0.033	1,075	0.025
	--	0.83	--	--	--	2,797	0.064	1,242	0.029
	--	0.92	--	--	--	2,784	0.064	1,466	0.034
	--	1.00	--	--	--	2,776	0.064	1,716	0.039
	--	1.08	--	--	--	2,767	0.064	1,938	0.044
	--	1.17	--	--	--	2,758	0.063	2,159	0.050
	--	1.25	--	--	--	2,750	0.063	2,407	0.055
	--	1.33	--	--	--	2,740	0.063	2,626	0.060
	--	1.42	--	--	--	2,730	0.063	2,845	0.065
	--	1.50	--	--	--	2,720	0.062	3,090	0.071
	--	1.58	--	--	--	2,708	0.062	3,308	0.076
	--	1.67	--	--	--	2,697	0.062	3,524	0.081
	--	1.75	--	--	--	2,685	0.062	3,766	0.086
	--	1.83	--	--	--	2,672	0.061	3,980	0.091
	--	1.92	--	--	--	2,659	0.061	4,194	0.096
	--	2.00	--	--	--	2,645	0.061	4,432	0.102
	--	2.08	--	--	--	2,630	0.060	4,643	0.107
	--	2.17	--	--	--	2,614	0.060	4,853	0.111
	--	2.25	--	--	--	2,598	0.060	5,088	0.117
	--	2.33	--	--	--	2,581	0.059	5,295	0.122
	--	2.42	--	--	--	2,563	0.059	5,501	0.126
	--	2.50	--	--	--	2,543	0.058	5,731	0.132
	--	2.58	--	--	--	2,523	0.058	5,933	0.136
	--	2.67	--	--	--	2,502	0.057	6,134	0.141
	--	2.75	--	--	--	2,480	0.057	6,359	0.146
	--	2.83	--	--	--	2,457	0.056	6,556	0.151
	--	2.92	--	--	--	2,432	0.056	6,752	0.155
	--	3.00	--	--	--	2,407	0.055	6,970	0.160
	--	3.08	--	--	--	2,380	0.055	7,161	0.164
	--	3.17	--	--	--	2,351	0.054	7,351	0.169
	--	3.25	--	--	--	2,320	0.053	7,561	0.174
	--	3.33	--	--	--	2,288	0.053	7,745	0.178
	--	3.42	--	--	--	2,253	0.052	7,927	0.182
	--	3.50	--	--	--	2,217	0.051	8,128	0.187
	--	3.58	--	--	--	2,176	0.050	8,304	0.191
	--	3.67	--	--	--	2,134	0.049	8,477	0.195
	--	3.75	--	--	--	2,087	0.048	8,667	0.199
	--	3.83	--	--	--	2,035	0.047	8,832	0.203
	--	3.92	--	--	--	1,977	0.045	8,993	0.206
	--	4.00	--	--	--	1,911	0.044	9,168	0.210
	--	4.08	--	--	--	1,826	0.042	9,317	0.214
	--	4.17	--	--	--	1,697	0.039	9,459	0.217
	--	4.25	--	--	--	1,589	0.036	9,607	0.221
	--	4.33	--	--	--	1,547	0.036	9,733	0.223
	--	4.42	--	--	--	1,508	0.035	9,855	0.226
	--	4.50	--	--	--	1,455	0.033	9,989	0.229
	--	4.58	--	--	--	1,434	0.033	10,104	0.232
	--	4.67	--	--	--	1,434	0.033	10,219	0.235
	--	4.75	--	--	--	1,434	0.033	10,348	0.238
	--	4.83	--	--	--	1,434	0.033	10,463	0.240
	--	4.92	--	--	--	1,434	0.033	10,577	0.243
	--	5.00	--	--	--	1,434	0.033	10,706	0.246
	--	5.08	--	--	--	1,434	0.033	10,821	0.248
	--	5.17	--	--	--	1,434	0.033	10,936	0.251
	--	5.25	--	--	--	1,434	0.033	11,065	0.254
	--	5.33	--	--	--	1,434	0.033	11,179	0.257
	--	5.42	--	--	--	1,434	0.033	11,294	0.259
	--	5.50	--	--	--	1,434	0.033	11,423	0.262
	--	5.58	--	--	--	1,434	0.033	11,538	0.265
	--	5.67	--	--	--	1,434	0.033	11,653	0.268

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)

Project:

Basin ID:



Example Zone Configuration (Retention Pond)

	Stage (ft)	Zone Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	0.99	0.039	Orifice Plate
Zone 2 (EURV)	1.78	0.049	Orifice Plate
Zone 3 (100-year)	4.17	0.129	Weir&Pipe (Restrict)
		0.217	Total

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth =	N/A	ft (distance below the filtration media surface)	
Underdrain Orifice Diameter =	N/A	inches	

Calculated Parameters for Underdrain

Underdrain Orifice Area =	N/A	ft^2
Underdrain Orifice Centroid =	N/A	feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Invert of Lowest Orifice =	0.00	ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Orifice Plate =	2.00	ft (relative to basin bottom at Stage = 0 ft)
Orifice Plate: Orifice Vertical Spacing =	N/A	inches
Orifice Plate: Orifice Area per Row =	N/A	inches

Calculated Parameters for Plate

WQ Orifice Area per Row =	N/A	ft^2
Elliptical Half-Width =	N/A	feet
Elliptical Slot Centroid =	N/A	feet
Elliptical Slot Area =	N/A	ft^2

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	0.67	1.33					
Orifice Area (sq. inches)	0.52	0.52	0.52					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Not Selected	Not Selected	
Invert of Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)
Vertical Orifice Diameter =	N/A	N/A	inches

Calculated Parameters for Vertical Orifice

	Not Selected	Not Selected	
Vertical Orifice Area =	N/A	N/A	ft^2
Vertical Orifice Centroid =	N/A	N/A	feet

User Input: Overflow Weir (Dropbox) and Grate (Flat or Sloped)

	Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	2.16	N/A	ft (relative to basin bottom at Stage = 0 ft)
Overflow Weir Front Edge Length =	2.92	N/A	feet
Overflow Weir Slope =	0.00	N/A	H:V (enter zero for flat grate)
Horiz. Length of Weir Sides =	0.00	N/A	feet
Overflow Grate Open Area % =	100%	N/A	%, grate open area/total area
Debris Clogging % =	0%	N/A	%

Calculated Parameters for Overflow Weir

	Zone 3 Weir	Not Selected	
Height of Grate Upper Edge, H_t =	2.16	N/A	feet
Over Flow Weir Slope Length =	0.00	N/A	feet
Grate Open Area / 100-yr Orifice Area =	0.00	N/A	should be ≥ 4
Overflow Grate Open Area w/o Debris =	0.00	N/A	ft^2
Overflow Grate Open Area w/ Debris =	0.00	N/A	ft^2

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

	Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	0.00	N/A	ft (distance below basin bottom at Stage = 0 ft)
Outlet Pipe Diameter =	18.00	N/A	inches
Restrictor Plate Height Above Pipe Invert =	3.69		inches

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

	Zone 3 Restrictor	Not Selected	
Outlet Orifice Area =	0.26	N/A	ft^2
Outlet Orifice Centroid =	0.18	N/A	feet
Half-Central Angle of Restrictor Plate on Pipe =	0.94	N/A	radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage=		ft (relative to basin bottom at Stage = 0 ft)
Spillway Crest Length =		feet
Spillway End Slopes =		H:V
Freeboard above Max Water Surface =		feet

Calculated Parameters for Spillway

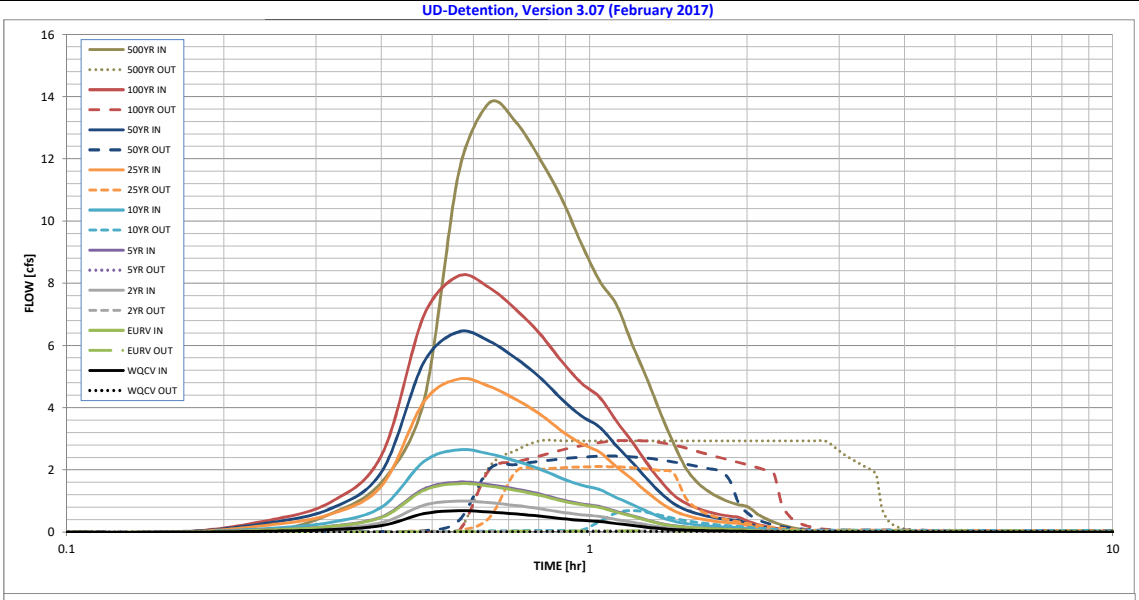
Spillway Design Flow Depth=		feet
Stage at Top of Freeboard =		feet
Basin Area at Top of Freeboard =		acres

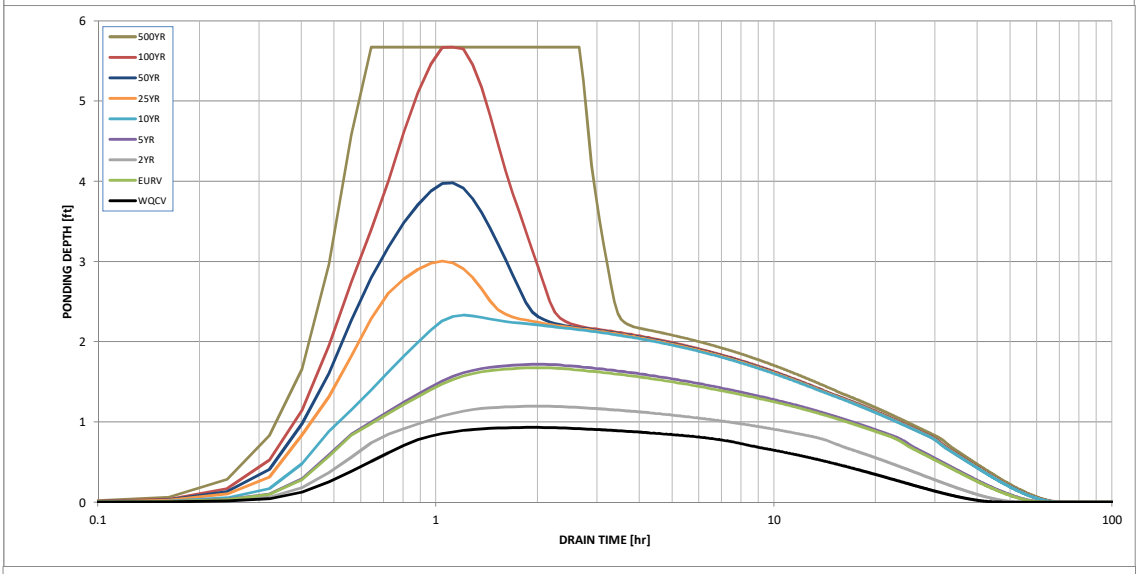
Routed Hydrograph Results

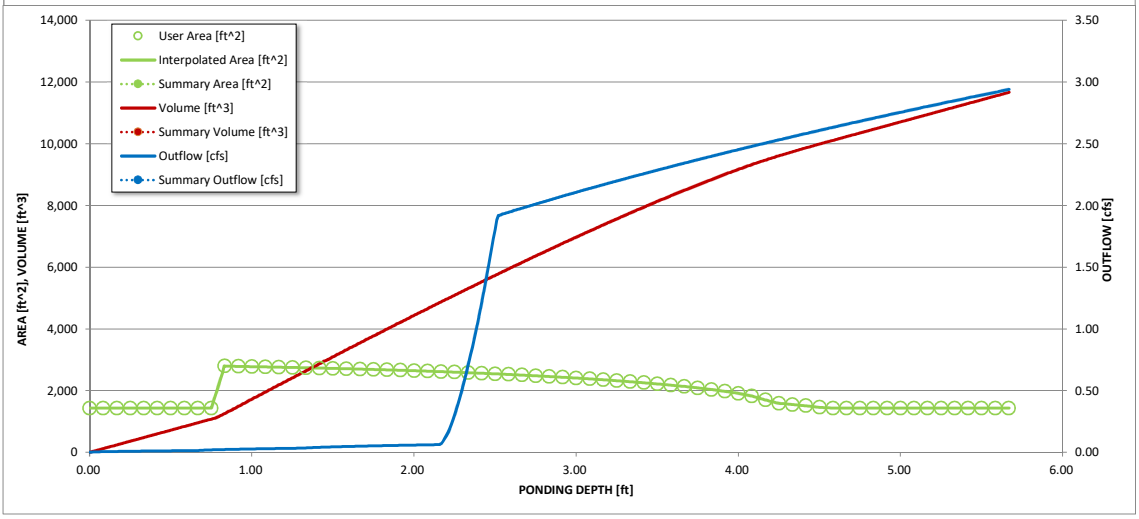
Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	0.53	1.07	1.01	1.43	1.73	2.09	2.40	2.68	3.89
Calculated Runoff Volume (acre-ft) =	0.039	0.088	0.057	0.091	0.151	0.284	0.371	0.477	0.803
OPTIONAL Override Runoff Volume (acre-ft) =									
Inflow Hydrograph Volume (acre-ft) =	0.038	0.088	0.056	0.091	0.151	0.283	0.372	0.477	0.803
Predevelopment Unit Peak Flow, q (cfs/acre) =	0.00	0.00	0.01	0.02	0.21	0.73	1.03	1.38	2.37
Predevelopment Peak Q (cfs) =	0.0	0.0	0.0	0.1	0.7	2.5	3.5	4.6	8.0
Peak Inflow Q (cfs) =	0.69	1.56	1.00	1.61	2.65	4.93	6.44	8.24	13.80
Peak Outflow Q (cfs) =	0.03	0.05	0.03	0.05	**0.70**	2.11	2.45	**2.94**	2.94
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.7	1.0	0.9	0.7	0.6	0.4
Structure Controlling Flow =	Plate	Plate	Plate	Plate	Overflow Grate 1	Outlet Plate 1	Outlet Plate 1	N/A	N/A
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	39	50	44	51	53	47	44	40	33
Time to Drain 99% of Inflow Volume (hours) =	**42**	56	48	56	60	57	55	53	49
Maximum Ponding Depth (ft) =	0.93	1.68	1.20	1.72	2.33	3.01	3.98	5.67	5.67
Area at Maximum Ponding Depth (acres) =	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.03	0.03
Maximum Volume Stored (acre-ft) =	0.035	0.082	0.051	0.084	0.122	0.160	0.210	0.268	0.268

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)







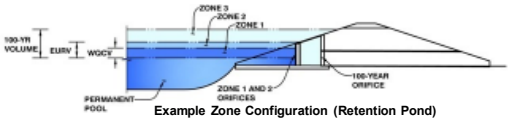
S-A-V-D Chart Axis Override	X-axis	Left Y-Axis	Right Y-Axis
minimum bound			
maximum bound			

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

UD-Detention, Version 3.07 (February 2017)

Project: MAIN STREET ERIE

Basin ID: BASIN B (POND)



Example Zone Configuration (Retention Pond)

Required Volume Calculation

Selected BMP Type =	EDB		
Watershed Area =	2.53	acres	Note: L / W Ratio < 1
Watershed Length =	287	ft	L / W Ratio = 0.7
Watershed Slope =	0.020	ft/ft	
Watershed Imperviousness =	55.32%	percent	
Percentage Hydrologic Soil Group A =	0.0%	percent	
Percentage Hydrologic Soil Group B =	100.0%	percent	
Percentage Hydrologic Soil Groups C/D =	0.0%	percent	
Desired WQCV Drain Time =	40.0	hours	
Location for 1-hr Rainfall Depths =	User Input		
Water Quality Capture Volume (WQCV) =	0.047	acre-feet	Optional User Override 1-hr Precipitation
Excess Urban Runoff Volume (EURV) =	0.151	acre-feet	
2-yr Runoff Volume (P1 = 1.01 in.) =	0.104	acre-feet	1.01 inches
5-yr Runoff Volume (P1 = 1.43 in.) =	0.159	acre-feet	1.43 inches
10-yr Runoff Volume (P1 = 1.73 in.) =	0.218	acre-feet	1.73 inches
25-yr Runoff Volume (P1 = 2.09 in.) =	0.311	acre-feet	2.09 inches
50-yr Runoff Volume (P1 = 2.4 in.) =	0.376	acre-feet	2.40 inches
100-yr Runoff Volume (P1 = 2.68 in.) =	0.451	acre-feet	2.68 inches
500-yr Runoff Volume (P1 = 3.89 in.) =	0.708	acre-feet	3.89 inches
Approximate 2-yr Detention Volume =	0.098	acre-feet	
Approximate 5-yr Detention Volume =	0.149	acre-feet	
Approximate 10-yr Detention Volume =	0.202	acre-feet	
Approximate 25-yr Detention Volume =	0.231	acre-feet	
Approximate 50-yr Detention Volume =	0.247	acre-feet	
Approximate 100-yr Detention Volume =	0.271	acre-feet	

Stage-Storage Calculation

Zone 1 Volume (WQCV) =	0.047	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.104	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.120	acre-feet
Total Detention Basin Volume =	0.271	acre-feet
Initial Surcharge Volume (ISV) =	user	ft^3
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H_{total}) =	user	ft
Depth of Trickle Channel (H_{TC}) =	user	ft
Slope of Trickle Channel (S_{TC}) =	user	ft/ft
Slopes of Main Basin Sides (S_{main}) =	user	H:V
Basin Length-to-Width Ratio ($R_{L/W}$) =	user	
Initial Surcharge Area (A_{ISV}) =	user	ft^2
Surcharge Volume Length (L_{ISV}) =	user	ft
Surcharge Volume Width (W_{ISV}) =	user	ft
Depth of Basin Floor (H_{FLOOR}) =	user	ft
Length of Basin Floor (L_{FLOOR}) =	user	ft
Width of Basin Floor (W_{FLOOR}) =	user	ft
Area of Basin Floor (A_{FLOOR}) =	user	ft^2
Volume of Basin Floor (V_{FLOOR}) =	user	ft^3
Depth of Main Basin (H_{MAIN}) =	user	ft
Length of Main Basin (L_{MAIN}) =	user	ft
Width of Main Basin (W_{MAIN}) =	user	ft
Area of Main Basin (A_{MAIN}) =	user	ft^2
Volume of Main Basin (V_{MAIN}) =	user	ft^3
Calculated Total Basin Volume (V_{total}) =	**user**	acre-feet

Depth Increment = ft

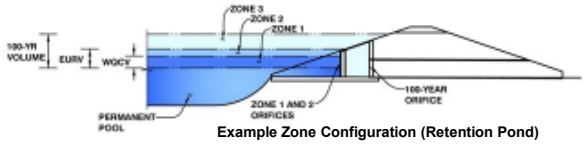
Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	62	0.001		
	--	0.20	--	--	--	137	0.003	19	0.000
	--	0.40	--	--	--	203	0.005	52	0.001
	--	0.60	--	--	--	390	0.009	109	0.003
	--	0.80	--	--	--	794	0.018	224	0.005
	--	1.00	--	--	--	1,364	0.031	434	0.010
	--	1.20	--	--	--	1,722	0.040	739	0.017
	--	1.40	--	--	--	1,840	0.042	1,094	0.025
	--	1.60	--	--	--	1,943	0.045	1,471	0.034
	--	1.80	--	--	--	2,048	0.047	1,869	0.043
	--	2.00	--	--	--	2,156	0.049	2,288	0.053
	--	2.20	--	--	--	2,269	0.052	2,752	0.063
	--	2.40	--	--	--	2,380	0.055	3,217	0.074
	--	2.60	--	--	--	2,491	0.057	3,704	0.085
	--	2.80	--	--	--	2,592	0.060	4,213	0.097
	--	3.00	--	--	--	2,687	0.062	4,741	0.109
	--	3.20	--	--	--	2,786	0.064	5,288	0.121
	--	3.40	--	--	--	2,885	0.066	5,855	0.134
	--	3.60	--	--	--	2,984	0.069	6,442	0.148
	--	3.80	--	--	--	3,084	0.071	7,049	0.162
	--	4.00	--	--	--	3,186	0.073	7,676	0.176
	--	4.20	--	--	--	3,292	0.076	8,324	0.191
	--	4.40	--	--	--	3,398	0.078	8,993	0.206
	--	4.60	--	--	--	3,504	0.080	9,683	0.222
	--	4.80	--	--	--	3,615	0.083	10,395	0.239
	--	5.00	--	--	--	3,736	0.086	11,130	0.256
	--	5.20	--	--	--	3,867	0.089	11,890	0.273
	--	5.40	--	--	--	4,014	0.092	12,678	0.291
	--	5.60	--	--	--	4,171	0.096	13,497	0.310
	--	5.80	--	--	--	4,415	0.101	14,355	0.330
	--	6.00	--	--	--	4,734	0.109	15,270	0.351
	--	6.20	--	--	--	5,118	0.117	16,255	0.373
	--	6.40	--	--	--	5,513	0.127	17,318	0.398
	--	6.60	--	--	--	5,984	0.137	18,468	0.424
	--	6.80	--	--	--	6,712	0.154	19,738	0.453
	--	7.00	--	--	--	13,422	0.308	21,751	0.499
	--		--	--	--				
	--		--	--	--				
	--		--	--	--			

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)

Project:

Basin ID:



Example Zone Configuration (Retention Pond)

	Stage (ft)	Zone Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	1.87	0.047	Orifice Plate
Zone 2 (EURV)	3.65	0.104	Orifice Plate
Zone 3 (100-year)	5.18	0.120	Weir&Pipe (Restrict)
		0.271	Total

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth =	N/A	ft (distance below the filtration media surface)	
Underdrain Orifice Diameter =	N/A	inches	

Calculated Parameters for Underdrain

Underdrain Orifice Area =	N/A	ft^2
Underdrain Orifice Centroid =	N/A	feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Invert of Lowest Orifice =	0.00	ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Orifice Plate =	4.10	ft (relative to basin bottom at Stage = 0 ft)
Orifice Plate: Orifice Vertical Spacing =	N/A	inches
Orifice Plate: Orifice Area per Row =	N/A	inches

Calculated Parameters for Plate

WQ Orifice Area per Row =	N/A	ft^2
Elliptical Half-Width =	N/A	feet
Elliptical Slot Centroid =	N/A	feet
Elliptical Slot Area =	N/A	ft^2

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	1.33	2.67					
Orifice Area (sq. inches)	0.35	0.35	0.35					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Not Selected	Not Selected	
Invert of Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)
Vertical Orifice Diameter =	N/A	N/A	inches

Calculated Parameters for Vertical Orifice

	Not Selected	Not Selected	
Vertical Orifice Area =	N/A	N/A	ft^2
Vertical Orifice Centroid =	N/A	N/A	feet

User Input: Overflow Weir (Dropbox) and Grate (Flat or Sloped)

	Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	4.18	N/A	ft (relative to basin bottom at Stage = 0 ft)
Overflow Weir Front Edge Length =	2.92	N/A	feet
Overflow Weir Slope =	0.00	N/A	H:V (enter zero for flat grate)
Horiz. Length of Weir Sides =	2.92	N/A	feet
Overflow Grate Open Area % =	70%	N/A	%, grate open area/total area
Debris Clogging % =	50%	N/A	%

Calculated Parameters for Overflow Weir

	Zone 3 Weir	Not Selected	
Height of Grate Upper Edge, H_t =	4.18	N/A	feet
Over Flow Weir Slope Length =	2.92	N/A	feet
Grate Open Area / 100-yr Orifice Area =	33.54	N/A	should be ≥ 4
Overflow Grate Open Area w/o Debris =	5.97	N/A	ft^2
Overflow Grate Open Area w/ Debris =	2.98	N/A	ft^2

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

	Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	0.25	N/A	ft (distance below basin bottom at Stage = 0 ft)
Outlet Pipe Diameter =	18.00	N/A	inches
Restrictor Plate Height Above Pipe Invert =	2.83		inches

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

	Zone 3 Restrictor	Not Selected	
Outlet Orifice Area =	0.18	N/A	ft^2
Outlet Orifice Centroid =	0.14	N/A	feet
Half-Central Angle of Restrictor Plate on Pipe =	0.82	N/A	radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage=		ft (relative to basin bottom at Stage = 0 ft)
Spillway Crest Length =		feet
Spillway End Slopes =		H:V
Freeboard above Max Water Surface =		feet

Calculated Parameters for Spillway

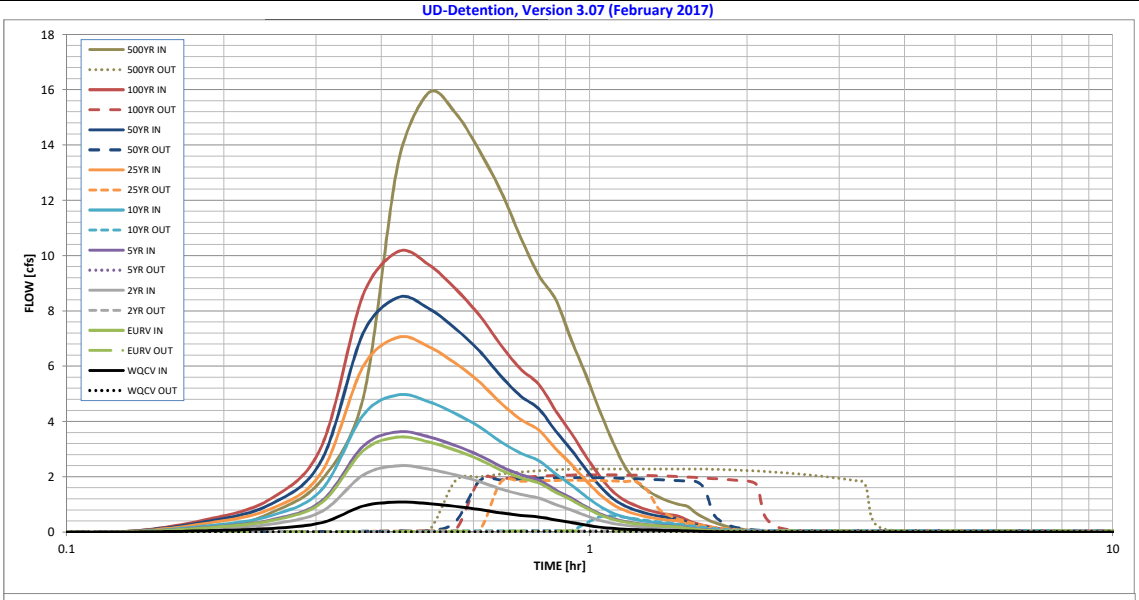
Spillway Design Flow Depth=		feet
Stage at Top of Freeboard =		feet
Basin Area at Top of Freeboard =		acres

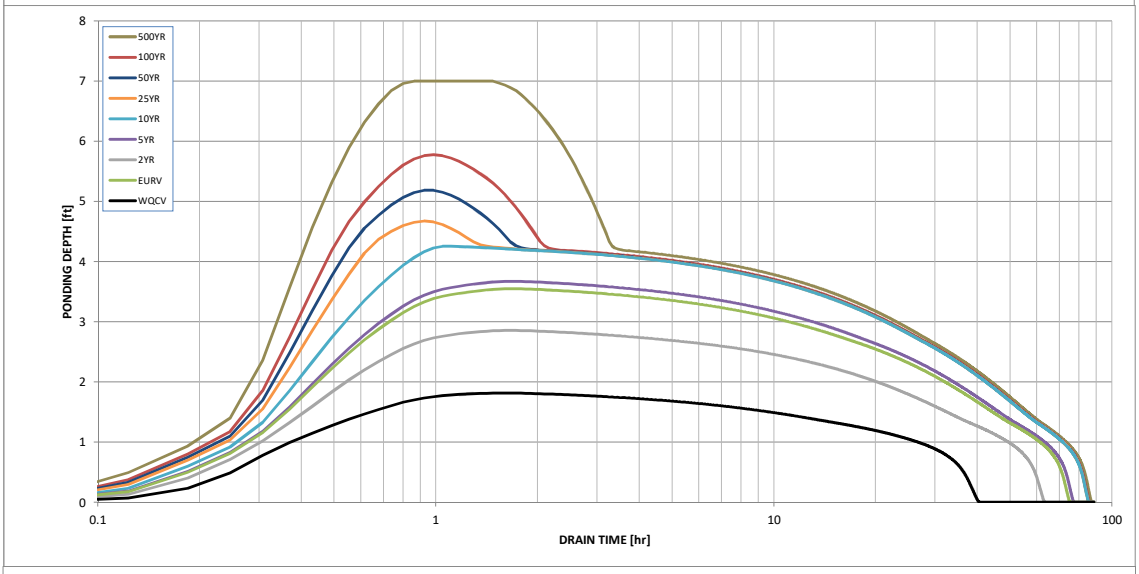
Routed Hydrograph Results

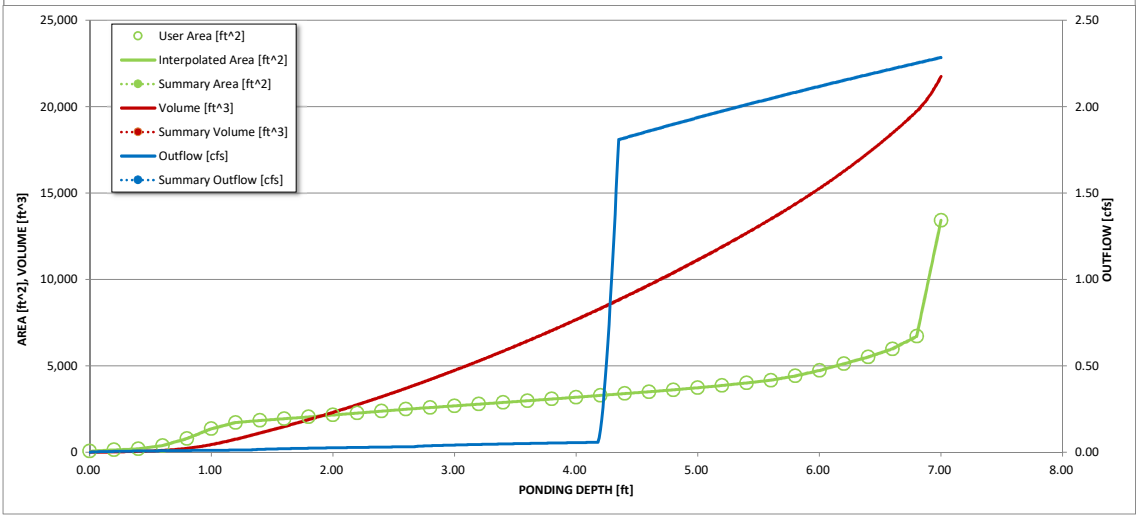
Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	0.53	1.07	1.01	1.43	1.73	2.09	2.40	2.68	3.89
Calculated Runoff Volume (acre-ft) =	0.047	0.151	0.104	0.159	0.218	0.311	0.376	0.451	0.708
OPTIONAL Override Runoff Volume (acre-ft) =									
Inflow Hydrograph Volume (acre-ft) =	0.047	0.150	0.104	0.158	0.218	0.311	0.375	0.449	0.707
Predevelopment Unit Peak Flow, q (cfs/acre) =	0.00	0.00	0.01	0.03	0.27	0.90	1.27	1.68	2.88
Predevelopment Peak Q (cfs) =	0.0	0.0	0.0	0.1	0.7	2.3	3.2	4.3	7.3
Peak Inflow Q (cfs) =	1.09	3.44	2.40	3.63	4.96	7.05	8.49	10.15	15.89
Peak Outflow Q (cfs) =	0.02	0.05	0.04	0.05	**0.59**	1.87	1.97	**2.08**	2.28
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.8	0.9	0.8	0.6	0.5	0.3
Structure Controlling Flow =	Plate	Plate	Plate	Plate	Overflow Grate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	N/A
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	N/A	0.1	0.3	0.3	0.3	0.4
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	37	68	57	69	76	73	71	69	63
Time to Drain 99% of Inflow Volume (hours) =	**39**	72	61	73	81	80	79	78	77
Maximum Ponding Depth (ft) =	1.81	3.55	2.85	3.67	4.26	4.67	5.18	5.78	7.00
Area at Maximum Ponding Depth (acres) =	0.05	0.07	0.06	0.07	0.08	0.08	0.09	0.10	0.31
Maximum Volume Stored (acre-ft) =	0.044	0.144	0.100	0.152	0.195	0.228	0.271	0.327	0.499

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)







S-A-V-D Chart Axis Override	X-axis	Left Y-Axis	Right Y-Axis
minimum bound			
maximum bound			

V=KxA DETENTION VOLUME CALCS

CALCULATED BY: PAK
DATE: 9/6/17
CHECKED BY:

JOB NO: 216-038
PROJECT: ERIE MAIN STREET-PROPOSED CONDITIONS

MINIMUM DETENTION VOLUME EQUATIONS…	
V=KxA	
K100=(1.78i-0.002i^2-3.56)/1000	
K10=(0.95i-1.90)/1000	
DENTION POND A (INLCUDING OFFSITE)	
i (%)	25.80
A (ac)	3.37
K100	0.041
K10	0.023
V100 (ac-ft)	0.14
V10 (ac-ft)	0.076
DENTION POND B (INLCUDING OFFSITE)	
i (%)	55.32
A (ac)	2.53
K100	0.089
K10	0.051
V100 (ac-ft)	0.22
V10 (ac-ft)	0.128

APPENDIX F
UNDERGROUND DETENTILON O&M MANUAL

StormTech
Detention • Retention • Water Quality
An ADS company

Isolator® Row O&M Manual

SC-740

MC-3500

MC-4500

THE MOST **ADVANCED** NAME IN WATER MANAGEMENT SOLUTIONS™

ADS®

THE ISOLATOR® ROW

INTRODUCTION

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row is a technique to inexpensively enhance Total Suspended Solids (TSS) removal and provide easy access for inspection and maintenance.

THE ISOLATOR ROW

The Isolator Row is a row of StormTech chambers, either SC-160LP, SC-310, SC-310-3, SC-740, DC-780, MC-3500 or MC-4500 models, that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as storm water rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls (SC-310, SC- 310-3 and SC-740 models) allow storm water to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage areas of the adjacent stone and chambers from sediment accumulation.

Two different fabrics are used for the Isolator Row. A woven geotextile fabric is placed between the stone and the Isolator Row chambers. The tough geotextile provides a media for storm water filtration and provides a durable surface for maintenance operations. It is also designed to prevent scour of the underlying stone and remain intact during high pressure jetting. A non-woven fabric is placed over the chambers to provide a filter media for flows passing through the perforations in the sidewall of the chamber. The non-woven fabric is not required over the SC-160LP, DC-780, MC-3500 or MC-4500 models as these chambers do not have perforated side walls.

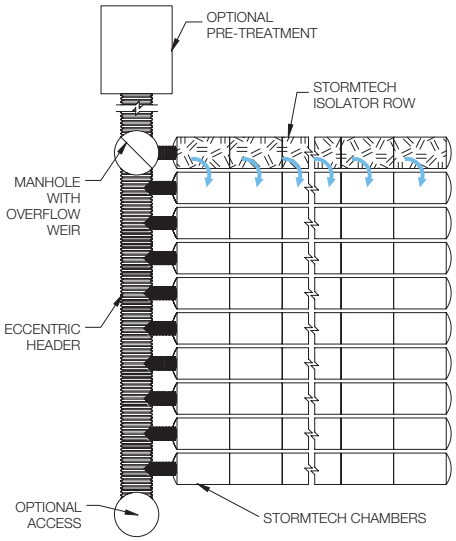
The Isolator Row is typically designed to capture the “first flush” and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but typically includes a high flow weir such that storm water flowrates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other chambers.

The Isolator Row may also be part of a treatment train. By treating storm water prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured. Pre-treatment best management practices can be as simple as deep sump catch basins, oil-water separators or can be innovative storm water treatment devices. The design of the treatment train and selection of pretreatment devices by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, the Isolator Row is recommended by StormTech as an effective means to minimize maintenance requirements and maintenance costs.

Note: See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row.

Looking down the Isolator Row from the manhole opening, woven geotextile is shown between the chamber and stone base.

StormTech Isolator Row with Overflow Spillway (not to scale)



ISOLATOR ROW INSPECTION/MAINTENANCE

INSPECTION

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.

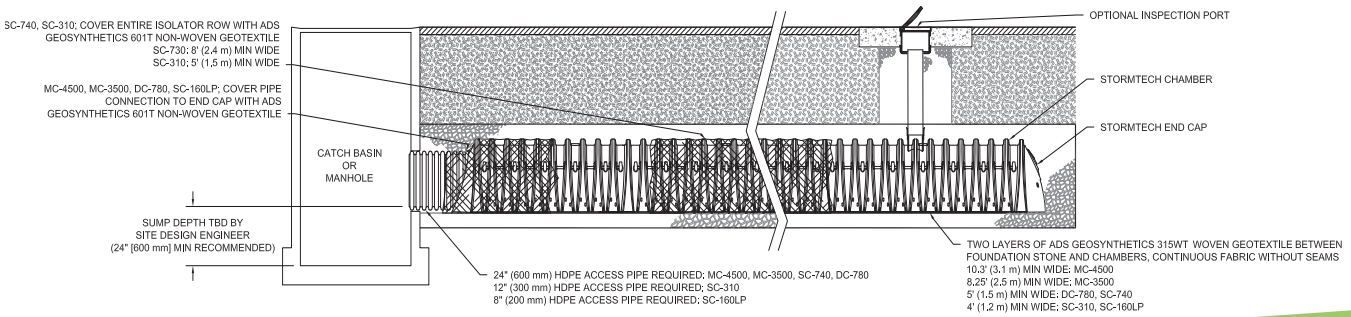
MAINTENANCE

The Isolator Row was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

StormTech Isolator Row (not to scale)

Note: Non-woven fabric is only required over the inlet pipe connection into the end cap for SC-160LP, DC-780, MC-3500 and MC-4500 chamber models and is not required over the entire Isolator Row.



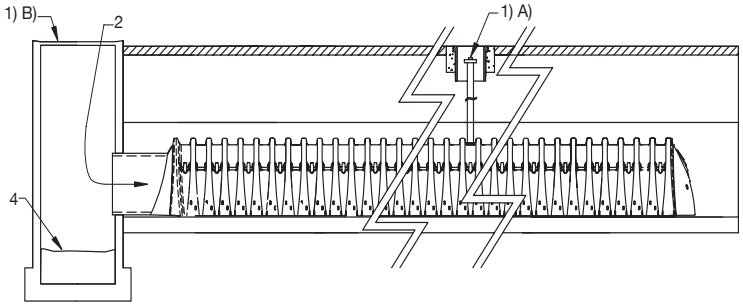
ISOLATOR ROW STEP BY STEP MAINTENANCE PROCEDURES

STEP 1
Inspect Isolator Row for sediment.
- A) Inspection ports (if present)
  - i. Remove lid from floor box frame
  - ii. Remove cap from inspection riser
  - iii. Using a flashlight and stadia rod,measure depth of sediment and record results on maintenance log.
  - iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.
- B) All Isolator Rows
  - i. Remove cover from manhole at upstream end of Isolator Row
  - ii. Using a flashlight, inspect down Isolator Row through outlet pipe
    1. Mirrors on poles or cameras may be used to avoid a confined space entry
    2. Follow OSHA regulations for confined space entry if entering manhole
  - iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2. If not, proceed to Step 3.

STEP 2
Clean out Isolator Row using the JetVac process.
- A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
- B) Apply multiple passes of JetVac until backflush water is clean
- C) Vacuum manhole sump as required

STEP 3
Replace all caps, lids and covers, record observations and actions.

STEP 4
Inspect & clean catch basins and manholes upstream of the StormTech system.



SAMPLE MAINTENANCE LOG

Date	Stadia Rod Readings		Sediment Depth (1)–(2)	Observations/Actions	Inspector
	Fixed point to chamber bottom (1)	Fixed point to top of sediment (2)			
3/15/11	6.3 ft	none		New installation. Fixed point is CI frame at grade	DJM
9/24/11		6.2	0.1 ft	Some grit felt	SM
6/20/13		5.8	0.5 ft	Mucky feel, debris visible in manhole and in Isolator Row, maintenance due	NV
7/7/13	6.3 ft		0	System jetted and vacuumed	DJM

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StormTech® Detention • Retention • Water Quality
A division of ADS

Advanced Drainage Systems, Inc.
4640 Trueman Blvd., Hilliard, OH 43026
1-800-821-6710 www.ads-pipe.com

APPENDIX G
UNDERGROUND DETENTION MAINTENANCE PLAN

ERIE MAIN STREET
UNDERGROUND DETENTION
MAINTENANCE PLAN

The proposed underground detention for this project will be a system manufactured by StormTech (ADS) consisting of rows of underground storage chambers installed over a bed of porous stone. The initial row of chambers is called the isolator row. The isolator row serves a similar function as the forebay in a conventional surface detention pond in that it captures the sedimentation of the runoff before it is distributed to the remaining storage chambers. The isolator row incorporates a combination of inspection ports or manholes (inlets) to allow for periodical inspections and maintenance.

It will be the responsibility of the Homeowner's Association to perform the inspections and complete the maintenance on this system.

INSPECTION:

Inspection of the system shall ne scheduled at regular intervals and shall occur every 6 months at minimum. Additional inspections will be required after significant storm events (5-year or greater) to determine if maintenance is required. Regular routine inspections will consist of visual inspection and measurement of sediment in the isolator chamber. Methods of measurement are described in the manufacturers operating and maintenance manual.

A more detailed inspection of the entire system shall be performed every 3 years. These inspections shall be performed by means of video camera inserted in each chamber. Required maintenance and repair of the system will be determined from this video inspection.

It shall be the responsibility of the Homeowners Association to maintain records of the regularly scheduled and storm related inspections and provide these to the Town of Erie as required.

MAINTENANCE:

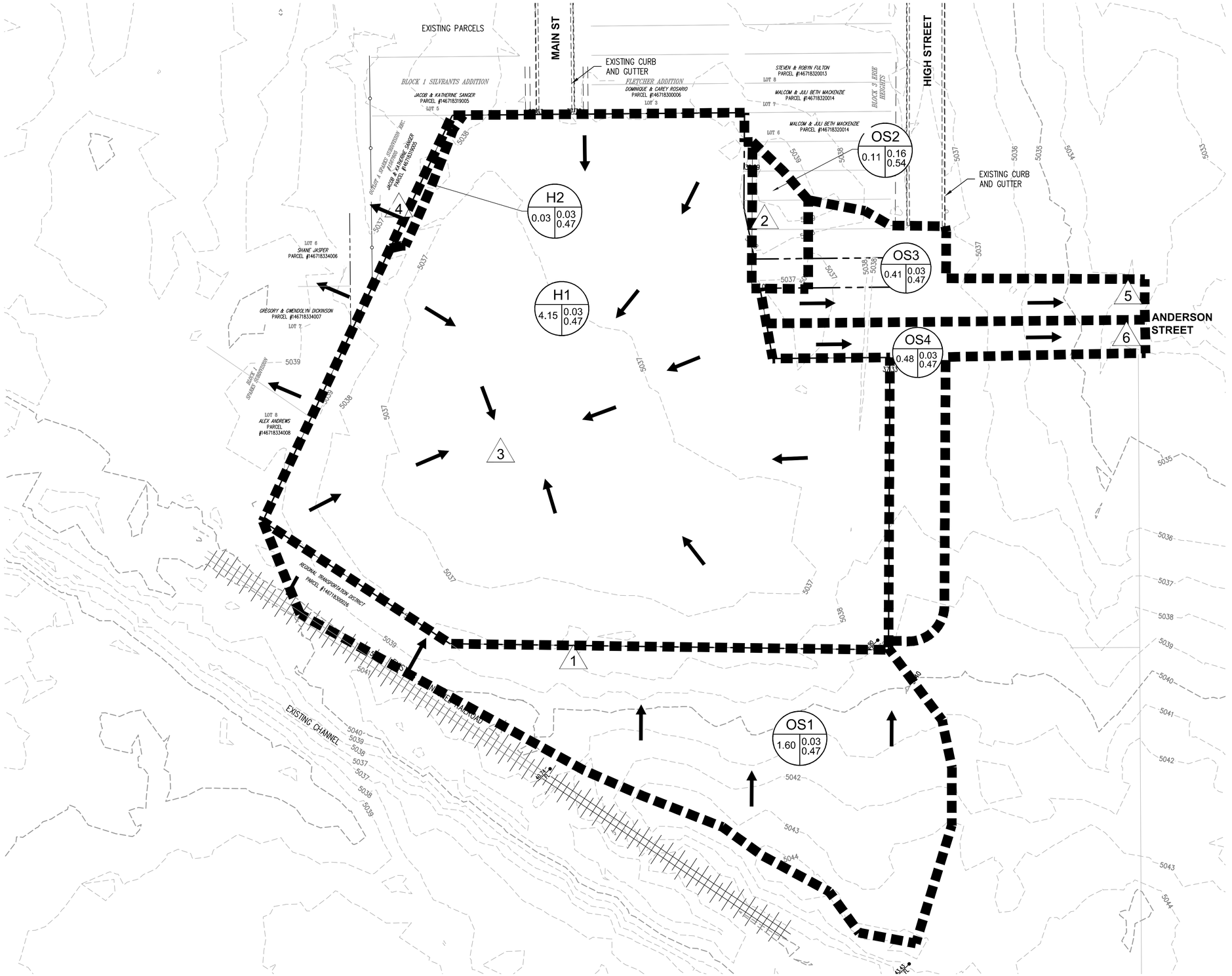
If upon visual inspection it is determined that sediment has accumulated, the depth of the sediment should be determined by inserting an stadia rod through the inspection port. When the average depth of sediment throughout the length of the isolator row exceeds an average of 3 inches, clean-out of the isolator row shall be performed.

Clean-out of the system will be accomplished with a JetVac process. The JetVac process utilizes a high-pressure water nozzle to scour and flush sediments from the isolator row. This process is described in the Operation and Maintenance manual provided by StormTech.

It shall be the responsibility of the Homeowners Association to maintain records of the maintenance operation and provide these to the Town of Erie as required.

FIGURES

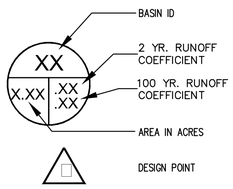
JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.



ORIGINAL SCALE: 1" = 40' HORIZ.

LEGEND

- EXISTING BOUNDARY LINE
- EXISTING SECTION LINE
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING FIRE HYDRANT
- FLOW ARROW
- DRAINAGE BASIN BOUNDARY



EXISTING RUNOFF SUMMARY TABLE

DESIGN POINT	BASIN	DIRECT RUNOFF Q2 (CFS)	DIRECT RUNOFF Q100(CFS)	TOTAL RUNOFF Q2 (CFS)	TOTAL RUNOFF Q100(CFS)
1	OS1	0.12	5.1	0.12	5.10
2	OS2	0.06	0.5	0.06	0.55
3	H1	0.30	13.1	0.41	16.64
4	H2	0.00	0.1	0.00	0.13
5	OS3	0.04	1.5	0.04	1.54
6	OS4	0.05	2.0	0.05	2.02

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

Call utility notification center of Colorado 2-business days in advance before you dig.
DIAL 1-800-922-1987
www.uncc.org
for marking of underground member utilities.

REFERENCE DOCUMENT

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NO.	DESCRIPTION	DATE	BY
	REVISIONS		

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

MAIN STREET
FIRE A - HISTORIC
CONDITIONS DRAINAGE MAP
prepared for
OLD TOWN DEVELOPMENT

DRAWN BY:	PA
DESIGNED BY:	AH
DRAWING NAME:	5018-PA-DRN.DWG
APPROVED BY:	
JOB NUMBER:	06-9-25-018
DATE:	06/05/2017
SCALE:	1" = 40'
SHEET NO:	FIRE A

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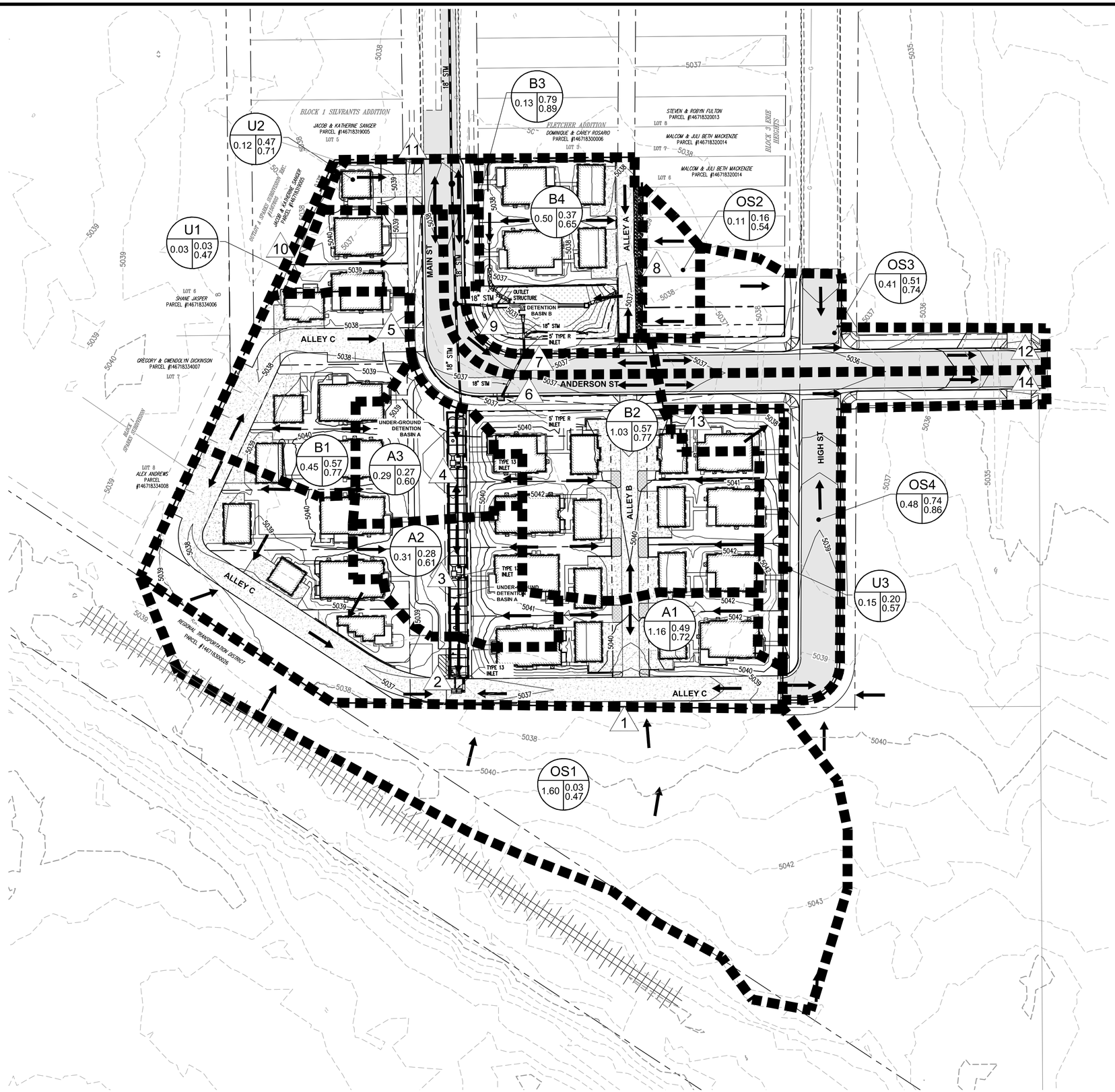
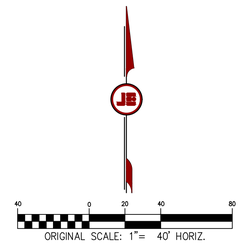
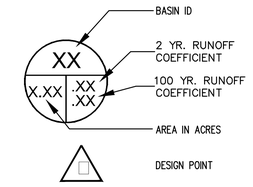




LEGEND

- EXISTING BOUNDARY LINE
- EXISTING SECTION LINE
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- 5730 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- x EXISTING FENCE
- S EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING FIRE HYDRANT
- FLOW ARROW
- DRAINAGE BASIN BOUNDARY



RUNOFF SUMMARY TABLE

DESIGN POINT	BASIN	DIRECT RUNOFF Q2 (CFS)	DIRECT RUNOFF Q100(CFS)	TOTAL RUNOFF Q2 (CFS)	TOTAL RUNOFF Q100(CFS)
1	OS1	0.1	5.1	0.1	5.1
2	A1	1.5	5.9	1.5	10.2
3	A2	0.3	1.7	0.3	1.7
4	A3	0.3	1.6	1.9	12.5
5	B1	0.8	2.8	0.8	2.8
6	B2	1.8	6.2	2.4	8.5
7	B3	0.4	1.1	3.3	11.5
8	OS2	0.1	0.5	0.1	0.5
9	B4	0.6	2.6	4.0	15.1
10	U1	0.0	0.1	0.0	0.1
11	U2	0.2	0.7	0.2	0.7
12	OS3	0.6	2.4	0.6	2.4
13	U3	0.1	0.8	0.1	0.8
14	OS4	1.2	3.8	1.3	4.6

POND A TABLE

V WQCV	0.035 ac-ft
V EURV	0.082 ac-ft
V 10	0.122 ac-ft
V 100	0.268 ac-ft
Q WQCV (RELEASE)	0.03 cfs (42 hr drain time)
Q EURV (RELEASE)	0.05 cfs (72 hr drain time)
Q 10 IN	2.65 cfs
Q 10 OUT (RELEASE)	0.70 cfs
Q 100 IN	8.24 cfs
Q 100 OUT (RELEASE)	2.90 cfs

POND B TABLE

V INITIAL SURCHARGE	5.7 cfs
WSEL INITIAL SURCHARGE	5030.67
V WQCV	0.044 ac-ft
V EURV	0.144 ac-ft
V 10	0.195 ac-ft
V 100	0.327 ac-ft
Q WQCV (RELEASE)	0.02 cfs (39 hr drain time)
Q EURV (RELEASE)	0.05 cfs (72 hr drain time)
Q 10 IN	4.96 cfs
Q 10 OUT (RELEASE)	0.59 cfs
Q 100 IN	10.15 cfs
Q 100 OUT (RELEASE)	2.08 cfs

NO. DESCRIPTION: REVISIONS DATE BY

SCALE VERIFICATION: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CERTIFICATE: The811.Promise.com FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

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JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

MAIN STREET
FINAL DRAINAGE REPORT FOR PROPOSED DRAINAGE MAP
prepared for
OLD TOWN SQUARE

DRAWN BY: PA
DESIGNED BY: AH
DRAWING NAME: 6038-PDRN.dwg
APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 09/06/2017
SCALE: 1" = 40'
SHEET NO: OF

J:\06\9-216-038\CIVIL\DRAINAGE\PHASE III\CAD FILES\6038-P-DRN.dwg, 1/14/2019 2:40:20 PM

LSC TRANSPORTATION CONSULTANTS, INC.

1889 York Street
Denver, CO 80206
(303) 333-1105
FAX (303) 333-1107
E-mail: lsc@lscdenver.com

December 2, 2016

Mr. Thomas Poppitz
Old Town Living, LLC
poppitz@comcast.net

Re: "Main Street" Residential
Traffic Impact Memorandum
Erie, CO
LSC #161320

Dear Mr. Poppitz:

Per your request, we have completed this traffic impact memorandum for the proposed "Main Street" Residential development in Erie, Colorado. The site is located south of Balcolm Street and west of High Street as shown in Figures 1 and 2.

LAND USE AND ACCESS

The site is proposed to include nine single-family dwelling units, three accessory dwelling units, and 14 duplex dwelling units. The conceptual site plan is shown in Figure 2.

TRIP GENERATION

Table 1 shows the estimated typical weekday, morning peak-hour, and afternoon peak-hour trip generation for the site based on the rates from *Trip Generation, 9th Edition,* 2012, by the Institute of Transportation Engineers (ITE).

The proposed land use on the site is projected to generate about 184 vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about three vehicles would enter and about eleven vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:30 p.m., about twelve vehicles would enter and about six vehicles would exit the site.

These trips will impact Main Street and High Street between the site and Balcolm Street. Anderson Street to the east would also be impacted if it is connected between High Street and Carr Street. Local residential streets in the Town of Erie typically have a capacity of up to 1,000 vehicles per day so the impact of the site can be accommodated both with or without the connection of Anderson Street between High Street and Carr Street.

* * *

We trust this information will assist you in planning for the proposed "Main Street" Residential development.

Respectfully submitted,

LSC Transportation Consultants, Inc.

By: _____
Christopher S. McGranahan, P.E., PTOE

12-2-16

CSM/wc

Enclosure: Table 1
Figures 1 and 2

Y:\LSC\Projects\2016\161320-MainStreetResidential\Report\MainStreetResidentialTripGeneration-120216.wpd

Table 1
ESTIMATED TRAFFIC GENERATION
"Main Street" Residential
Erie, CO
LSC #161320; December, 2016

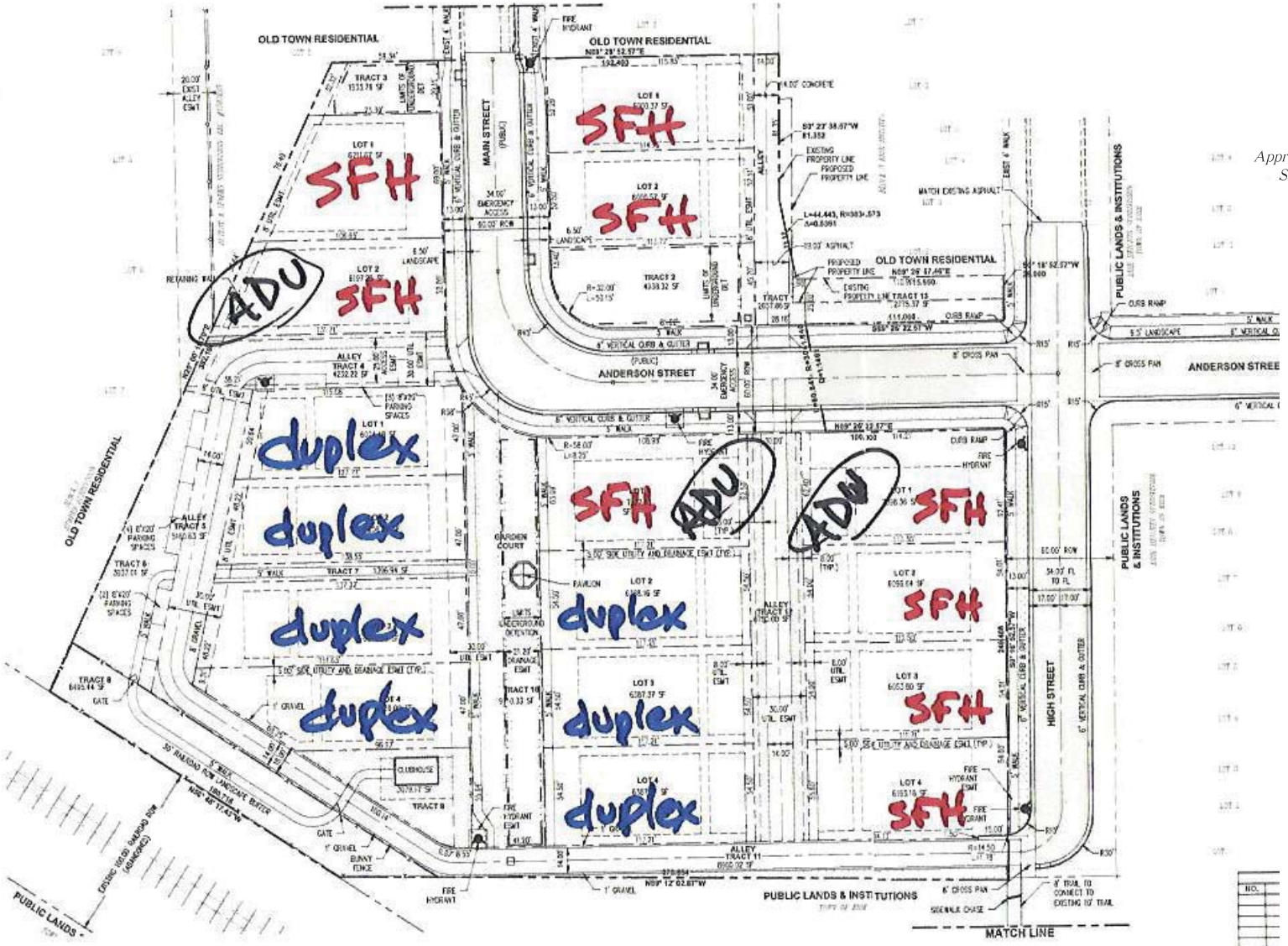
Land Use Description	Trip Generation Units	Trip Generation Rates [1]					Total Trips Generated				
		Average Weekday	AM Peak-Hour In	AM Peak-Hour Out	PM Peak-Hour In	PM Peak-Hour Out	Average Weekday	AM Peak-Hour In	AM Peak-Hour Out	PM Peak-Hour In	PM Peak-Hour Out
Single-Family [2]	9 DU [3]	9.52	0.188	0.563	0.630	0.370	86	2	5	6	3
ADU [4] [5]	3 DU [3]	5.81	0.075	0.365	0.348	0.172	17	0	1	1	1
Duplexes [4]	14 DU [3]	5.81	0.075	0.365	0.348	0.172	81	1	5	5	2
					Total =		**184**	**3**	**11**	**12**	**6**

Notes:
(1) Source: *Trip Generation*, Institute of Transportation Engineers, 9th Edition, 2012.
(2) ITE Land Use No. 210, Single-Family Detached Housing
(3) DU = Dwelling Unit
(4) ITE Land Use No. 230 - Residential Condominium/ Townhouse. The units are duplexes, but the trip generation rate used for an attached housing product is typically the condominium/townhouse rate.
(5) ADU = Accessory Dwelling Unit

Figure 1

Vicinity Map

Main Street Residential (LSC #161320)



Approximate Scale
Scale: NTS

Figure 2

Site Plan

Main Street Residential (LSC #161320)

Preliminary Geotechnical Engineering Report

Proposed Future Erie Apartments

South of South Main Street

Erie, Colorado

February 17, 2016

Terracon Project No. 25155197

Prepared for:

Old Time Living
c/o: Jehn Engineering
Arvada, Colorado

Prepared by:

Terracon Consultants, Inc.
Wheat Ridge, Colorado

Offices Nationwide
Employee-Owned
Established in 1965
terracon.com

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

Terracon

February 17, 2016

Old Time Living
c/o: Jehn Engineering
5690 Webster Street
Arvada, Colorado 80002

Attn: Mr. Steve Ceresa, Vice President
p: 303.423.6036

Re: Preliminary Geotechnical Engineering Report
Proposed Future Erie Apartments
South of South Main Street
Erie, Colorado
Terracon Project No. 25155197

Mr. Ceresa:

Terracon Consultants, Inc. (Terracon) has completed the geotechnical engineering exploration for the above referenced project. This study was performed in general accordance with our proposal number P25151103, dated October 28, 2015. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork, utility installations and pavement thickness recommendations for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

John N. Haas, P.E.
Senior Staff Engineer

Scott B. Myers, P.E.
Geotechnical Department Manager

Enclosures
cc: Addressee (3 hard copies and PDF)
1 - File

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EXECUTIVE SUMMARY

A preliminary geotechnical engineering report has been prepared for the proposed future Erie Apartments to be located south of South Main Street in Erie, Colorado. Based on the information obtained from our preliminary subsurface exploration and the laboratory testing completed, the site appears suitable for the proposed construction; however, the following geotechnical conditions will need to be considered:

- Based on the subsurface conditions encountered in the exploratory borings and the anticipated elevation of the utility lines, the proposed utilities may be constructed on the native soils with a relatively low risk of movement. We recommend that a gravel bedding be placed below utilities during installation.

- Pavement thicknesses are provided in this report. The pavement thicknesses presented in this report are based on the pavement subgrade consisting of clay soils.

- Excavations within the native soils should be able to be accomplished with conventional excavation equipment. Based on subsurface groundwater conditions and the anticipated depth of the utility lines, dewatering is not anticipated to be required for installation of the proposed utilities.

- Based on the subsurface conditions encountered in the exploratory borings, if the owner is willing to accept some risk of movement, it may be possible to support future buildings on spread foundations constructed on the native soils or a zone of new engineered fill. Alternatively, if the owner is not willing to accept the risk of movement of shallow foundations, a deep foundation system, such as drilled piers, may be constructed for future buildings.

- We understand that crawlspaces are proposed for future buildings. However, should plans change, slabs-on-grade may be considered for future interior floor systems, provided the slabs-on-grade are constructed on a zone of new engineered fill or modified native soils, and the owner is willing to accept the risk of movement. If the owner is not willing to accept the risk of movement, a structural floor is recommended.

- The amount of movement associated with the future foundations, slabs-on-grade, pavements, etc. will be related to the wetting of the underlying fill materials. Therefore, it is imperative the recommendations outlined in the “Grading and Drainage” section of this report be followed to reduce potential movement. Moisture conditioning and/or replacement of the on-site fill materials and/or native soils should follow the recommendations outlined in the “Earthwork” section of this report.

This summary should be used in conjunction with the entire report for design purposes. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. The section titled **GENERAL COMMENTS** should be read for an understanding of the report limitations.

PRELIMINARY GEOTECHNICAL ENGINEERING REPORT
PROPOSED FUTURE ERIE APARTMENTS
SOUTH OF SOUTH MAIN STREET
ERIE, COLORADO

Terracon Project No. 25155197
February 17, 2016

1.0 INTRODUCTION

A preliminary geotechnical engineering report has been prepared for the proposed future Erie Apartments to be located south of South Main Street in Erie, Colorado.

As part of our subsurface exploration, five (5) borings (designated as Boring Nos. 1 to 5) were drilled at the site to depths of about 20 to 30 feet below existing site grade. Boring Logs along with a Boring Location Plan are included in Appendix A of this report.

The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil and bedrock conditions
- Groundwater levels
- Earthwork
- Grading and drainage
- Infrastructure design and construction
- Preliminary foundation design and construction
- Preliminary interior slab-on-grade design and construction
- Exterior flatwork design and construction
- Pavement design and construction

2.0 PROJECT INFORMATION

2.1 Project Description

Item	Description
Site layout	See Appendix A, Boring Location Plan
Proposed construction	The proposed development consists of the construction of new infrastructure, extending South Main Street and Anderson Street into the proposed development. The new infrastructure will include new utilities, curb and gutter, concrete aprons and flatwork, and asphalt paved roadways. In addition to the new infrastructure, the proposed project includes

Item	Description
	of the development of five blocks of future single-story apartment buildings with detached garages. We understand the future buildings will have crawlspaces and shallow basements to house mechanical equipment.
Traffic Loading	Determined from the 2014 Colorado Department of Transportation (CDOT) *Pavement Design Manual* using: Residential: 63 residential units (provided)
Building construction	We anticipate the buildings will be of wood frame construction with crawlspaces.
Anticipated foundation systems	Shallow spread footings
Below grade areas	Shallow basements for future buildings
Maximum loads	Columns: 20 to 50 kips (assumed) Walls: 1 to 2 klf (assumed) Slabs: 150 psf (assumed)
Grading	Cut and fill, 2 feet (+/-) max (assumed)
Excavation depth	Foundations – 3 to 7½ feet (anticipated) Sanitary Sewer – 5 to 7 feet (anticipated)
Free-standing retaining walls	None anticipated
Infrastructure	Installation of the proposed underground utilities is anticipated to be within about 5 to 7 feet of finished site grades. We anticipate future roadways, curbs and gutters, and aprons will consist of asphalt and/or portland cement concrete pavements.

2.2 Site Location and Description

Item	Description
Location	The proposed future development will be located south of South Main Street in Erie, Colorado. The general location of the proposed project is 40.0462° N 105.0525° W.
Existing improvements	The subject site consists of vacant land.
Current ground cover	Ground cover over the site consists primarily of grass or barren ground.
Existing topography	The site appears to be generally flat with an elevation difference of less than 5 feet.

3.0 SUBSURFACE CONDITIONS

3.1 Geology

Surficial geologic conditions at a majority of the site, as mapped by the U.S. Geological Survey (USGS) ([1]Colton and Anderson, 1977), consists primarily of Eolian Sand of the Holocene and Pleistocene ages. These materials generally consist of brown to olive-brown deposits of sand-sized particles. These materials are generally 1 to 2 feet thick, as mapped in this area.

The geologic conditions presented in this section were obtained by locating the subject site on available large-scale geologic maps. Due to the scales involved, precise location of the site can be difficult to determine. In addition, the large-scale geologic maps describe only general trends. Local variations are possible and site specific geology may differ from those described above. A site-specific detailed geologic description is beyond the scope of this project.

3.2 Typical Profile

Based on the results of the borings, subsurface conditions on the site can be generalized as follows:

Material Description	Approximate Depth to Bottom of Stratum below Existing Site Grade	Consistency/ Relative Density/ Hardness
Native soils consisting of lean clay with varying amounts of silt and sand, silt with varying amounts of sand, and sand with varying amounts of silt, clay and gravel	About 20 to 30 feet, Maximum depth explored	Clay/silt: medium stiff to hard Sand: loose to dense

Stratification boundaries on the boring logs represent the approximate location of changes in soil and material types; in-situ, the transition between materials may be gradual. Further details of the borings can be found on the Boring Logs in Appendix A.

Laboratory testing indicates the native clay soils have nil to low swell potential. The native sand soils are considered to be essentially non-expansive.

[1]Colton, R.B. and Anderson, L.W., 1977, ***Preliminary Geologic Map of the Erie Quadrangle, Boulder, Weld and Adams Counties, Colorado***, United States Geological Survey, Map MF-882.

A composite sample of the soils obtained from the upper 5 feet of Boring Nos. 1, 3 and 5 was tested for moisture-density relationship and California Bearing Ratio (CBR) (in general accordance with AASHTO T90 and T193, respectively). Based on the laboratory testing, a CBR value of 2 was used for design.

Water-soluble sulfate testing was also performed on a sample obtained from the subsurface exploration. A summary of laboratory test results is included in Appendix B.

3.3 Groundwater

The borings were observed while drilling for the presence and level of groundwater. The groundwater levels are noted on the Boring Logs, and are summarized below.

Boring No.	Depth to groundwater while drilling	Depth to groundwater at least one day after drilling and date measured
1	About 17 feet	-*
2	About 16 feet	-*
3	About 18 feet	-*
4	About 16 feet	-*
5	About 16 feet	-*

* Borings were backfilled after obtaining initial groundwater measurements.

These observations represent groundwater conditions at the time of the field explorations, and may not be indicative of other times or at other locations. Groundwater levels can be expected to fluctuate with varying seasonal and weather conditions.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff, and other factors not evident at the time the borings were performed. Groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

4.1 Geotechnical Considerations

Based on subsurface conditions encountered in the borings, the site appears suitable for the proposed construction from a geotechnical point of view provided certain precautions and design and construction recommendations outlined in this report are followed. We have

identified geotechnical conditions that could impact design and construction of the proposed future buildings, infrastructure and other site improvements.

4.1.1 Expansive Soils

Laboratory testing indicates the native clay soils have nil to low swell potential. The native sand soils are considered to be essentially non-expansive.

This report provides general recommendations to help mitigate the effects of soil shrinkage and expansion. However, even if these procedures are followed, some movement and cracking in the structures, pavements, and flatwork should be anticipated. The severity of cracking and other damage such as uneven floor slabs will probably increase if any modification of the site results in excessive wetting or drying of the expansive clays. Eliminating the risk of movement and distress is generally not feasible, but it may be possible to reduce the risk of movement.

4.1.2 Utility Recommendations

Based on the geotechnical engineering analyses, subsurface exploration and laboratory test results, the proposed storm/sanitary sewer lines and new water lines may be constructed in the existing native soils with a relatively low risk of movement. Due to the presence of clay soils, we recommend that the proposed utility lines be constructed on 6 to 12 inches of gravel bedding material.

4.1.3 Subgrade Stabilization

Potentially expansive clay soils will be encountered beneath pavement and flatwork construction elevations. To reduce distress and maintenance of associated pavements and flatwork, and to enhance performance, we recommend these materials be partially overexcavated, processed, moisture conditioned and compacted into place prior to construction.

4.2 Earthwork

The following presents recommendations for site preparation, excavation, subgrade preparation and placement of engineered fills on the project. All earthwork on the project should be observed and evaluated by Terracon on a full-time basis. The evaluation of earthwork should include observation of overexcavation operations, testing of engineered fills, subgrade preparation, foundation bearing soils and other geotechnical conditions exposed during the construction of the project.

4.2.1 Site Preparation

Strip and remove existing vegetation, organics and other deleterious materials from proposed future building and pavement areas. All exposed surfaces should be free of mounds and depressions that could prevent uniform compaction.

Stripped materials consisting of vegetation, unsuitable fills and organic materials should be wasted from the site or used to revegetate landscaped areas or exposed slopes after completion of grading operations.

Where possible, the site should be initially graded to create a relatively level surface to receive fill and to provide for a relatively uniform thickness of fill beneath the proposed structure. All exposed areas that will receive fill, once properly cleared, should be scarified to a minimum depth of 12 inches, conditioned to near optimum moisture content and compacted. It is imperative the moisture content of prepared materials be protected from moisture loss.

Although evidence of underground facilities such as grease pits, septic tanks, cesspools, existing foundations and basements was not observed during the site reconnaissance, such features could be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

It is anticipated that excavations for the proposed construction can be accomplished with conventional earthmoving equipment.

The stability of subgrade soils may be affected by precipitation and seasonal groundwater conditions, repetitive construction traffic or other factors. Where unstable conditions are encountered or develop during construction, workability may be improved by overexcavation of wet zones and mixing these soils with crushed gravel or recycled concrete and recompaction. Use of lime, fly ash, kiln dust, cement or geotextiles could also be considered as a stabilization technique. Laboratory evaluation is recommended to determine the effect of chemical stabilization on subgrade soils prior to construction. Lightweight excavation equipment may be required to reduce subgrade pumping.

The individual contractor(s) is responsible for designing and constructing stable, temporary excavations as required maintaining stability of both the excavation sides and bottoming. All excavations should be sloped or shored in the interest of safety following local and federal regulations, including current Occupational Safety and Health Administration (OSHA) excavation and trench safety standards.

4.2.2 Material Types

Engineered fill should meet the following material property requirements:

Fill Type [1]	USCS Classification	Acceptable location for placement
On-site silt and clay soils	CL, ML, CL-ML	On-site silt and clay soils are considered suitable for reuse as compacted fill for utilities and below flatwork and pavement areas.
On-site sand soils	SC, SM	On-site sand soils are considered suitable for reuse as compacted fill for utilities and below flatwork and pavement areas.
Imported soils	Varies	Imported soils meeting the gradation outlined herein can be considered acceptable for use as engineered fill beneath slabs and pavements.

1. Controlled, compacted fill should consist of approved materials that are free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the geotechnical engineer for evaluation.
2. Care should be taken during the fill placement process to avoid zones of dis-similar fill. Improvements constructed over varying fill types are at a higher risk of differential movement compared to improvements over a uniform fill zone.

Imported soils for fills (if required) should meet the following material property requirements:

Gradation	Percent finer by weight (AASHTO T27)
3”	100
No. 4 Sieve	50-100
No. 200 Sieve	15-70

- Liquid Limit……30 (max)
- Plastic Limit……..15 (max)
- Maximum Expansive Potential (%)……..1.0*

*Measured on a sample compacted to approximately 95 percent of the AASHTO T90 maximum dry density at optimum water content. The sample is confined under a 500 psf surcharge and submerged.

4.2.3 Compaction Requirements

Engineered fill should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift.

Item	Description
Fill lift thickness	8-inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6-inches in loose thickness when hand-guided equipment (i.e. jumping jack, plate compactor) is used
Compaction requirements [1]	Minimum of 95% of the material's standard Proctor maximum dry density (AASHTO T90).
Moisture content cohesive soils (clay)	+0 to +3% of the optimum moisture content
Moisture content cohesionless soil (sand)	-2 to +2 % of the optimum moisture content

1. We recommend that engineered fill be tested for water content and compaction during placement. Should the results of the in-place density tests indicate the specified water or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified water and compaction requirements are achieved.
2. Water levels should be maintained low enough to allow for satisfactory compaction to be achieved without the compacted fill material pumping when proofrolled.
3. Moisture conditioned clay soils should not be allowed to dry out. A loss of moisture within these materials could result in an increase in the materials expansive potential. Subsequent wetting of these materials could result in undesirable movement.

4.2.4 Excavation and Trench Construction

Excavations into the subsurface soils will encounter a variety of conditions. Excavations into the native clay soils can be expected to stand on relatively steep temporary slopes during construction while excavations into the native sand soils will be subject to sloughing and caving. The individual contractor(s) should be made responsible for designing and constructing stable, temporary excavations as required to maintain stability of both the excavation sides and bottom. All excavations should be sloped or shored in the interest of safety following local and federal regulations, including current OSHA excavation and trench safety standards.

Soils penetrated by the proposed excavations may vary significantly across the site. The soil classifications are based solely on the materials encountered in the exploratory borings. The contractor should verify that similar conditions exist throughout the proposed area of excavation. If different subsurface conditions are encountered at the time of construction, the actual conditions should be evaluated to determine any excavation modifications necessary to maintain safe conditions.

As a safety measure, it is recommended that all vehicles and soil piles be kept to a minimum lateral distance from the crest of the slope equal to no less than the slope height. The exposed slope face should be protected against the elements.

4.2.5 Grading and Drainage

All grades must be adjusted to provide positive drainage away from excavations during construction. Infiltration of water into utility excavations must be prevented during construction. Water permitted to pond near or adjacent to the perimeter of pavements and future structures (either during or post-construction) can result in significantly higher soil movements than those discussed in this report. As a result, any estimations of potential movement described in this report cannot be relied upon if positive drainage is not obtained and maintained, and water is allowed to infiltrate the fill and/or subgrade.

Exposed ground should be sloped at a minimum of 10 percent grade for at least 5 feet beyond the perimeter of above grade structures, where possible. The use of swales or chases may be required to facilitate drainage in unpaved areas adjacent to flatwork and pavements. Backfill against utility trenches should be well compacted and free of all construction debris to reduce the possibility of moisture infiltration. After construction and prior to project completion, we recommend that verification of final grading be performed to document that positive drainage, as described above, has been achieved.

Flatwork and pavements will be subject to post construction movement. Maximum grades practical should be used for paving and flatwork to prevent areas where water can pond. In addition, allowances in final grades should take into consideration post-construction movement of flatwork, particularly if such movement would be critical.

4.2.6 Earthwork Construction Considerations

Upon completion of grading operations, care should be taken to maintain the moisture content of the subgrade prior to construction of flatwork and pavements. Construction traffic over prepared subgrade should be minimized and avoided to the extent practical. Construction traffic over processed clay subgrade will eventually reduce the moisture content and increase the density of the subgrade. Subsequent wetting of these materials will result in undesirable movement.

The site should also be graded to prevent ponding of surface water on prepared subgrade or in excavations. In areas where water is allowed to pond over a period of time, the affected area should be removed and allowed to dry out; however, allowing the clays to dry out below the optimum moisture content is not recommended. If such conditions occur, the affected area should be overexcavated and replaced with granular materials and/or non- to low expansive materials.

Although the exposed subgrade is anticipated to be relatively stable upon initial exposure, unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. Should unstable subgrade conditions develop, stabilization measures will need to be employed. Options for subgrade stabilization can include removal of unsuitable material and replacement with approved fill material. An alternative can include the use of TX-140 Tensar geogrid (or approved equivalent) overlain by Colorado

Department of Transportation (CDOT) Class 5 or 6 aggregate base course. The depth of aggregate base course will depend on the severity of unstable soils.

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during overexcavation operations, excavations, subgrade preparation; proof-rolling; placement and compaction of controlled compacted fills; backfilling of excavations into the completed subgrade, and just prior to construction of slabs-on-grade and pavements.

4.2.7 Soluble Sulfate Test Results

Water-soluble sulfate testing was performed on a sample of the subgrade materials obtained during the field exploration. The following table lists the result of laboratory soluble sulfate testing. This value may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials that will be used for project construction.

Boring No.	Sample Depth(feet)	Soluble Sulfate[1] (mg/l)
1	2	1

1. Results of soluble sulfate testing indicate that the sample of the on-site soils tested possesses negligible sulfate concentrations when classified in accordance with Table 4.3.1 of the ACI Design Manual. The results of the testing indicate ASTM Type I Portland Cement is suitable for project concrete on and below grade. However, if there is no (or minimal) cost differential, use of ASTM Type II Portland Cement is recommended for additional sulfate resistance of construction concrete. Concrete should be designed in accordance with the provisions of the ACI Design Manual, Section 318, Chapter 4.

4.3 Preliminary Foundation Recommendations

Based on the subsurface conditions encountered in the exploratory borings, if the owner is willing to accept some risk of movement, it may be possible to support future buildings on spread foundations constructed on the native soils or a zone of new engineered fill.

Alternatively, if the owner is not willing to accept the risk of movement of shallow foundations, a deep foundation system may be used to support of future buildings. A common deep foundation system used in the area consists of drilled piers. Terracon should be contacted if deep foundations will be considered for future buildings. Additional exploration will be required for deep foundation recommendations.

4.3.1 Preliminary Spread Footing Design Recommendations

If the owner is willing to accept the risk of movement, buildings could be constructed on the native soils or a zone of new engineered fill. Footing foundations should be designed using information from subsequent, structure-specific geotechnical studies; however, for

feasibility/preliminary design purposes the following information could be considered:

Description	Value
Overexcavation depth	None anticipated
Supporting stratum	Native soils or new engineered fill
Maximum net allowable bearing pressure	1,500 to 2,000 psf
Minimum dead-load pressure	500 psf, or as high as practical
Void thickness	4 to 6 inches
Estimated foundation movement [2]	About 1 inch

1. Foundation movement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of engineered fill, and the quality of the earthwork operations and footing construction.

Additional spread footing design and construction recommendations, specific to the future development will be provided in the design level geotechnical report.

4.4 Seismic Considerations

The following table presents the seismic site classification based on the 2012 International Building Code:

Code Used	Site Classification
2012 International Building Code (IBC)[1]	D

1. In general accordance with the *2003 International Building Code,* Table 1613.5.2.
2. The 2012 International Building Code (IBC) requires a site soil profile determination extending a depth of 100 feet for seismic site classification. The current scope requested does not include the required 100 foot soil profile determination. The deepest boring of this exploration extended to a maximum depth of about 30 feet and this seismic site class definition considers that similar soil conditions exist below the maximum depth of the subsurface exploration. Additional exploration to deeper depths could be performed to confirm the conditions below the current depth of exploration. Alternatively, a geophysical exploration could be utilized in order to attempt to justify a higher seismic site class.

4.5 Preliminary Interior Floor Recommendations

We understand that future buildings will include crawlspaces. However, we have included preliminary recommendations for slab-on-grade floors should plans change. Slabs-on-grade may be considered for the interior floor system, provided the slabs-on-grade are constructed on new engineered fill or a zone of modified native soils, and the owner is willing to accept the risk of movement. We recommend that at least 2 feet of the existing soils below slabs-on-grade be overexcavated, moisture conditioned and compacted back to grade.

Even when constructed on properly reprocessed and compacted fills, movement of the slab-on-grade floor system is possible should the subgrade soils undergo an increase in moisture content. If the owner cannot accept the risk of slab movement, then a structural floor should be considered.

For preliminary structural design of concrete slabs-on-grade, a modulus of subgrade reaction of 100 pounds per cubic inch (pci) may be used for point or limited area loads for floors supported on modified on-site soils.

Additional interior slab-on-grade design and construction recommendations, specific to the future development will be provided in the design level geotechnical report.

4.6 Below-grade Construction

Groundwater was measured in four borings at depths of about 16 to 18 feet below existing ground surface at the time of the field exploration. We understand that shallow basements will be constructed for the future buildings. Installation of a perimeter drainage system is recommended for below-grade foundation construction.

Since groundwater was generally encountered at least 8 to 9 feet below the bottom of anticipated basement level, we do not anticipate the groundwater encountered during our subsurface exploration will enter the foundation drain system unless in the very unlikely but possible event that the groundwater level rises significantly in the future.

4.7 Utility Recommendations

We anticipate that the proposed utility lines will be constructed on native soils. The following paragraphs present design and construction recommendations for the proposed utility lines.

4.7.1 Utility Design Recommendations

Based on the geotechnical engineering analyses, subsurface exploration and laboratory test results, the proposed utility lines may be constructed on a gravel bedding overlying native soils, provided the owner is willing to risk some potential movement.

Design recommendations for utility lines are presented in the following paragraphs.

Description	Value
Overexcavation depth	We recommend that the proposed utility lines be constructed on 6 to 12 inches of clean gravel bedding material.

4.7.2 Utility Construction Considerations

If unstable conditions are encountered at the base of excavations, these will need to be stabilized prior to the placement of the gravel bedding or installation of the utilities. The use of crushed concrete, angular rock and/or gravel pushed into the yielding subgrade are generally considered suitable means of stabilizing soft soils. Alternatively, the use of geogrid materials in conjunction with gravel have also been successfully used to stabilize soft soil conditions.

If unstable soil conditions are encountered, the geotechnical engineer should observe the conditions to provide site specific recommendations.

4.8 Deep Backfill Zones

The magnitude of settlement of the deep backfill zones associated with utility lines will be directly related to the type of fill material used, the degree of compaction, and the thickness of the fill zone. If the on-site soils are used as the fill material, the settlement of fill zones about 7 feet in thickness are estimated to be about 1 inch or less. This assumes that the degrees of compaction for fill zones are maintained in accordance with this report. Using gravel, aggregate base course, or flowable fill for backfill could reduce settlement.

4.9 Thrust Block Recommendations

Thrust blocks bearing on and against undisturbed natural soils or properly compacted fill/backfill can be evaluated and designed using the following parameters. Stabilization of thrust block excavations may be required where low strength soils are encountered.

Description		Design Parameter	
Bearing material		Native soils or properly compacted engineered fill	
Allowable soil bearing pressure[1]		2,000 psf	
Ultimate passive pressure [2]	**Cohesive (Clays)** [2]	**Above Water**	**Below Water**
		275 psf/ft	135 psf/ft
	Granular (Sands/Gravels [2]	**Above Water**	**Below Water**
		400 psf/ft	200 psf/ft
Ultimate Coefficient of sliding friction [2]		0.3 times the vertical dead load	

1. The allowable soil bearing pressure applies to dead loads plus design live load conditions. Unstable soils, if encountered, should be removed and replaced with engineered fill or stabilized by other suitable methods. Terracon should be contacted to provide site specific recommendations if unstable soils are encountered in thrust block excavations.
2. For evaluating resistance to lateral movement (or sliding) of thrust blocks. The sides of the excavation for thrust blocks must be nearly vertical and concrete should be placed neat against these vertical faces or backfill must be compacted to at least 95 percent of the standard Proctor maximum dry density for the passive earth pressure values to be valid. Passive pressure requires movement to generate the resistance and should only be used when movement is tolerable and

the soil is well compacted and will not be removed. The passive resistance and friction factor are ultimate values. As such, appropriate factors of safety should be applied.

4.10 Exterior Flatwork

Exterior slabs-on-grade and exterior architectural features may be constructed on a zone of modified native soils or new engineered fill. We recommend the native soils be partially modified by being scarified to minimum depth of 12 inches, properly processed, moisture treated and compacted back to subgrade elevation.

4.10.1 Exterior Flatwork Design Recommendations

For structural design of exterior concrete slabs-on-grade, a modulus of subgrade reaction of 100 pci may be used for point or limited area loads for exterior slabs-on-grade at this site.

Additional slab design and construction recommendations are as follows:

- Minimizing moisture increases in the backfill.
- Controlling moisture-density during placement of backfill.
- Positive separations and/or isolation joints should be provided between exterior slabs and permanent vertical structures to allow independent movement.
- Control joints should be provided in slabs to control the location and extent of cracking.
- Exterior slabs should not be constructed on frozen subgrade
- Other design and construction considerations, as outlined in Section 302.1R of the *ACI Design Manual*, are recommended.

4.10.2 Exterior Flatwork Construction Considerations

Movements of exterior slab-on-grades using the above technique will likely be reduced and tend to be more uniform. The estimates outlined above assume that the other recommendations in this report are followed. Additional movement could occur should the subsurface soils become wetted to significant depths, which could result in potential excessive movement causing uneven exterior slabs and severe cracking. This could be due to over watering of landscaping, poor drainage, and/or broken utility lines. Therefore, it is imperative that the recommendations outlined in the “Grading and Drainage” section of this report be followed.

4.11 Pavement Design and Construction

Design of pavements for the project were performed in general accordance with the guidelines outlined by the *1993 Guideline for Design of Pavement Structures* by the American Association of

State Highway and Transportation Officials (AASHTO), the *2016 Standards and Specifications* by the City of Erie, and the Colorado Department of Transportation (CDOT) 2014 *Pavement Design Manual* (these referred to hereafter as the Standards).

4.11.1 Design Traffic

We understand roads in the proposed development will include new roadways through the development consisting of extensions of Main Street and Anderson Street. Traffic loads for the streets were determined using the design equations for residential streets in accordance with the Standards. The traffic loads are based on the residential streets providing access to 63 residential units.

4.11.2 Subgrade Soils

Based on the laboratory test results, the near-surface soils were classified A-4 and A-6 soils in accordance with AASHTO. A composite sample of the soils obtained from the upper 5 feet of Boring Nos. 1, 3 and 5 was tested for moisture-density relationship and California Bearing Ratio (CBR) (in general accordance with AASHTO T90 and T193, respectively). Based on the laboratory testing, a CBR value of 2 was used for design.

4.11.3 Subgrade Stabilization

Proper subgrade preparation will be required to provide a stable platform for paving and will aid in enhancing pavement performance. We recommend that the subgrade soils be scarified to a depth of at least 12 inches, moisture conditioned and compacted back to grade.

4.11.4 Recommended Minimum Pavement Sections and Materials

Recommended alternatives for pavements using the traffic loading, subgrade soil strengths and the Standards, are presented in the following table.

Roadway segment	Alternatives	Recommended pavement section thickness (inches)			
		Asphalt concrete surface (HMA)	Aggregate base course (ABC)[1]	Portland cement concrete (PCC)	Total
Proposed Main Street and Anderson Street Extensions	A	6½			6½
	B[3]	4½	6		16
	C[4]			5½	5½

Material Specifications: The material specifications as outlined in the Standards should be followed. These specifications are generally summarized below.

Aggregate Base Course: Aggregate base course (if used) should consist of a blend of sand and gravel which meets strict specifications for quality and gradation. Use of materials

meeting Colorado Department of Transportation (CDOT) Class 5 or 6 specifications may be used, as follows:

Standard Sieve Size	Percent Passing by Weight Class 5	Class 6
1-1/2"	100	--
1"	95-100	--
3/4"	--	100
No. 4	30-70	30-65
No. 8	--	25-55
No. 200	3-15	3-12

- Liquid Limit..... 25 Maximum
- Plasticity Index..... 6 Maximum
- Los Angeles Abrasion (AASHTO T 96) ..... 50 Maximum
- R-Value..... 78 Minimum

In addition, the base course material should be moisture stable. Moisture stability is determined by R-value testing which shows a maximum 12-point difference in R-values between exudation pressures of 300 psi and 100 psi. Aggregate base course material should be tested to determine compliance with these specifications prior to importation to the site.

Aggregate base course should be placed in lifts not exceeding 6 inches and should be compacted to a minimum of 95 percent of modified Proctor density (AASHTO T180), within a moisture content range of 2 percent below to 2 percent above optimum. Where base course thickness exceeds 6 inches, the material should be placed and compacted in two or more lifts of equal thickness.

Asphalt Concrete: Asphalt concrete should be obtained from an approved mix design stating the Hveem properties, optimum asphalt content, job mix formula (JMF), and recommended mixing and placing temperatures. Traffic Level II should be specified. Aggregate used in asphalt concrete should meet a particular gradation.

Per the Standards, HMA Grading SG or S shall be used for new street construction. Grading SX may be used for overlay or in special cases as required on the accepted plans or authorized by the Public Works Director. Use of materials meeting the Standards is recommended as outlined in the following table:

Sieve Size	**Grading SX** 1/2" nominal		**Grading S** 3/4" nominal		**Grading SG** 1" nominal	
	Master Range & Control Points	*Restricted Zone Boundary (Guideline Only) see note **	Master Range & Control Points	*Restricted Zone Boundary (Guideline Only) see note **	Master Range & Control Points	*Restricted Zone Boundary (Guideline Only) see note **
1-1/2"					100	
1"			100		90-100	
¾"	100		90-100		JMF [2]	
½"	90-100		JMF [2]		JMF [2]	
3/8"	JMF [2]		JMF [2]		JMF [2]	
#4	JMF [2]		JMF [2]		JMF [2]	39.5
#8	28-58	39.1	23-49	34.6	19-45	26.8-30.8
#16	--	25.6-31.6	--	22.3-28.3	--	18.1-24.1
#30	JMF [2]	19.1-23.1	JMF [2]	16.7—20.7	JMF [2]	13.6-17.6
#50	JMF [2]	15.5	JMF [2]	13.7	JMF [2]	11.4
#100	--		--		--	
#200**	2.0-8.0		2.0-7.0		1.0-7.0	

Notes:

1. Mix designs shall be reworked if mixes segregate in the field and field procedures cannot correct the problem. The Engineer shall determine segregation.
2. These additional screens shall have a % passing initially established from the Mix Design JMF. Tolerances shall then be applied to establish the AMPR.
3. The restricted zone boundaries (Guideline Only) shown for Gradings SX, S and SG are to be used as guidelines in mix design development. However, the job-mix gradation is not required to pass above or below the restricted zone boundaries.
4. All mixes shall be designed with 1.0% lime.

Additional aggregate requirements are outlined below:

Coarse Aggregate (retained on #4 sieve):

- Two Fractured Faces (CP-45)
  - SX and S mixes.....80% Minimum
  - SG mixes .....90% Minimum
- Los Angeles Abrasion (AASHTO T 96)..... 45% Maximum
- Flat and Elongated, Ratio 5:1 (AASHTO M 283) ..... 10% Maximum
- Adherent Coating, Dry Sieving (ASTM D 5711)..... 0.5% Maximum

Fine Aggregate (retained on #4 sieve):

- Fine Aggregate Angularity, C-L 5113 Method A
  Traffic Level 1 and 2 .....40% Minimum
- Sand Equivalent (AASHTO T 176) ..... 45% Minimum

All mixes shall meet the minimum voids in mineral aggregate (VMA) specified in the following table, below. VMA shall be based on the most recent tests of the Bulk Specific Gravity of the Compacted Mix (CP-L 5103) and Aggregate (T 84 & T 85), and calculated according to CP-48.

Reclaimed Asphalt Pavement material (RAP) shall be used only where specifically allowed and shall be of uniform quality and gradation with a maximum size no greater than the nominal aggregate size of the mix. Reclaimed Asphalt Pavement (RAP) is allowed in non-polymer and non-rubberized hot mix asphalt (HMA) up to a maximum of 20 percent for all lifts other than the top lift, provided all specifications for HMA are met. Fine Aggregate Angularity requirements shall apply only to the virgin fraction of the fine aggregate. The RAP shall not contain clay balls, vegetable matter, or other deleterious substances. Mixtures with RAP shall not be used in the top lift of any asphalt pavement or in polymer-modified mixes.

Nominal maximum particle size[2]	Air voids, %		
	3.0	4.0	5.0
3/4"	12.0	13.0	14.0
1/2"	13.0	14.0	15.0

Note: Minimum VMA criteria applies to the mix design only. The VMA minimum shall be interpolated based on actual air voids.

Aggregates should not contain clay balls, organic matter, or other deleterious substances. After the job mix formula is established, all mix furnished for the project should conform within the following range of tolerances:

Job Mix Formula Tolerances:

- Maximum Size ..... ±1 percentage points
- Passing No. 3/8 and larger ..... ±6 percentage points
- Passing No. 4 and No. 8 ..... ±5 percentage points
- Passing No. 30 to No. 50 ..... ±4 percentage points
- Passing No. 200 ..... ±2 percentage points
- Asphalt Content ..... ±0.3 percentage points

[2]The Nominal Maximum Particle Size is defined as one sieve size larger than the first sieve to retain more than 10%, but shall not exceed the 100% passing size. The Nominal Maximum Particle Size can vary during mix production even when the 100% passing size is constant.

- Air Voids ..... ±1.2 percentage points
- VMA ..... ±1.2 percentage points

Based on the Standards, a PG performance graded binder should be used. The mix design should be performed using the Superpave procedures as outlined in the Standards. The Superpave mixture properties are summarized below:

Property or Test	Value
Traffic Loading	Low ESAL < 100,000
Design gyrations, N_{design}; (Air Void Specification: 3% to 5%)	50
Air Voids in Total Mix, %(VMT) (test method is CDOT CP-L 5115 or AASHTO T 312)	(See Note 1)
Voids Filled with Asphalt (VFF), % (calculate by MS-2)	70 -- 80
Hveem Stability, (test method is CDOT CP-L 5106 or AASHTO T 246) (Grading S & SX only)	(See Note 2)
Tensile Strength Ratio, % retained (Lottman, test method is CDOT CP-L 5109 or AASHTO T 283, Method B)	80 Min.
Dry Tensile Strength, psi (Lottman, test method is CDOT CP-L 5109 or AASHTO T 283)	30 Min.
VMA %. CP-48 or AASHTO PP 19	Minimum VMA criteria applies to the mix design only. The minimum VMA criteria shall be linearly interpolated based on actual air voids. See previous table for production tolerances.

1. Select the target Job Mix Optimum Binder Content for HMA gradings as close to 4.0% air voids as possible (3% to 5% air voids).
2. Hveem Stability is not a criterion for mixes with a (N_{DES}) of 50.
3. Maximum Theoretical Specific Gravity of mix by CP-51 or AASHTO T 209.
4. VMA shall be based on tests of the Bulk Specific Gravity of the Compacted Mix (CP-L 5103 or AASHTO T 166) and Aggregate (AASHTO T 84 & T 85), and calculated according to CP-48 or AASHTO PP 19. All mixes shall meet the minimum VMA specified in previous table.

The mix design should be submitted prior to construction to verify its adequacy. The asphalt concrete should be placed in accordance with the requirements of the City of Erie and compacted to between 92 and 96 percent of Rice value (AASHTO T209). Other requirements outlined by the City of Erie should be followed.

4.11.5 Compliance

Recommendations for pavement design and construction presented depend upon compliance with recommended material specifications. To assess compliance, observation and testing should be performed under the observation of the geotechnical engineer.

4.11.6 Drainage Adjacent to Pavements

Clay subgrade materials will expand and/or lose stability with increases in moisture content. Therefore, to reduce pavement distress due to wetting of the subgrade in areas of water intensive landscaping or other nearby water sources (or if aggregate base course is used) located adjacent to pavements, we recommend edge drains be considered. The drain system should consist of a properly sized pipe embedded in free-draining material directed to a suitable outfall such as an underdrain or storm sewer.

4.11.7 Pavement Performance

Future performance of pavements constructed at this site will be dependent upon several factors, including:

- Maintaining stable moisture content of the subgrade soils both before and after pavement construction.
- Providing for a planned program of preventative maintenance.

Pavement surfaces could crack in the future primarily because of soil movement when subjected to an increase in moisture content to the subgrade. The cracking, while not desirable, does not necessarily constitute structural failure of the pavement, provided that timely maintenance, such as crack sealing is performed. Excessive movement and cracking could result if the subgrade soils are allowed to dry out before paving and subsequently become rewetted.

The performance of all pavements can be enhanced by minimizing excess moisture, which can reach the subgrade soils. The following recommendations should be considered at minimum:

- Site grading at a minimum 2 percent grade onto or away from the pavements.
- Water should not be allowed to pond behind curbs.
- Compaction of any utility trenches for landscaped areas to the same criteria as the pavement subgrade.
- Sealing all landscaped areas in or adjacent to pavements to minimize or prevent moisture migration to subgrade soils.
- Placing compacted backfill against the exterior side of curb and gutter.
- Placing curb, gutter and/or sidewalk directly on subgrade soils without the use of base course materials.
- Placing shoulder or edge drains in pavement areas adjacent to water sources.

Preventative maintenance should be planned and provided for an ongoing pavement management program in order to enhance future pavement performance. Preventative maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment.

Preventative maintenance consists of both localized maintenance (e.g. crack sealing and patching) and global maintenance (e.g. surface sealing). Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements.

4.11.8 Construction Considerations

Site grading is generally accomplished early in the construction phase. However, as construction proceeds, the subgrade may be disturbed due to construction traffic, desiccation, or rainfall. As a result, the pavement subgrade may not be suitable for pavement construction and corrective action will be required. The subgrade should be carefully evaluated at the time of pavement construction for signs of disturbance or excessive rutting. If disturbance has occurred, pavement subgrade areas should be reworked, moisture conditioned, and properly compacted to the recommendations in this report immediately prior to paving.

We recommend the pavement areas be rough graded, stabilized and then thoroughly proof rolled with a loaded tandem axle dump truck prior to final grading and paving. Particular attention should be paid to high traffic areas that were rutted and disturbed earlier and to areas where backfilled trenches are located. Areas where unsuitable conditions are located should be repaired by removing and replacing the affected areas with gravel. The use of chemical stabilization could also be considered as a means of stabilizing the affected area and could also increase the strength of the subgrade. We are available to discuss chemical stabilization with you at your request.

All pavement areas should be moisture conditioned and properly compacted to the recommendations in this report immediately prior to paving.

5.0 DESIGN LEVEL GEOTECHNICAL REPORT

After completion of future development plans, we should be contacted to provide a final design level geotechnical exploration for the proposed structures. The scope of the final design level geotechnical exploration will be dependent on the future development plans. Information from this preliminary geotechnical exploration will be used to supplement the final design level geotechnical exploration, where possible.

6.0 GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon should also be retained to provide testing and observation during the over excavation (if performed), grading, foundation and construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between borings, across the site, or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include, either specifically or by implication, any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes are planned in the nature, design, or location of the project as outlined in this report, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes, and either verifies or modifies the conclusions of this report in writing.

APPENDIX A
FIELD EXPLORATION

Field Exploration Description

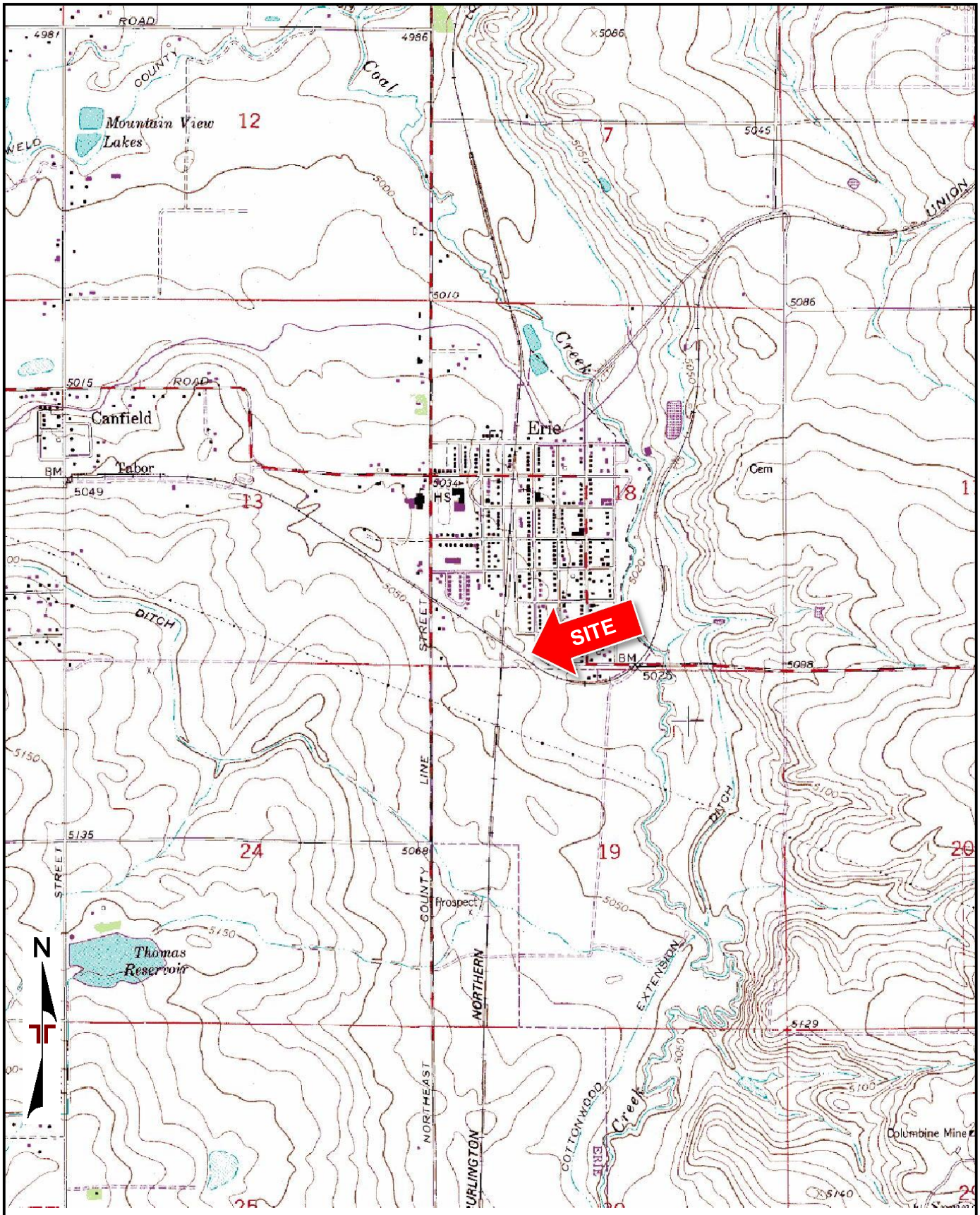
The locations of borings are presented in Exhibits A-3 and A-4. The borings were located in the field by measuring from existing property lines and site features. Locations of the borings were recorded with a handheld GPS device. The accuracy of the handheld GPS is typically on the order of about ± 25 feet. Boring elevations were obtained using a level and assigning the base of the fire hydrant at the south end of High Street an elevation of 100.0. The accuracy of the boring locations and elevations should only be assumed to the level implied by the methods used.

The borings were drilled with a CME-75 truck-mounted rotary drill rig with solid-stem augers. During the drilling operations, lithologic logs of the borings were recorded by the field engineer. Relatively undisturbed samples were obtained at selected intervals utilizing a 3-inch outside diameter ring barrel sampler (RS) and a 2-inch outside diameter split-spoon sampler (SS). Bulk samples were obtained from auger cuttings. Penetration resistance values were recorded in a manner similar to the standard penetration test (SPT). This test consists of driving the sampler into the ground with a 140-pound hammer free-falling through a distance of 30 inches. The number of blows required to advance the ring-barrel sampler 12 inches (18-inches for standard split-spoon samplers, final 12-inches are recorded) or the interval indicated, is recorded and can be correlated to the standard penetration resistance value (N-value). The blow count values are indicated on the boring logs at the respective sample depths, ring barrel sample blow counts are not considered N-values.

An automatic hammer was used to advance the samplers in the borings performed on this site. A greater efficiency is typically achieved with the automatic hammer compared to the conventional safety hammer operated with a cathead and rope. Published correlations between the SPT values and soil properties are based on the lower efficiency cathead and rope method. This higher efficiency affects the standard penetration resistance blow count value by increasing the penetration per hammer blow over what would be obtained using the cathead and rope method. The effect of the automatic hammer's efficiency has been considered in the interpretation and analysis of the subsurface information for this report.

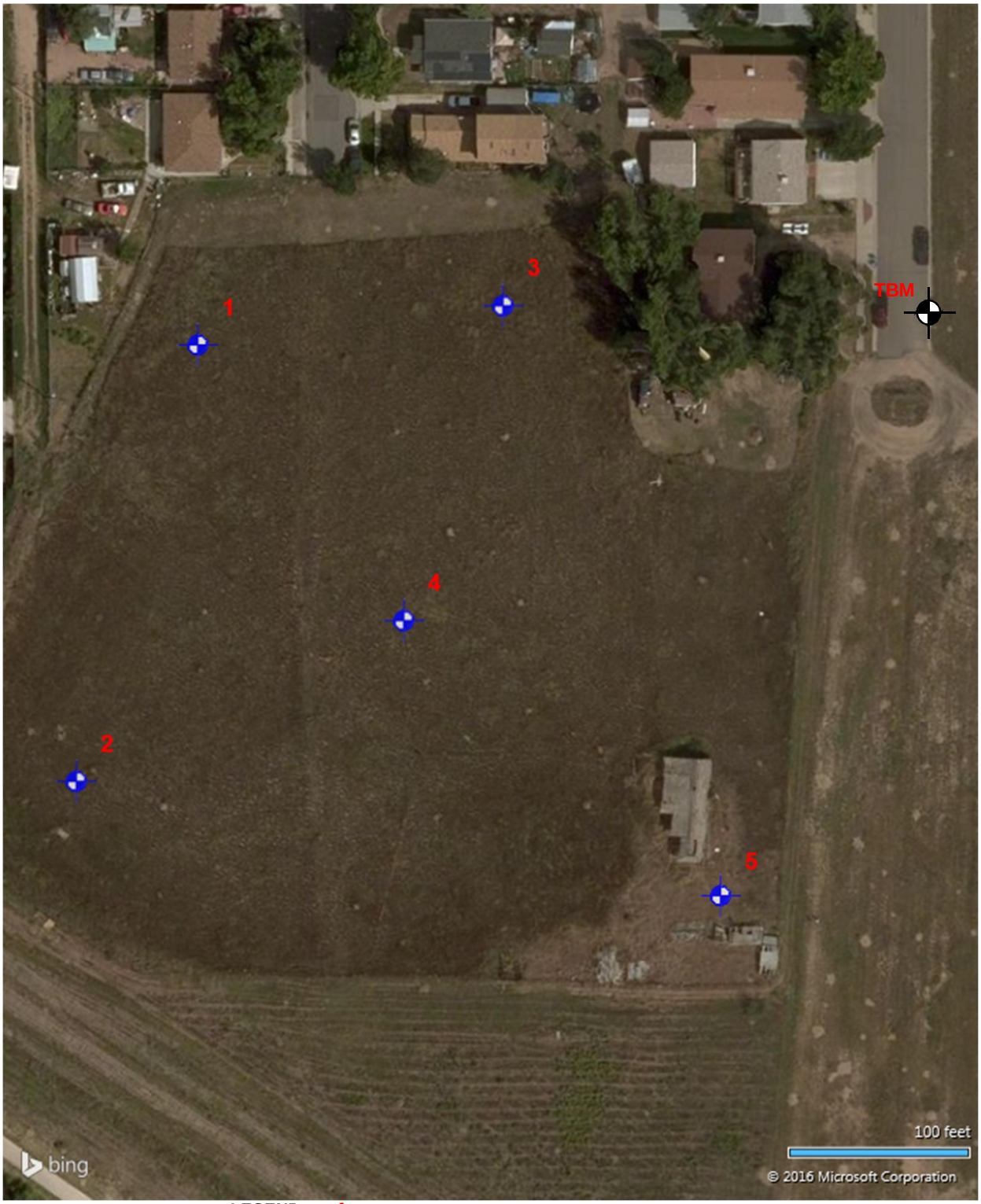
The standard penetration test provides a reasonable indication of the in-place density of sandy type materials, but only provides an indication of the relative stiffness of cohesive materials since the blow count in these soils may be affected by the soils moisture content. In addition, considerable care should be exercised in interpreting the N-values in gravelly soils, particularly where the size of the gravel particle exceeds the inside diameter of the sampler.

Groundwater measurements were obtained in the borings at the time of site exploration. Upon completion of the drilling operations, the borings were backfilled with auger cuttings. Some settlement of the backfill and asphalt patches may occur and should be repaired as soon as possible.



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY
QUADRANGLES INCLUDE: ERIE, CO (1/1/1979).

Project Manager: SBM	Project No. 25155197	Terracon 10625 W I-70 Frontage Rd N Ste 3 Wheat Ridge, CO 80033	SITE LOCATION	Exhibit
Drawn by: CMW	Scale: 1"=2,000'		PROPOSED FUTURE ERIE APARTMENTS SOUTH OF SOUTH MAIN STREET ERIE, COLORADO	A-2
Checked by: WDR	File Name: A2 & A3			
Approved by: SBM	Date: 2/1/2016			



LEGEND

1 — Approximate Boring Location

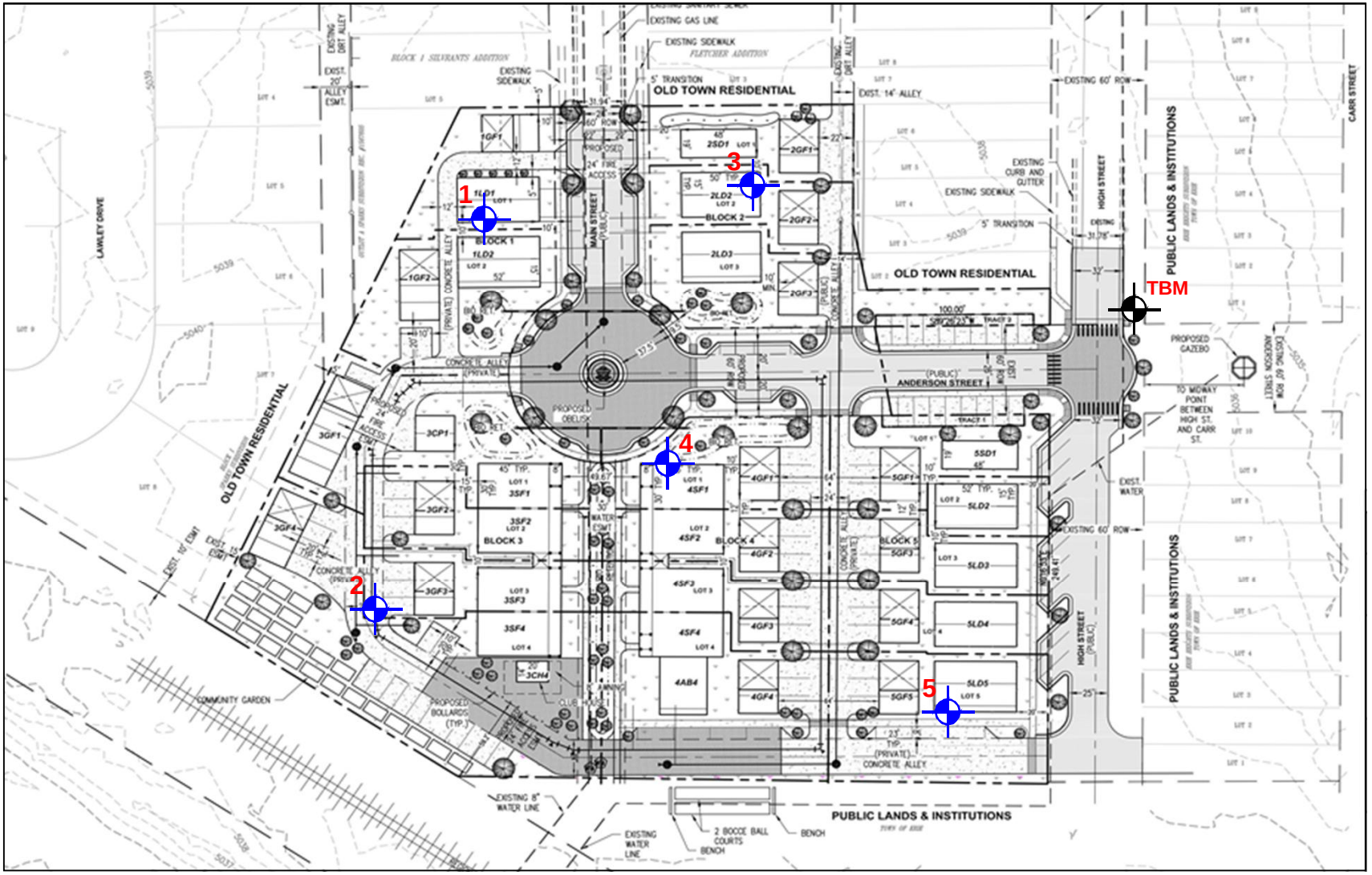
TBM — Temporary Benchmark: base of fire hydrant at south end of High Street. Assumed elevation = 100.0.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager: SBM	Project No. 25155197	Terracon	AERIAL IMAGE EXPLORATION PLAN
Drawn by: CMW	Scale: AS SHOWN	10625 W I-70 Frontage Rd N Ste 3	PROPOSED FUTURE ERIE APARTMENTS
Checked by: WDR	File Name: A2 & A3	Wheat Ridge, CO 80033	SOUTH OF SOUTH MAIN STREET
Approved by: SBM	Date: 2/1/2016		ERIE, COLORADO

Exhibit A-3



N

GRAPHIC SCALE

0’ 50’ 100’

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

LEGEND

1 Approximate Boring Location

TBM Temporary Benchmark: base of fire hydrant at south end of High Street. Assumed elevation = 100.0.

Project Manager: SBM	Project No. 25155197
Drawn by: CMW	Scale: 1” = 100’
Checked by: WDR	File Name: 25155197-A4
Approved by: CMW	Date: 2/4/2016

Terracon
Consulting Engineers & Scientists
10625 W. I-70 Frontage Rd. N. Wheat Ridge, Colorado 80033
PH. (303) 423-3300 FAX. (303) 423-3353

BORING LOCATION PLAN

PROPOSED FUTURE ERIE APARTMENTS

SOUTH OF SOUTH MAIN STREET
ERIE, COLORADO

Exhibit A-4

BORING LOG NO. 1

PROJECT: Proposed Future Erie Apartments

CLIENT: Old Time Living

SITE: South of South Main Street
Erie, Colorado

LOCATION See Exhibit A-2

Latitude: 40.046649° Longitude: -105.05298°

Approximate Surface Elev: 99.36 (Ft.) +/-

DEPTH ELEVATION (Ft.)

GRAPHIC LOG	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
CLAYEY SAND (SC), tan to brown, loose to medium dense									
				10-8		6	98	27-16-11	47
				12-13		12	93		
	5								
9.8 89.5+/-				10-12					
LEAN CLAY (CL), with silt, gray to brown, medium stiff to very stiff	10								
		▽		7-12					
20.0 79.5+/-	15								
				4-5					
Boring Terminated at 20 Feet	20								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diameter continuous flight auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

Elevation obtained using a level and assigning the ground level west edge of the fire hydrant located on the east side of at the south dead end of High Street an elevation of 100.0 feet.

WATER LEVEL OBSERVATIONS

▽ *Encountered at 17 feet while drilling*

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

Boring Started: 12/19/2015 Boring Completed: 12/19/2015

Drill Rig: CME-75 Driller:

Project No.: 25155197 Exhibit: A-5

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 25155197.GPJ TERRACON2015.GDT 2/12/16

BORING LOG NO. 2

PROJECT: Proposed Future Erie Apartments

CLIENT: Old Time Living

SITE: South of South Main Street
Erie, Colorado

LOCATION See Exhibit A-2

Latitude: 40.045988° Longitude: -105.05322°

Approximate Surface Elev: 99.48 (Ft.) +/-

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LEAN CLAY (CL), with sand, dark brown to light brown, stiff to very stiff					13-11		7	95		
					7-6	-1.2 @ 500 psf	9	102		
8.5	91+/-	5								
CLAYEY SAND (SC), trace silt, fine to coarse grained, light brown, loose to medium dense					10-9		8	107	23-15-8	29
15.0	84.5+/-	10								
LEAN CLAY (CL), with sand, light brown to gray, stiff to very stiff			▽		5-8					
		15								
					12-6					
25.0	74.5+/-	20								
Boring Terminated at 25 Feet					8-13-8					
		25								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diameter continuous flight auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

Elevation obtained using a level and assigning the ground level west edge of the fire hydrant located on the east side of at the south dead end of High Street an elevation of 100.0 feet.

WATER LEVEL OBSERVATIONS

▽ *Encountered at 16 feet while drilling*

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

Boring Started: 12/19/2015 Boring Completed: 12/19/2015

Drill Rig: CME-75 Driller:

Project No.: 25155197 Exhibit: A-6

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 25155197.GPJ TERRACON2015.GDT 2/12/16

BORING LOG NO. 3

PROJECT: Proposed Future Erie Apartments

CLIENT: Old Time Living

SITE: South of South Main Street
Erie, Colorado

LOCATION See Exhibit A-2

Latitude: 40.046708° Longitude: -105.052377°

Approximate Surface Elev: 99.95 (Ft.) +/-

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), dark brown, very stiff									
3.0	97+/-				14-14	+0.6 @ 500 psf	8	107		
	SANDY SILT (ML), light brown, very stiff				13-17		8		NP	55
		5								
					12-22					
		10								
12.0	88+/-									
	CLAYEY SAND (SC), with gravel, light brown, medium dense									
15.0	85+/-				14-13		16	116		
	LEAN CLAY (CL), silty, light brown to gray	15	▽							
19.0	81+/-									
	CLAYEY SAND (SC), fine to coarse grained, light brown, loose to medium dense				4-4					
		20								
25.0	75+/-				6-7-6					
	Boring Terminated at 25 Feet	25								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diameter continuous flight auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

Elevation obtained using a level and assigning the ground level west edge of the fire hydrant located on the east side of at the south dead end of High Street an elevation of 100.0 feet.

WATER LEVEL OBSERVATIONS

▽ *Encountered at 18 feet while drilling*

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

Boring Started: 12/19/2015 Boring Completed: 12/19/2015

Drill Rig: CME-75 Driller:

Project No.: 25155197 Exhibit: A-7

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 25155197.GPJ TERRACON2015.GDT 2/12/16

BORING LOG NO. 4

PROJECT: Proposed Future Erie Apartments

CLIENT: Old Time Living

SITE: South of South Main Street
Erie, Colorado

LOCATION See Exhibit A-2

Latitude: 40.046232° Longitude: -105.052573°

Approximate Surface Elev: 94.43 (Ft.) +/-

DEPTH	ELEVATION (Ft.)	GRAPHIC LOG	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
						13-12		9	93	30-16-14	65
						12-14	-0.2 @ 500 psf	8	96		
			5								
8.5	86+/-										
			10			7-10		5	116		
						8-8					
			15	▽							
						6-9-11					
			20								
						50/7"					
28.0	66.5+/-		25								
						50/3"					
30.0	64.5+/-		30								

SANDY LEAN CLAY (CL), light brown to brown, very stiff

SILTY SAND (SM), with gravel and trace clay, fine to coarse grained, light brown to brown, loose to dense

LEAN CLAY (CL), with sand, light brown, hard

Boring Terminated at 30 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diameter continuous flight auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

Elevation obtained using a level and assigning the ground level west edge of the fire hydrant located on the east side of at the south dead end of High Street an elevation of 100.0 feet.

WATER LEVEL OBSERVATIONS

▽ *Encountered at 16 feet while drilling*

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

Boring Started: 12/19/2015 Boring Completed: 12/19/2015

Drill Rig: CME-75 Driller:

Project No.: 25155197 Exhibit: A-8

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 25155197.GPJ TERRACON2015.GDT 2/12/16

BORING LOG NO. 5

PROJECT: Proposed Future Erie Apartments

CLIENT: Old Time Living

SITE: South of South Main Street
Erie, Colorado

LOCATION See Exhibit A-2

Latitude: 40.045815° Longitude: -105.051947°

Approximate Surface Elev: 99.62 (Ft.) +/-

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LEAN CLAY (CL), with sand, light brown to dark brown, stiff to hard					20-24		6	110		
					5-13	-1.6 @ 500 psf	9	110		
		5								
8.0	91.5+/-									
SANDY SILTY CLAY (CL-ML), light brown, medium stiff					3-3		16	105	24-17-7	60
		10								
13.0	86.5+/-									
SILTY SAND (SM), trace gravel, fine to medium grained, light brown, loose to dense					50/10"					
		15	▽							
20.0	79.5+/-				5-9					
Boring Terminated at 20 Feet		20								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4-inch diameter continuous flight auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
Elevation obtained using a level and assigning the ground level west edge of the fire hydrant located on the east side of at the south dead end of High Street an elevation of 100.0 feet.

WATER LEVEL OBSERVATIONS

▽ *Encountered at 16 feet while drilling*

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

Boring Started: 12/19/2015 Boring Completed: 12/19/2015

Drill Rig: CME-75 Driller:

Project No.: 25155197 Exhibit: A-9

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 25155197.GPJ TERRACON2015.GDT 2/12/16

APPENDIX B

LABORATORY TESTING

Laboratory Testing Description

Samples retrieved during the field exploration were returned to the laboratory for observation by the project geotechnical engineer, and were classified in general accordance with the Unified Soil Classification System presented in Appendix C.

At this time, an applicable laboratory-testing program was formulated to determine engineering properties of the subsurface materials. Following the completion of the laboratory testing, the field descriptions were confirmed or modified as necessary, and the Boring Logs were prepared. The Boring Logs are included in Appendix A.

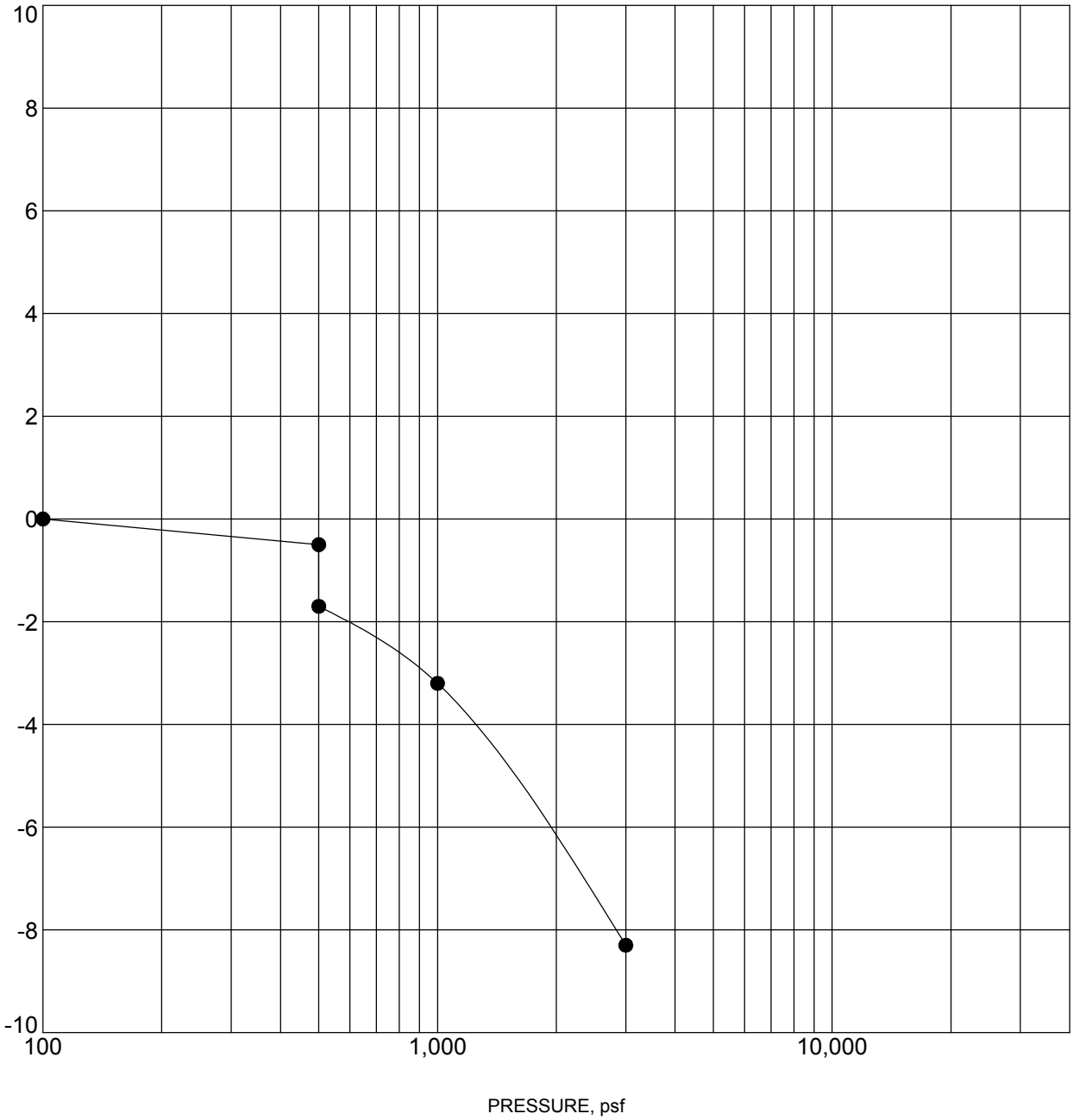
Laboratory test results are included in Appendix B. These results were used for the geotechnical engineering analyses and the development of foundation and earthwork recommendations. All laboratory tests were performed in general accordance with the applicable local or other accepted standards.

Selected soil samples were tested for the following engineering properties:

- Water content
- Dry density
- Grain size distribution
- Atterberg limits
- Swell/consolidation
- Water soluble sulfate content
- Moisture-density relationship
- California Bearing Ratio

SWELL CONSOLIDATION TEST

ASTM D4546



Specimen Identification		Classification	γ_d, pcf	WC, %
● 2	4 - 5 ft	LEAN CLAY	102	9

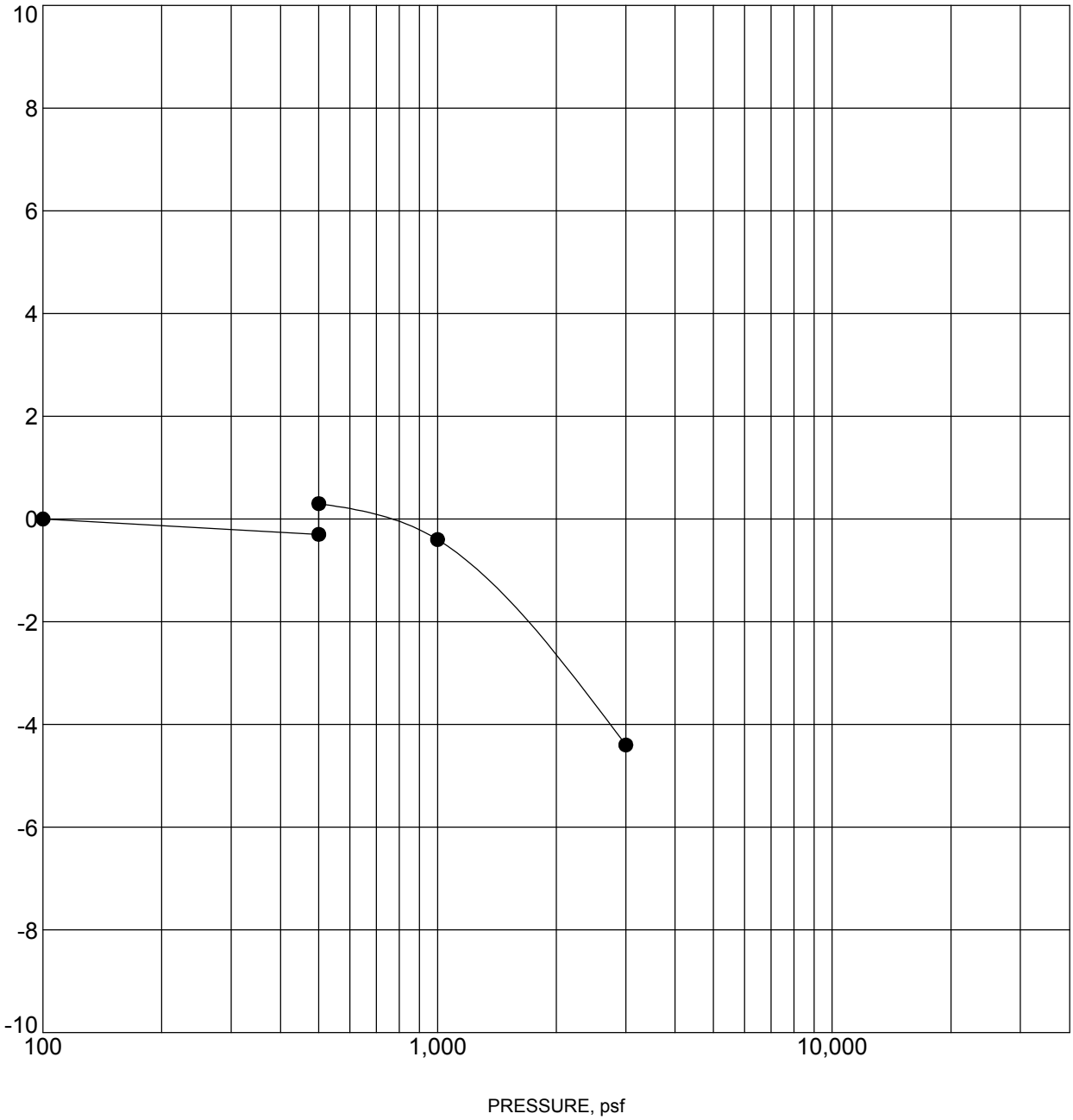
NOTES: Water added at 500 psf

PROJECT: Proposed Future Erie Apartments	Terracon 10625 W I-70 Frontage Road N., Ste. 3 Wheat Ridge, Colorado	PROJECT NUMBER: 25155197
SITE: South of South Main Street Erie, Colorado		CLIENT: Old Time Living
		EXHIBIT: B-2

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC_CONSOL_STRAIN-USCS 25155197.GPJ TERRACON2012.GDT 2/10/16

SWELL CONSOLIDATION TEST

ASTM D4546



Specimen Identification			Classification	γ_d, pcf	WC, %
●	3	2 - 3 ft	LEAN CLAY	107	8

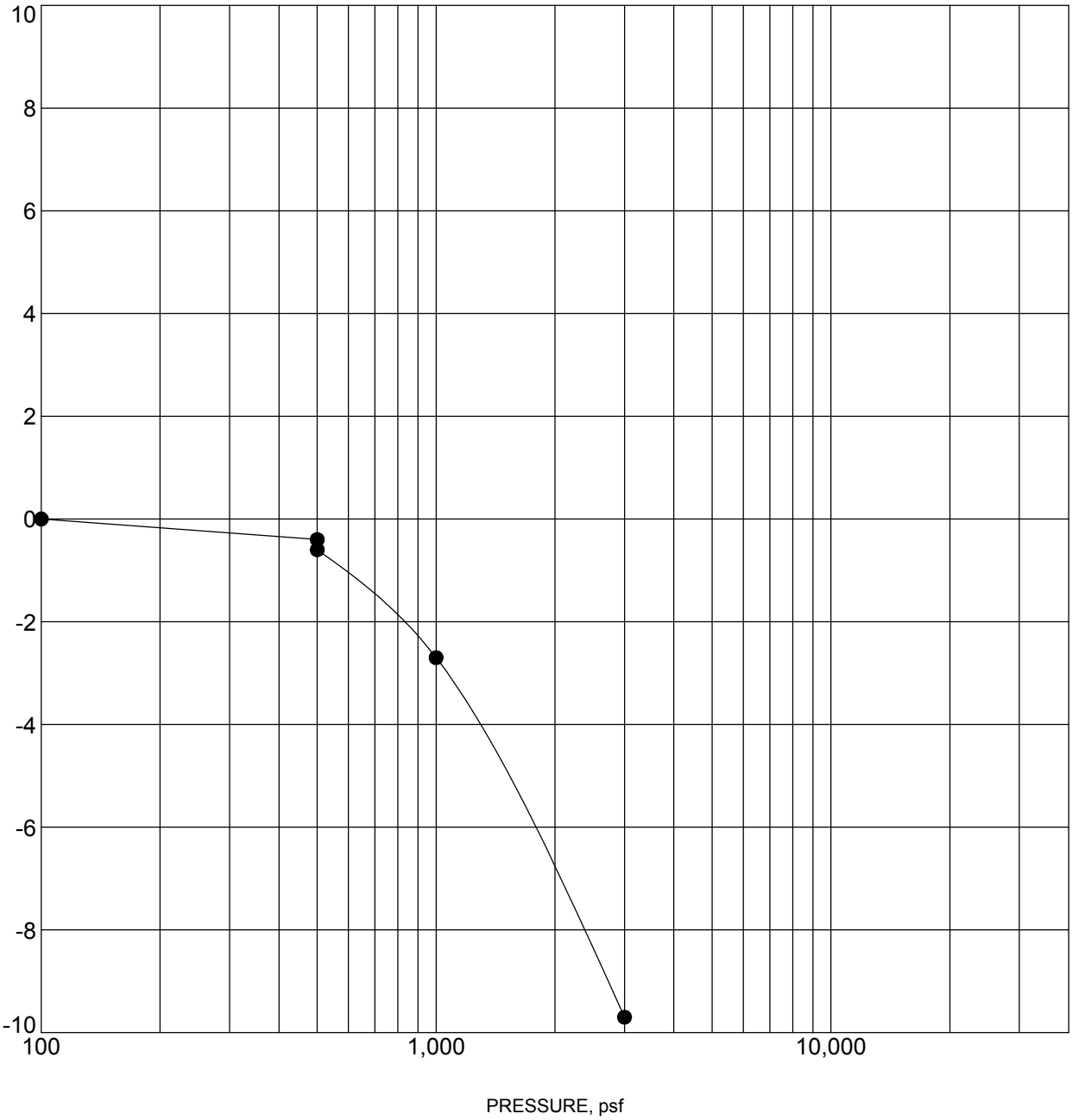
NOTES: Water added at 500 psf

PROJECT: Proposed Future Erie Apartments	Terracon 10625 W I-70 Frontage Road N., Ste. 3 Wheat Ridge, Colorado	PROJECT NUMBER: 25155197
SITE: South of South Main Street Erie, Colorado		CLIENT: Old Time Living
		EXHIBIT: B-3

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC_CONSOL_STRAIN-USCS 25155197.GPJ TERRACON2012.GDT 2/10/16

SWELL CONSOLIDATION TEST

ASTM D4546



Specimen Identification		Classification	γ_d, pcf	WC, %
● 4	4 - 5 ft	SANDY LEAN CLAY	96	8

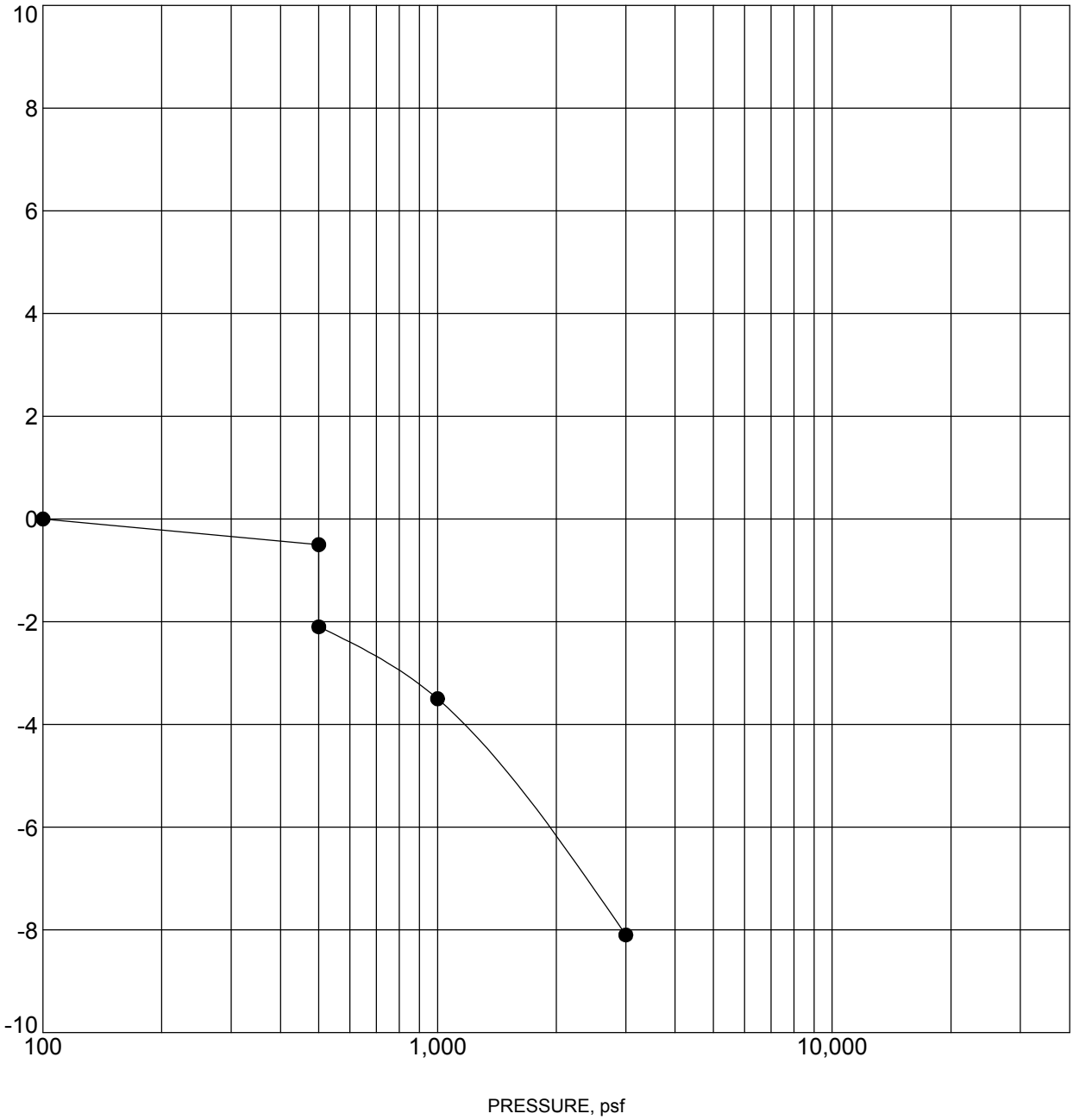
NOTES: Water added at 500 psf

PROJECT: Proposed Future Erie Apartments	Terracon	PROJECT NUMBER: 25155197
SITE: South of South Main Street Erie, Colorado	10625 W I-70 Frontage Road N., Ste. 3 Wheat Ridge, Colorado	CLIENT: Old Time Living
		EXHIBIT: B-4

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC_CONSOL_STRAIN-USCS 25155197.GPJ TERRACON2012.GDT 2/10/16

SWELL CONSOLIDATION TEST

ASTM D4546



Specimen Identification		Classification	γ_d, pcf	WC, %
● 5	4 - 5 ft	LEAN CLAY	110	9

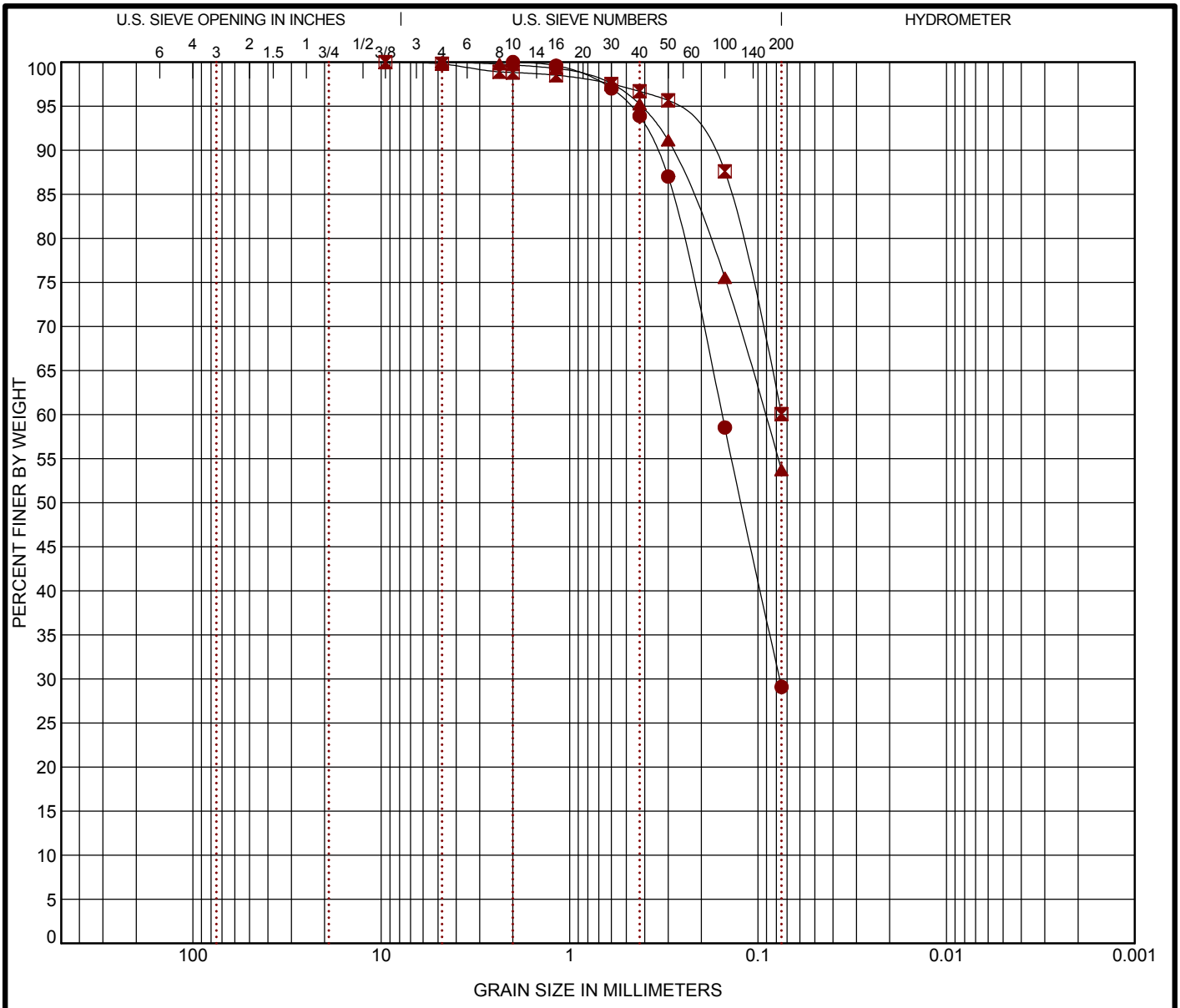
NOTES: Water added at 500 psf

PROJECT: Proposed Future Erie Apartments	Terracon 10625 W I-70 Frontage Road N., Ste. 3 Wheat Ridge, Colorado	PROJECT NUMBER: 25155197
SITE: South of South Main Street Erie, Colorado		CLIENT: Old Time Living
		EXHIBIT: B-5

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC_CONSOL_STRAIN-USCS 25155197.GPJ TERRACON2012.GDT 2/10/16

GRAIN SIZE DISTRIBUTION

ASTM D422



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Boring ID	Depth	USCS Classification	AASHTO Classification	LL	PL	PI	Cc	Cu
●	2	9 - 10	CLAYEY SAND (SC)	A-2-4(0)	23	15	8		
⊠	5	9 - 10	SANDY SILTY CLAY (CL-ML)	A-4(2)	24	17	7		
▲	COMP 1 3 5	0 - 5	SANDY LEAN CLAY (CL)	A-4(3)	27	17	10		

	Boring ID	Depth	D_{100}	D_{60}	D_{30}	D_{10}	%Gravel	%Sand	%Silt	%Clay
●	2	9 - 10	2	0.155	0.077		0.0	70.9	29.1	
⊠	5	9 - 10	9.5				0.2	39.7	60.1	
▲	COMP 1 3 5	0 - 5	4.75	0.092			0.0	46.3	53.7	

PROJECT: Proposed Future Erie Apartments

SITE: South of South Main Street
Erie, Colorado

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

PROJECT NUMBER: 25155197

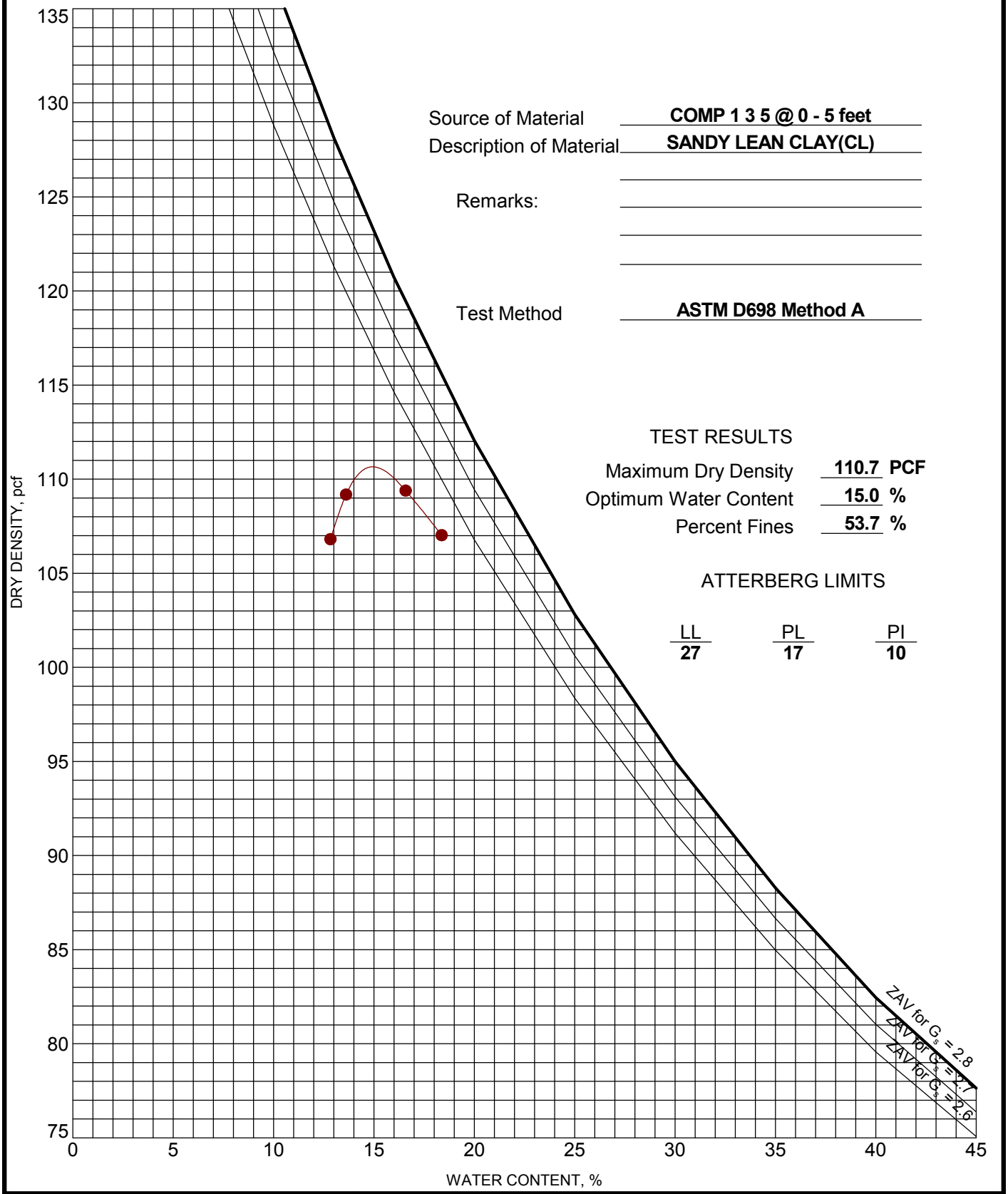
CLIENT: Old Time Living

EXHIBIT: B-6

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS & AASHTO COMBINED 25155197.GPJ TERRACON2012.GDT 2/10/16

MOISTURE-DENSITY RELATIONSHIP

ASTM D698/D1557



Source of Material: **COMP 1 3 5 @ 0 - 5 feet**

Description of Material: **SANDY LEAN CLAY(CL)**

Remarks:

Test Method: **ASTM D698 Method A**

TEST RESULTS

Maximum Dry Density	**110.7**	**PCF**
Optimum Water Content	**15.0**	**%**
Percent Fines	**53.7**	**%**

ATTERBERG LIMITS

LL	PL	PI
27	**17**	**10**

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. COMPACTION - V2 25155197.GPJ TERRACON2012.GDT 2/8/16

PROJECT: Proposed Future Erie Apartments

SITE: South of South Main Street
Erie, Colorado

Terracon
10625 W I-70 Frontage Road N., Ste. 3
Wheat Ridge, Colorado

PROJECT NUMBER: 25155197

CLIENT: Old Time Living

EXHIBIT: B-7

REPORT FOR CALIFORNIA BEARING RATIO

Report Number: 25155197
Service Date:
Report Date: 01/20/16

Terracon
10625 W. I-70 Frontage Rd. N, Ste. 3
Wheat Ridge, Colorado 80033
303-423-3300

Client

Old Time Living

Project

Proposed Future Erie Apartments
South of South Main Street
Erie, Colorado

Project No. 25155197

SAMPLE INFORMATION

Sample Number:		Proctor Method:	ASTM D698 - Method A
Boring Number:	Composite 1,3,5	Maximum Dry Density (pcf):	110.7
Sample Location:		Optimum Moisture:	15.0
Depth:	0-5	Liquid Limit:	27
Material Description:	Sandy Lean Clay (CL)	Plasticity Index:	17

CBR TEST DATA

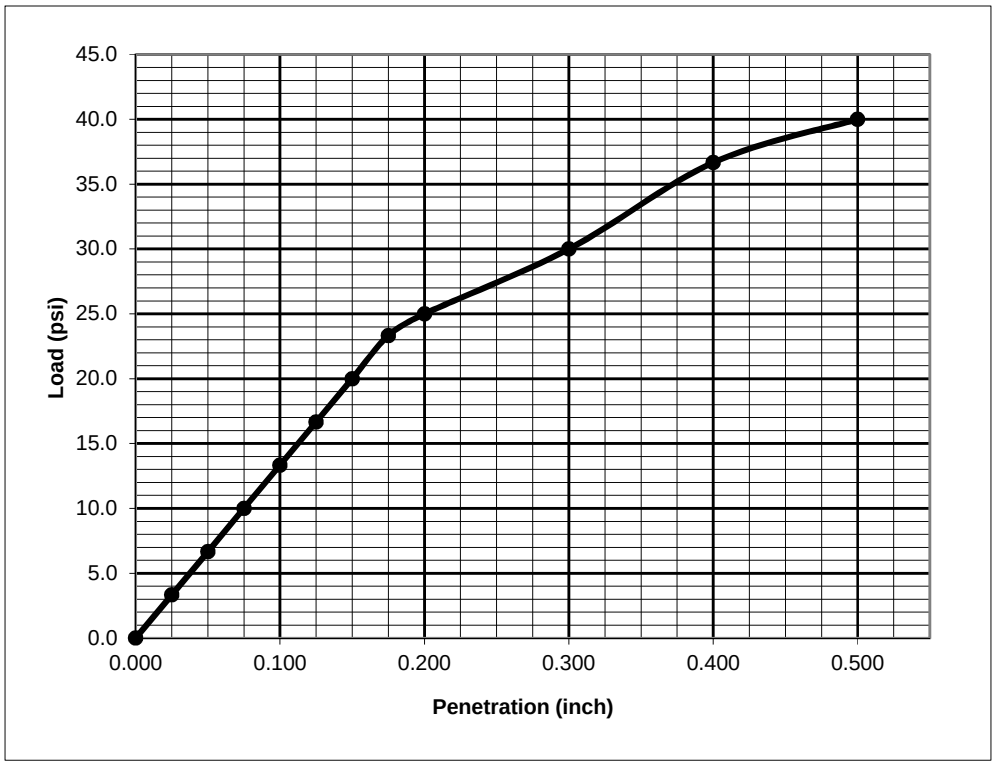
CBR Value at 0.100 inch	**NA**
CBR Value at 0.200 inch	**1.7**
Surcharge Weight (lbs)	10
Soaking Condition	Soaked
Length of Soaking (hours)	96
Swell (%)	2.1

DENSITY DATA

Dry Density Before Soaking (pcf)	107.3
Compaction of Proctor (%)	97.0

MOISTURE DATA

Before Compaction (%)	12.4
After Compaction (%)	12.4
Top 1" After Soaking (%)	21.7
Average After Soaking (%)	17.0



Comments:

Services: Perform California Bearing Ratio test on composite sample.

Terracon Rep: J. Taylor
Reported To: William Rethamel, PE
Contractor:

Report Distribution

Exhibit B-8

Test Methods: ASTM D1883

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written approval of Terracon. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

REPORT FOR CALIFORNIA BEARING RATIO

Report Number: 25155197
Service Date:
Report Date: 01/20/16

Terracon
10625 W. I-70 Frontage Rd. N, Ste. 3
Wheat Ridge, Colorado 80033
303-423-3300

Client

Old Time Living

Project

Proposed Future Erie Apartments
South of South Main Street
Erie, Colorado

Project No. 25155197

SAMPLE INFORMATION

Sample Number:		Proctor Method:	ASTM D698 - Method A
Boring Number:	Composite 1,3,5	Maximum Dry Density (pcf):	110.7
Sample Location:		Optimum Moisture:	15.0
Depth:	0-5	Liquid Limit:	27
Material Description:	Sandy Lean Clay (CL)	Plasticity Index:	17

CBR TEST DATA

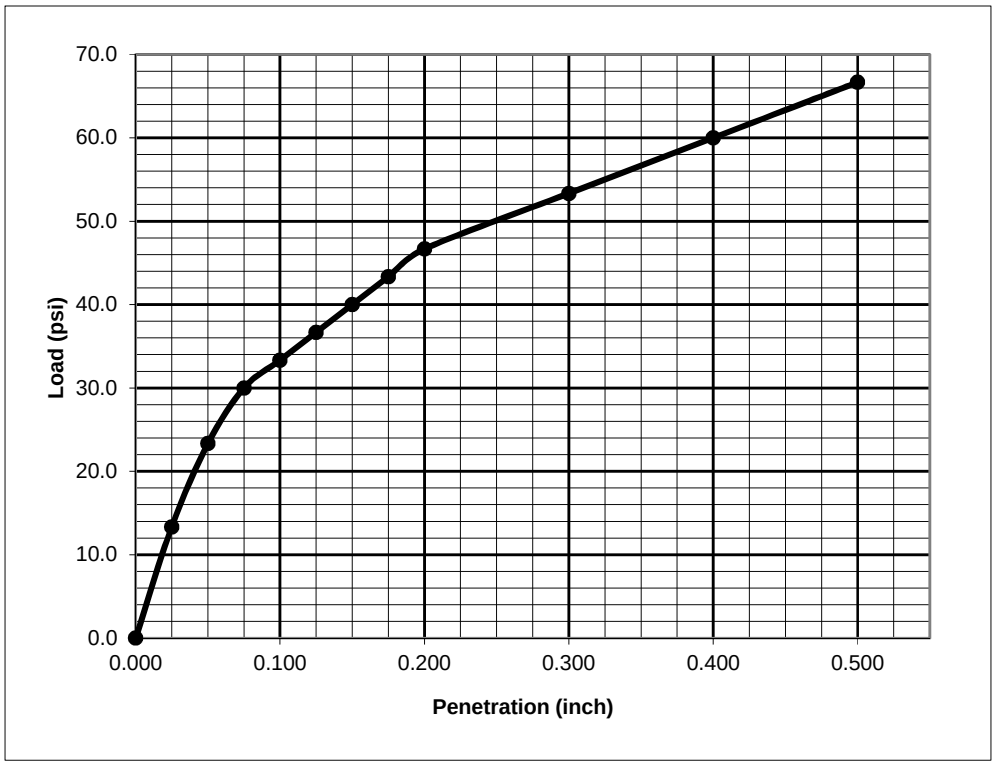
CBR Value at 0.100 inch	**3.3**
CBR Value at 0.200 inch	**3.1**
Surcharge Weight (lbs)	10
Soaking Condition	Soaked
Length of Soaking (hours)	96
Swell (%)	1.1

DENSITY DATA

Dry Density Before Soaking (pcf)	105.5
Compaction of Proctor (%)	95.3

MOISTURE DATA

Before Compaction (%)	15.3
After Compaction (%)	15.3
Top 1" After Soaking (%)	21.3
Average After Soaking (%)	17.8



Comments:

Services: Perform California Bearing Ratio test on composite sample.

Terracon Rep: J. Taylor
Reported To: William Rethamel, PE
Contractor:

Report Distribution

Exhibit B-9

Test Methods: ASTM D1883

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written approval of Terracon. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

REPORT FOR CALIFORNIA BEARING RATIO

Report Number: 25155197
Service Date:
Report Date: 01/20/16

Terracon
10625 W. I-70 Frontage Rd. N, Ste. 3
Wheat Ridge, Colorado 80033
303-423-3300

Client

Old Time Living

Project

Proposed Future Erie Apartments
South of South Main Street
Erie, Colorado

Project No. 25155197

SAMPLE INFORMATION

Sample Number:		Proctor Method:	ASTM D698 - Method A
Boring Number:	Composite 1,3,5	Maximum Dry Density (pcf):	110.7
Sample Location:		Optimum Moisture:	15.0
Depth:	0-5	Liquid Limit:	27
Material Description:	Sandy Lean Clay (CL)	Plasticity Index:	17

CBR TEST DATA

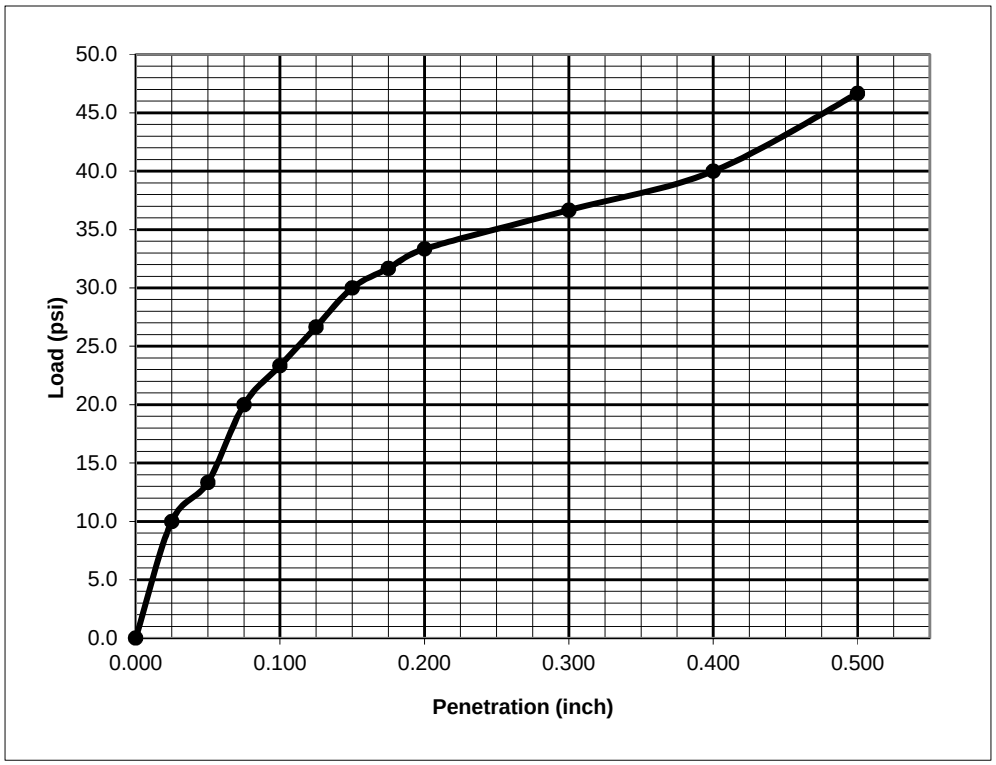
CBR Value at 0.100 inch	**2.3**
CBR Value at 0.200 inch	**2.2**
Surcharge Weight (lbs)	10
Soaking Condition	Soaked
Length of Soaking (hours)	96
Swell (%)	2.6

DENSITY DATA

Dry Density Before Soaking (pcf)	105.3
Compaction of Proctor (%)	95.1

MOISTURE DATA

Before Compaction (%)	17.0
After Compaction (%)	17.0
Top 1" After Soaking (%)	22.4
Average After Soaking (%)	17.5



Comments:

Services: Perform California Bearing Ratio test on composite sample.

Terracon Rep: J. Taylor
Reported To: William Rethamel, PE
Contractor:

Report Distribution

Exhibit B-10

Test Methods: ASTM D1883

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written approval of Terracon. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

SUMMARY OF LABORATORY TEST RESULTS

Proposed Future Erie Apartments - Erie, Colorado

Terracon Project No. 25155197

Boring No.	Depth (ft.)	USCS Class.	Initial Dry Density (pcf)	Initial Water Content (%)	Moisture-Density Relationship			Swell/Consolidation		Particle Size Distribution, Percent Passing by Weight					Atterberg Limits		California Bearing Ratio	Water Soluble Sulfates (mg/l)	Remarks
					Dry Density (pcf)	Optimum Moisture Content (%)	Method	Surcharge (ksf)	Swell (%)	3/4"	#4	#10	#40	#200	LL	PI			
1	0 - 5	SC												47	27	11			5
1	2	SC	98	6														1	4
1	4	SC	93	12															4
2	2	CL	95	7															4
2	4	CL	102	9				0.5	-1.2										3,4
2	9	SC	107	8						100	100	100	94	29	23	8			4,5
3	2	CL	107	8				0.5	+0.6										3,4
3	4	ML		8										55	NV	NP			4,5
3	14	SC	116	16															4
4	2	CL	93	9										65	30	14			4,5
4	4	CL	96	8				0.5	-0.2										3,4
4	9	SM	116	5															4
5	2	CL	110	6															4
5	4	CL	110	9				0.5	-1.6										3,4
5	9	CL-ML	105	16						100	100	99	97	60	24	7			4
COMP 1 3 5	0 - 5	CL	107	12	110.7	15.0	698A			100	100	100	95	54	27	10	2		3,6
COMP 1 3 5	0 - 5	CL	106	15	110.7	15.0	698A			100	100	100	95	54	27	10	3		3,6
COMP 1 3 5	0 - 5	CL	105	17	110.7	15.0	698A			100	100	100	95	54	27	10	2		3,6

Notes:
Initial Dry Density and Initial Water Content are in-situ values unless otherwise noted.
* = Partially disturbed sample
- = Compression/settlement
NV = no value
NP = non-plastic

Remarks:
1 Remolded Compacted density (about 95% of ASTM D698 maximum density near optimum moisture content)
2 Remolded Compacted density (about 95% of ASTM D1557 maximum density near optimum moisture content)
3 Water added to sample
4 Dry density and/or moisture content determined from one ring of a multi-ring sample
5 Minus #200 Only
6 Moisture-Density Relationship Test Method ASTM D698/AASHTO T99
7 Moisture-Density Relationship Test Method ASTM D1557/AASHTO T180

Exhibit B-11

Terracon

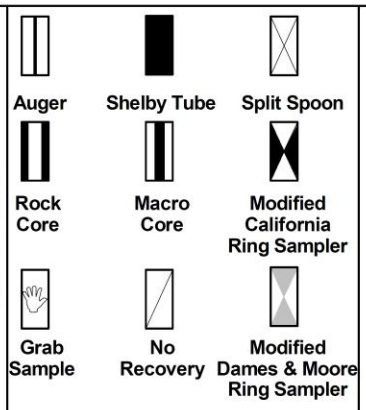
APPENDIX C

SUPPORTING DOCUMENTS

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

SAMPLING



WATER LEVEL

Water Initially Encountered

Water Level After a Specified Period of Time

Water Level After a Specified Period of Time

Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.

FIELD TESTS

(HP)	Hand Penetrometer
(T)	Torvane
(b/f)	Standard Penetration Test (blows per foot)
N	N value
(PID)	Photo-Ionization Detector
(OVA)	Organic Vapor Analyzer

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance Includes gravels, sands and silts.			CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance				BEDROCK		
Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.	Ring Sampler Blows/Ft.	Standard Penetration or N-Value Blows/Ft.	Descriptive Term (Consistency)
Very Loose	0 - 3	0 - 6	Very Soft	less than 500	0 - 1	< 3	< 30	< 20	Weathered
Loose	4 - 9	7 - 18	Soft	500 to 1,000	2 - 4	3 - 4	30 - 49	20 - 29	Firm
Medium Dense	10 - 29	19 - 58	Medium-Stiff	1,000 to 2,000	5 - 7	5 - 9	50 - 89	30 - 49	Medium Hard
Dense	30 - 50	59 - 98	Stiff	2,000 to 4,000	8 - 14	10 - 18	90 - 119	50 - 79	Hard
Very Dense	> 50	≥ 99	Very Stiff	4,000 to 8,000	15 - 30	19 - 42	> 119	>79	Very Hard
			Hard	> 8,000	> 30	> 42			

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 - 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300 mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm
Silt or Clay	Passing #200 sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 - 12
Modifier	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1 - 10
Medium	11 - 30
High	> 30

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3 [E]		GW	Well-graded gravel [F]
			Cu < 4 and/or 1 > Cc > 3 [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel [F,G,H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu ≥ 6 and 1 ≤ Cc ≤ 3 [E]		SW	Well-graded sand [I]
			Cu < 6 and/or 1 > Cc > 3 [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G,H,I]
			Fines classify as CL or CH		SC	Clayey sand [G,H,I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A" line [J]		CL	Lean clay [K,L,M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay [K,L,M,N]
			Liquid limit - not dried			Organic silt [K,L,M,O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K,L,M]
			PI plots below "A" line		MH	Elastic Silt [K,L,M]
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay [K,L,M,P]
			Liquid limit - not dried			Organic silt [K,L,M,Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

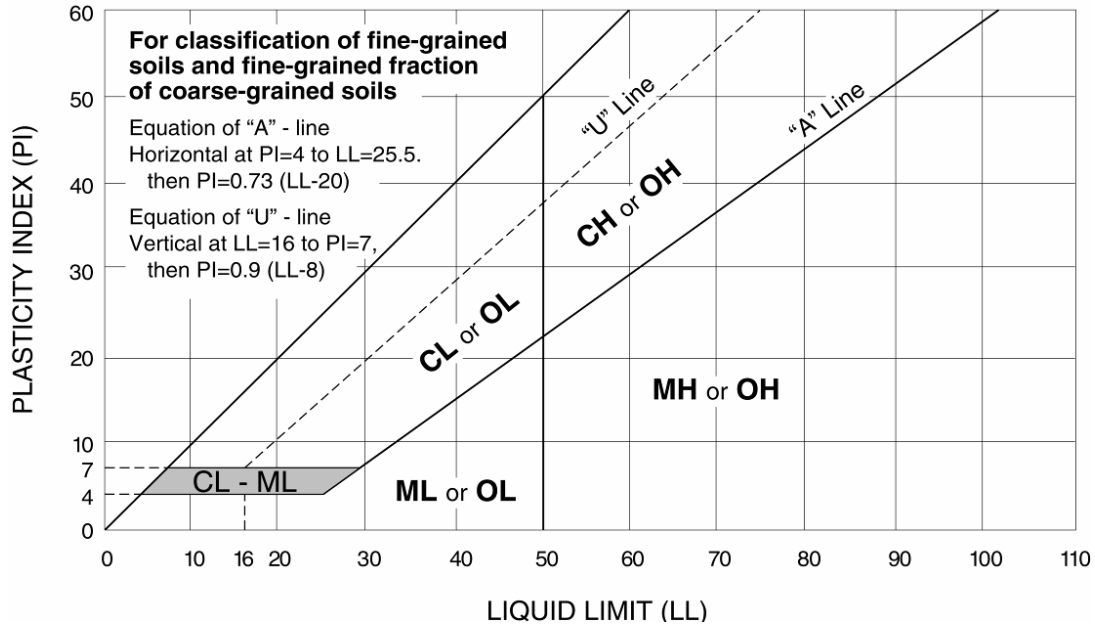
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.



APPENDIX D

FLEXIBLE PAVEMENT DESIGN CALCULATIONS

Proposed Future Erie Apartments - Flexible Pavement Design Calculations

Terracon Project No. 25155197

DESIGN DATA

Traffic Load - EDLA	=	9
Design Life - Years	=	20
Traffic Volume w/ 50% lanal distribution - 18 kip ESAL's	=	67,400
CBR	=	2
Soil Support Value - S_1	=	3.7
Resilient Modulus - M_R (psi)	=	3,982
Reliability - R (%)	=	85
Serviceability Loss - PSI	=	2.0
Overall Deviation - S_o	=	0.44

DESIGN CALCULATION RESULTS

Based on the following equation:

$$\log_{10}(18k\ ESAL) = Z_R x S_o + 9.36 x \log_{10}(SN+1) - 0.20$$
$$+\log_{10}(PSI/(4.2-1.5))/(0.4+(1094/(SN+1)^{5.19}))+2.32 x \log_{10}(M_R) - 8.07$$

Structural Number - SN	=	2.7

PAVEMENT THICKNESS DESIGN EQUATION

$$SN = C_1D_1+C_2D_2m_2$$

where

C_1 = Strength Coefficient - Asphalt	=	0.44
C_2 = Strength Coefficient - Aggregate Base Course	=	0.12
m_2 = Drainage Coefficient	=	1.0

D_1 = Depth of Asphalt (inches)

D_2 = Depth of Stabilized Base (inches)

PAVEMENT THICKNESS RESULTS

Full Depth Asphalt

D_1	=	6.5 inches

Asphalt + Aggregate Base Course

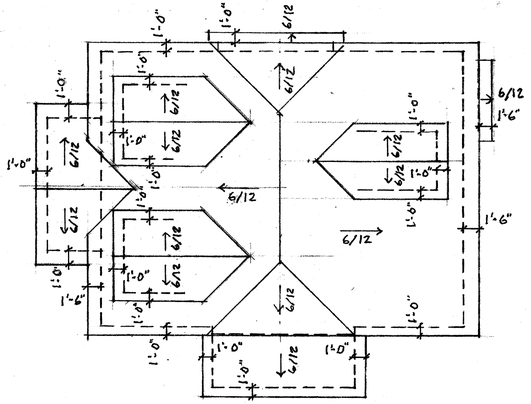
D_1 (Asphalt)	=	4.5 inches
D_2 (Aggregate Base Course)	=	6.0 inches

NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

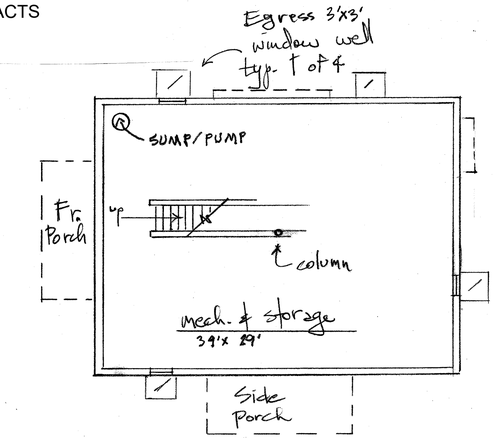
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

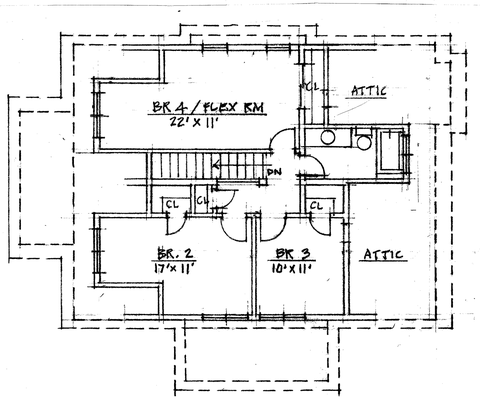
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016



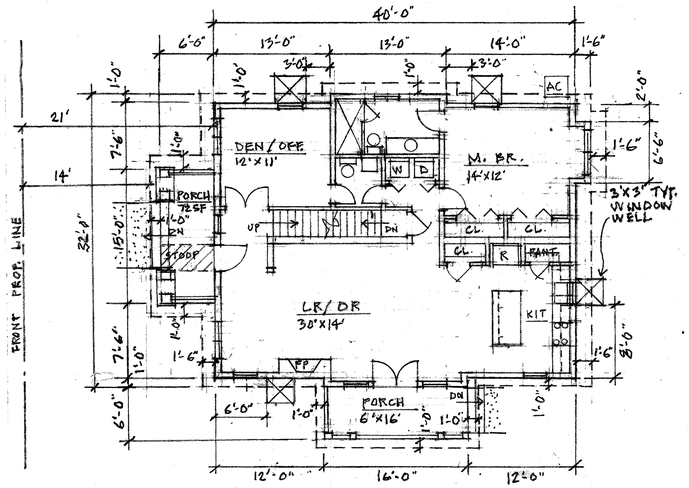
3 SINGLE FAMILY C-1 ROOF PLAN
1/8"= 1'-0"



4 SINGLE FAM. C-1 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY C-1 LEVEL 2 PLAN
1/8"= 1'-0"



1 SINGLE FAMILY C-1 LEVEL 1 PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 1

CHUCK SANDERS
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2055 Kohler Drive, Boulder, Colorado 80305
c. 303.817.1248, o. 303.499.1172
sandersfleming@msn.com

SINGLE FAMILY RESIDENCE- MODEL C-1 PLANS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	THIRD SUBMITTAL	5/ /18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	01/29/19	SBP

JeHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-8438

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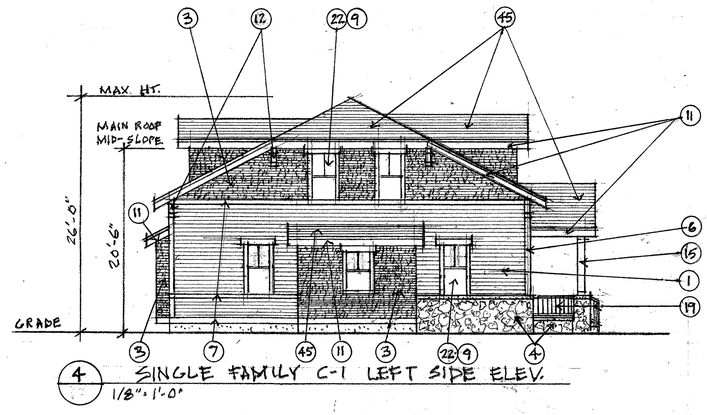
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

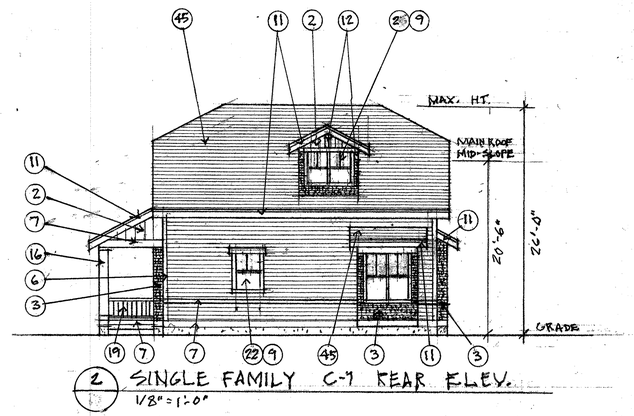
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

MATERIALS AND DETAILS REFERENCES KEY

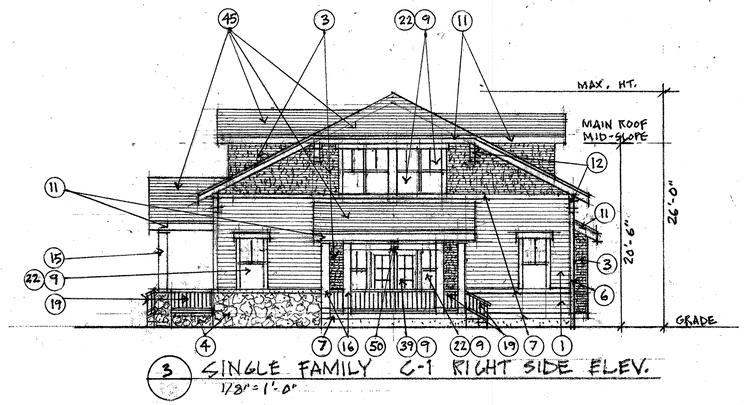
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



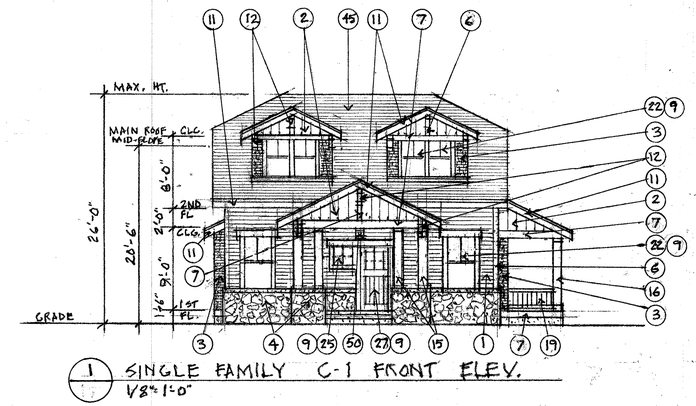
4 SINGLE FAMILY C-1 LEFT SIDE ELEV.
1/8"=1'-0"



2 SINGLE FAMILY C-1 REAR ELEV.
1/8"=1'-0"



3 SINGLE FAMILY C-1 RIGHT SIDE ELEV.
1/8"=1'-0"



1 SINGLE FAMILY C-1 FRONT ELEV.
1/8"=1'-0"

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SINGLE FAMILY RESIDENCE- MODEL C-1 ELEVATIONS- CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
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4	THIRD SUBMITTAL	5/18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	01/29/19	SBP

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5680 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET, ERIE, CO.

SHEET A.2

P:\09-17-015-03\RCOSB\ERIC\WORKING\OUT\2017-09-22 TO SAUNDERS\9938-SP-TITLEBLK.dwg, 9/22/2017 10:05:06 AM

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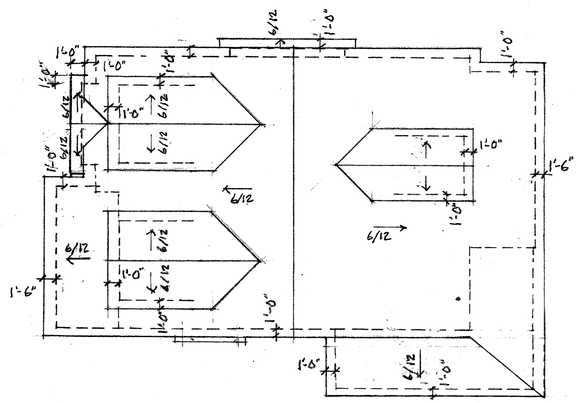
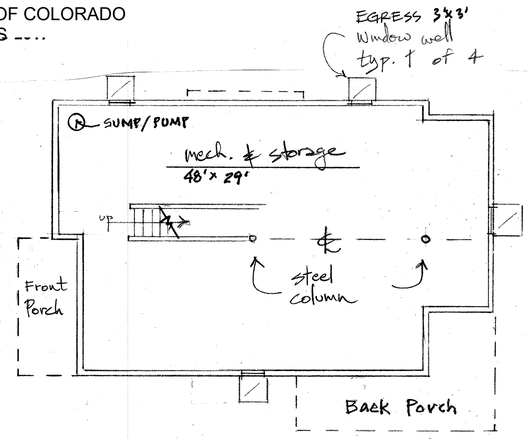
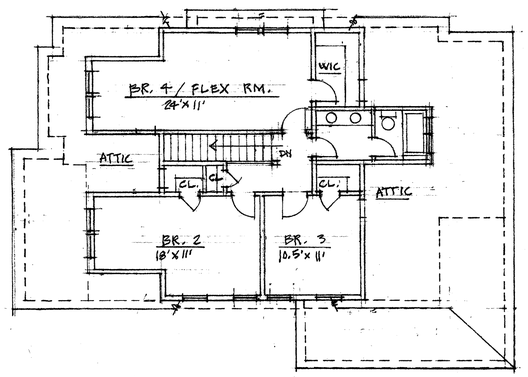


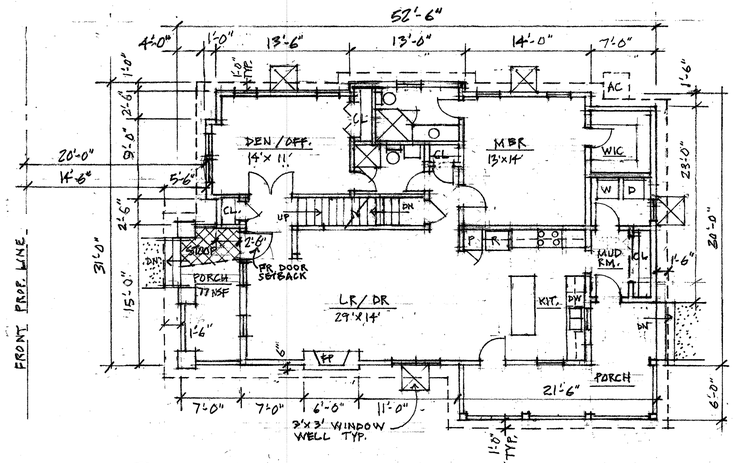
3 SINGLE FAMILY C-2 ROOF PLAN
1/8" = 1'-0"



4 SINGLE FAM. C-2 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY C-2 LEVEL 2 PLAN
1/8" = 1'-0"



1 SINGLE FAMILY C-2 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A.3

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SINGLE FAMILY RESIDENCE- MODEL C-2 PLANS

CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	GS
4	THIRD SUBMITTAL	5/18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	01/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
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6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
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10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
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16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
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23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
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27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
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30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
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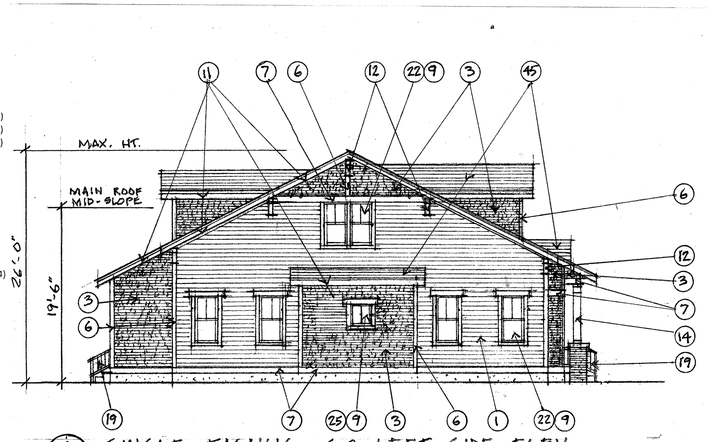
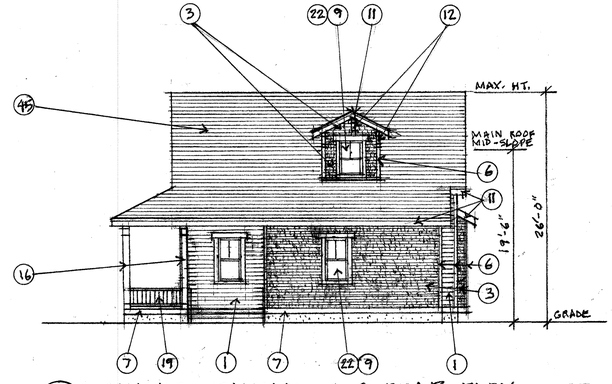
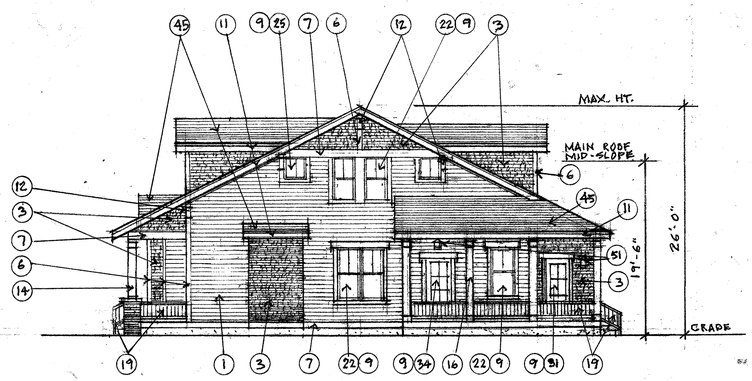
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



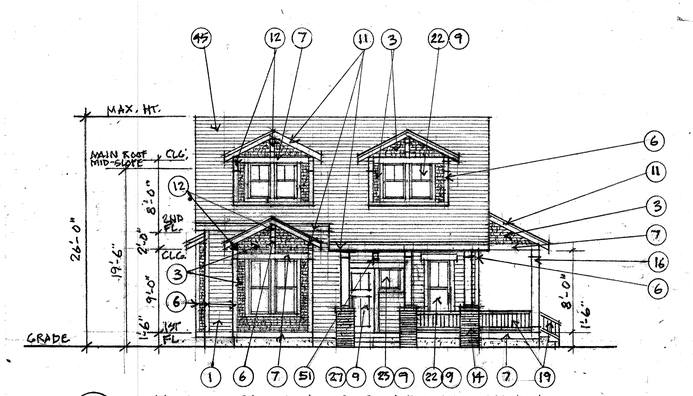
4 SINGLE FAMILY C-2 LEFT SIDE ELEV.
1/8"=1'-0"



2 SINGLE FAMILY C-2 REAR ELEV.
1/8"=1'-0"



3 SINGLE FAMILY C-2 RIGHT SIDE ELEV.
1/8"=1'-0"



1 SINGLE FAMILY C-2 FRONT ELEV.
1/8"=1'-0"

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SINGLE FAMILY RESIDENCE- MODEL C-2 ELEVATIONS- CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	THIRD SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	01/29/19	SBP

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MAIN STREET, ERIE, CO.

SHEET A.4

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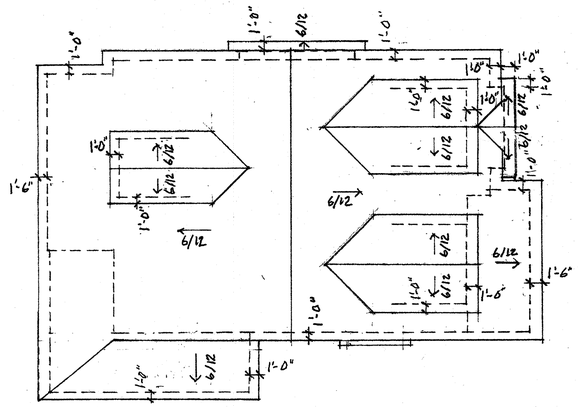
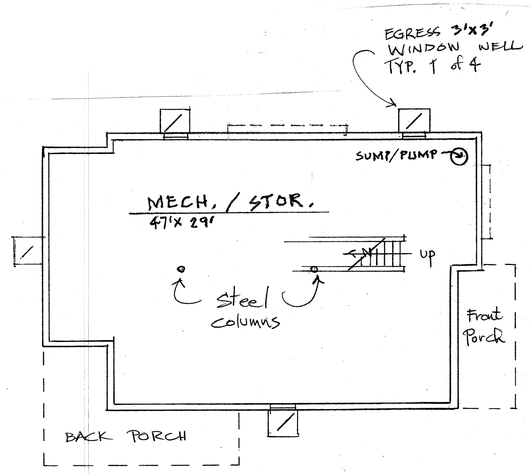
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

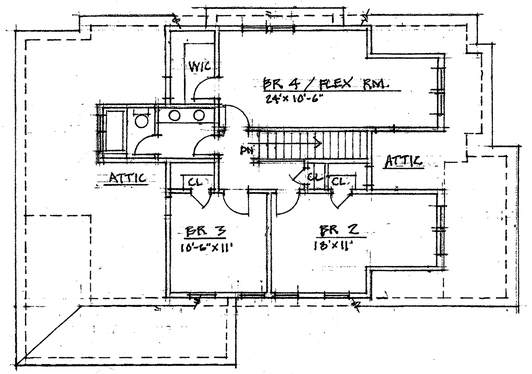
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES.- 18 LOTS / 7 TRACTS
PP-000836-2016



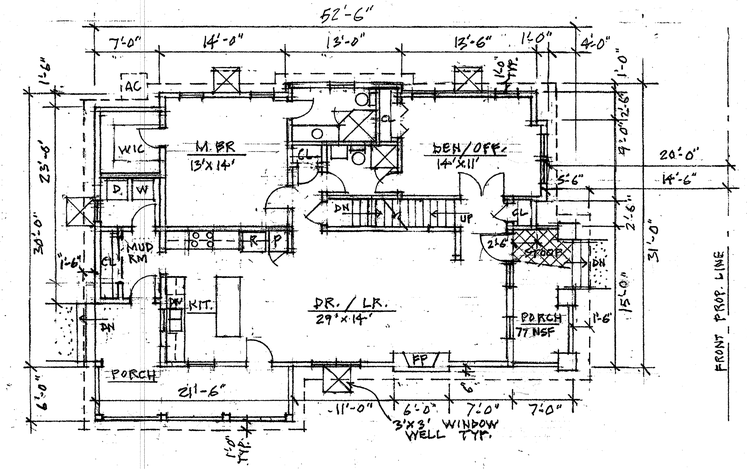
3 SINGLE FAMILY C-3 ROOF PLAN



4 SINGLE FAM. C-3 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY C-3 LEVEL 2 PLAN
1/8"= 1'-0"



1 SINGLE FAMILY C-3 LEVEL 1 PLAN
1/8"= 1'-0"

NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

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SINGLE FAMILY RESIDENCE- MODEL C-3 PLANS
CRAFTSMAN STYLE

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NO.	DESCRIPTION	DATE	BY
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MAIN STREET, ERIE, CO.

SHEET A.5

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MAIN STREET SUBDIVISION

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TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
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D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
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RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

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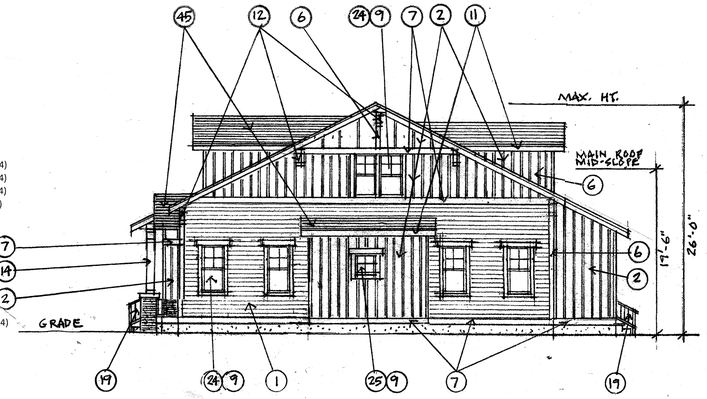
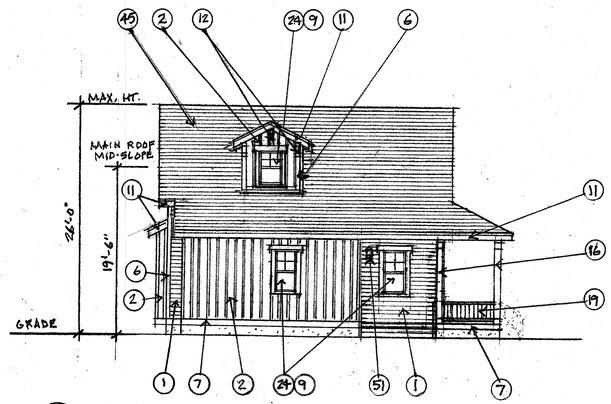
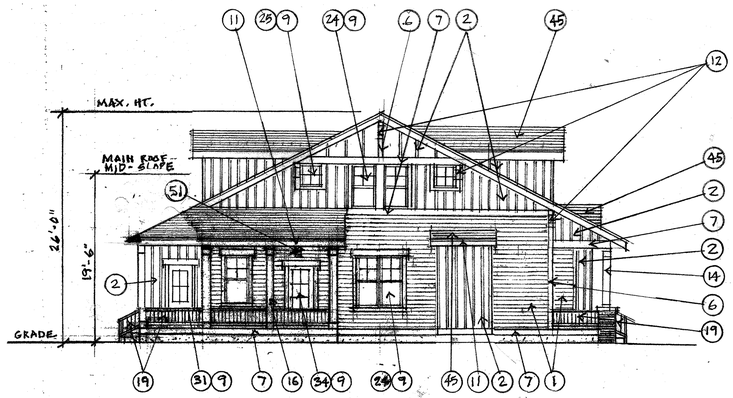
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



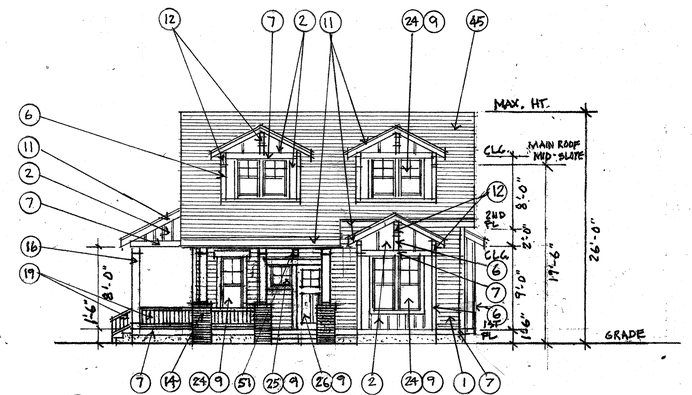
4/21 SINGLE FAMILY C-3 RIGHT SIDE ELEV.
1/8" = 1'-0"



2/21 SINGLE FAMILY C-3 REAR ELEV.
1/8" = 1'-0"



3/21 SINGLE FAMILY C-3 LEFT SIDE ELEV.
1/8" = 1'-0"



1/21 SINGLE FAMILY C-3 FRONT ELEV.
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 6

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SINGLE FAMILY RESIDENCE- MODEL C-3 ELEVATIONS-
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL		
4	3rd SUBMITTAL	5/29/18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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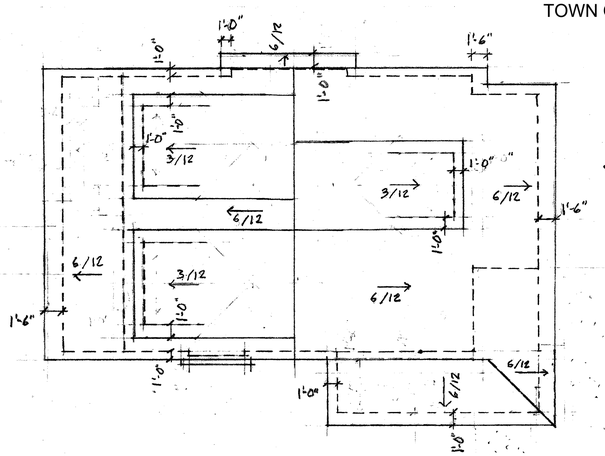
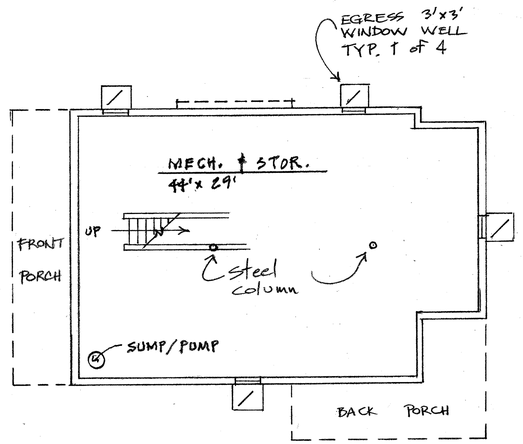
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

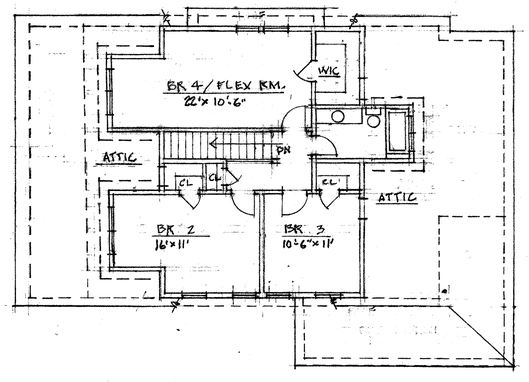
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016



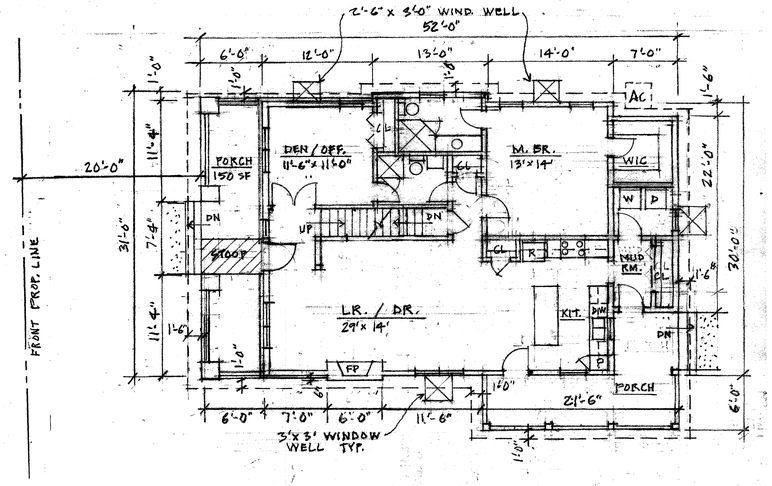
3 SINGLE FAMILY C-4 ROOF PLAN
1/8" = 1'-0"



4 SINGLE FAM C-4 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY C-4 LEVEL 2 PLAN
1/8" = 1'-0"



1 SINGLE FAMILY C-4 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A.7

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NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

SINGLE FAMILY RESIDENCE- MODEL C-4 PLANS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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J:\JOBS\2016-038\CDRBSD\PDWG\DOUT\2017-09-12 TR TO SAUNDERS\038-SP-TITLEBLK.dwg, 9/22/2017 10:55:06 AM

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

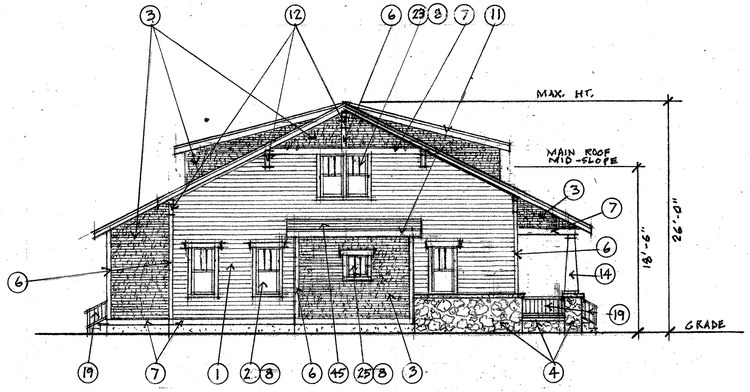
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

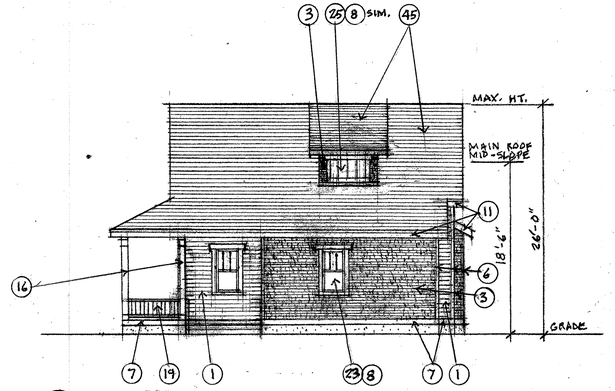
COLOR KEY	ELEVATION MATERIAL REFERENCES	
S-1	1.	ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2.	ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3.	PANELIZED CEDAR SHAKE SIDING
M	4.	SYNTHETIC STONE VENEER
M	5.	STANDARD BRICK VENEER
T	6.	5/4 X 4 ENGINEERED WOOD TRIM
T	7.	5/4 X 10 ENGINEERED WOOD TRIM
T	8.	WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9.	WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10.	WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11.	1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12.	EAVE BRACKET (SEE DETAILS A.33&34)
T	13.	GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14.	PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15.	PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16.	PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17.	PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18.	VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19.	VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20.	EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21.	VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22.	VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23.	VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24.	VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25.	VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26.	EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27.	EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28.	EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29.	EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30.	EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31.	EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32.	EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33.	EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34.	EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35.	EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36.	EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37.	EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38.	EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39.	EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40.	GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41.	GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42.	GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43.	GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44.	GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45.	ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46.	PREFINISHED STANDING-SEAM METAL ROOFING
T	47.	VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

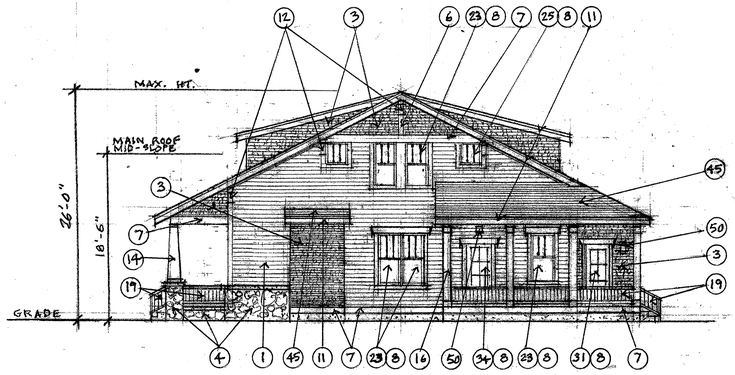
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



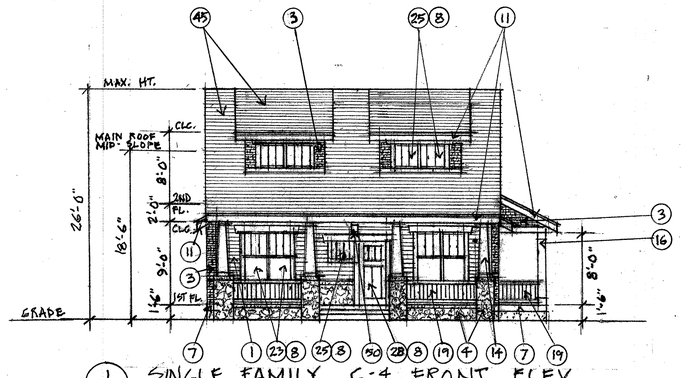
4 SINGLE FAMILY C-4 LEFT SIDE ELEV.
1/8"=1'-0"



2 SINGLE FAMILY C-4 REAR ELEV.
1/8"=1'-0"



3 SINGLE FAMILY C-4 RIGHT SIDE ELEV.
1/8"=1'-0"



1 SINGLE FAMILY C-4 FRONT ELEV.
1/8"=1'-0"

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SINGLE FAMILY RESIDENCE- MODEL C-4- ELEVATIONS- CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL	5/20/18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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MAIN STREET, ERIE, CO.

SHEET A.8

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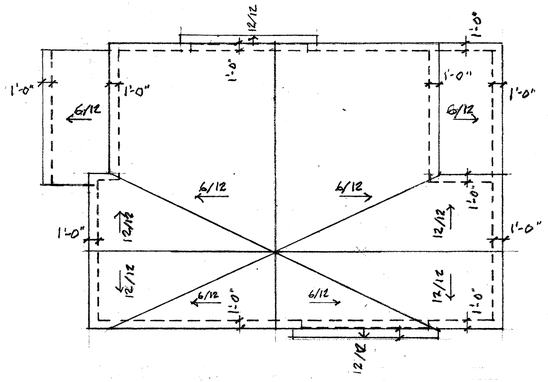
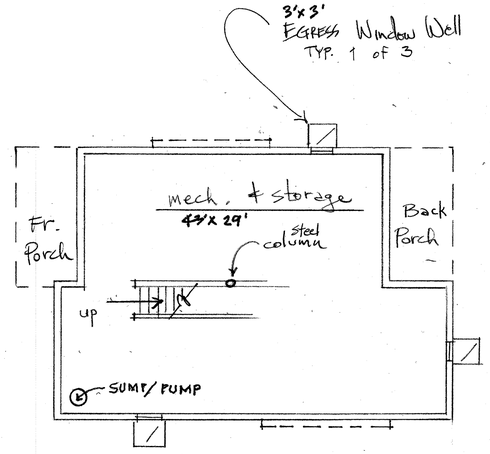
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

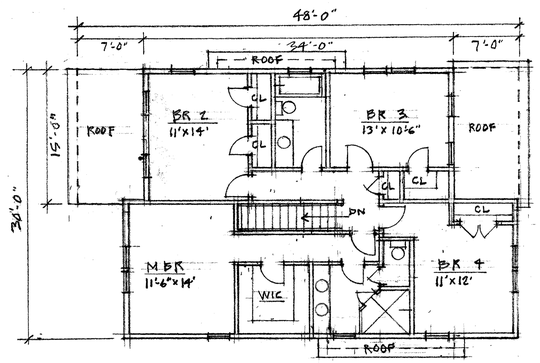
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016



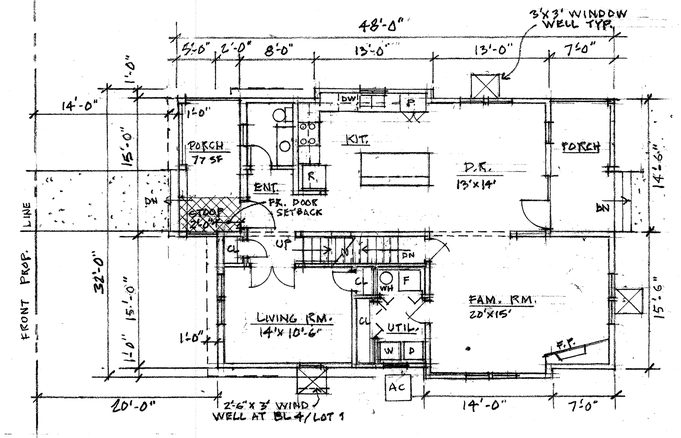
3 SINGLE FAMILY F-1 ROOF PLAN
1/8"= 1'-0"



4 SINGLE FAM. F-1 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY F-1 LEVEL 2 PLAN
1/8"= 1'-0"



1 SINGLE FAMILY F-1 LEVEL 1 FLOOR PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A.9

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SINGLE FAMILY RESIDENCE- MODEL F-1 PLANS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL 5/1/2018		SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

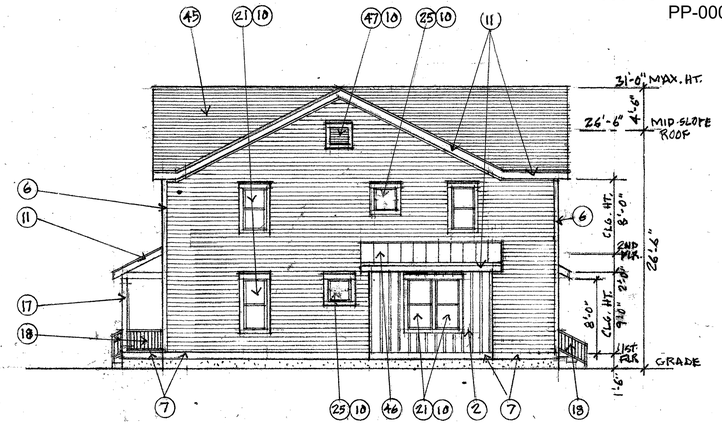
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

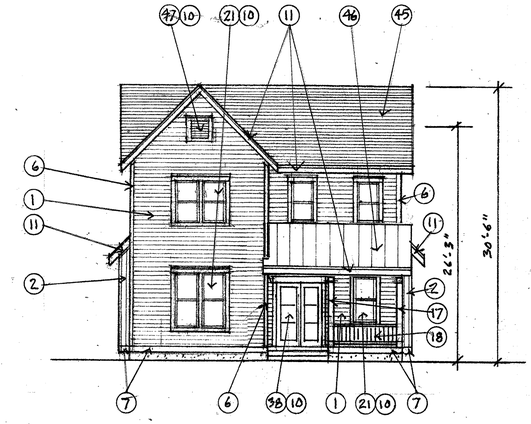
COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

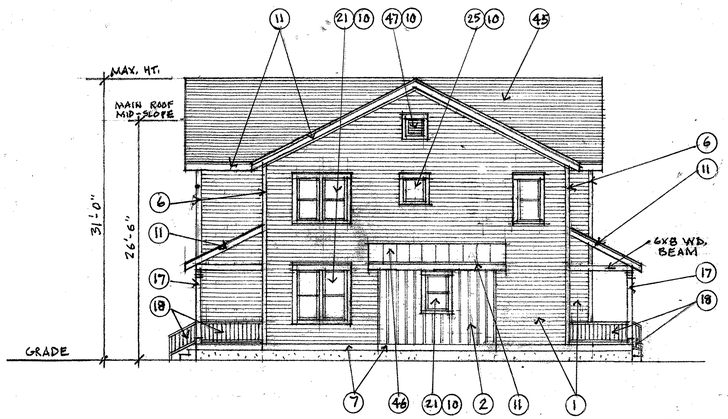
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



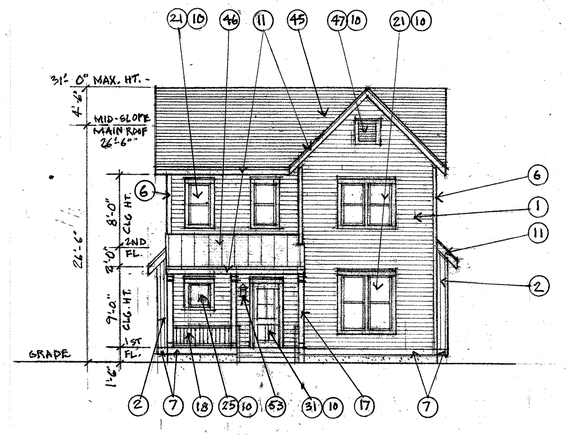
4 SINGLE FAMILY F-1 RIGHT SIDE ELEV.
1/8" = 1'-0"



2 SINGLE FAMILY F-1 REAR ELEV.
1/8" = 1'-0"



3 SINGLE FAMILY F-1 LEFT SIDE ELEV.
1/8" = 1'-0"



1 SINGLE FAMILY F-1 FRONT ELEV.
1/8" = 1'-0"

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sandersfleming@msn.com

SINGLE FAMILY RESIDENCE- MODEL F-1 ELEVATIONS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

MAIN STREET, ERIE, CO.

SHEET A.10

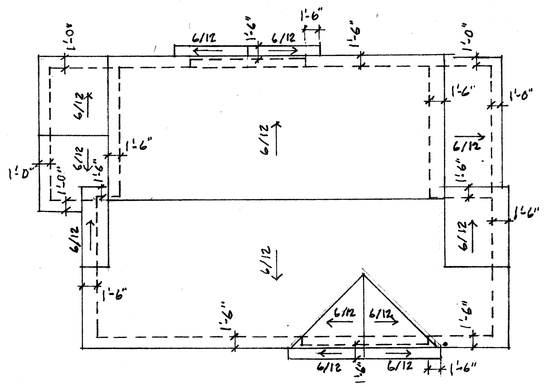
J:\05\79\215-03\CORRESPONDENCE\OUT\2017-09-22 TO SAUNDERS\05SB-3P-TITLEBLK.dwg, 9/22/2017 10:05:06 AM

MAIN STREET SUBDIVISION

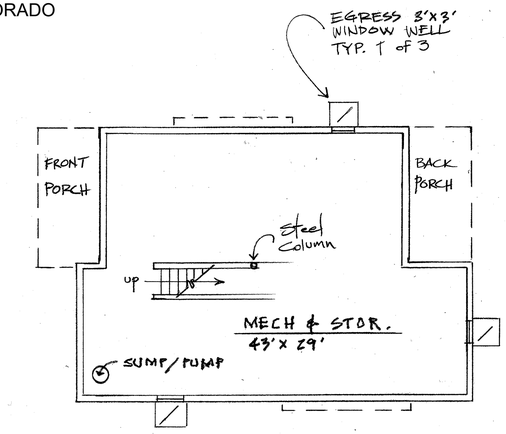
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

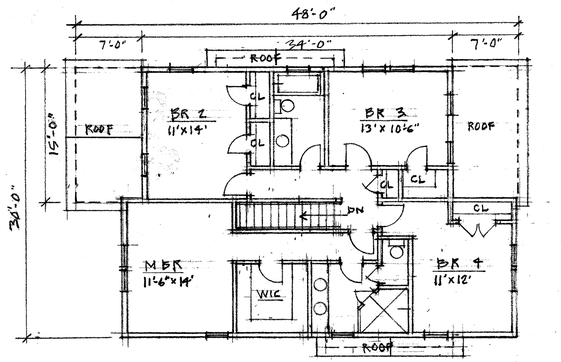
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



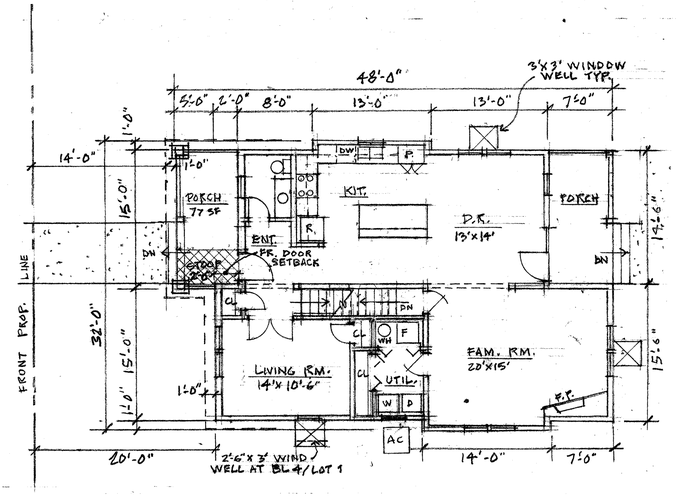
3 SINGLE FAMILY F-2 ROOF PLAN
1/8"= 1'-0"



4 SINGLE FAM. F-2 B'MT. PLAN
1/8" = 1'0"



2 SINGLE FAMILY F-2 LEVEL 2 PLAN
1/8"= 1'-0"



1 SINGLE FAMILY F-2 LEVEL 1 FLOOR PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A.11

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SINGLE FAMILY RESIDENCE- MODEL F-2 PLANS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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I:\2017\9-21-17-SINGLEFAMILY RESIDENCE\DWG\CAD\PLOT\17-09-22 TO SAUNDERS\9-22-17 SHEETS\9-22-17 TITLE.dwg, 9/22/2017 10:05:06 AM

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES	
S-1	1.	ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2.	ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3.	PANELIZED CEDAR SHAKE SIDING
M	4.	SYNTHETIC STONE VENEER
M	5.	STANDARD BRICK VENEER
T	6.	5/4 X 4 ENGINEERED WOOD TRIM
T	7.	5/4 X 10 ENGINEERED WOOD TRIM
T	8.	WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9.	WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10.	WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11.	1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12.	EAVE BRACKET (SEE DETAILS A.33&34)
T	13.	GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14.	PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15.	PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16.	PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17.	PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18.	VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19.	VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20.	EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21.	VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22.	VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23.	VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24.	VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25.	VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26.	EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27.	EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28.	EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29.	EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30.	EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31.	EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32.	EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33.	EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34.	EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35.	EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36.	EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37.	EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38.	EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39.	EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40.	GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41.	GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42.	GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43.	GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44.	GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45.	ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46.	PREFINISHED STANDING-SEAM METAL ROOFING
T	47.	VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
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8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
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13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
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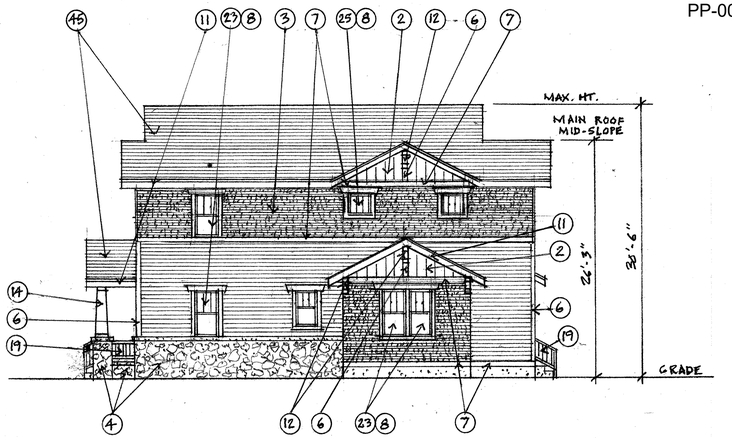
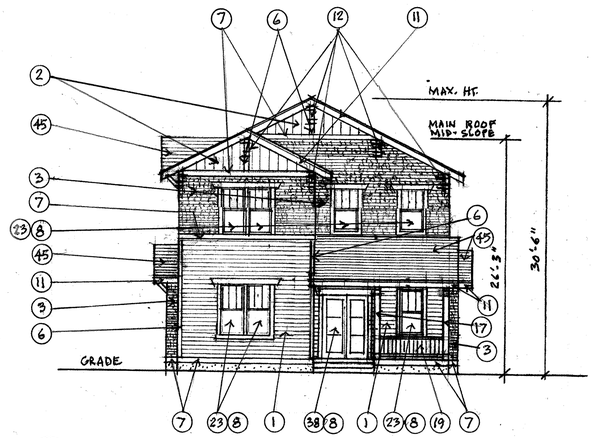
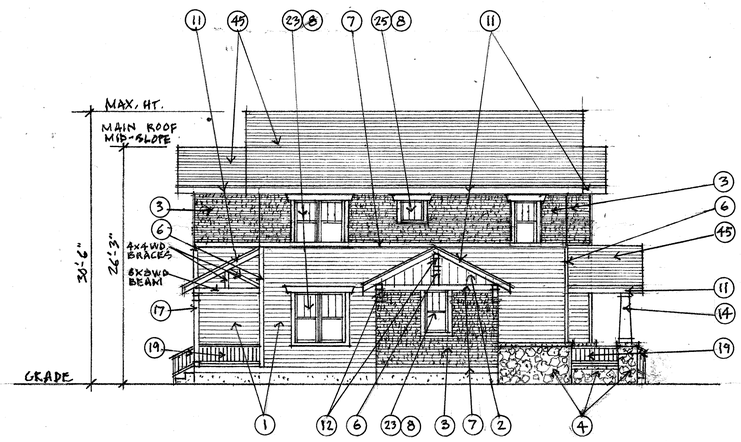
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



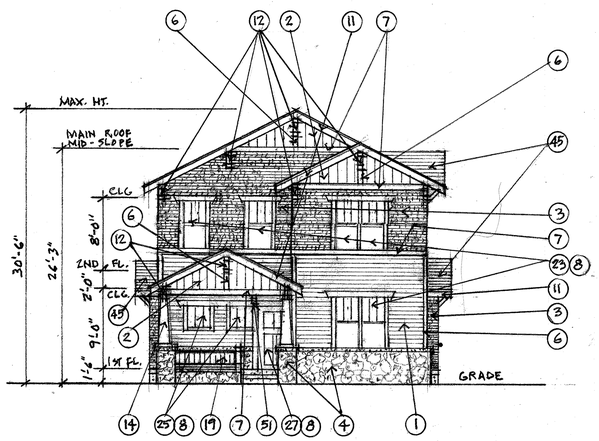
4 SINGLE FAMILY F-2 RIGHT SIDE ELEV.
1/8"=1'-0"



2 SINGLE FAMILY F-2 REAR ELEV.
1/8"=1'-0"



3 SINGLE FAMILY F-2 LEFT SIDE ELEV.
1/8"=1'-0"



1 SINGLE FAMILY F-2 FRONT ELEV.
1/8"=1'-0"

MAIN STREET, ERIE, CO.

SHEET A.12

CHUCK SANDERS
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SINGLE FAMILY RESIDENCE- MODEL F-2 ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL	5/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
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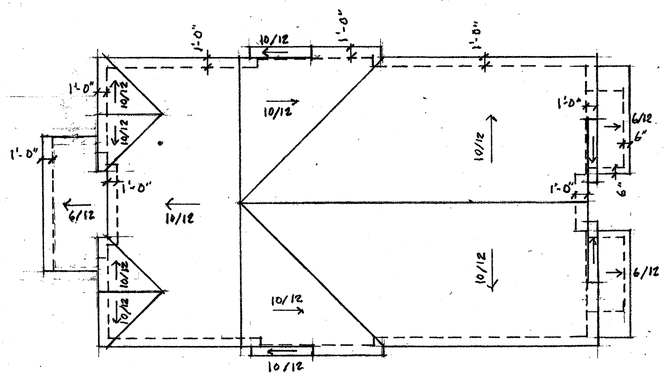
MAIN STREET SUBDIVISION

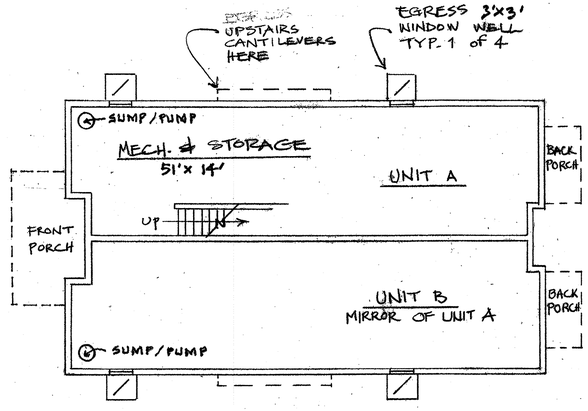
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

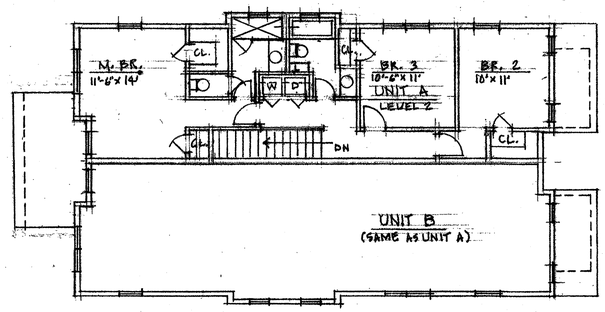
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



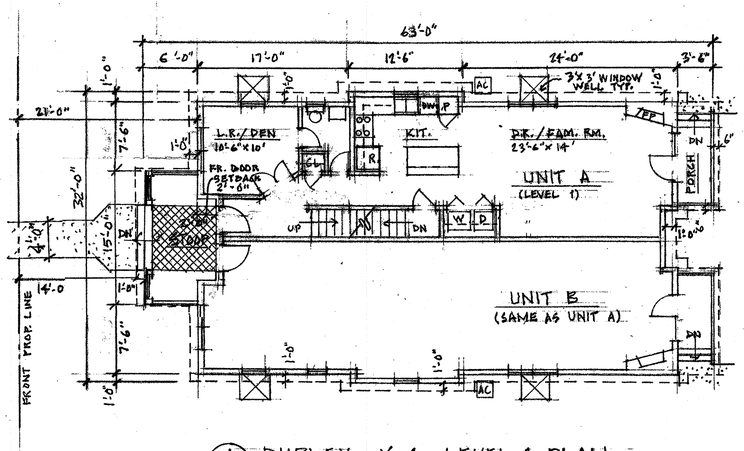
3 DUPLEX X-1 ROOF PLAN
1/8"=1'-0"



4 DUPLEX X-1 B'MT. PLAN
1/8" 1'-0"



2 DUPLEX X-1 LEVEL 2 PLAN
1/8" = 1'-0"



1 DUPLEX X-1 LEVEL 1 PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 13

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sandersfleming@msn.com

DUPLEX RESIDENCE- MODEL X-1 PLANS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

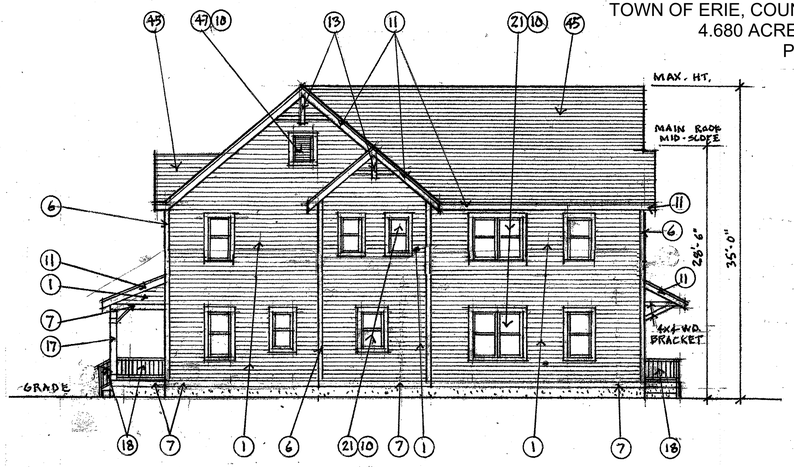
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

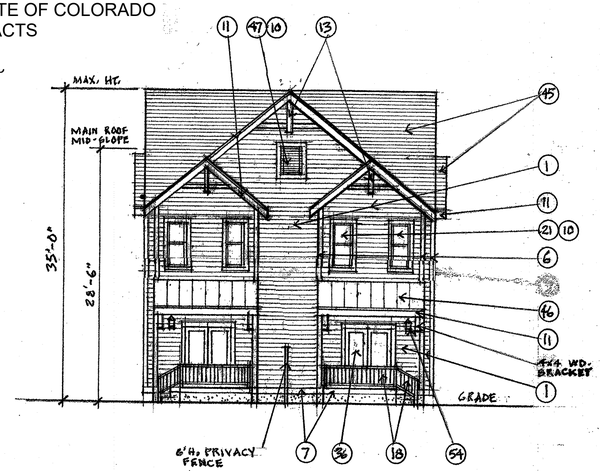
COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

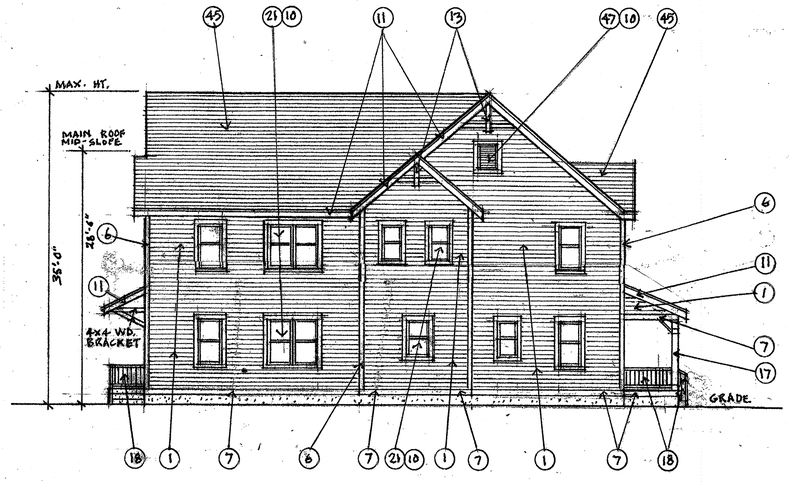
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



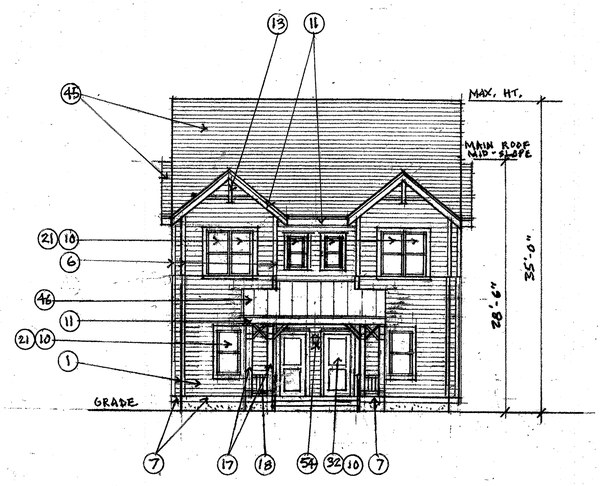
4 DUPLEX X-1 RIGHT SIDE ELEV.
1/8"=1'-0"



2 DUPLEX X-1 REAR ELEV.
1/8"=1'-0"



3 DUPLEX X-1 LEFT SIDE ELEV.
1/8"=1'-0"



1 DUPLEX X-1 FRONT ELEV.
1/8"=1'-0"

MAIN STREET, ERIE, CO.

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DUPLEX RESIDENCE- MODEL X-1 ELEVATIONS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	8/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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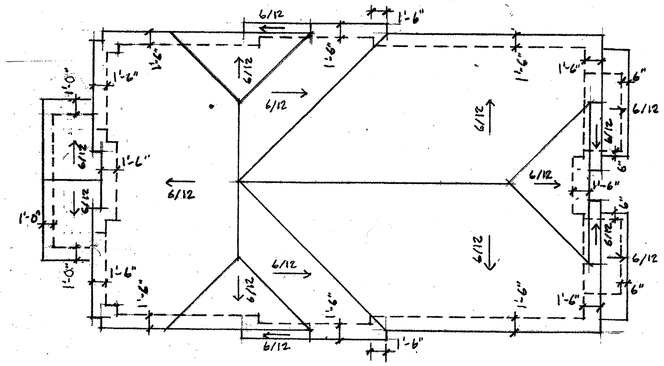
MAIN STREET SUBDIVISION

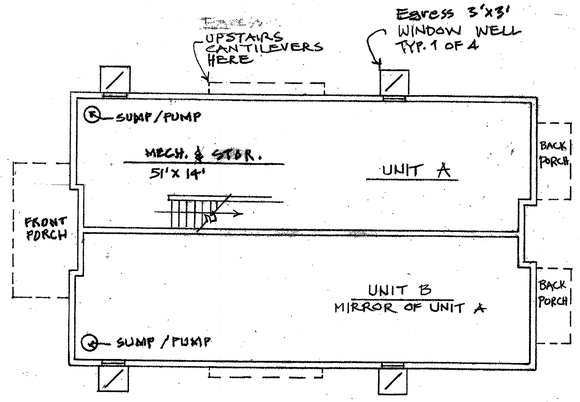
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

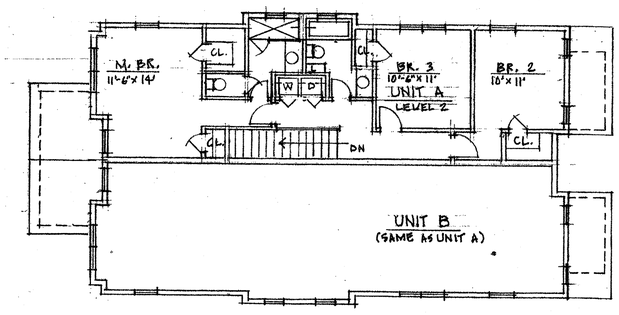
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



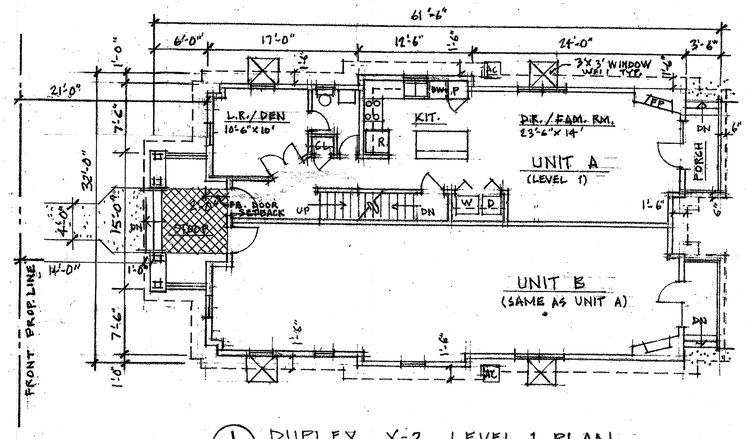
3 DUPLEX X-2 ROOF PLAN
1/8"= 1'-0"



4 DUPLEX X-2 B'MT. PLAN
1/8"=1'0"



2 DUPLEX X-2 LEVEL 2 PLAN
1/8" = 1'-0"



1 DUPLEX X-2 LEVEL 1 PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 15

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DUPLEX RESIDENCE- MODEL X-2 PLANS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL 5/1/2018		SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
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T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
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D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
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D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
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T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
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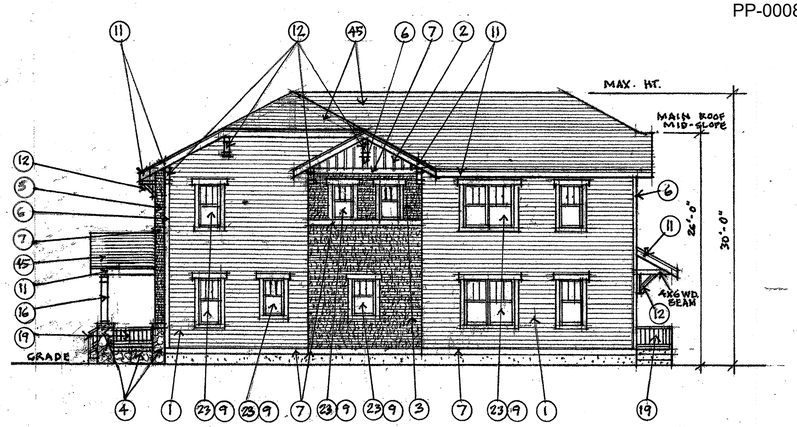
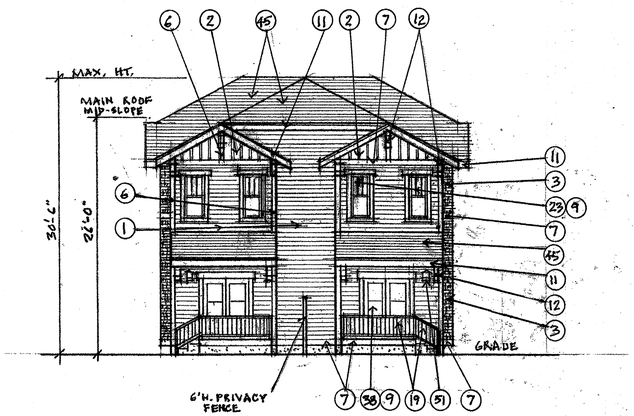
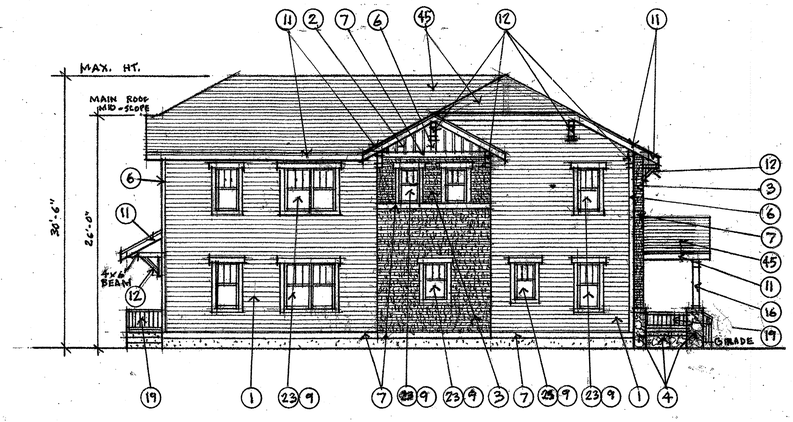
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



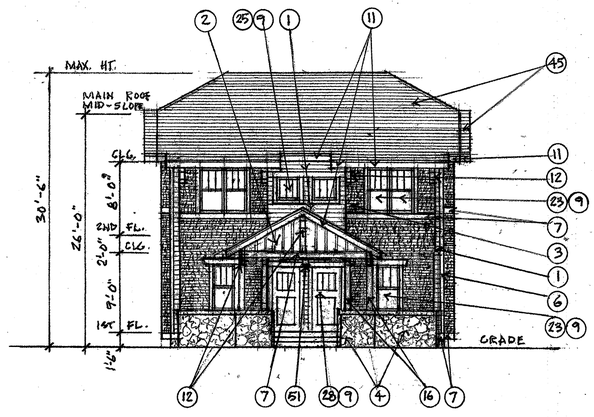
4 DUPLEX X-2 RIGHT SIDE ELEV.
1/8"=1'-0"



2 DUPLEX X-2 REAR ELEV.
1/8"=1'-0"



3 DUPLEX X-2 LEFT SIDE ELEV.
1/8"=1'-0"



1 DUPLEX X-2 FRONT ELEV.
1/8"=1'-0"

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DUPLEX RESIDENCE- MODEL X-2 ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL 5/1/2018		SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

MAIN STREET, ERIE, CO.

SHEET A. 16

JEHN ENGINEERING
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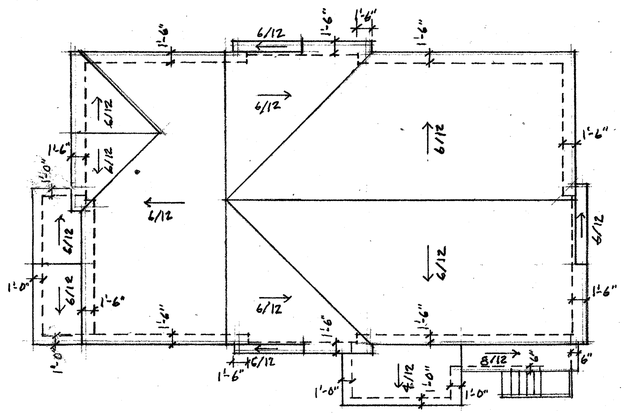
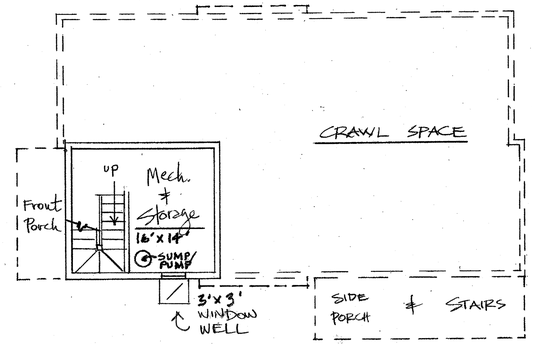
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

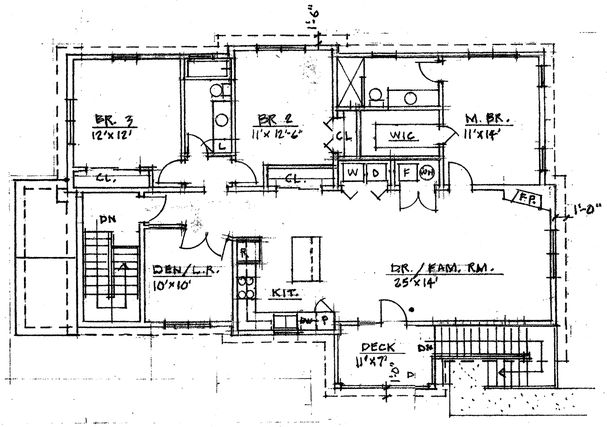
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016



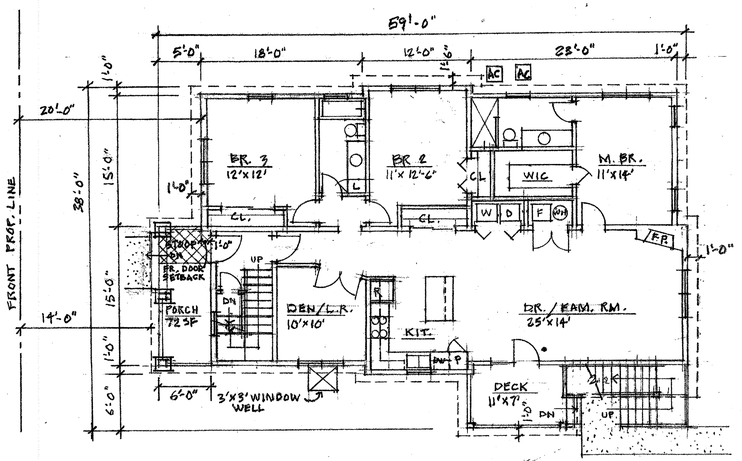
3 DUPLEX Y-1 ROOF PLAN
1/8"=1'-0"



4 DUPLEX Y-1 B'MT. PLAN
1/8" = 1'0"



2 DUPLEX Y-1 LEVEL 2 PLAN
1/8" = 1'-0"



1 DUPLEX Y-1 LEVEL 1 PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 17

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NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

DUPLEX RESIDENCE- MODEL Y-1 PLANS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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X:\2016\P-216-108\CORRESPONDENCE\OUT\2017-09-22 TO 2nd\RDRSV\B308-1P-TITLES.dwg, 9/22/2017 10:05:06 AM

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

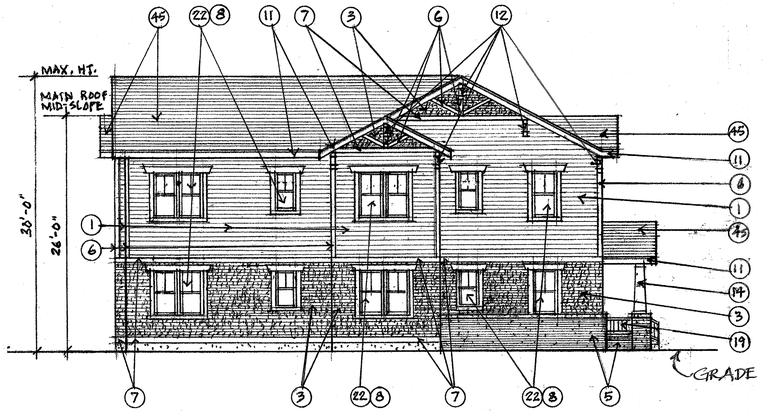
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

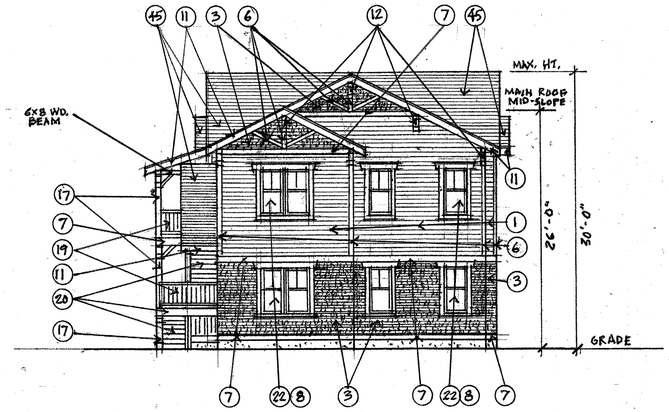
COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

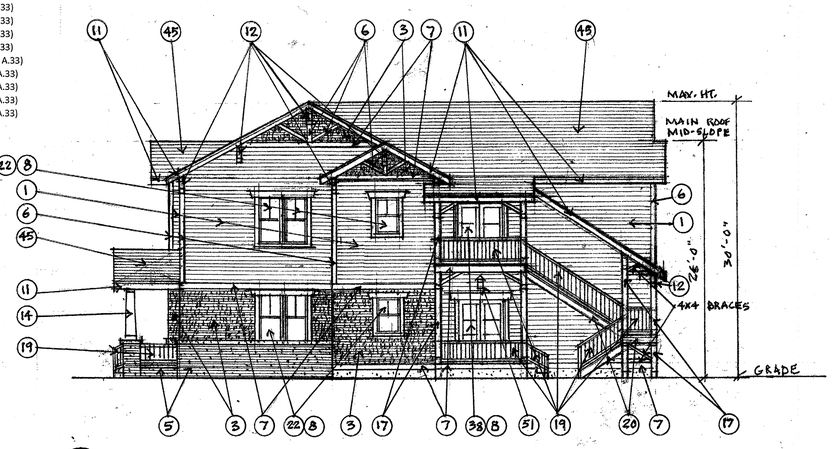
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



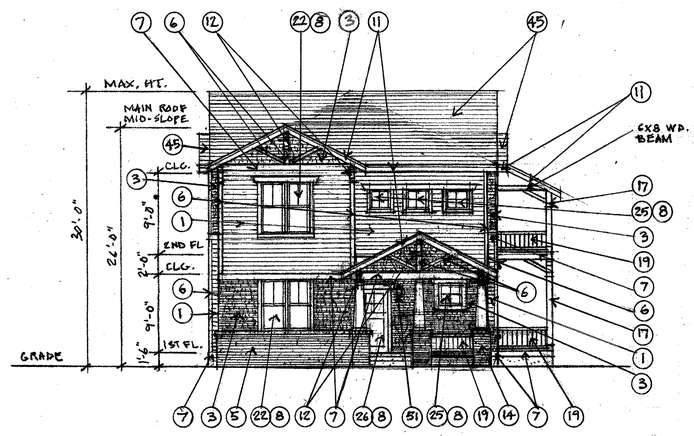
4 DUPLEX Y-1 LEFT SIDE ELEV.
1/8"=1'-0"



2 DUPLEX Y-1 REAR ELEV.
1/8"=1'-0"



3 DUPLEX Y-1 RIGHT SIDE ELEV.
1/8"=1'-0"



1 DUPLEX Y-1 FRONT ELEV.
1/8"=1'-0"

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DUPLEX RESIDENCE- MODEL Y-1 ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/8/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3RD SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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ARVADA, CO 80002
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MAIN STREET, ERIE, CO.

SHEET A. 18

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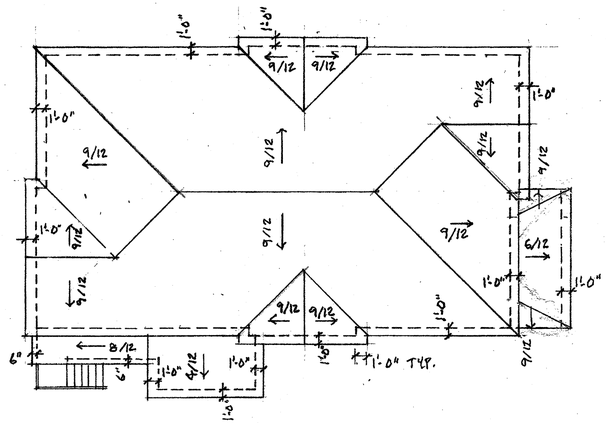
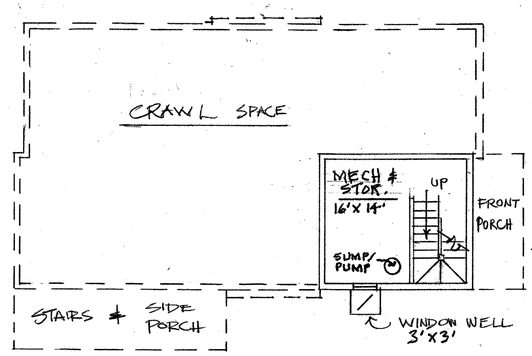
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

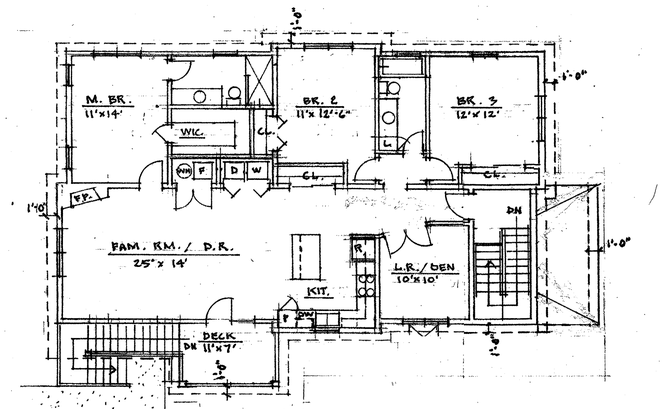
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016



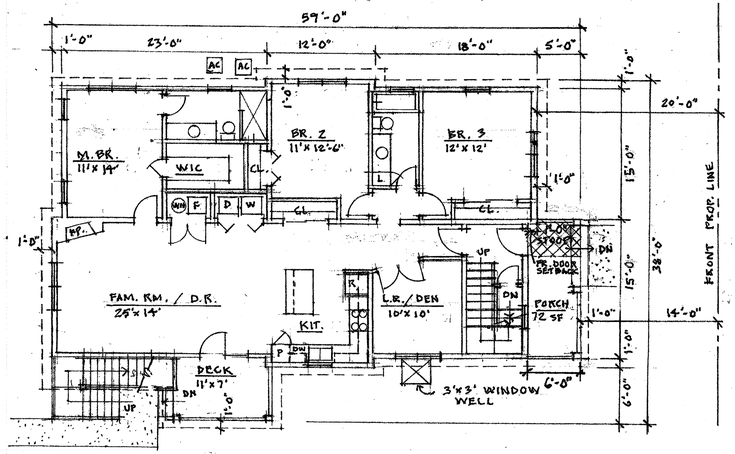
DUPLEX Y-2 ROOF PLAN
1/8" = 1'-0"



4 DUPLEX Y-2 B'MT. PLAN
1/8" = 1'0"



2 DUPLEX Y-2 LEVEL 2 PLAN
1/8" = 1'-0"



1 DUPLEX Y-2 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 19

CHUCK SANDERS
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NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

DUPLEX RESIDENCE- MODEL Y-2 PLANS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	8/8/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
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33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
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38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
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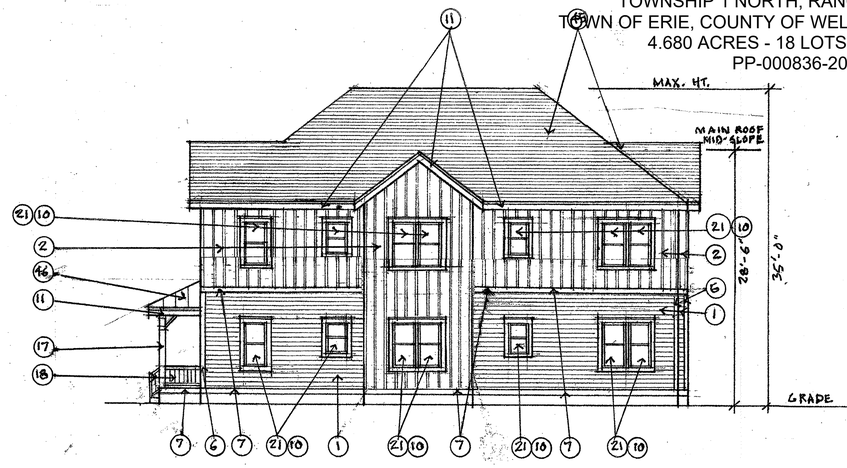
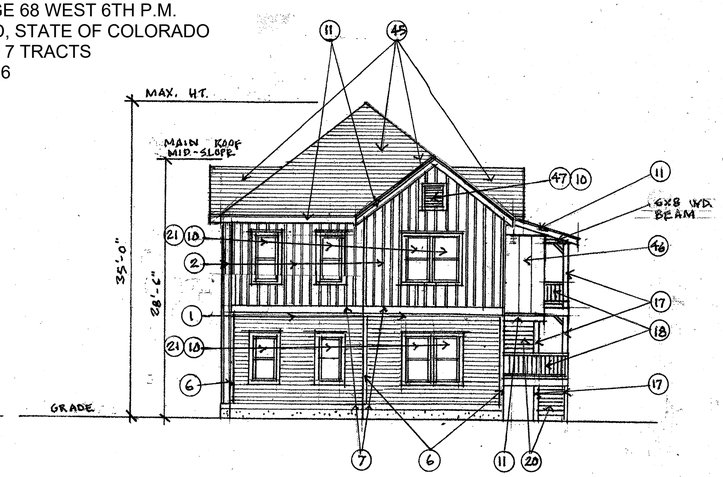
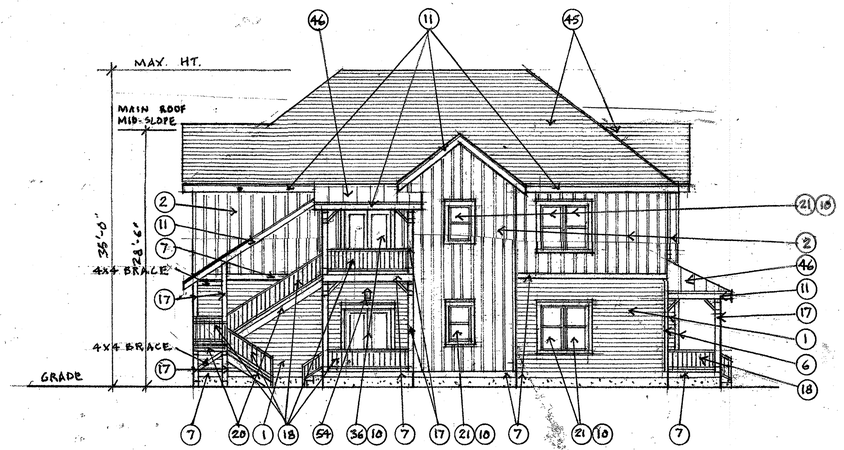
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



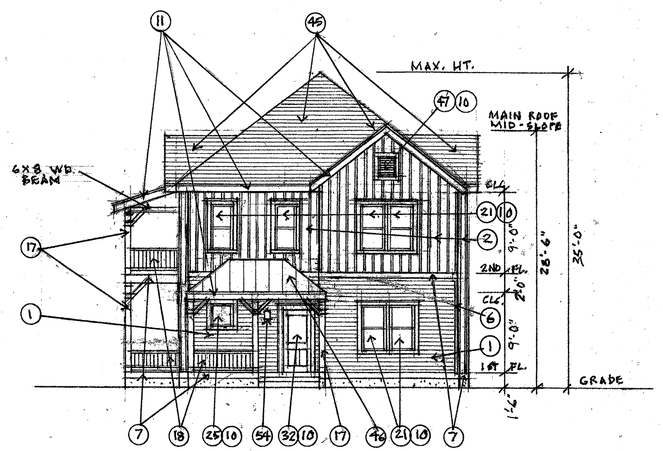
4 DUPLEX Y-2 RIGHT SIDE ELEV.
1/8"= 1'-0"



2 DUPLEX Y-2 REAR ELEV.
1/8"= 1'-0"



3 DUPLEX Y-2 LEFT SIDE ELEV.
1/8"= 1'-0"



1 DUPLEX Y-2 FRONT ELEV.
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 20

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sandersfleming@msn.com

DUPLEX RESIDENCE- MODEL Y-2 ELEVATIONS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL 3/A.21)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL 3/ A.21)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL 3/ A.21)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE 1/ A.21)
12. EAVE BRACKET (SEE DETAIL 1/ A.21)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL 7/ A.21)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL 2/ A.21)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL 2/ A.21)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL 2/ A.21)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL 2/ A.21)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE 1/ A.22)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE 1/ A.22)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE 2/ A.22)
21. VINYL WINDOW TYPE W-1 (SEE ELEVATIONS 5/ A.21)
22. VINYL WINDOW TYPE W-2 (SEE ELEVATIONS 5/ A.21)
23. VINYL WINDOW TYPE W-3 (SEE ELEVATIONS 5/ A.21)
24. VINYL WINDOW TYPE W-4 (SEE ELEVATIONS 5/ A.21)
25. VINYL WINDOW TYPE W-5 (SEE ELEVATIONS 5/ A.21)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE ELEVS. 6/ A.21)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE ELEVS. 6/ A.21)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE ELEVS. 6/ A.21)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE ELEVS. 6/ A.21)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE ELEVS. 6/ A.21)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE ELEVS. 6/ A.21)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE ELEVS. 6/ A.21)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE ELEVS. 6/ A.21)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE ELEVS. 6/ A.21)
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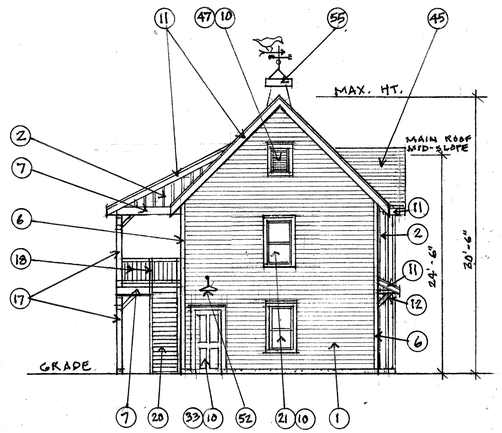
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE ELEVS. 6/ A.21)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE ELEVS. 6/ A.21)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE ELEVS. 6/ A.21)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE ELEVS. 6/ A.21)
40. GARAGE DOOR TYPE GD-1 (SEE 4/ A.21 & 5/ A.22)
41. GARAGE DOOR TYPE GD-2 (SEE 4/ A.21 & 5/ A.22)
42. GARAGE DOOR TYPE GD-3 (SEE 4/ A.21 & 5/ A.22)
43. GARAGE DOOR TYPE GD-4 (SEE 4/ A.21 & 5/ A.22)
44. GARAGE DOOR TYPE GD-5 (SEE 4/ A.21 & 5/ A.22)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE 3/ A.22)
50. EXTERIOR LIGHT TYPE L-2 (SEE 3/ A.22)
51. EXTERIOR LIGHT TYPE L-3 (SEE 3/ A.22)
52. EXTERIOR LIGHT TYPE L-4 (SEE 3/ A.22)
53. EXTERIOR LIGHT TYPE L-5 (SEE 3/ A.22)
54. EXTERIOR LIGHT TYPE L-6 (SEE 3/ A.22)
55. BARN ROOF VENT & WEATHERVANE (4/A.22)

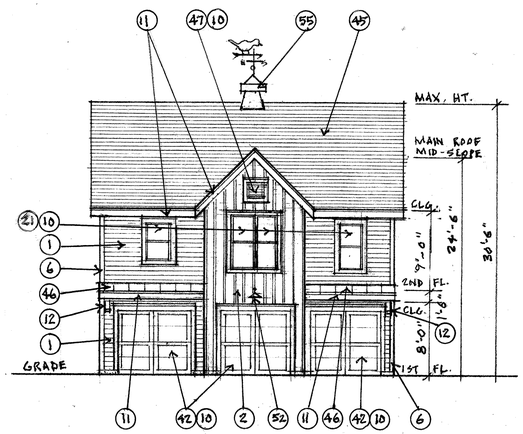
NOTES

1. BLOCK 1/LOT 2 IS 6078 SF
2. THE PRIMARY SINGLE FAMILY RESIDENCE F-1 HAS 2337 SF HABITABLE AREA AND THE ADU A-1 HAS 726 SF HABITABLE AREA- 31% OF THE PRIMARY RESIDENCE ON THIS LOT.
3. ADU A-1 IS BUILT ABOVE A DETACHED GARAGE AND HAS A HEIGHT OF 24'-6".
4. THE ADU FARMHOUSE STYLE, EXTERIOR FINISHES, ROOF PITCHES, WINDOW DESIGNS, EAVES AND ARCHITECTURAL DETAILS GENERALLY MATCH THE PRIMARY RESIDENCE. (SEE ATTACHED F-1 DRAWINGS.)
5. THE EXTERIOR COLOR SCHEME OF THE ADU WILL MATCH THE PRIMARY RESIDENCE.

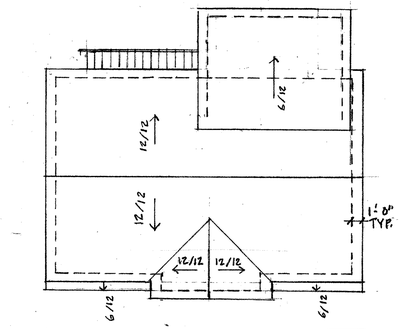
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



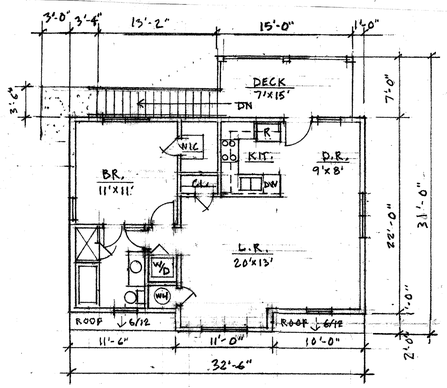
7 ADU A-1 SIDE (WEST) ELEV.
1/8" = 1'-0"



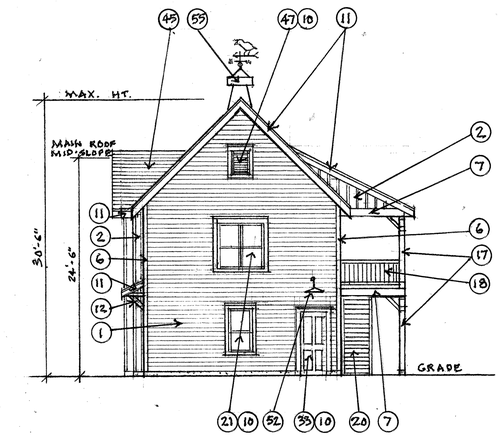
5 ADU A-1 REAR (SOUTH) ELEV.
1/8" = 1'-0"



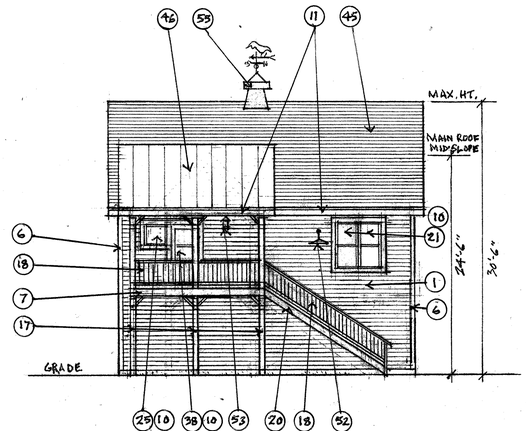
3 ADU A-1 ROOF PLAN
1/8" = 1'-0"



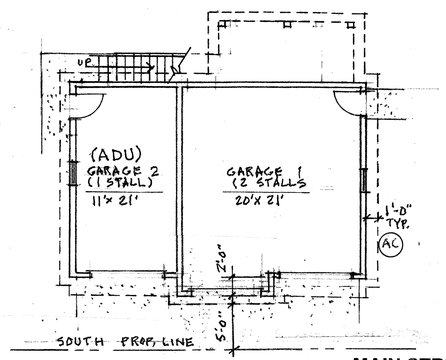
2 ADU A-1 LEVEL 2 PLAN
1/8" = 1'-0"



6 ADU A-1 SIDE (EAST) ELEV.
1/8" = 1'-0"



4 ADU A-1 FRONT (NORTH) ELEV.
1/8" = 1'-0"



2 ADU A-1 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 21

CHUCK SANDERS
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sandersfleming@msn.com

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL 5/1/2018		SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

ADU/GARAGE- MODEL A-1 PLANS & ELEVATIONS
FARMHOUSE STYLE

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

MATERIALS AND DETAILS REFERENCES KEY

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3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
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16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
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41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
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46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)

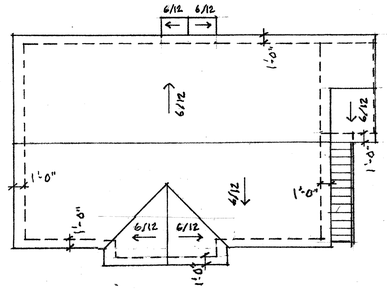
EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

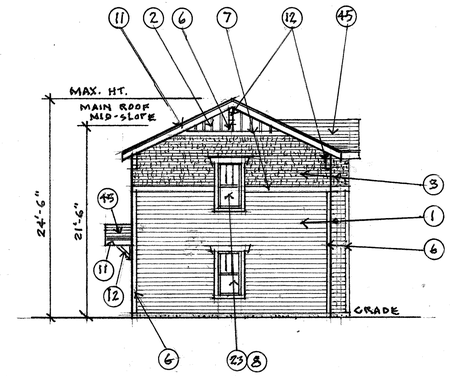
NOTES

1. BLOCK 4/LOT 1 IS 6858 SF
2. THE PRIMARY SINGLE FAMILY RESIDENCE F-2 HAS 2337 SF HABITABLE AREA AND THE ADU A-2 HAS 726 SF HABITABLE AREA- 31% OF THE PRIMARY RESIDENCE ON THIS LOT.
3. ADU A-2 IS BUILT ABOVE A DETACHED GARAGE AND HAS A HEIGHT OF 21'-6".
4. THE ADU CRAFTSMAN STYLE, EXTERIOR FINISHES, ROOF PITCHES, WINDOW DESIGNS, EAVES AND ARCHITECTURAL DETAILS GENERALLY MATCH THE PRIMARY RESIDENCE. (SEE ATTACHED F-2 DRAWINGS.)
5. THE EXTERIOR COLOR SCHEME OF THE ADU WILL MATCH THE PRIMARY RESIDENCE.

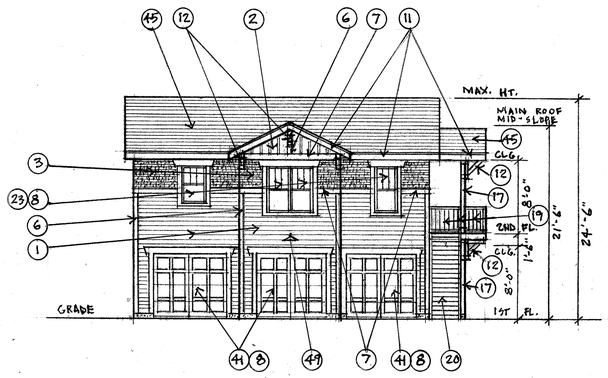
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



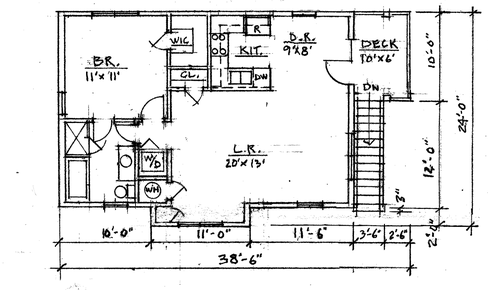
3 ADU A-2 ROOF PLAN
1/8" = 1'-0"



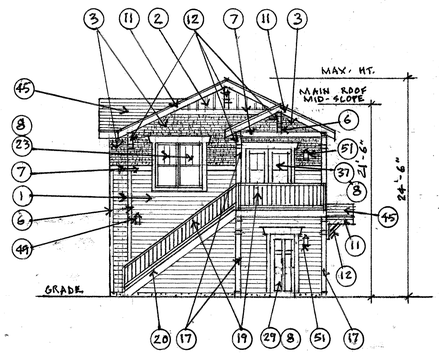
7 ADU A-2 RIGHT (SOUTH) SIDE ELEV.
1/8" = 1'-0"



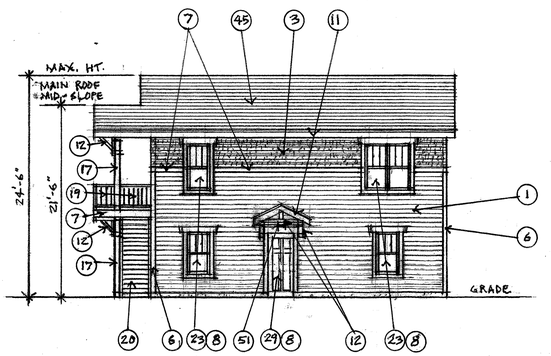
5 ADU A-2 REAR (EAST) ELEV.
1/8" = 1'-0"



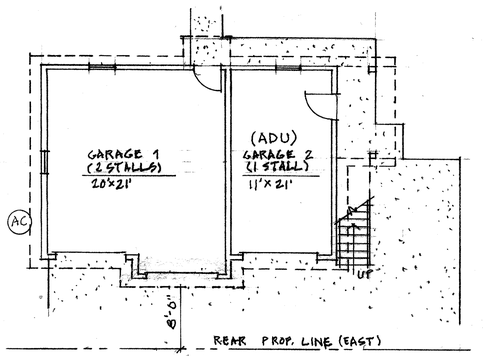
2 ADU A-2 LEVEL 2 PLAN
1/8" = 1'-0"



6 ADU A-2 SIDE (NORTH) ELEV.
1/8" = 1'-0"



4 ADU A-2 FRONT (WEST) ELEV.
1/8" = 1'-0"



1 ADU A-2 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 22

ADU/GARAGE- MODEL A-2 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/8/2017	MCB
3	2nd SUBMITTAL	10/25/2017	SBP
4	3rd SUBMITTAL	5/8/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5th SUBMITTAL	1/29/19	SBP

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MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)

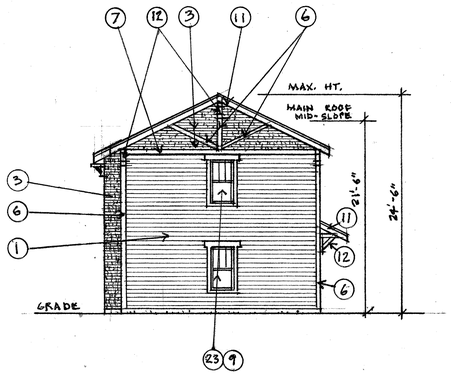
EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

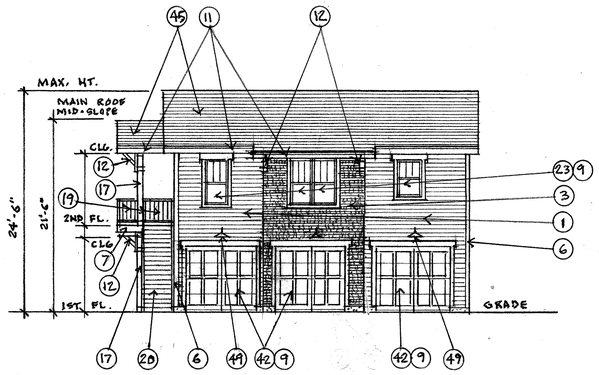
NOTES

1. BLOCK 5/LOT 1 IS 6656 SF
2. THE PRIMARY SINGLE FAMILY RESIDENCE C-4 HAS 2200 SF HABITABLE AREA AND THE ADU A-3 HAS 726 SF HABITABLE AREA- 33% OF THE PRIMARY RESIDENCE ON THIS LOT.
3. ADU A-2 IS BUILT ABOVE A DETACHED GARAGE AND HAS A HEIGHT OF 21'-6".
4. THE ADU CRAFTSMAN STYLE, EXTERIOR FINISHES, ROOF PITCHES, WINDOW DESIGNS, EAVES AND ARCHITECTURAL DETAILS GENERALLY MATCH THE PRIMARY RESIDENCE. (SEE ATTACHED C-4 DRAWINGS.)
5. THE EXTERIOR COLOR SCHEME OF THE ADU WILL MATCH THE PRIMARY RESIDENCE.

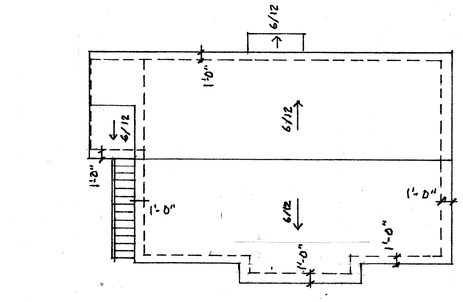
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.



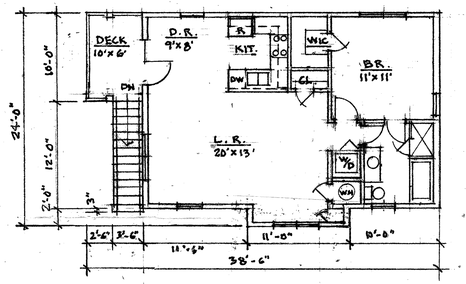
7 ADU A-3 LEFT (SOUTH) SIDE ELEV.
1/8" = 1'-0"



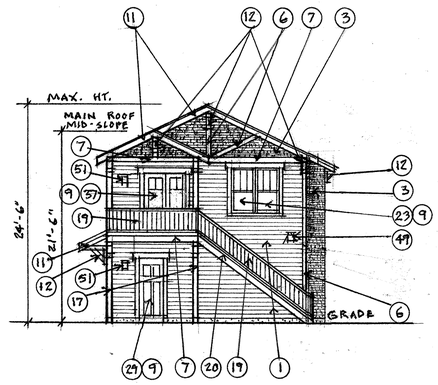
5 ADU A-3 REAR (WEST) ELEV.
1/8" = 1'-0"



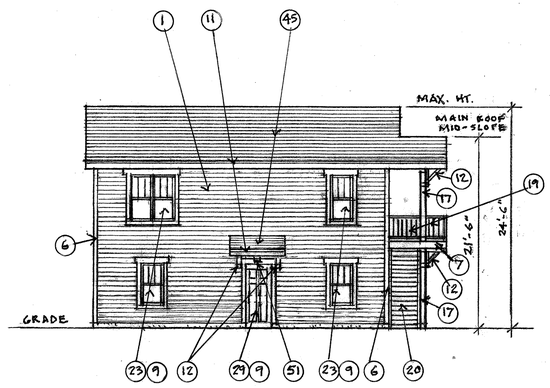
3 ADU A-3 ROOF PLAN
1/8" = 1'-0"



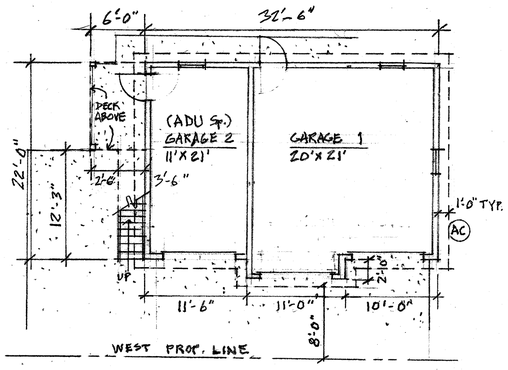
2 ADU A-3 LEVEL 2 PLAN
1/8" = 1'-0"



6 ADU A-3 SIDE (NORTH) ELEV.
1/8" = 1'-0"



4 ADU A-3 FRONT (EAST) ELEV.
1/8" = 1'-0"



1 ADU A-3 LEVEL 1 PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 23

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REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/8/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

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ADU/GARAGE- MODEL A-3 PLANS & ELEVATIONS
CRAFTSMAN STYLE

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
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D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
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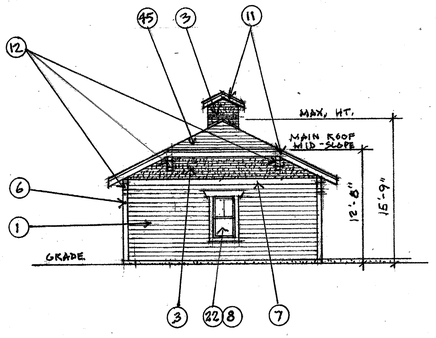
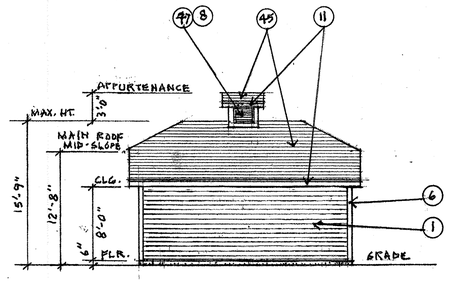
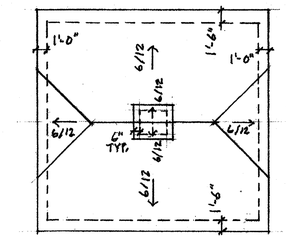
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



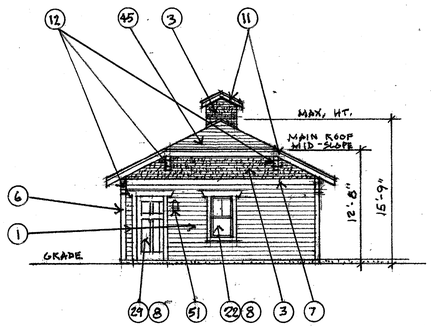
6 GARAGE G-1 RIGHT SIDE ELEV.
1/8"=1'-0"



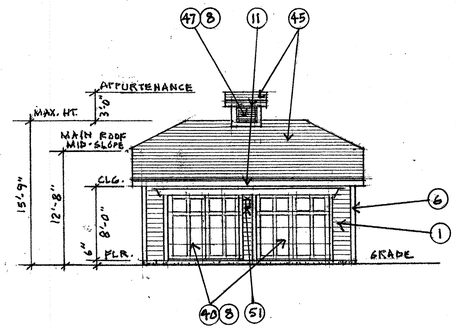
4 GARAGE G-1 REAR ELEV.
1/8"=1'-0"



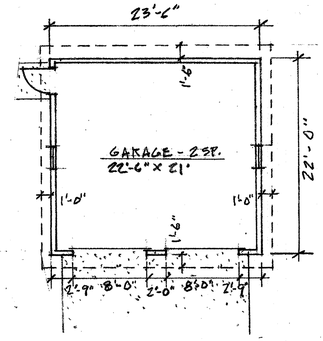
2 GARAGE G-1 ROOF PLAN
1/8"=1'-0"



5 GARAGE G-1 LEFT SIDE ELEV.
1/8"=1'-0"



3 GARAGE G-1 FRONT ELEV.
1/8"=1'-0"



1 GARAGE G-1 FLOOR PLAN
1/8"=1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 24

CHUCK SANDERS
ARCHITECT
2055 Kohler Drive, Boulder, Colorado 80305
c. 303.817.1248, o. 303.499.1172
sandersfleming@msn.com

GARAGE- MODEL G-1 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
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RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
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46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
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51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
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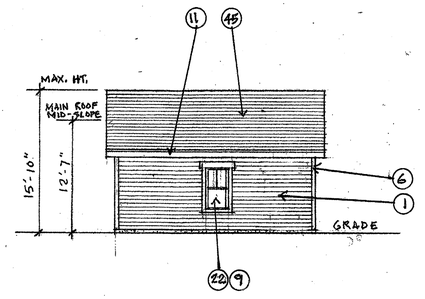
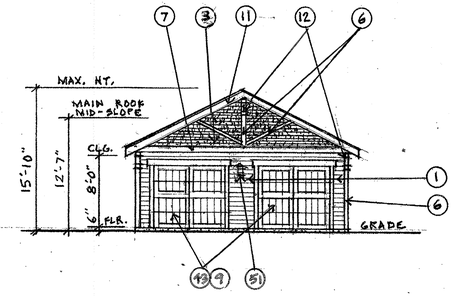
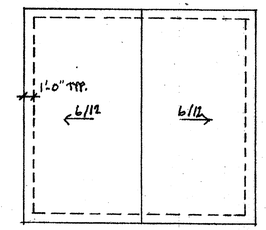
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



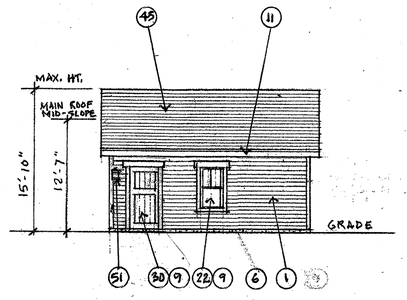
6 GARAGE G-2 SOUTH SIDE ELEV.
1/8"= 1'-0"



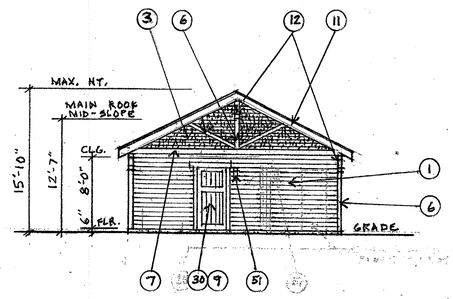
4 GARAGE G-2 REAR ELEV.
1/8"= 1'-0"



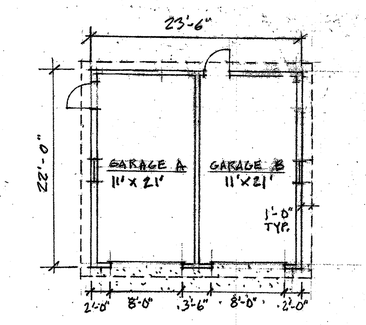
2 GARAGE G-2 ROOF PLAN
1/8"= 1'-0"



5 GARAGE G-2 NORTH SIDE ELEV.
1/8"= 1'-0"



3 GARAGE G-2 FRONT ELEV.
1/8"= 1'-0"



1 GARAGE G-2 FLOOR PLAN
1/8"= 1'-0"

CHUCK SANDERS
ARCHITECT
2055 Kohler Drive, Boulder, Colorado 80305
c. 303.817.1248, o. 303.499.1172
sandersfleming@msn.com

GARAGE- MODEL G-2 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/23/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

MAIN STREET, ERIE, CO.

SHEET A. 25

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
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T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
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T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
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W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
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D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
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RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

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7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
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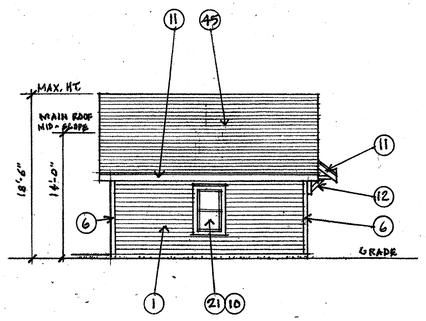
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)

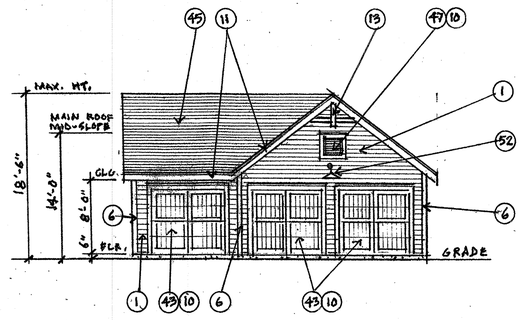
MATERIALS AND DETAILS NOTES

THE MATERIALS AND DETAILS SHOWN ON THESE ELEVATIONS ARE FOR THE G-3 GARAGE LOCATED AT BLOCK 3/LOT 1.

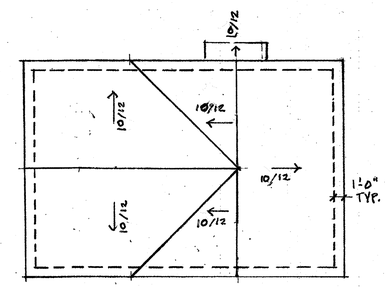
THE MATERIALS AND DETAILS FOR THE G-3 GARAGES LOCATED AT BLOCK 2/LOT 2 AND AT BLOCK 2/LOT 3 ARE SIMILAR EXCEPT THAT THE GABLE-END DECORATIVE TRUSS DETAIL (DETAIL REFERENCE #13) DOES NOT OCCUR AT THESE GARAGES.



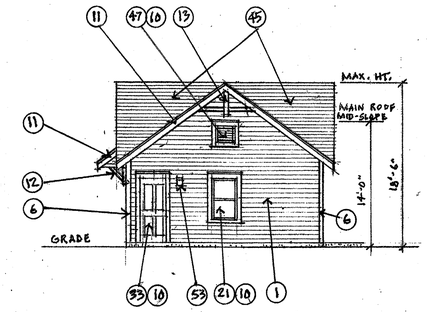
6 GARAGE G-3 LEFT SIDE ELEV.
1/8"= 1'-0"



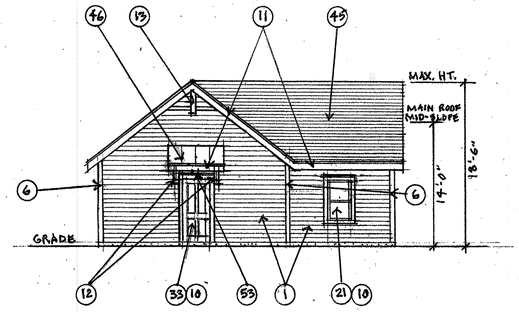
4 GARAGE G-3 REAR ELEV.
1/8"= 1'-0"



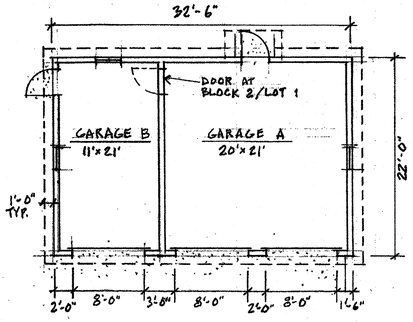
2 GARAGE G-3 ROOF PLAN
1/8" = 1'-0"



5 GARAGE G-3 RIGHT SIDE ELEV.
1/8"= 1'-0"



3 GARAGE G-3 FRONT ELEV.
1/8"= 1'-0"



1 GARAGE G-3 FLOOR PLAN
1/8"= 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 26

CHUCK SANDERS
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sandersfleming@msn.com

GARAGE- MODEL G-3 PLANS & ELEVATIONS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5690 WEBSTER STREET
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J:\0619-216 (ERIE)\DRB\RESPONDENCE\OUT\2017-09-22 TO SAUNDERS\0618-SH-TITLEBLK.dwg, 9/22/2017 10:05:56 AM

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
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26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
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35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
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38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
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41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
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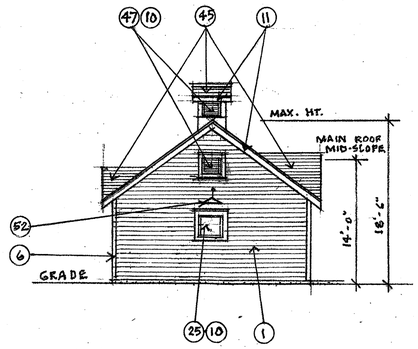
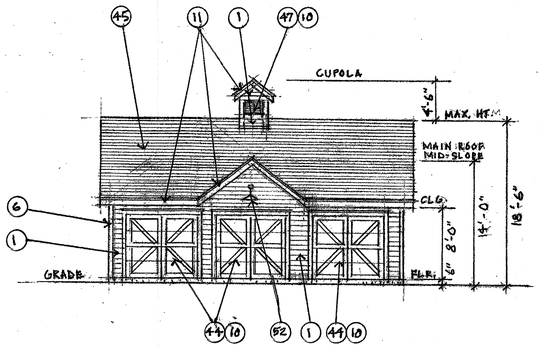
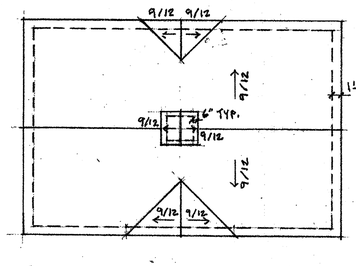
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



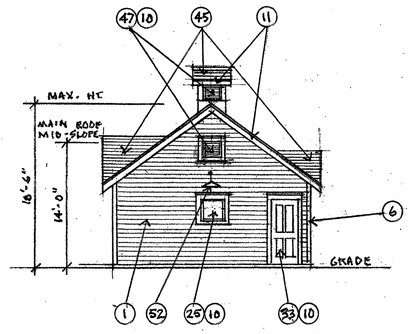
6 GARAGE G-4 RIGHT SIDE ELEV.
1/8" = 1'-0"



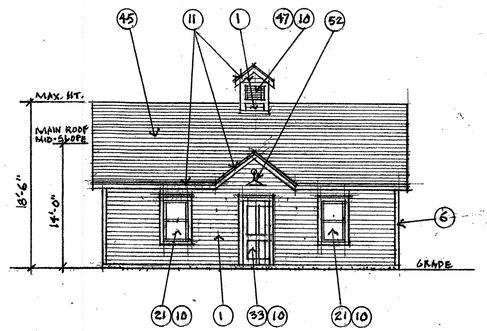
4 GARAGE G-4 REAR ELEV.
1/8" = 1'-0"



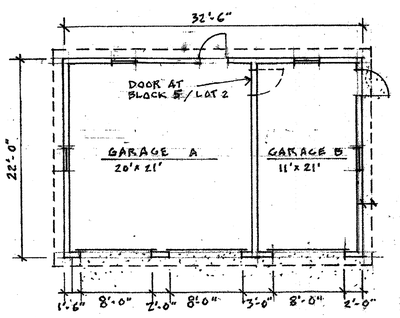
2 GARAGE G-4 ROOF PLAN
1/8" = 1'-0"



5 GARAGE G-4 LEFT SIDE ELEV.
1/8" = 1'-0"



3 GARAGE G-4 FRONT ELEV.
1/8" = 1'-0"



1 GARAGE G-4 FLOOR PLAN
1/8" = 1'-0"

MATERIALS AND DETAILS NOTES

THE MATERIALS AND DETAILS SHOWN ON THESE ELEVATIONS ARE FOR THE G-4 GARAGE LOCATED AT BLOCK 5/LOT 2.

THE MATERIALS AND DETAILS FOR THE G-4 GARAGE LOCATED AT BLOCK 4/LOT 2 ARE SIMILAR EXCEPT THAT THE GABLE-END DECORATIVE TRUSS DETAIL (DETAIL REFERENCE #13) SHALL OCCUR AT THE RIGHT, LEFT AND REAR ROOF GABLES AT THIS GARAGE.

MAIN STREET, ERIE, CO.

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sandersfleming@msn.com

GARAGE- MODEL G-4 PLANS & ELEVATIONS
FARMHOUSE STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
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D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
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D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
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6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
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10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
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31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
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41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
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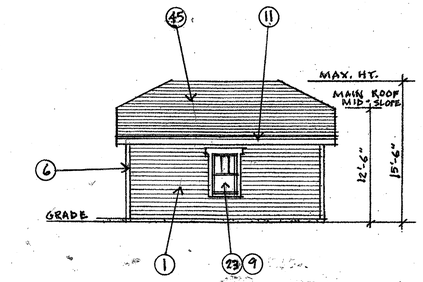
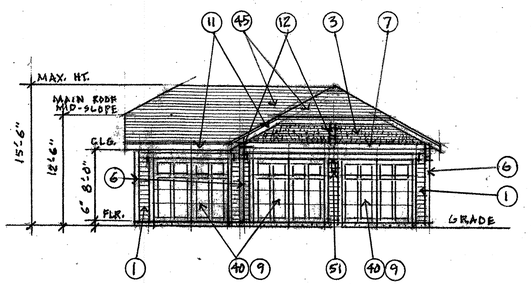
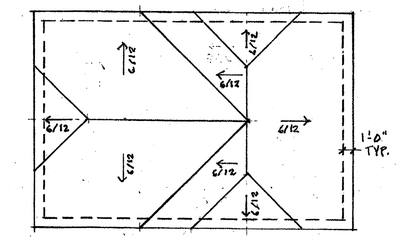
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



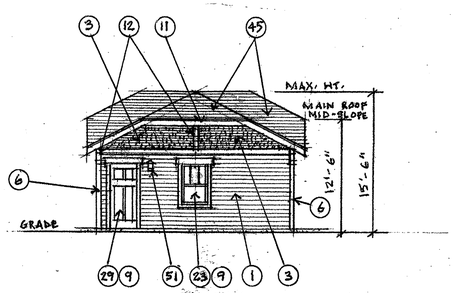
6 GARAGE G-5 LEFT SIDE ELEV.
1/8"=1'-0"



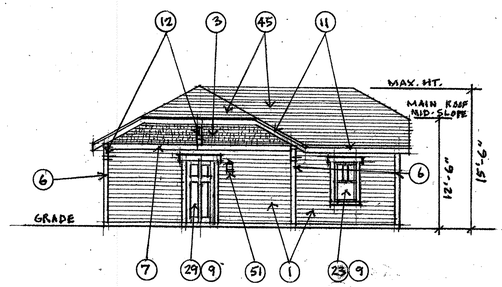
4 GARAGE G-5 REAR ELEV.
1/8"=1'-0"



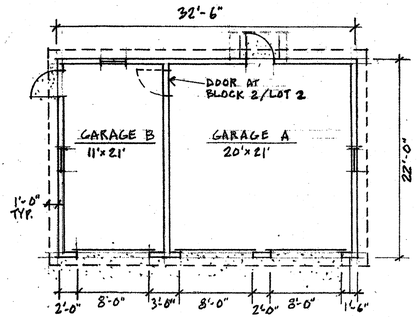
2 GARAGE G-5 ROOF PLAN
1/8"=1'-0"



5 GARAGE G-5 RIGHT SIDE ELEV.
1/8"=1'-0"



3 GARAGE G-5 FRONT ELEV.
1/8"=1'-0"



1 GARAGE G-5 FLOOR PLAN
1/8"=1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 28

CHUCK SANDERS
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sandersfleming@msn.com

GARAGE- MODEL G-5 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
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7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
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10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
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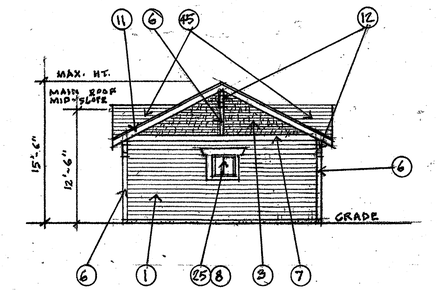
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)

MATERIALS AND DETAILS NOTES

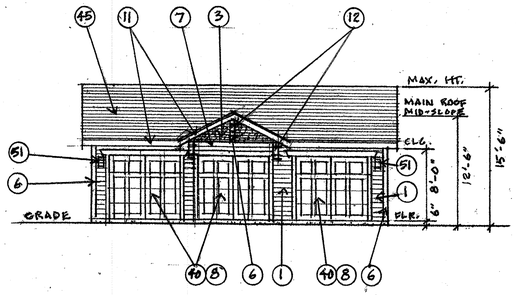
THE MATERIALS AND DETAILS SHOWN ON THESE ELEVATIONS ARE FOR THE G-6 GARAGES LOCATED AT BLOCK 2/LOT 2 AND AT BLOCK 4/LOT 3.

THE MATERIALS AND DETAILS FOR THE G-6 GARAGE LOCATED AT BLOCK 4/LOT 3 ARE SIMILAR
(MATERIAL REFERENCE #2) AND THE DOUBLE-HUNG WINDOWS SHALL BE 2OVER 1 LITES (DETAIL REFERENCE 23) AND THE FIXED WINDOWS SHALL HAVE 2 VERTICAL LITES.

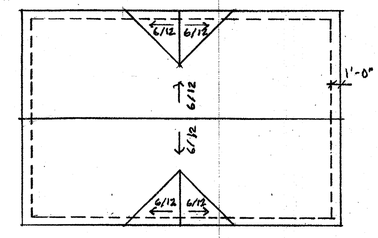
THE MATERIALS AND DETAILS FOR THE G-6 GARAGE LOCATED AT BLOCK 5/LOT 4 ARE SIMILAR EXCEPT THAT THE GABLE SIDING SHALL BE BOARD AND BATTEN (MATERIAL REFERENCE #2) AND THE DOUBLE-HUNG WINDOWS SHALL BE 4 OVER 1 LITES (DETAIL REFERENCE #24) AND THE FIXED WINDOWS SHALL HAVE 4 LITES.



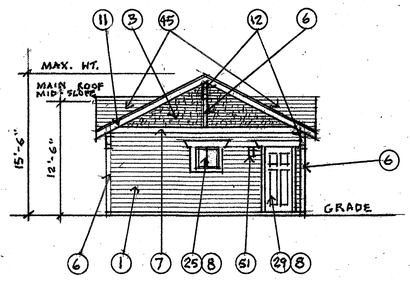
6 GARAGE G-6 RIGHT SIDE ELEV.
1/8" = 1'-0"



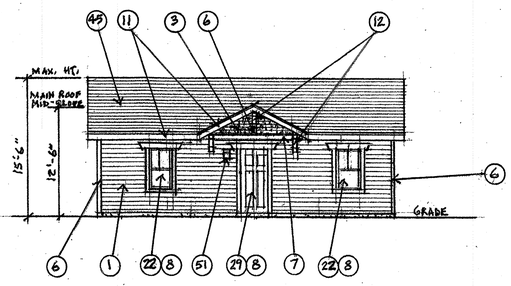
4 GARAGE G-6 REAR ELEV.
1/8" = 1'-0"



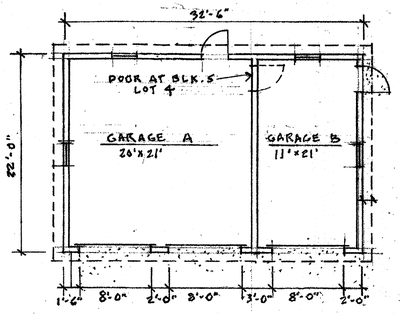
2 GARAGE G-6 ROOF PLAN
1/8" = 1'-0"



5 GARAGE G-6 LEFT SIDE ELEV.
1/8" = 1'-0"



3 GARAGE G-6 FRONT ELEV.
1/8" = 1'-0"



1 GARAGE G-6 FLOOR PLAN
1/8" = 1'-0"

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GARAGE- MODEL G-6 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	GS
4	~~3rd SUBMITTAL~~ 5/	12/18	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

MAIN STREET, ERIE, CO.

SHEET A. 29

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

EXTERIOR COLORS AND MATERIALS KEY

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D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
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T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
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T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
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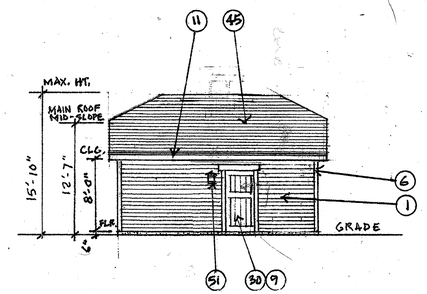
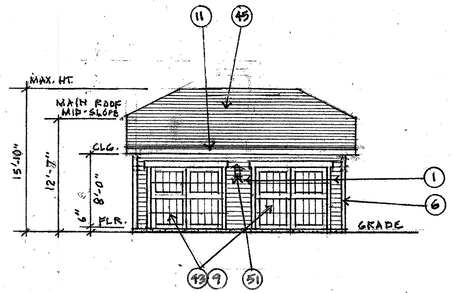
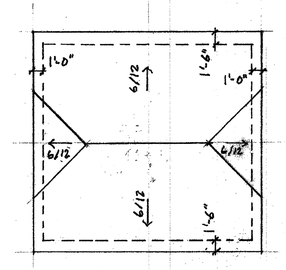
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



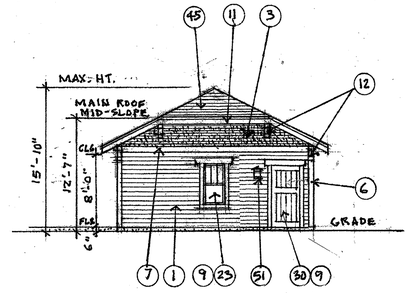
6 GARAGE G-7 FRONT ELEV.
1/8" = 1'-0"



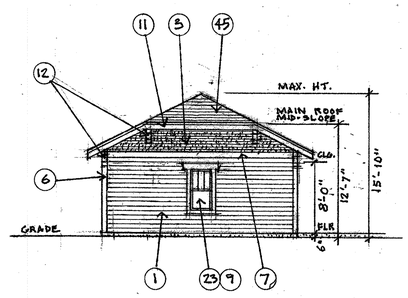
4 GARAGE G-7 REAR ELEV.
1/8" = 1'-0"



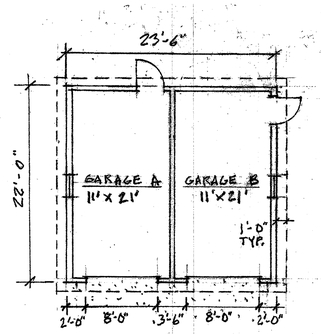
2 GARAGE G-7 ROOF PLAN
1/8" = 1'-0"



5 GARAGE G-7 LEFT SIDE ELEV.
1/8" = 1'-0"



3 GARAGE G-7 RIGHT SIDE ELEV.
1/8" = 1'-0"



1 GARAGE G-7 FLOOR PLAN
1/8" = 1'-0"

MAIN STREET, ERIE, CO.

SHEET A. 30

CHUCK SANDERS
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sandersfleming@msn.com

GARAGE- MODEL G-7 PLANS & ELEVATIONS
CRAFTSMAN STYLE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5990 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

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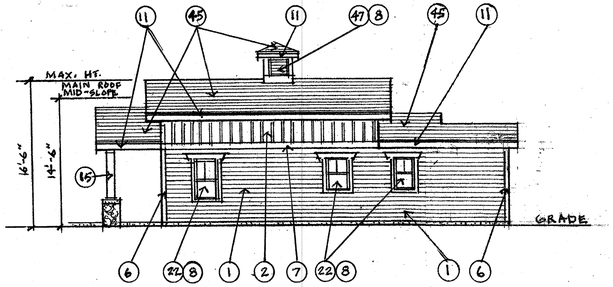
NOTE: THE BUILDING ELEVATIONS AND PLANS SHOWN AND APPROVED HEREON ARE INTENDED TO DEMONSTRATE HOW ALL HVAC AND OTHER MECHANICAL EQUIPMENT SHALL BE SCREENED ACCCORDING TO TOWN OF ERIE, UNIFIED DEVELOPMENT CODE REQUIREMENTS. IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE THAT THIS APPROVED SCREENING OCCURS IM THE FIELD AS DEMONSTRATED BY THESE PLANS, REGARDLESS OF CURB REQUIREMENTS, MECHANICAL PLAN CHANGES, OR OTHER CIRCUMSTANCES. FAILURE TO PROVIDE APPROVED SCREENING MAY RESULT IN DELAY OF FINAL INSPECTIONS AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SEE 1ST FLOOR BUILDING PLANS FOR LOCATIONS OF PROPOSED EXTERIOR AC EQUIPMENT AND LANDSCAPE DRAWINGS FOR PROPOSED SCREENING.

EXTERIOR COLORS AND MATERIALS KEY

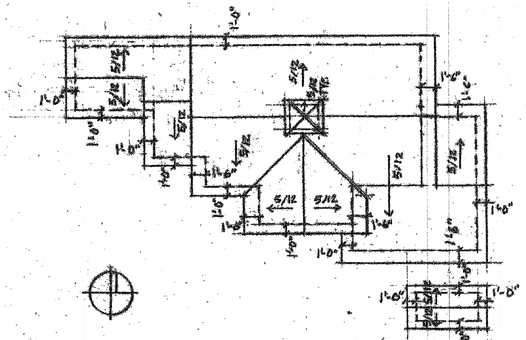
COLOR KEY	ELEVATION MATERIAL REFERENCES
S-1	1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
S-2	2. ENGINEERED WOOD PANEL AND BATTEN SIDING
S-2	3. PANELIZED CEDAR SHAKE SIDING
M	4. SYNTHETIC STONE VENEER
M	5. STANDARD BRICK VENEER
T	6. 5/4 X 4 ENGINEERED WOOD TRIM
T	7. 5/4 X 10 ENGINEERED WOOD TRIM
T	8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAILS A.33&34)
T	9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAILS A.33&34)
T	10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAILS A.33&34)
T	11. 1 x 10 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
T	12. EAVE BRACKET (SEE DETAILS A.33&34)
T	13. GABLE-END DECORATIVE TRUSS (SEE DETAILS A.33&34)
T & M	14. PORCH COLUMN TYPE CL-1 (SEE DETAILS A.33&34)
T & M	15. PORCH COLUMN TYPE CL-2 (SEE DETAILS A.33&34)
T	16. PORCH COLUMN TYPE CL-3 (SEE DETAILS A.33&34)
T	17. PORCH COLUMN TYPE CLS-4 (SEE DETAILS A.33&34)
R	18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
R	19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
T	20. EXTERIOR STEEL STAIR STRINGERS (SEE A.33&34)
W	21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33&34)
W	22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33&34)
W	23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33&34)
W	24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33&34)
W	25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33&34)
D-1	26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DET. A.33&34)
D-1	27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DET. A.33&34)
D-1	28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DET. A.33&34)
D-2	29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DET. A.33&34)
D-2	30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DET. A.33&34)
D-1	31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DET. A.33&34)
D-1	32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DET. A.33&34)
D-2	33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DET. A.33&34)
D-2	34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DET. A.33&34)
T	35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DET. A.33&34)
D-2	36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DET. A.33&34)
D-2	37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DET. A.33&34)
D-2	38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DET. A.33&34)
D-2	39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DET. A.33&34)
T	40. GARAGE DOOR TYPE GD-1 (SEE DET. A.33&34)
T	41. GARAGE DOOR TYPE GD-2 (SEE DET. A.33&34)
T	42. GARAGE DOOR TYPE GD-3 (SEE DET. A.33&34)
T	43. GARAGE DOOR TYPE GD-4 (SEE DET. A.33&34)
T	44. GARAGE DOOR TYPE GD-5 (SEE DET. A.33&34)
RF-1	45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
RF-2	46. PREFINISHED STANDING-SEAM METAL ROOFING
T	47. VINYL LOUVER VENT (COLOR TO MATCH TRIM)

MATERIALS AND DETAILS REFERENCES KEY

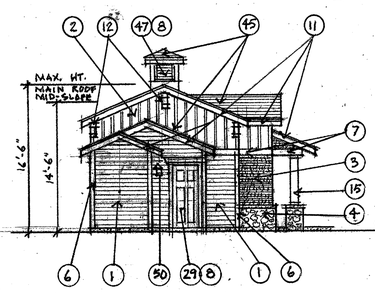
1. ENGINEERED WOOD 6" EXPOSURE LAP SIDING
2. ENGINEERED WOOD PANEL AND BATTEN SIDING
3. PANELIZED CEDAR SHAKE SIDING
4. SYNTHETIC STONE VENEER
5. STANDARD BRICK VENEER
6. 5/4 X 4 ENGINEERED WOOD TRIM
7. 5/4 X 10 ENGINEERED WOOD TRIM
8. WINDOW AND DOOR TRIM TYPE T-1 (SEE DETAIL A.33&34)
9. WINDOW AND DOOR TRIM TYPE T-2 (SEE DETAIL A.33&34)
10. WINDOW AND DOOR TRIM TYPE T-3 (SEE DETAIL A.33&34)
11. 1 x 8 ENGINEERED WOOD FASCIA & SOFFIT (SEE A.33&34)
12. EAVE BRACKET (SEE DETAIL A.33&34)
13. GABLE-END DECORATIVE TRUSS (SEE DETAIL A.33&34)
14. PORCH COLUMN TYPE CL-1 (SEE DETAIL A.33&34)
15. PORCH COLUMN TYPE CL-2 (SEE DETAIL A.33&34)
16. PORCH COLUMN TYPE CL-3 (SEE DETAIL A.33)
17. PORCH COLUMN TYPE CLS-4 (SEE DETAIL A.33)
18. VINYL PORCH RAILING SYSTEM TYPE R-1 (SEE A.33&34)
19. VINYL PORCH RAILING SYSTEM TYPE R-2 (SEE A.33&34)
20. EXTERIOR STEEL STAIR TREADS & STRINGERS (SEE A.33&34)
21. VINYL WINDOW TYPE W-1 (SEE DETAILS A.33)
22. VINYL WINDOW TYPE W-2 (SEE DETAILS A.33)
23. VINYL WINDOW TYPE W-3 (SEE DETAILS A.33)
24. VINYL WINDOW TYPE W-4 (SEE DETAILS A.33)
25. VINYL WINDOW TYPE W-5 (SEE DETAILS A.33)
26. EXTERIOR STEEL DOOR TYPE D-1 (SEE DETAILS A.33)
27. EXTERIOR STEEL DOOR TYPE D-2 (SEE DETAILS A.33)
28. EXTERIOR STEEL DOOR TYPE D-3 (SEE DETAILS A.33)
29. EXTERIOR STEEL DOOR TYPE D-4 (SEE DETAILS A.33)
30. EXTERIOR STEEL DOOR TYPE D-5 (SEE DETAILS A.33)
31. EXTERIOR STEEL DOOR TYPE D-6 (SEE DETAILS A.33)
32. EXTERIOR STEEL DOOR TYPE D-7 (SEE DETAILS A.33)
33. EXTERIOR STEEL DOOR TYPE D-8 (SEE DETAILS A.33)
34. EXTERIOR STEEL DOOR TYPE D-9 (SEE DETAILS A.33)
35. EXTERIOR WOOD DOOR TYPE D-10 (SEE DETAILS A.33)
36. EXTERIOR STEEL DOOR TYPE D-11 (SEE DETAILS A.33)
37. EXTERIOR STEEL DOOR TYPE D-12 (SEE DETAILS A.33)
38. EXTERIOR STEEL DOOR TYPE D-13 (SEE DETAILS A.33)
39. EXTERIOR STEEL DOOR TYPE D-14 (SEE DETAILS A.33)
40. GARAGE DOOR TYPE GD-1 (SEE A.33&34)
41. GARAGE DOOR TYPE GD-2 (SEE A.33&34)
42. GARAGE DOOR TYPE GD-3 (SEE A.33&34)
43. GARAGE DOOR TYPE GD-4 (SEE A.33&34)
44. GARAGE DOOR TYPE GD-5 (SEE A.33&34)
45. ARCHITECTURAL FIBERGLASS COMPOSITION SHINGLE ROOFING
46. PREFINISHED STANDING-SEAM METAL ROOFING
47. VINYL LOUVER VENT
48. PREFINISHED ALUMINUM OGEE GUTTER WITH MATCHING DOWNSPOUTS
49. EXTERIOR LIGHT TYPE L-1 (SEE A.35)
50. EXTERIOR LIGHT TYPE L-2 (SEE A.35)
51. EXTERIOR LIGHT TYPE L-3 (SEE A.35)
52. EXTERIOR LIGHT TYPE L-4 (SEE A.35)
53. EXTERIOR LIGHT TYPE L-5 (SEE A.35)
54. EXTERIOR LIGHT TYPE L-6 (SEE A.35)
55. BARN ROOF VENT & WEATHERVANE (SEE A.34)



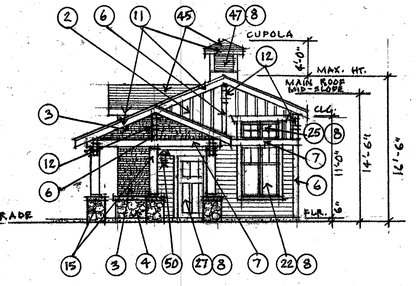
6 CLUBHOUSE CH NORTH ELEV.
1/8"=1'-0"



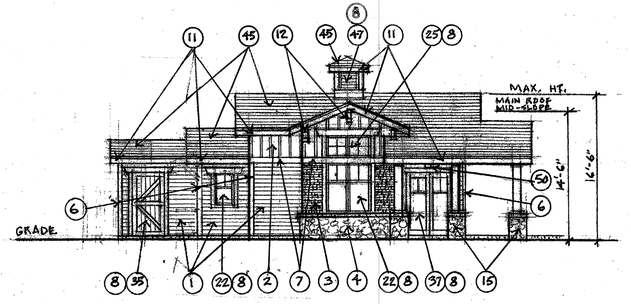
2 CLUBHOUSE CH ROOF PLAN
1/8"=1'-0"



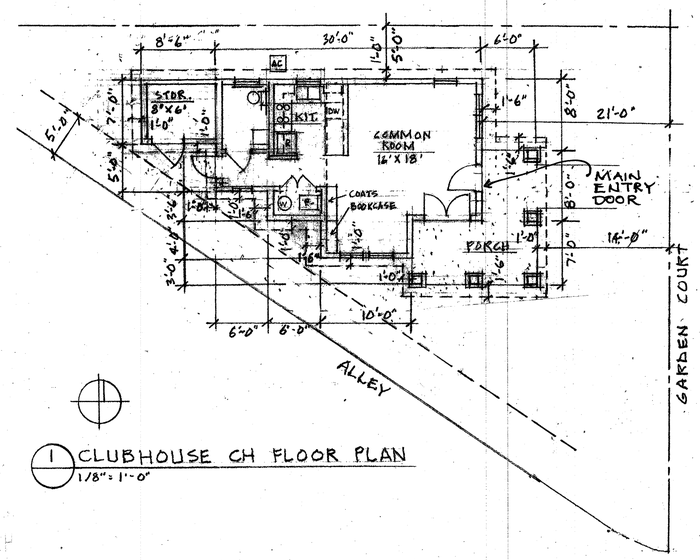
5 CLUBHOUSE CH WEST ELEV.
1/8"=1'-0"



4 CLUBHOUSE CH EAST ELEV.
1/8"=1'-0"



3 CLUBHOUSE CH SOUTH ELEV.
1/8"=1'-0"



1 CLUBHOUSE CH FLOOR PLAN
1/8"=1'-0"

CLUBHOUSE- CH PLANS & ELEVATIONS
CRAFTSMAN STYLE

MAIN STREET, ERIE, CO.

SHEET A. 31

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	GS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JeHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
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MAIN STREET SUBDIVISION

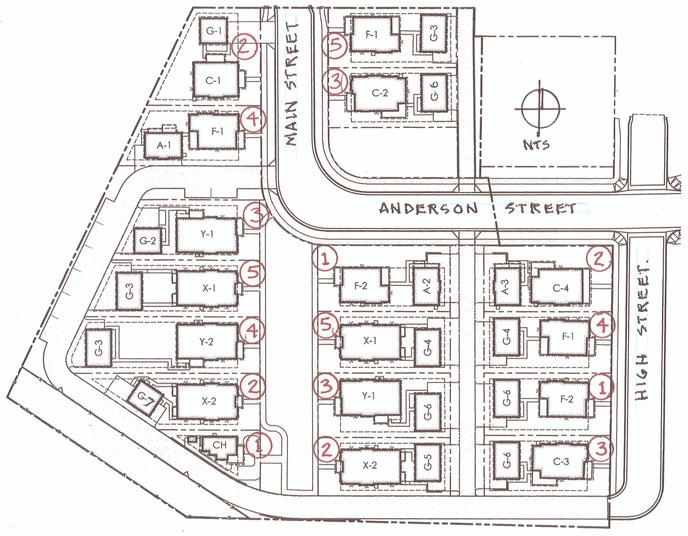
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

COLOR SCHEMES	SIDING (S-1)	SIDING (S-2)	TRIM (T)	RAILING (R)	WINDOW SASH (W)	DOOR (D-1)	DOOR (D-2)	ROOFING (RF-1)	ROOFING (RF-2)	MASONRY (M)
1	PPU 18-13	PPU4-01	PPU4-09	TAN	BRICK RED	Hemlock Green	Almond	WEATHERED WOOD		COGNAC
2	PPU 4-14 Renoir Bisque PPU4-14	PPU 8-25	PR-W14 PR-W14 Bit of Sugar	WHITE	POPLAR WHITE	Colonial Red	Almond	WEATHERED WOOD		BARLEY
3	PPU 5-10 Happy Ending PPU5-10	S138-5	PPU 18-09 Burnished Clay PPU18-09	GRAY	POPLAR WHITE	Forest Green	Parchment	HICKORY		DARK BUFF
4	N460-3 N460-3 Lunar Surface 1	PPU 26-15 Halation PPU26-15	PR-W15 ULTRA PURE WHITE	WHITE	BRICK RED	Hemlock Green	Almond	HICKORY	Sierra Tan	
5	PPU 4-18 Porcelain Skin PPU4-18	PPU5-09 Bleached Linen PPU5-09	PPU 26-09 Graycloth PPU26-09	GRAY	WHITE	Colonial Red	Parchment	SLATE	Hemlock Green	

COLOR AND MATERIAL NOTES

1. COLORS SHOWN ON EXTERIOR COLOR SCHEMES MATRIX ARE APPROXIMATE AND MAY BE SOMEWHAT DIFFERENT FROM TRUE COLORS DUE TO SCANNING AND PRINTING.
2. COLOR SCHEMES AS INDICATED ON BUILDING COLOR SCHEME MAP WILL BE SAME FOR PRIMARY BUILDINGS AND ALL RELATED ACCESSORY BUILDINGS- ACCESSORY DWELLING UNITS AND GARAGES.
3. MATERIALS AND FINISHES ARE BASED ON MANUFACTURERS AS LISTED BELOW. PRODUCTS AND COLORS BY OTHER MANUFACTURERS, EQUAL TO THESE, MAY BE USED.
4. PAINT COLORS S-1 AND S-2 FOR SIDING AND TRIM AS NOTED ARE BY BEHR PAINTS.
5. RAILINGS ARE FACTORY-BUILT VINYL, USING STANDARD AVAILABLE INTEGRAL COLORS (R) AS NOTED.
6. VINYL WINDOW UNITS ARE BY PELLA, USING THEIR STANDARD INTEGRAL COLORS (W) AS NOTED.
7. DOORS ARE PRE-FINISHED STEEL DOORS USING STANDARD BERRIDGE KYNAR PAINT COLORS (D-1 AND D-2) AS NOTED.
8. SHINGLE ROOFING (RF-1) IS GAF TIMBERLINE USING THEIR STANDARD COLORS AND PATTERNS AS NOTED.
9. METAL ROOFING IS BERRIDGE PRE-FINISHED USING THEIR STANDARD COLORS (RF-2) AS NOTED.
10. SYNTHETIC STONE COLORS AND PATTERNS (M) ARE BY ELDORADO STONE.
11. BRICK VENEER (M) IS STANDARD FACE BRICK BY SUMMIT BRICK COMPANY.
12. S-1 PAINT COLORS ARE USED ON STANDARD LAP SIDING AS REFERENCED ON ELEVATION SHEETS. EXCEPTION: AT DUPLEX RESIDENCES MODEL X-1, LAP SIDING ABOVE HORIZONTAL BELLY BAND WILL HAVE S-2 PAINT COLORS RELATED TO RESPECTIVE COLOR SCHEMES.
13. S-2 PAINT COLORS ARE USED ON WOOD SHAKE AND BOARD AND BATTEN SIDING AS REFERENCED ON ELEVATION SHEETS.
14. SAME TRIM PAINT COLOR (T) WILL BE USED ON ALL HORIZONTAL AND VERTICAL TRIM, WINDOW, LOUVER AND DOOR TRIM, ROOF FASCIAS AND SOFFITS, DECK AND PORCH FASCIAS, PORCH COLUMNS, EXTERIOR STAIR STRINGERS, ROOF EAVE BRACKETS AND ROOF GABLE-END DECORATIVE TRUSSES, ON EACH BUILDING. EXCEPTION: CORNER BOARDS AT LAP SIDING WILL MATCH ADJACENT SIDING COLOR.



BUILDING COLOR SCHEMES MAP

EXTERIOR COLOR SCHEMES

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	6/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	CS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

MAIN STREET, ERIE, CO.

SHEET A. 32

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

CHUCK SANDERS
ARCHITECT
2055 Kohler Drive, Boulder, Colorado 80305
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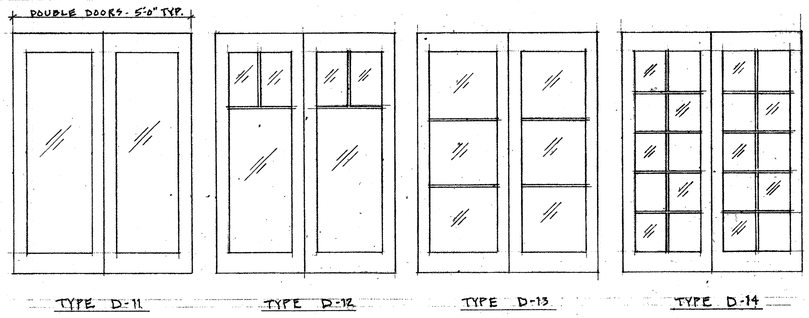
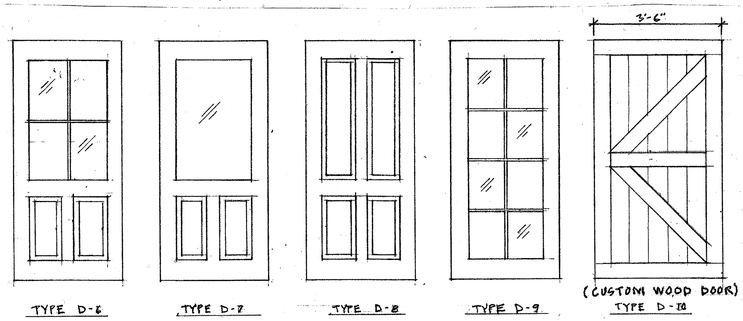
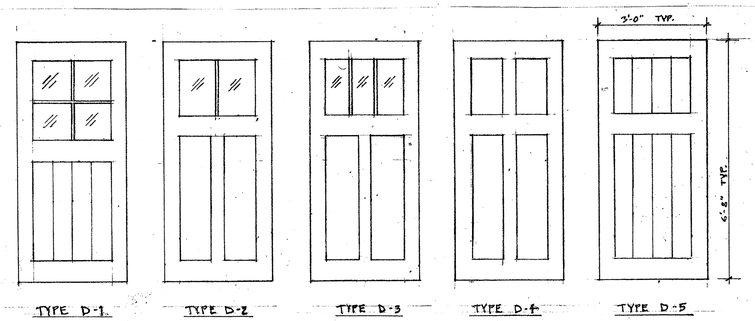
sandersfleming@msn.com

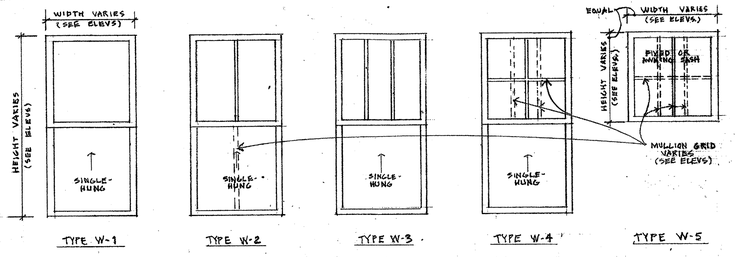






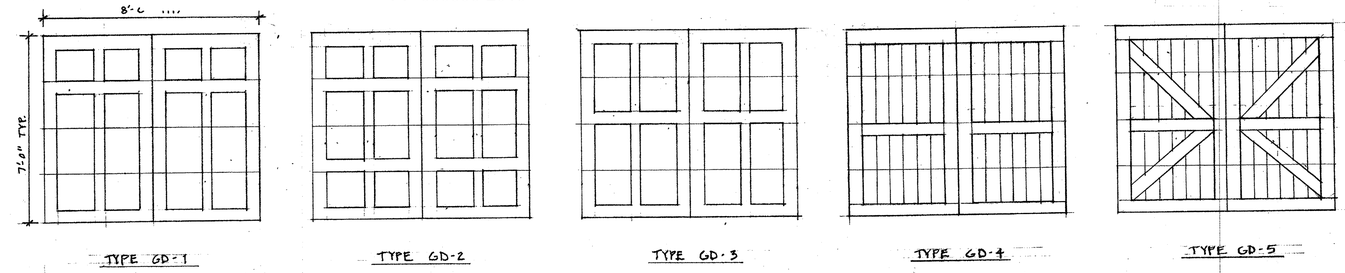
NOTE: ALL DOORS ARE PREFINISHED INSULATED STEEL WITH SIMULATED DIVIDED LITE MULLIONS & LOW E INSULATED GLASS AS SHOWN (EXCEPT AS NOTED)

6 EXTERIOR DOOR TYPE ELEVATIONS
1/2"= 1'-0"

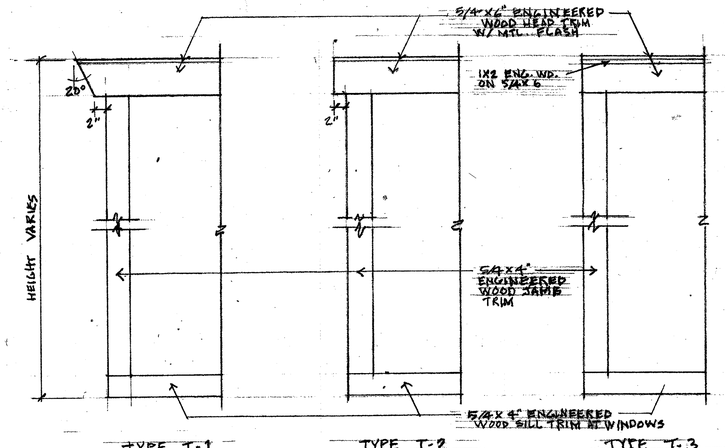


NOTE: ALL WINDOW UNITS ARE VINYL FRAMES & SIMULATED DIVIDED LITE MULLIONS (GRIDS AS SHOWN) WITH LOW E INSULATED GLASS

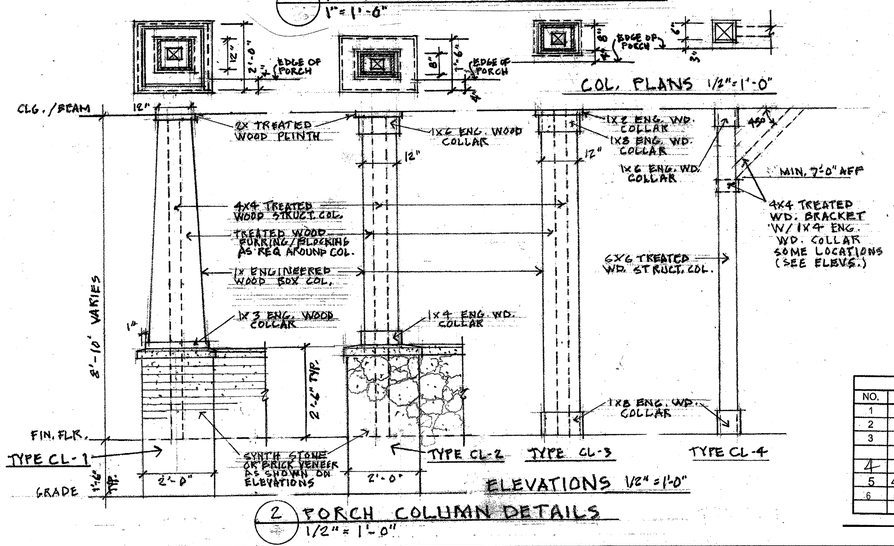
5 WINDOW TYPE ELEVATIONS
1/2" = 1'-0"



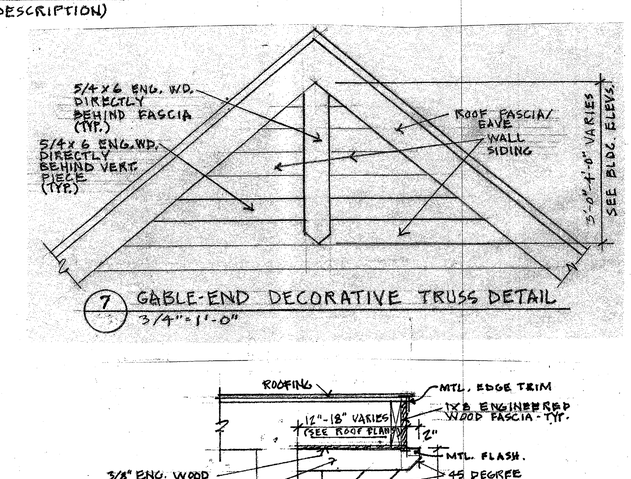
4 GARAGE DOOR TYPE ELEVATIONS
3/8" = 1'-0" (NOTE: SEE 5 / SHT. 47 FOR DESCRIPTION)



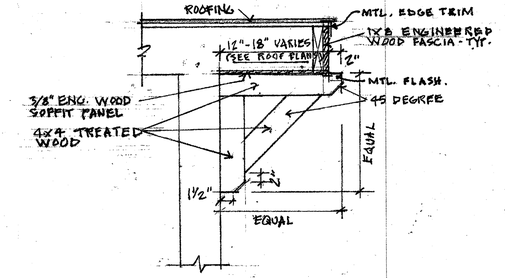
3 WINDOW & DOOR TRIM DETAILS
1"= 1'-0"



2 PORCH COLUMN DETAILS
1/2" = 1'-0"



7 GABLE-END DECORATIVE TRUSS DETAIL
3/4"=1'-0"



1 EAVE / SOFFIT & BRACKET (WHERE SHOWN ON ELEVATIONS) DETAIL
1"=1'-0"

EXTERIOR ARCHITECTURAL DETAILS

MAIN STREET, ERIE, CO.

SHEET A. 33

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	PER COMPLETENESS CHECK	2/9/2017	MFB
2	PER CITY COMMENTS	8/6/2017	MCB
3	2nd SUBMITTAL	10/25/2017	GS
4	3rd SUBMITTAL	5/1/2018	SBP
5	4TH SUBMITTAL	11/2/18	SBP
6	5TH SUBMITTAL	1/29/19	SBP

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-9438

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
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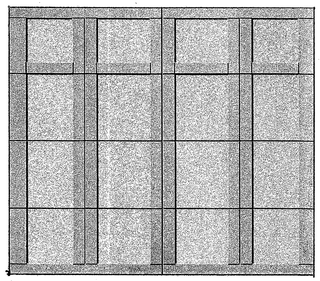


Carriage House Style Garage Doors

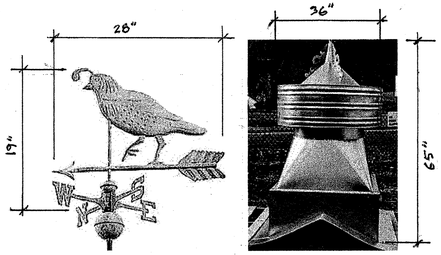
OVERHEAD DOOR

Courtyard Collection®

Our Courtyard garage doors are made with an insulated steel construction and fashioned to resemble the elegant wood designs of traditional carriage house doors. They have the beauty of wood, the durability of steel and a classic design

NOTE: SEE GARAGE DOOR TYPE ELEVATIONS 4/46

5 GARAGE DOORS
NTS



4 BARN VENT / WEATHERVANE HOLDER & WEATHERVANE
NTS GALVANIZED STEEL

Multiple Sizes

Portfolio Dovray H
Oil-Rubbed Bronze
Dark Sky Outdoor

TYPE L-1

Multiple Options

Progress Lighting
Wish Dark Sky
Outdoor Wall Light

TYPE L-2

CRAFTSMAN STYLE

Forte Lighting 1873-01
Craftsman / Mission 1 Light Outdoor V
Sconce from the Dark Sky Collection

TYPE L-3

Belleair Bluffs 1
Outdoor Barn Light
Galvanized Finish
Dark Sky Certified

TYPE L-4

Hinkley Lighting 2250
9.75" Height 1 Light Dark Sky Lantern
Wall Sconce from the New Castle Coll

TYPE L-5

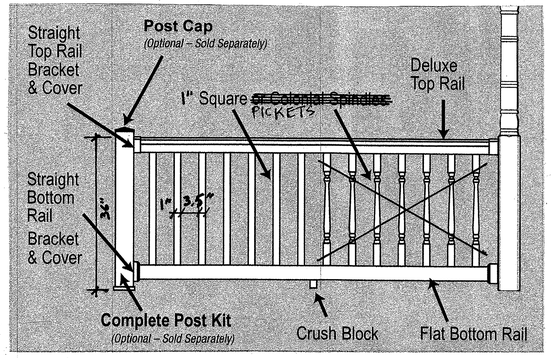
FARMHOUSE STYLE

Portfolio 13-in H Rust
Dark Sky LED
Outdoor Wall Light

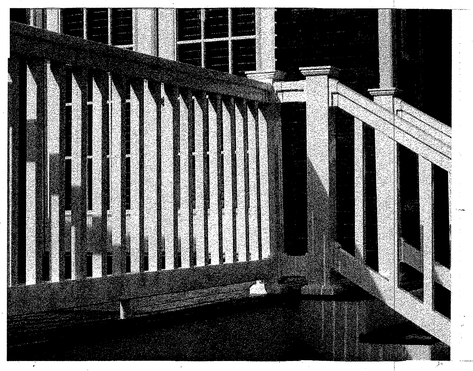
TYPE L-6

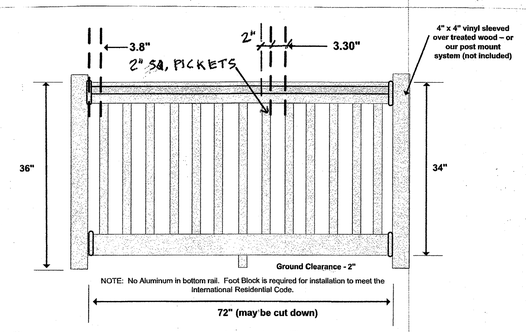
NOTE: ALL FIXTURES ARE DARK SKY CERTIFIED.
LED LAMPS ARE CUT-OFF SHIELDED AT TOP OF FIXTURES.

3 EXTERIOR LIGHT FIXTURE TYPES
NTS * SEE NEXT SHEET FOR FIXTURE SPECIFICATIONS



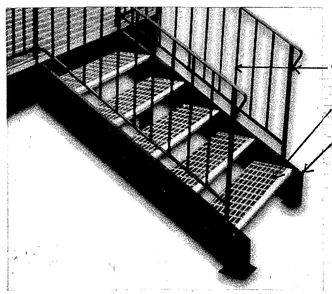
TYPE R-1
(1" SQUARE PICKETS - FARMHOUSE)





TYPE R-2
(2" SQUARE PICKETS - CRAFTSMAN)

1 EXTERIOR VINYL RAILINGS
NTS



2 EXTERIOR STEEL STAIRS
NTS

EXTERIOR ARCHITECTURAL DETAILS & PHOTOS

MAIN STREET, ERIE, CO.

SHEET A. 34

CHUCK SANDERS
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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS / 7 TRACTS
PP-000836-2016

LIGHT FIXTURE TYPE L-6

Specifications

Collection Name	N/A	**Wattage Equivalent**	
Type	Outdoor lantern	**Lumens (Lumens)**	
Size	Medium (6-9 inches)	**Glass Color**	
Package Quantity	1	**Glass Style**	
Bulb Type	LED	**Style**	
Number of Bulbs Required	1	**Theme**	
Bulb(s) Included	✓	**Dark Sky**	
Recommended Light Bulb Shape	LED	**Motion Activated**	
Light Bulb Base Type	LED	**Hardware Included**	
Power Source	Hardwired	**Weather Resistant**	
Material	Die-cast aluminum	**Weatherproof**	
Fixture Height (Inches)	13	**Weight (lbs.)**	
Fixture Width (Inches)	6.13	**UL Safety Listing**	
Fixture Depth (Inches)	7	**CSA Safety Listing**	

LIGHT FIXTURE TYPE L-5

HINKLEY & FR.

HINKLEY LIGHTING, INC.
33000 PIN OAK PARKWAY | AVON LAKE, OHIO 44012
(PH) 440.653.5500 (F) 440.653.5555
HINKLEY-LIGHTING.COM | FREDRICKRAMOND.COM

NEW CASTLE 2250BK	
BLACK	
WIDTH:	7.0"
HEIGHT:	9.8"
WEIGHT:	2.0 LBS
MATERIAL:	ALUMINUM
GLASS:	CLEAR SEEDY
BACKPLATE WIDTH:	4.5"
BACKPLATE HEIGHT:	6.8"
SOCKET:	1-35W GU-10 *INCLUDED
DARK SKY:	YES
EXTENSION:	8.0"
TTO:	5.8"
CERTIFICATION:	C-US WET RATED
VOLTAGE:	120V
UPC:	640665225006

LIGHT FIXTURE TYPE L-4

Belleair Bluffs 1-Light Outdoor Barn Light

Specifications

Features	
Lighting Type	Outdoor Barn Light
Dry, Damp or Wet Location Listed	Wet
Number of Lights	1
Replaceable Bulb Included	No
Bulb Type	LED; Compact Fluorescent (CFL); Incandescent
Bulb Base	E26/Medium (Standard); E27/Medium
Wattage	100 Watts
Dimmable	Yes (LED Dimmable)
Fixture Material	Steel
Power Source	Hardwired
Shade Material	Metal
Country of Manufacture	China
Control Switch Technology	In-line switch
Voltage	120 Volts
Light Direction	Down
Mounting	Wall
Durability	Chip Resistant; Fade Resistant; Mildew Resistant; Rust Resistant; UV Resistant; Warp Resistant; Weather Resistant
Product Care	Wipe with clean cloth
Assembly	
Installation Required	Yes
Warranty	
Product Warranty	1 Year
Specifications	
Commercial ONLY Certifications	Yes
Energy Policy Act 1992 Compliant	Yes
ISO 14001 Certified	Yes
ISO 14000 Certified	Yes
ISO 9001 Certified	Yes
ISO 9000 Certified	Yes
Commercial OR Residential Certifications	Yes
Dark Sky Compliant	Yes
Energy Star Compliant	Yes
ADA Compliant	Yes
UL 2108 Listed	Yes
UL Listed	Yes
ETL Listed	Yes

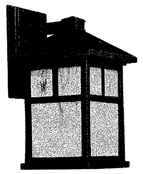
LIGHT FIXTURE TYPE L-3

FORTE LIGHTING

Order Desk
Call: (800) 966 - 8000 • (909) 823 - 7890
Fax: (800) 999 - 8500 • (909) 356 - 5678
Visit our web site at www.fortelighting.com

Product Specification

1873-01-28DS



One-light die cast aluminum outdoor wall lamp in Painted Rust finish with Honey Glass Panels

Dimensions:
8W x 14H x 9E

Bulbs:
1- Medium Base A-19 (Edison)
100 watt max ,120v, Not included

Material List:
Die Cast Aluminum Body in Painted Rust Finish
Honey Glass Panels

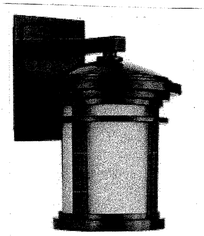
Safety Listing:
UL Listed for Damp Location
CUL Listed for Damp location

LIGHT FIXTURE TYPE L-2

P6084-20
Wish

Small wall lantern with etched umber linen glass. Includes dark sky shield for full cut-off illumination or remove for a traditional lighting effect.

Category: Outdoor
Finish: Antique Bronze (powdercoat)
Construction: Aluminum construction
Glass: Etched Umber Linen glass cylindrical diffuser



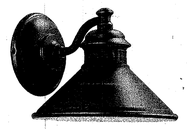
Width: 7"
Height: 10-1/2"
Depth: 8-5/8"
H/CTR: 3-1/8"

Glass: 4-5/8" dia.
Height: 5-7/8"

MOUNTING	ELECTRICAL	LAMPING	ADDITIONAL INFORMATION
Wall mounted Mounting strap for outlet box included Backplate covers a standard 4" hexagonal recessed outlet box 4-11/16" W, 6-1/4", 1"	Pre-wired 6" of wire supplied 120V	Quantity: 1 75W Medium Base Medium porcelain socket	cCSAus Wet location listed 1 year warranty Companion Chain hung lantern, Post top lantern, Wall lantern fixtures are available

LIGHT FIXTURE TYPE L-1

Portfolio Dovray 8.12-in H Oil-Rubbed Bronze Dark Sky Outdoor Wall Light



Wall lantern.

- Bronze-finished steel fixture is weather-resistant and sturdy
- 60 watt medium base incandescent Bulb required (not included)
- 10.37-in W x 8.12-in H x 12-in D
- 3-year base warranty on the parts and labor gives you peace of mind
- ETL safety listing demonstrates this product has met minimum requirements of widely accepted product safety standards
- Hardware included for easy setup
- Lantern style offers a traditional look
- Dark sky design minimizes upward glare, preventing light pollution
- Ideal for entranceway lighting

Specifications

Collection Name	Dovray	**Wattage Equivalent**	13
Type	Outdoor wall-mount light	**Lumens (Lumens)**	0
Size	Large (larger than 9 inches)	**Glass Color**	No glass
Package Quantity	1	**Glass Style**	No glass
Bulb Type	Incandescent / LED	**Style**	Traditional
Number of Bulbs Required	1	**Theme**	N/A
Bulb(s) Included	×	**Dark Sky**	✓
Recommended Light Bulb Shape	A19	**Motion Activated**	×
Light Bulb Base Type	Medium base (E-26)	**Hardware Included**	✓
Power Source	Hardwired	**Weather Resistant**	✓
Material	Steel	**Weatherproof**	×
Fixture Height (Inches)	8.12	**Weight (lbs.)**	2.09
Fixture Width (Inches)	10.37	**UL Safety Listing**	×
Fixture Depth (Inches)	12	**CSA Safety Listing**	×
Manufacturer Color/Finish	Oil-rubbed bronze	**ETL Safety Listing**	✓
Fixture Color Family	Bronze	**ENERGY STAR Certified**	×
Fixture Finish	Oil-rubbed	**Lowe's Exclusive**	✓
Wattage (Watts)	60	**Warranty**	3-year limited

EXTERIOR LIGHT FIXTURE SPECIFICATIONS

MAIN STREET, ERIE, CO.

SHEET A. 35

CHUCK SANDERS
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MAIN STREET CONSTRUCTION PLANS

LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
CITY OF ERIE, COUNTY OF WELD, STATE OF COLORADO
□.1□ ACRES

JE□N □ENERAL NOTE□□

1. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO TOWN OF ERIE TRAFFIC ENGINEERING DIVISION FOR ACCEPTANCE WITH THE PUBLIC IMPROVEMENTS PERMIT APPLICATION. A PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL ON EXISTING ROADS DURING CONSTRUCTION.
2. ALL REMOVALS (TREES, FENCES, POST, SIDEWALK, CONCRETE, ETC) AND RUBBISH SHALL BE DISPOSED OF LEGALLY.
3. ADJUST ALL MANHOLES, VALVES ETC. TO FINISH GRADE.
4. IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO RESOLVE CONSTRUCTION PROBLEMS WITH THE CONTRACTOR DUE TO CHANGED CONDITIONS ENCOUNTERED BY THE CONTRACTOR DURING THE PROGRESS OF ANY PORTION OF THE PROPOSED WORK. IF, IN THE OPINION OF THE DESIGN ENGINEER, PROPOSED ALTERATIONS TO THE SIGNED CONSTRUCTION PLANS INVOLVES SIGNIFICANT CHANGES TO THE CHARACTER OF THE WORK, OR TO THE FUTURE CONTIGUOUS PUBLIC OR PRIVATE IMPROVEMENTS, THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR SUBMITTING REVISED PLANS TO THE TOWN OF ERIE FOR REVIEW PRIOR TO ANY FURTHER CONSTRUCTION RELATED TO THAT PORTION OF THE WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. NO CONCRETE SHALL BE PLACED WHERE GROUNDWATER IS VISIBLE OR UNTIL THE GROUNDWATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS. ANY UNSTABLE AREAS, AS A RESULT OF GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE STABILIZED AS AGREED UPON BY THE CONTRACTOR, THE SOILS ENGINEER, TOWN OF ERIE, AND THE DESIGN ENGINEER AT THE TIME OF THEIR OCCURRENCE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ANY EXISTING SIGNS, STRUCTURES, FENCES, ETC., ENCOUNTERED ON THE JOB AND RESTORING THEM TO THEIR ORIGINAL CONDITIONS.
7. THE CONTRACTOR SHALL OBTAIN ALL NEEDED PERMITS.
8. THE CONTRACTOR SHALL COORDINATE ALL REMOVAL AND REPLACEMENT OF FENCES WITH ADJACENT LAND OWNERS.
9. JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS. THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE ANY EXISTING UTILITY RELOCATION IN THE ORIGINAL CONTRACT.

GRADING NOTES:

1. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY PER AASHTO T-99 (STANDARD PROCTOR) AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND REPAIR OF UTILITIES ENCOUNTERED DURING CONSTRUCTION, WHETHER SHOWN ON THESE PLANS OR NOT. CONTRACTOR SHALL CONTACT REPRESENTATIVES OF THE RESPECTIVE UTILITIES AND HAVE ALL UTILITIES FIELD LOCATED PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LOCATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON THE DRAWINGS, TO ASCERTAIN WHETHER ANY STRUCTURES AND UTILITIES MAY EXIST, AND REPAIR AND/OR REPLACE ANY STRUCTURES AND/OR UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR.
3. CONTRACTOR TO GRADE TO A DEPTH BELOW TOPSOIL, LANDSCAPING MULCH (SHREDDED MULCH & ROCK, COBBLE, ETC.) AND RIP-RAP TO ALLOW THE TOP OF MATERIALS TO BE AT THE FINISHED GRADES AS SHOWN. REF: LANDSCAPE PLANS
4. TOPSOIL SHALL BE COMPACTED TO 85% SPD. TOPSOIL WILL NOT BE REQUIRED FOR TEMPORARY SEEDING LOCATIONS.
5. ALL TOPSOIL SHALL BE SALVAGED. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS, WHICH SHALL BE SEEDED AND PLANTED. RUNOFF FROM THE STOCKPILED AREAS SHALL BE CONTROLLED TO PREVENT EROSION.
6. CONTRACTOR SHALL OVER EXCAVATE 3 FEET MINIMUM BENEATH THE PROPOSED BUILDINGS. REPLACEMENT OF ALL MATERIAL BELOW THE PROPOSED BUILDINGS TO BE REVIEWED AND APPROVED BY SOILS ENGINEER PRIOR TO / DURING PLACEMENT. COMPACTION TO BE IN ACCORDANCE WITH SOILS REPORT DESIGN STANDARDS.
7. FINAL PAVEMENT DESIGN TO BE DESIGNED BY SOILS ENGINEER AFTER OVERLOT GRADING HAS BEEN COMPLETED.

□TREET NOTE□□

1. EXISTING ASPHALT PAVEMENT SHALL BE STRAIGHT SAW-CUT OR BLADE-CUT WHEN ADJOINING WITH NEW ASPHALT PAVEMENT. SS-1 TACK COAT SHALL BE APPLIED TO ALL SURFACES.
2. THE CONTRACTOR WILL BE REQUIRED TO REPLACE ANY BROKEN, CRACKED, SETTLED, RAISED ETC. CONCRETE PANS OR CURB.
3. ADJUST ALL MANHOLES, VALVES ETC. TO FINISH GRADE.
4. ALL SLEEVES FOR ELECTRICAL AND IRRIGATION SHALL BE INSTALLED PRIOR TO ANY PAVING OPERATIONS.

LE□AL DE□CRIPTION□

LOTS 1 THROUGH 10, INCLUSIVE, BLOCK 1 AND LOTS 1 THROUGH 5, INCLUSIVE, BLOCK 3, ERIE HEIGHTS AS RECORDED ON MAY 22ND, 1889 AT RECEPTION No. 32997, TOGETHER WITH PART OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF WELD, STATE OF COLORADO. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING ARE BASED ON THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST, 6TH P.M. BEING CONSIDERED TO BEAR SOUTH 89°13'04" EAST, A DISTANCE OF 2543.59 FEET BETWEEN THE FOLLOWING DESCRIBED MONUMENTS;

-SOUTH QUARTER CORNER OF SECTION 18 BEING A 3.25" BRASS CAP USGS MATCHING MONUMENT RECORDS ON FILE;

-SOUTHWEST CORNER OF SECTION 18 BEING A 3.25" BRASS CAP BLM MATCHING MONUMENT RECORDS ON FILE;

COMMENCING AT SAID SOUTHWEST CORNER OF SECTION 18;

THENCE NORTH 34°44'59" EAST, A DISTANCE OF 921.99 FEET TO THE SOUTHEAST CORNER OF SPARKS SUBDIVISION AS RECORDED MAY 11TH, 1971 AT RECEPTION No. 1567605, POINT ALSO BEING ON THE NORTH RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD, AND THE POINT OF BEGINNING;

THENCE NORTH 25°00'20" EAST ALONG THE EAST LINE OF SAID SPARKS SUBDIVISION, A DISTANCE OF 382.10 FEET TO A POINT ON THE SOUTH LINE OF LOT 5, SILVRANT'S ADDITION;

THENCE NORTH 89°28'53" EAST ALONG THE SOUTH LINES OF SAID SILVRANT'S ADDITION AND FLETCHER ADDITION, A DISTANCE OF 249.15 FEET TO THE NORTHWEST CORNER LOT 6, BLOCK 3 OF SAID ERIE HEIGHTS;

THENCE SOUTH 00°20'39" WEST ALONG THE WEST LINE OF LOT 6, BLOCK 3 OF SAID ERIE HEIGHTS, A DISTANCE OF 25.07 FEET TO THE SOUTHWESTERN CORNER OF SAID LOT;

THENCE ALONG THE SOUTHERLY LINE OF SAID LOT NORTH 89°27'05" EAST, A DISTANCE OF 125.04 FEET TO THE SOUTHEASTERLY CORNER THEREOF, BEING ALSO A POINT ON THE WESTERLY RIGHT-OF-WAY OF HIGH STREET;

THENCE ALONG SAID WESTERLY RIGHT-OF-WAY SOUTH 00°16'53" WEST, A DISTANCE OF 124.90 FEET TO THE SOUTHEAST CORNER OF LOT 1, BLOCK 3 OF SAID ERIE HEIGHTS;

THENCE SOUTH 89°26'23" WEST ALONG THE SOUTH LINE OF SAID LOT 1 BEING ALSO THE NORTHERLY RIGHT-OF-WAY OF ANDERSON STREET, A DISTANCE OF 111.00 FEET TO THE SOUTHWEST CORNER OF SAID LOT 1 AND TO A POINT OF A NON-TANGENT CURVE;

THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 3,041.64 FEET, A CENTRAL ANGLE OF 01°08'46", WHOSE CHORD BEARS SOUTH 10°07'54" EAST, A DISTANCE OF 60.85 FEET, FOR AN ARC LENGTH OF 60.85 FEET TO THE NORTHWEST CORNER OF LOT 10, BLOCK 1 OF SAID ERIE HEIGHTS AND THE SOUTHERLY RIGHT-OF-WAY OF SAID ANDERSON STREET;

THENCE NORTH 89°26'23" EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY, A DISTANCE OF 100.00 FEET TO THE NORTHEAST CORNER OF SAID LOT 10, SAID POINT ALSO BEING ON THE WEST RIGHT OF WAY LINE OF HIGH STREET;

THENCE SOUTH 00°16'53" WEST ALONG SAID WEST LINE, A DISTANCE OF 249.40 FEET TO THE SOUTHEAST CORNER LOT 1, BLOCK 1 OF SAID ERIE HEIGHTS;

THENCE NORTH 89°12'03" WEST, A DISTANCE OF 373.85 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF UNION PACIFIC RAILROAD;

THENCE NORTH 56°48'17" WEST ALONG SAID NORTH LINE, A DISTANCE OF 190.72 FEET TO THE POINT OF BEGINNING.

CONTAINING 196,761 SQUARE FEET OR 4.517 ACRES, MORE OR LESS.

TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO.

BASIS OF BEARING:

ALL BEARINGS CONTAINED HEREIN ARE BASED UPON THE ASSUMPTION THAT THE CENTER LINE OF THE NORTH HALF OF SOUTHEAST QUARTER OF SECTION 12 BEARS N00°09'10"E BETWEEN THE FOUND MONUMENTS SHOWN AND DESCRIBED HEREON.

□ENC□MAR□□

DESCRIBED BY NATIONAL GEODETIC SURVEY 1985 (MCG). THE STATION IS LOCATED ABOUT 12.9 KM (8.0 MI) SOUTHEAST OF NIWOT, 10.5 KM (6.5 MI) NORTHEAST OF LOUISVILLE AND 0.8 KM (0.5) SOUTHEAST OF ERIE.

AZIMUTH MARK NO. 1 IS A STANDARD USGS DISK STAMPED "JR 53 5026 1948", SET INTO THE TOP OF A CONCRETE MONUMENT 15 CM (6 IN) ON A SIDE PROJECTING 5 CM (2 IN) ABOVE THE GROUND.

LE□END□

	EXISTING	PROPOSED
RIGHT-OF-WAY/ BOUNDARY		
LOT LINE		
SANITARY SEWER	8" SAN	8" SAN
WATER LINE	8" WAT	8" WAT
WATER SERVICE		W/S
SANITARY SERVICE		S/S
GAS UTILITY LINE	G	
EASEMENT LINE		
MAJOR CONTOUR LINE	5036	5036
MINOR CONTOUR LINE	5036	5036
CURB & GUTTER		
SECTION LINE		
FENCE		
FENCE (CHAIN LINK)		
SANITARY SEWER MH		
WATER MH		
TELEPHONE MH		
WATER VALVE		
FIRE HYDRANT		
RAILROAD TRACKS		
PROPOSED WALK		
PROPOSED CONCRETE		
PROPOSED ASPHALT		
PROPOSED LANDSCAPE		
PROPOSED PERMEABLE PAVERS		
PROPOSED GRAVEL		
PROPOSED GRASSCRETE		
REMOVE EXISTING ASPHALT AND REPLACE		
ROCK MULCH		

ABBREVIATIONS

ADU	-ACCESSORY DWELLING UNIT	LS	-LANDSCAPE
BW	-BOTTOM OF WALL	MH	-MANHOLE
CL	-CENTER LINE	PC	-POINT OF CURVATURE
CONC	-CONCRETE	PT	-POINT OF TANGENCY
DIA	-DIAMETER	PSCO	-PUBLIC SERVICE COMPANY
ELEC	-ELECTRIC	PVC	-POLYVINYL CHLORIDE PIPE
EOA	-EDGE OF ASPHALT	RCP	-REINFORCED CONCRETE PIPE
EQ	-EQUAL	SAN	-SANITARY
ESMT	-EASEMENT	SQ. FT.	-SQUARE FOOTAGE
EXIST	-EXISTING	STM	-STORM
FF	-FINISHED FLOOR	TC	-TOP OF CURB
FG	-FINISHED GRADE	TG	-TOP OF GRATE
FH	-FIRE HYDRANT	TW	-TOP OF WALL
FL	-FLOW LINE	TYP.	-TYPICAL
G	-GAS	WAT	-WATER
GB	-GRADE BREAK	U.&D.E	-UTILITY AND DRAINAGE EASEMENT
HP	-HIGH POINT	U.E.	-UTILITY EASEMENT
LF	-LINEAL FEET	UTIL	-UTILITY

LI□T O□ CONTACT□□

O□NER□DEVELOPER
OLD TOWN LIVING, LLC.
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PHONE: 303-419-8337

CO□NTY
WELD COUNTY
1150 O. STREET
GREELEY, CO. 80631

□IL□EN□INEER
TERRACON
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WHEAT RIDGE, CO 80033
PHONE: (303) 423-3300

□TILITIE□

WATER
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ERIE, CO. 80516

GAS AND ELECTRIC
XCEL ENERGY OF COLORADO
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PHONE: (303) 534-6700

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DENVER, CO 80201
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SANITARY SEWER
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ERIE, CO. 80516

MOUNTAIN VIEW FIRE RESCUE
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LONGMONT, CO 80504

CABLE TV
COMCAST CABLE
8000 E. ILIFF AVE.
DENVER, CO 80231
PHONE: (303) 353-9526

CIVIL EN□INEER
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ARVADA CO, 80002
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ATTN: ARNOLD H. NIEMEYER, P.E.

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ARC□ITECT
CHUCK SANDERS
2055 KOHLER DRIVE
BOULDER, CO 80305
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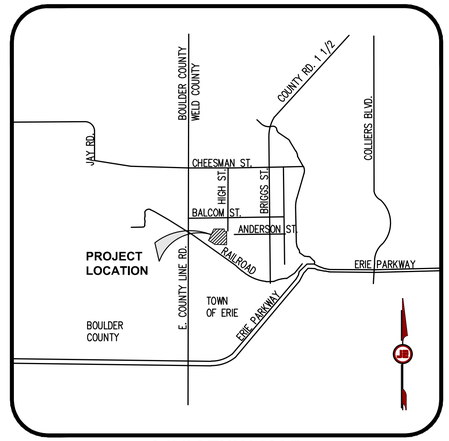

LOCATION MAP

SCALE: 1"=2000'

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APPROVAL□□

ALL WORK SHALL BE CONSTRUCTED TO TOWN OF ERIE STANDARDS AND SPECIFICATIONS. THIS DRAWING HAS BEEN REVIEWED AND FOUND TO BE IN GENERAL COMPLIANCE WITH THESE STANDARDS AND SPECIFICATIONS AND OTHER TOWN REQUIREMENTS.
THE ENGINEERING DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE APPEAR HEREON.

ACCEPTED BY: _____ TOWN ENGINEER _____ DATE

PREPARED UNDER THE SUPERVISION OF: FOR AND ON BEHALF OF JEHN ENGINEERING

_____ ARNOLD H. NIEMEYER, P.E. NO. 22281 _____ DATE

□□TI□□ □OTIFICATIO□ LETTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATIO□
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

RE□ISE OF DOC□ME□T
THE IDEAS & DESIGN INCORPORATED HEREON, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JEHN ENGINEERING & IS NOT TO BE USED FOR ANY PURPOSE WITHOUT WRITTEN AUTHORIZATION OF JEHN ENGINEERING.

REVISIO□S

NO.	DESCRIPTIO□	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRE□M□AR□

JEHN ENGINEERING
5690 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-6438

MAIN STREET
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COVER SHEET

prepared for
O□D TOW□ □V□□, □□C

DRAWN BY: MC□
DESIGNED BY: MC□
DRAWING NAME: 6038-CVR.dwg
APPROVED BY:

JOB NUMBER: 06□9-2□6-038
DATE: □29□20□9
SCALE: □A
SHEET NO: 0□ OF 43

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TO□ N O□ ERIE □ENERAL CON□TR□CTION NOTE□

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST "STANDARDS AND SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS" BY THE TOWN OF ERIE. COPIES OF THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS MAY BE OBTAINED FROM THE TOWN OF ERIE WEB SITE. CONTRACTOR SHALL HAVE A SET ON SITE AT ALL TIMES.

2. THE OWNER SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE TOWN OF ERIE ENGINEERING STAFF AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THOSE IN ATTENDANCE SHALL INCLUDE THE OWNER, HIS ENGINEER, THE TOWN OF ERIE ENGINEERING STAFF, REPRESENTATIVES OF THE CONTRACTORS AND OTHER AFFECTED AGENCIES. PLANS SIGNED AND ACCEPTED BY THE TOWN OF ERIE WILL BE DISTRIBUTED AT THE PRE-CONSTRUCTION MEETING. CONTRACTOR SHALL HAVE (1) COPY OF THE SIGNED PLANS ON SITE AT ALL TIMES.

3. THE TOWN OF ERIE, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT. THE OWNER AND DESIGN ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT. REPORT ALL DISCREPANCIES TO THE DESIGN ENGINEER IMMEDIATELY.

4. PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL OBTAIN ANY/ALL WRITTEN AGREEMENTS FOR INGRESS AND EGRESS TO THE WORK SITE FROM ADJACENT PRIVATE PROPERTY OWNERS. A COPY OF ALL AGREEMENTS SHALL BE PROVIDED TO THE TOWN. ACCESS TO ANY ADJACENT PRIVATE PROPERTY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

5. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF ERIE ENGINEERING STAFF. THE TOWN RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO TOWN STANDARDS AND SPECIFICATIONS. INSPECTIONS AND ONSITE VISITS ARE NOT TO BE CONSTRUED AS A GUARANTEE BY THE TOWN ENGINEERING STAFF OF THE CONTRACTORS' CONTRACTUAL COMMITMENT. REQUESTS FOR INSPECTION BY THE TOWN OF ERIE SHALL BE MADE BY THE CONTRACTOR A MINIMUM OF TWENTY FOUR (24) HOURS IN ADVANCE.

6. CONSTRUCTION WATER IS AVAILABLE TO THE CONTRACTOR AS ESTABLISHED IN THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE TOWN OF ERIE REGARDING CURRENT REGULATIONS, FEES AND REQUIRED AGREEMENTS RELATED TO THE PROVISION OF CONSTRUCTION WATER.

7. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH THE AFFECTED UTILITY COMPANIES AND SHALL NOTIFY THE UTILITY NOTIFICATION CENTER, PHONE NUMBER 811, FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.

8. UTILITIES IN THE AREA OF CONSTRUCTION ARE APPROXIMATE ONLY. THEY HAVE BEEN LOCATED FROM FIELD INVESTIGATION AND THE BEST AVAILABLE UTILITY RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL CONTACT ALL RESPECTIVE UTILITIES AND HAVE ALL UTILITIES FIELD-LOCATED PRIOR TO CONSTRUCTION. IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, IT SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE TOWN OF ERIE ENGINEERING STAFF AND DESIGN ENGINEER PRIOR TO PROCEEDING.

9. THE CONTRACTOR SHALL NOTIFY TOWN OF ERIE ENGINEERING STAFF OF ANY PROBLEM IMPACTING WATER AND WASTE WATER FACILITIES THAT WOULD POTENTIALLY REQUIRE A VARIANCE FROM THE APPROVED PLANS AND SPECIFICATIONS. ANY VARIANCE FROM THE APPROVED DOCUMENTS SHALL BE AT THE SOLE DISCRETION OF THE TOWN OF ERIE ENGINEERING STAFF.

10. CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE SPECIFICATIONS AND PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.

11. AS-BUILT DRAWINGS AND A CD INCLUDING AUTOCAD AND PDF FILES, AS REQUIRED IN THE SPECIFICATIONS, ARE TO BE SUBMITTED BY THE OWNER/DEVELOPER PRIOR TO SUBSTANTIAL COMPLETION/CONSTRUCTION ACCEPTANCE OF THE CONSTRUCTION.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ANY EXISTING SIGNS, STRUCTURES, FENCES, ETC., ENCOUNTERED ON THE JOB AND RESTORING THEM TO THEIR ORIGINAL CONDITION.

13. THE CONTRACTOR IS RESPONSIBLE FOR: A. NOTIFYING THE TOWN OF ERIE UTILITY CUSTOMERS OF POTENTIAL SERVICE OUTAGES, AND COORDINATE WITH THE TOWN OF ERIE FOR DETERMINATION OF MINIMUM TIME REQUIREMENT. B. NOTIFYING THE TOWN OF ERIE ENGINEERING STAFF IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ERIE FORTY-EIGHT (48) HOURS PRIOR TO RESTART. C. IN THE EVENT OF AN AFTER HOURS EMERGENCY, CALL 303-441-4444. D. NOTIFYING THE MOUNTAIN VIEW FIRE PROTECTION DISTRICT OF ALL STREET CLOSURES AND EXISTING FIRE HYDRANTS TAKEN OUT OF SERVICE A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.

14. PRIOR TO INSTALLATION OF UTILITY MAINS, ROAD CONSTRUCTION MUST HAVE PROGRESSED TO AT LEAST THE "SUB-GRADE" STAGE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. A CONSTRUCTION DEWATERING PERMIT MUST BE OBTAINED FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE). GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS OR EROSION OF ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. THE USE OF ANY SANITARY SEWER TO DISPOSE OF TRENCH WATER WILL NOT BE PERMITTED. NO CONCRETE SHALL BE PLACED WHERE GROUNDWATER IS VISIBLE OR UNTIL THE GROUNDWATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS. ANY UNSTABLE AREAS, AS A RESULT OF GROUNDWATER, ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE STABILIZED AS AGREED UPON BY THE CONTRACTOR, THE TOWN OF ERIE, AND THE DESIGN ENGINEER AT THE TIME OF THE OCCURRENCE

16. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO RESOLVE CONSTRUCTION PROBLEMS WITH THE TOWN OF ERIE DUE TO CHANGED CONDITIONS ENCOUNTERED BY THE CONTRACTOR DURING THE PROGRESS OF ANY PORTION OF THE PROPOSED WORK. IF, IN THE OPINION OF THE TOWN OF ERIE, PROPOSED ALTERATIONS TO THE SIGNED CONSTRUCTION PLANS INVOLVES SIGNIFICANT CHANGES TO THE CHARACTER OF THE WORK, OR TO THE FUTURE CONTIGUOUS PUBLIC OR PRIVATE IMPROVEMENTS, THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR SUBMITTING REVISED PLANS TO THE TOWN OF ERIE FOR REVIEW, PRIOR TO ANY FURTHER CONSTRUCTION RELATED TO THAT PORTION OF THE WORK.

17. DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND IS NOT LIMITED TO NORMAL WORKING HOURS. THE TOWN OF ERIE OR THE DESIGN ENGINEER EXERCISE NO CONTROLS OVER THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS, SCAFFOLDING, FORMS OR OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR IN THE SUPERINTENDING OF THE SAME. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE DESIGN ENGINEER OR THE TOWN. THE TOWN OF ERIE ENGINEERING STAFF, OR ANY CONTRACTED ENGINEER, ARE NOT RESPONSIBLE FOR SAFETY IN, ON OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATIONS RELATING THERETO. 18. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.

19. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING A STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES FOR ANY PROJECT DISTURBING OVER ONE ACRE FROM BOTH THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND THE TOWN OF ERIE.

20. EACH TYPE OF CONSTRUCTION SHALL BE COMPLETED BY A CONTRACTOR THAT HAS DEMONSTRATED ACCEPTABLE QUALIFICATIONS TO THE TOWN AND IS A LICENSED CONTRACTOR IN THE TOWN OF ERIE.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL DURING CONSTRUCTION. ALL TRAFFIC CONTROLS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) LATEST EDITION. A PLAN SHALL BE SUBMITTED TO THE TOWN FOR REVIEW AND APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING.

22. ALL BACKFILL SHALL CONFORM TO THE TRENCH DETAIL LOCATED IN THE TOWN OF ERIE STANDARDS & SPECIFICATIONS.

23. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY CONSTRUCTION DEBRIS OR MUD TRACKED ONTO EXISTING ROADWAYS.

24. THE CONTRACTOR SHALL REPAIR ANY EXCAVATION OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION.

25. THE CONTRACTOR SHALL RENEW OR REPLACE ANY EXISTING TRAFFIC STRIPING AND/OR PAVEMENT MARKINGS, WHICH HAVE BEEN EITHER REMOVED OR THE EFFECTIVENESS OF WHICH HAS BEEN REDUCED DURING HIS OPERATION. RENEWAL OF PAVEMENT STRIPING AND MARKING SHALL BE DONE IN CONFORMANCE WITH THE TOWN OF ERIE STANDARD SPECIFICATIONS.

26. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE EVERY MEASURE NECESSARY TO COMPLY WITH ANY STATE, COUNTY OR TOWN DUST CONTROL ORDINANCE.

27. CONSTRUCTION VEHICLES SHALL USE TRUCK ROUTES DESIGNATED BY THE TOWN.

28. THE OWNER/DEVELOPER WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE IMPROVEMENTS FOR A MINIMUM OF TWO (2) YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION/ CONSTRUCTION ACCEPTANCE OF THE IMPROVEMENTS BY THE TOWN OF ERIE. ANY FAILURE DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE OWNER/CONTRACTOR TO THE SATISFACTION OF THE TOWN OF ERIE AT NO EXPENSE TO THE TOWN.

29. THE DESIGN ENGINEER SHALL PERFORM SUFFICIENT INSPECTIONS AND SURVEYS DURING GRADING AND CONSTRUCTION SO THAT AN OPINION CAN BE RENDERED AND VERIFIED IN WRITING AS TO COMPLIANCE WITH THE PLANS AND CODES WITHIN THE DESIGN ENGINEER'S PURVIEW.

30. THE SOILS ENGINEER SHALL PERFORM SUFFICIENT INSPECTIONS DURING GRADING AND CONSTRUCTION SO THAT AN OPINION CAN BE RENDERED AND VERIFIED IN WRITING AS TO COMPLIANCE WITH THE PLANS AND CODES WITHIN THE SOILS ENGINEER'S PURVIEW.

TO□ N O□ ERIE □ENERAL ROAD□ AY NOTE□

1. ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL PREPARE THE SUBGRADE BY SCARIFYING THE UPPER ONE (1) FOOT OF THE SUBGRADE IN CUT AREAS OR AREAS WITH LITTLE OR NO FILL, UNLESS SPECIFIED IN THE SOILS REPORT. THE WORK SHALL CONFORM TO THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

3. PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN INSTALLED, TESTED AND ACCEPTED BY THE TOWN OF ERIE ENGINEERING STAFF.

4. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO SUPERVISE AND CERTIFY THAT PROPER COMPACTION HAS BEEN OBTAINED BY SUBCONTRACTORS AND AGENCIES CONCERNING UTILITY LINE BACKFILL INCLUDING, BUT NOT LIMITED TO, SEWER, WATER, ELECTRICAL, GAS AND LANDSCAPE IRRIGATION LINES AND ACCEPTED BY THE TOWN OF ERIE ENGINEERING STAFF AND THE SOILS ENGINEER.

5. STREET PAVING SHALL NOT START UNTIL:
   a. A SOILS REPORT AND PAVEMENT DESIGN IS ACCEPTED BY THE TOWN OF ERIE ENGINEERING STAFF.
   b. ALL STREETS ARE COMPACTED IN ACCORDANCE WITH THE SOILS REPORT AND THE TOWN OF ERIE SPECIFICATIONS.
   c. ALL COMPACTION TEST REPORTS HAVE BEEN SUBMITTED TO THE TOWN ENGINEERING STAFF PRIOR TO PROOF ROLLS.
   d. PROOF ROLLS ARE PERFORMED USING SINGLE AXLE, FIVE (5) TON TRUCK AND MONITORED BY THE TOWN OF ERIE ENGINEERING STAFF.

6. THE OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL UTILITY MANHOLE COVERS AND ACCESS LIDS TO GRADE.

7. ALL CONCRETE SHALL BE A MINIMUM OF CLASS B, IN CONFORMANCE WITH CDOT STANDARDS.

8. ALL CONCRETE EDGES MUST BE ROUNDED TO A FOURTH (1/4) INCH RADIUS, EXCEPT WHERE SHOWN OTHERWISE ON DRAWINGS.

9. ONE HALF (1/2) INCH EXPANSION JOINTS SHALL BE INSTALLED AT ALL CURB RETURNS, CURB CUTS AND EXISTING STRUCTURES. CONTROL JOINTS SHALL BE INSTALLED AT TEN (10) FOOT INTERVALS, HALF STONES ARE NOT ALLOWED.

10. BEFORE PLACING OF ASPHALT THE SUBGRADE SHALL RECEIVE A GROUND STERILANT APPLIED AT A RATE IN ACCORDANCE TO MANUFACTURERS RECOMMENDATIONS.

11. TACK COAT SHALL BE USED PRIOR TO OVERLAY, (CSS-1H), 50:50 DILUTION, 0.10 GAL/SY. ALL EDGES ABUTTING NEW PAVEMENT SHALL BE TACKED.

12. WHEN IT IS REQUIRED TO MATCH EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO AFFECT A SMOOTH, VERTICAL STRAIGHT CUT EDGE.

13. ALL SAWCUT EDGES OF EXISTING PAVEMENT SHALL BE CLEAN AND COATED WITH TACK COAT PRIOR TO PLACING NEW PAVEMENT ADJACENT TO THE EXISTING PAVEMENT.

14. ALL ASPHALT SHALL BE ONE FOURTH (1/4) INCH ABOVE CONCRETE EDGES, MANHOLE COVERS AND ACCESS LIDS.

15. SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE COLORADO DEPARTMENT OF TRANSPORTATION M&S STANDARDS, AND THE TOWN OF ERIE STANDARD DESIGN CRITERIA AND STANDARD CONSTRUCTION REQUIREMENTS.

16. THE PURCHASE AND INSTALLATION OF STREET NAME SIGNS SHALL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR. THE OWNER/CONTRACTOR SHALL SECURE THE APPROVAL OF THE TOWN OF ERIE ENGINEERING STAFF FOR TYPE AND LOCATION OF THE STREET NAME SIGNS PRIOR TO INSTALLATION.

17. ALL NEW ROADWAY SECTIONS SHALL HAVE SUBGRADE PREPARATION AND INITIAL ASPHALT PAVEMENT PLACED WITH A 1% CROWN. FINAL OVERLAY IS TO BE PLACED WITH A 2% CROWN. SEE DETAIL ST7 IN THE "STANDARD DETAILS-STREET" FOR MORE INFORMATION.

18. DETERMINATION OF CROWN FOR CUL DE SAC PAVING SHALL BE EVALUATED ON A CASE BY CASE BASIS

TO□ N O□ ERIE □ENERAL □ ATER NOTE□

1. AT ALL POINTS OF CONNECTION OF NEW WATER MAINS TO EXISTING MAINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING AND VERIFYING LOCATION OF THE EXISTING LINES PRIOR TO ANY CONSTRUCTION.

2. EXCEPT IN CASE OF AN EMERGENCY, VALVES ON THE TOWN OF ERIE WATER SYSTEM SHALL BE OPERATED BY OR UNDER THE DIRECTION OF THE APPROPRIATE TOWN OF ERIE PERSONNEL. THE CONTRACTOR SHALL GIVE THE TOWN OF ERIE ENGINEERING STAFF 48 HOURS NOTICE TO ARRANGE FOR OPERATING VALVES. BOTH THE CONTRACTOR AND THE APPROPRIATE TOWN OF ERIE PERSONNEL SHALL BE PRESENT WHEN THE VALVES ARE OPERATED.

3. WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET. WHEN A TEN (10) FOOT SEPARATION IS NOT PROVIDED OR WHEN SEWER LINES CROSS WATER LINES WITH LESS THAN ONE AND ONE-HALF (1½) FEET OF VERTICAL SEPARATION, SEWER LINE JOINTS SHALL BE CONCRETE ENCASED. FOR PERPENDICULAR CROSSINGS, ENCASED JOINTS SHALL EXTEND TEN (10) FEET, PERPENDICULAR TO THE WATER LINE IN BOTH DIRECTIONS.

4. ALL WATER LINES SHALL HAVE A MINIMUM OF FOUR AND ONE-HALF (4½) FEET OF COVER AND BE LOCATED A MINIMUM OF TEN (10) FEET FROM THE SANITARY SEWER AND THREE (3) FEET FROM THE EDGE OF CONCRETE CURB AND GUTTER PAN.

5. ANY DEFLECTION REQUIRED UNDER (VERTICALLY) OR AROUND (HORIZONTALLY) EXISTING UTILITIES SHALL BE MADE USING BENDS. HORIZONTAL BENDS SHALL REQUIRE THRUST BLOCKS AND VERTICAL BENDS SHALL REQUIRE HARNESS RODS. ANY ABRUPT CHANGE IN LINE OR GRADE SHALL REQUIRE FITTINGS.

6. WHEN IT IS NECESSARY TO DEPRESS WATER LINES AT UTILITY CROSSINGS, A MINIMUM CLEARANCE OF ONE AND ONE-HALF (1-1/2) FEET SHALL BE MAINTAINED BETWEEN OUTSIDES OF PIPE.

7. DEFLECTION OF PIPE SHALL CONFORM TO AMERICAN WATER WORKS ASSOCIATION (AWWA) AND/OR EIGHTY (80%) PERCENT OF MANUFACTURERS RECOMMENDED MAXIMUM DEFLECTION, WHICH EVER IS MORE STRINGENT. A COPY OF THE MANUFACTURES RECOMMENDATIONS SHALL BE SUBMITTED TO THE TOWN.

8. DISTANCES FOR WATER LINES ARE THE HORIZONTAL DISTANCE BETWEEN THE CENTERS OF THE FITTINGS. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND FITTING DIMENSIONS.

9. ALL WATER LINE VALVES SHALL BE SET ADJACENT TO THE TEE, EXCEPT FOR POINTS THAT FALL IN THE FLOW LINE OF A CONCRETE CROSS PAN. IN WHICH CASE THE VALVE SHALL BE LOCATED SO THAT SURFACE DRAINAGE DOES NOT INFILTRATE THE VALVE BOX. VALVE BOXES SHALL BE SET AT AN ELEVATION IN ACCORDANCE WITH TOWN PAVING REQUIREMENTS.

10. ALL WATER MAINS SHALL BE POLYVINYL CHLORIDE (PVC) PRESSURE PIPE UNLESS SPECIFIED OTHERWISE. NOMINAL PVC PIPE SIZES 6-INCH THROUGH 12-INCH SHALL CONFORM TO ALL REQUIREMENTS OF AWWA STANDARD C-900, PRESSURE CLASS 150 (DR18). NOMINAL PVC PIPE SIZES 16-INCH THROUGH 24-INCH SHALL CONFORM TO ALL REQUIREMENTS OF AWWA STANDARD C-905, PRESSURE CLASS 165 (DR25). ALL PVC PIPES SHALL HAVE OUTSIDE DIAMETERS EQUIVALENT TO CAST IRON PIPE.

11. FIRE HYDRANT ASSEMBLY INCLUDES THE FIRE HYDRANT, SIX (6) INCH VALVE, AND SIX (6) INCH PIPE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS.

12. ALL FITTINGS SHALL BE MADE FROM DUCTILE IRON, FURNISHED WITH MECHANICAL JOINT ENDS OR INTEGRAL RESTRAINED JOINTS, AND SHALL HAVE A PRESSURE RATING OF 350 PSI.

13. POLYETHYLENE WRAPPING SHALL BE INSTALLED AROUND ALL DUCTILE IRON PIPES, FITTINGS, VALVES, FIRE HYDRANT BARRELS AND ROD AND CLAMPS. THE POLYETHYLENE SHALL HAVE A MINIMUM THICKNESS OF EIGHT (8) MILS, IN ACCORDANCE WITH AWWA STANDARD C-105.

14. ALL WATER LINE PIPE SHALL BE PROVIDED WITH A MINIMUM GAGE SIZE OF #14 AWG INSULATED; MULTI-STRAND COPPER WIRE. SPLICES IN TRACER WIRE SHALL BE CAPPED IN WATER PROOF GEL CAP TYPE CONNECTORS SUITED FOR DIRECT BURY APPLICATION (3M TYPE DBY-6 LOW VOLTAGE OR EQUAL). WIRE SHALL BE ATTACHED TO TOP OF WATER LINE WITH 2-INCH WIDE PVC TAPE @ 5-FT INTERVALS ALONG PIPE. TRACER WIRE SHALL EXTEND TO THE SURFACE AND BE COILED IN A LOCATE BOX AT THE BACKSIDE OF EITHER EACH FIRE HYDRANT OR VALVE. UNDER THE SUPERVISION OF TOWN OF ERIE ENGINEERING STAFF, TEST SHALL BE MADE BY THE CONTRACTOR @ THE COMPLETION OF CONSTRUCTION TO INSURE THAT THE TRACER WIRES CARRY A CONTINUOUS CURRENT BETWEEN ALL ACCESS POINTS.

15. WARNING TAPE SHALL BE INSTALLED 12" MINIMUM AND 18" MAXIMUM ABOVE WATER PIPE.

16. BEDDING MATERIAL SHALL CONFORM TO TOWN OF ERIE STANDARDS AND SPECIFICATIONS.

17. VALVES SHALL OPEN COUNTER CLOCKWISE. VALVES 12-INCH AND SMALLER SHALL BE RESILIENT SEAT GATE VALVES. LARGER VALVES SHALL BE BUTTERFLY VALVES.

18. VALVE BOXES SHALL BE RAISED TO ONE-FOURTH (1/4) INCH BELOW GRADE AFTER COMPLETION OF SURFACE PAVING OR FINAL GRADING. VALVE BOXES IN NON-PAVED AREAS SHALL HAVE A CONCRETE COLLAR AROUND THE VALVE LID IN ACCORDANCE WITH THE DETAIL.

19. ALL SERVICE LINE TAPS SHALL HAVE DOUBLE STRAP BRASS TAPPING SADDLES. (ROMAC 202B OR APPROVED EQUAL).

20. ALL RESIDENTIAL WATER TAPS SHALL BE THREE-QUARTER (3/4) INCH OR AS REQUIRED BY THE CURRENT BUILDING CODE.

21. ALL WATER SERVICE LATERALS SHALL EXTEND FIVE (5) FEET BEYOND RIGHT OF WAY OR UTILITY EASEMENTS, WHICHEVER IS GREATER. THE ENDS SHALL BE MARKED BY A BLUE PAINTED WOOD POST UNTIL CURB AND GUTTER IS IN PLACE. WHEN CURB AND GUTTER IS IN PLACE THE LATERALS SHALL BE MARKED ON THE CONCRETE CURB FACE WITH A "V" OR "W".

TO□ N O□ ERIE □ENERAL □ ATER NOTE□ □CONT□

22. CONCRETE THRUST BLOCKS AND/OR "MEGA-LUG" MECHANICAL RESTRAINTS ARE REQUIRED AT ALL MECHANICAL FITTINGS. THRUST BLOCKS MAY NOT BE REQUIRED IF PIPE RESTRAINT IS PROVIDED IN ACCORDANCE WITH RESTRAINED PIPE DETAIL.

23. NO WORK SHALL BE BACKFILLED (INCLUDING BEDDING MATERIAL ABOVE THE SPRING LINE OF THE PIPE) UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE TOWN OF ERIE ENGINEERING STAFF.

24. ONLY ONE CONNECTION TO THE EXISTING WATER DISTRIBUTION SYSTEM SHALL BE MADE UNTIL ALL HYDROSTATIC TESTING, CHLORINATION AND FLUSHING HAS BEEN COMPLETED.

25. DISINFECTION AND HYDROSTATIC TESTING SHALL BE DONE IN THE PRESENCE OF A TOWN OF ERIE ENGINEERING STAFF. CONTACT THE TOWN OF ERIE DEPARTMENT OF PUBLIC WORKS, FORTY-EIGHT (48) HOURS PRIOR TO DISINFECTING AND/OR TESTING.

26. DISINFECTION AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE COLORADO DEPARTMENT OF HEALTH AND THE PROCEDURE SET FORTH IN AWWA C651, "STANDARD FOR DISINFECTING WATER MAINS". THE CHLORINATION OF THE WATER LINE SHALL BE PERFORMED PRIOR TO THE HYDROSTATIC TESTING. ALL VALVES, FIRE HYDRANTS AND OTHER APPURTANCES SHALL BE OPERATED WHILE PIPELINE IS FILLED WITH THE CHLORINATING AGENT TO INSURE THAT HIGH CHLORINE CONTACT IS MADE WITH ALL INTERNAL SURFACES.

27. ALL WATER LINES SHALL BE HYDROSTATIC TESTED. PRESSURE AND LEAKAGE TESTS SHALL BE CONDUCTED ACCORDING TO THE APPLICABLE SECTIONS OF AWWA C600/605 TO A MINIMUM PRESSURE OF ONE HUNDRED AND FIFTY (150) POUNDS PER SQUARE (PSI) INCH AT THE LOW POINT OF THE SECTION BEING TESTED FOR THE DURATION OF TWO (2) HOURS. THE MAXIMUM LENGTH OF LINE TO BE TESTED SHALL BE ONE THOUSAND (1,000) FEET. ALL JOINTS IN CONNECTIONS ARE TO BE WATERTIGHT WITHIN TOLERANCES ALLOWED BY THE SPECIFICATIONS IN AWWA C600/605. ANY LEAKAGE THAT IS DISCOVERED BY OBSERVATION OR TESTS SHALL BE LOCATED AND MADE WATERTIGHT BY THE CONTRACTOR. PRESSURE AND LEAKAGE TESTS SHALL NOT BE CONDUCTED UNTIL THE LINE HAS PASSED ALL REQUIRED DISINFECTION TESTS.

28. SUBSTANTIAL COMPLETION/CONSTRUCTION ACCEPTANCE OF THE NEW WATER LINES ARE CONTINGENT UPON RECEIVING COPIES OF:
A. WATER TRENCH COMPACTION TEST RESULTS
B. HYDRO STATIC TESTING OF 100% OF THE SYSTEM
C. HEALTH DEPARTMENT TESTS. (CHLORINE AND/OR CLEAR WATER AS REQUIRED)

29. ALL METER PITS AND CURB STOPS SHALL BE PROTECTED AT THE TIME OF INSTALLATION WITH A MINIMUM OF THREE (3) T-POSTS AND ORANGE SAFETY FENCE. THE T-POST AND SAFETY FENCE SHALL REMAIN IN PLACE AND IN GOOD CONDITION UNTIL THE LANDSCAPING IS INSTALLED.

TO□ N O□ ERIE □ENERAL □RADIN□ NOTE□

1. ALL CONSTRUCTION ACTIVITIES THAT DISTURBS ONE OR MORE ACRES OF LAND, AS WELL AS ACTIVITIES THAT DISTURB LESS THAN ONE ACRE OF LAND, BUT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT, MUST COMPLY WITH BOTH LOCAL AND STATE REGULATIONS REGARDING STORMWATER DRAINAGE ON CONSTRUCTION SITES. OWNERS OR CONTRACTORS MUST OBTAIN A COLORADO STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) AND EITHER A PUBLIC IMPROVEMENT PERMIT OR A GRADING AND STORMWATER QUALITY PERMIT FROM THE TOWN OF ERIE. CONTRACTOR SHALL:

   A. MAINTAIN A COPY OF THE STORM WATER MANAGEMENT PLAN (SWMP) ONSITE AT ALL TIMES. THE SWMP MUST BE MAINTAINED AND MADE AVAILABLE TO TOWN OF ERIE INSPECTORS UPON REQUEST.
   B. INSTALL AND MAINTAIN EROSION, SEDIMENT, AND MATERIALS MANAGEMENT CONTROL BMPS AS SPECIFIED IN THE SWMP.
   C. INSPECT ALL BEST MANAGEMENT PRACTICES (BMPS) AT LEAST EVERY FOURTEEN (14) DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY PRECIPITATION OR SNOWMELT EVENT THAT CAUSES SURFACE RUNOFF.
   D. MAINTAIN INSPECTION AND MAINTENANCE RECORDS OF BMPS ONSITE WITH THE SWMP. COPIES OF THESE REPORTS SHALL BE PROVIDED TO THE TOWN OF ERIE ENGINEERING STAFF.
   E. BASED ON INSPECTIONS PERFORMED BY THE PERMIT HOLDER OR BY TOWN PERSONNEL, MODIFICATIONS TO THE SWMP WILL BE NECESSARY IF AT ANY TIME THE SPECIFIED BMPS DO NOT MEET THE OBJECTIVES OF THE PERMIT. ALL MODIFICATIONS SHALL BE COMPLETED AS SOON AS PRACTICABLE AFTER THE REFERENCED INSPECTION, AND SHALL BE RECORDED ON THE OWNER'S COPY OF THE SWMP.
   F. THE OPERATOR SHALL AMEND THE SWMP WHENEVER THERE IS A SIGNIFICANT CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS TO THE RECEIVING WATERS, OR IF THE SWMP PROVES TO BE INEFFECTIVE IN ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
   G. INSTALLATION AND MAINTENANCE OF BMPS SHALL BE SUPERVISED BY PERSONNEL CERTIFIED IN EROSION AND SEDIMENT CONTROL.

2. ALL SITE GRADING (EXCAVATION, EMBANKMENT, AND COMPACTION) SHALL CONFORM TO THE RECOMMENDATIONS OF THE LATEST SOILS INVESTIGATION FOR THI

TOWN OF ERIE GENERAL SEWER NOTES

1. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING SEWERS TO BE CONNECTED TO PRIOR TO CONSTRUCTION STAKING.

2. CONNECTION TO EXISTING TOWN OF ERIE LINES WILL BE PERMITTED UPON SUBSTANTIAL COMPLETION/CONSTRUCTION ACCEPTANCE OF THE NEW SANITARY SEWER SYSTEM. EXISTING PIPE AT THE POINT OF CONNECTION SHALL NOT BE "BROKEN OUT" UNTIL THE NEW SYSTEM IS ACCEPTED. IF CONNECTING TO AN EXISTING MANHOLE, THE NEW LINE SHALL BE PLUGGED UNTIL THE NEW SYSTEM IS ACCEPTED.

3. MINIMUM VERTICAL SEPARATIONS BETWEEN ALL UTILITY PIPES SHALL BE EIGHTEEN (18) INCHES. IF VERTICAL SEPARATIONS ARE LESS THAN EIGHTEEN (18) INCHES, THE UTILITY PIPES SHALL BE REINFORCED AND PROTECTED AS REQUIRED BY CURRENT TOWN STANDARD SPECIFICATIONS.

4. WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET. WHEN A TEN (10) FOOT SEPARATION IS NOT PROVIDED OR WHEN SEWER LINES CROSS WATER LINES WITH LESS THAN ONE AND ONE-HALF (1½) FEET OF VERTICAL SEPARATION, SEWER LINE JOINTS SHALL BE CONCRETE ENCASED. FOR PERPENDICULAR CROSSINGS, ENCASED JOINTS SHALL EXTEND TEN (10) FEET, PERPENDICULAR TO THE WATER LINE IN BOTH DIRECTIONS.

5. ALL SANITARY SEWER SERVICES AND WATER SERVICES ARE TO BE TEN (10) FEET APART.

6. SERVICE LATERALS SHALL EXTEND FIVE (5) FEET BEYOND RIGHTS OF WAY OR UTILITY EASEMENTS, WHICHEVER IS GREATER. THE ENDS SHALL BE MARKED BY A GREEN PAINTED WOOD POST UNTIL CURB AND GUTTER IS IN PLACE. WHEN CURB AND GUTTER IS IN PLACE THE LATERALS SHALL BE MARKED ON THE CONCRETE CURB FACE WITH AN 'S' OR "X".

7. THE LENGTH OF SANITARY SEWER LINE IS THE HORIZONTAL DISTANCE BETWEEN CENTER OF MANHOLE TO CENTER OF MANHOLE. THEREFORE, THE DISTANCES INDICATED ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND MANHOLE DIMENSIONS.

8. SERVICE LINE CONNECTIONS TO DEAD END MANHOLES THAT HAVE NO FURTHER POSSIBILITY OF EXTENSION SHALL BE ALLOWED AND SHALL HAVE A MINIMUM DROP OF 0.75 X MAIN DIAMETER. SERVICE LINE CONNECTINGS TO IN-LINE MANHOLES ARE NOT PERMITTED. MINIMUM SERVICE LINE SLOPE: 4 INCHES=2%; 6 INCHES= 1%; 8 INCHES=0.4%.

9. ALL FOUR (4) THROUGH FIFTEEN (15) INCH SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL BE IN ACCORDANCE WITH ASTM D-3034-SDR35, "STANDARD SPECIFICATION FOR PVC SEWER PIPE AND FITTINGS". ANY SANITARY SEWER HAVING A DEPTH IN EXCESS OF FIFTEEN (15) FEET SHALL BE COORDINATED WITH THE PUBLIC WORKS DEPARTMENT. BEDDING MATERIAL SHALL CONFORM TO TOWN OF ERIE STANDARDS AND SPECIFICATIONS.

10. WARNING TAPE SHALL BE INSTALLED 12" MINIMUM AND 18" MAXIMUM ABOVE SEWER PIPE.

11. PRECAST CONCRETE MANHOLE SECTIONS SHALL BE IN ACCORDANCE WITH ASTM C0478. MANHOLE STEPS SHALL BE POLYPROPYLENE COVERED STEEL CONFORMING TO ASTM. D-4101 AND ASTMA-615. CAST IRON RING AND COVER SHALL CONFORM TO ASTM A-48.

12. MANHOLES SHALL BE A MINIMUM FOUR (4) FOOT DIAMETER AND CONSTRUCTED PER THE STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL TAKE CARE TO PROPERLY SHAPE ALL MANHOLE INVERTS AND BENCHES IN ACCORDANCE WITH THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS, TO PROMOTE SMOOTH FLOW THROUGH THE MANHOLE. INVERTS OF LINES INTERSECTING AT 90 DEGREES AND AT HIGHLY DIVERGENT OR FLAT SLOPES ARE ESPECIALLY CRITICAL. MANHOLE INVERTS SHALL BE CONSTRUCTED WITH A SMOOTH TROWEL FINISH, AND BENCH FINISHED WITH A LIGHT BROOMED, NON-SKID, FINISH.

15. SEWER TEES AND/OR WYES SHALL BE STAKED BY A SURVEY CREW. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES AND WYES. ALL SERVICE LINES ARE FOUR (4) INCH UNLESS OTHERWISE NOTED.

16. THE CONTRACTOR, AT THE OWNER'S EXPENSE, WILL MAKE ALL SEWER SERVICE TAPS.

17. PRIOR TO BACKFILL THE TOWN OF ERIE ENGINEERING STAFF SHALL INSPECT ALL SANITARY SEWER MAINS AND SERVICE EXTENSIONS.

18. MANHOLE RIMS SHALL BE SET AT AN ELEVATION RELATIVE TO THE PAVEMENT, IN ACCORDANCE WITH THE TOWN OF ERIE STANDARDS. WHETHER THE MANHOLE IS AT PAVED OR UNPAVED GRADE, A MINIMUM OF ONE (1) AND A MAXIMUM OF FOUR (4) CONCRETE RINGS SHALL BE USED TO ADJUST THE RIM ELEVATION TO FINAL GRADE. THE MAXIMUM ACCEPTABLE VERTICAL ADJUSTMENT UTILIZING CONCRETE RINGS IS EIGHTEEN (18) INCHES.

19. A SUBSTANTIAL COMPLETION/CONSTRUCTION ACCEPTANCE OF THE NEW SANITARY SEWER MAINS IS CONTINGENT UPON THE RECEIPT OF COPIES OF:
A. SANITARY SEWER TRENCH COMPACTION TEST RESULT, AND
B. RECORD DRAWINGS, BOTH MYLAR AND ELECTRONIC FILES

AND THE SANITARY SEWER SYSTEM BEING TESTED IN ACCORDANCE WITH THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS WHICH INCLUDES:
A. LOW PRESSURE AIR TEST 100% OF THE NEW SYSTEM, AND
B. VACUUM TEST 100% OF THE NEW SYSTEM MANHOLES.
C. JET VACUME 100% OF THE NEW SYSTEM.

TOWN OF ERIE GENERAL STORM DRAIN NOTES

1. EXCEPT WHERE NOTED, ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE, CLASS III AND SHALL CONFORM TO REQUIREMENTS OF ASTM C76. ALL RCP SHALL HAVE RUBBER GASKETED JOINTS AND SHALL CONFORM TO REQUIREMENTS OF ASTM C443, AND SHALL PROVIDE WATERTIGHT PERFORMANCE CHARACTERISTICS.

2. TONGUE AND GROOVE JOINTS SHALL NOT BE ALLOWED.

3. THE MINIMUM COVERAGE FOR ALL STORM DRAINAGE PIPES SHALL BE 1.5 FEET FOR CLASS III PIPE AND 1 FOOT FOR CLASS IV PIPE.

4. BEDDING MATERIAL SHALL CONFORM TO TOWN OF ERIE STANDARDS AND SPECIFICATIONS.

5. ALL MANHOLES SHALL BE CONCRETE AND CONFORM TO CDOT STANDARD M-604-20.

6. THE MINIMUM MANHOLE DIAMETER SHALL BE AS SPECIFIED BELOW:

PIPE DIAMETER	MANHOLE SIZE
15" TO 18"	4' DIAMETER
21" TO 42"	5' DIAMETER
48" TO 54"	6' DIAMETER
60" AND LARGER	BOX BASE MANHOLE

7. ALL STREET INLETS SHALL BE CURB OPENING TYPE R, CONFORMING TO CDOT STANDARD M-604-12, EXCEPT WHERE OTHERWISE NOTED.

8. ALL INLET ACCESS COVERS SHALL HAVE THE WORDS "NO DUMPING – DRAINS TO RIVERS" AND "STORM SEWER" CAST INTO THE COVER PER TOWN OF ERIE STANDARD DETAIL.

9. ALL END SECTIONS SHALL CONFORM TO CDOT STANDARD M-603-10.

10. WHERE RIPRAP IS CALLED FOR ON THE PLANS FOR THE EROSION CONTROL, IT SHALL CONFORM TO THE URBAN STORM DRAINAGE CRITERIA MANUAL SPECIFICATIONS (LATEST REVISION).

NOTIFICATION OF CONSTRUCTION
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

RESERVE STATEMENT
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REVISIONS

NO.	DESCRIPTION:	DATE	BY:
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
9980 WEBSTER STREET
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MAIN STREET
CONSTRUCTION DOCUMENTS
TOWN OF ERIE GENERAL NOTES

prepared for
TOWN OF ERIE, COLORADO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-GEN NTS.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-2019
SCALE: A
SHEET NO: 03 OF 43

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JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

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UTILITY NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

RESPONSE DOCUMENT

THE IDEAS & DESIGN INCORPORATED HEREON, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JEHN ENGINEERING & IS NOT TO BE USED FOR ANY OF JEHN ENGINEERING WITHOUT WRITTEN AUTHORIZATION

NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

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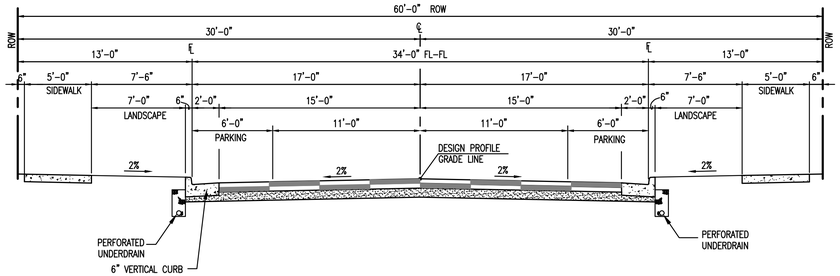
MAIN STREET

CONSTRUCTION DOCUMENTS
DEMOLITION PLAN

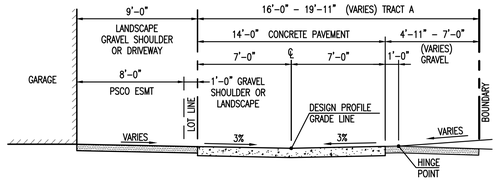
prepared for
OLD TOWN VILLAGE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6035-DEMO.dwg
APPROVED BY:

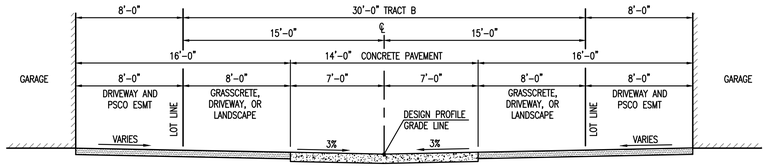
JOB NUMBER: 06-9-216-038
DATE: 1-29-19
SCALE: 1" = 30'
SHEET NO: 04 OF 43



A MAIN STREET, ANDERSON STREET, AND HIGH STREET TYPICAL SECTION
NTS



TRACT "A" AREA TYPICAL SECTION
NTS



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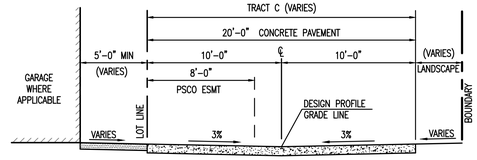

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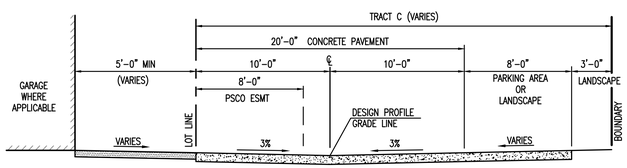
NTS



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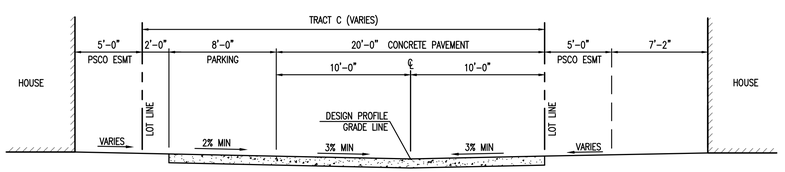

TRACT C AREA TYPICAL SECTION
NTS

NOTES

PAVEMENT SECTIONS DETERMINED FROM GEOTECHNICAL REPORT FOR PROPOSED ERIE APARTMENTS SOUTH OF MAIN STREET, ERIE CO, DATED FEBRUARY 17, 2016.

SUBGRADE SOILS BELOW PAVEMENT SHALL BE SCARIFIED TO A DEPTH OF 12", MOISTURE CONDITIONED AND COMPACTED BACK TO GRADE.

NOTIFICATION OF UTILITIES
The Utility Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
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NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

JEHN ENGINEERING
9590 WEBSTER STREET
ARVADA, CO 80002
PH (303) 423-6036 FAX (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
STREET SECTIONS

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-TYP-RD-XSEC.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-2019
SCALE: A
SHEET NO: 05 OF 43

J:\06\19\216-038\CIVIL\CONSTRUCTION\6038-TYP-RD-XSEC.dwg, 1/30/2019 8:29:58 AM

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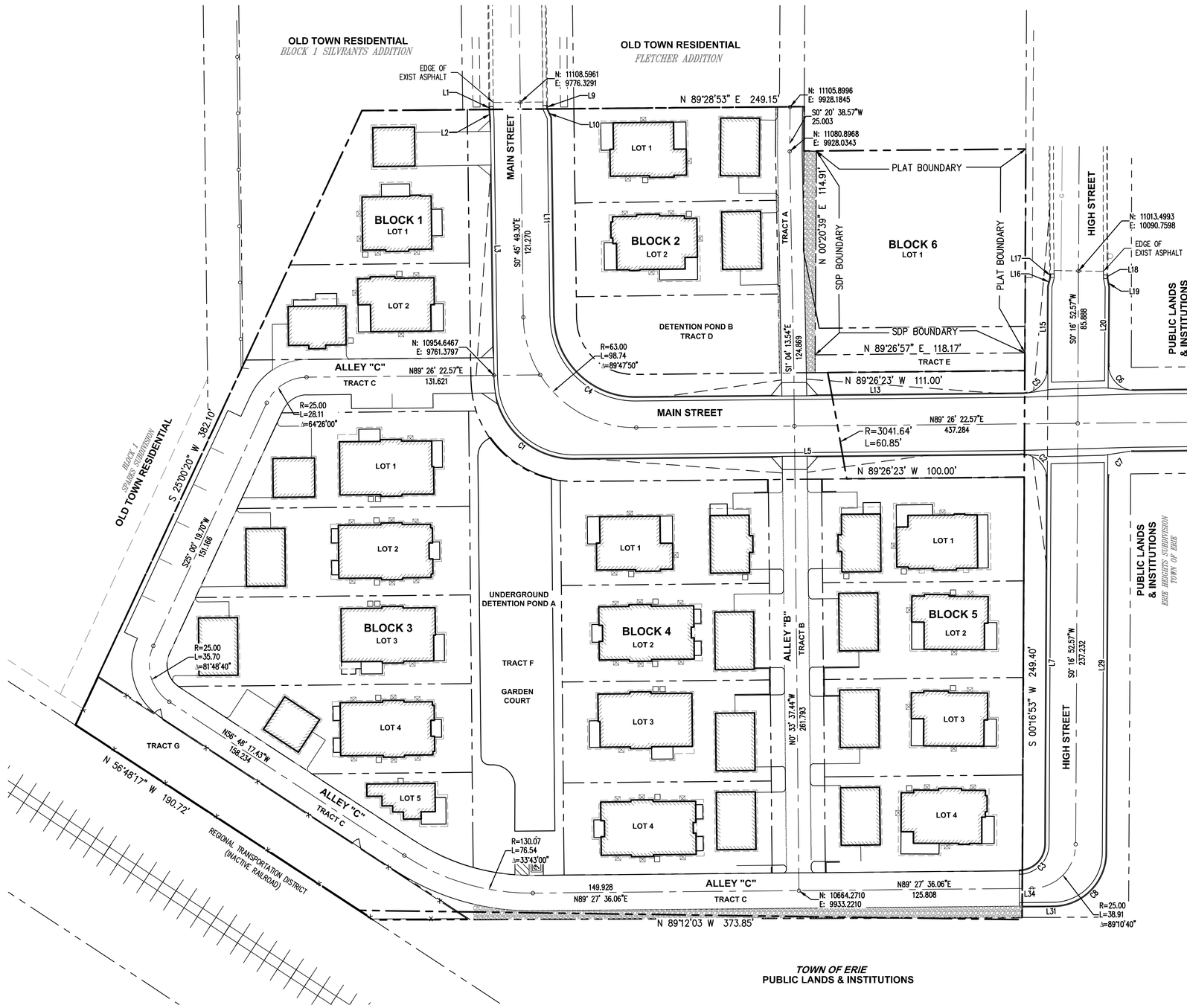

NOTE

1. LINE & CURVE TABLE IS OF FLOWLINE IN STREETS OR EDGE OF CONCRETE IN THE ALLEYS. SEE PLAN FOR CENTERLINE CURVE DATA AND TANGENT LENGTHS.
2. SEE PLAT FOR LOT DIMENSIONS AND EASEMENT LOCATIONS.

LINE TABLE			LINE TABLE			LINE TABLE		
LINE #	LENGTH	BEARING	LINE #	LENGTH	BEARING	LINE #	LENGTH	BEARING
L1	1.67'	S00°28'32.63"E	L15	45.51'	N00°16'52.57"E	L25	11.90'	S89°21'06.16"W
L2	5.01'	S05°02'45.72"E	L16	5.16'	N14°47'34.81"E	L26	20.21'	S87°38'23.21"W
L3	147.20'	N00°45'49.30"W	L17	2.06'	N00°42'39.21"W	L27	123.21'	S89°21'56.09"W
L5	251.17'	N89°26'22.57"E	L18	1.95'	S00°14'03.08"E	L29	211.73'	S00°16'52.57"W
L7	204.86'	S00°16'52.49"W	L19	4.76'	S10°56'55.87"E	L31	2.44'	S89°26'22.57"W
L9	1.89'	S00°43'28.52"E	L20	43.36'	S00°16'52.57"W	L34	5.36'	S89°27'36.06"W
L10	5.50'	S25°29'26.78"E	L22	122.81'	N89°21'56.09"E			
L11	113.32'	S00°45'49.30"E	L23	20.03'	S86°32'35.53"E			
L13	218.23'	N89°26'22.57"E	L24	11.91'	N89°21'06.16"E			

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	70.53'	45.00'	089°47'48.12"	S45°39'43.37"E	63.53'
C2	23.78'	15.00'	090°50'30.00"	S45°08'22.43"E	21.37'
C3	23.34'	15.00'	089°09'30.00"	S44°51'37.57"W	21.06'
C4	70.53'	45.00'	089°47'48.12"	S45°39'43.37"E	63.53'
C5	23.34'	15.00'	089°09'30.00"	N44°51'37.57"E	21.06'
C6	23.80'	15.00'	090°54'56.48"	S45°10'35.67"E	21.38'
C7	23.32'	15.00'	089°05'03.52"	S44°49'24.33"W	21.04'
C8	46.68'	30.00'	089°09'30.00"	S44°51'37.57"W	42.11'

TOWN OF ERIE
PUBLIC LANDS & INSTITUTIONS

J:\06\39-216-038\CIVIL\CONSTRUCTION\6038-HRZ.dwg, 1/30/2019 8:30:04 AM

NOTIFICATION CENTER — The811.Promise.com — FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

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1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6236 FAX: (303) 487-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
HORIZONTAL CONTROL PLAN

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-HRZ.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-19
SCALE: 1" = 30'
SHEET NO: 06 OF 43

JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

SITE TABLE

Block	Lot	Lot Size sq.ft.	Primary dwelling type	Primary dwelling name	Additional structure type	Additional structure name	# of Dwellings	Onsite Parking Spaces	# of Stories
B1	L1	6211.67	Bungalow	B-1	Detached garage	G-2	1	4	1-1/2
	L2	6197.25	Farmhouse	F-1	ADU / garage	A-2	2	4	2
B2	L1	6000.37	Farmhouse	F-2	Detached garage	G-3	1	4	2
	L2	6000.57	Bungalow	B-2	Detached garage	G-3	1	4	1-1/2
B3	L1	6024.48	Stacked duplex	Y-1	Detached garage	G-2s	2	4	2
	L2	6258.20	Side-side duplex	X-1	Detached garage	G-2s	2	4	2
	L3	6873.03	Stacked duplex	Y-2	Detached garage	G-2s	2	4	2
	L4	6139.00	Side-side duplex	X-2	Detached garage	G-2s	2	4	2
	L5	3071.78	Clubhouse				0	0	1
B4	L1	7327.03	Farmhouse	F-2	ADU / garage	A-2	2	4	2
	L2	6388.16	Side-side duplex	X-2	Detached garage	G-4	2	4	2
	L3	6387.37	Stacked duplex	Y-1	Detached garage	G-4	2	4	2
	L4	6387.77	Side-side duplex	X-1	Detached garage	G-4	2	4	2
B5	L1	7392.88	Bungalow	B-1	ADU / garage	A-1	2	4	1-1/2
	L2	6004.60	Farmhouse	F-1	Detached garage	G-3	1	4	2
	L3	6007.70	Farmhouse	F-2	Detached garage	G-3	1	4	2
	L4	6032.03	Bungalow	B-2R	Detached garage	G-3	1	4	1-1/2

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ORIGINAL SCALE: 1"= 30' HORIZ.

NOTES

1. ALL FENCING IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE LANDSCAPING PLANS.
2. PROPOSED MONUMENT SIGN, BY SEPARATE PERMIT.
3. ALL SIGNS ON-SITE SHALL CONFORM TO MUTCD STANDARDS AND SPECIFICATIONS.
4. ADJUST EXISTING MANHOLES, VALVES, ETC. TO FINISHED GRADE.
5. CONTRACTOR SHALL INSTALL 4" SCHEDULE 40 PVC SLEEVES FOR ELECTRICAL, IRRIGATION, SITE LIGHTING, GAS ETC. AS DEEMED NECESSARY PRIOR TO ANY PAVING OPERATIONS. SLEEVES SHALL HAVE 24" MIN COVER. CONTRACTOR SHALL CONFIRM SLEEVE LOCATIONS WITH THE SIGHT LIGHTING PLAN AND IRRIGATION PLANS.
6. ALL CURB RAMPS SHALL BE PER TOWN OF ERIE STANDARDS.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- ROCK MULCH
- CONCRETE WALK
- PROPOSED SIGN
- (A) STREET SECTIONS SEE SHEET 04

TOWN OF ERIE
PUBLIC LANDS & INSTITUTIONS

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NOTIFICATION
FOR MARKING OF UNDERGROUND MEMBER UTILITIES, The811.Promise.com

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1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	1/16/18	AHN
3	4TH SUBMITTAL	10/6/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6068 FAX: (303) 467-5438

MAIN STREET
CONSTRUCTION DOCUMENTS
OVERALL SITE PLAN

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-SITE-PLAN.dwg
APPROVED BY:

JOB NUMBER: 06-19-216-038
DATE: 02-01-2019
SCALE: 1" = 30'
SHEET NO: 07 OF 43

JOHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

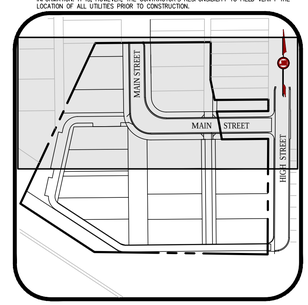
LEGEND

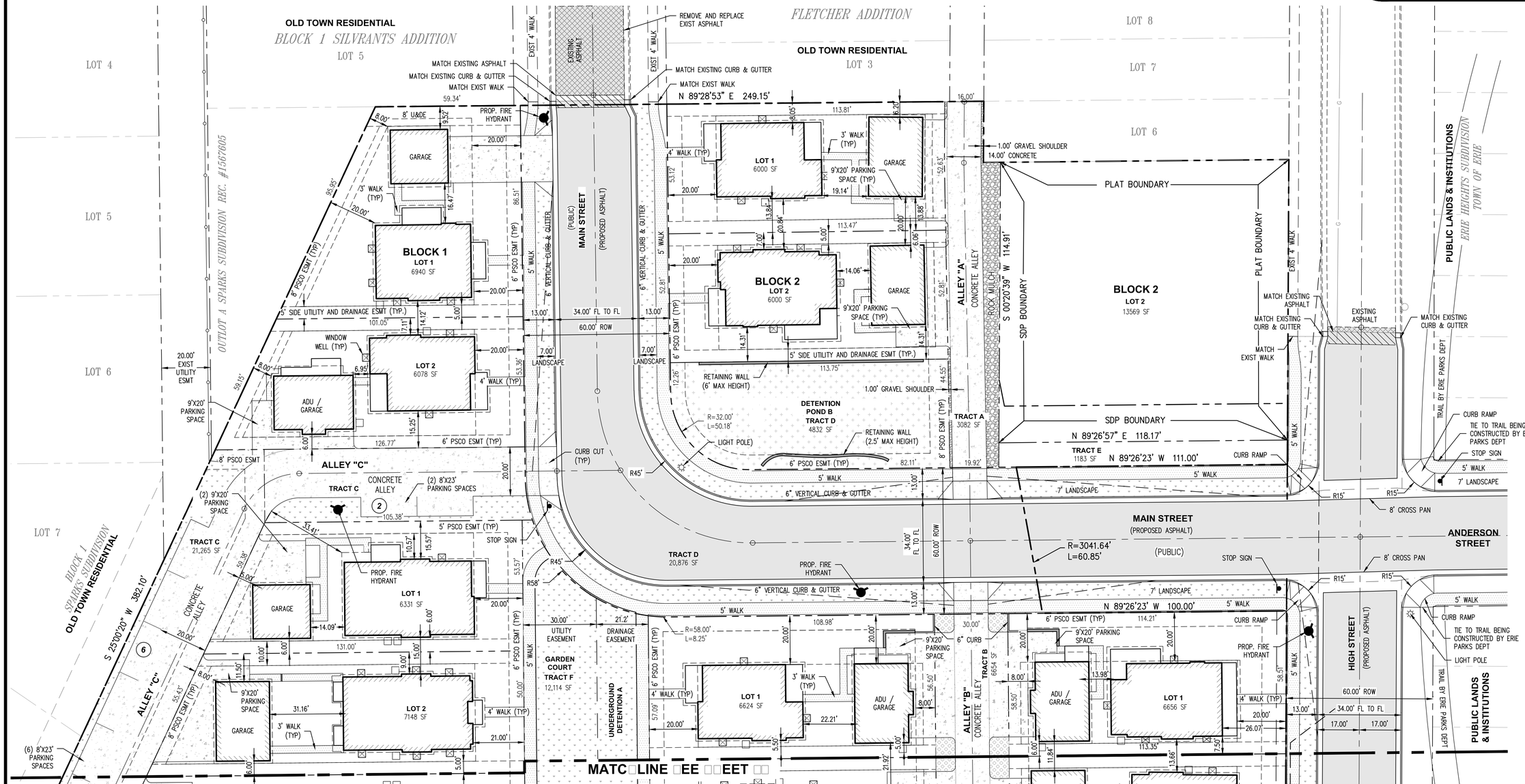
- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- CONCRETE WALK
- PROPOSED SIGN
- (A) STREET SECTIONS SEE SHEET 04

NOTES

1. ALL STREET DIMENSIONS ARE TAKEN FROM FLOWLINE UNLESS STATED OTHERWISE.
2. LINE AND CURVE TABLES FOR PUBLIC STREETS AND ALLEYS ON SHEET 05.

ORIGINAL SCALE: 1"= 20' HORIZ.





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REVISIONS		
NO.	DESCRIPTION:	DATE: BY:
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2	3RD SUBMITTAL	7/16/18 AHN
3	4TH SUBMITTAL	10/6/18 AHN
4	5TH SUBMITTAL	1/29/19 AHN

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PRELIMINARY

JEHN ENGINEERING
9990 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

MAIN STREET

CONSTRUCTION DOCUMENTS
DETAILED SITE PLAN NORTH

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038HC.dwg
APPROVED BY:

JOB NUMBER: 06-19-216-038
DATE: 01-29-2019
SCALE: 1" = 20'
SHEET NO: 08 OF 43

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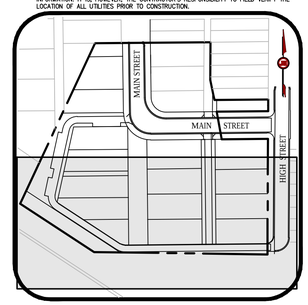
LEGEND

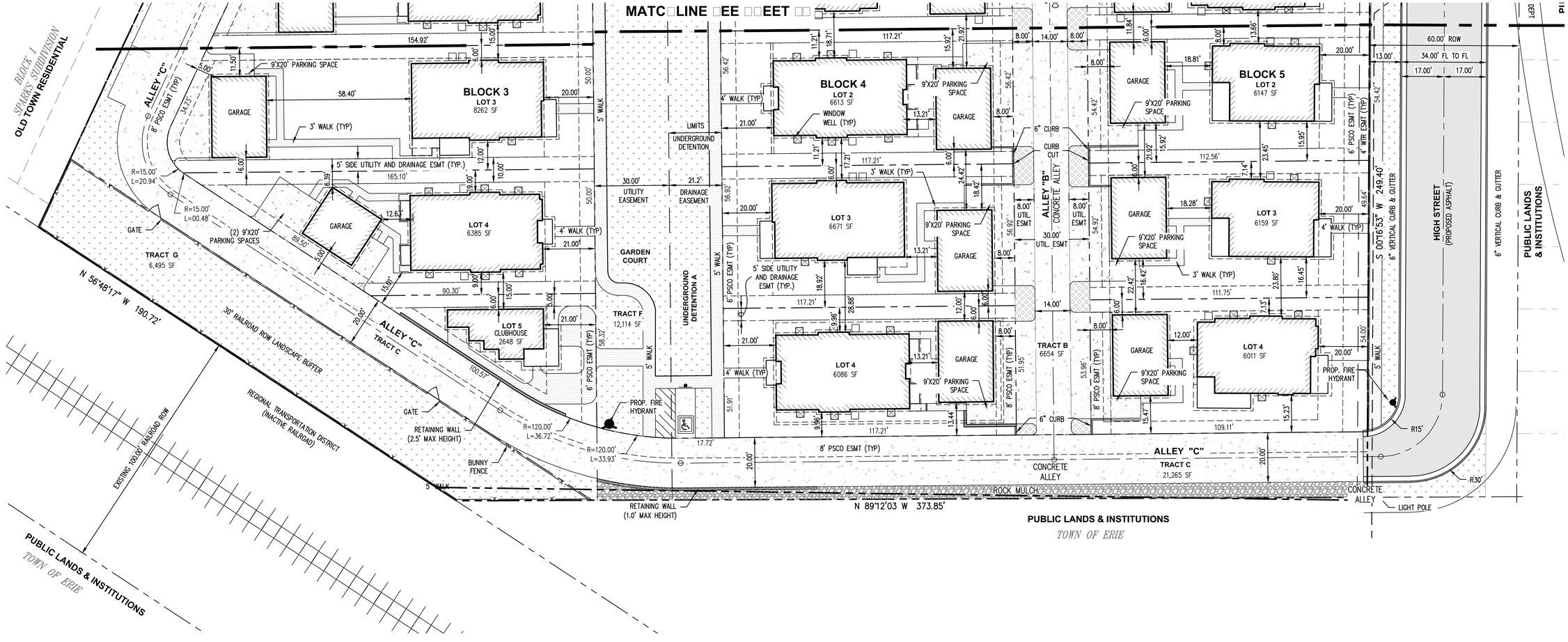
- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED SIGN
- (A) STREET SECTIONS SEE SHEET 04

NOTES

1. ALL STREET DIMENSIONS ARE TAKEN FROM FLOWLINE UNLESS STATED OTHERWISE.
2. LINE AND CURVE TABLES FOR PUBLIC STREETS AND ALLEYS ON SHEET 05.

ORIGINAL SCALE: 1"= 20' HORIZ.





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JEHN ENGINEERING
9990 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

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PRELIMINARY

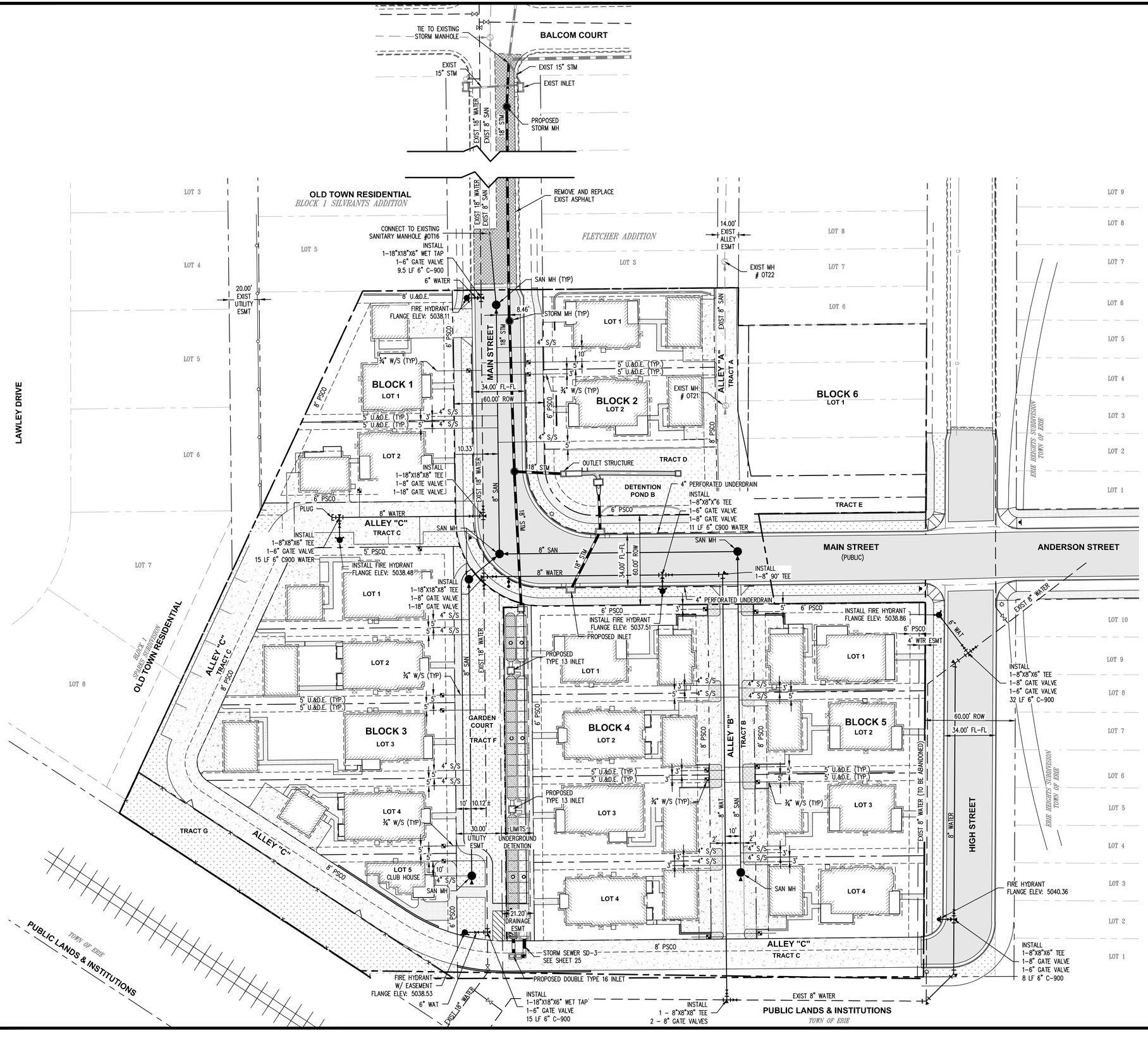
MAIN STREET

CONSTRUCTION DOCUMENTS
DETAILED SITE PLAN SOUTH

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-HC.dwg
APPROVED BY:

JOB NUMBER: 06-9-16-038
DATE: 1-29-2019
SCALE: 1" = 20'
SHEET NO: 09 OF 43



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30 0 15 30 60
ORIGINAL SCALE: 1"= 30' HORIZ.

UTILITY LEGEND

PROPOSED WATER LINE	WAT
PROPOSED FIRE HYDRANT	
PROPOSED GATE VALVE	
PROPOSED WATER METER W/ SERVICE	¾" W/S
PROPOSED AIR & VACUUM VALVE	
PROPOSED 4" SAN SERVICE	4" S/S
EXISTING WATER LINE	WAT
EXISTING FIRE HYDRANT	
EXISTING GATE VALVE	
EXISTING WATER MANHOLE	

SANITARY SEWER NOTES

1. ALL SANITARY SEWER SERVICES ARE 4" DIA. UNLESS NOTED OTHERWISE.
2. ALL SANITARY SEWER SERVICES TO EXTEND TO 5' BEYOND ESMT.
3. ALL MANHOLES GREATER THAN 15' DEPTH SHALL BE 5' DIAMETER.
4. THE STATIONING FOR THE SANITARY SERVICES WAS CALCULATED BY THE DISTANCE BETWEEN THE DOWNSTREAM MANHOLE AND THE SANITARY SERVICE.

NOTES

1. CONTRACTOR SHALL FIELD VERIFY VERTICAL LOCATION OF EXISTING WATER LINES PRIOR TO ANY CONSTRUCTION TO INSURE 4.5 FEET MINIMUM COVER TO FINAL PROPOSED GRADE.
2. VACATED EASEMENTS ARE NOT SHOWN FOR CLARITY.
3. CONTRACTOR SHALL NOTIFY ALL AFFECTED PARTIES, TOWN OF ERIE UTILITY AND ENGINEERING DIVISIONS, A MINIMUM OF 24 HOURS PRIOR TO ANY WATER OR SEWER SERVICE INTERRUPTION.
4. CONTRACTOR IS TO COORDINATE THE OPERATION OF ALL WATER VALVES, FIRE HYDRANTS, AND OTHER APPURTENANCES WITH THE TOWN'S WATER T & D DIVISION THROUGH THE TOWN'S ENGINEERING INSPECTOR.
5. THE CONTRACTOR SHALL COORDINATE THE DISCONNECT OR RELOCATION OF ALL PUBLIC UTILITIES. I.E. WATER, SANITARY SEWER, GAS, POWER, AND TELEPHONE.
6. ALL TRENCH BACKFILL BENEATH THE PROPOSED PAVED AREAS SHALL BE COMPACTED IN LIFTS PER THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS.

UTILITY NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
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NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
5990 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6039 FAX: (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
OVERALL UTILITY PLAN
prepared for
OLD TOWN DEVELOPERS, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-MUP.dwg
APPROVED BY:
JOB NUMBER: 06-29-26-038
DATE: 01-29-2019
SCALE: 1" = 30'
SHEET NO: 10 OF 43

J:\06\29\26-038\CIVIL\CONSTRUCTION\6038-MUP.dwg, 1/30/2019 8:31:00 AM

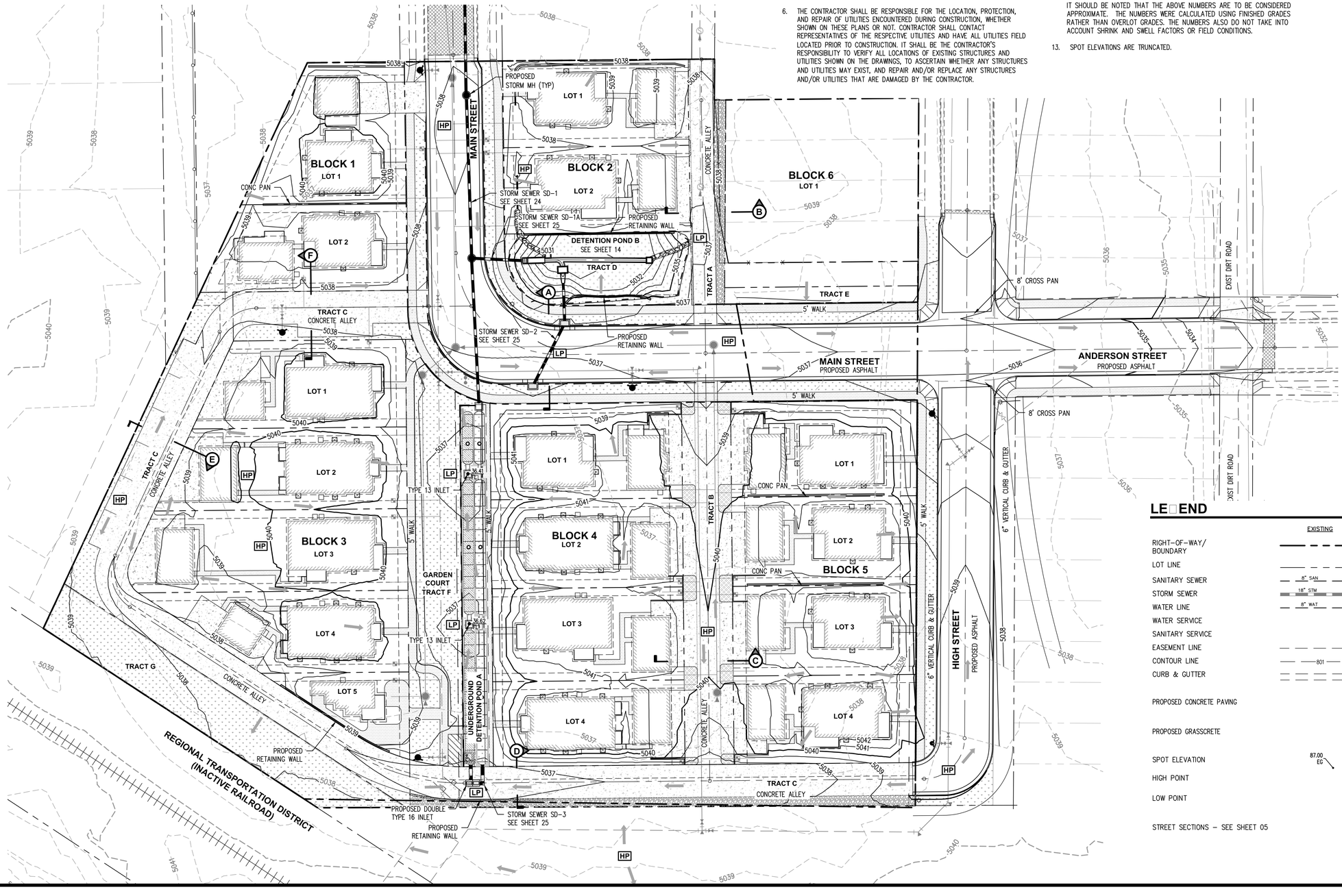
GRADING NOTES

1. ADJUST ALL MANHOLES, VALVES ETC. TO FINISHED GRADE.
2. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY PER ASHTO T-99 (STANDARD PROCTOR) AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
3. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS.
4. ALL REMOVALS (TREES, FENCES, POSTS, SIDEWALKS, CONCRETE, ETC) AND RUBBISH SHALL BE LEGALLY DISPOSED OF.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUND WATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUND WATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. NO CONCRETE SHALL BE PLACED WHERE GROUND WATER IS VISIBLE OR UNTIL THE GROUND WATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS. ANY UNSTABLE AREAS, AS A RESULT OF GROUND WATER, ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE STABILIZED AS AGREED UPON BY THE CONTRACTOR, THE COUNTY, AND THE DESIGN ENGINEER AT THE TIME OF THEIR OCCURRENCE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND REPAIR OF UTILITIES ENCOUNTERED DURING CONSTRUCTION, WHETHER SHOWN ON THESE PLANS OR NOT. CONTRACTOR SHALL CONTACT REPRESENTATIVES OF THE RESPECTIVE UTILITIES AND HAVE ALL UTILITIES FIELD LOCATED PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LOCATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON THE DRAWINGS, TO ASCERTAIN WHETHER ANY STRUCTURES AND UTILITIES MAY EXIST, AND REPAIR AND/OR REPLACE ANY STRUCTURES AND/OR UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR.
7. CONTRACTOR TO FOLLOW RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT.
8. CONTRACTOR TO GRADE TO A DEPTH BELOW TOPSOIL, LANDSCAPING MULCH (SHREDDED MULCH & ROCK COBBLE, ETC) AND RIP-RAP TO ALLOW THE TOP OF MATERIALS TO BE AT THE FINISHED GRADES AS SHOWN.
6. FINAL PAVEMENT DESIGN TO BE DESIGNED BY SOILS ENGINEER AFTER OVERLOT GRADING HAS BEEN COMPLETED.
7. TOPSOIL SHALL BE COMPACTED TO 85% SPD. TOPSOIL WILL NOT BE REQUIRED FOR TEMPORARY SEEDING LOCATIONS REF: LANDSCAPE PLANS
8.
11. CONTRACTOR TO FOLLOW RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT FOR OVERLOT GRADING AND OVER-EXCAVATION OF THE BUILDING PADS. ALL FILL MATERIAL AND PLACEMENT OF FILL TO BE REVIEWED AND APPROVED BY SOILS ENGINEER PRIOR TO / DURING PLACEMENT. COMPACTION TO BE IN ACCORDANCE WITH SOILS REPORT DESIGN STANDARDS.
12. UNADJUSTED EARTHWORK NUMBERS ARE AS FOLLOWS:
    CUT: 1,760 CY
    FILL: 14,465 CY

    IT SHOULD BE NOTED THAT THE ABOVE NUMBERS ARE TO BE CONSIDERED APPROXIMATE. THE NUMBERS WERE CALCULATED USING FINISHED GRADES RATHER THAN OVERLOT GRADES. THE NUMBERS ALSO DO NOT TAKE INTO ACCOUNT SHRINK AND SWELL FACTORS OR FIELD CONDITIONS.
13. SPOT ELEVATIONS ARE TRUNCATED.

JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

30 0 15 30 60
ORIGINAL SCALE: 1"= 30' HORIZ.



LEGEND

	EXISTING	PROPOSED
RIGHT-OF-WAY/ BOUNDARY		
LOT LINE		
SANITARY SEWER	8" SAN	8" SAN
STORM SEWER	18" STM	18" STM
WATER LINE	8" WAT	8" WAT
WATER SERVICE		WAT SER
SANITARY SERVICE		SAN SER
EASEMENT LINE		
CONTOUR LINE	801	801
CURB & GUTTER		
PROPOSED CONCRETE PAVING		
PROPOSED GRASSCRETE		
SPOT ELEVATION	87.00 EG	87.00 FG
HIGH POINT		HP
LOW POINT		LP
STREET SECTIONS – SEE SHEET 05		A

NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

SCALE VERIFICATION BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

NOTIFICATION CENTER
FOR MARKING OF UNDERGROUND MEMBER UTILITIES, CALL 811 OR 1-800-922-1987
The811.Promise.com

RESPONSE DOCUMENT
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PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-5438

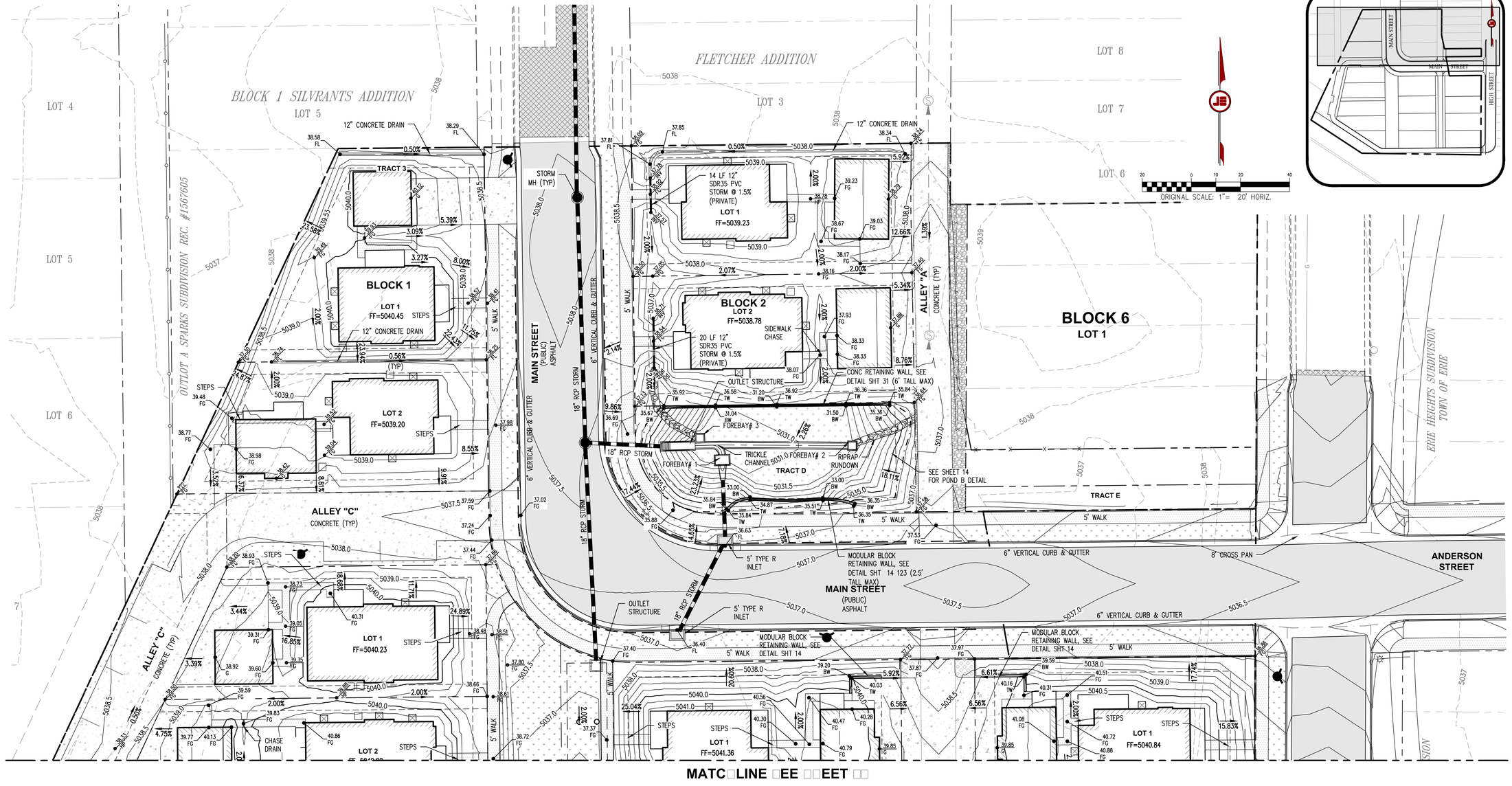
MAIN STREET
CONSTRUCTION DOCUMENTS
OVERALL GRADING PLAN
prepared for
O.D TOWNHOMES, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-CVL-GR.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 29 20 9
SCALE: " 30
SHEET NO: OF 43

J:\06\9\216-038\CIVIL\CONSTRUCTION\6038-CVL-GR.dwg, 2/1/2019 11:56:08 AM

JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.



MATC□ LINE □EE □□EET □□

NOTE□

1. SEE STREET PLAN AND PROFILES FOR DETAIL STREET GRADING.

SCALE VERIFICATION□
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

NOTIFICATION CENTER□
The811.Promise.com
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RE: SE OF DOC□ME□T
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REV/SO□S

□O	DESCRIPT□O□	DATE	B□
1	2N□ SUBMITTAL	10/25/1	AHN
2	3R□ SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRE□M□AR□

JeHN ENGINEERING JE
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX (303) 467-0438

MAIN STREET

CO□STR□CT□O□ DOC□ME□TS
DETA□ED □RAD□□ □ORTH

prepared for
O□D TOW□ □V□□□, □□C

DRAWN BY:	DESIGNED BY:	DRAWING NAME	APPROVED BY:
MC□	MC□	6306ETAILGRADING.dwg	

JOB NUMBER: 06□9-2□6-038
DATE: □29□20□9
SCALE: □"□20□
SHEET NO: □2 OF 43

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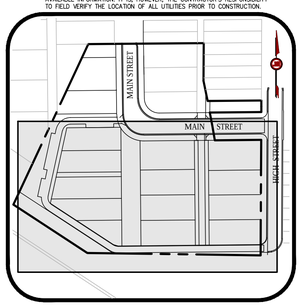
JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

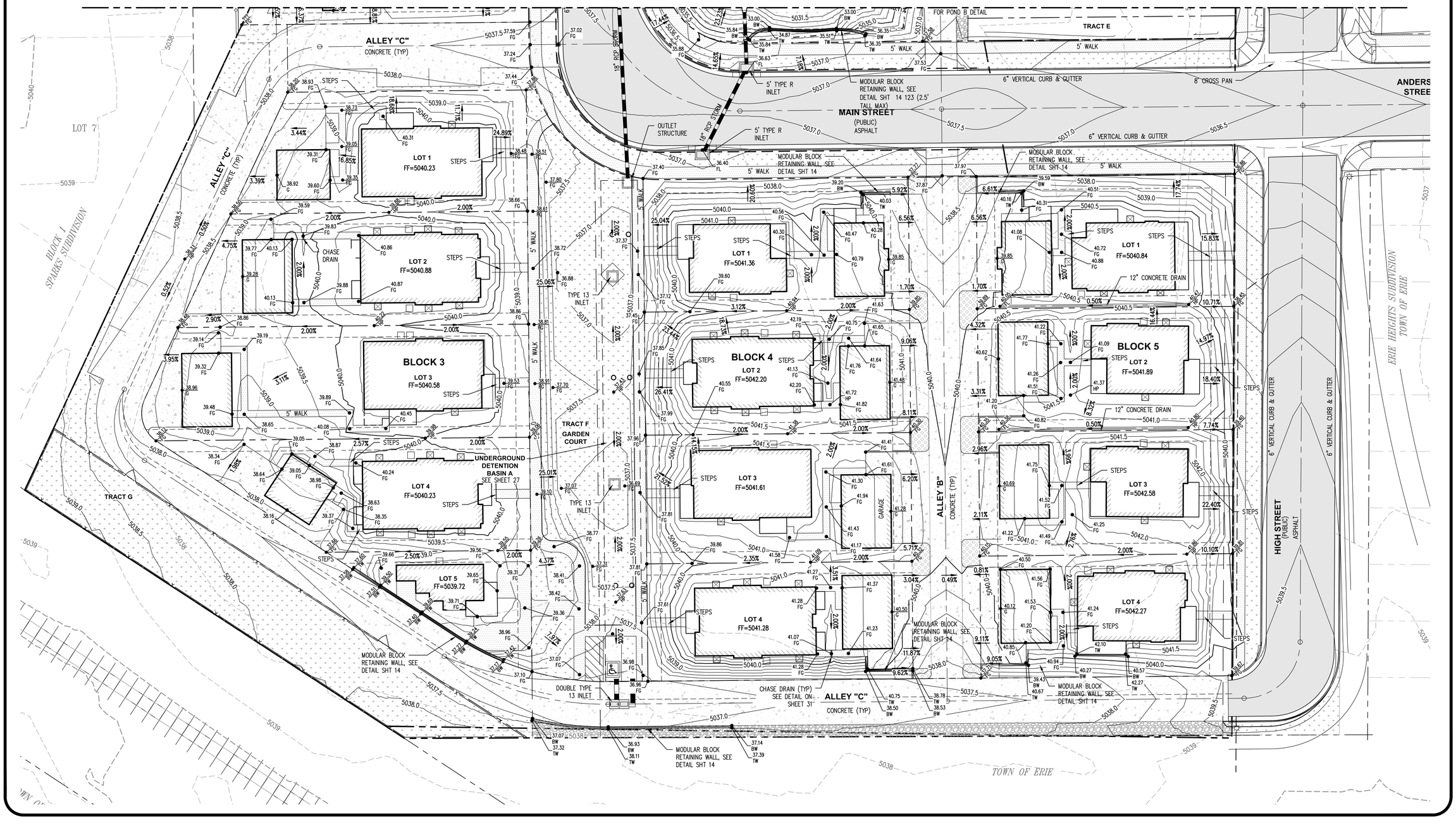
NOTE

1. SEE STREET PLAN AND PROFILES FOR DETAIL STREET GRADING.



20 0 10 20 40
ORIGINAL SCALE: 1" = 20' HORIZ.

MATCH LINE SEE SHEET



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JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6236 FAX: (303) 467-0438

CERTIFICATE OF COMPLETION

PRELIMINARY

NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

CERTIFICATE OF CERTIFIER

Call 811 Before You Dig
The 811 Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES

SCALE VERIFICATION
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IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

RESPONSIBILITY OF DOCUMENT

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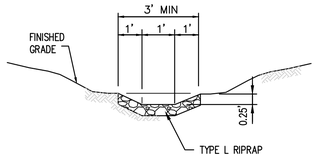
MAIN STREET

CONSTRUCTION DOCUMENTS
DETAILED GRADING SOUTH

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038DETAILGRADING.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-20-9
SCALE: 1" = 20
SHEET NO: 3 OF 43

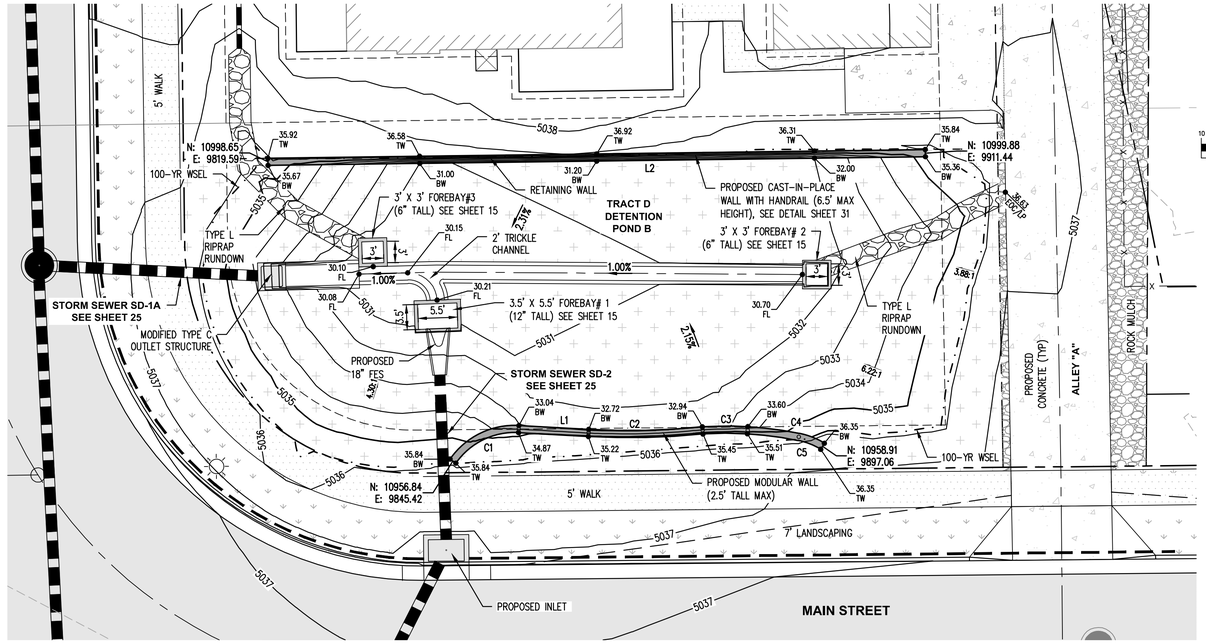


RIP RAP R NDO N

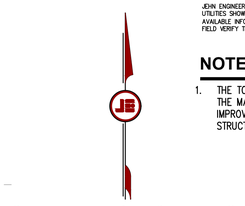
NTS

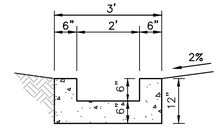
CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	10.68'	10.50'	058°16'14.16"	S64°03'51.25"W	10.22'
C2	15.95'	104.60'	008°44'13.24"	N88°41'40.06"E	15.93'
C3	6.29'	49.68'	007°15'27.04"	S89°50'06.23"W	6.29'
C4	7.19'	50.50'	008°09'22.02"	N82°31'44.70"W	7.18'
C5	3.60'	10.50'	019°39'56.60"	N68°37'05.38"W	3.59'

LINE TABLE		
LINE #	LENGTH	BEARING
L1	9.78'	S86°48'01.67"E
L2	91.86'	N89°14'10.70"E



DETENTION POND





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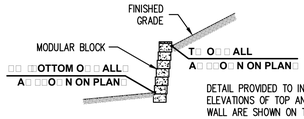
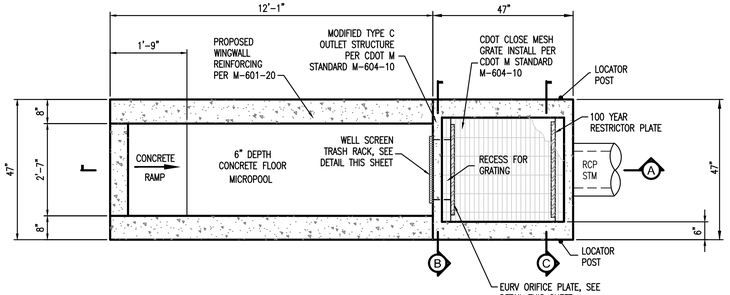
NTS



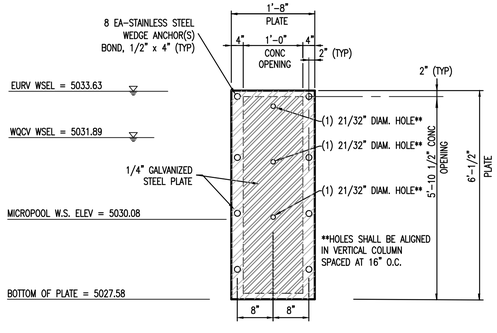
MOD LAR LOC ALL DETAIL

SEE SHEET 12 AND 13 FOR WALL LOCATIONS

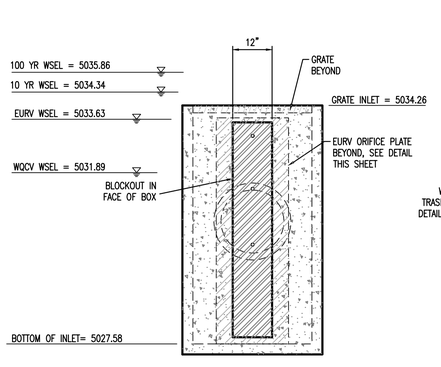
NTS



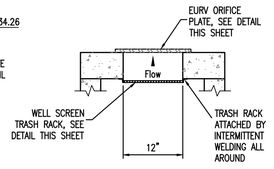
PLAN



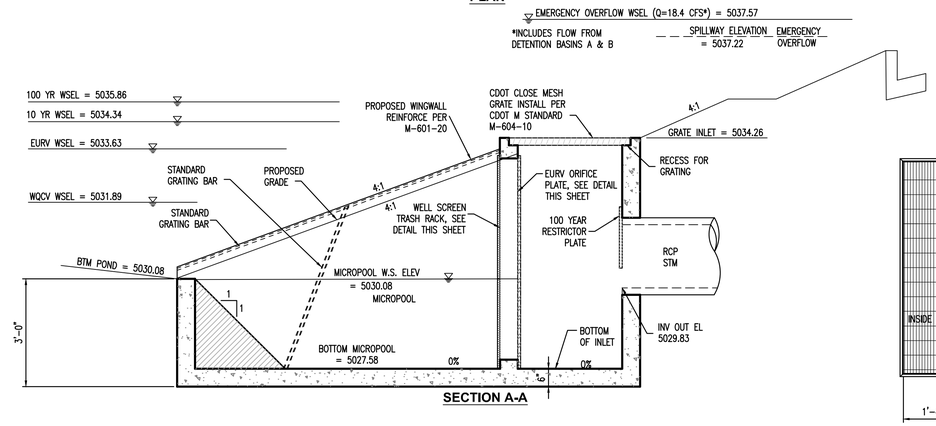
EURV ORIFICE PLATE DETAIL



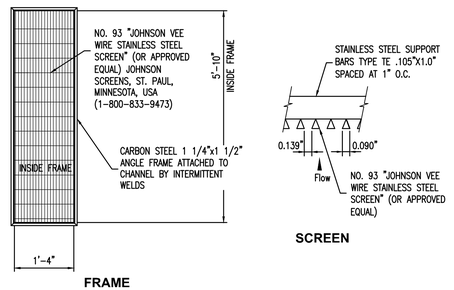
SECTION B-B



WELL SCREEN DETAIL



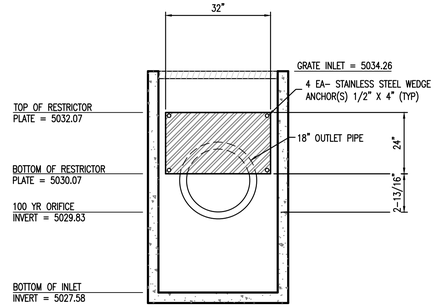
SECTION A-A



FRAME

SCREEN

TRASH RACK DETAIL



SECTION C-C

POND B TABLE

V INITIAL SURCHARGE	5.7 cfs
WSEL INITIAL SURCHARGE	5030.67
V WQCV	0.044 ac-ft
V EURV	0.144 ac-ft
V 10	0.195 ac-ft
V 100	0.327 ac-ft
Q WQCV (RELEASE)	0.02 cfs (39 hr drain time)
Q EURV (RELEASE)	0.05 cfs (72 hr drain time)
Q 10 IN	4.96 cfs
Q 10 OUT (RELEASE)	0.59 cfs
Q 100 IN	10.15 cfs
Q 100 OUT (RELEASE)	2.08 cfs

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NOTE

1. THE TOWN OF ERIE SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE OF ROADWAY AND APPURTENANT IMPROVEMENTS INCLUDING STORM DRAINAGE STRUCTURES AND PIPES FOR THIS DEVELOPMENT.

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

UTILITY NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

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NO.	DESCRIPTION	DATE	BY
	REVISIONS		
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6236 FAX: (303) 467-0438

MAIN STREET

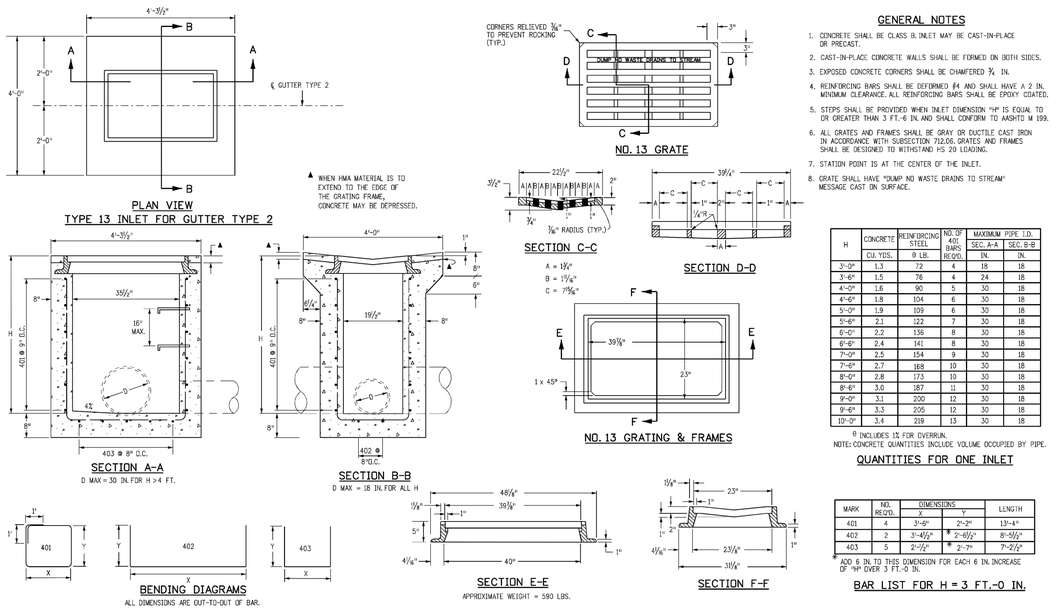
CONSTRUCTION DOCUMENTS
DETENTION POND B AND DETAILS

prepared for
TOWN OF ERIE, COLORADO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-DET-POND.dwg
APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 1-29-19
SCALE: 1" = 10'
SHEET NO: 4 OF 43

J:\06\19-216-038\CIVIL\CONSTRUCTION\6038-DET-POND.dwg, 1/30/2019 8:32:12 AM



H	CONCRETE CU. YDS.	REINFORCING STEEL @ LB.	NO. OF 401 BARS REQ'D.	MAXIMUM PIPE I.D. SEC. A-A IN.	MAXIMUM PIPE I.D. SEC. B-B IN.
3'-0"	1.3	72	4	18	18
3'-6"	1.5	76	4	24	18
4'-0"	1.6	90	5	30	18
4'-6"	1.8	104	6	30	18
5'-0"	1.9	109	6	30	18
5'-6"	2.1	122	7	30	18
6'-0"	2.2	136	8	30	18
6'-6"	2.4	141	8	30	18
7'-0"	2.5	154	9	30	18
7'-6"	2.7	168	10	30	18
8'-0"	2.8	173	10	30	18
8'-6"	3.0	187	11	30	18
9'-0"	3.1	200	12	30	18
9'-6"	3.3	205	12	30	18
10'-0"	3.4	219	13	30	18

θ INCLUDES 1% FOR OVERRUN.
NOTE: CONCRETE QUANTITIES INCLUDE VOLUME OCCUPIED BY PIPE.

MARK	NO. REQ'D.	DIMENSIONS X	DIMENSIONS Y	LENGTH
401	4	3'-6"	2'-2"	13'-4"
402	2	3'-4½"	* 2'-6½"	8'-5½"
403	5	2'-1½"	* 2'-7"	7'-2½"

* ADD 6 IN. TO THIS DIMENSION FOR EACH 6 IN. INCREASE OF "H" OVER 3 FT.-0 IN.

Computer File Information	
Creation Date: 07/04/12	Initials: DD
Last Modification Date: 07/04/12	Initials: LTA
Full Path: www.coloradodot.info/business/designsupport	
Drawing File Name: 604013010l.dgn	
CAD Ver.: MicroStation V8 Scale: Not to Scale	Units: English

Sheet Revisions	
Date:	Comments

Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222
Phones: (303) 757-9083
Fax: (303) 757-9820
Project Development Branch DD/LTA

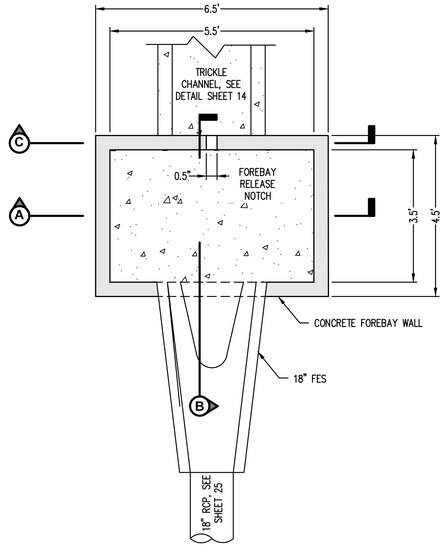
CONCRETE INLET TYPE 13

STANDARD PLAN NO. M-604-13

Sheet No. 1 of 1

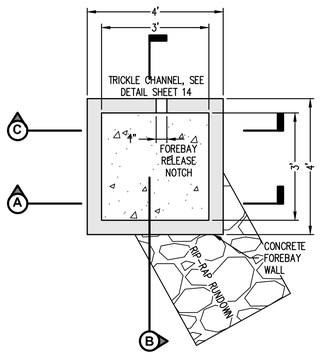
Issued By: Project Development Branch July 4, 2012

TYPE □□ □RATE □ □RAME INLET



□ORE□AY □□ PLAN

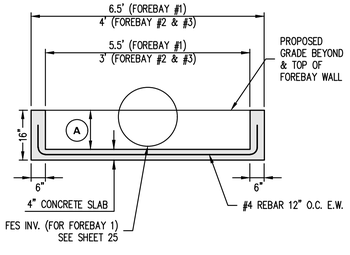
NTS



□ORE□AY □□□ □PLAN

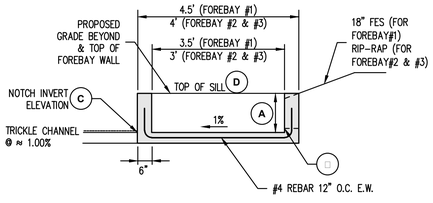
NTS

	FOREBAY #1	FOREBAY #2	FOREBAY #3
(A)	12"	6"	6"
(B) ELEVATION	5030.25	5030.73	5030.13
(C) ELEVATION	5030.21	5030.70	5030.10
(D) ELEVATION	5031.25	5031.23	5031.73
(E) NOTCH WIDTH	1.5"	1"	1"



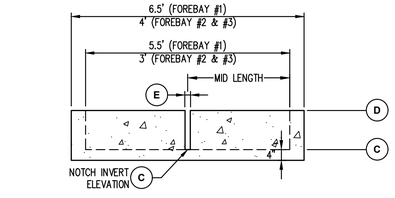
□ECTION A □□ORE□AY ELEVATION VIE□

NTS



□ECTION □ □□ORE□AY ELEVATION VIE□

VOLUME: FOREBAY#1= 19.25 CU-FT, FOREBAY#2= 4.5 CU-FT, FOREBAY#3= 4.5 CU-FT NTS



□ECTION C □□ORE□AY O□TLET DETAIL

FOREBAY # 1: 100-YR FLOW= 12.5 CFS. NOTCH RELEASE RATE= 0.32 CFS
FOREBAY #2 & #3: 100-YR FLOW= 1.3 CFS. NOTCH RELEASE RATE= 0.06 CFS NTS

□TR□CT□RAL NOTE□□

CONCRETE:
1. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI AND SHALL BE MANUFACTURED WITH TYPE II CEMENT. CALCIUM CHLORIDE IS NOT TO BE ADDED TO CONCRETE.
2. MAXIMUM WATER/CEMENT RATIO = 0.48
3. MAXIMUM SLUMP = 5"
4. MAXIMUM AGGREGATE SIZE = 3/4" DIA.
5. AIR ENTRAINMENT SHALL BE PROVIDED WITH MATERIALS IN ACCORDANCE WITH ASTM C250/C50M- AIR CONTENT SHALL BE 7% ± 1.5%
6. ALL CONCRETE SLABS SHALL HAVE 0.5 POUNDS OF MICROFIBER REINFORCING PER CUBIC YARD OF CONCRETE.

REINFORCING:
1. ALL REINFORCING SHALL CONFORM TO ASTM-A-615, GRADE 60, BARS TO BE BENT TWICE OR BE WELDED SHALL BE ASTM A706.
2. MINIMUM REINFORCING STEEL BAR LAP SHALL BE 24 INCHES, UNLESS OTHERWISE NOTED.
3. MAKE ALL REINFORCING STEEL CONTINUOUS AROUND CORNERS AND ACROSS WALL STEPS.
4. PLACEMENT AND PROTECTION OF ALL REINFORCING BARS SHALL MEET THE REQUIREMENTS OF ACI-318 AND ACI-301.
5. REINFORCING STEEL MUST BE INSPECTED BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE. PLEASE CALL 24 HOURS IN ADVANCE FOR PROPER SCHEDULING.
6. PROVIDE CLEAR COVER FOR REINFORCING STEEL AS FOLLOWS:
3" CLEAR COVER FOR STRUCTURES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH
2" CLEAR COVER FOR CONCRETE EXPOSED TO EARTH OR WEATHER
1-1/2" CLEAR COVER FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.

STRUCTURAL/ENGINEERED FILL:
1. STRUCTURAL/ENGINEERED FILL SHOULD CONSIST OF APPROVED MATERIALS THAT ARE FREE OF ORGANIC MATTER AND DEBRIS. FROZEN MATERIAL SHOULD NOT BE USED, AND FILL SHOULD NOT BE PLACED ON A FROZEN SUBGRADE. EACH PROPOSED FILL MATERIAL TYPE SHOULD BE SAMPLED AND EVALUATED BY THE GEOTECHNICAL ENGINEER PRIOR TO ITS DELIVERY AND/OR USE.
2. IMPORTED STRUCTURAL/ENGINEERED FILL REQUIRED BELOW FOUNDATIONS, COLUMNS, INTERIOR/EXTERIOR CONCRETE SLABS AND FOR EXTERIOR WALL BACKFILL SHOULD CONSIST OF A GRANULAR PIT RUN MATERIAL, OR CONFORM TO THE GRADATION CRITERIA. ADDITIONALLY, THE MATERIAL SHOULD BE SUBMITTED TO THE PROJECT GEOTECHNICAL ENGINEER FOR REVIEW AND APPROVAL.

SCALE VERIFICATION
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NO.	DESCRIPTION	DATE	BY
	REVISIONS		
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2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
9980 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
FOREBAY DETAILS
prepared for
OLD TOWN AVENUE, LOC

DRAWN BY:	DESIGNED BY:	DRAWING NAME	APPROVED BY:
MC	MC	6038-FORE.dwg	

JOB NUMBER: 06-9-26-038
DATE: 02920-9
SCALE: TS
SHEET NO: 5 OF 43

J:\06\19-316-038\CIVIL\CONSTRUCTION\6038-FORE.dwg, 1/30/2019 8:32:27 AM

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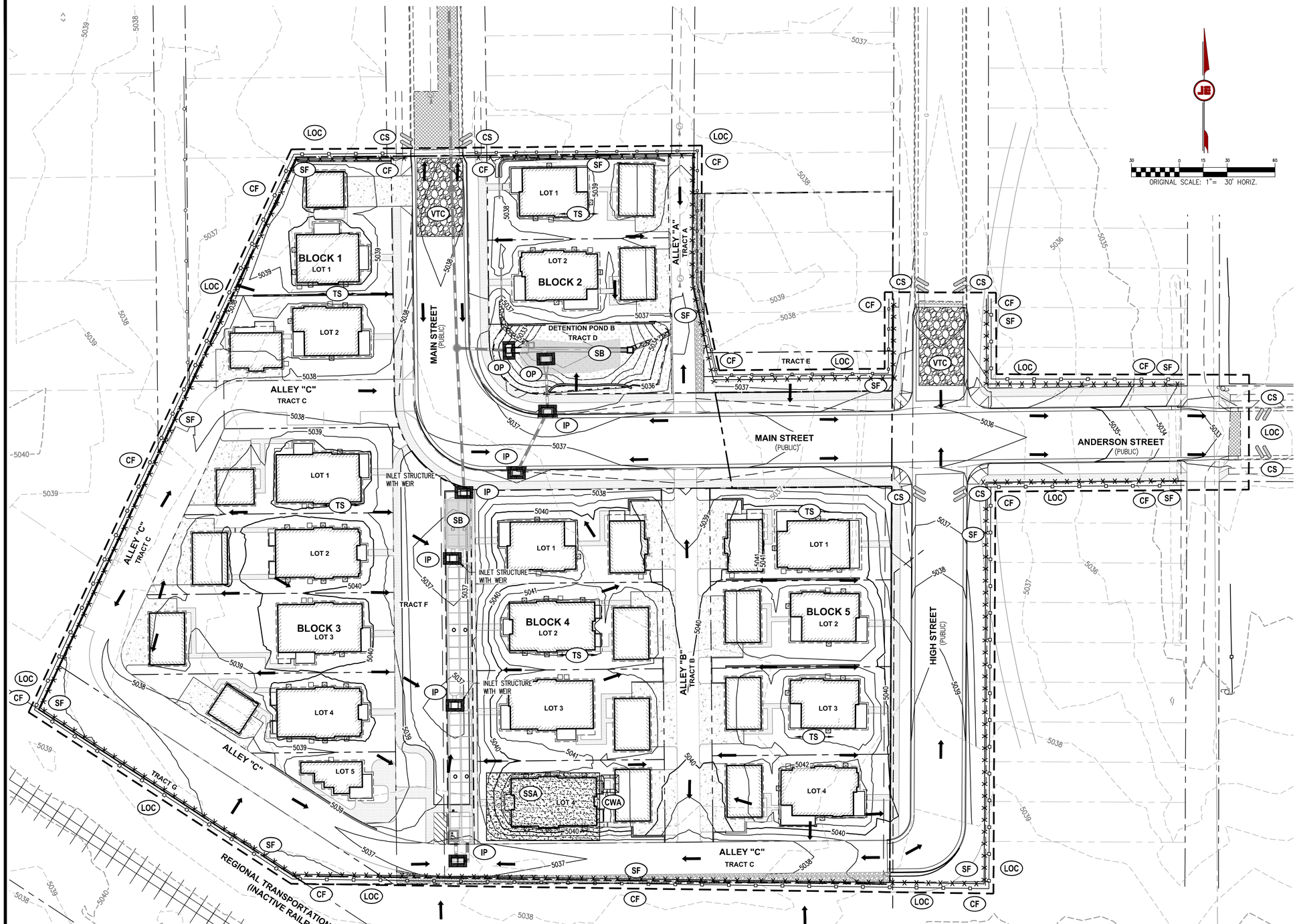

ORIGINAL SCALE: 1"= 30' HORIZ.

NOTE

1. EXISTING TOPOGRAPHIC INFORMATION IS BASED ON A SURVEY PERFORMED BY JEHN ENGINEERING.

LEGEND

	EXISTING	PROPOSED
ROW / BOUNDARY		
LOT LINE		
STORM SEWER		18" STM
CONTOUR LINE	801	801
CURB & GUTTER		

MP LEGEND

- LOC — LIMITS OF CONSTRUCTION
- CF — CONSTRUCTION FENCE
- SF — SILT FENCE
- SB — SEDIMENT BASIN
- SSA — STABILIZED STAGING AREA
- VTC — VEHICLE TRACKING CONTROL
- CWA — CONCRETE WASHOUT AREA
- CS — CURB SOCK
- IP / OP — INLET/OUTLET PROTECTION
- TS — TEMPORARY SEEDING

NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/6/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

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PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6039 FAX: (303) 467-0438

MAIN STREET

CONSTRUCTION DOCUMENTS
EROSION CONTROL PLAN

prepared for
O.D TOWN HOMES, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-EC.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-20-9
SCALE: 1" = 30
SHEET NO: 6 OF 43

J:\06\19\216-038\CIVIL\CONSTRUCTION\6038-EC.dwg, 1/30/2019 8:32:43 AM

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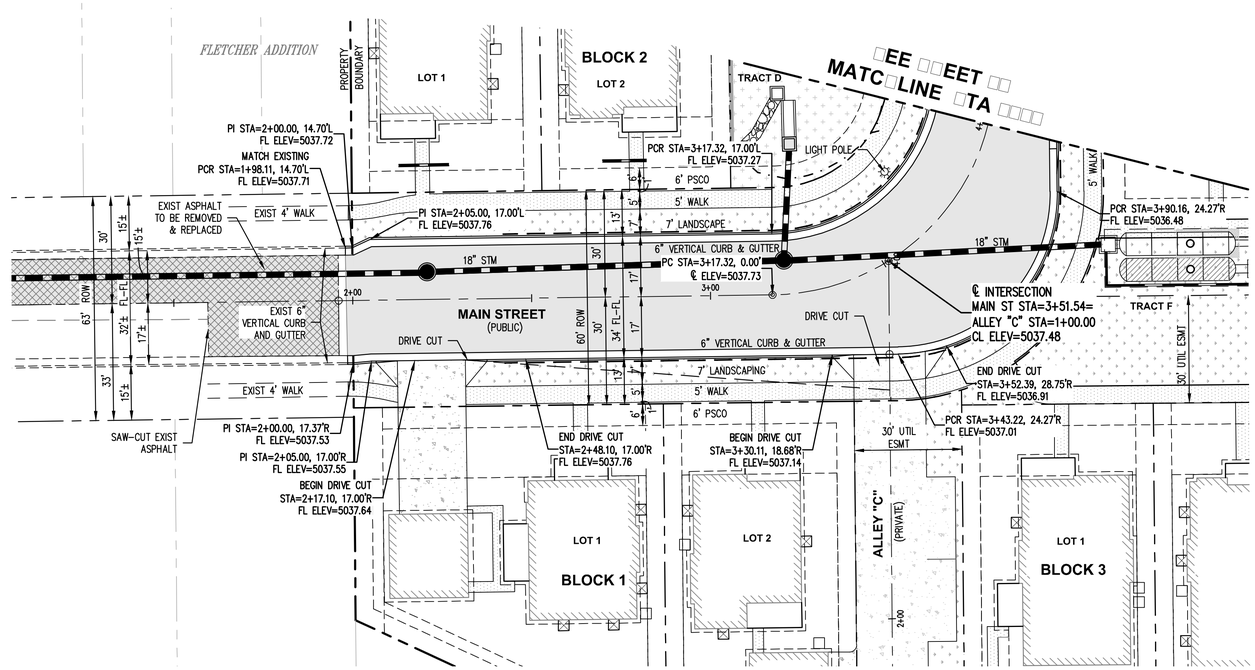
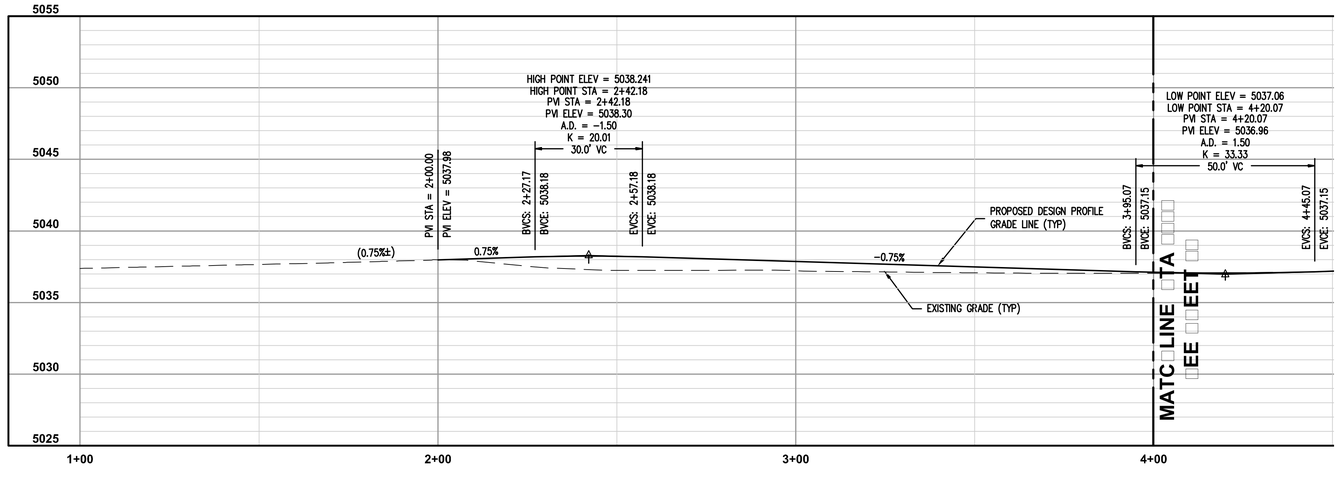
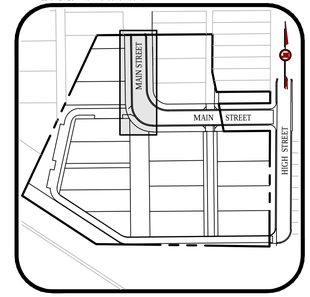


MAIN STREET PLAN AND PROFILE





ORIGINAL SCALE: 1"= 20' HORIZ.
1"= 5' VERT.

NOTE

1. SEE SHEET 06 FOR FLOWLINE AND ROADWAY CURVE DATA AND TANGENT LENGTHS.
2. ALL DIMENSIONS AND ELEVATIONS ARE FL UNLESS NOTED OTHERWISE.
3. ALL HANDICAP RAMPS AND DRIVE CUTS TO CONFORM TO TOWN OF ERIE STANDARDS SW8 AND SW4A, RESPECTIVELY, EXCEPT AS NOTED.
4. 6" VERTICAL CURB, GUTTER, AND DETACHED SIDEWALK PER TOWN OF ERIE STANDARD SW-13.
5. PROFILE IS CENTERLINE GRADE.
6. CURB INLET FLOW LINE ELEVATIONS ARE THE FLOW LINE EXTENDED ELEVATION. ACTUAL FLOW LINE ELEVATIONS ARE 2" LOWER.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING
- PROPOSED GRASS-CRETE

SCALE VERIFICATION BAR IS ONE INCH ON ORIGINAL DRAWING
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1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
MAIN STREET PLAN & PROFILE
prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-MAIN STREET.dwg
APPROVED BY:
JOB NUMBER: 06-9-26-038
DATE: 29 20 9
SCALE: 1" 20
SHEET NO: 7 OF 43

J:\06\19-316-038\CIVIL\CONSTRUCTION\6038-RPP-ANDERSON STREET.dwg, 1/30/2019 8:33:07 AM

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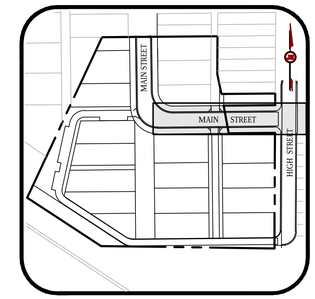

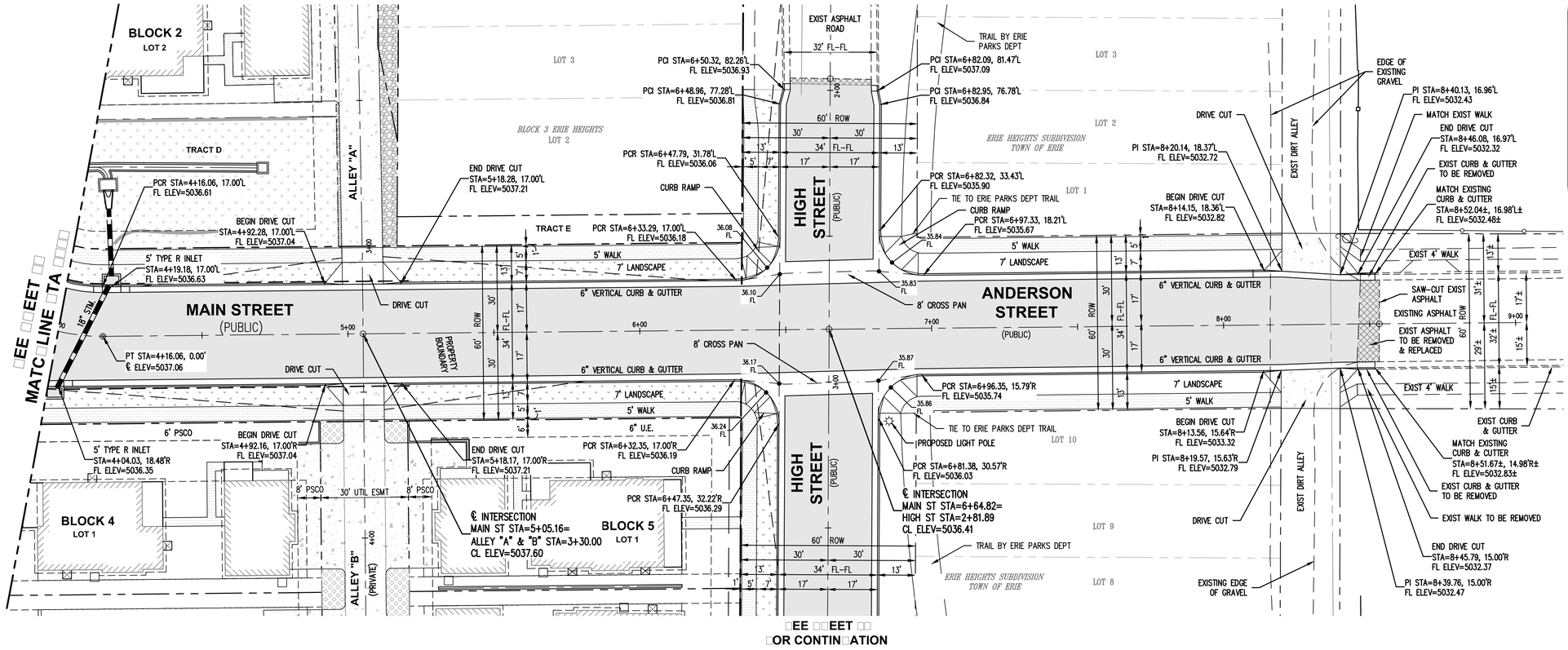

ORIGINAL SCALE: 1"= 20' HORIZ.
1"= 5' VERT.

NOTE

1. SEE SHEET 06 FOR FLOWLINE AND ROADWAY CURVE DATA AND TANGENT LENGTHS.
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LEGEND

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- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
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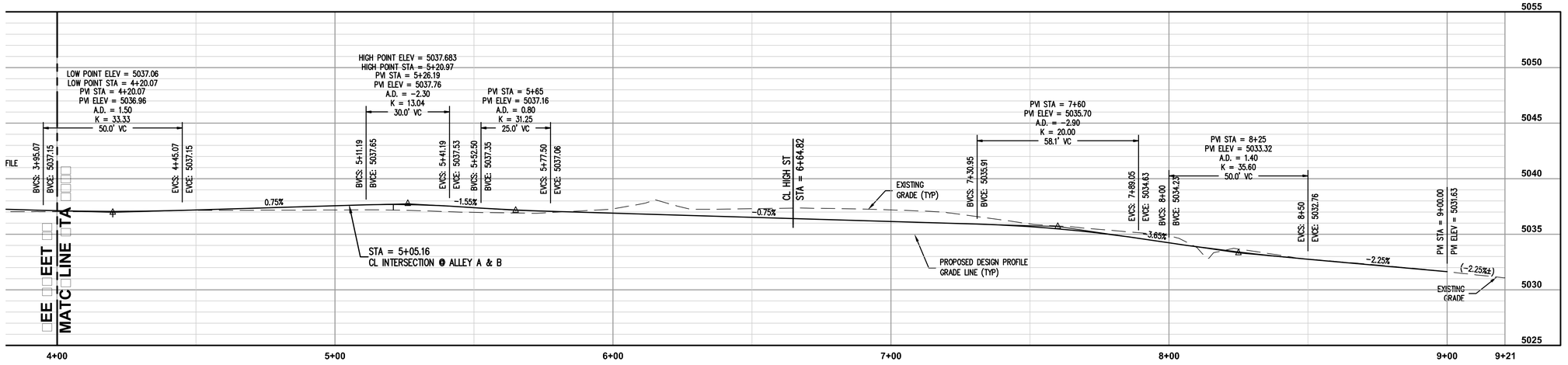
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING
- PROPOSED GRASS-CRETE

MAIN STREET AND ANDERSON STREET
PLAN AND PROFILE



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ENGINEERING
6990 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6209 FAX: (303) 467-5438

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2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

MAIN STREET
CONSTRUCTION DOCUMENTS
ANDERSON STREET PAVING & PROFILE
prepared for
OLD TOWN ERIE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6938-ANDERSON STREET.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 02-9-20-9
SCALE: 1" = 20'
SHEET NO: 8 OF 43

J:\06\9-216-038\CIVIL\CONSTRUCTION\6938-RPP-ANDERSON STREET.dwg, 1/30/2019 8:33:12 AM

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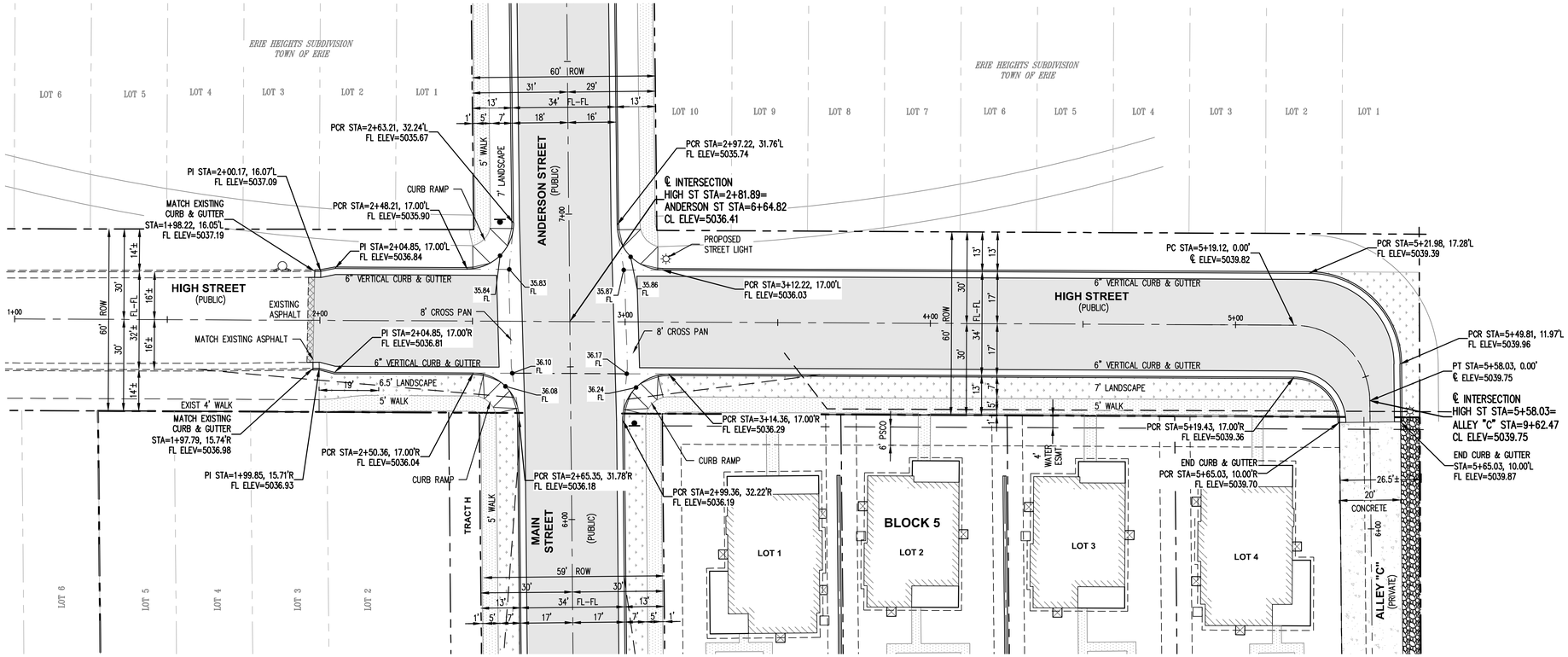
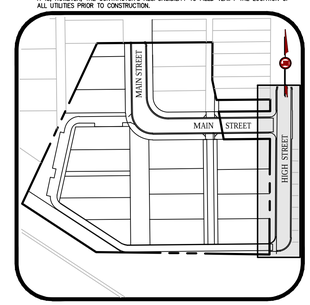
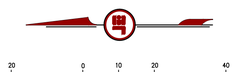
SEE SHEET
FOR CONTINUATION







NOTE

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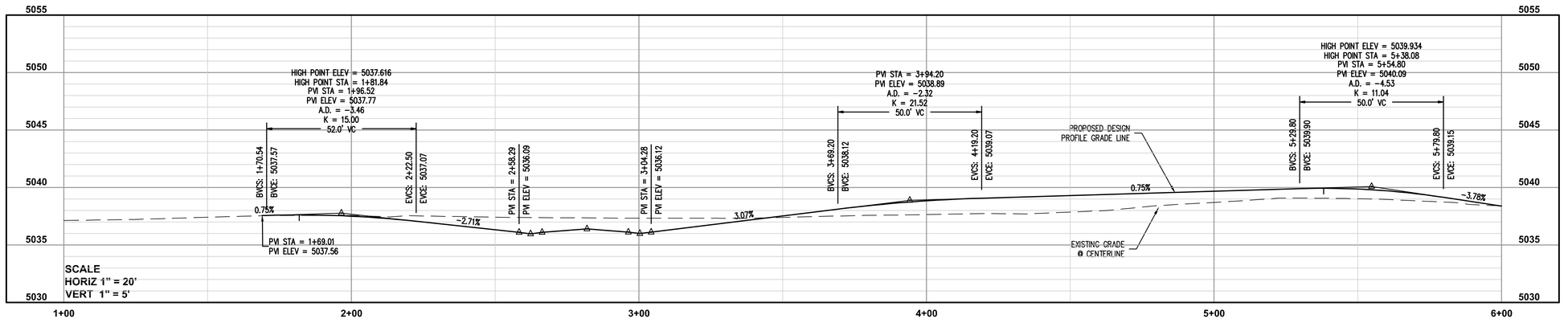
6. CURB INLET FLOW LINE ELEVATIONS ARE THE FLOW LINE EXTENDED ELEVATION. ACTUAL FLOW LINE ELEVATIONS ARE 2" LOWER.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING
- PROPOSED GRASS-CRETE

MAIN STREET PLAN AND PROFILE



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5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

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3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

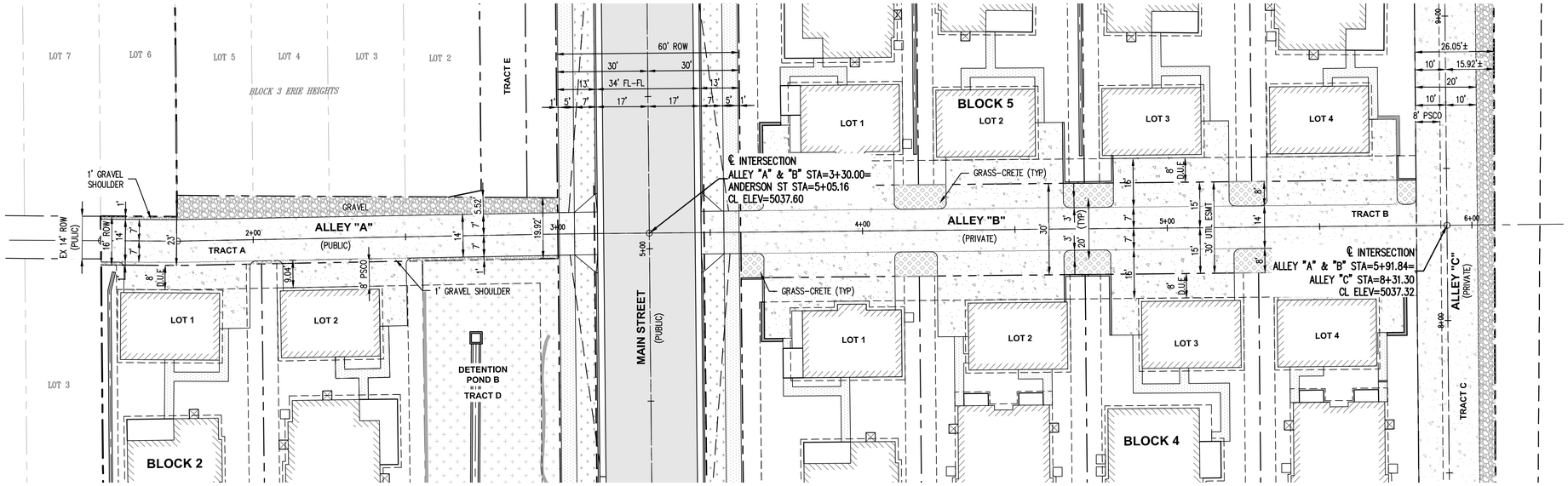
PRELIMINARY

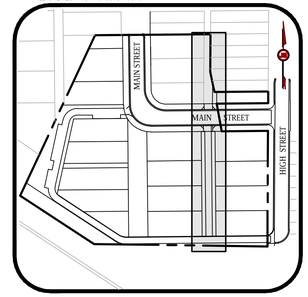
MAIN STREET
CONSTRUCTION DOCUMENTS
HIGH STREET PLAN & PROFILE
prepared for
OLD TOWN DEVELOPMENT, LLC

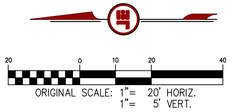
DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038RP-HIGH STREET.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 12-9-20-19
SCALE: 1" = 20'
SHEET NO: 9 OF 43

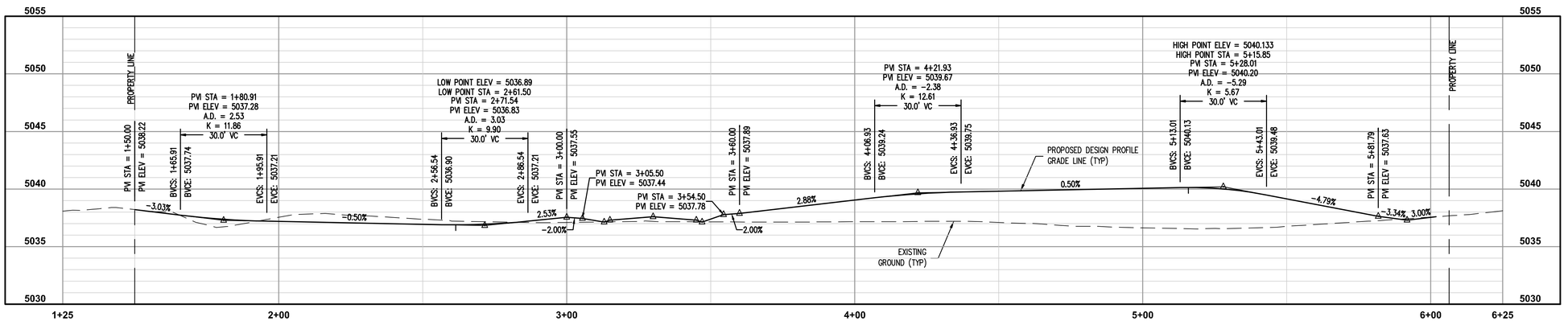
SEE SHEET FOR CONTINUATION







ALLEY A □ □ PLAN AND PRO□ILE



LE□END

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING

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3	4TH SUBMITTAL	10/6/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

JOHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-8438

MAIN STREET
CONSTRUCTION DOCUMENTS
APPROVED PROFILE
prepared for
OLD TOWN VILLAGE, LLC

DRAWN BY: MC□
DESIGNED BY: MC□
DRAWING NAME: 6038-PP-ALLEY A AND B.dwg
APPROVED BY:

JOB NUMBER: 06□9-2□6-038
DATE: □29 20□9
SCALE: □"□20□
SHEET NO: 20 OF 43

A:\06\19\216-038\CIVIL\CONSTRUCTION\6038-RPP-ALLEY A AND B.dwg, 1/30/2019 8:33:55 AM

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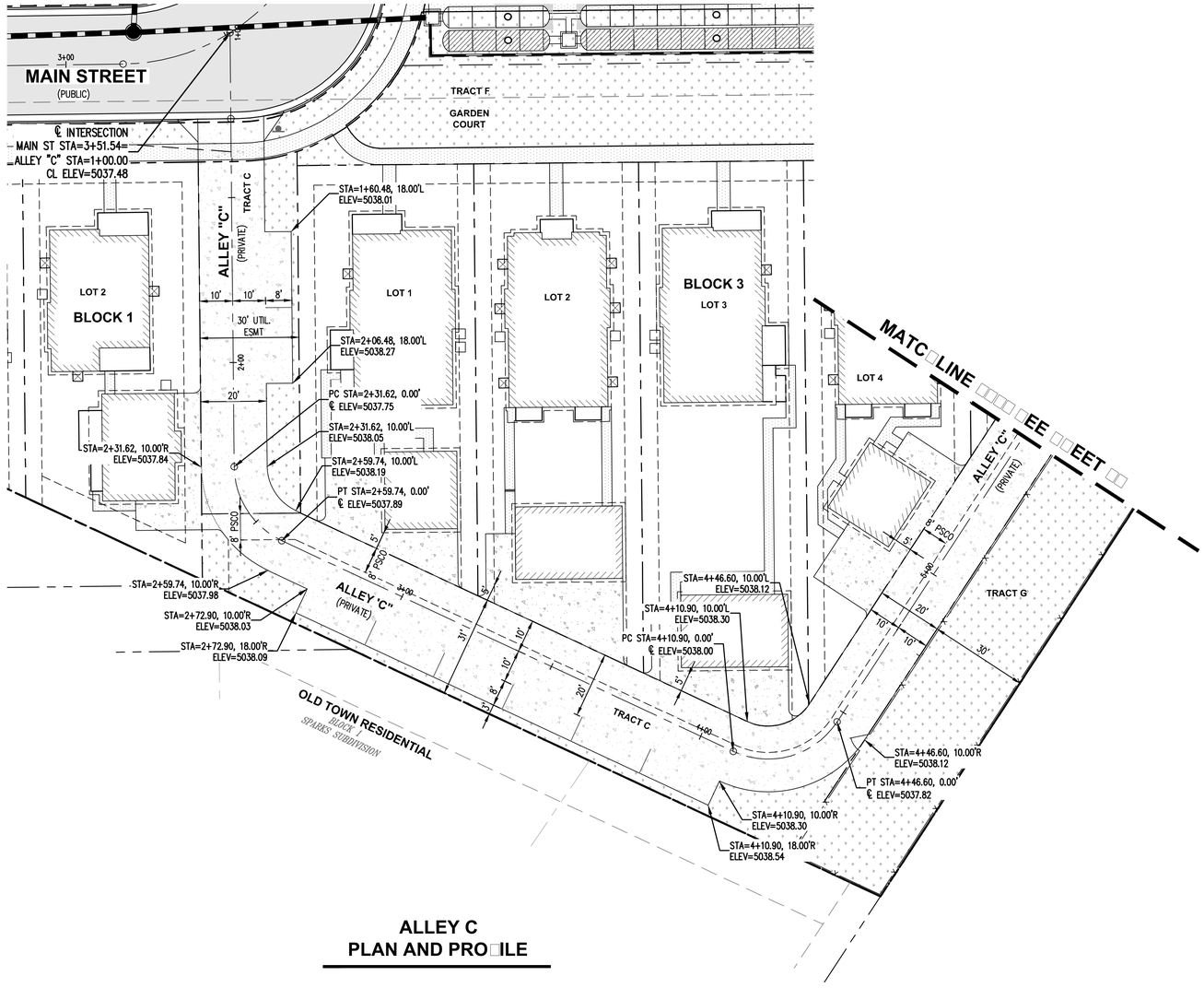
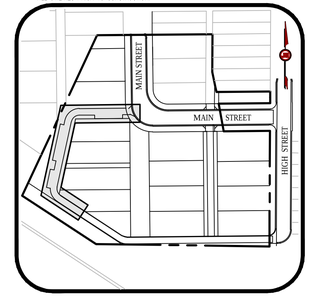




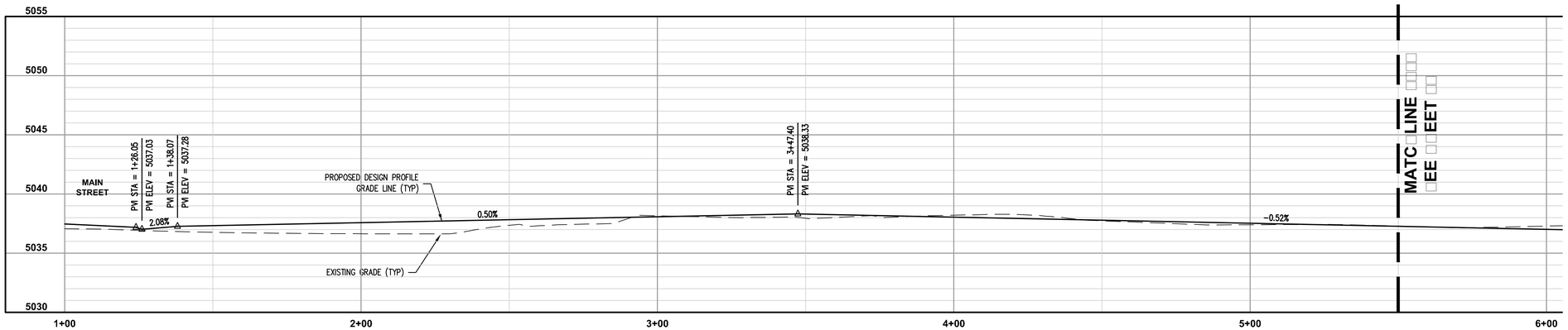
20 0 10 20 40

ORIGINAL SCALE: 1"= 20' HORIZ.
1"= 5' VERT.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING

ALLEY C
PLAN AND PRO□ILE



NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

RESE OF DOCUMENT
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PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6236 FAX: (303) 467-8408

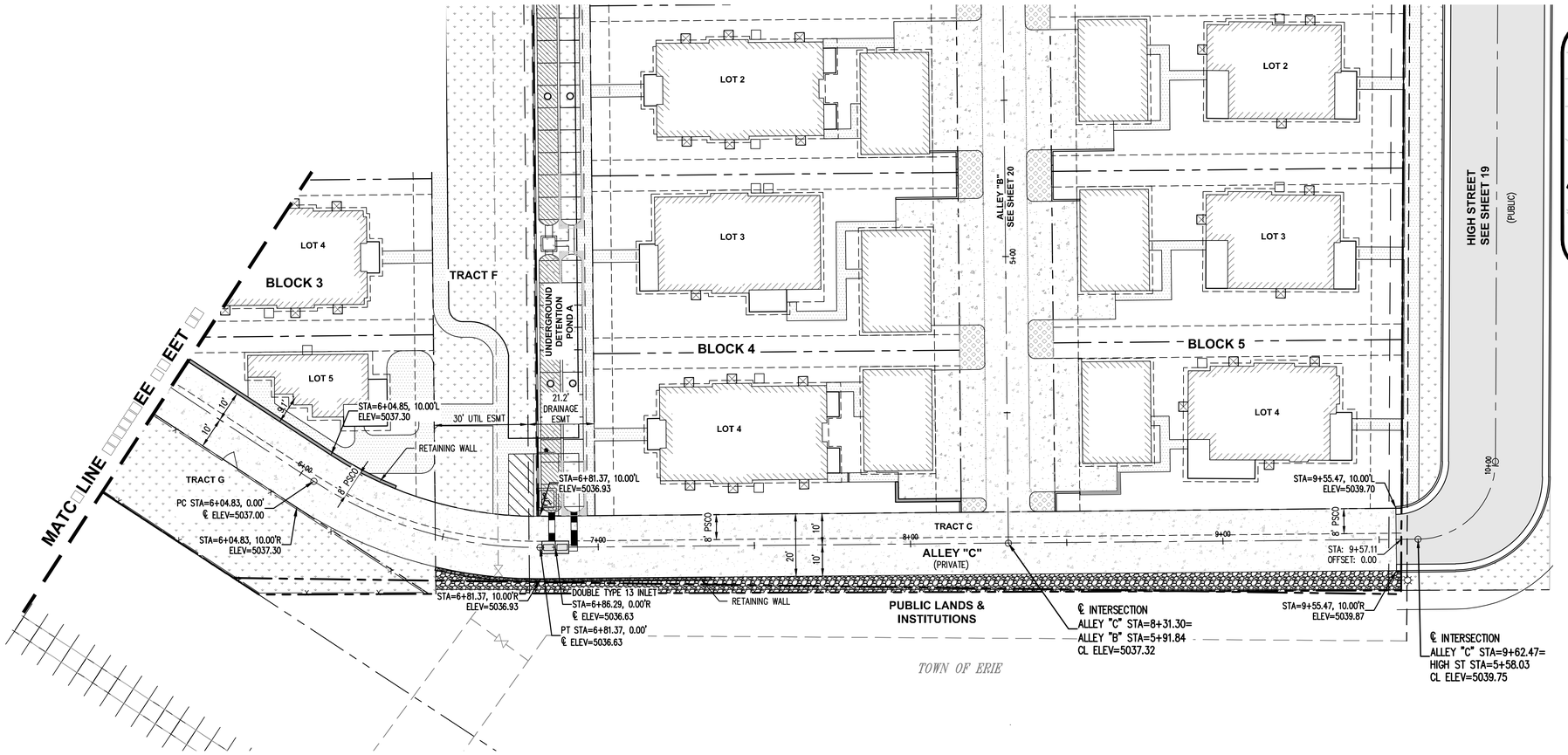
MAIN STREET
CONSTRUCTION DOCUMENTS
ALTE C PA PROFILE
STA 00 TO 5:50
OLD TOWN VILLAGE, LLC
prepared for

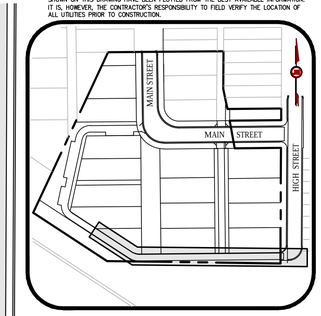
DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038PP-ALLEY C.dwg
APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 29 20 9
SCALE: "20
SHEET NO: 2 OF 43

J:\06192\16-038\CIVIL\CONSTRUCTION\6038-RPP-ALLEY C.dwg, 1/30/2019 8:34:17 AM

JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.



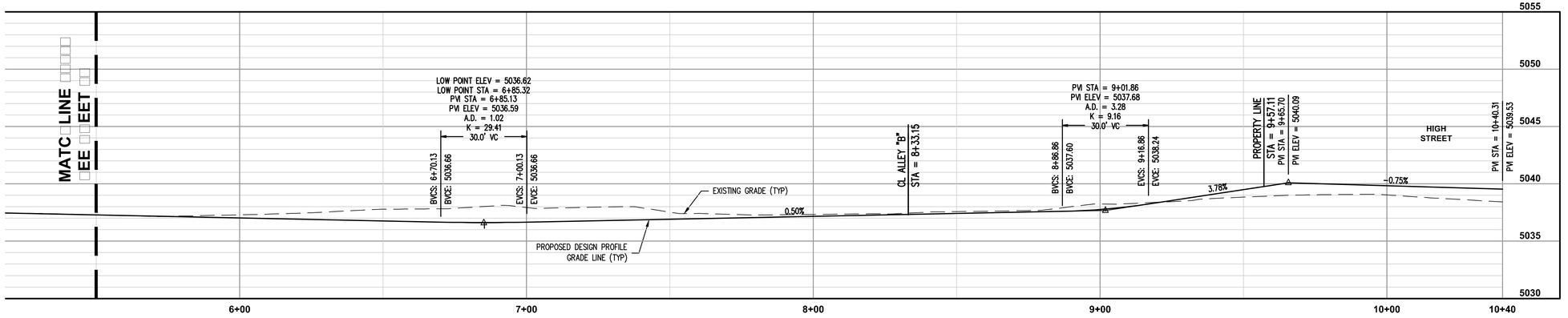


ORIGINAL SCALE: 1"= 20' HORIZ.
1"= 5' VERT.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING

ALLEY C PLAN AND PROFILE



NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

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NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

JEHN ENGINEERING
5660 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-8438

MAIN STREET
CONSTRUCTION DOCUMENTS
ALLEY C PLAN AND PROFILE
STA 5+50 TO 9+49.24

prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC	DESIGNED BY: MC	DRAWING NAME: 6038PHALEYC.dwg	APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 01-29-2019
SCALE: 1" = 20'
SHEET NO: 22 OF 43

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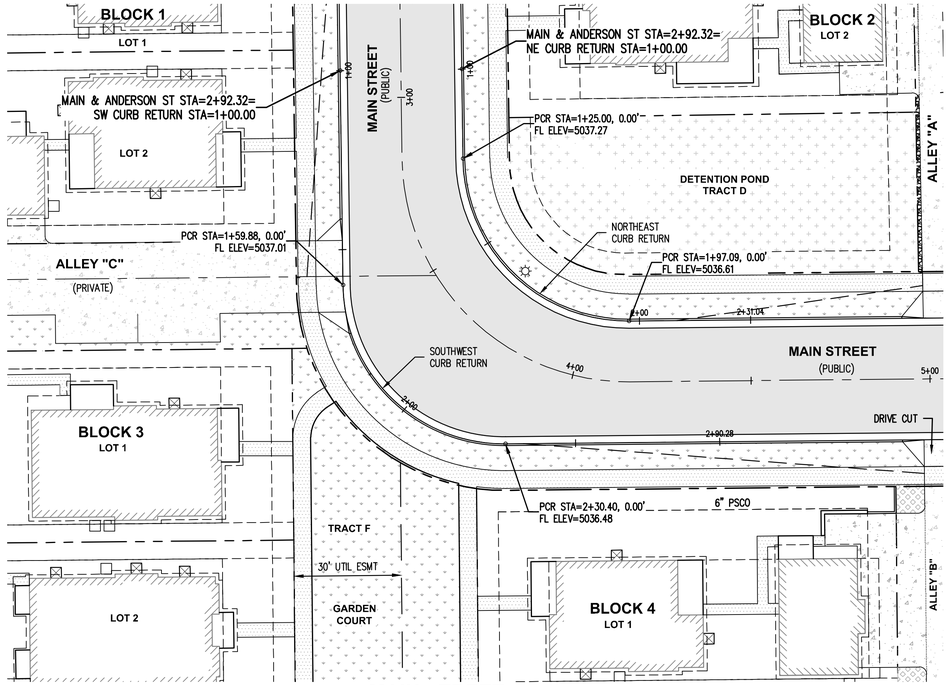
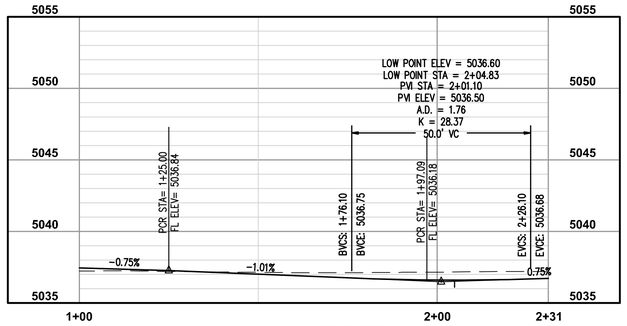
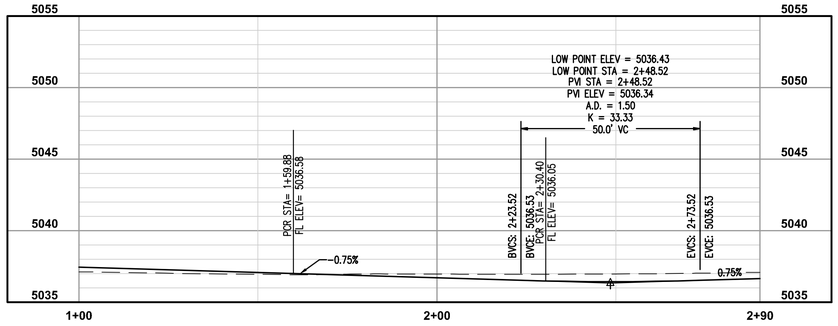


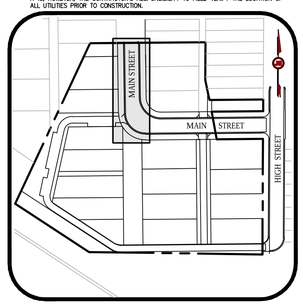
MAIN STREET
CORNER RETURN PLAN

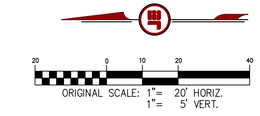


MAIN STREET
NORTHEAST CORNER RETURN PROFILE



MAIN STREET
SOUTHEAST CORNER RETURN PROFILE



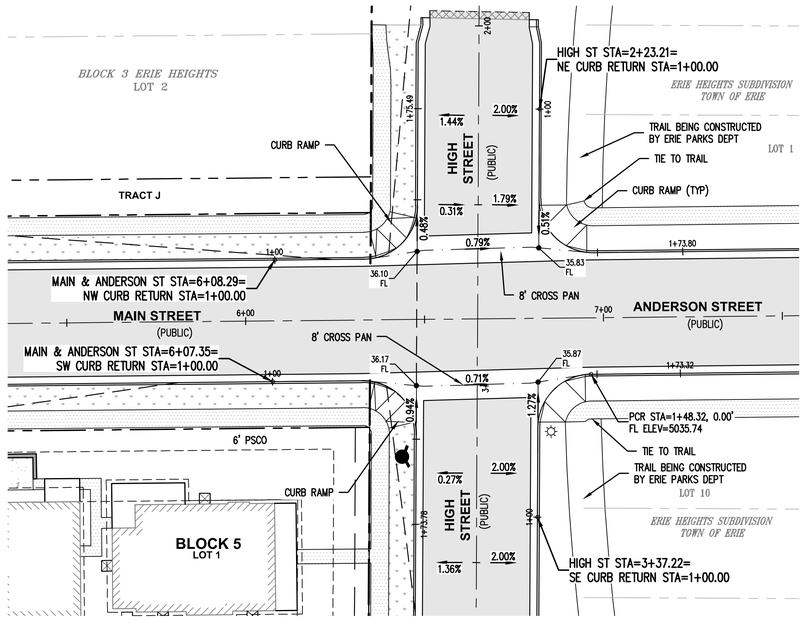


NOTE

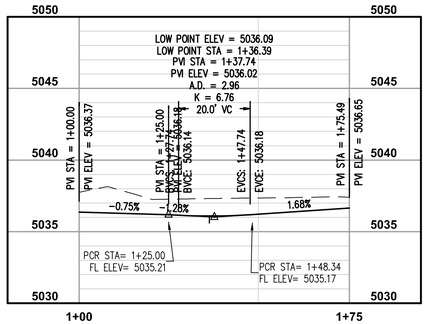
1. SEE SHEET 06 FOR FLOWLINE AND ROADWAY CURVE DATA AND TANGENT LENGTHS.
2. ALL DIMENSIONS AND ELEVATIONS ARE FL UNLESS NOTED OTHERWISE.
3. ALL HANDICAP RAMPS AND DRIVE CUTS TO CONFORM TO TOWN OF ERIE STANDARDS SW8 AND SW4A, RESPECTIVELY, EXCEPT AS NOTED.
4. 6" VERTICAL CURB, GUTTER, AND DETACHED SIDEWALK PER TOWN OF ERIE STANDARD SW-13.
5. PROFILE IS CENTERLINE GRADE.
6. CURB INLET FLOW LINE ELEVATIONS ARE THE FLOW LINE EXTENDED ELEVATION. ACTUAL FLOW LINE ELEVATIONS ARE 2" LOWER.

LEGEND

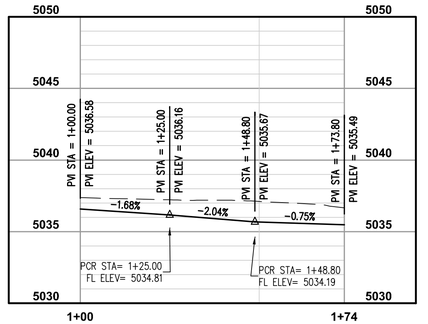
- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING
- PROPOSED GRASS-CRETE



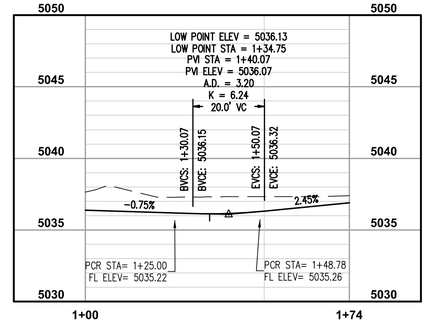
MAIN STREET AND ANDERSON STREET INTERSECTION
CORNER RETURN PLAN



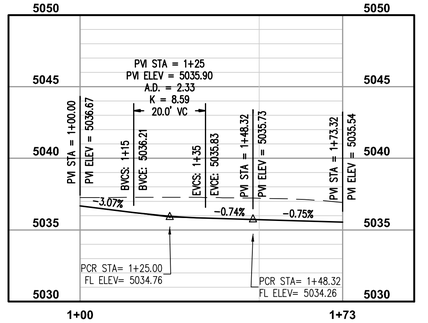
MAIN STREET @ 1ST STREET INTERSECTION
NORTHEAST CORNER RETURN PROFILE



ANDERSON @ 1ST STREET INTERSECTION
NORTHEAST CORNER RETURN PROFILE



MAIN STREET @ 1ST STREET INTERSECTION
SOUTHEAST CORNER RETURN PROFILE



ANDERSON @ 1ST STREET INTERSECTION
SOUTHEAST CORNER RETURN PROFILE

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NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-5438

MAIN STREET
CONSTRUCTION DOCUMENTS
MAIN ST AND ANDERSON ST
INTERSECTION DETAILS
prepared for
OLD TOWN VILLAGE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 0618-INT-DETAILS.dwg
APPROVED BY:
JOB NUMBER: 06-9-26-038
DATE: 1-29-19
SCALE: 1" = 20'
SHEET NO: 23 OF 43

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LEGEND

PROPERTY LINE
PROPOSED EASEMENT
PROPOSED CURB AND GUTTER
EXISTING CURB AND GUTTER
PROPOSED PARKING STALL COUNT
PROPOSED SIGN
PROPOSED LIGHTING
EXISTING ASPHALT TO BE REMOVED AND REPLACED
PROPOSED CONCRETE PAVING
PROPOSED ASPHALT PAVING

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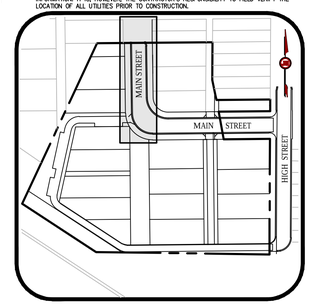
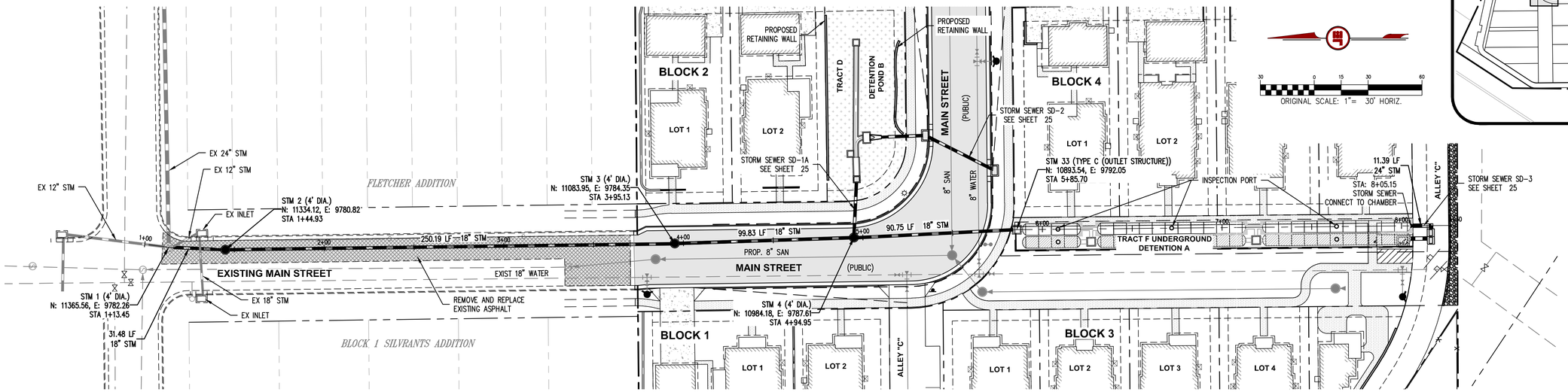
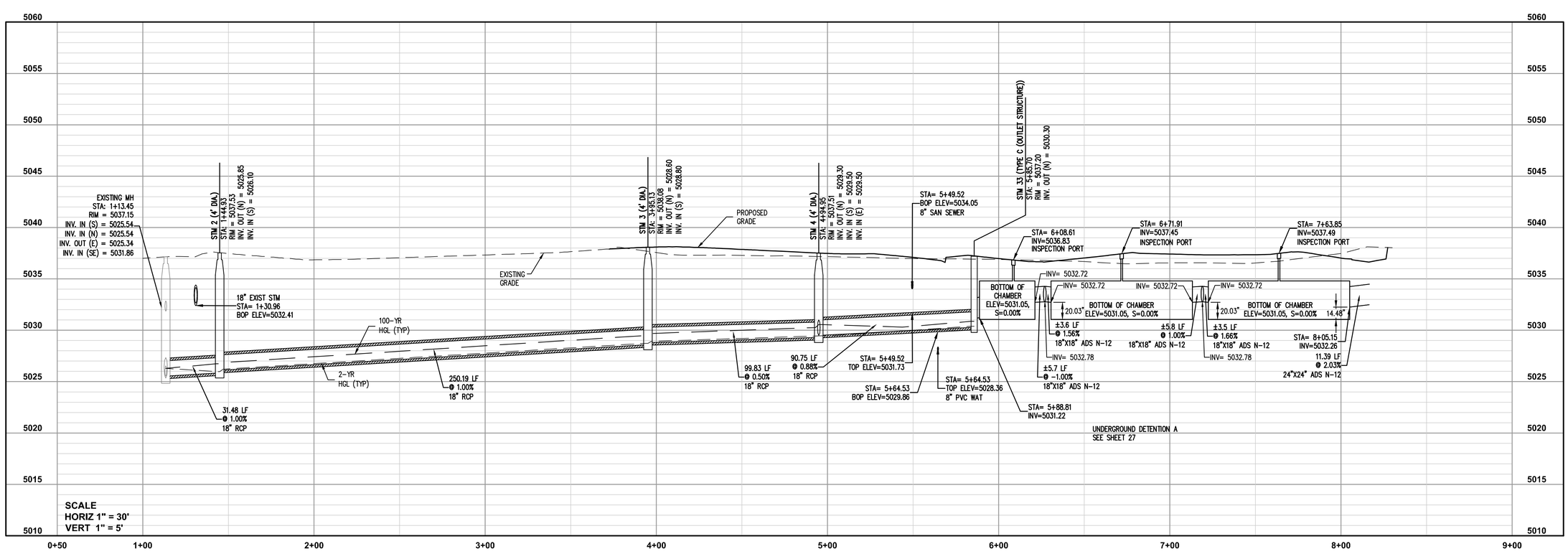


ORIGINAL SCALE: 1" = 30' HORIZ.



STORM SEWER PLAN AND PROFILE



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SCALE VERIFICATION
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NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/5/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

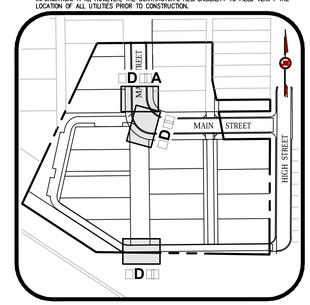
JEHN ENGINEERING
9690 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

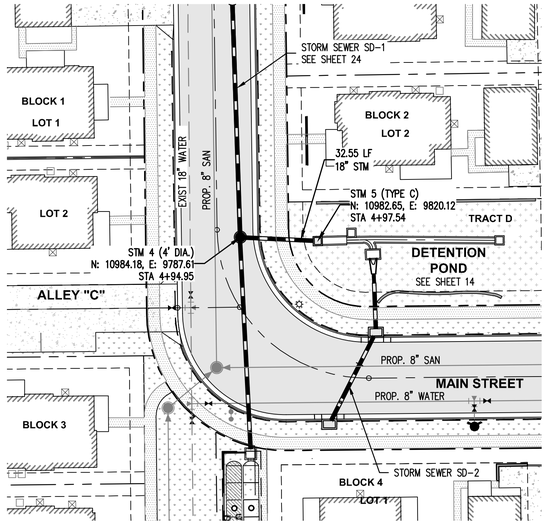
MAIN STREET
STORM SD-1
prepared for
OLD TOWN AVENUE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-STORM-1.dwg
APPROVED BY:

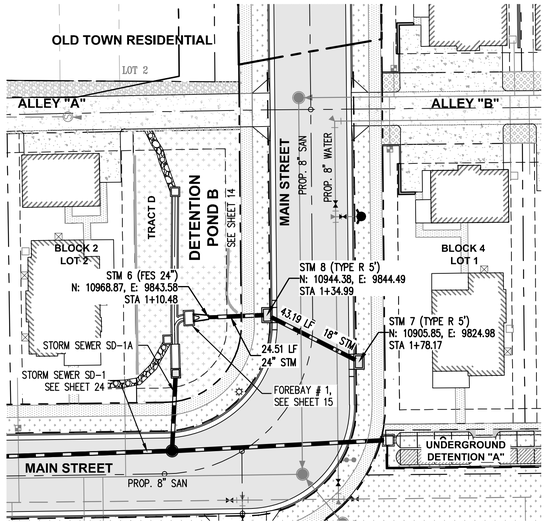
JOB NUMBER: 06-9-2-6-038
DATE: 1-29-19
SCALE: 1" = 30'
SHEET NO: 24 OF 43

JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

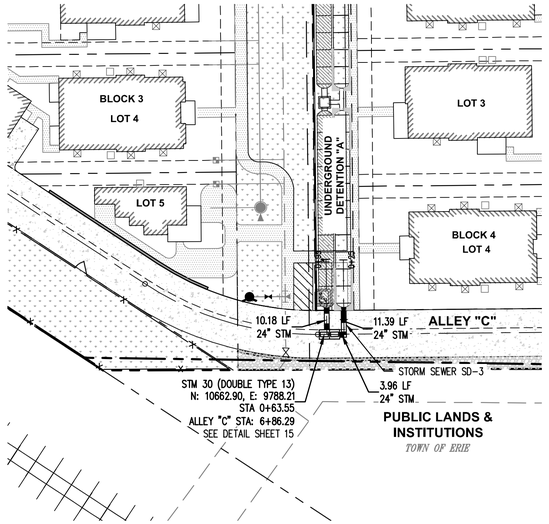




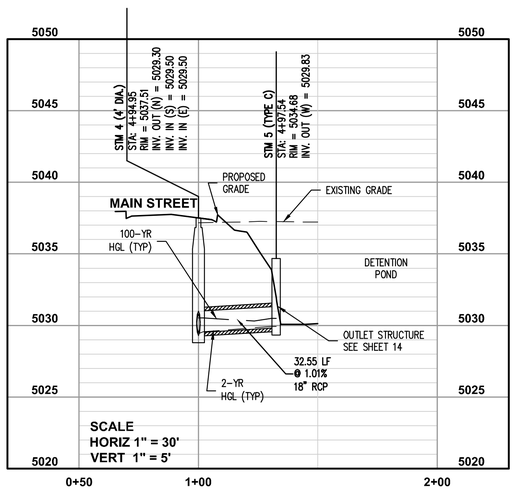
STORM SEWER PLAN AND PROFILE

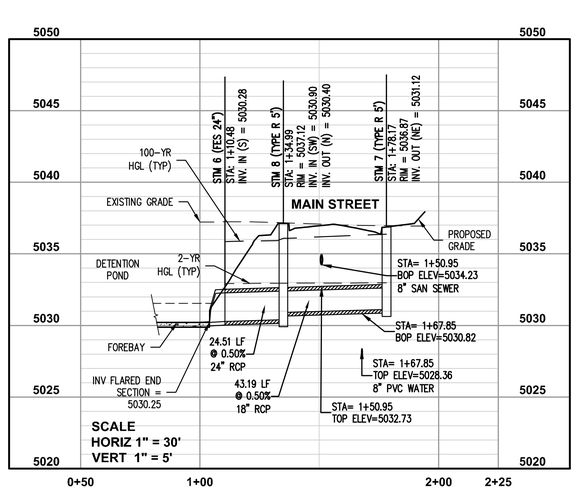


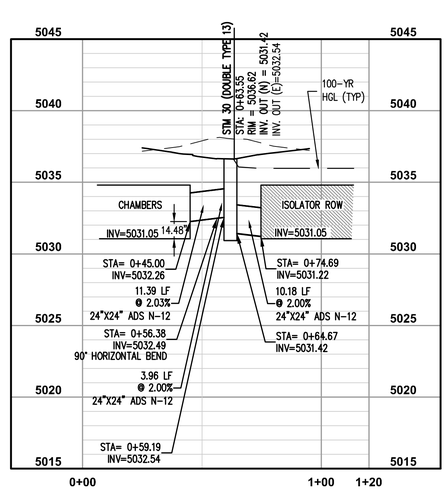
STORM SEWER PLAN AND PROFILE



STORM SEWER PLAN AND PROFILE







30 0 15 30 60

ORIGINAL SCALE: 1"= 30' HORIZ.
1"= 5' VERT.

LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED LIGHTING
- (10) PROPOSED PARKING STALL COUNT
- PROPOSED SIGN
- PROPOSED ASPHALT PAVING
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- PROPOSED CONCRETE PAVING

NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING

5680 WEBSTER STREET
ARVADA, CO 80002
PH (303) 423-6236 FAX (303) 467-8438

MAIN STREET
CONSTRUCTION DOCUMENTS
STORM SD-A, SD-2 AND SD-3

prepared for
O.D TOWN INVESTORS, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: SHEET NAME
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 01-29-2019
SCALE: 1" = 30'
SHEET NO: 25 OF 43

THE UTILITY NOTIFICATION CENTER
The811.Promise.com
FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

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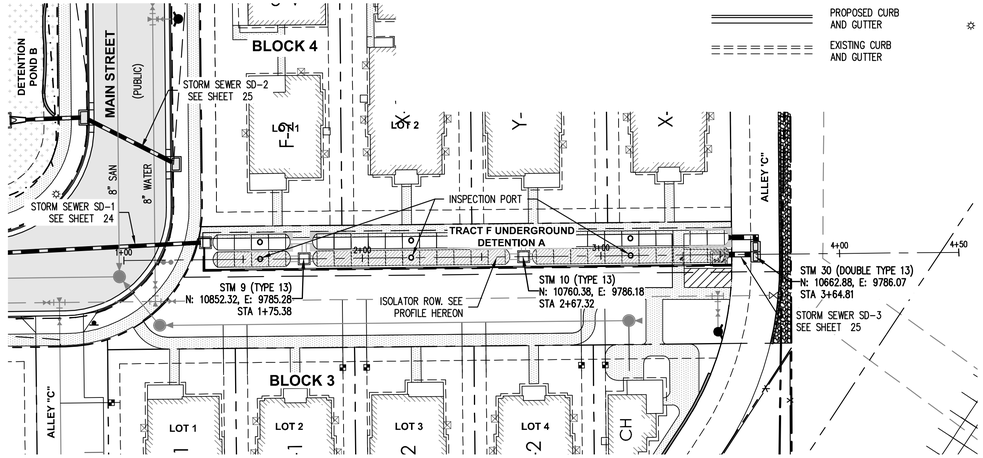
LE□END

PROPERTY LINE
PROPOSED EASEMENT
PROPOSED CURB AND GUTTER
EXISTING CURB AND GUTTER
10
PROPOSED PARKING STALL COUNT
PROPOSED SIGN
PROPOSED LIGHTING
EXISTING ASPHALT TO BE REMOVED AND REPLACED
PROPOSED CONCRETE PAVING
PROPOSED ASPHALT PAVING



ORIGINAL SCALE: 1"= 30' HORIZ.

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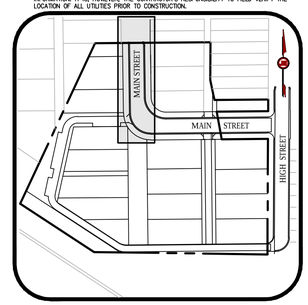
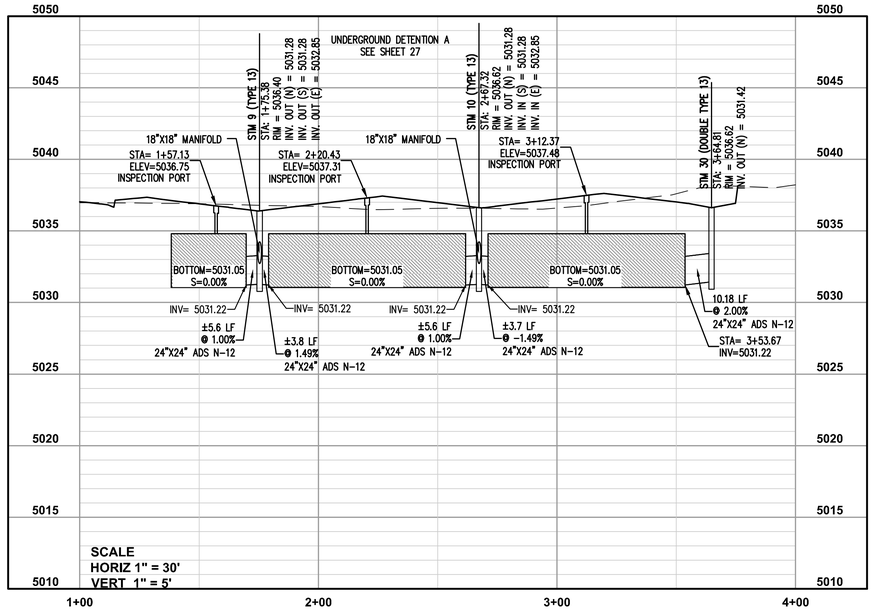


□TORMTEC□ I□OLATOR RO□
PLAN AND PRO□ILE



SCALE
HORIZ 1" = 30'
VERT 1" = 5'

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JeHN ENGINEERING
9690 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-8438

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FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

SCALE VERIFICATIO□
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RE□ SE OF DOC□ME□T
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REVISIO□S

□O	DESCRIPTIO□	DATE	B□
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

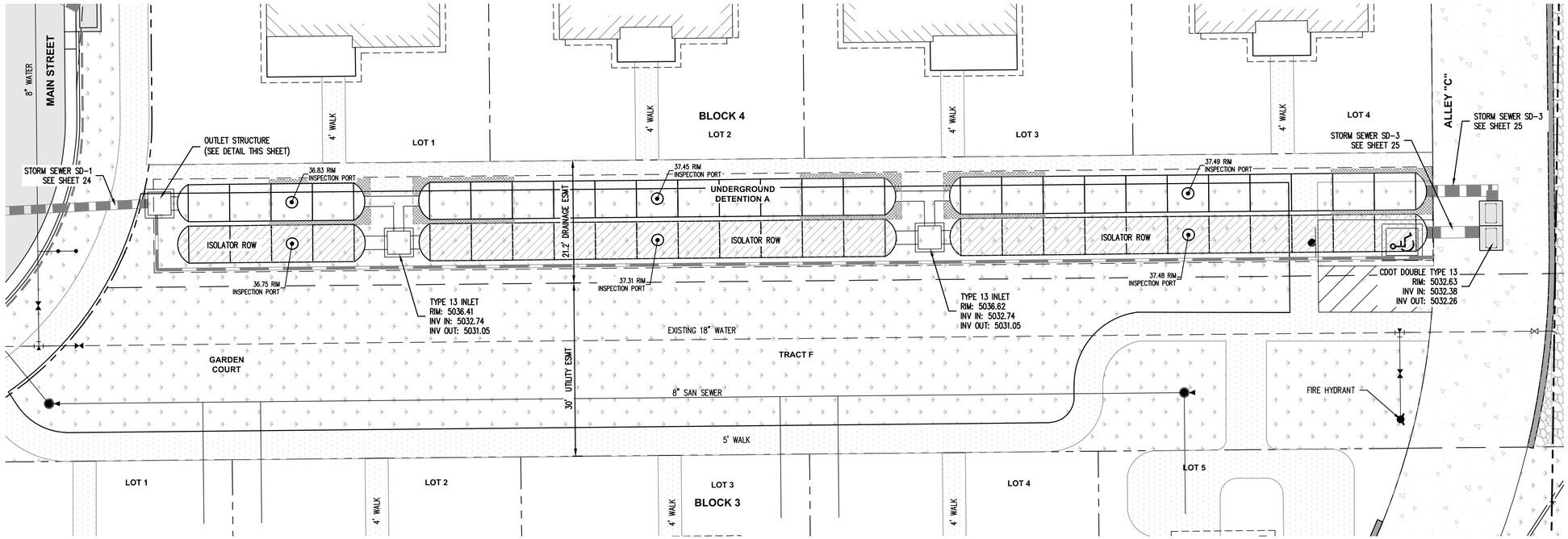
PRE□M□AR□

MAIN STREET
CO□STR□CTIO□ DOC□ME□TS
STORMTECH □SOLATOR ROW

prepared for
O□D TOW□ □V□□, □□C

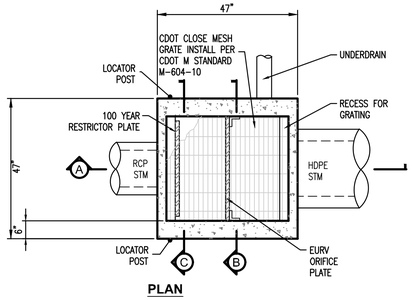
DRAWN BY:	DESIGNED BY:	DRAWING NAME:	APPROVED BY:
MC□	MC□	6038-STORMTECH.dwg	

JOB NUMBER: 06□9-2□6-038
DATE: □29□20□9
SCALE: □" □30□
SHEET NO: 26 OF 43

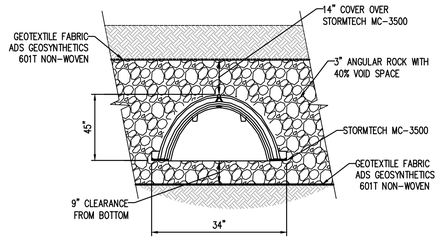


JEHN ENGINEERING ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

ORIGINAL SCALE: 1"= 10' HORIZ.



PLAN

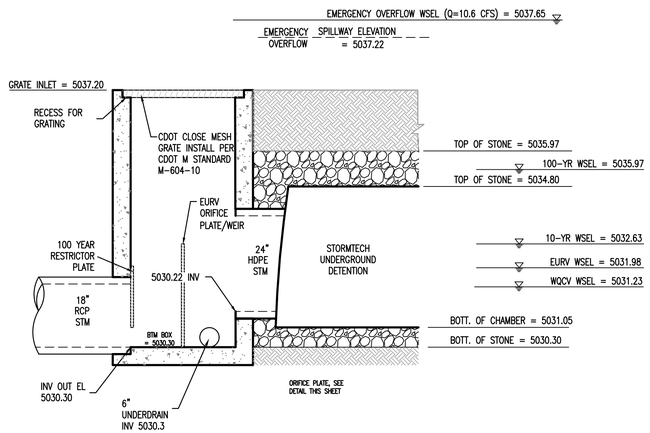


DETENTION SECTION

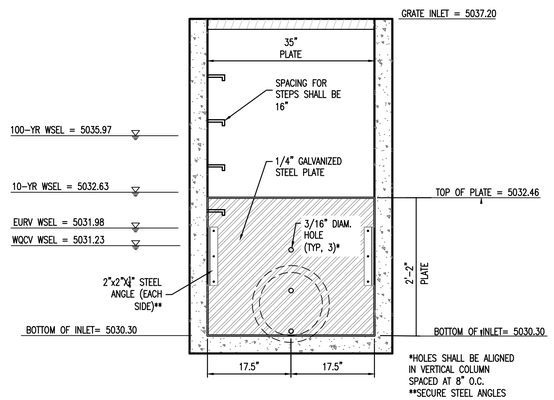
SCALE NTS

POND A TABLE

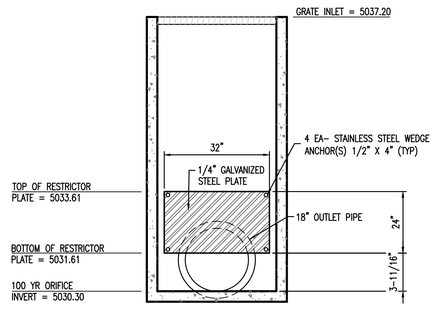
V_{WQCV}	0.035 ac-ft
V_{EURV}	0.082 ac-ft
V_{10}	0.122 ac-ft
V_{100}	0.268 ac-ft
$Q_{WQCV\ (RELEASE)}$	0.03 cfs (42 hr drain time)
$Q_{EURV\ (RELEASE)}$	0.05 cfs (72 hr drain time)
$Q_{10\ IN}$	2.65 cfs
$Q_{10\ OUT\ (RELEASE)}$	0.70 cfs
$Q_{100\ IN}$	8.24 cfs
$Q_{100\ OUT\ (RELEASE)}$	2.90 cfs



SECTION A-A



SECTION B-B
EURV ORIFICE PLATE DETAIL



SECTION C-C
100-YEAR RESTRICTOR PLATE DETAIL

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NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/5/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

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MAIN STREET
CONSTRUCTION DOCUMENTS
UNDERDETENTION
DETAILS
prepared for
CITY OF WHEAT RIDGE, CO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-UD.dwg
APPROVED BY:

JOB NUMBER: 06-29-26-038
DATE: 01-29-2019
SCALE: 1"=10'
SHEET NO: 27 OF 43

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	EVAN FISCHGRUND 720-250-8047 EVAN.FISCHGRUND@ADS-PIPE.COM
ADS SALES REP:	MARK KAELBERER 720-256-8225 MARK.KAELBERER@ADS-PIPE.COM
PROJECT NO:	180178

STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm) MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

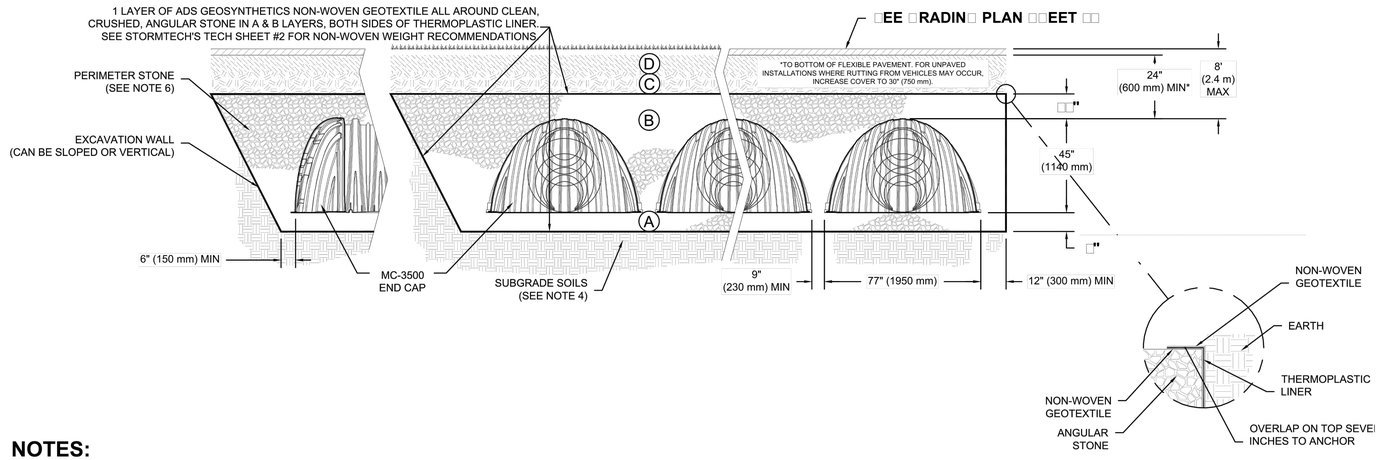
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2 3]

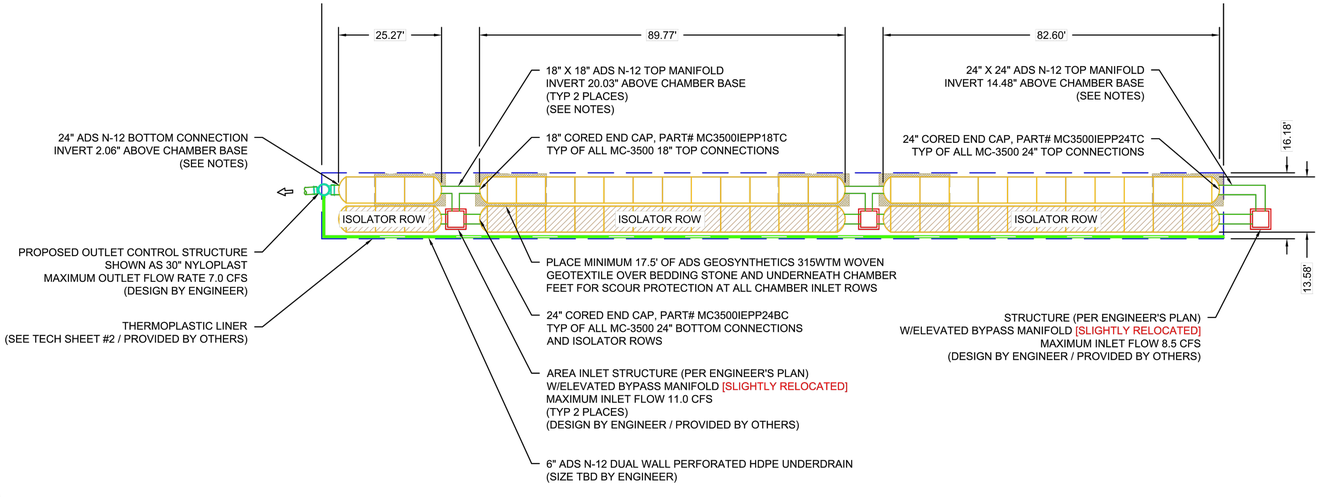
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



THERMOPLASTIC LINER DETAIL

NOTES:

1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.



PROPOSED LAYOUT

52	STORMTECH MC-3500 CHAMBERS
12	STORMTECH MC-3500 END CAPS
14	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
11,662	**INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)**
3,584	SYSTEM AREA (ft²)
475	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	5042.80
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	5037.30
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	5036.80
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	5036.80
MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):	5036.80
TOP OF STONE:	5035.97
TOP OF MC-3500 CHAMBER:	5034.80
18" TOP MANIFOLD INVERT:	5032.72
24" TOP MANIFOLD INVERT:	5032.26
24" BOTTOM CONNECTION INVERT:	5031.22
24" ISOLATOR ROW INVERT:	5031.22
BOTTOM OF MC-3500 CHAMBER:	5031.05
UNDERDRAIN INVERT:	5030.30
BOTTOM OF STONE:	5030.30

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CERTIFICATE OF AUTHORIZATION FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

RESERVE DOCUMENT

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4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
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ARVADA, CO 80002
PH: (303) 423-6039 FAX: (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
DETAILS 2
prepared for
OLD TOWN VILLAGE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-UD.dwg
APPROVED BY:

JOB NUMBER: 06-09-26-038
DATE: 02-20-19
SCALE: A
SHEET NO: 28 OF 43

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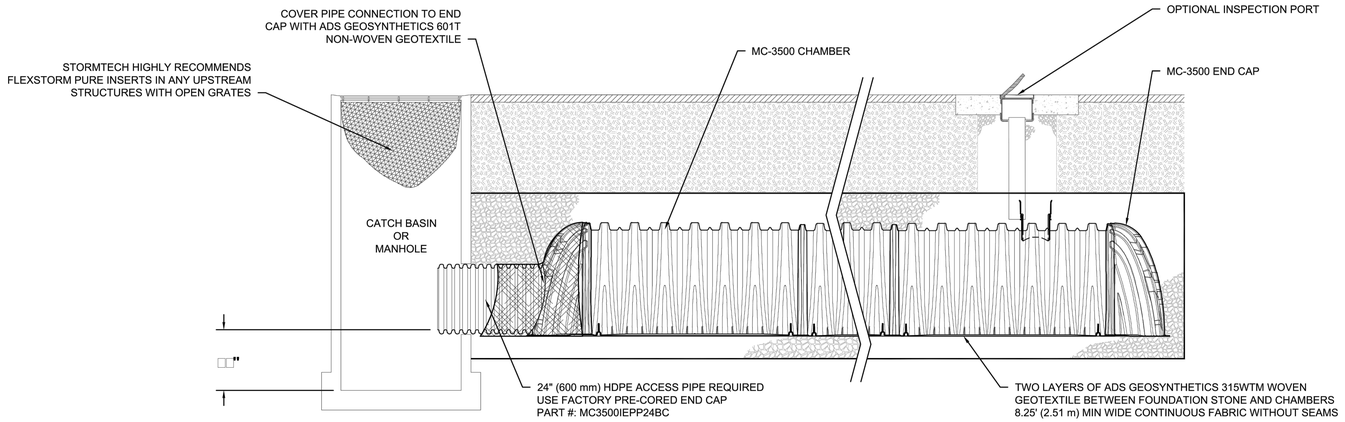
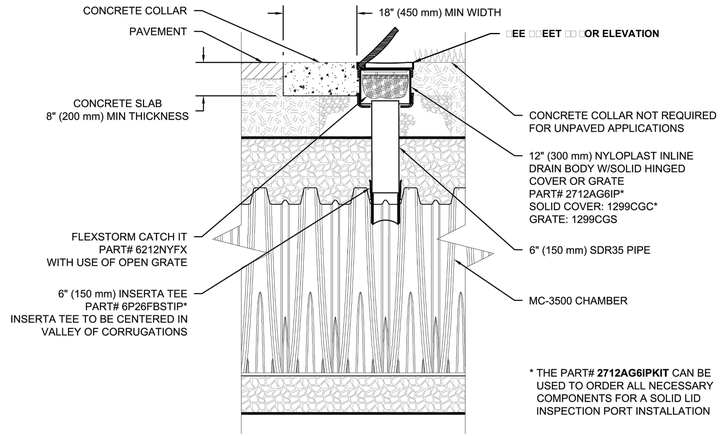


MC-3500 ISOLATOR ROW DETAIL
NTS



MC-3500 6" INSPECTION PORT DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

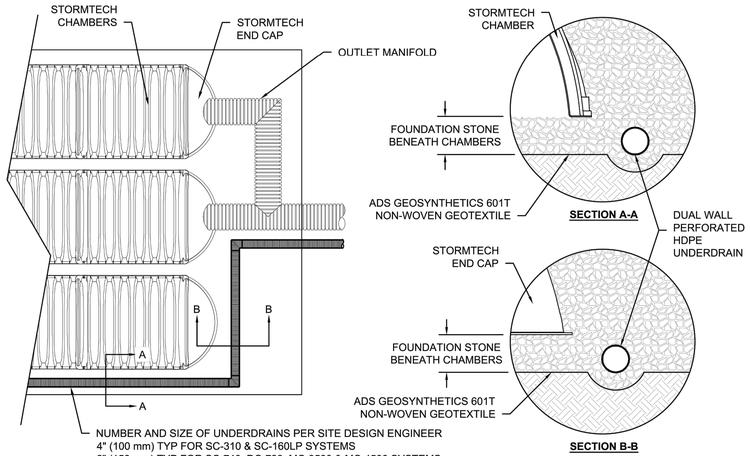
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

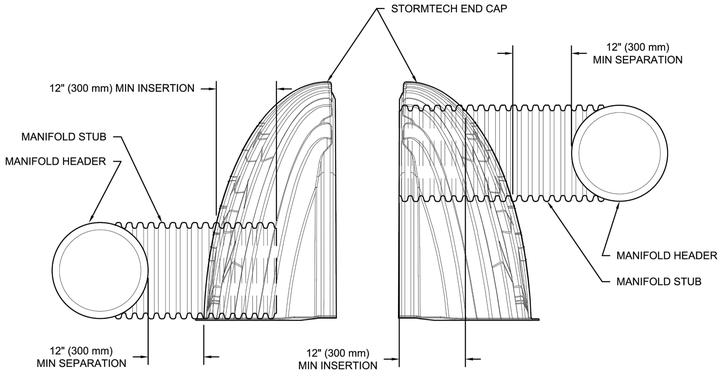
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

UNDERDRAIN DETAIL
NTS

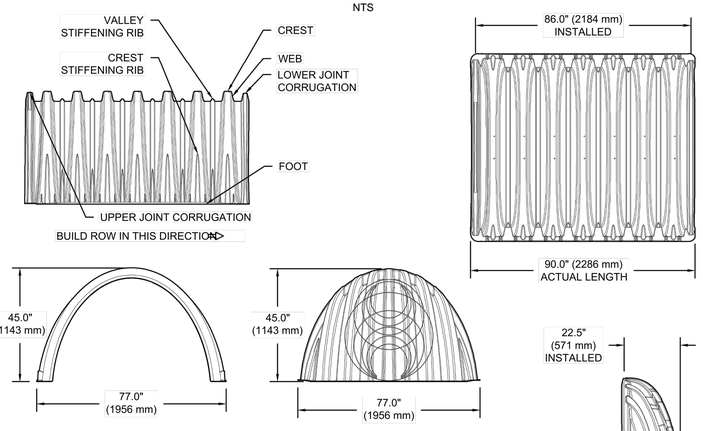


MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-3500 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	178.9 CUBIC FEET	(5.06 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	46.0 CUBIC FEET	(1.30 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

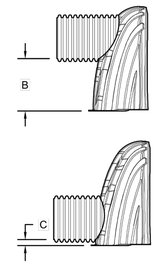
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS.
CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm)
THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.



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REVISIONS

NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

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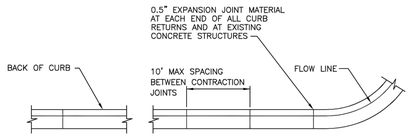
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6098 FAX: (303) 467-8408

MAIN STREET
CONSTRUCTION DOCUMENTS
UNDERDRAIN DETAILS
prepared for
TOWN OF VAIL, CO

DRAWN BY:	DESIGNED BY:	DRAWING NAME:	APPROVED BY:
MC	MC	6038-UD.dwg	

JOB NUMBER: 06-19-2-16-038
DATE: 01-29-2019
SCALE: AS NOTED
SHEET NO: 29 OF 43



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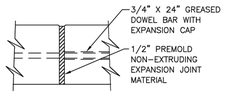
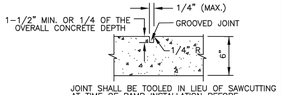


EXPANSION JOINT



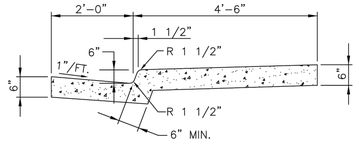
CONTRACTION JOINT

NOTES:

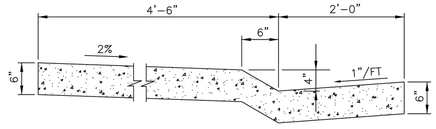
1. EXPANSION JOINT MATERIAL SHALL BE NON-EXTRUDING AND RESILIENT TYPE TO MEET AASHTO SPEC. M-213.
2. ANY OVER-EXCAVATION SHALL BE REPLACED BY GRANULAR BACKFILL COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698.

The Town of ERIE COLORADO

DRAWING TITLE: CURB AND GUTTER JOINT DETAIL
DRAWING NUMBER: SW1
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2010



VERTICAL



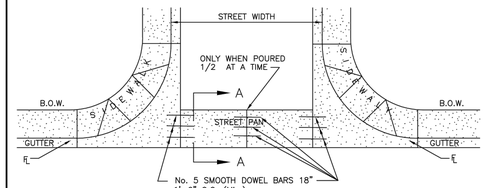
HOLLYWOOD

NOTES:

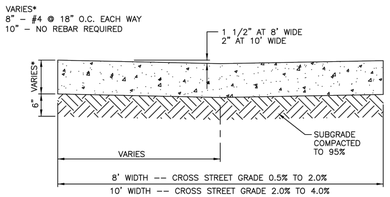
1. EXPANSION JOINT MATERIAL SHALL BE NON-EXTRUDING AND RESILIENT TYPE TO MEET AASHO SPEC. M-213.
2. ANY OVER-EXCAVATION SHALL BE REPLACED BY GRANULAR BACKFILL COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698.
3. SEE DETAILS ON DRAWING SW1 FOR EXPANSION AND CONTRACTION JOINT DETAILS.
4. FOR USE IN RESIDENTIAL AREAS OF LOCAL COLLECTORS ONLY.

The Town of ERIE COLORADO

DRAWING TITLE: MONOLITHIC INTEGRAL CURBWALK
DRAWING NUMBER: SW2
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2010



PLAN



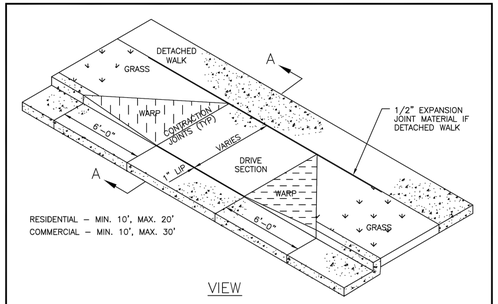
SECTION A-A

CONCRETE CROSS PAN

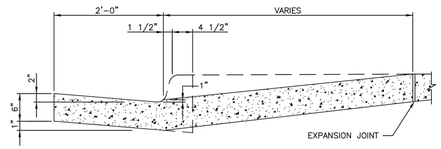
NOT TO SCALE

The Town of ERIE COLORADO

DRAWING TITLE: CONCRETE CROSS PAN
DRAWING NUMBER: SW3
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2010



VIEW



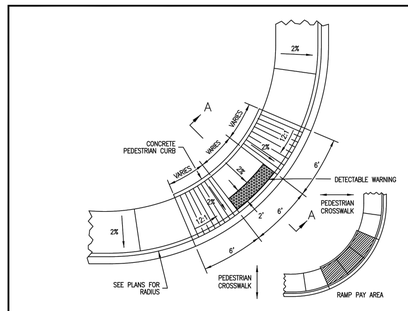
SECTION A-A

NOTES:

1. CONTRACTION JOINTS ARE REQUIRED AT EACH SIDE OF WARPED SECTION AND EVERY 10' ALONG THE DRIVE SECTION. SEE DETAILS ON DRAWING SW1 FOR CONSTRUCTION JOINT DETAILS.
2. CHAMFER FRONT EDGE OF CURB AND DRIVE SECTION AS SHOWN IN SECTION A-A.
3. SIDEWALK THICKNESS SHALL BE 6" AT DRIVEWAY

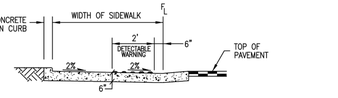
The Town of ERIE COLORADO

DRAWING TITLE: DRIVE CUT-DETACHED WALK
DRAWING NUMBER: SW4A
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2006



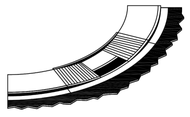
SIDEWALK RAMP TYPE 2A

PLAN



SECTION A-A

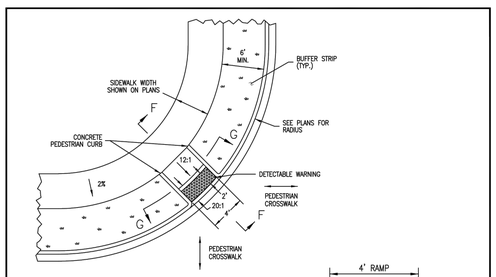
NOTES:
1. GROOVED JOINTS SHALL BE SPACED 8' APART 1/2" DEPTH. FOR CLARITY, NOT ALL JOINTS ARE SHOWN. NO LIP AT FLOWLINE.
2. THE RAMP AREA SHALL RECEIVE A COARSER BRUSH TREATMENT THAN THE SIDEWALK. BROOMING SHALL NOT CAUSE THE GROOVES TO CLOSE.
3. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
4. RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1. THE DETECTABLE WARNING AREA SLOPE SHALL NOT BE STEEPER THAN 20:1.
5. CONSTRUCTION OF THE CONCRETE PEDESTRIAN CURB TO BE INCLUDED IN THE COST OF THE CURB RAMP.
6. DETECTABLE WARNINGS SHALL BE EAST JORDON IRON WORKS 7005 SERIES DETECTABLE WARNING PLATES OR APPROVED EQUAL.



ISOMETRIC VIEW

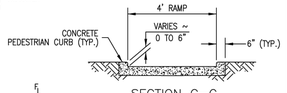
The Town of ERIE COLORADO

DRAWING TITLE: CURB RAMP TYPE 2A ATTACHED WALK
DRAWING NUMBER: SW6
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2006

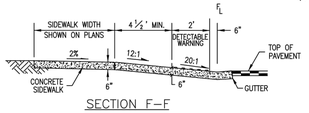


SIDEWALK RAMP TYPE 3A

PLAN

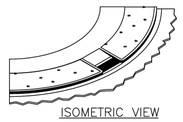


SECTION G-G



SECTION F-F

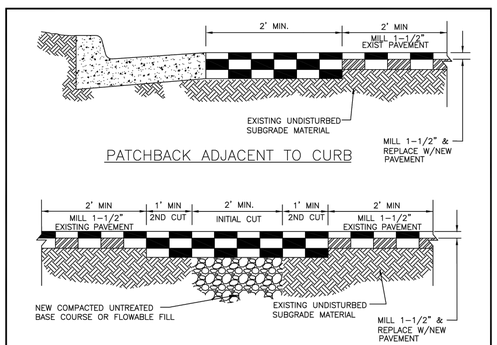
NOTES:
1. GROOVED JOINTS SHALL BE SPACED 8' APART 1/2" DEPTH. FOR CLARITY, NOT ALL JOINTS ARE SHOWN. NO LIP AT FLOWLINE.
2. THE RAMP AREA SHALL RECEIVE A COARSER BRUSH TREATMENT THAN THE SIDEWALK. BROOMING SHALL NOT CAUSE THE GROOVES TO CLOSE.
3. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
4. RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1. THE DETECTABLE WARNING AREA SLOPE SHALL NOT BE STEEPER THAN 20:1.
5. CONSTRUCTION OF THE CONCRETE PEDESTRIAN CURB TO BE INCLUDED IN THE COST OF THE CURB RAMP.
6. DETECTABLE WARNINGS SHALL BE EAST JORDON IRON WORKS 7005 SERIES DETECTABLE WARNING PLATES OR APPROVED EQUAL.



ISOMETRIC VIEW

The Town of ERIE COLORADO

DRAWING TITLE: CURB RAMP TYPE 3 DETACHED SIDEWALK
DRAWING NUMBER: SW9
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2015



PATCHBACK ADJACENT TO CURB

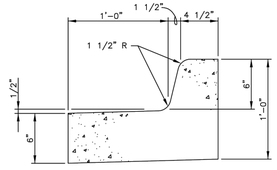
PATCHBACK FOR UTILITY AND SERVICE TRENCHES

NOTE:

1. IF ASPHALT PATCH THICKNESS IS NOT IDENTIFIED ON PLANS USE 6-1/2" MIN ASPHALT PATCH OR MATCH EXISTING, WHICH EVER THICKNESS IS GREATER.
2. MINIMUM DEPTH OF WEARING COURSE SHALL BE 1-1/2" AND SHALL BE GRADING SX ASPHALT.
3. MINIMUM DEPTH OF INTERMEDIATE COURSE SHALL BE 5" AND BE INSTALLED IN 2 LIFTS. INTERMEDIATE COURSE SHALL BE GRADING S OR G ASPHALT.
4. PATCH SHALL BE PLACED AND COMPACTED IN LIFTS A MAXIMUM OF 3" IN DEPTH.
5. APPLY SS-1 TACK COAT TO EXISTING ASPHALT AND/OR CONCRETE VERTICAL SURFACES.
6. TRENCHES LESS THAN 2' IN WIDTH MUST RECEIVE PRIOR APPROVAL FROM THE TOWN OF ERIE ENGINEERING DEPARTMENT AND SHALL BE FLOW-FILLED.
7. PROVIDE 28 DAY 60 PSI CONTROLLED LOW STRENGTH FLOWABLE FILL AS SPECIFIED. USE FILL THAT FLOWS EASILY AND VIBRATION IS NOT REQUIRED. CURE TO INITIAL SET BEFORE PLACING NEW UNTREATED BASE COURSE OR NEW ASPHALT PAVEMENT. USE FLOWABLE FILL IN EXCAVATIONS THAT ARE TOO NARROW TO RECEIVE COMPACTION EQUIPMENT.
8. REMOVE ADDITIONAL PAVEMENT TO A PAINTED LANE STRIPE, A LIP OF GUTTER, A CURB, AN EXISTING PAVEMENT PATCH, OR AN EDGE OF THE PAVEMENT IF SUCH STREET FEATURE IS WITHIN TWO FEET OF THE SECOND SAW CUT.
9. PROVIDE UNTREATED BASE COURSE MATERIAL. DO NOT USE GRAVEL OR WASHED ROCK. PLACE NEW MATERIAL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT TO A MODIFIED PROCTOR DENSITY OF 95% OR GREATER.
10. STRAIGHT SAWCUT OR BLADECUT THE EXISTING ASPHALT PAVEMENT WHEN JOINING WITH NEW ASPHALT PAVEMENT.

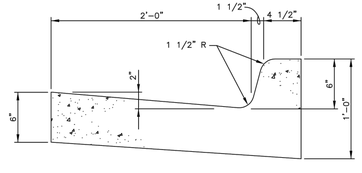
The Town of ERIE COLORADO

DRAWING TITLE: TRENCH AND CURB PATCH
DRAWING NUMBER: ST10
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 1/2014



MEDIAN CURB & GUTTER

SPILL



VERTICAL CURB & GUTTER

CATCH

NOTES:

1. SUBGRADE TO BE COMPACTED TO 95% MODIFIED PROCTOR.

The Town of ERIE COLORADO

DRAWING TITLE: VERTICAL CURB SECTION
DRAWING NUMBER: SW12
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2010

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3	4TH SUBMITTAL	10/5/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

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5680 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-6438

MAIN STREET
CONSTRUCTION DOCUMENTS
SITE DETAILS

prepared for
TOWN OF ERIE, COLORADO

DRAWN BY:	DESIGNED BY:	DRAWING NAME	APPROVED BY:
MC	MC	6038-ST-DET.dwg	

JOB NUMBER: 06-9-20-6-038
DATE: 01-29-2019
SCALE: AS
SHEET NO: 30 OF 43

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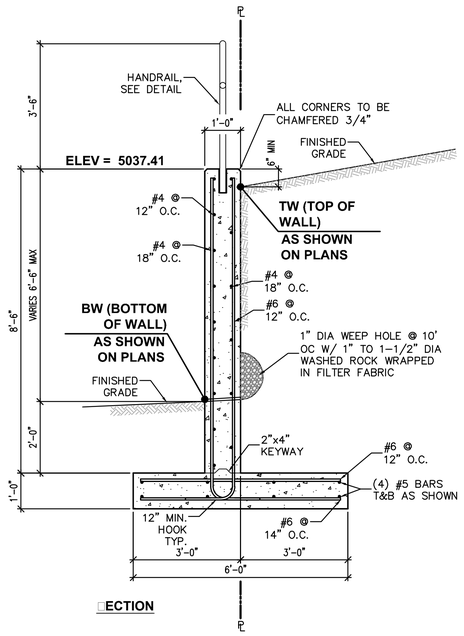
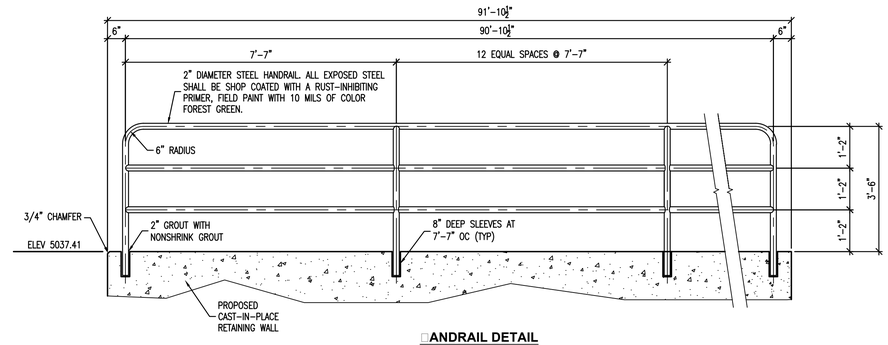


□ECTION

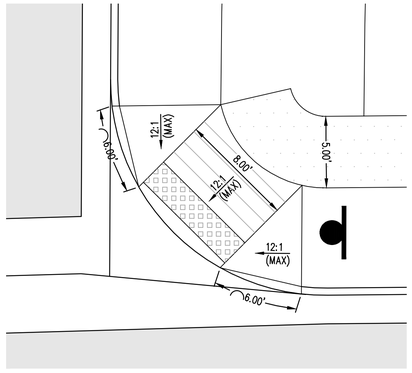


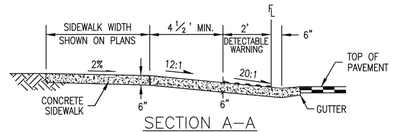
□ANDRAIL DETAIL

PRE□CA□T CONCRETE RETAININ□ □ ALL

SEE DETENTION POND SHEET 14
FOR PLAN VIEW OF RETAINING WALL

SCALE 1/2"=1'-0"



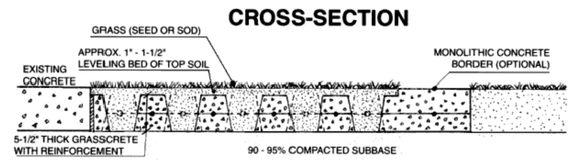


NOTES:

1. THERE SHALL BE NO LIP WHERE THE RAMP MEETS THE GUTTER.
2. CURB RAMPS SHALL BE PROVIDED AT ALL CORNERS OF STREET INTERSECTIONS AND AT "T" INTERSECTIONS WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB.
3. RAMP SURFACE SHALL HAVE A COARSE BROOM FINISH WITH GROOVES PLACED PERPENDICULAR TO THE SLOPE AT 8" INTERVALS, 1/2" DEPTH.
4. CURB RAMPS SHALL BE POURED MONOLITHICALLY WITH THE CURB, GUTTER AND APRON.
5. RAMP DIMENSIONS SHALL BE SPECIFIED ON THE CONSTRUCTION PLANS, RAMP AND WING SLOPES SHALL NOT BE STEEPER THAN 12:1.
6. RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1. THE DETECTABLE WARNING AREA SLOPE SHALL NOT BE STEEPER THAN 20:1.
7. DETECTABLE WARNINGS SHALL BE EAST JORDON IRON WORKS 7005 SERIES DETECTABLE WARNING PLATES OR APPROVED EQUAL.

□□C□R□ RAMP

NTS



CROSS-SECTION

□RA□□CRETE DETAIL

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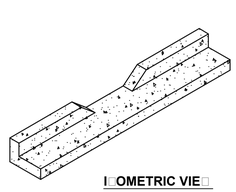

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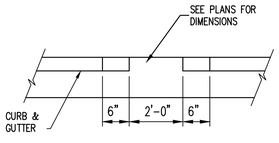

PLAN

C□R□ C□T DETAIL

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2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIO□S

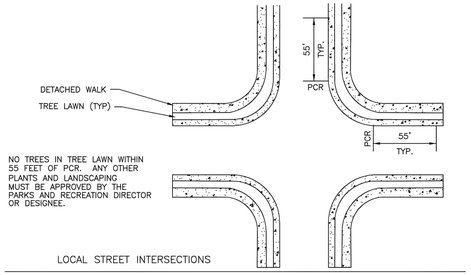
PRE□M□AR□

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6209 FAX: (303) 467-8408

MAIN STREET
CO□STR□CTIO□ DOC□ME□TS
SITE DETA□S 2
prepared for
O□D TOW□ □V□□, □□C

DRAWN BY: MC□
DESIGNED BY: MC□
DRAWING NAME: 6038-ST-DET.dwg
APPROVED BY:

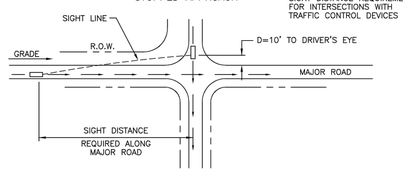
JOB NUMBER: 06□9-2□6-038
DATE: □29□20□9
SCALE: □A
SHEET NO: 3□ OF 43



LOCAL STREET INTERSECTIONS

STOPPED APPROACH

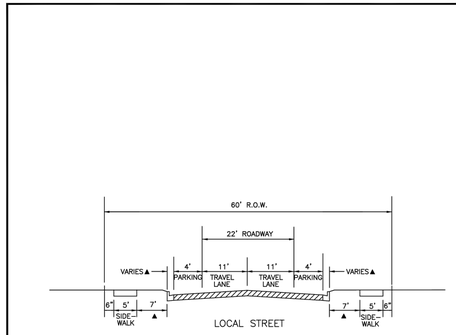
SIGHT DISTANCE REQUIREMENT FOR INTERSECTIONS WITH TRAFFIC CONTROL DEVICES



DESIGN SPEED OF THRU ROADWAY (MPH)	MINIMUM SIGHT DISTANCE FOR STOPPED VEHICLE (FEET)	GRADE CORRECTION DISTANCE (FEET) SPEED	UPGRADE TO 3%	UPGRADE TO 6%	FOR DOWNGRADES 3%	FOR DOWNGRADES 6%
25	250	25	0	−10	+10	+20
30	300	30	0	−10	+10	+20
35	350	35	−10	−15	+10	+25
40	400	40	−10	−20	+10	+30
45	450	45	−15	−25	+15	+40

The Town of ERIE COLORADO

DRAWING TITLE: SIGHT DISTANCE
DRAWING NUMBER: ST5
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2012



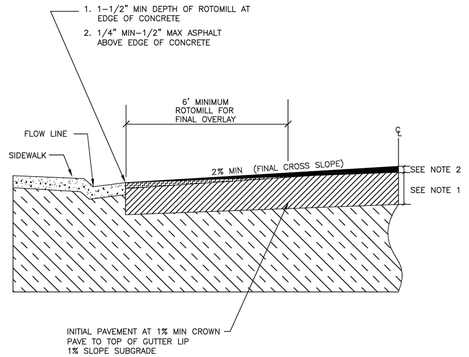
LOCAL STREET

NOTE:
PRIVATE UTILITIES TO BE OUTSIDE OF THE PUBLIC RIGHT-OF-WAY

▲ WIDTH DEPENDS ON VERTICAL OR ROLLOVER CURB

The Town of ERIE COLORADO

DRAWING TITLE: LOCAL STREETS
DRAWING NUMBER: ST6
DRAWN BY: J. ASCUNCE APPROVED BY: G. BEHLEN DATE: 01/2017



NOTES:

1. INITIAL PAVEMENT DEPTH AT CONSTRUCTION ACCEPTANCE SHALL BE THE FULL DESIGN DEPTH FOR THE ENTIRE WIDTH OF THE ROAD SECTION.

2. FINAL OVERLAY DEPTH AT FINAL ACCEPTANCE IS IN ADDITION TO THE DESIGN DEPTH. THE DEPTH WILL VARY DEPENDING UPON THE PAVEMENT WIDTH TO ENSURE A MINIMUM OF A 2% PAVEMENT CROSS SLOPE.

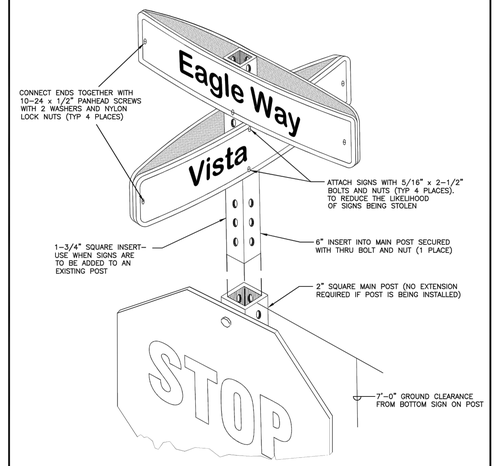
3. THE FINAL OVERLAY SHALL BE COMPLETE AT FINAL ACCEPTANCE WHICH IS AFTER THE END OF THE 2 YEAR WARRANTY PERIOD WHEN ALL FINAL PUNCH LIST REPAIRS ARE COMPLETE.

4. DETERMINATION OF CROWN FOR CUL DE SAC PAVING SHALL BE EVALUATED ON A CASE BY CASE BASIS.

The Town of ERIE COLORADO

DRAWING TITLE: PAVEMENT PHASING-NEW ROADS
DRAWING NUMBER: ST7
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2013

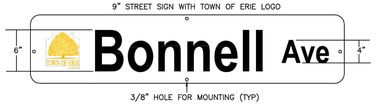
STANDARD ORIENTATION:
NORTH-SOUTH STREETS ON TOP
EAST-WEST STREETS ON BOTTOM



The Town of ERIE COLORADO

DRAWING TITLE: GROUND MOUNT STREET NAME SIGN INSTALLATION
DRAWING NUMBER: ST15A
DRAWN BY: J. ASCUNCE APPROVED BY: R. PENNINGTON DATE: 09/2017

9" STREET SIGN WITH TOWN OF ERIE LOGO



3/8" HOLE FOR MOUNTING (TYP)

6" STREET SIGN WITHOUT TOWN OF ERIE LOGO

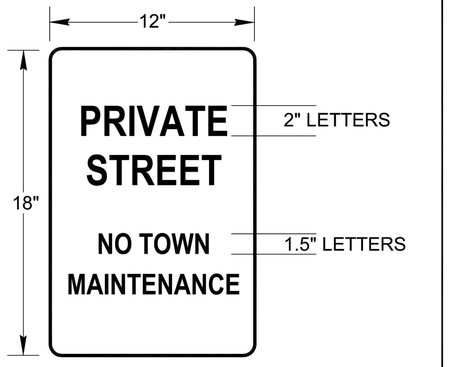
INTERSECTION TYPE	SIGN BLANK SIZE (30" MINIMUM ON ALL LENGTHS)	MOUNTING	RECOMMENDED MINIMUM LETTER HEIGHT: INITIAL UPPER CASE	LETTER HEIGHT: LOWER CASE	SUFFIX (ST, AVE, CT ETC): INITIAL UPPER CASE	SUFFIX (ST, AVE, CT ETC): LOWER CASE
ARTERIALS AT SIGNAL LIGHTS WITH LOGO		OVERHEAD	12 INCHES	9 INCHES	6 INCHES	4.5 INCHES
MULTI LANE ARTERIALS AND ALL OTHERS DIRECTED BY PUBLIC WORKS DEPT WITH LOGO	10" X AS NEEDED	POST MOUNTED	8 INCHES	6 INCHES	4.5 INCHES	3.5 INCHES
ARTERIALS & COLLECTORS AND ALL OTHERS DIRECTED BY PUBLIC WORKS DEPT WITH LOGO	9" X AS NEEDED	POST MOUNTED	6 INCHES	4.5 INCHES	4 INCHES	3 INCHES
LOCAL/NO LOGO	9" X AS NEEDED	POST MOUNTED	6 INCHES	4.5 INCHES	4 INCHES	3 INCHES
*LOCAL/NO LOGO	6" X AS NEEDED	POST MOUNTED	4 INCHES	3 INCHES	3 INCHES	2.25 INCHES
*ON LOCAL TWO-LANE STREETS WITH SPEED LIMITS OF 25 MPH OR LESS, 4 INCH INITIAL UPPER-CASE LETTERS WITH 3 INCH LOWER CASE LETTERS MAY BE USED						
NO BORDERS EXCEPT ON OVERHEAD LIGHTED STREET SIGNS AT SIGNALIZED INTERSECTIONS						
WHEN LOGO IS DISPLAYED, THE HEIGHT AND WIDTH OF THE LOGO SHALL NOT EXCEED THE UPPER CASE LETTER HEIGHT OF THE PRINCIPAL LEGEND OF THE SIGN AND LOCATED LEFT OF THE STREET NAME						

NOTES:

1. SIGN BLANKS SHALL BE 6061 OR 5052-H38 ALUMINUM ALLOY MIN .080" THICK.
2. FACING SHALL BE GREEN HI-INTENSITY RETROREFLECTIVE SHEETING.
3. LETTERS AND NUMBERS SHALL BE WHITE RETROREFLECTIVE SHEETING.
4. TOWN OF ERIE COLOR LOGO IS TO BE USED FOR COLLECTOR AND ARTERIAL STREET BLADES ONLY.
5. 30" MIN. LENGTH ON ALL STREET SIGNS, SINGLE FACE FOR BACK TO BACK INSTALLATION AND 1/4" HOLES FOR PINNING ENDS OF SIGNS TOGETHER

The Town of ERIE COLORADO

DRAWING TITLE: ROAD AND STREET NAME SIGNS
DRAWING NUMBER: ST15B
DRAWN BY: C. GERATY APPROVED BY: G. BEHLEN REV. DATE: 03/2016

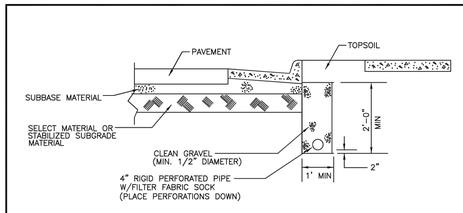


NOTES:

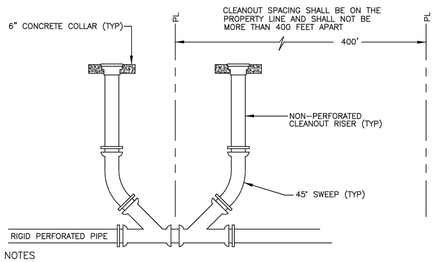
1. SIGN BLANKS SHALL BE 6061 OR 5052-H38 ALUMINUM ALLOY MIN .080" THICK.
2. FACING SHALL BE WHITE RETRO REFLECTIVE.
3. LETTERS SHALL BE BLACK.

The Town of ERIE COLORADO

DRAWING TITLE: PRIVATE STREET SIGN
DRAWING NUMBER: ST15C
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2011



4" PERFORATED UNDERDRAIN DETAIL

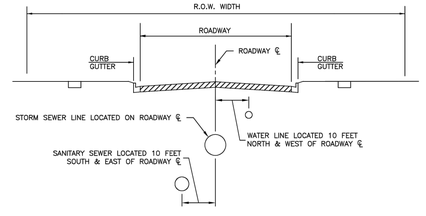


NOTES

1. CURB STOP TO BE A MIN OF 1' BEHIND TRENCH.
2. PERFORATED DRAIN NEEDS TO DAYLIGHT INTO DRAINAGE SYSTEM.
3. PROVIDE PLUG ON UPSTREAM END OF PIPE.
4. PERFORATED PIPE SHALL FOLLOW ESTABLISHED GRADE AND HAVE POSITIVE FLOW.
5. THE NEED FOR UNDERDRAINS WILL BE DETERMINED BY SOILS TESTING.
6. WHERE THE BOTTOM OF SELECT MATERIAL IS GREATER THAN 4' BELOW PAVEMENT, THE UNDERDRAIN PIPE IS TO BE COINCIDENT WITH THE BOTTOM OF SELECT MATERIAL AND THE TRENCH DEPTH AND BACKFILL QUANTITY INCREASED ACCORDINGLY.
7. PLACE A VALVE BOX TOP WITH LID AND 6" THICK CONCRETE COLLAR AT ALL 4" PERFORATED UNDERDRAIN CLEANOUTS.
8. WHEN CURB & GUTTER IS IN PLACE THE CLEANOUTS SHALL BE MARKED ON THE CONCRETE CURB FACE WITH A "+".

The Town of ERIE COLORADO

DRAWING TITLE: 4" PERFORATED UNDERDRAIN
DRAWING NUMBER: ST16
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 1/2015



TYPICAL UTILITY LOCATIONS ON NORMAL ROADWAY

NOTE:

1. VERTICAL DEPTH LOCATION OF UTILITIES VARIES (REFER TO LATEST TOWN OF ERIE STANDARDS AND SPECIFICATION FOR ALLOWABLE DEPTHS).
2. HORIZONTAL DIMENSIONS BASED ON ℄ TO ℄ OF VARIOUS PIPE UTILITY
3. UTILITY SEPERATION ALONG ℄ ROADWAY RADIAL ARC REVIEWED ON AN INDIVIDUAL PROJECT BASIS (MUST MAINTAIN 10 FEET HORIZONTAL SEPERATION)

The Town of ERIE COLORADO

DRAWING TITLE: TYPICAL STREET UTILITY LOCATION
DRAWING NUMBER: ST19
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2011

SCALE VERIFICATION
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FOR MARKING OF UNDERGROUND MEMBER UTILITIES.

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NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JEHN ENGINEERING
9960 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX (303) 467-0438

MAIN STREET
CONSTRUCTION DOCUMENTS
STREET DETAILS 3

prepared for
OLD TOWN VILLAGE, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-ST-DET.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-2019
SCALE: A
SHEET NO: 32 OF 43

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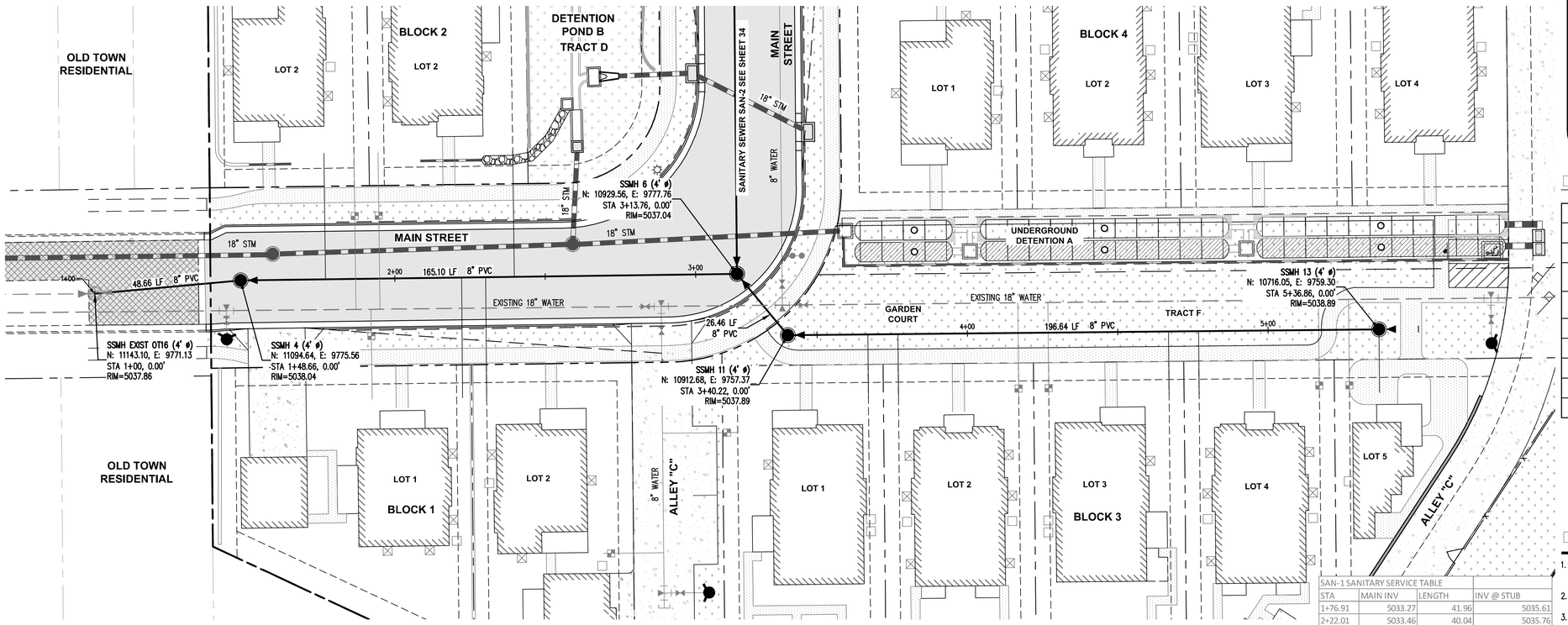
20 0 10 20 40
ORIGINAL SCALE: 1"= 20' HORIZ.
1"= 5' VERT.



SANITARY SEWER PLAN AND PROFILE

SAN-1 SANITARY SERVICE TABLE

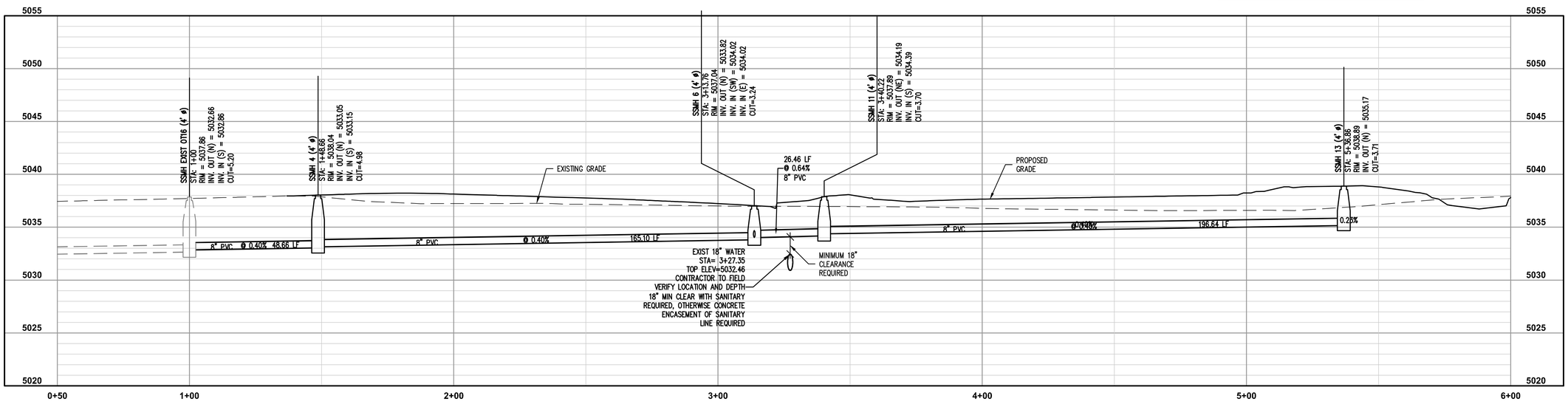
STA	MAIN INV	LENGTH	INV @ STUB
1+76.91	5033.27	41.96	5035.61
2+22.01	5033.46	40.04	5035.76
2+30.01	5033.48	40.07	5035.78
2+39.72	5033.52	41.96	5035.86
3+66.86	5034.49	21	5036.41
3+76.86	5034.53	21	5036.45
4+66.86	5034.89	21	5036.81
4+76.86	5034.93	21	5036.85
5+36.86	5035.17	21	5037.09

UTILITY LEGEND

PROPOSED WATER LINE	WAT
PROPOSED FIRE HYDRANT	
PROPOSED GATE VALVE	
PROPOSED WATER METER W/ SERVICE	3/4" W/S
PROPOSED AIR & VACUUM VALVE	
PROPOSED 4" SAN SERVICE	4" S/S
EXISTING WATER LINE	WAT
EXISTING FIRE HYDRANT	
EXISTING GATE VALVE	
EXISTING WATER MANHOLE	

SANITARY SEWER NOTES

1. ALL SANITARY SEWER SERVICES ARE 4" DIA. UNLESS NOTED OTHERWISE.
2. ALL SANITARY SEWER SERVICES TO EXTEND TO 5' BEYOND ESMT.
3. ALL MANHOLES GREATER THAN 15' DEPTH SHALL BE 5' DIAMETER.
4. THE STATIONING FOR THE SANITARY SERVICES WAS CALCULATED BY THE DISTANCE BETWEEN THE DOWNSTREAM MANHOLE AND THE SANITARY SERVICE.



JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6039 FAX: (303) 467-0438

PRELIMINARY

MAIN STREET
SANITARY SEWER CONSTRUCTION
SANITARY SEWER SAN-1 PLAN AND PROFILE
OLD TOWN NEVADA, CO

prepared for

NO.	DESCRIPTION:	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-SAN-1.dwg
APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 01-29-2019
SCALE: 1"=20'
SHEET NO: 33 OF 43

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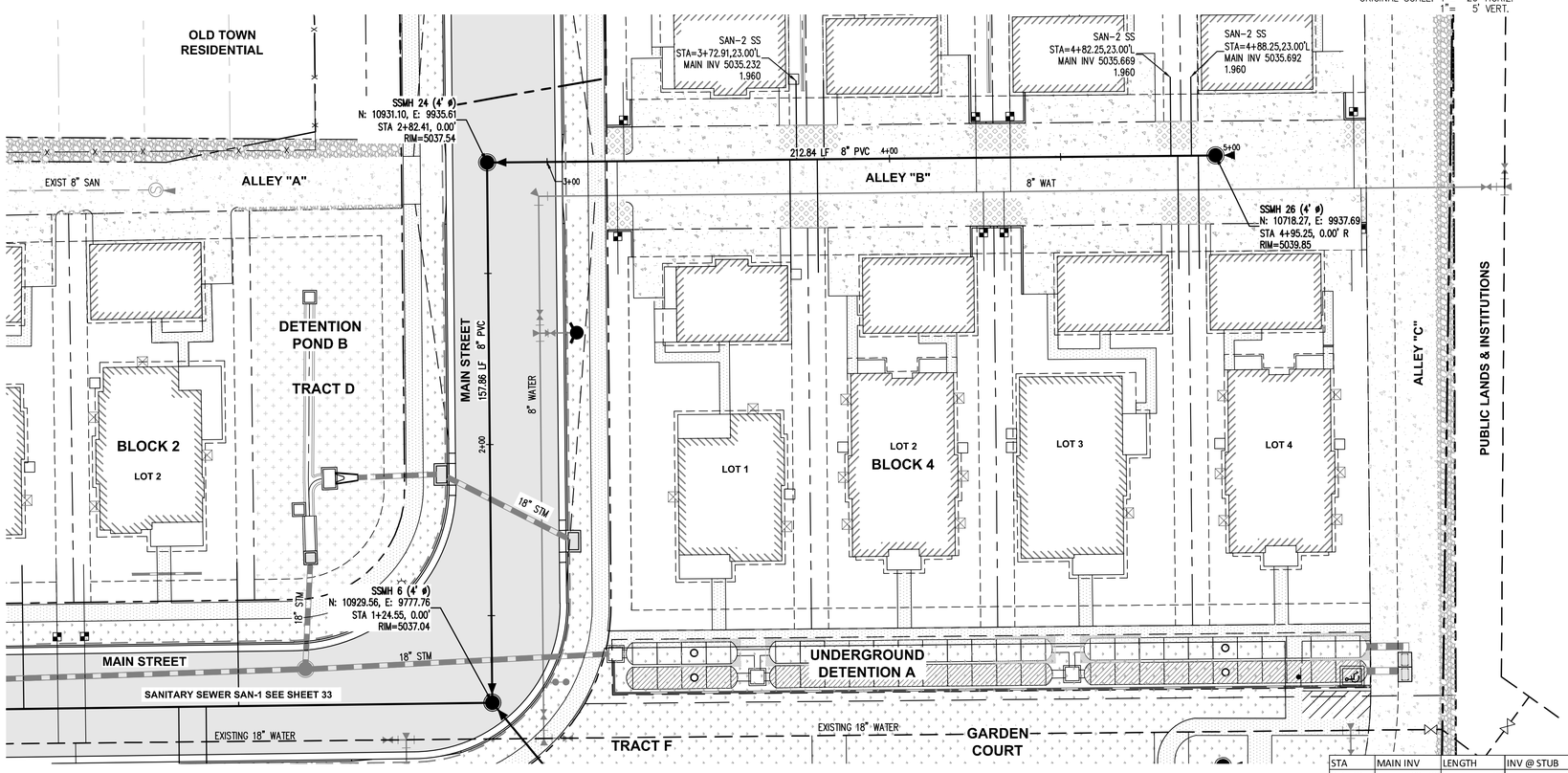

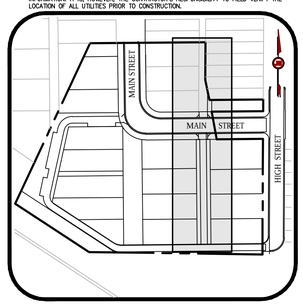

UTILITY LEGEND

PROPOSED WATER LINE	WAT
PROPOSED FIRE HYDRANT	
PROPOSED GATE VALVE	
PROPOSED WATER METER W/ SERVICE	3/4" W/S
PROPOSED AIR & VACUUM VALVE	
PROPOSED 4" SAN SERVICE	4" S/S
EXISTING WATER LINE	WAT
EXISTING FIRE HYDRANT	
EXISTING GATE VALVE	
EXISTING WATER MANHOLE	

SANITARY SEWER NOTES

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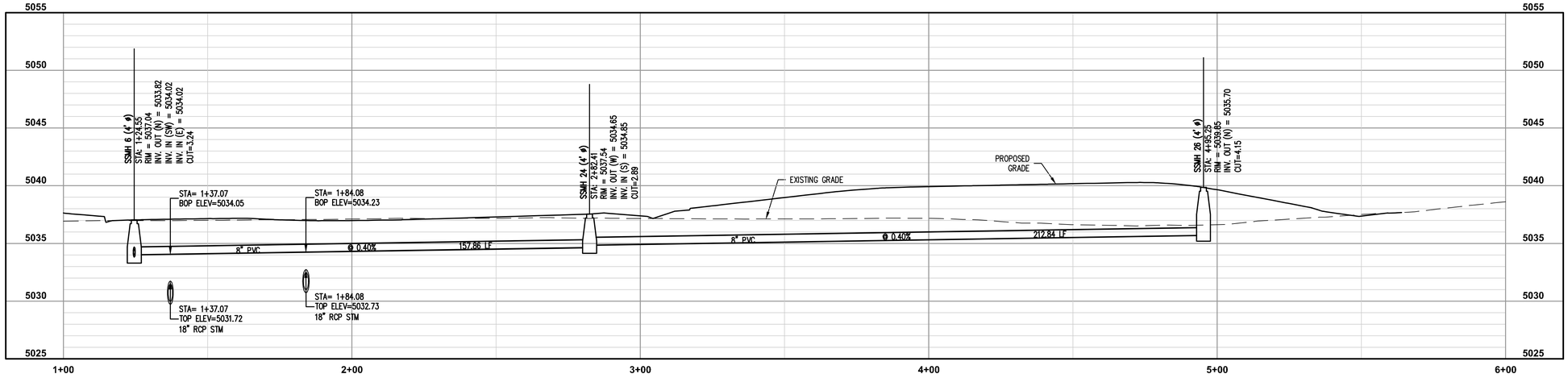
2. ALL SANITARY SEWER SERVICES TO EXTEND TO 5' BEYOND ESMT.
3. ALL MANHOLES GREATER THAN 15' DEPTH SHALL BE 5' DIAMETER.
4. THE STATIONING FOR THE SANITARY SERVICES WAS CALCULATED BY THE DISTANCE BETWEEN THE DOWNSTREAM MANHOLE AND THE SANITARY SERVICE.

STA	MAIN INV	LENGTH	INV @ STUB
3+65.91	5035.20	33	5037.36
3+67.91	5035.21	23	5037.17
3+73.91	5035.24	33	5037.40
3+75.91	5035.24	23	5037.20
4+77.25	5035.65	23	5037.61
4+79.25	5035.66	33	5037.82
4+83.25	5035.67	23	5037.63
4+85.25	5035.68	33	5037.84

SANITARY SEWER PLAN AND PROFILE



NO	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/18	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

NOTIFICATION LETTER
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JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-8438

MAIN STREET
SANITARY SEWER
CONSTRUCTION
SANITARY SEWER SAN-2 PLAN
prepared for
OLD TOWN DEVELOPMENT, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-SAN-2.dwg
APPROVED BY:

JOB NUMBER: 06-9-216-038
DATE: 12/9/2019
SCALE: 1"=20'
SHEET NO: 34 OF 43

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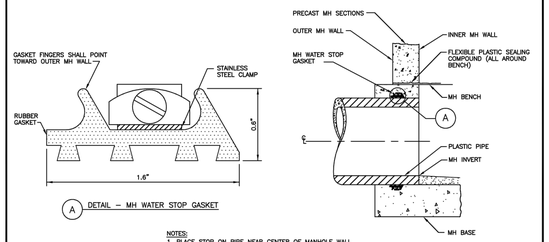
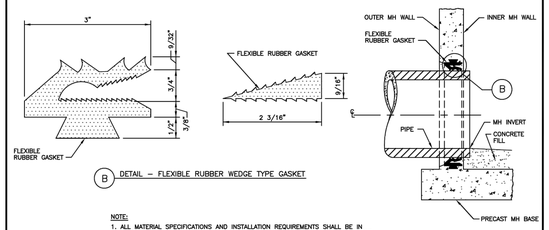


A DETAIL – MH WATER STOP GASKET

NOTES:
1. PLACE STOP ON PIPE NEAR CENTER OF MANHOLE WALL.
2. TIGHTEN STEEL BAND TO ASSURE POSITIVE SEAL AGAINST PIPE OUTSIDE. A SCREWDRIVER MAY BE USED TO TAKE UP INITIAL SLACK BUT A SOCKET WRENCH (5/16") IS PREFERRED TO ENSURE PROPER TIGHTNESS.

CAST–IN–PLACE MANHOLE CONNECTION DETAILS FOR PLASTIC PIPE



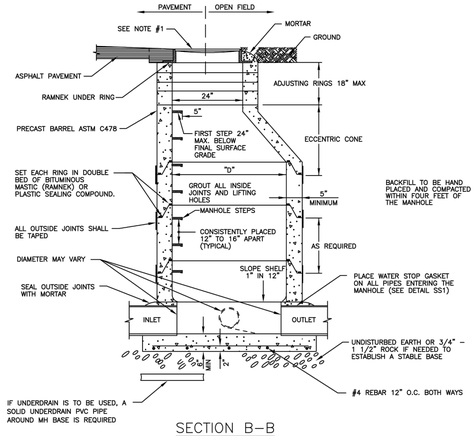
B DETAIL – FLEXIBLE RUBBER WEDGE TYPE GASKET

NOTE:
1. ALL MATERIAL SPECIFICATIONS AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.

PRECAST MANHOLE CONNECTION DETAILS FOR ANY TYPE OF PIPE

The Town of ERIE COLORADO

DRAWING TITLE: MH/PIPE WATER STOP GASKET
DRAWING NUMBER: SS1
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004

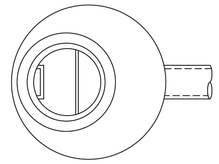


SECTION B–B

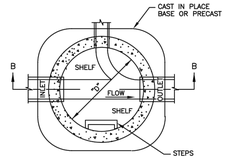
NOTES:
1. FINAL GRADE OF MANHOLE COVERS SHALL BE 1/4" LOWER THAN FINAL STREET.
2. ALL CHANNELS FLOWING INTO THE MAIN STREAM OF THE SEWER SHALL BE HAND FORMED INTO THE FLOW.
3. STEPS SHOULD BE PLACED OVER THE SHELF, NOT OVER THE FLOW. NO STEPS ALLOWED IN THE ADJUSTING RING AREA.
4. PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C–478.
5. BLOCK–OUTS, WHEN APPROVED, SHALL EXTEND A MAX. OF 6" PAST MANHOLE O.D. AND BE SATISFACTORILY PLUGGED AND SEALED.
6. BENCH MUST HAVE A BRUSHED, NON–SKID SURFACE.
7. BENCH IS TO BE EVEN WITH TOP OF PIPES
8. A MINIMUM OF 0.2' AND MAXIMUM OF 2' FALL REQUIRED FROM INLET TO OUTLET
9. MANHOLES NOT IN ASPHALT OR CONCRETE SHALL BE RAISED 6" ABOVE FINAL GRADE AND A CONCRETE COLLAR INSTALLED WITH A GREEN CARSONITE POST

The Town of ERIE COLORADO

DRAWING TITLE: STANDARD MANHOLE
DRAWING NUMBER: SS3A (1 OF 2)
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2010



ECCENTRIC CONE PLAN VIEW



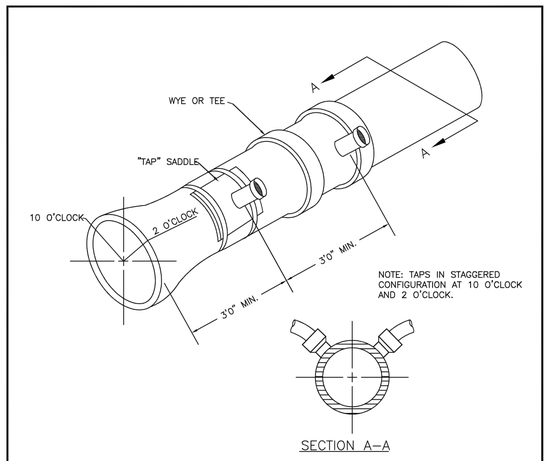
BASE PLAN VIEW

PIPE I.D.	MANHOLE I.D.	RING & COVER
18" & SMALLER	4'–0"▲	24"
21" TO 48"	5'–0"	30"
54"	6'–0"	30", 36" W/ 24"
60" & LARGER	SPECIAL DESIGN	INNER COVER

▲ WHENEVER MORE THAN A TWO WAY MANHOLE OF MAX. PIPE I.D. IS REQUIRED, THE MANHOLE SHOULD BE INCREASED TO LARGER DIA., EG. 18"x18"x18", REQUIRES 5'–0" I.D.

The Town of ERIE COLORADO

DRAWING TITLE: STANDARD MANHOLE
DRAWING NUMBER: SS3B (2 OF 2)
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004

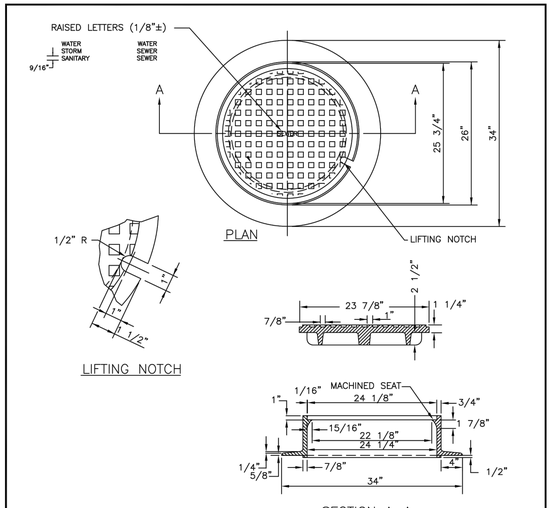


SECTION A–A

NOTES:
1. SEWER SERVICE CONNECTIONS SHALL BE POSITIONED AT EITHER THE 2 O'CLOCK OR THE 10 O'CLOCK POSITION ON THE CIRCUMFERENCE OF THE SEWER MAIN.
2. ON NEW INSTALLATIONS, EITHER WYE OR TEE FITTINGS SHALL BE USED. WHEN TAPPING INTO AN EXISTING SEWER MAIN, A SADDLE CONNECTION AND APPROVED CORING METHOD SHALL BE USED.
3. THE MINIMUM DISTANCE BETWEEN SERVICE CONNECTIONS MADE ALONG THE PIPE SHALL BE 3–FEET. THE MINIMUM DISTANCE FROM EITHER THE BELL OR SPIGOT END OF A PIPE SHALL BE 3–FEET. THE MINIMUM DISTANCE FROM THE CENTER OF A MANHOLE TO A SERVICE CONNECTION SHALL BE EITHER 5–FEET OR THE TRANSITION POINT FROM THE MANHOLE TRENCH, WHICHEVER IS GREATER.
4. A MAXIMUM OF 4 SEWER SERVICE CONNECTIONS SHALL BE ALLOWED PER 20–FEET LENGTH OF PIPE. A SPECIFIC SOILS INVESTIGATIONS SHOULD BE CONDUCTED TO ASSURE THAT THE EXTERNAL LOADING WILL BE WITHIN ALLOWABLE LIMITS REGARDLESS OF THE NUMBER OF TAPS INVOLVED.

The Town of ERIE COLORADO

DRAWING TITLE: DOMESTIC SEWER TAPPING
DRAWING NUMBER: SS15
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004



SECTION A–A

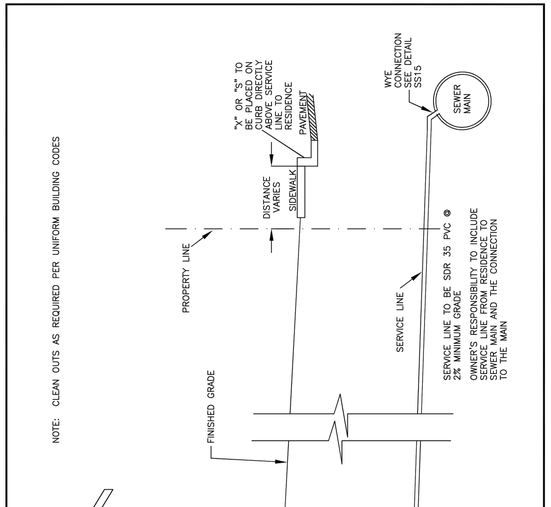
1. CASTING SPECIFICATIONS: ASTM A–48 WITH A MINIMUM TENSILE STRENGTH OF 25 KSI (CLASS 25)
2. ALL CASTINGS TO BE DIPPED IN ASPHALT BASE PAINT (OR APPROVED EQUAL)
3. CASTINGS SHALL BE AS SPECIFIED BELOW OR APPROVED EQUAL:

MANUFACTURERS	CAT. #
NEENAH	R–1706
CASTINGS, INC.	MH–400–24 C.I.
HUTCHINSON FDRY. & STL. INC.	MH–400

4. ALL NEW MANHOLES MUST INCLUDE A PLASTIC OR VINYL TAG ATTACHED TO THE TOP STEP STATING THE FOLLOWING "CAUTION CONFINED SPACE; ENTRY PERMIT REQUIRED.

The Town of ERIE COLORADO

DRAWING TITLE: 24" MANHOLE RING AND COVER
DRAWING NUMBER: SS6
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 1/2015



The Town of ERIE COLORADO

DRAWING TITLE: SERVICE MAINTENANCE LINE
DRAWING NUMBER: SS10
DRAWN BY: J. ASCUNCE APPROVED BY: R. PENNINGTON DATE: 09/2017

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JEHN ENGINEERING
5960 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

MAIN STREET
SANITARY SEWER
CONSTRUCTION
SANITARY SEWER DETAILS
TOWN OF ERIE, WELD COUNTY, COLORADO
prepared for

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-SSDET.DWG
APPROVED BY:
JOB NUMBER: 06-9-26-038
DATE: 01-29-19
SCALE: 30
SHEET NO: 35 OF 43

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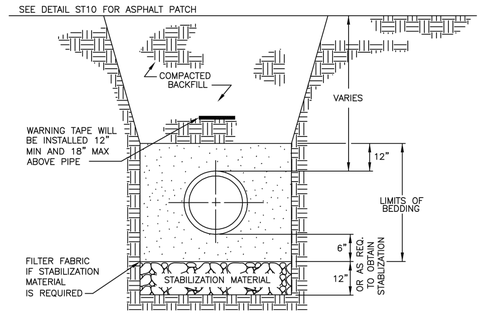
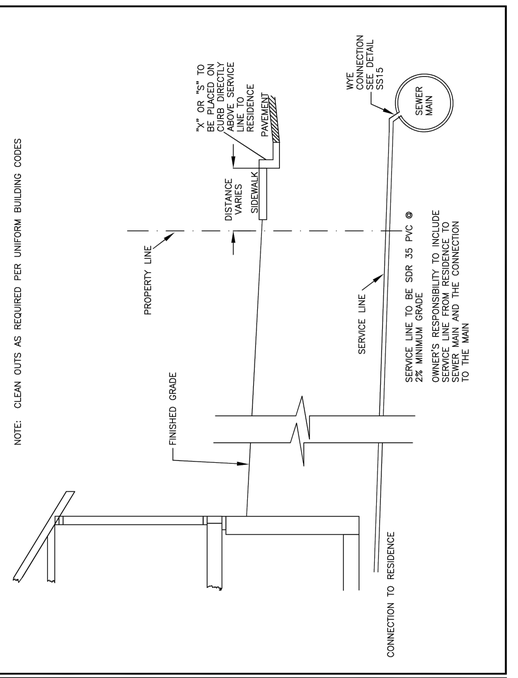


NOTES:

1. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 6" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.
2. FILTER FABRIC IS REQUIRED IF STABILIZATION MATERIAL IS USED. THE FABRIC SHALL BE INSTALLED AS SHOWN IN THE DETAIL.
3. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
4. PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
5. TRENCH WIDTH SHALL NOT BE MORE THAN 24" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.
6. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 P.S.I. CONCRETE FROM TRENCH BOTTOM TO PIPE SPRINGLINE.

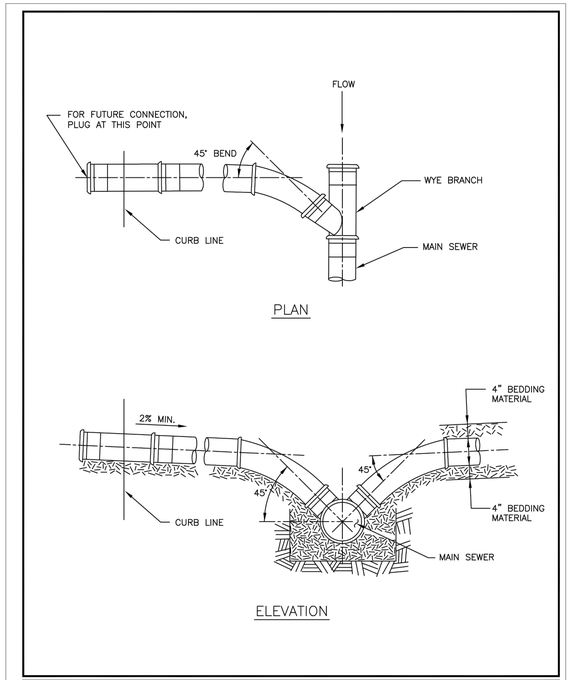
The Town of ERIE COLORADO

DRAWING TITLE: SANITARY SEWER TRENCH DETAIL
DRAWING NUMBER: SS8
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2012



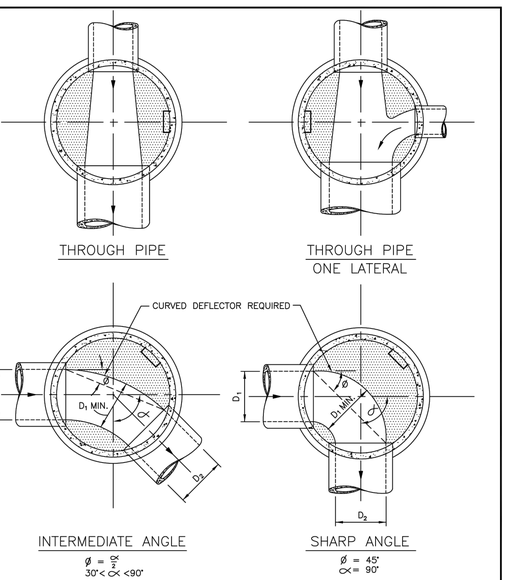
The Town of ERIE COLORADO

DRAWING TITLE: SERVICE MAINTENANCE LINE
DRAWING NUMBER: SS10
DRAWN BY: J. ASCUNCE APPROVED BY: R. PENNINGTON DATE: 09/2017



The Town of ERIE COLORADO

DRAWING TITLE: SEWER SERVICE CONNECTION
DRAWING NUMBER: SS18
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004

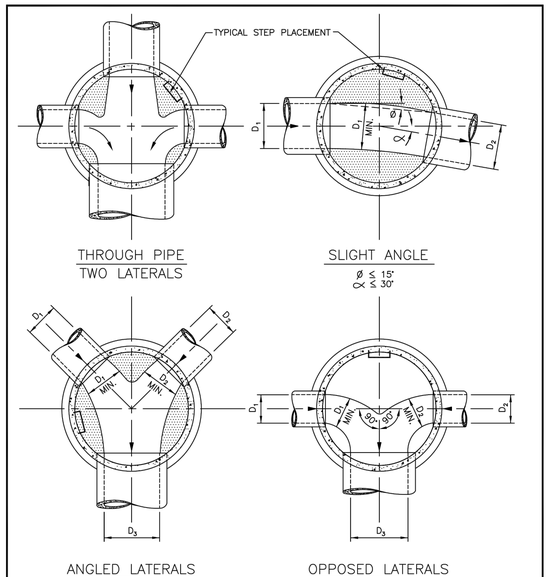


NOTES:

1. DETAILS SHOWN ARE TYPICAL ONLY FOR INSTALLATIONS WITH ALL INVERTS AT SAME RELATIVE ELEVATION.
2. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, ETC. SPECIAL BASE/CHANNEL DETAILS SHALL BE SHOWN ON PLANS.
3. CHANNELIZATION DETAILS & STEP PLACEMENT TYPICAL FOR BOTH STORM AND SANITARY SEWER MH'S.
4. THE MINUMUM VERTICAL DROP THRU MANHOLE BASE SHALL BE 0.20 FOOT.
5. FOR VERTICAL DROPS IN EXCESS OF 1.5 FEET AN OUTSIDE DROP MANHOLE IS REQUIRED.

The Town of ERIE COLORADO

DRAWING TITLE: TYPICAL MH BASE CHANNELIZATION (1 OF 2)
DRAWING NUMBER: SS11A
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004



NOTES:

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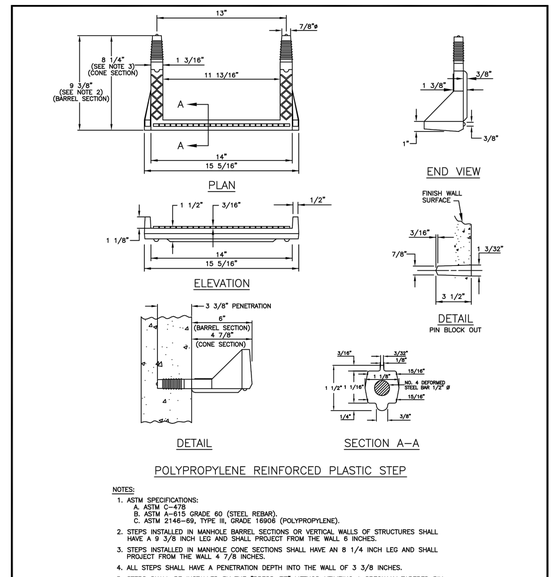
5. FOR VERTICAL DROPS IN EXCESS OF 1.5 FEET AN OUTSIDE DROP MANHOLE IS REQUIRED.

The Town of ERIE COLORADO

DRAWING TITLE: TYPICAL MH BASE CHANNELIZATION (2 OF 2)
DRAWING NUMBER: SS11B
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004



POLYPROPYLENE REINFORCED PLASTIC STEP

NOTES:

1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9 3/8 INCH LEG AND SHALL PROJECT FROM THE WALL 6 INCHES.
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8 1/4 INCH LEG AND SHALL PROJECT FROM THE WALL 4 7/8 INCHES.
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3 3/8 INCHES.
5. STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. W.M.D. INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AMD MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.

The Town of ERIE COLORADO

DRAWING TITLE: MANHOLE STEPS
DRAWING NUMBER: SS12
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2004

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SANITARY SEWER DETAILS 2

prepared for
OLD TOWN ENVIRONS, LLC

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-SS-DET.dwg
APPROVED BY:

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DATE: 1-29-19
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SHEET NO: 36 OF 43

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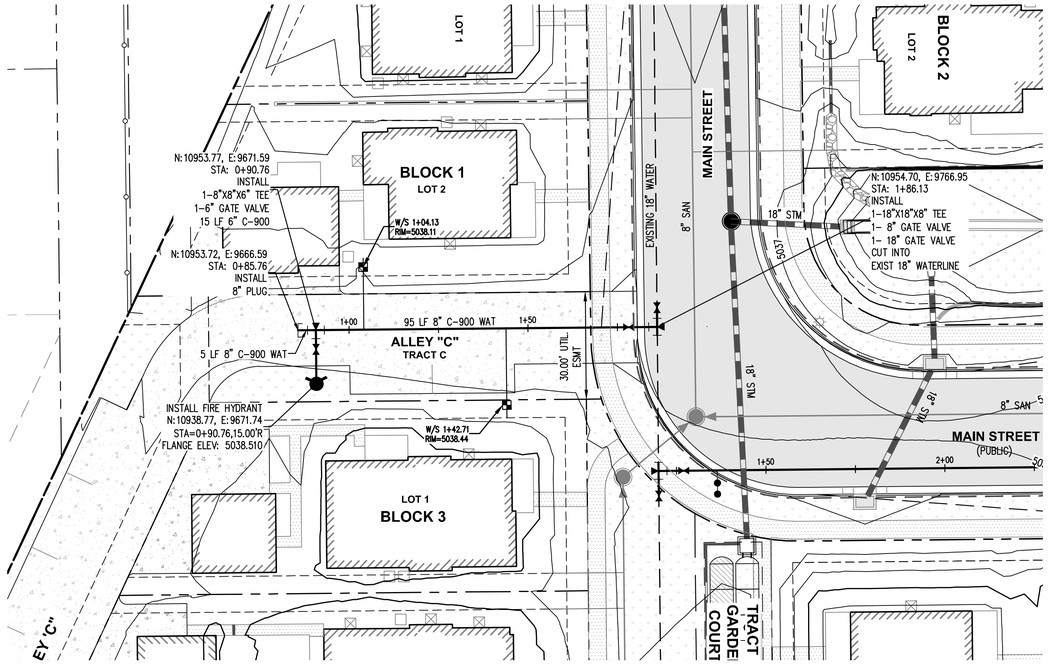
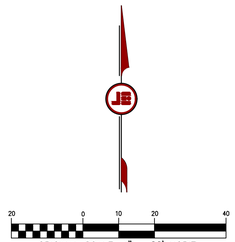
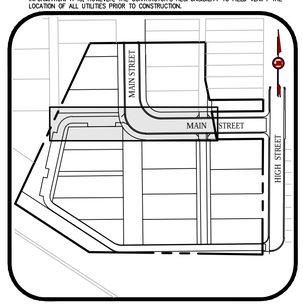


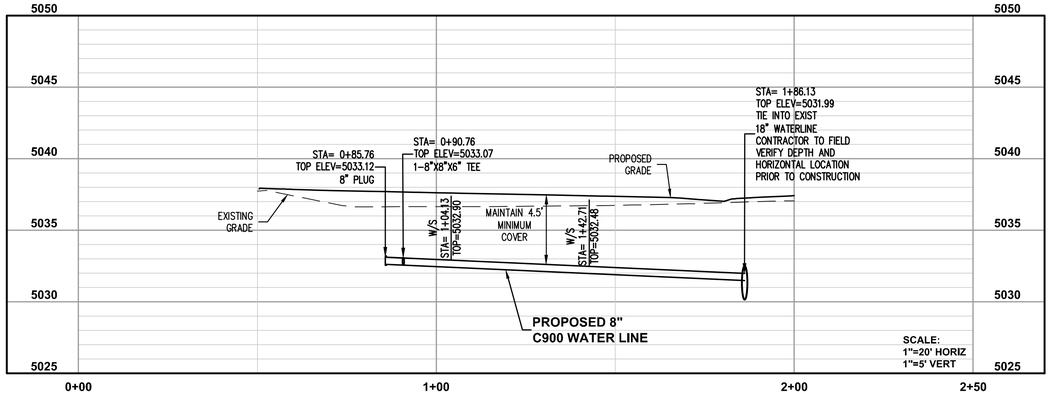




UTILITY LEGEND

PROPOSED WATER LINE	WAT
PROPOSED FIRE HYDRANT	
PROPOSED GATE VALVE	
PROPOSED WATER METER W/ SERVICE	3/4" W/S
PROPOSED AIR & VACUUM VALVE	
PROPOSED 4" SAN SERVICE	4" S/S
EXISTING WATER LINE	WAT
EXISTING FIRE HYDRANT	
EXISTING GATE VALVE	
EXISTING WATER MANHOLE	

WATERLINE PLAN AND PROFILE



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WATER LINE CONSTRUCTION
WATERLINE PLAN-PROFILE
prepared for
OLD TOWN VILLAGE, LLC

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DESIGNED BY: MC
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APPROVED BY:

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DATE: 01-29-19
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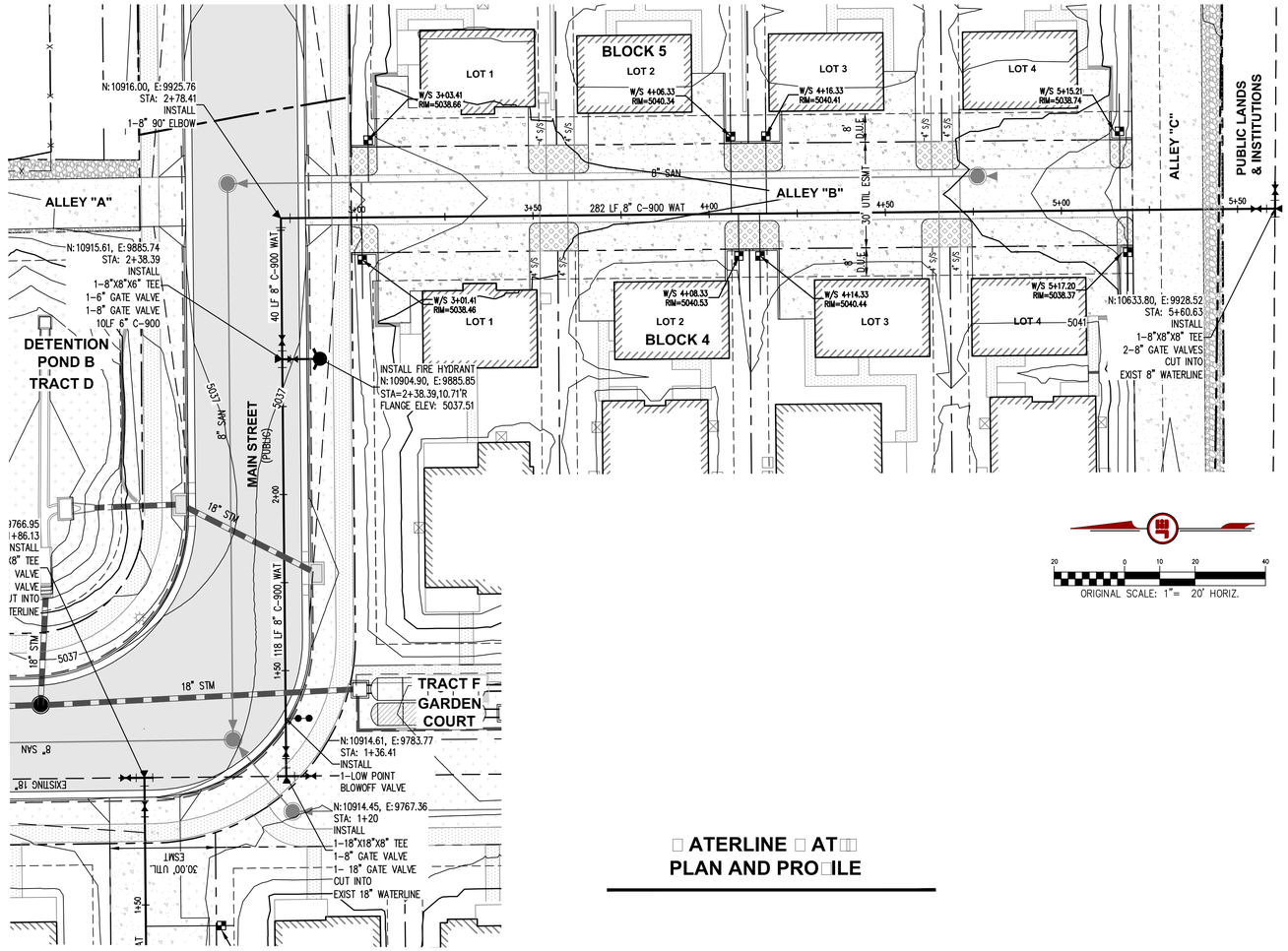

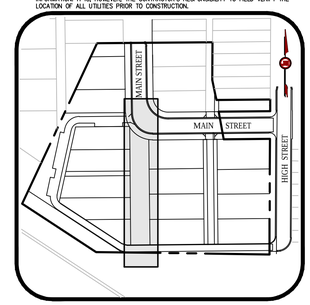

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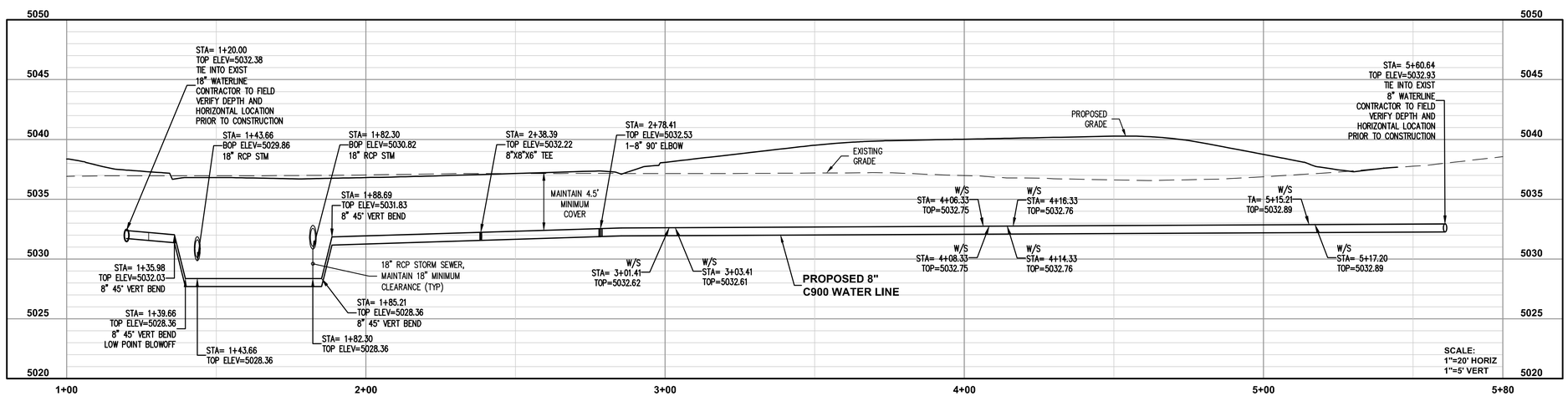

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WATER□□E WAT-2 P□A□ A□D PROF□□E
prepared for
O.D TOW□ □V□□, □□C

DRAWN BY:	DESIGNED BY:	DRAWING NAME:	APPROVED BY:
MC□	MC□	6038-WAT.dwg	

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DATE: □29□20□9
SCALE: □"□20□
SHEET NO: 38 OF 43

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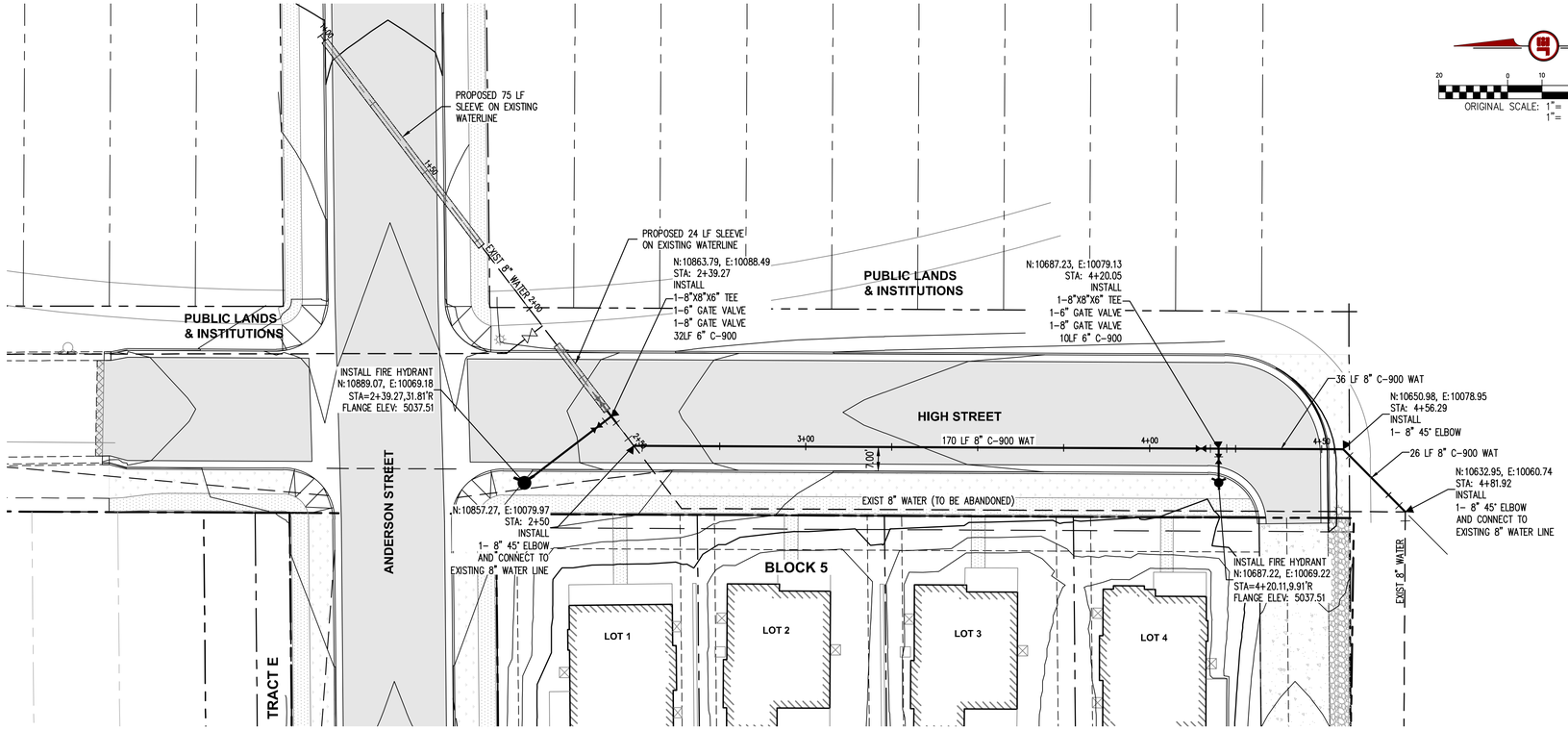

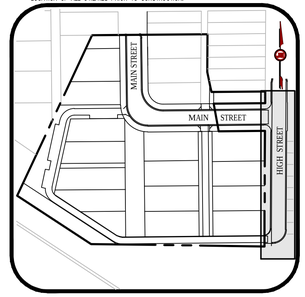

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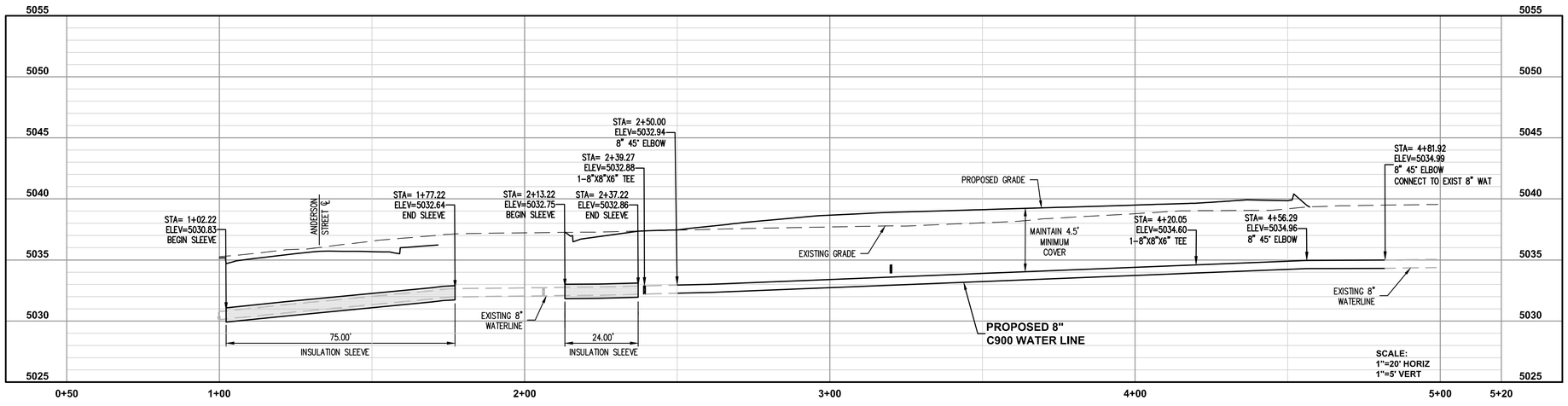

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WATER □□E CO□STR□CT□□
WATER□□□E WAT-3 P□A□ A□D PROF□□E

prepared for
O□D TOW□ □V□□, □□C

DRAWN BY:	DESIGNED BY:	DRAWING NAME:	APPROVED BY:
MC□	MC□	6038-WAT.dwg	

JOB NUMBER: 06□9-2□6-038
DATE: □29/20□9
SCALE: □"□20□
SHEET NO: 39 OF 43

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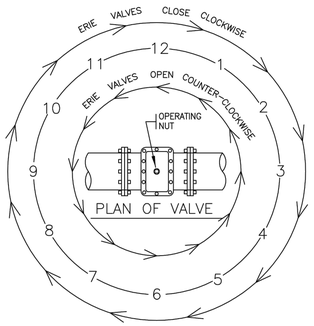
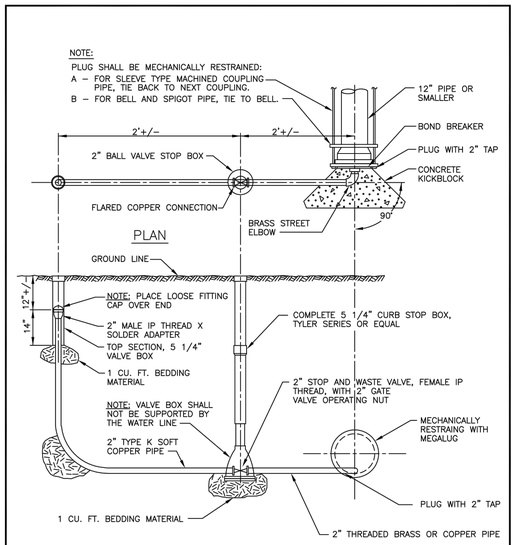


NOTE:
NORMALLY VALVES WITH A BLACK OPERATING NUT INDICATE A STANDARD ERIE VALVE. (OPEN LEFT)

VALVE OPENING & CLOSING PROCEDURE

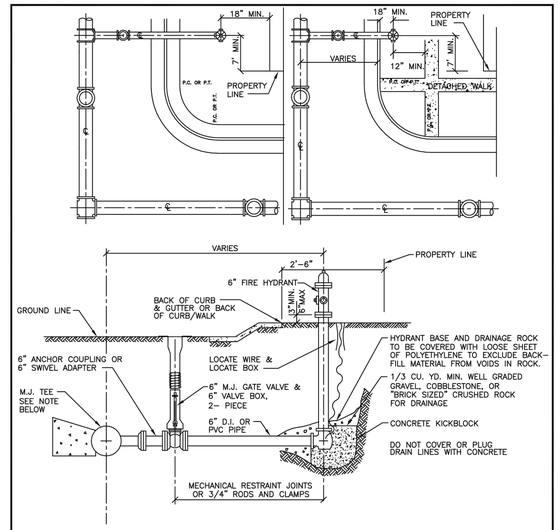
The Town of ERIE COLORADO

DRAWING TITLE: VALVE OPERATION
DRAWING NUMBER: W1
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009



The Town of ERIE COLORADO

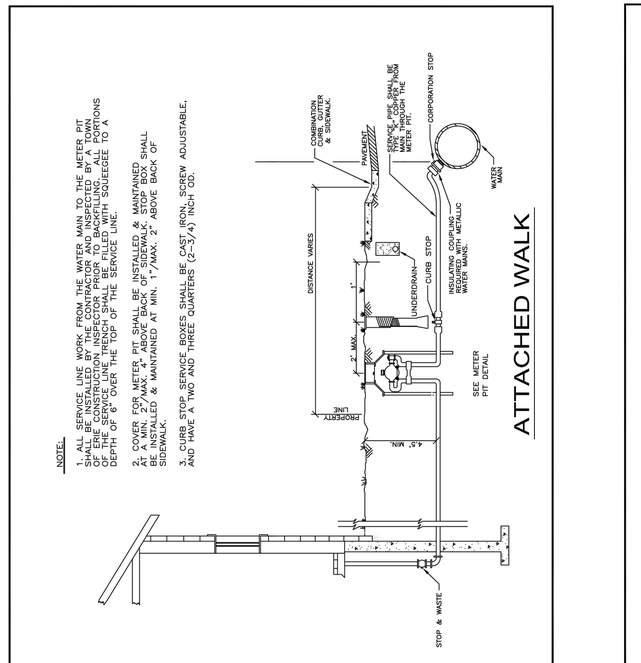
DRAWING TITLE: BLOW-OFF INSTALLATION FOR 12" AND SMALLER PIPE
DRAWING NUMBER: W5
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2016



NOTES:
1. ALTERNATE TO THE ABOVE: FASTEN M.J. VALVE DIRECTLY TO A M.J. ANCHOR TEE (ALSO CALLED SWIVEL TEE)
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH OR SPRINKLER LINES
3. MAXIMUM OF ONE FIRE HYDRANT EXTENSION
4. CONTRACTOR TO TAKE CARE NOT TO BLOCK WEEP HOLES
5. ALL DUCTILE IRON PIPE TO BE POLYETHYLENE WRAPPED

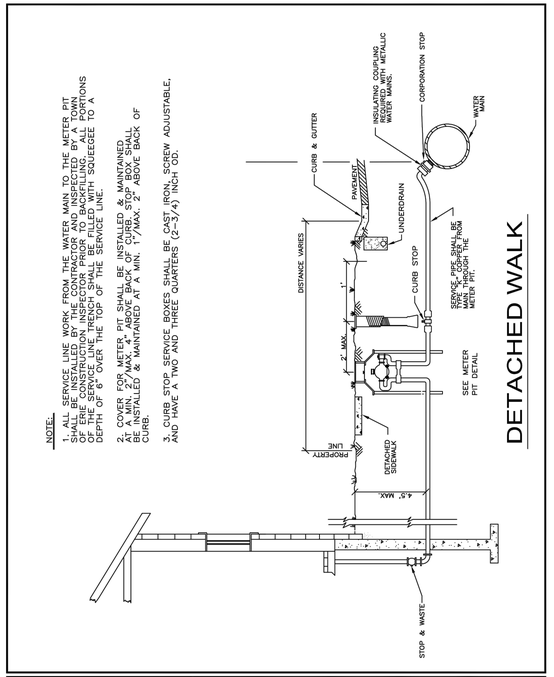
The Town of ERIE COLORADO

DRAWING TITLE: FIRE HYDRANTS, MAINS & VALVES
DRAWING NUMBER: W7
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 06/2010



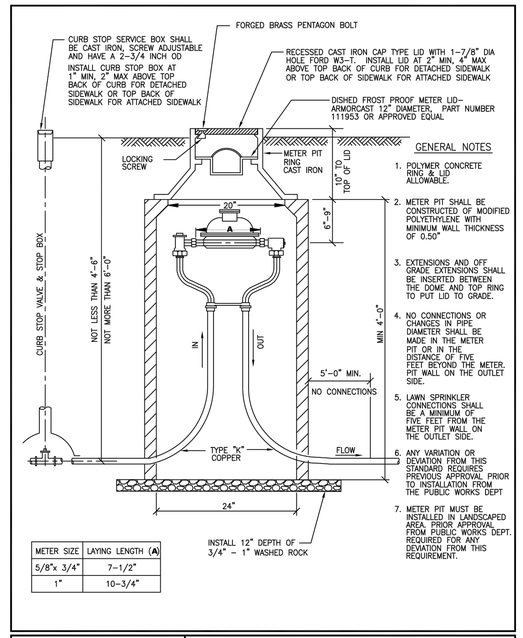
The Town of ERIE COLORADO

DRAWING TITLE: POTABLE SERVICE LINE ATTACHED WALK
DRAWING NUMBER: W11A (1 OF 2)
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015



The Town of ERIE COLORADO

DRAWING TITLE: POTABLE SERVICE LINE DETACHED WALK
DRAWING NUMBER: W11B (2 OF 2)
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015



METER SIZE	LAYING LENGTH (A)
5/8"x 3/4"	7–1/2"
1"	10–3/4"

The Town of ERIE COLORADO

DRAWING TITLE: POTABLE WATER METER PIT 3/4" & 1" METER
DRAWING NUMBER: W12A
DRAWN BY: C. GERATY APPROVED BY: G. BEHLEN REV. DATE: 01/2016

REVISIONS

NO.	DESCRIPTION:	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

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9990 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6036 FAX: (303) 467-0438

MAIN STREET
WATER CONSTRUCTION
WATER DETAILS

prepared for
TOWN OF ERIE, COLORADO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-WAT-DET.dwg
APPROVED BY:
JOB NUMBER: 06-29-26-038
DATE: 01-29-2019
SCALE: A
SHEET NO: 40 OF 43

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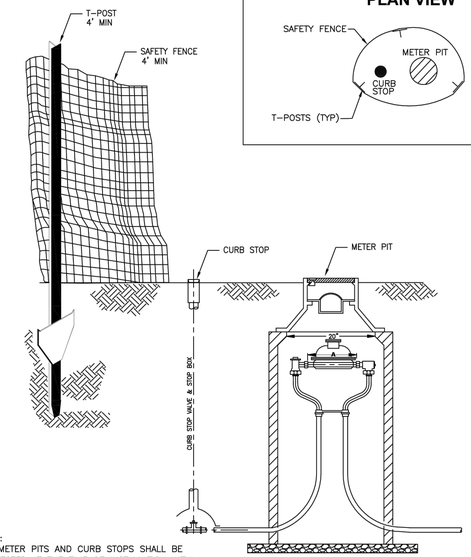
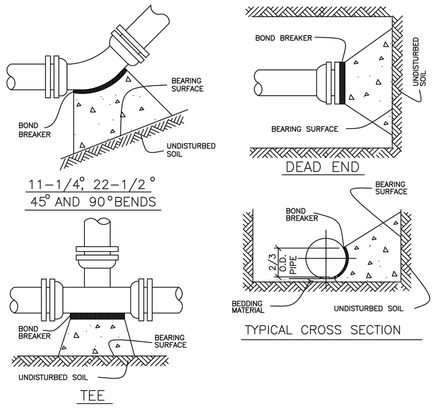


NOTE:
ALL METER PITS AND CURB STOPS SHALL BE PROTECTED AT THE TIME OF INSTALLATION WITH A MINIMUM OF 3 T-POSTS AND ORANGE SAFETY FENCE. THE T-POSTS AND SAFETY FENCE SHALL REMAIN IN PLACE AND IN GOOD CONDITION UNTIL THE LANDSCAPING IS INSTALLED.

The Town of ERIE COLORADO

DRAWING TITLE: METER PIT & CURB STOP PROTECTION
DRAWING NUMBER: W12C
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2012



NOTES:

1. SEE THRUST BLOCKING CHART FOR MINIMUM BEARING SURFACE AREAS
2. BASED ON 150 PSI INTERNAL PIPE PRESSURE PLUS WATER HAMMER
   4",6",8" AND 12" WATER HAMMER=110 P.S.I.
   16",20" AND 24" WATER HAMMER =70 P.S.I.
3. BASED ON 3,000 pfs SOIL BEARING CAPACITY
4. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. FORMS SHALL BE USED AS REQUIRED TO OBTAIN ADEQUATE BEARING AND TO CONFINE THE CONCRETE. THRUST BLOCKING SHALL BEAR ON THE FITTING OR END CAP ONLY AND SHOULD NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE PIPE

The Town of ERIE COLORADO

DRAWING TITLE: THRUST BLOCK
DRAWING NUMBER: W14A
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015

TABLE OF BEARING AREAS IN SQ. FT. FOR CONCRETE THRUST BLOCKING

FOR 100 P.S.I. INTERNAL STATIC PRESSURE AND 1,000 LBS. PER SQUARE FOOT SOIL BEARING CAPACITY.

SIZE	BENDS				TEES *	GATE VALVES	DEAD ENDS	CROSS W/ 1 BRANCH PLUGGED	CROSS W/ 2 BRANCHES PLUGGED
	90°	45°	22-1/2°	11-1/4°					
3	1.0	0.6	0.3	1.0	0.7	0.5	0.7	0.7	0.7
4	1.8	1.0	0.5	1.0	1.3	0.5	1.3	1.3	1.3
6	4.0	2.2	1.1	1.0	2.8	0.7	2.8	2.8	2.8
8	7.1	3.8	2.0	1.0	5.0	2.4	5.0	5.0	5.0
10	11.1	6.0	3.0	1.5	7.8	4.5	7.8	7.8	7.8
12	16.0	8.6	4.4	2.2	11.3	7.3	11.3	11.3	11.3
14	21.7	11.8	6.0	3.0	15.4	11.0	15.4	15.4	15.4
15	25.0	13.5	7.0	3.5	17.6	SPECIAL DESIGN	17.6	17.6	17.6
16	28.4	15.3	8.0	4.0	20.0		20.0	20.0	20.0
18	36.0	19.4	10.0	5.0	25.4		25.4	25.4	25.4
20	44.2	24.0	12.2	6.1	31.4		31.4	31.4	31.4
21	49.0	26.5	13.5	6.8	34.6		34.6	34.6	34.6
22	54.0	29.0	14.8	7.4	38.0		38.0	38.0	38.0
24	64.0	34.5	17.7	8.8	45.0		45.0	45.0	45.0
30	100.0	54.0	27.6	13.8	71.0		71.0	71.0	71.0
36	144.0	78.0	40.0	20.0	102.0		102.0	102.0	102.0

* SIZE IS BRANCH SIZE

AREAS GIVEN IN TABLE ARE BASED UPON AN INTERNAL STATIC PRESSURE OF 100 P.S.I. AND A SOIL BEARING CAPACITY OF 1,000 LBS. PER SQUARE FOOT. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED VALUES BY A CORRECTION FACTOR "F".

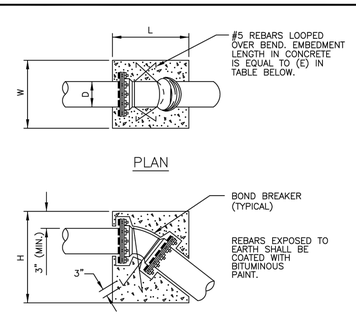
$$F = \frac{\text{ACTUAL SPECIFIED TEST PRESSURE IN HUNDRED OF LBS.}}{\text{ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.}}$$

EXAMPLE: TO FIND BEARING AREA FOR 8" – 90° BEND WITH A STATIC INTERNAL PRESSURE OF 150 P.S.I. AND WITH A SOIL BEARING CAPACITY OF 3,000 LBS. PER SQUARE FOOT.

F = 1.5 ÷ 3 = 0.5 TABULATED VALUE = 7.1 SQUARE FOOT.
0.5 x 7.1 = 3.56 SAY 4 SQUARE FEET OF 2 FOOT LONG BY 2 FOOT HIGH.

The Town of ERIE COLORADO

DRAWING TITLE: THRUST BLOCKING CHART
DRAWING NUMBER: W14B
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015



SIZE OF PIPE (D)	11 1/4 DEG.					22 1/2 DEG.					45 DEG.				
	L"	W"	H"	E"	VOL	L"	W"	H"	E"	VOL	L"	W"	H"	E"	VOL
4"	12	24	24	12	4	12	34	34	12	8	22	37	32	22	15
6"	18	32	27	18	9	15	52	40	15	18	28	64	32	28	33
8"	21	40	33	21	16	22	61	40	22	31	35	64	45	35	58
10"	24	50	36	24	25	30	59	48	30	49	42	72	52	42	90
12"	31	56	36	31	36	36	70	48	36	70	45	80	62	45	129

NOTES:

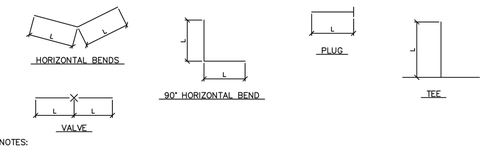
1. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. FORMS SHALL BE USED AS REQUIRED TO OBTAIN ADEQUATE BEARING AND TO CONFINE THE CONCRETE. THRUST BLOCKING SHALL BEAR ON THE FITTING OR END CAP ONLY AND SHOULD NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE PIPE.
2. VOLUME IS IN CUBIC FEET.
3. ALL CONCRETE TO BE 4000 P.S.I. MIN.
4. BLOCKS TO BE CENTERED HORIZONTALLY ON THE BEND.
5. DESIGN BASED ON A TEST PRESSURE OF 150 P.S.I. AND SAFETY FACTOR (S_f) OF 1.5
6. $V_g = \frac{S_f \ PA \ SIN \ \Theta}{W_m}$
7. W_m= 140 # / FT^3
8. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING THE ACTUAL SITE CONDITIONS WITH RESPECT TO THE ASSUMPTIONS LISTED ABOVE.

The Town of ERIE COLORADO

DRAWING TITLE: UPPER VERTICAL THRUST BLOCK
DRAWING NUMBER: W15
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015

ROD DIAMETER, GRADE & LENGTH OF RESTRAINED PIPE

PIPE SIZE	4"			6"			8"			12"			16"			20"			24"		
FITTING	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G
90° BEND, TEE, PLUG	3/4"	30'	MS	3/4"	45'	MS	3/4"	60'	MS	3/4"	88'	MS	1"	108'	HS	1 1/4"	132'	HS	–	155'	–
VALVE	–	–	–	–	–	–	–	–	–	–	–	–	1"	108'	HS	1 1/4"	132'	HS	–	155'	–
45° BEND	3/4"	9'	MS	3/4"	13'	MS	3/4"	18'	MS	3/4"	25'	MS	1"	32'	MS	3/4"	39'	HS	–	45'	–
22 1/2° BEND	3/4"	1'	MS	3/4"	4'	MS	3/4"	5'	MS	3/4"	7'	MS	3/4"	8'	MS	3/4"	10'	MS	–	12'	–
11 1/4° BEND	–	–	–	–	–	–	3/4"	1'	MS	3/4"	2'	MS	3/4"	2'	MS	3/4"	3'	MS	–	3'	–

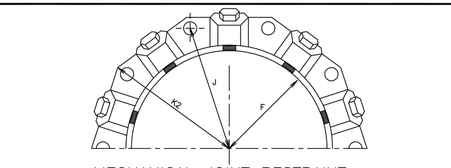


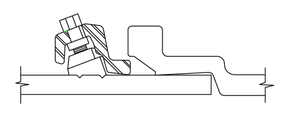
NOTES:

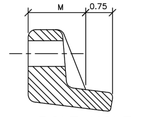
1. LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
2. CLAMPS AND RODS NOT ALLOWED FOR 24" & LARGER PIPES.
3. D=DIAMETER, L=LENGTH, G=GRADE, MS=MILD STEEL, HS=HIGH STRENGTH.
4. MIN 4.5' GROUND COVER REQD.
5. BASED ON 150 PSI INTERNAL PRESSURE.
6. MS = MILD STEEL ROD ASTM A 36.
7. HS = HIGH STRENGTH ROD ASTM A 193 GRADE B7.
8. NUTS SHALL BE ASTM A 307 GRADE A OR B HEXAGON HEAVY SERIES. HS NUTS SHALL CONFORM TO MS-22.
9. LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE RESTRAINED TOGETHER.
10. LENGTH OF RESTRAINED PIPE CHART IS ALSO FOR THE LENGTH OF JOINT RESTRAINT FOR MEGALUGS.
11. TEES & CROSSES MUST BE RESTRAINED IN ALL APPLICABLE DIRECTIONS.
12. 12" AND SMALLER IN LINE VALVES AND TEES SHALL HAVE A MECHANICAL JOINT RESTRAINT DEVICE ON EACH SIDE OF THE FITTING OR VALVE.
13. A SECOND VALVE WILL BE REQD TO BE CLOSED WHEN EXCAVATING NEXT TO A EXIST VALVE.
14. WHEN REDUCERS ARE USED ON VALVE INSTALLATIONS THE LENGTH OF RESTRAINT SHALL BE BASED ON THE SIZE OF THE PIPE NOT THE SIZE OF THE VALVE.
15. ALL REDUCERS/INCREASERS SHALL HAVE MECHANICAL RESTRAINT DEVICES ON EACH SIDE OF FITTING.
16. PIPE JOINT RESTRAINT MAY BE ACCOMPLISHED USING HARNESS RODS, MECHANICAL JOINT RESTRAINT OR RESTRAINED JOINT PIPE AND FITTINGS.
17. AN ANALYSIS OF THE NECESSARY RESTRAINT LENGTH FOR PIPE LARGER THAN 24" SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPT FOR REVIEW AND APPROVAL ON A CASE BY CASE BASIS.

The Town of ERIE COLORADO

DRAWING TITLE: RESTRAINED PIPE LENGTHS
DRAWING NUMBER: W16
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015







DIMENSIONS

	NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES	
PVC	4"	2	2					PVC
	6"	6	3	11.12	9.50	7.00	0.88	
	8"	6	4	13.37	11.75	9.15	1.00	
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	
DI	4"	4	2					DI
	6"	6	3	11.12	9.50	7.00	0.88	
	8"	6	4	13.37	11.75	9.15	1.00	
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	

NOTES:

1. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.
2. OTHER MECHANICAL JOINT RESTRAINT DEVICES MUST BE APPROVED BEFORE INSTALLATION.

The Town of ERIE COLORADO

DRAWING TITLE: MECHANICAL JOINT RESTRAINT DETAIL
DRAWING NUMBER: W17
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009

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PRELIMINARY

JEHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

MAIN STREET
WATER CONSTRUCTION
WATER DETAILS 2

prepared for
TOWN OF ERIE, COLORADO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-WAT-DET.dwg
APPROVED BY:

JOB NUMBER: 06-9-2-6-038
DATE: 1-29-19
SCALE: A
SHEET NO: 4 OF 43

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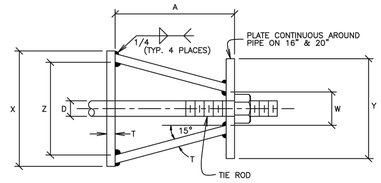
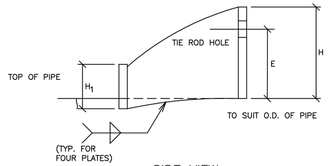


TOP VIEW



SIDE VIEW

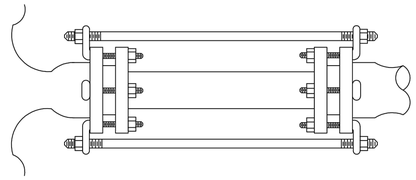
	CARRIER PIPE NOMINAL DIA.	STUD DIA. D	A	W	Z	T	H	E	H_1	Y	X
W/O FLANGED LUGS	4" TO 12"	3/4"	5"	1-1/2"	3-3/4"	3/8"	4-1/8"	3-1/8"	2"	4-1/2"	5"
	16"	1"	5-3/4"	1-3/4"	4-1/2"	1/2"	4-1/2"	3-1/4"	2"	RING	6"
	20"	1-1/4"	7-1/2"	2"	5-3/4"	5/8"	5"	3-3/4"	2-1/2"	RING	7-1/2"

NOTES:

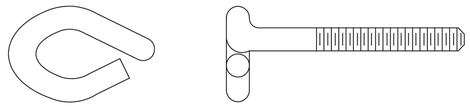
1. USE TWO HIGH STRENGTH STEEL TIE RODS AT END OF CASING.
2. TIE ROD HOLE DIAMETER 1/8" LARGER THAN STUD DIAMETER.
3. BOTTOM EDGE OF ALL PLATES SHAPED TO FIT O.D. OF PIPE.
4. HARNESS LUGS AS PER AWWA MANUAL M-11.

The Town of ERIE COLORADO

DRAWING TITLE: COMBINATION FLANGED HARNESS LUG DETAIL
DRAWING NUMBER: W18
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009



PLAN



DETAIL

DIMENSIONS

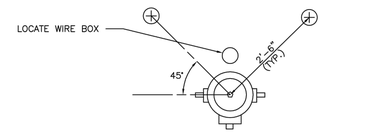
ALLOWABLE PIPE DIAMETER INCHES	BOLT SIZE	NO . OF BOLTS REQUIRED
4	3/4"	2
6	3/4"	2
8	3/4"	2
10	3/4"	4
12	3/4"	6

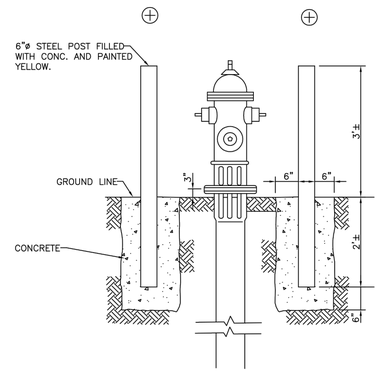
NOTES:

1. THE BOLT SHALL BE MANUFACTURED OF "COR-TEN" OR APPROVED EQUAL.
2. THE BOLT MAY BE HEAT TREATED.

The Town of ERIE COLORADO

DRAWING TITLE: JOINT RESTRAINT DETAIL
DRAWING NUMBER: W19
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009



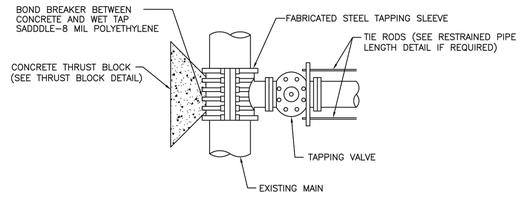


NOTES:

TO BE USED IN COMMERCIAL OR INDUSTRIAL AREAS WHERE HYDRANTS ARE UNPROTECTED FROM THE MAINFLOW OF TRAFFIC. STEAMER CONNECTION ON FIRE HYDRANT SHOULD FACE THE STREET.

The Town of ERIE COLORADO

DRAWING TITLE: FIRE HYDRANT GUARDS
DRAWING NUMBER: W20
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009



NOTES:

1. FABRICATED STEEL TAPPING SLEEVE SHALL BE:

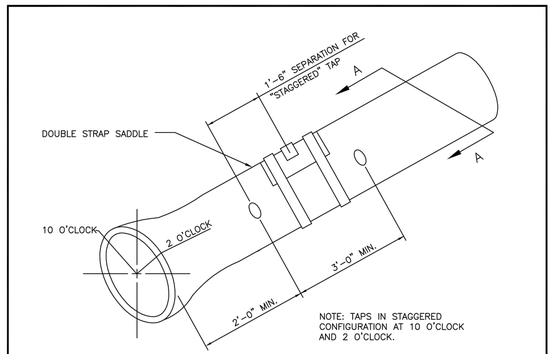
   ROMAC FTS419 OR APPROVED EQUAL TO BE USED FOR PVC UP TO 75% OF EXISTING MAIN

   ROMAC FTS420 OR APPROVED EQUAL TO BE USED FOR DIP UP TO 75% OF EXISTING MAIN

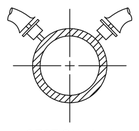
   ROMAC FTS425 OR APPROVED EQUAL TO BE USED ON ALL AC PIPE AND ANYTIME BRANCH LINE IS GREATER THAN 75% OF EXISTING MAIN

The Town of ERIE COLORADO

DRAWING TITLE: TAPPING TEE AND VALVE
DRAWING NUMBER: W21
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015



NOTE: TAPS IN STAGGERED CONFIGURATION AT 10 O'CLOCK AND 2 O'CLOCK.

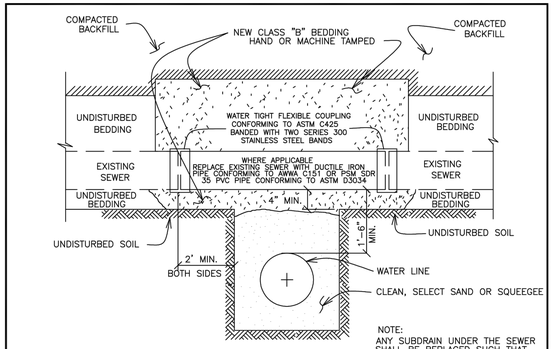


SECTION A-A

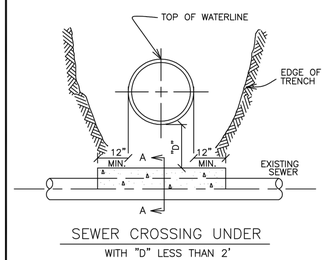
NOTE:
SERVICE TAPS - WATER SERVICE TAPS SHALL BE MADE AT EITHER THE 2 O'CLOCK OR THE 10 O'CLOCK POSITION ON THE CIRCUMFERENCE OF A WATER MAIN. THE MINIMUM DISTANCE BETWEEN A TAP MADE AT THE 2 O'CLOCK POSITION AND THE ONE MADE AT THE 10 O'CLOCK POSITION SHALL BE 18-INCHES MEASURED ALONG THE PIPE. THE MINIMUM DISTANCE BETWEEN SUCCESSIVE TAPS MADE EITHER AT THE 2 O'CLOCK OR THE 10 O'CLOCK POSITION SHALL BE 3-FEET. THE MINIMUM DISTANCE FROM EITHER THE BELL OR THE SPIGOT END OF A PIPE TO A TAP SHALL BE 2-FEET. A MAXIMUM OF 4 WATER SERVICE TAPS SHALL BE ALLOWED PER LENGTH OF PIPE. DOUBLE STRAP SADDLE (ROMAC 202B OR APPROVED EQUAL) SHALL BE USED FOR ALL SERVICE TAPS.

The Town of ERIE COLORADO

DRAWING TITLE: DOMESTIC WATER TAPPING DETAIL
DRAWING NUMBER: W22
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2010

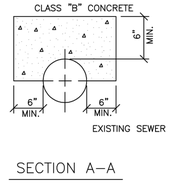


NOTE:
ANY SUBDRAIN UNDER THE SEWER SHALL BE REPLACED SUCH THAT NO FLOW SHALL ENTER THE WATER LINE TRENCH.



SEWER CROSSING UNDER
WITH "D" LESS THAN 2'

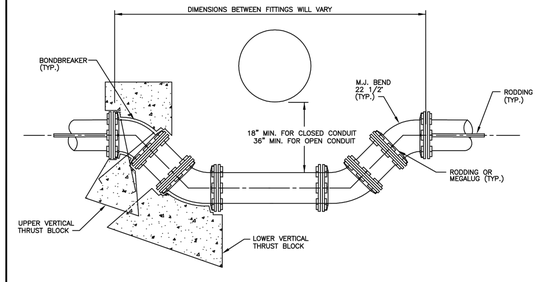
NOTE:
ALL EXISTING SEWER DAMAGED DURING INSTALLATION MUST BE REPLACED WITH PVC PIPE.



SECTION A-A

The Town of ERIE COLORADO

DRAWING TITLE: CROSSING STORM AND SANITARY SEWERS
DRAWING NUMBER: W25
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009



NOTES:

1. LOWERING OF THIS TYPE WILL BE RESTRAINED BY MEANS OF THRUST BLOCKING AND MEGALUGS OR RODDING.
2. FOR SIZING INFORMATION OF THRUST BLOCKS REFER TO THRUST BLOCK DETAILS.
3. WHEN RESTRAINING PIPE BY MEANS OF RODDING JOINTS, 3/4 " TIE RODS, NUTS, AND WASHERS WILL BE USED AND ARE TO BE MADE OF "COR-TEN" STEEL AS PER A.S.T.M. A242.
4. FOR FURTHER INFORMATION ON RODDING OF JOINTS REFER TO TABLE 1.
5. ALL METALLIC PIPE, FITTINGS, AND APPURTENANCES WILL BE WRAPPED IN POLYETHYLENE.
6. REQUIREMENTS FOR LARGER THAN 12" DIAMETER PIPE WILL BE DETERMINED ON A CASE BY CASE BASIS.
7. LENGTH OF EXTENSION OF PIPE AND RESTRAINED JOINTS SHALL BE IN ACCORDANCE WITH THE ENGINEERING STANDARDS.
8. CATHODIC PROTECTION SHALL BE AS REQUIRED IN ACCORDANCE WITH THE ENGINEERING STANDARDS.
9. A BORED CROSSING MAY BE REQUIRED BY THE ENGINEER.

TABLE 1

Pipe Size	Test Pressure	Minimum number of Tie Rods
10" and less	150	2
	200	2
12"	150	2
	200	4

The Town of ERIE COLORADO

DRAWING TITLE: 12" OR SMALLER WATERLINE, LOW-ERING DTL. FOR UTILITY CROSSINGS
DRAWING NUMBER: W27
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2011

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SCALE VERIFICATION
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REVISIONS

NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/17	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

PRELIMINARY

JeHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH: (303) 423-6236 FAX: (303) 467-0438

MAIN STREET
WATER CONSTRUCTION
WATER DETAILS 3

prepared for
TOWN OF ERIE, CO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-WAT-DET.dwg
APPROVED BY:

JOB NUMBER: 06-9-26-038
DATE: 29 20 9
SCALE: " = A
SHEET NO: 42 OF 43

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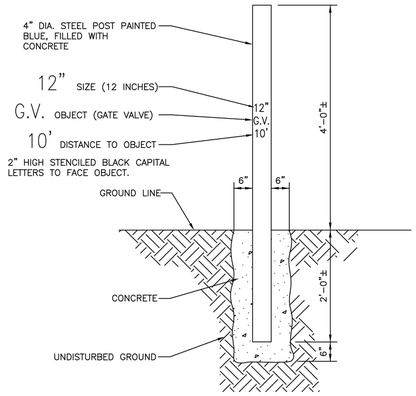
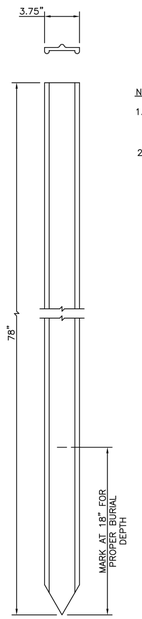


The Town of ERIE COLORADO

DRAWING TITLE: STEEL MARKER POST
DRAWING NUMBER: W28
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2009

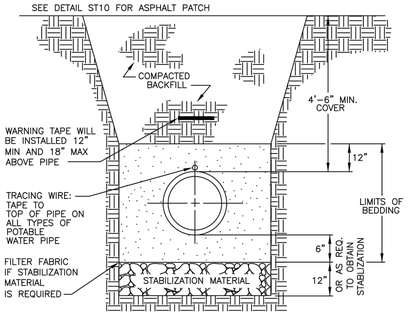


NOTES:

1. UTILITY MARKER POST SHALL BE CARSONITE CUM-375 OR EQUAL WITH ANCHORS AND APPROPRIATE DECALS FOR WATER.
2. COLOR FOR WATER-BLUE, COLOR FOR NON POTABLE-PURPLE

The Town of ERIE COLORADO

DRAWING TITLE: FIBERGLASS MARKER POST
DRAWING NUMBER: W29
DRAWN BY: D. JENKINS APPROVED BY: G.BEHLEN REV. DATE: 01/2009

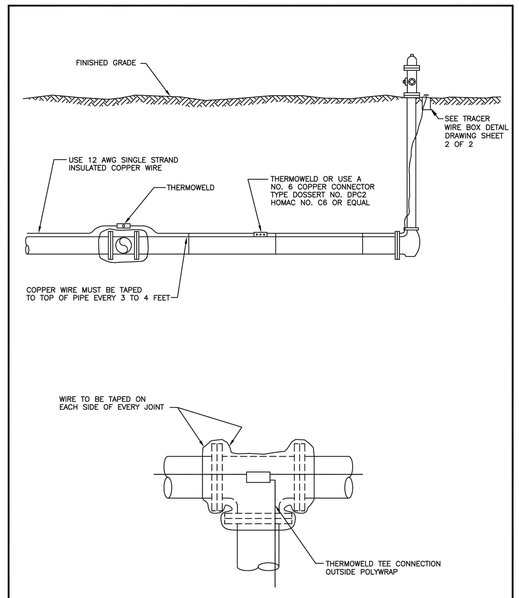


NOTES:

1. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 6" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.
2. 14 AWG. STRANDED COPPER WIRE SHALL BE INSTALLED AS TRACING WIRE ABOVE ALL POTABLE WATER PIPES. THE WIRE SHALL BE CONNECTED AND COME TO THE SURFACE BEHIND THE FIRE HYDRANTS IN A TEST BOX.
3. FILTER FABRIC IS REQUIRED IF STABILIZATION MATERIAL IS USED. THE FABRIC SHALL BE INSTALLED AS SHOWN IN THE DETAIL.
4. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
5. PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
6. TRENCH WIDTH SHALL NOT BE MORE THAN 24" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.

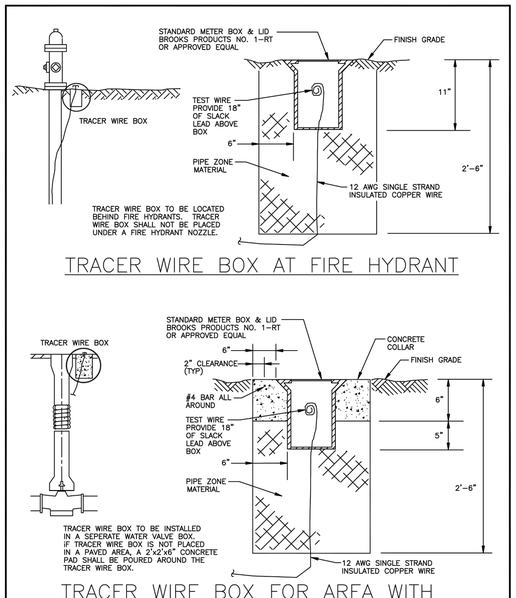
The Town of ERIE COLORADO

DRAWING TITLE: WATER TRENCH DETAIL
DRAWING NUMBER: W35
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 01/2015



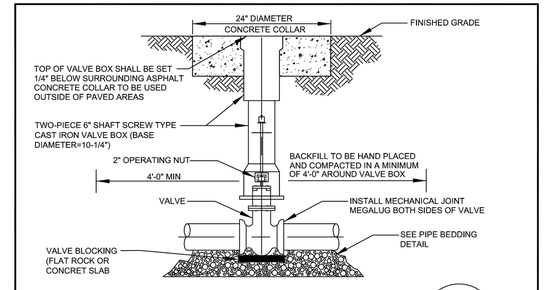
The Town of ERIE COLORADO

DRAWING TITLE: TRACER WIRE
DRAWING NUMBER: W32A (1 OF 2)
DRAWN BY: C. GERATY APPROVED BY: G. BEHLEN REV. DATE: 01/2016



The Town of ERIE COLORADO

DRAWING TITLE: TRACER WIRE
DRAWING NUMBER: W32B (2 OF 2)
DRAWN BY: C. GERATY APPROVED BY: G. BEHLEN REV. DATE: 01/2016



NOTES:
1. POTABLE & FIRE VALVE BOX LID RESTS INSIDE THE UPPER VALVE BOX SECTION.
2. NON-POTABLE VALVE BOX LID SLIDES OVER THE TOP OF THE UPPER VALVE BOX SECTION.
3. NON-POTABLE, WATER OR FIRE CAST IN TOP OF APPROPRIATE VALVE BOX COVER.
4. VALVE BOX SHALL NOT BE SUPPORTED BY WATER LINE.
5. VALVE BOX TO BE PLUMB AND CENTERED OVER NUT.
6. UTILIZING A VALVE BOX ALIGNMENT DEVICE IS OPTIONAL.
7. IF 2" OPERATING NUT IS MORE THAN 6' BELOW FINISHED GRADE, A VAULT NUT EXTENDER SHALL BE INSTALLED TO PUT THE VALVE NUT AT AN ELEVATION OF 4' BELOW FINISHED GRADE.

The Town of ERIE COLORADO

DRAWING TITLE: STANDARD VALVE AND BOX
DRAWING NUMBER: W38
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN REV. DATE: 1/2015

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NO.	DESCRIPTION	DATE	BY
1	2ND SUBMITTAL	10/25/11	AHN
2	3RD SUBMITTAL	7/16/18	AHN
3	4TH SUBMITTAL	10/8/18	AHN
4	5TH SUBMITTAL	1/29/19	AHN

REVISIONS

PRELIMINARY

JeHN ENGINEERING
5680 WEBSTER STREET
ARVADA, CO 80002
PH. (303) 423-6036 FAX (303) 467-0438

MAIN STREET
WATER DETAILS 4
prepared for
TOWN OF ERIE, CO

DRAWN BY: MC
DESIGNED BY: MC
DRAWING NAME: 6038-WAT-DET.dwg
APPROVED BY:

JOB NUMBER: 06-9-20-6-038
DATE: 01-29-2019
SCALE: 1" = NA
SHEET NO: 43 OF 43

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE PLANT LIST

DECIDUOUS SHADE TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY	%
WEC	Western Catalpa	Catalpa speciosa	40-60'	30-50'	Low	Sun	2" Cal., B&B	9	12.9
WEH	Western Hackberry	Celtis occidentalis	50-60'	40-50'	Low	Sun	2" Cal., B&B	4	5.7
SKL	Skyline Honeylocust	Gleditsia triacanthos inermis 'Skyline'	40-50'	30-40'	Low	Sun	2" Cal., B&B	6	8.6
KYC	Kentucky Coffeetree	Gymnocladus dioicus	50-60'	40-50'	Low	Sun	2" Cal., B&B	3	4.3
BUO	Bur Oak	Quercus macrocarpa	50-80'	50-80'	Low	Sun	2" Cal., B&B	4	5.7
ENO	English Oak	Quercus robur	40-60'	30-40'	Medium	Sun	2" Cal., B&B	5	7.1
GRL	Greenspire Linden	Tilia cordata 'Greenspire'	30-40'	25-35'	Medium	Sun	2" Cal., B&B	9	12.9

ORNAMENTAL TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY	%
TAT	Hot Wings Tatarian Maple	Acer tataricum 'GarAnn'	20-25'	15-20'	Low	Adaptable	1-1/2" Cal., B&B	2	2.9
TCH	Thornless Cockspur Hawthorn	Crataegus crus-galli inermis	15-25'	15-20'	Low	Sun	1-1/2" Cal., B&B	3	4.3
GRT	Goldenrain Tree	Koelreuteria paniculata	20-30'	20-30'	Low	Sun	1-1/2" Cal., B&B	3	4.3
CBC	Coralburst Crabapple	Malus 'Coralburst'	12-15'	12-15'	Medium	Sun	1-1/2" Cal., B&B	5	7.1
CCP	Chanticleer Pear	Pyrus calleryana 'Chanticleer'	20-30'	15-20'	Medium	Sun	1-1/2" Cal., B&B	5	7.1
ISJ	Ivory Silk Japanese Lilac	Syringa reticulata 'Ivory Silk'	15-25'	15-20'	Low	Sun	1-1/2" Cal., B&B	3	4.3

EVERGREEN TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY	%
PIN	Pinon Pine	Pinus edulis	20-30'	10-20'	Low	Sun	6' ht., B&B	5	7.1
PRP	Ponderosa Pine	Pinus ponderosa	60-80'	30-40'	Low	Sun	6' ht., B&B	4	5.7

DECIDUOUS SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY
OCJ	Orange Columnar Japanese Barberry	Berberis thunbergii 'Orange Rocket'	4-5'	18-24"	Low	Sun / Part Shade	5 Gallon Cont.	14
SFB	Silver Fountain Butterfly Bush	Buddleja alternifolia 'Argentea'	10-15'	10-15'	Low	Sun	5 Gallon Cont.	6
BMS	Blue Mist Spirea	Caryopteris x clandonensis 'Blue Mist'	3-4'	2-3'	Low	Sun	5 Gallon Cont.	30
FEB	Fernbush	Chamaebatiaria millefolium	3-5'	3-6'	Very Low	Sun	5 Gallon Cont.	35
DBR	Dwarf Blue Rabbitbrush	Ericameria nauseosa nauseosa	1-4'	1-4'	Very Low	Sun	5 Gallon Cont.	40
RUS	Russian Sage	Perovskia atriplicifolia	3-4'	3-4'	Very Low	Sun	5 Gallon Cont.	133
DNB	Diabolo Ninebark	Physocarpus opulifolius 'Diabolo'	6-8'	6-8'	Low	Sun	5 Gallon Cont.	15
DSP	Dakota Sunspot Potentilla	Potentilla fruticosa Dakota Sunspot	2-3'	2-3'	Low	Sun	5 Gallon Cont.	61
TLS	Three-Leaf Sumac	Rhus trilobata	3-6'	3-6'	Very Low	Sun	5 Gallon Cont.	30
RLR	Red-Leaved Rose	Rosa glauca	6-7'	4-6'	Low	Sun	5 Gallon Cont.	4
RMR	Red Meidland Rose	Rosa Meidland Red	18-24"	4-6'	Low	Sun	5 Gallon Cont.	70
CPL	Common Purple Lilac	Syringa vulgaris	10-20'	8-12'	Low	Sun	5 Gallon Cont.	16
MWT	Mohican Wayfaring Tree	Viburnum lantana 'Mohican'	6-8'	6-8'	Low	Sun / Part Shade	5 Gallon Cont.	1

EVERGREEN SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY
PMZ	Panchito Manzanita	Arctostaphylos x coloradoensis 'Panchito'	10-15"	3-5'	Low	Sun / Part Shade	5 Gallon Cont.	48
JFB	Joint Fir Bluestem	Mahonia aquifolium compacta	3-5'	2-3'	Low	Sun / Part Shade	5 Gallon Cont.	1
REY	Red False (Texas) Yucca	Hesperaloe parviflora	3-4'	3-4'	Very Low	Sun	5 Gallon Cont.	73
MAJ	Medora Juniper	Juniperus scopulorum 'Medora'	15-20'	3-5'	Very Low	Sun	5 Gallon Cont.	41
BAY	Banana Yucca	Yucca baccata	3-4'	3-5'	Very Low	Sun	5 Gallon Cont.	25
GSY	Golden Sword Variegated Yucca	Yucca filamentosa 'Golden Sword'	2-3'	2-4'	Low	Sun	5 Gallon Cont.	40
BKY	Beaked Yucca	Yucca rostrata	6'	3-6'	Very Low	Sun	5 Gallon Cont.	10

ORNAMENTAL GRASSES

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND CONDITION	QTY
BAM	Blonde Ambition Grama Grass	Bouteloua gracilis 'Blonde Ambition'	2-3'	1-2'	Very Low	Sun	1 Gallon Cont.	125
FRG	Feather Reed Grass	Calamagrostis acutiflora 'Karl Foerster'	4-5'	18-24"	Low	Sun / Part Shade	5 Gallon Cont.	155
URM	UNDAUNTED® Ruby Muhly Grass	Muhlenbergia reverchonii Undaunted	15-30"	2-3'	Low	Sun	5 Gallon Cont.	58
HMS	Heavy Metal Blue Switch Grass	Panicum virgatum 'Heavy Metal'	3-4'	12-18"	Low	Sun	5 Gallon Cont.	32
SRS	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	3-4'	12-18"	Low	Sun	5 Gallon Cont.	47
LBG	Little Bluestem Grass	Schizachyrium scoparium 'Blaze'	3-4'	24-30"	Low	Sun	5 Gallon Cont.	10
GSG	Giant Sacaton Grass	Sporobolus wrightii	3-6'	3-5'	Low	Sun	5 Gallon Cont.	227

PERENNIALS

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND SPACING	QTY
MOY	Moonshine Yarrow	Achillea 'Moonshine'	24-30"	18-24"	Low	Sun	1 Gallon Cont.	79
DMH	Double Mix Hollyhock	Alcea rosea Chater's Double Hybrids	5-6'	2-3'	Low	Sun	1 Gallon Cont.	42
GLA	Grape-Leaved Anemone	Anemone tomentosa 'Robustissima'	2-3'	18-24"	Medium	Sun / Part Shade	1 Gallon Cont.	19
PAS	Purple Aster	Aster longolensis 'Wartburg Star'	12-18"	12-15"	Medium	Sun	1 Gallon Cont.	26
SIS	Snow-In-Summer	Cerastium tomentosum	6-12"	12-18"	Low	Sun	1 Gallon Cont.	109
FSI	Fire Spinner Ice plant	Delosperma 'Fire Spinner'	2-4"	14-18"	Low	Sun	1 Gallon Cont.	57
WBF	Whirling Butterflies	Gaura lindheimeri	2-3'	18-24"	Low	Sun / Part Shade	1 Gallon Cont.	66
RHP	Red-hot Poker	Kniphofia uvaria	3-4'	2-3'	Low	Sun	1 Gallon Cont.	67
ENL	English Lavender	Lavandula angustifolia 'Munstead'	12-18"	12-18"	Low	Sun	1 Gallon Cont.	91
WLC	Walker's Low Catmint	Nepeta x faassenii 'Walker's Low'	18-24"	2-3'	Low	Sun	1 Gallon Cont.	70
PPK	Pink Penstemon	Penstemon 'Elfin Pink'	12-15"	6-12"	Low	Sun	1 Gallon Cont.	55
PCF	Prairie Yellow Coneflower	Ratibida columnifera	18-24"	18-24"	Very Low	Sun	1 Gallon Cont.	99
PRC	Prairie Red Coneflower	Ratibida columnifera pulcherrima	18-24"	18-24"	Very Low	Sun	1 Gallon Cont.	24
RBT	Red Birds in a Tree	Scrophularia macrantha	15-40"	1-3'	Low	Sun	1 Gallon Cont.	19

VINES

SYMBOL	COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	MATURE SPREAD	WATER USE	SUN/SHADE	SIZE AND SPACING	QTY
CHV	Cascade Hop Vine	Humulus lupulus 'Cascade'	Vine	Vine	Medium	Sun	1 Gallon / NA	53
CEV	Centennial Hop Vine	Humulus lupulus 'Centennial'	Vine	Vine	Medium	Sun	1 Gallon / NA	76

LARGE PERENNIALS

LOW PERENNIALS & GROUNDCOVERS

SOD
90 / 10 Fescue/Bluegrass Mix

NATIVE SEEDING - DRYLAND MIX
Town of Erie Shortgrass Prairie Native Seed Mix:
Application Rate: 30 LBS/ACRE

NATIVE SEEDING - WETLAND MIX
Town of Erie Moist Swale Seed Mix:
Application Rate: 15 LBS/ACRE

GENERAL LANDSCAPE NOTES

1. ALL LOW PERENNIAL AND GROUNDCOVER PLANTING AREAS SHALL BE MULCHED WITH SHREDDED WESTERN RED CEDAR WOOD MULCH, AT A DEPTH OF 2". WEED BARRIER FABRIC IS NOT REQUIRED UNDER WOOD MULCH.

2. ALL OTHER PLANTING BED AREAS SHALL BE MULCHED WITH 1-1/2" WESTERN RIVER ROCK, AT A DEPTH OF 3", INSTALLED OVER PERMEABLE WEED BARRIER FABRIC. DO NOT INSTALL EDGING BETWEEN WOOD MULCH AND ROCK MULCH AREAS.

3. SOD EDGER SHALL BE $\frac{3}{16}$" x 6" STEEL EDGING (DARK GREEN COLOR) IN THE LOCATIONS SHOWN ON THE PLANS. EDGER IS NOT REQUIRED WHERE SOD ABUTS CONCRETE.

4. ALL AREAS TO BE LANDSCAPED SHALL HAVE ORGANIC AMENDMENTS THOROUGHLY INCORPORATED INTO THE SOIL AT A RATE OF 5 CUBIC YARDS PER 1,000 SQUARE FEET, AND TILLED TO A DEPTH OF 6 INCHES.

5. ALL SOD AREAS, BED AREAS, AND LANDSCAPE AREAS SHALL BE FINE GRADED PRIOR TO INSTALLATION OF NEW PLANT MATERIAL. ROCKS, WOOD, AND ANY MATERIAL LARGER THAN 1" IN DIAMETER SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO SODDING AND PLANTING NEW MATERIALS.

6. EXISTING TURF, SHRUBS, TREES, AND PLANT MATERIAL TO BE REMOVED SHALL BE FULLY REMOVED FROM THE SITE, INCLUDING ALL ROOTS.

7. ALL LANDSCAPED AREAS SHALL BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.

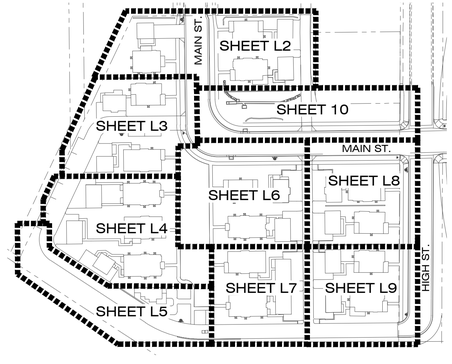
8. SOD AREAS SHALL BE ZONED SEPARATELY THAN BEDS, AND SHALL BE IRRIGATED VIA POP-UP SPRAY HEADS PROVIDING FULL (HEAD TO HEAD) COVERAGE. HEADS SHALL BE COMMERCIAL GRADE WITH REPLACEABLE NOZZLES, PRESSURE REGULATORS, AND CHECK VALVES.

9. BED AREAS SHALL BE ZONED SEPARATELY THAN SOD AREAS, AND SHALL BE IRRIGATED BY INDIVIDUAL DRIP EMITTERS TO EACH PLANT. DRIP COMPONENTS SHALL BE COMMERCIAL GRADE RAIN-BIRD OR EQUAL POINT SOURCE EMITTERS, WITH ALL PLANTS RECEIVING IRRIGATION.

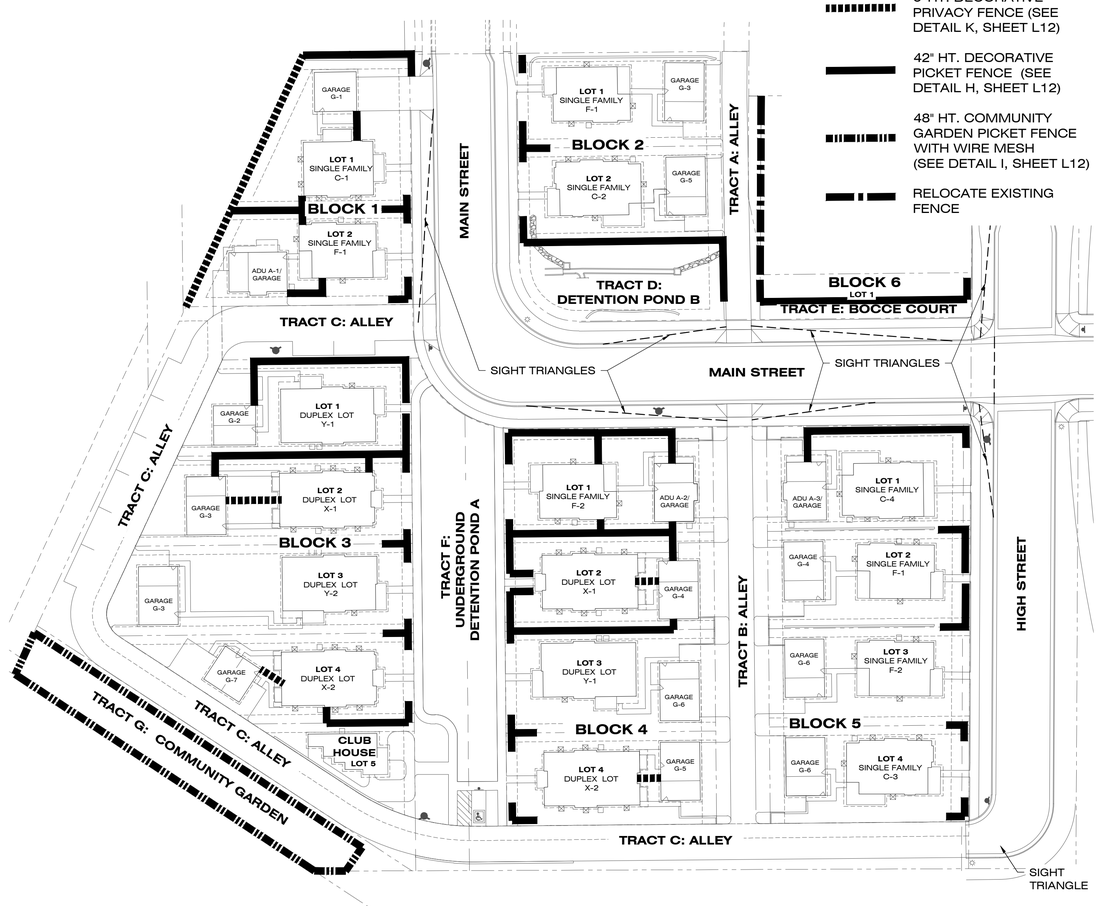
10. FOR PLANTINGS IN NATIVE SEEDED AREAS, PLACE RING OF WOOD MULCH (PER THE WIDTH SPECIFIED IN PLANTING DETAILS) AROUND EACH TREE, SHRUB, PERENNIAL AND ORNAMENTAL GRASS. FOR PLANTINGS IN ROCK OR COBBLE, PROVIDE 8" DIAMETER RING OF WOOD MULCH AROUND EACH PERENNIAL AND ORNAMENTAL GRASS.

SHEET KEY

N.T.S.



OVERALL LANDSCAPE AND FENCE PLAN



FENCE TYPE LEGEND

- 5' HT. DECORATIVE PRIVACY FENCE (SEE DETAIL K, SHEET L12)
- 42" HT. DECORATIVE PICKET FENCE (SEE DETAIL H, SHEET L12)
- 48" HT. COMMUNITY GARDEN PICKET FENCE WITH WIRE MESH (SEE DETAIL I, SHEET L12)
- RELOCATE EXISTING FENCE

N

0 20' 40' 80'

SCALE:1"=40'

MAIN STREET, ERIE, CO.
LANDSCAPE COVER SHEET & PLANT LIST
SHEET L1 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
- NOT FOR CONSTRUCTION -

COLORADO 811
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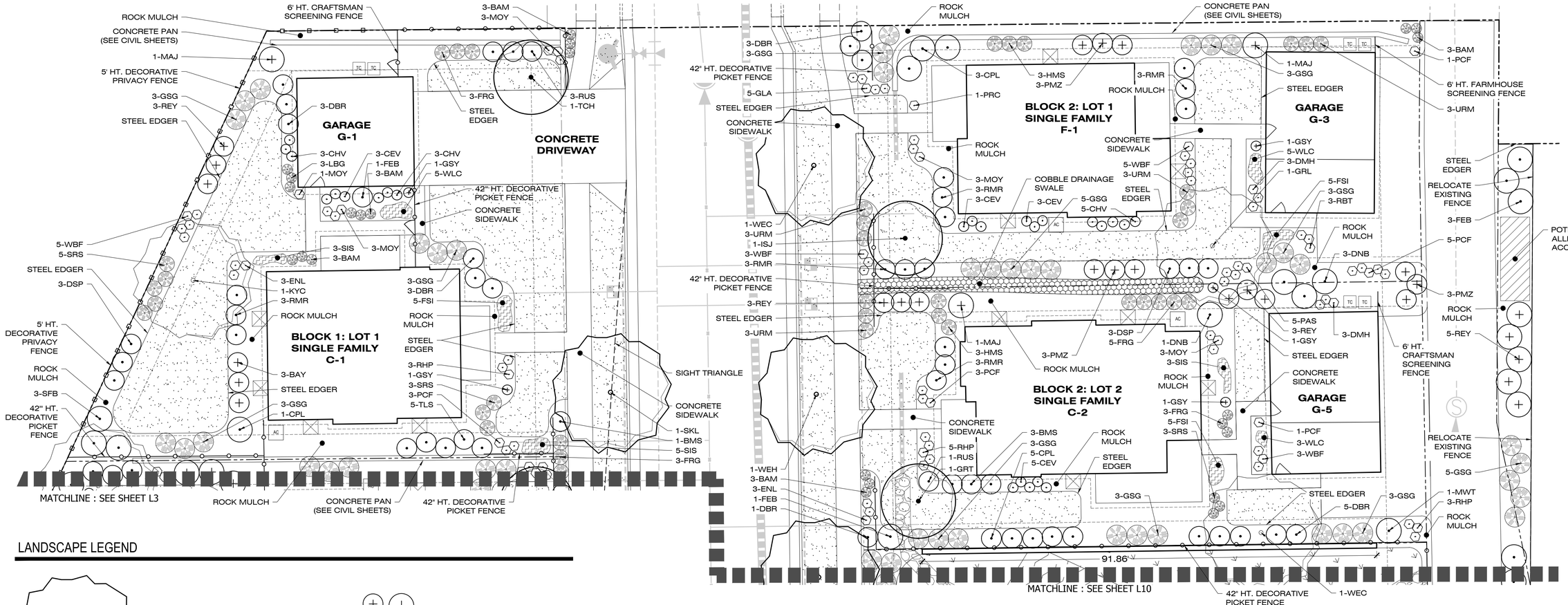
OUTDOOR DESIGN GROUP, INC.
5690 WEBSTER STREET
ARVADA, CO 80002
(303) 993-4811

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE PLAN



LANDSCAPE LEGEND

DECIDUOUS TREES

ORNAMENTAL TREES

DECIDUOUS SHRUBS

EVERGREEN SHRUBS

ORNAMENTAL GRASSES

LARGE PERENNIALS

LOW PERENNIALS & GROUNDCOVERS

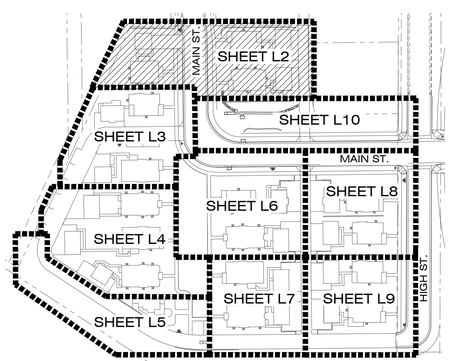
SOD

TC — TRASH / RECYCLING

AC — AC UNIT

SHEET KEY

N.T.S.



INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

1) THIS CHART REFLECTS ALL LOTS ON THIS SHEET.

N

0 5' 10' 20'

SCALE:1"=10'

MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L2 OF L14
PREPARATION DATE: 1/28/2019

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LANDSCAPE LEGEND

- DECIDUOUS TREES
- ORNAMENTAL TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- LARGE PERENNIALS
- LOW PERENNIALS & GROUNDCOVERS
- SOD
- NATIVE SEED
- TC — TRASH / RECYCLING
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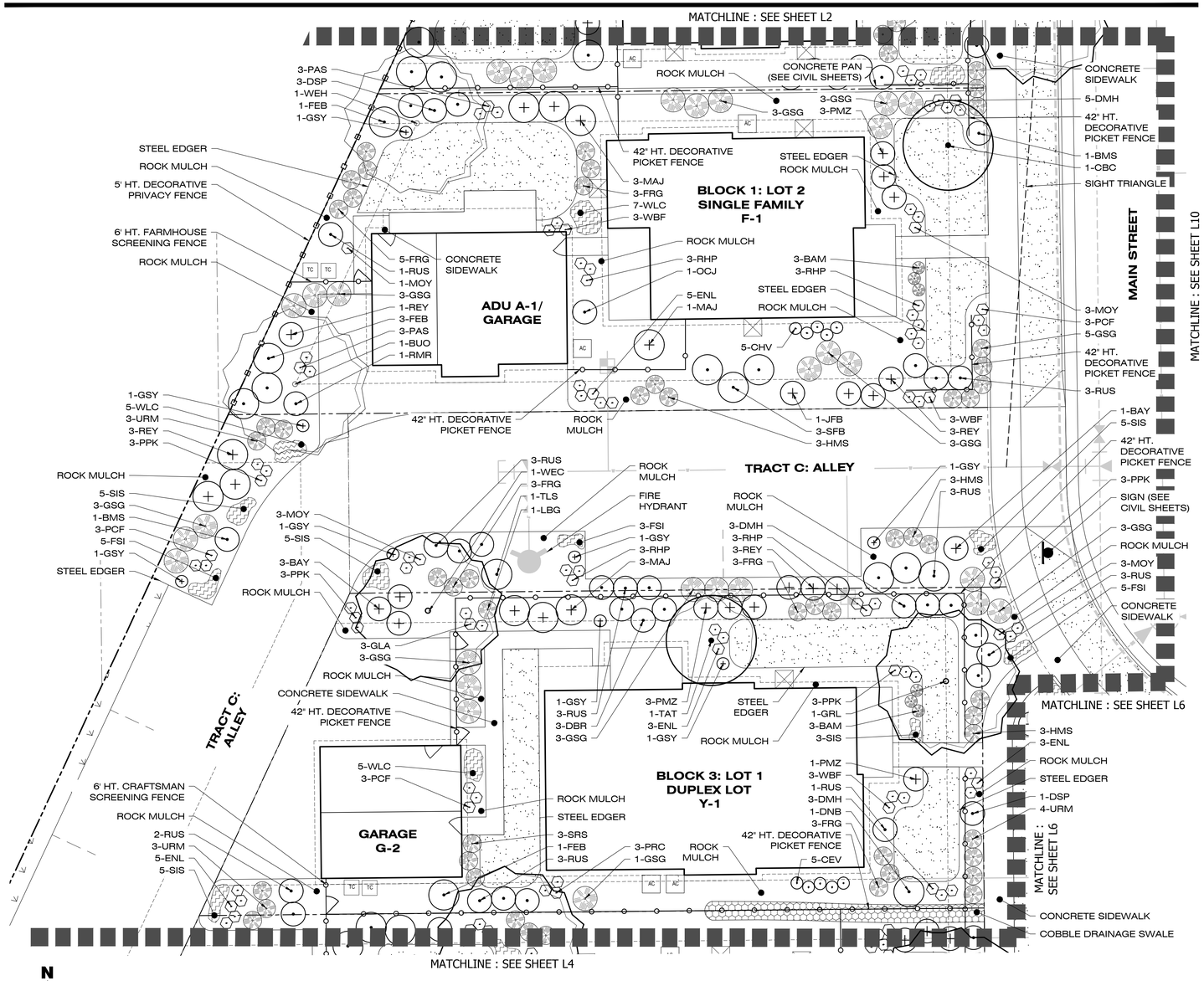
LANDSCAPE PLAN



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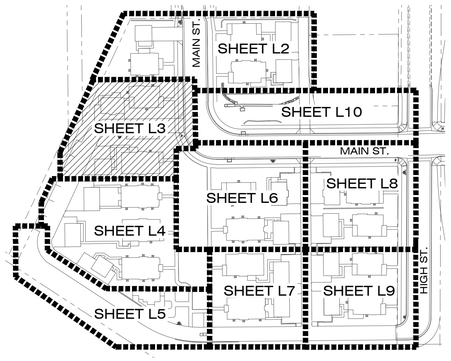

INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

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**MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L3 OF L14
PREPARATION DATE: 1/28/2019**

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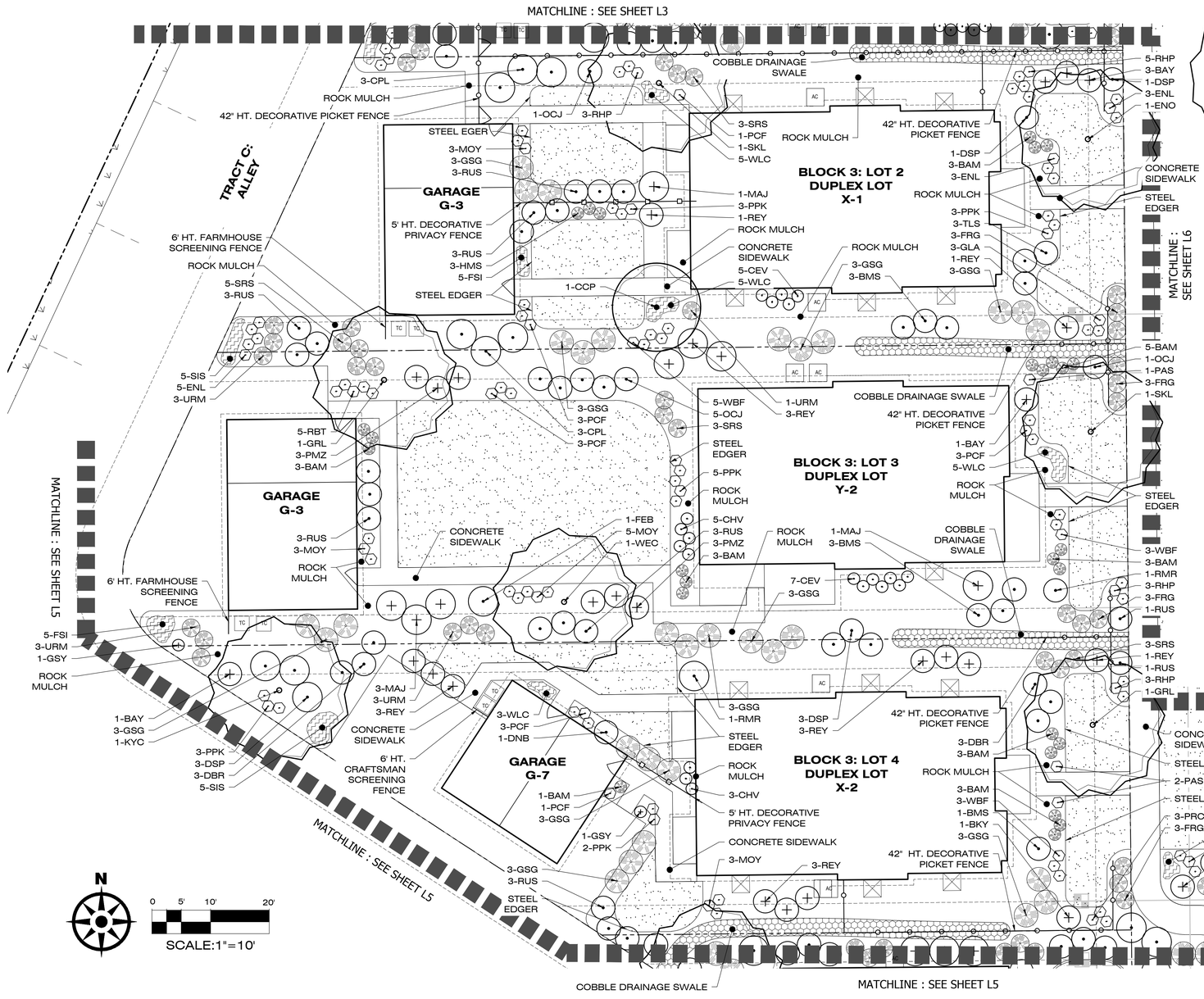
LANDSCAPE PLAN



LANDSCAPE LEGEND

- DECIDUOUS TREES
- ORNAMENTAL TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- LARGE PERENNIALS
- LOW PERENNIALS & GROUNDCOVERS
- SOD
- NATIVE SEED
- TC — TRASH / RECYCLING
- AC — AC UNIT

SHEET KEY

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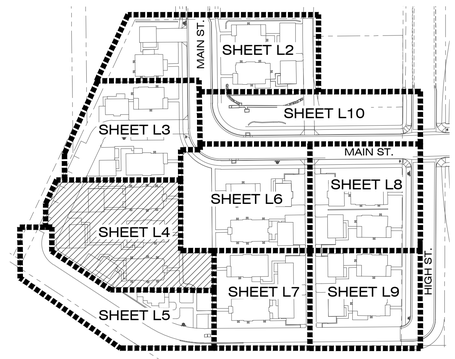

INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

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MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L4 OF L14
PREPARATION DATE: 1/28/2019

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PRELIMINARY PLAT - PP-000836-2016**

LANDSCAPE PLAN

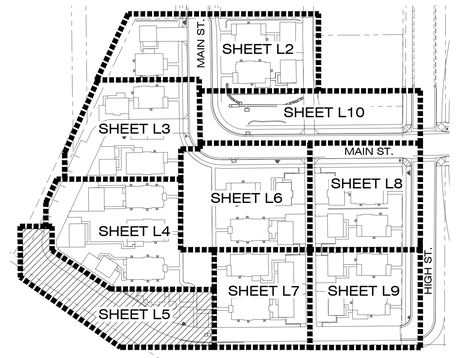
LANDSCAPE REQUIREMENTS

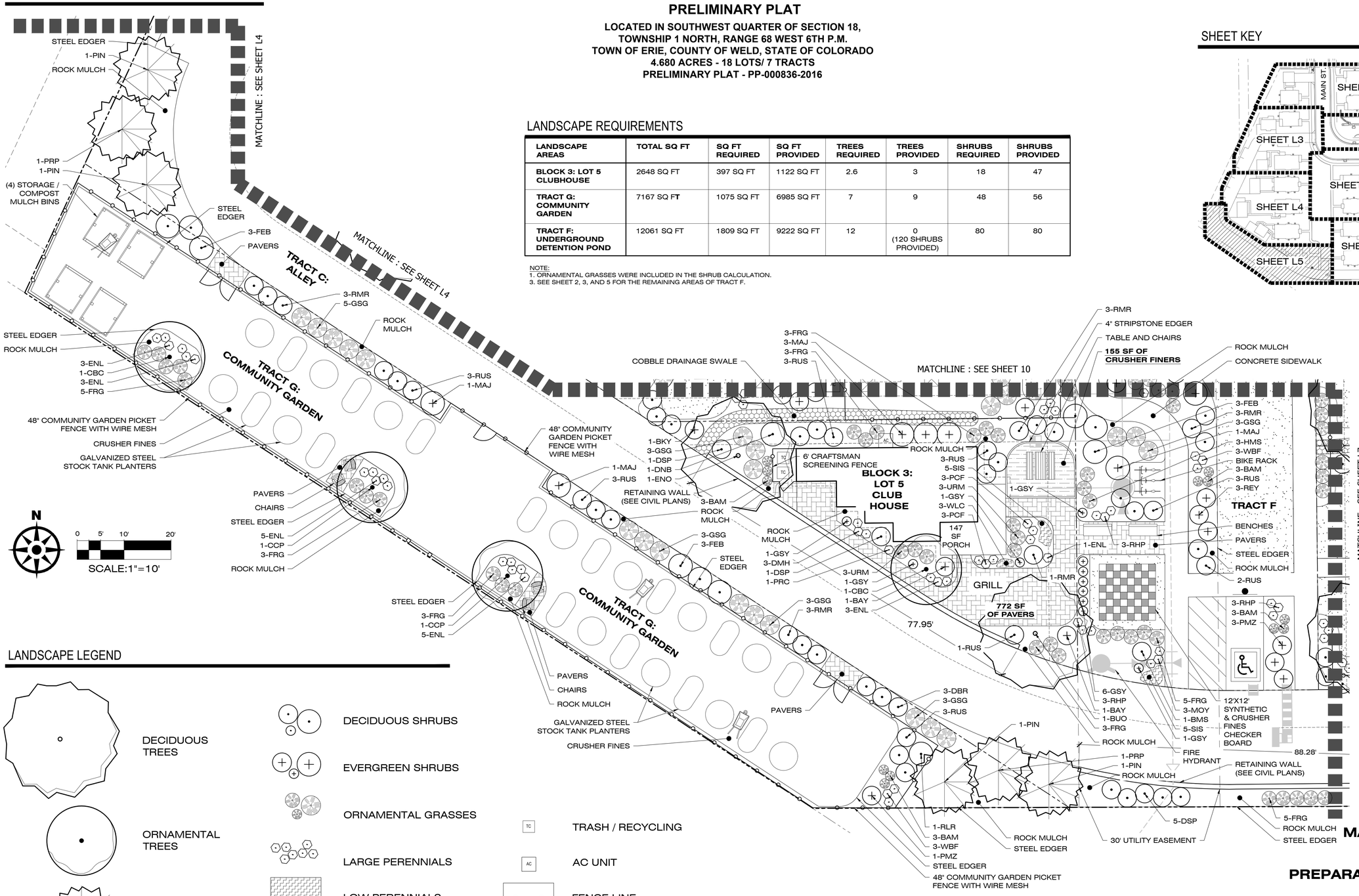
LANDSCAPE AREAS	TOTAL SQ FT	SQ FT REQUIRED	SQ FT PROVIDED	TREES REQUIRED	TREES PROVIDED	SHRUBS REQUIRED	SHRUBS PROVIDED
BLOCK 3: LOT 5 CLUBHOUSE	2648 SQ FT	397 SQ FT	1122 SQ FT	2.6	3	18	47
TRACT G: COMMUNITY GARDEN	7167 SQ FT	1075 SQ FT	6985 SQ FT	7	9	48	56
TRACT F: UNDERGROUND DETENTION POND	12061 SQ FT	1809 SQ FT	9222 SQ FT	12	0 (120 SHRUBS PROVIDED)	80	80

NOTE:
1. ORNAMENTAL GRASSES WERE INCLUDED IN THE SHRUB CALCULATION.
3. SEE SHEET 2, 3, AND 5 FOR THE REMAINING AREAS OF TRACT F.

SHEET KEY

N.T.S.





N

0 5' 10' 20'

SCALE:1"=10'

LANDSCAPE LEGEND

DECIDUOUS TREES

ORNAMENTAL TREES

EVERGREEN TREES

DECIDUOUS SHRUBS

EVERGREEN SHRUBS

ORNAMENTAL GRASSES

LARGE PERENNIALS

LOW PERENNIALS & GROUNDCOVERS

SOD

TC TRASH / RECYCLING

AC AC UNIT

FENCE LINE

PAVERS

**MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L5 OF L14
PREPARATION DATE: 1/28/2019**

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

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4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE LEGEND

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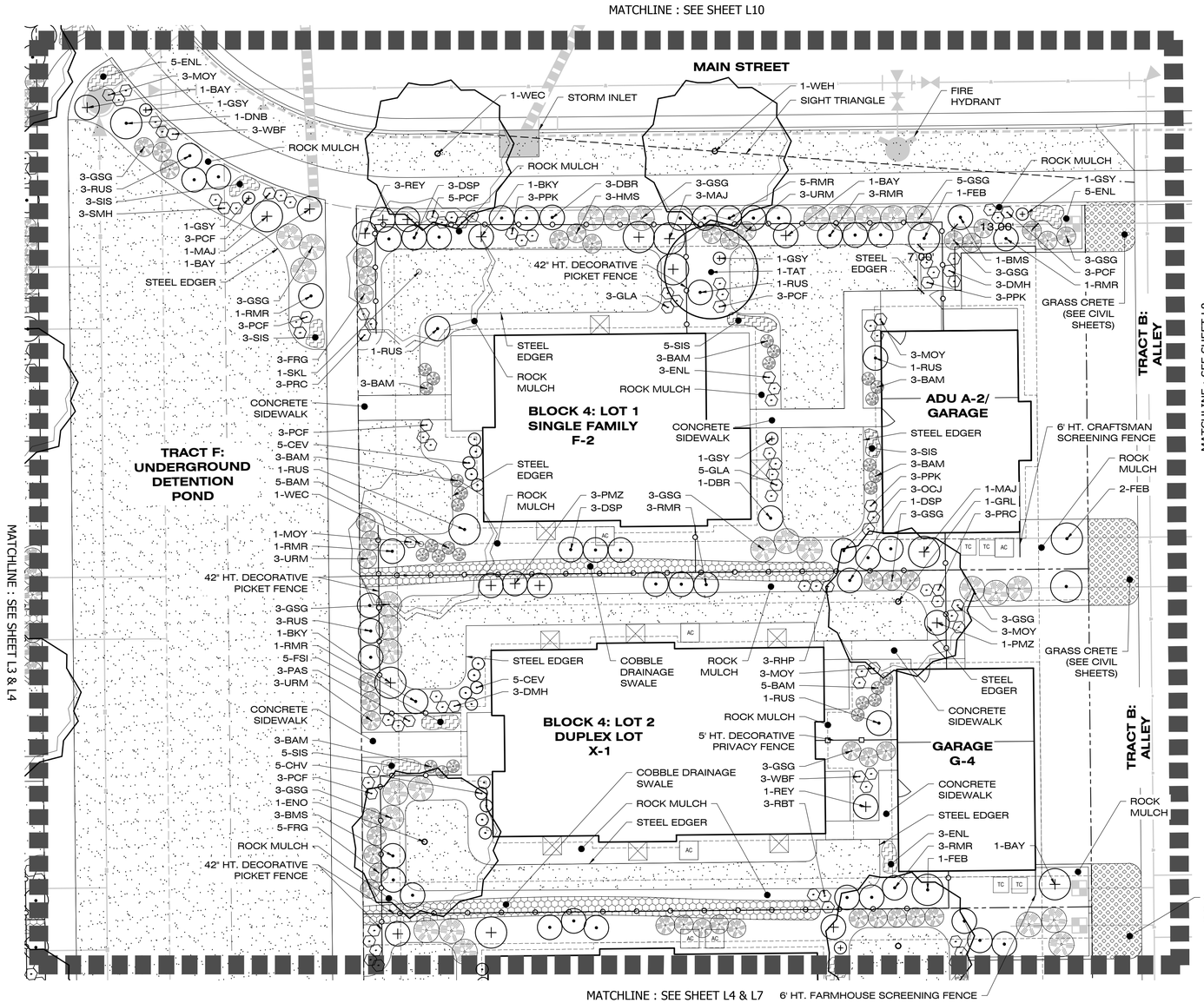
- ORNAMENTAL TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- LARGE PERENNIALS
- LOW PERENNIALS & GROUNDCOVERS
- SOD
- TRASH / RECYCLING (TC)
- AC UNIT (AC)

LANDSCAPE PLAN



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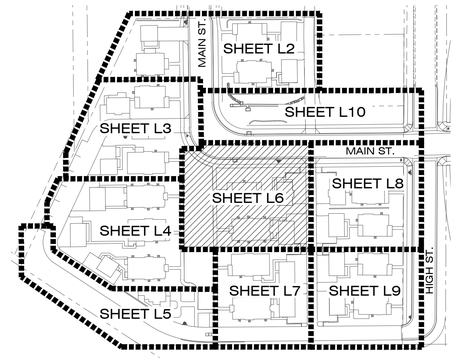

INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

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N

0 5' 10' 20'

SCALE:1"=10'

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MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L6 OF L14
PREPARATION DATE: 1/28/2019

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PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE LEGEND

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- ORNAMENTAL TREES
- DECIDUOUS SHRUBS
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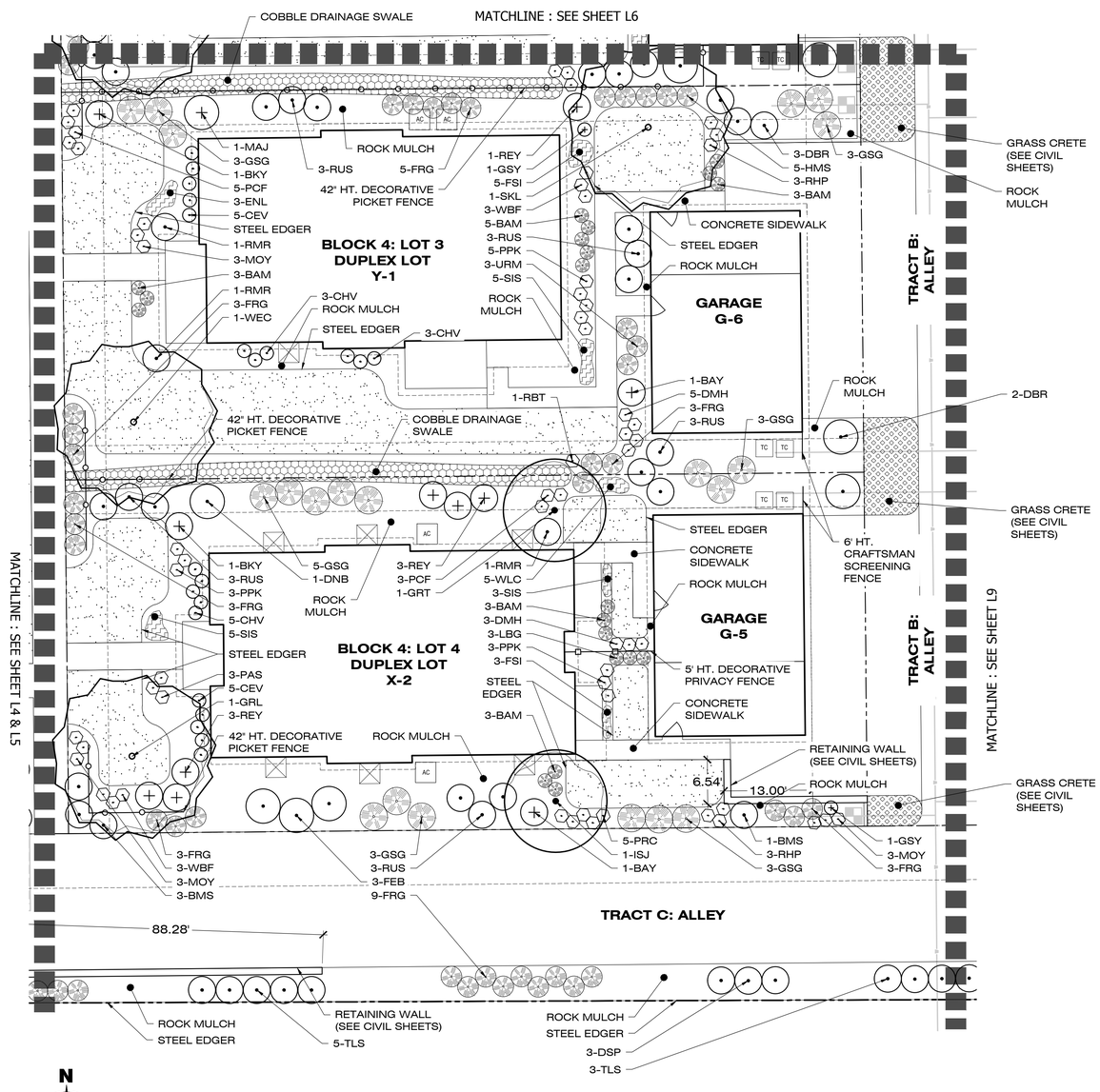
- ORNAMENTAL GRASSES
- LARGE PERENNIALS
- LOW PERENNIALS & GROUNDCOVERS
- SOD
- NATIVE SEED
- TRASH / RECYCLING (TC)
- AC UNIT (AC)

LANDSCAPE PLAN



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0 5' 10' 20'

SCALE:1"=10'

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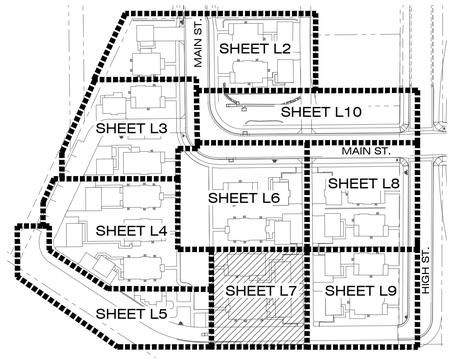

INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

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MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L7 OF L14
PREPARATION DATE: 1/28/2019

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

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LANDSCAPE LEGEND

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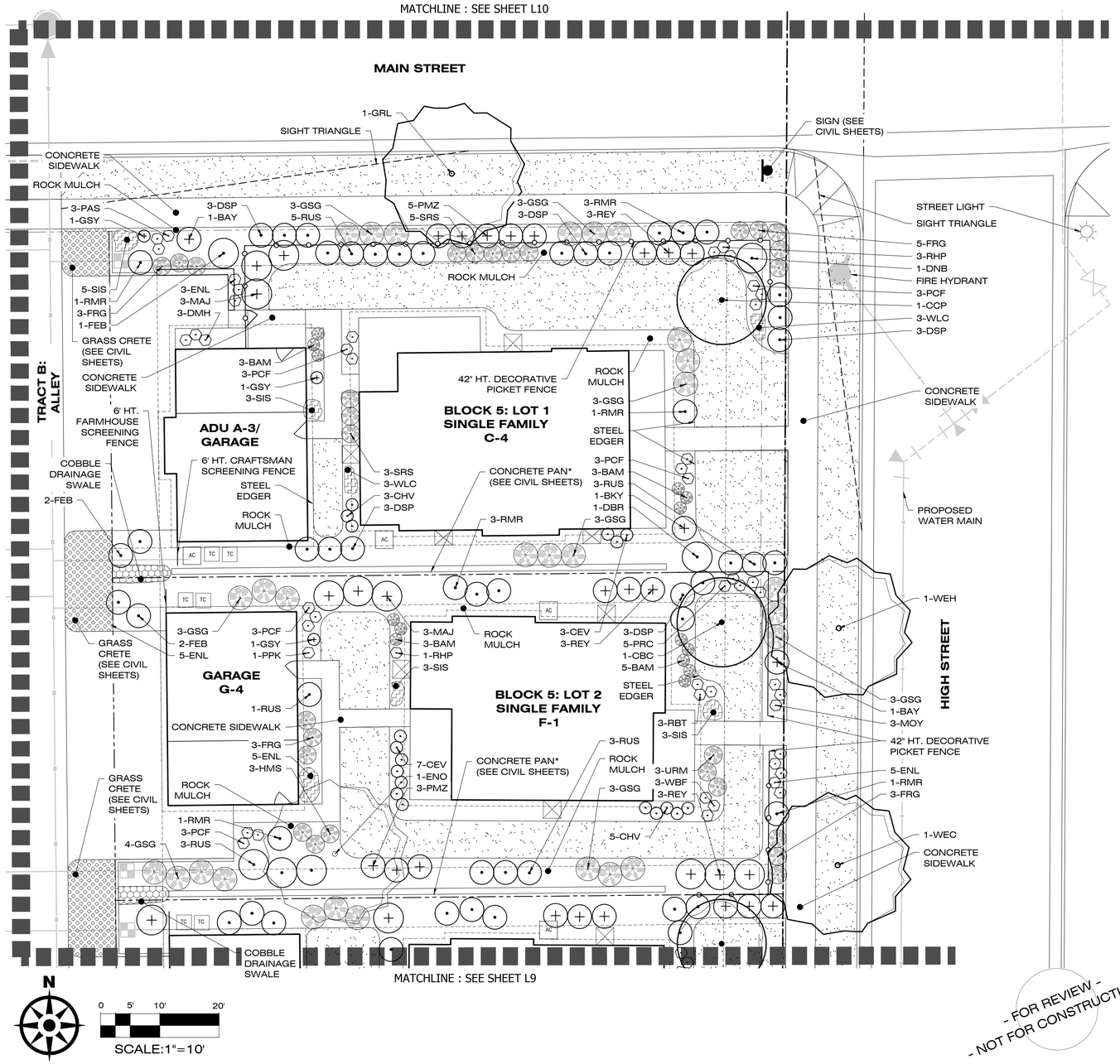
LANDSCAPE PLAN



SHEET KEY

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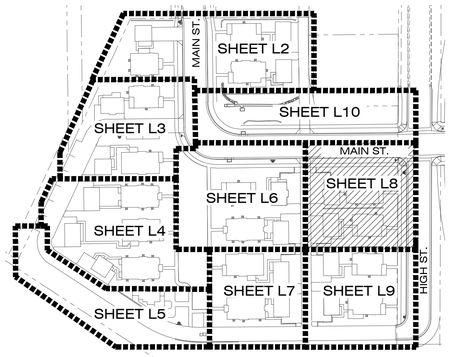

INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

1) THIS CHART REFLECTS ALL LOTS ON THIS SHEET.

*CONCRETE PANS TO BE MAINTAINED BY THE SUBDIVISION HOA.

MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L8 OF L14
PREPARATION DATE: 1/28/2019

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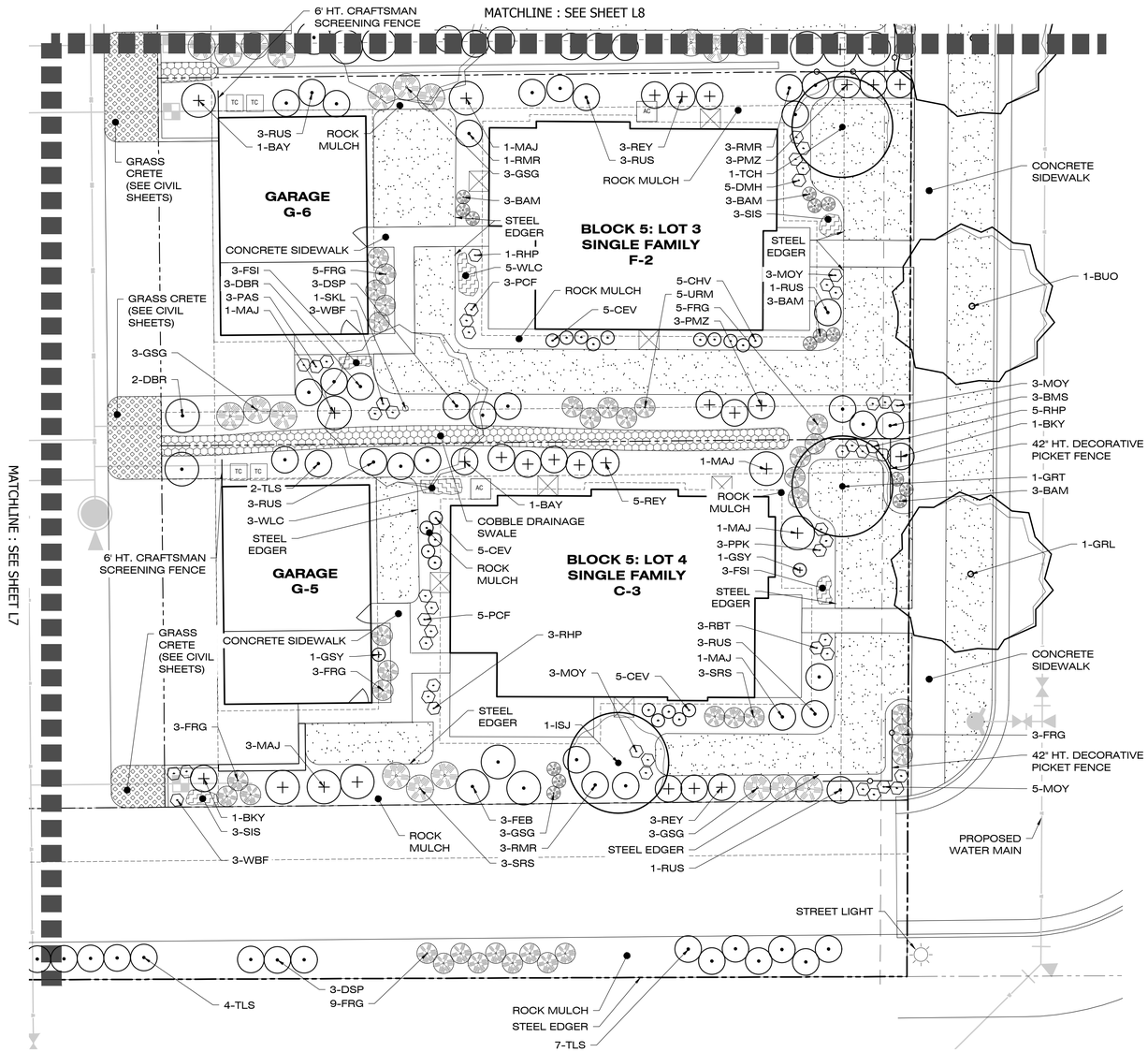
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE LEGEND

- DECIDUOUS TREES
- ORNAMENTAL TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- LARGE PERENNIALS
- LOW PERENNIALS & GROUNDCOVERS
- SOD
- NATIVE SEED
- TRASH RECYCLING (TC)
- AC UNIT (AC)

LANDSCAPE PLAN



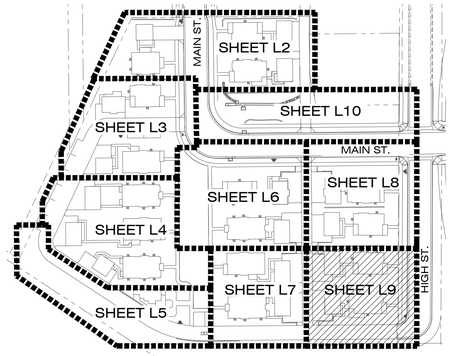
N

0 5' 10' 20'

SCALE:1"=10'

SHEET KEY

N.T.S.



INDIVIDUAL LOT LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
FRONT YARD	75%	75%
SIDE & REAR YARD	50%	50%

NOTES:

1) THIS CHART REFLECTS ALL LOTS ON THIS SHEET.

MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L9 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
- NOT FOR CONSTRUCTION -

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.
Call 3 business days in advance before you dig, grade, or excavate for the marking of underground member utilities

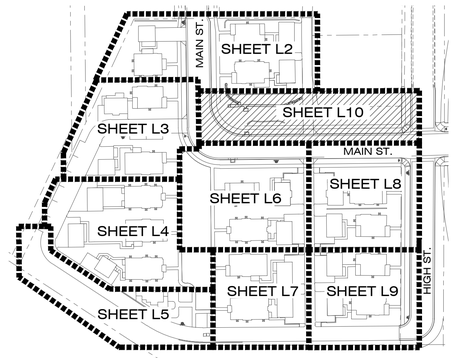
OUTDOOR DESIGN GROUP
WWW.ODGDESIGN.COM
OUTDOOR DESIGN GROUP, INC.
5690 WEBSTER STREET
ARVADA, CO 80002
(303) 993-4811

MAIN STREET SUBDIVISION

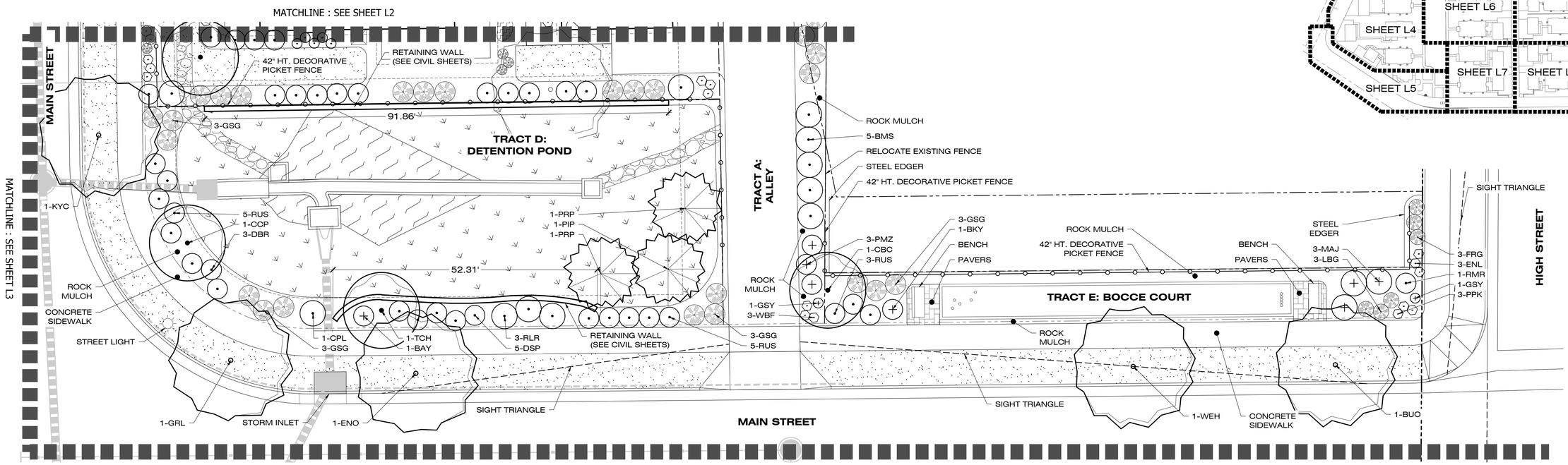
PRELIMINARY PLAT

LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

SHEET KEY N.T.S.



LANDSCAPE PLAN



MATCHLINE : SEE SHEET L6 & L8

N

0 5' 10' 20'

SCALE:1"=10'

LANDSCAPE LEGEND

DECIDUOUS TREES

ORNAMENTAL TREES

EVERGREEN TREES

DECIDUOUS SHRUBS

EVERGREEN SHRUBS

ORNAMENTAL GRASSES

LARGE PERENNIALS

LOW PERENNIALS & GROUNDCOVERS

SOD

NATIVE SEED

TC TRASH / RECYCLING

AC AC UNIT

LANDSCAPE REQUIREMENTS

LANDSCAPE AREAS	TOTAL SQ FT	SQ FT REQUIRED	SQ FT PROVIDED	TREES REQUIRED	TREES PROVIDED	SHRUBS REQUIRED	SHRUBS PROVIDED
TRACT D: DETENTION POND	4832 SQ FT	725 SQ FT	4598 SQ FT	5	5	32	32
TRACT E: BOCCE COURT	1183 SQ FT	178 SQ FT	395 SQ FT	1	1	8	17

NOTE:
1. ORNAMENTAL GRASSES WERE INCLUDED IN THE SHRUB CALCULATION.

MAIN STREET, ERIE, CO.
LANDSCAPE PLAN
SHEET L10 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
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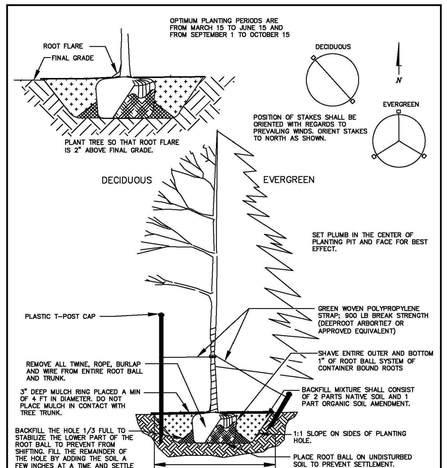
MAIN STREET SUBDIVISION

PRELIMINARY PLAT

**LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
CITY OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2017**

A PLANTING DETAIL FOR ALL TREES & B&B SHRUBS

N.T.S.



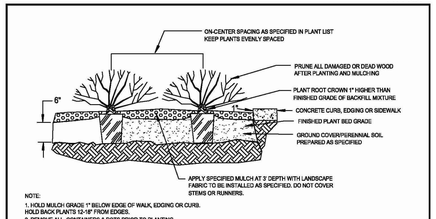
STAKING NOTES:
DECIDUOUS TREES SHALL BE STAKED USING TWO(2) SIX(6) FOOT STEEL T-POSTS DRIVEN PERPENDICULAR TO THE TREE AT 180 DEGREES.
EVERGREEN TREES SHALL BE STAKED USING THREE(3) TWO(2) FOOT STAKES DRIVEN AT 120 DEGREES.
ALL STAKES SHALL BE DRIVEN OUTSIDE OF ROOTBALL AND IN UNDISTURBED SOIL.

The Town of ERIE COLORADO

DRAWING TITLE: TREE PLANTING DETAIL
DRAWING NUMBER: P20A
DRAWN BY: D. JENKINS APPROVED BY: G. HEGNER DATE: 1/2014

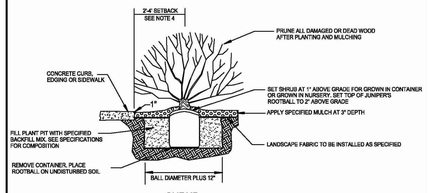
B PLANTING DETAIL FOR SHRUBS, PERENNIALS, AND GROUNDCOVER

N.T.S.



NOTE:
1. HOLD MULCH GRADE 1" BELOW EDGE OF WALK, EDGING OR CURB. HOLD BACK PLANTS 12-18" FROM EDGES.
2. REMOVE ALL CONTAINERS & POTS PRIOR TO PLANTING.

GROUNDCOVER / PERENNIAL



SHRUB

NOTE:
1. DO NOT PLANT ANY PLANT WITH ROOTBALL NOT IN CONFORMANCE WITH COLORADO NURSERY ACT REQUIREMENTS
2. HOLD MULCH GRADE 1" BELOW EDGE OF WALK, EDGING OR CURB
3. SHRUBS NOT PLANTED WITHIN A MULCHED BED REQUIRE A 4" HIGH EARTH SAUCER TO BE CONSTRUCTED CONTAINING A 1' RADIUS AND 3" DEEP MULCH COLLAR.
4. USE A 2' TO 4' SETBACK DEPENDING ON SPECIES. SETBACK TO ACCOMODATE MATURE SPREAD OF SPECIES TO PREVENT OVERHANG.
5. REMOVE ALL CONTAINERS & POTS PRIOR TO PLANTING.

The Town of ERIE COLORADO

DRAWING TITLE: SHRUB & GROUNDCOVER/ PERENNIAL PLANTING DETAIL
DRAWING NUMBER: P20B
DRAWN BY: D. JENKINS APPROVED BY: G. BEHLEN DATE: 01/2006

C MAGLIN BENCH

N.T.S.

310 SERIES

MLB310-W

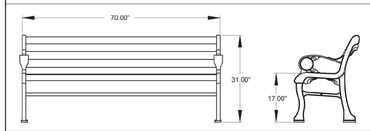
MATERIALS: Bench ends are made from solid cast aluminum. The seat employs Ipe wood slats.

FINISH: All steel components are protectec with E-Coat rust proofing.
The Maglin Powdercoat System provides a durable finish on all metal surfaces. Wood slats are finished with penetrating sealers.

INSTALLATION: The bench is delivered pre- assembled. Holes (0.5") are provided in each foot for securing to base.

TO SPECIFY: Select MLB310-W
Choose:
- Powdercoat Color

OPTIONS:
- Center Arm
- Plaque
- Skate Deterrent
- Personalization



DIMENSIONS:
Height: 31" (78.7cm)
Length: 70" (177.8cm)
Depth: 24" (63.5cm)
Seat: 17" (43.2cm)
Weight: 95lbs (43kg)

MAGLIN

T 800-716-5506
F 877-260-9303
WWW.MAGLIN.COM
SALES@MAGLIN.COM

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- Details and specifications may vary due to continuing improvements of our products.

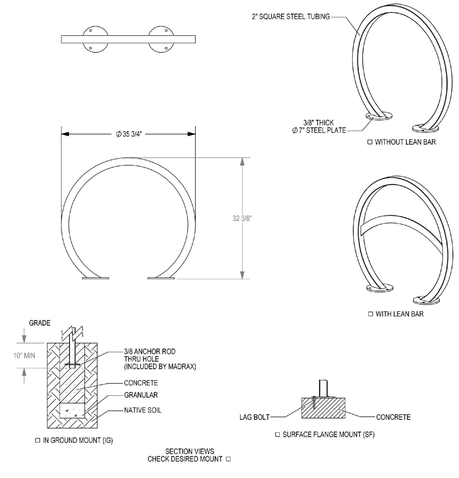
NOTES:
1. MODEL: MAGLIN MLB 310-W.
2. POWDERCOAT COLOR: BLACK
3. SEATING MATERIAL: IPE WOOD

D MADRAX BIKE RACK

N.T.S.
MADRAX DIVISION

MADRAX

GRABER MANUFACTURING, INC.
1060 UNIEK DRIVE
WAUNAKEE, WI 53597
P(800) 448-7931, P(608) 849-1060, F(608) 849-1081
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM



SECTION VIEWS
CHECK DESIRED MOUNT ☐

PRODUCT: ORNS-2(LB)-IG(SF)
DESCRIPTION: ORION BIKE RACK
2 BIKE, SURFACE OR IN GROUND MOUNT

DATE: 7-1-16
ENG: SMC

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NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR/FINISH. SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

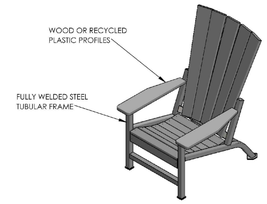
NOTE:
1. MODEL: MADRAX ORION BIKE RACK.
2. POWDERCOAT COLOR: BLACK

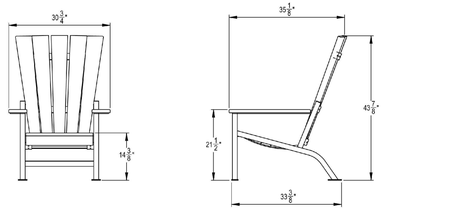
E THOMAS STEELE CHAIR

N.T.S.

THOMAS STEELE

GRABER MANUFACTURING, INC.
1060 UNIEK DRIVE
WAUNAKEE, WI 53597
P(800) 448-7931, P(608) 849-1060, F(608) 849-1081
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM





PRODUCT: MNC-WI[RP]
DESCRIPTION: MONONA CHAIR

DATE: 10-19-16
ENG: BLW

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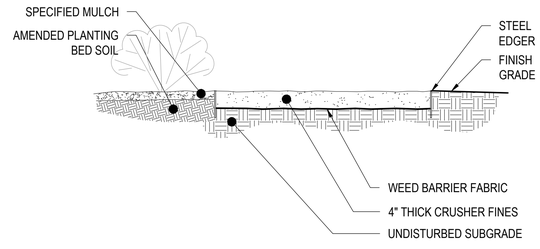
STEEL FRAME CAN BE FINISHED WITH POWDER COAT PAINT OR HOT DIP GALVANIZE.

SITE FURNISHING IS POWDER COATED WITH TGIC POLYESTER. STEEL SURFACE PREP INCLUDES MECHANICAL AND CHEMICAL ETCHING FOLLOWED WITH A COATING TO IMPROVE ADHESION AND CORROSION RESISTANCE.

NOTE:
1. MODEL: THOMAS STEELE MONONA CHAIR.
2. POWDERCOAT COLOR: BLACK
3. SEATING MATERIAL: IPE WOOD

F CRUSHER FINES

N.T.S.



NOTE:
1. STEEL EDGING TO BE $\frac{3}{16}$" x 6" SAFETY EDGING (DARK GREEN COLOR)WITH THREE PINS PER 10' SECTION. OVERLAP EDGING 1'-0" AND DOUBLE PIN ALL JOINTS.
2. MATERIAL COLOR: TAN

G MAGLIN TABLE & SEATING

N.T.S.

CLUSTER SEATING

MAGLIN

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F 877-260-9303
WWW.MAGLIN.COM
SALES@MAGLIN.COM

MLPT I 200-W

MATERIALS: Table and bench ends are made from solid cast aluminum. The table top and seats employ Ipe.

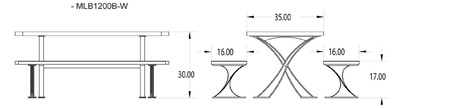
FINISH: The Maglin Powdercoat System provides a durable finish on all metal surfaces. Wood slats are treated with penentrating sealers.

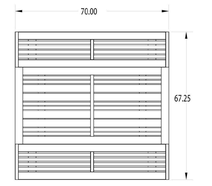
INSTALLATION: The table is delivered knocked down and the benches are pre-assembled. Holes (0.5") are provided in each foot for securing to base.

TO SPECIFY: Select MLPT1200-W
Choose:
- Ipe Wood
- Powdercoat Color

OPTIONS: - Wheelchair Accessibility (WCA)

COMPLEMENTARY PRODUCTS:
- MLB1200-W
- MLB1200B-W





DIMENSIONS: Height: 30.00" (76.2 cm)
Length: 70.00" (177.8 cm)
Width: 67.25" (170.8 cm)

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-Details and specifications may vary due to continuing improvements of our products.

* MAGLIN is a registered trade mark of Maglin Site Furniture Inc.

NOTES:
1. MODEL: MAGLIN MLPT I 200-W.
2. POWDERCOAT COLOR: BLACK
3. TABLE TOP & SEATING MATERIAL: IPE WOOD

**MAIN STREET, ERIE, CO.
LANDSCAPE NOTES & DETAILS
SHEET L11 OF L14
PREPARATION DATE: 1/28/2019**

- FOR REVIEW -
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ARVADA, CO 80002
(303) 993-4811

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

**LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
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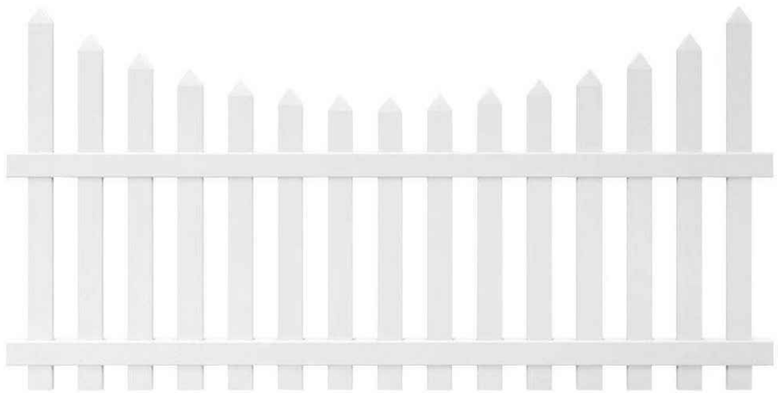
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016**

H 42" HT. DECORATIVE PICKET FENCE

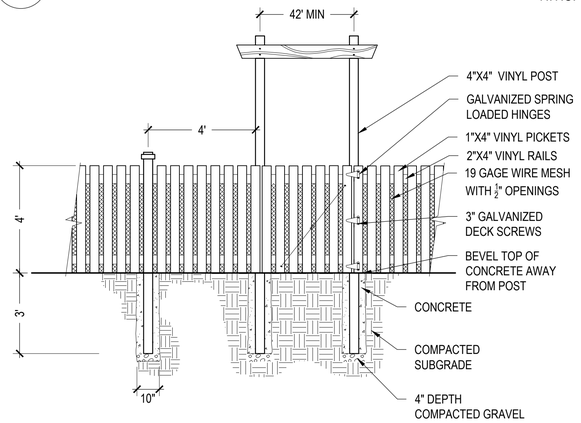
N.T.S.



NOTES:
1. MODEL: VERANDA GLENDALE 42 IN. HT. X 8 FT. WHITE VINYL SCALLOPED TOPE SPACED PICKET FENCE PANEL WITYH 3 IN UNASSEMBLED POINTED PICKETS.
2. VINYL COLOR: WHITE

I 48" HT. COMMUNITY GARDEN PICKET FENCE WITH WIRE MESH

N.T.S.

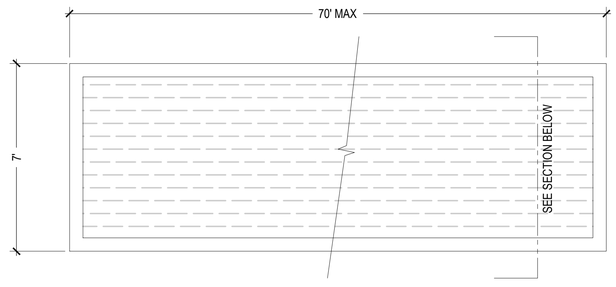


NOTES:
1. POST, RAIL, & PICKET MATERIAL: VINYL
2. MATERIAL COLOR: WHITE
3. WIRE MESH WILL BE ON INSIDE/UNFINISHED SIDE OF FENCE, FACING THE GARDEN

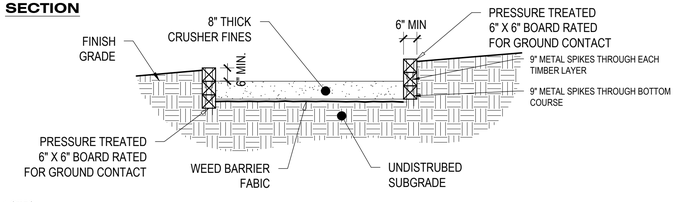
J BOCCE COURT

N.T.S.

PLAN



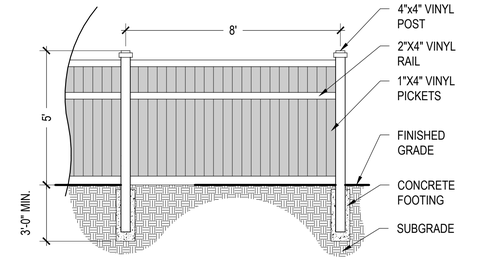
SECTION



NOTES:
1. WOOD MATERIAL COLOR: NATURAL
2. CRUSHER FINES COLOR: TAN

K 5' HT. DECORATIVE PRVACY FENCE

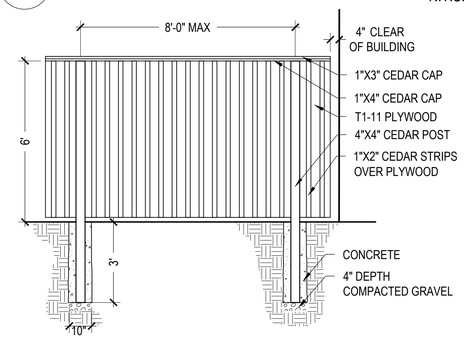
N.T.S.



NOTES:
1. POST, RAIL, & PICKET MATERIAL: VINYL
2. MATERIAL COLOR: WHITE

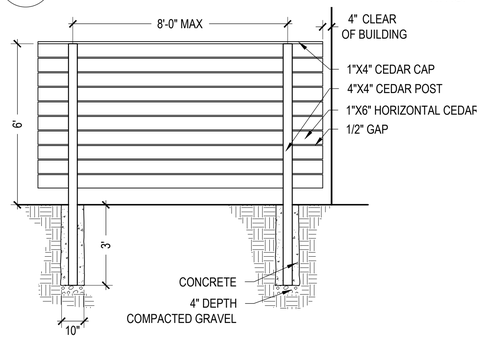
L 6' HT. CRAFTSMAN SCREENING FENCE

N.T.S.



M 6' HT. FARMHOUSE SCREENING FENCE

N.T.S.



MAIN STREET, ERIE, CO.
LANDSCAPE NOTES & DETAILS
SHEET L12 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
- NOT FOR CONSTRUCTION -

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MAIN STREET SUBDIVISION

PRELIMINARY PLAT

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TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016**

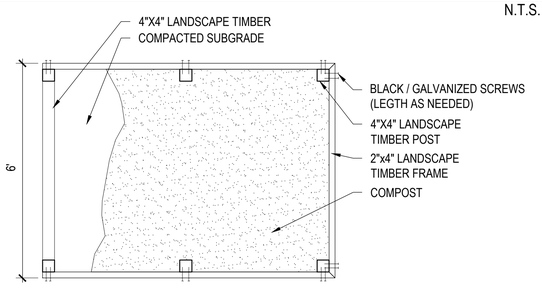
N GALVANIZED STEEL STOCK TANK PLANTER

N.T.S.

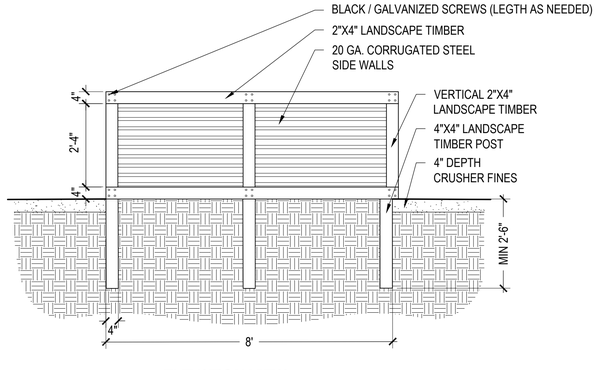
NOTES:
1. MODEL: STEEL STOCK TANK
2. AVAILABLE AT WWW.HUTCHISON-INC.COM.

O MULCH BINS

N.T.S.



PLAN VIEW

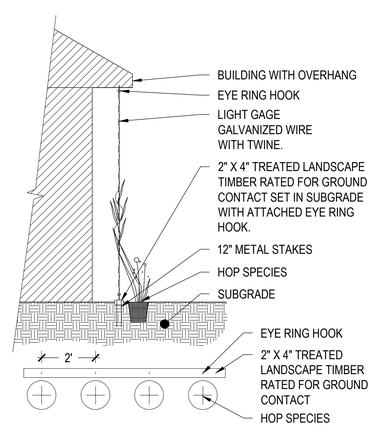


ELEVATION VIEW

NOTES:
1. USE NAIL GUN TO NAIL VERTICAL 2"X4" LANDSCAPE TIMBER. NAILS SHOULD BE UNNOTICEABLE AS POSSIBLE.
2. WOOD & METAL MATERIAL COLOR: NATURAL

P TYPICAL HOP VINE DETAIL

N.T.S.



EXAMPLE IMAGE

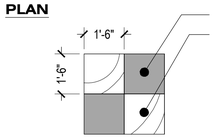
TOWN OF ERIE SCREENING REQUIREMENTS & STANDARDS

1. GROUND-MOUNTED MECHANICAL EQUIPMENT AND UTILITY FIXTURES - GROUNDMOUNTED ABOVE-GRADE MECHANICAL EQUIPMENT SHALL BE SCREENED BY ORNAMENTAL FENCES, SCREENING ENCLOSURES, TREES, OR SHRUBS THAT BLOCK AT LEAST 80 PERCENT OF THE VIEW.

Q 12'X12' SYNTHETIC TURF AND PAVERS CHECKER BOARD

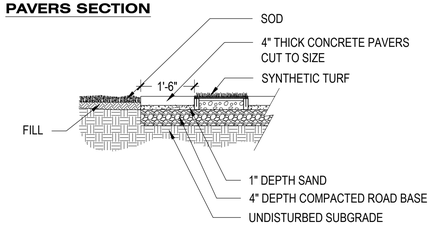
N.T.S.

PLAN

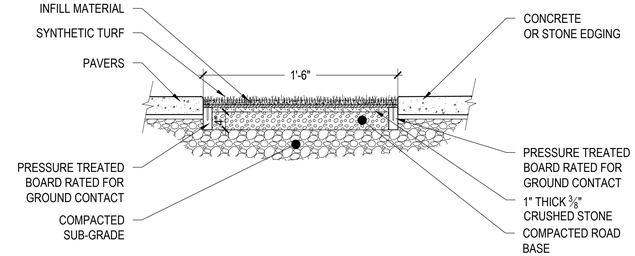


NOTES:
1. PAVER MODEL: UNILOCK SKYLINE 24X24
2. PAVER COLER: MEDIUM GRAY
3. AVAILABLE AT HTTPS://COMMERCIAL.UNILOCK.COM
4. TURF MODEL: PIONEER SAND ARTIFICIAL TURF - CLOVER
5. AVAILABLE AT HTTP://WWW.PIONEERSAND.COM

PAVERS SECTION



SYNTHETIC TURF SECTION



SYNTHETIC GRASS GENERAL INSTALLATION STEPS:

1) REMOVE ALL UNWANTED GRASS, SOD, AND VEGETATION PER LANDSCAPE PLAN.
2) CAP OFF OR REMOVE ALL UNWANTED IRRIGATION/SPRINKLER HEADS PER IRRIGATION PLAN.
3) INSTALL BASE. BASE MATERIAL SHOULD BE SPREAD EVENLY.
4) LIGHTLY WET PROJECT AREA AND COMPACT WITH A ROLLER OR PLATE COMPACTOR.
5) UNROLL THE SYNTHETIC GRASS AND STRETCH ACROSS THE PREPARED BASE. DO NOT DRAG ACROSS THE BASE. IF THE GRASS HAS WRINKLES, LAY FLAT ON A FLAT SURFACE IN THE SUN.
6) MAKE SURE GRAIN DIRECTION OF EACH ROLL FACING THE SAME DIRECTION.
7) CUT THE GRASS TO FIT THE PROJECT AREA WITH A UTILITY KNIFE. ALL CUTS TO BE MADE FROM BACK SIDE OF THE GRASS.
8) SECURE THE GRASS TO PT BOARD EVERY 3" - 6" WITH HOT-DIPPED GALVANIZED SCREWS.
9) INFILL THE GRASS UTILIZING A DROP SPREADER OPENED TO THE HIGHEST SETTING. DO NOT INSTALL THE INFILL WHILE THE GRASS OR INFILL MATERIAL IS WET. BRUSH THE GRASS FIBERS UPRIGHT IN BETWEEN INFILL LAYERS. REPEAT THE INFILL PROCESS UNTIL THE INFILL MATERIAL IS EVENLY SPREAD SO THAT NO MORE THAT ¾" OF SYNTHETIC FIBERS ARE EXPOSED.
10) WATER THE ENTIRE AREA TO SETTLE THE MATERIAL

MAIN STREET, ERIE, CO.
LANDSCAPE NOTES & DETAILS
SHEET L13 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
- NOT FOR CONSTRUCTION -

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.
Call 3 business days in advance before you dig, grade, or excavate for the marking of underground member utilities

OUTDOOR DESIGN GROUP
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OUTDOOR DESIGN GROUP, INC.
5690 WEBSTER STREET
ARVADA, CO 80002
(303) 993-4811

MAIN STREET SUBDIVISION

PRELIMINARY PLAT

LOCATED IN SOUTHWEST QUARTER OF SECTION 18,
TOWNSHIP 1 NORTH, RANGE 68 WEST 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
4.680 ACRES - 18 LOTS/ 7 TRACTS
PRELIMINARY PLAT - PP-000836-2016

LANDSCAPE LOT PLANT LIST

ORNAMENTAL TREES

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
TAT	Hot Wings Tatarian Maple	Acer tataricum 'GarAnn'					1					1															
TCH	Thornless Cockspur Hawthorn	Crataegus crus-galli inermis	1															1					1				
GRT	Goldenrain Tree	Koelreuteria paniculata				1									1				1								
CBC	Coralburst Crabapple	Malus 'Coralburst'		1						1							1							1		1	
CCP	Chanticleer Pear	Pyrus calleryana 'Chanticleer'						1								1							1			2	
ISJ	Ivory Silk Japanese Lilac	Syringa reticulata 'Ivory Silk'			1										1				1								

EVERGREEN TREES

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
PIN	Pinon Pine	Pinus edulis																				3	1			1	
PRP	Ponderosa Pine	Pinus ponderosa																				1	2			1	

DECIDUOUS SHRUBS

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
OCJ	Orange Columnar Japanese Barberry	Berberis thunbergii 'Orange Rocket'		1				1	6			3												3		
SFB	Silver Fountain Butterfly Bush	Buddleja alternifolia 'Argentea'	3	3																							
BMS	Blue Mist Spirea	Caryopteris x clandonensis 'Blue Mist'	1	1		3		3	1	3		1	3		4			3		5		1			1		
FEB	Fernbush	Chamaebatiaria millefolium	1	4		1	1		1			2	2		3	2	2		3	3		1			3	5	
DBR	Dwarf Blue Rabbitbrush	Ericameria nauseosa nauseosa	6		3	1	3		1	5		4		4	1	1		4	1				3			3	
RUS	Russian Sage	Perovskia atriplicifolia	3	4		1	14	8	8	4	7	4	4	8	7	8	7	7	7			6	5	3	9	9	
DNB	Diabolo Ninebark	Physocarpus opulifolius 'Diabolo'				9	1			1	1					1	1								1		
DSP	Dakota Sunspot Potentilla	Potentilla fruticosa Dakota Sunspot	3	3	3		1	2	1	5	2	6	1			12	3	3				11	5				
TLS	Three-Leaf Sumac	Rhus trilobata	5					3											2			20					
RLR	Red-Leaved Rose	Rosa glauca																					3			1	
RMR	Red Meidland Rose	Rosa Meidland Red	3	1	9	3			1	1	4	10	7	2	1	5	5	4	3					1	4	6	
CPL	Common Purple Lilac	Syringa vulgaris	1		3	5		6															1				
MWT	Mohican Wayfaring Tree	Viburnum lantana 'Mohican'				1																					

EVERGREEN SHRUBS

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
PMZ	Panchito Manzanita	Arctostaphylos x coloradoensis 'Panchito'		3	7	2	4		6				4			5	3	6		3					4	1	
JFB	Joint Fir Bluestem	Mahonia aquifolium compacta		1																							
REY	Red False (Texas) Yucca	Hesperaloe parviflora	3	4		6		3	2	10		3	1	1	6	3	6	3	8	5		6			3		
MAJ	Medora Juniper	Juniperus scopulorum 'Medora'	1	4	1	1	3	1	4		3	4		1		3	3	2	2					3	3	2	
BAY	Banana Yucca	Yucca baccata	3				3	3	1	1	2	1	1	1	1	1	1	1				1	1		2		
GSY	Golden Sword Variegated Yucca	Yucca filamentosa 'Golden Sword'	2	1	1	2	2		1	1	3	3		1	1	2	1		2	1		5		1	10		
BKY	Beaked Yucca	Yucca rostrata								1	1	1	1	1	1	1			2					1			

ORNAMENTAL GRASSES

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
BAM	Blonde Ambition Grama Grass	Bouteloua gracilis 'Blonde Ambition'	6	3	3	3	3	3	14	7	3	20	8	11	6	6	8	9	3						6	3	3
FRG	Feather Reed Grass	Calamagrostis acutiflora 'Karl Foerster'	6	8		8	6	3	6	3	9	3	5	10	10	8	6	6	13			26		3	5	11	
URM	UNDAUNTED® Ruby Muhly Grass	Muhlenbergia reverchonii Undaunted			9	3	6	3	7	1	6	6	3	3			3	5				3					
HMS	Heavy Metal Blue Switch Grass	Panicum virgatum 'Heavy Metal'		3	3	3	3	3				3		5			3					3			3		
SRS	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	8			3	3	6	5	3						8			6						5		
LBG	Little Bluestem Grass	Schizachyrium scoparium 'Blaze'	3				1								3									3			
GSG	Giant Sacaton Grass	Sporobolus wrightii	9	17	14	9	5	10	9	11	3	17	15	6	14	12	13	6	6	5		7	9	3	10	14	

PERENNIALS

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St
MOY	Moonshine Yarrow	Achillea 'Moonshine'	7	4	3	3		3	8	3		4	6	3	6		3	6	8			3			9		
DMH	Double Mix Hollyhock	Alcea rosea Chater's Double Hybrids		5	3	3	3				3	3	3	5	3	3		5							3		
GLA	Grape-Leaved Anemone	Anemone tomentosa 'Robustissima'			5		3	3				8															
PAS	Purple Aster	Aster tongolensis 'Wartburg Star'		6	5				1	2			3		3	3		3									
SIS	Snow-In-Summer	Cerastium tomentosum	8			3	8	4	1	5	5	8	5	5	8	8	6	3	3			15			14		
FSI	Fire Spinner Iceplant	Delosperma 'Fire Spinner'	5		5	5			10				5	5	3			3	3			8			5		
WBF	Whirling Butterflies	Gaura lindheimeri	5	6	8	3	3	5	3	3			3	3	3		3	3	3	3					9	3	
RHP	Red-hot Poker	Kniphofia uvaria	3	8		8	3	8	3	3			3	3	3	3	1	1	8			3			6		
ENL	English Lavender	Lavandula angustifolia 'Munstead'	3	5		3	11	10	1		4	8	3	3		3	10							3	8	16	
WLC	Walker's Low Catmint	Nepeta x faassenii 'Walker's Low'	5	7	5	3	5	10	5	3	3				5	6		5	3			5					
PPK	Pink Penstemon	Penstemon 'Elfin Pink'					6	6	5	5		9		5	6		1		3			6		3			
PCF	Prairie Yellow Coneflower	Ratibida columnifera	3	3	6	4	3	4	6	4	6	14	3	5	3	9	6	3	5			3			9		
PRC	Prairie Red Coneflower	Ratibida columnifera pulcherrima			1		3			3	1	3	3		5		5										
RBT	Red Birds in a Tree	Scrophularia macrantha			3				5				3	1			3		3						1		

VINES

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5										
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Tract H	Main St
CHV	Cascade Hop Vine	Humulus lupulus 'Cascade'	6	5	5		5		5	3			5	6	5	3	5		5								
CEV	Centennial Hop Vine	Humulus lupulus 'Centennial'	3		6	5	5	5	7			5	5	5	5	3	7	5	10								

DECIDUOUS SHADE TREES

			BLOCK 1		BLOCK 2			BLOCK 3					BLOCK 4					BLOCK 5											
SYMBOL	COMMON NAME	BOTANICAL NAME	Lot 1	Lot 2	Lot 1	Lot 2	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Lot 1	Lot 2	Lot 3	Lot 4	Tract A	Tract B	Tract C	Tract D	Tract E	Tract F	Tract G	Main St	High St
WEC	Western Catalpa	Catalpa speciosa				1	1		1			1		1		1													3	1
WEH	Western Hackberry	Celtis occidentalis		1																									2	1
SKL	Skyline Honeylocust	Gleditsia triacanthos inermis 'Skyline'						1	1			1		1		1				1									1	
KYC	Kentucky Coffeetree	Gymnocladus dioicus	1							1																			1	
BUO	Bur Oak	Quercus macrocarpa		1							1																		1	1
ENO	English Oak	Quercus robur						1			1		1							1									1	
GRL	Greenspire Linden	Tilia cordata 'Greenspire'			1		1		1	1			1																2	1

STANDARD LANDSCAPE NOTES

1. ALL WORK SHALL CONFORM TO TOWN OF ERIE STANDARDS AND SPECIFICATIONS AND WITH THE ACCEPTED PLANS. REFER TO THESE STANDARDS FOR ADDITIONAL INFORMATION AS NEEDED. A COPY OF THESE SPECIFICATIONS SHALL BE AVAILABLE ON THE WORK SITE AT ALL TIMES.

2. THE DEVELOPER/ARCHITECT SHALL ENSURE THAT THE IRRIGATION PLAN IS COORDINATED WITH PLANS DONE BY OTHERS SO THE PROPOSED GRADING, DRAINAGE WORK, OR OTHER CONSTRUCTION DOES NOT CONFLICT NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS ON THIS PLAN.

3. STORM WATER BEST MANAGEMENT PRACTICES SHALL CONFORM TO STATE OF COLORADO REQUIREMENTS. ALL STORM WATER REPORTS AND REQUIRED PAPERWORK SHALL ADHERE TO ALL STATE OF COLORADO REQUIREMENTS.

4. THE CONTRACTOR SHALL CERTIFY THAT THE GRADE IS WITHIN PLUS OR MINUS ONE-TENTH (1/10TH) OF THE FINAL GRADING PLAN PRIOR TO COMMENCEMENT OF ANY LANDSCAPE OR IRRIGATION WORK.

5.THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES ASSOCIATED WITH THE WORK AS SHOWN ON THE PLANS.

6.THE CONTRACTOR SHALL BE RESPONSIBLE FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.

7. ANY REVISION TO THE IRRIGATION PLAN SHALL BE REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.

8. THE CONTRACTOR SHALL HAVE ACCEPTED SET OF PLANS AND MUST HAVE HELD A PRE-CONSTRUCTION MEETING WITH LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY AND ALL WORK.

9. THE CONTRACTOR SHALL WARRANTY THE WORKMANSHIP AND IRRIGATION SYSTEM FOR A PERIOD OF TWO YEARS.

10. DO NOT DISTURB PAVING, LIGHTING, LANDSCAPE OR IRRIGATION THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLANS.

11. THE CONTRACTOR SHALL IDENTIFY, VERIFY AND PROTECT CONTROL POINT. CONTRACTOR SHALL VERIFY LOCATION OF CONTROL POINT WEEKLY AND THE ORIGINAL CONDITION OF CONTROL POINT PIN SHALL BE MAINTAINED THROUGHOUT ENTIRE PROJECT. LOCATION AND G.P.S. COORDINATES OF THE CONTROL POINT SHALL BE IDENTIFIED ON ALL PLANS AND AS-BUILTS.

12. GRAPHIC SYMBOLS SHALL PRESIDE OVER WRITTEN PLANT QUANTITIES.

13. ALL TREE SPECIES SHALL BE FROM THE TOWN OF ERIE APPROVED TREE LIST.

14. NATIVE PLANTS SHALL BE USED IN NATIVE SEED AREAS. REFER TO STANDARDS AND SPECIFICATIONS FOR COMPLETE SPECIES LIST.

15. ALL STREET TREE SPECIES AND THEIR LOCATIONS SHALL BE APPROVED BY THE PARKS & RECREATION DIRECTOR OR DESIGNEE FOR TREES PLANTED ADJACENT TO RESIDENTIAL HOMES WHETHER THEY ARE INSTALLED BY THE DEVELOPER, CONTRACTOR, OR HOMEOWNER.

16. NO ASH TREES SHALL BE PLANTED UNDER ANY CIRCUMSTANCES.

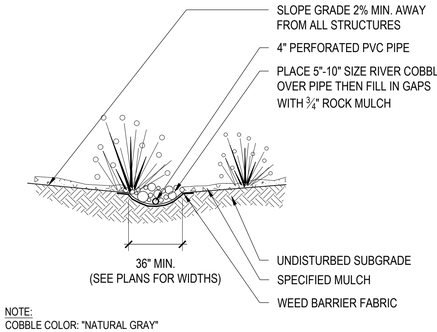
17. ALL HOA/DISTRICT MAINTAINED LANDSCAPING TO BE INSPECTED BY A COLORADO LANDSCAPE ARCHITECT IN GOOD STANDING AND PAID FOR BY THE DEVELOPER.

18. ALL TOWN OF ERIE LANDSCAPE ACCEPTANCE PROCEDURES FOR HOW/DISTRICT MAINTAINED TRACRTS SHALL BE FOLLOWED.

19. UPON COMPLETION OF THE PROJECT, DEVELOPER/LANDSCAPE ARCHITECT TO PROVIDE TOWN OF ERIE A FULL SET OF AS-BUILT DRAWINGS OF ALL LANDSCAPE AND IRRIGATION, ON A CD SET INCLUDING LATEST VERSION OF PDF AND AUTO-CAD. IN ADDITION, A SIGNED LANDSCAPE/IRRIGATION COMPLIANCE STATEMENT SHALL BE PROVIDED TO THE TOWN.

R COBBLE DRAINAGE SWALE

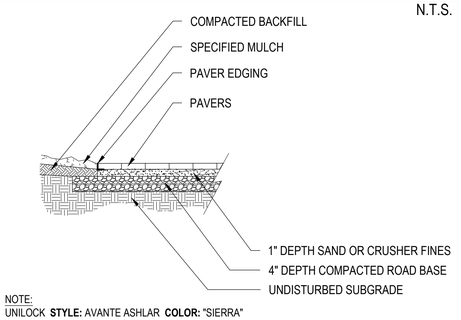
N.T.S.



NOTE:
COBBLE COLOR: "NATURAL GRAY"
DRAINAGE SWALE IS TO MEANDER AROUND FENCE POSTS AND FINE GRADING TO BE PERFORMED TO MAINTAIN DESIRED DRAINAGE.

S PAVERS

N.T.S.



NOTE:
UNILOCK **STYLE:** AVANTE ASHLAR **COLOR:** "SIERRA"

TOWN OF ERIE SCREENING REQUIREMENTS & STANDARDS

TRANSFORMERS, GROUND MOUNTED HVAC EQUIPMENT, UTILITY PEDESTALS, ETC. ARE NOT SHOWN ON THE LANDSCAPE PLAN. ADDITIONAL LANDSCAPING AND ASSOCIATED IRRIGATION WILL BE REQUIRED BASED UPON FIELD CONDITIONS IN ORDER TO SCREEN ABOVE GROUND UTILITY FACILITIES. THE ADDITIONAL LANDSCAPING OF THE ABOVE GROUND UTILITY FACILITIES SHALL BE INSTALLED PRIOR TO INSPECTION BY THE LANDSCAPE ARCHITECT. THE COMPLIANCE STATEMENT SUBMITTED FOR INITIAL ACCEPTANCE OF THE LANDSCAPING SHALL INCLUDE A DECLARATION THAT THE UTILITY FACILITIES HAVE BEEN LANDSCAPED AS REQUIRED.

MAIN STREET, ERIE, CO.
LANDSCAPE NOTES & DETAILS
SHEET L14 OF L14
PREPARATION DATE: 1/28/2019

- FOR REVIEW -
- NOT FOR CONSTRUCTION -

COLORADO 811
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OUTDOOR DESIGN GROUP, INC.
5690 WEBSTER STREET
ARVADA, CO 80002
(303) 993-4811

November 7, 2018

Old Time Living
c/o: Jehn Engineering
5690 Webster Street
Arvada, Colorado 80002

Re: Preliminary Geotechnical Engineering Report
Additional Groundwater Measurement for Basement Feasibility
Proposed Future Erie Apartments
South of South Main Street
Erie, Colorado
Terracon Project No. 25155197

Terracon Consultants, Inc. (Terracon) previously performed a preliminary geotechnical exploration of the subject site (Terracon Project No. 25155197) that was documented in a report dated February 17, 2016. We understand it is desired to obtain an additional groundwater measurement this mid-winter in order to confirm the feasibility of the proposed basements.

The purpose of this letter is to acknowledge that we will be subcontracted by the owner to perform the additional groundwater measurements and comment on the feasibility of the proposed basements based on the results of the groundwater measurement.

After additional groundwater measurements have been obtained, in the unlikely event that groundwater is high enough to influence the proposed basement construction, we will provide additional geotechnical recommendations for a watertight basement. A properly designed and constructed watertight basement will not require foundation drains.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this letter, please do not hesitate to contact us.

Sincerely,
TERRACON CONSULTANTS, INC.

Scott Myers, P.E.
Geotechnical Department Manager

John N. Haas, P.E.
Project Engineer

DUPLEX (X-1) FRONT ELEV.
1/8" = 1'-0"

S.F. (F-1) FRONT ELEV.
1/8" = 1'-0"

CHUCK SANDERS
ARCHITECT, LEED AP
2055 Kohler Drive, Boulder, Colorado 80305
c. 303.817.1248, o. 303.499.1172
sandersfleming@msn.com

DUPLEX (Y-1) FRONT ELEV.
1/8" = 1'-0"

S.F. (B-1) FRONT ELEV.
1/8" = 1'-0"

Rendered Elevations
Main Street
Erie, Colorado

Memorandum of Understanding

Feb 1, 2017

Mr. Jess Castro,
Old Town Living, LLC proposes redefining our shared property lines, between your 300 High Street, Erie property, and our 0 High Street, Erie property (formerly the Castro Farm) to better fit both of our needs.
Terms of our agreement:

- No money will exchange hands between Jess Castro and Old Town Living, LLC. This is a two way exchange of land for the sole purpose of redrawing the border between our properties.
- Old Town Living will employ a surveyor to define and physically stake a mutually acceptable new west-border property line for Jess Castro's land (spanning his Lots 2, 3, 4, 5 of Block 3 of Erie Heights Subdivision) and across Lot 1 that Old Town Living owns. It will be approximately 4 feet inside of his existing rear fence (which is not currently on the actual property line) and run parallel to Mr. Castro's front land border (along High Street).
- If, after the survey company physically stakes the new property lines, either party is not satisfied, then this MOU is void.
- Old Town Living will deed its north-most 15 feet of Lot 1 (the 25 foot parcel just south of Jess Castro's land and just north of the Anderson Street right of way) to Jess Castro. This makes his land 15 feet wider as measured on the High Street curb or sidewalk.
- Jess Castro will deed his land west of his newly defined west-border property line (along the alley) to Old Town Living. This accomplishes Old Town Living's goal of widening the alley to better serve its new development plans.

- Old Town Living will finalize this action through the Platting process of its new development.
- Jess Castro will participate as necessary (signing things) for ordering necessary title documents and helping process Old Town Living's Final Plat, which will now also redefine his property lines. He may also need to help arrange for his mortgage company's signature if he has one.

Signatories below agree in principal to achieving these goals, and have the authority necessary to represent their company / family. They will be available and empowered in the months to come for signing documents on behalf of their parties for the express purpose listed above.

2/4/17

Old Town Living, LLC Jess Castro Date

Steve Poppitz – Principal
1036 Walnut Street
Louisville, CO 80027
(303) 419-8337

300 High Street
Erie, CO 80516
(303) 903-6015

JēHN ENGINEERING
5690 Webster Street
Arvada, Colorado 80002
(800)547-JeHN, (303)423-6036
(303)467-9438fax

Town of Erie
Community Development Department
645 Holbrook St.
Erie, CO 80516

Re: Main Street

Land Use Application

Preliminary Plat

Cultural, Archaeological, and Historical Resource Report

There are no structures on this property nor is this property part of any historical significance. The property was farmland and has been abandoned for years. It is not anticipated that there are any archaeological remnants on the property, but if any are found, the proper authorities will be notified.

Thank you,

Mark F. Bishop, P.E. Date 12/7/16

Mark F. Bishop, P.E.
Project Manager
For and on behalf of Jehn Engineering

Environmental Hazards

December 7, 2015

To Erie Planning Department,

In the late 1800s and early 1900s, our land originally located a railway line that were used for local transportation of coal across the land. It was never a destination and so loading, or unloading coal was never performed. Coal mining, surface or subterranean, was never performed on the land either. As a result our land was no more prone to coal residue than any other part of downtown area.

After coal mining activity in the area waned in the area in the early 1900s, and the tracks were eventually removed, the land first fell idle and was then eventually used by the Castro family for raising a small number of hogs. They additionally intended to use the land for housing, and transported a previously constructed home to the site for that purpose. It was never used, and eventually fell into disrepair in the successive generation. We removed that house, at the request of the Erie Police Department (it was structurally unsound safety hazard), shortly after we purchased the property.

Testimony from the Castro family, who owned the land for generations, says that they never stored or used any significant amount of pesticides or herbicides during their very limited "farming" use of the land.

In summary, nothing in the history of this property suggests concerns about any environmental hazards that would require study or mitigation of any sort.

Sincerely,

Thomas Poppitz

Old Town Living, LLC.
1036 Walnut Street, Louisville, CO 80027
Telephone: (650) 948-9778
Cellphone: (650) 888-3464

JēHN ENGINEERING
5690 Webster Street
Arvada, Colorado 80002
(800)547-JeHN, (303)423-6036
(303)467-9438fax

Town of Erie
Community Development Department
645 Holbrook St.
Erie, CO 80516

Re: Main Street

Land Use Application

Preliminary Plat

Threated and Endangered Species, Habitat and Wetlands Report

The existing site does not have any wetlands. There are no trees, bushes or streams to attract or protect endangered species on the property, primarily the Prebles Jumping Mouse. The site is primarily overgrown with native grasses and noxious weeds.

Thank you,

Mark F. Bishop, P.E. Date 12/7/16

Mark F. Bishop, P.E.
Project Manager
For and on behalf of Jehn Engineering

JOE JEHN, CA-PE#41487|CO-PE#15756|OH-PE#43204|IND-PE#9829
MARK BISHOP, CO-PE#26988 DEBBIE KLISIS, CO-PE#32969|MT-PE#11213
BOB HENNESSY, CO-PLS#34580|ID-PLS#12918|IND-PLS#9241
BRET EGAN,CO-PE#34724 MARK WILSON, CO-PLS#36062

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5690 Webster Street
Arvada, Colorado 80002
(800)547-JeHN, (303)423-6036
(303)467-9438fax

Town of Erie
Community Development Department
645 Holbrook St.
Erie, CO 80516

Re: Main Street

Land Use Application

Preliminary Plat

Native Trees and Vegetation Report

There are no trees located on this site. The only vegetation is native grasses and noxious weeds. The project is primarily single family residential development in the Old Town area so could be interpreted as exempt from requiring this report per section 6.2.C.3.b. of the Unified Development Code.

Thank you,

MFE. Bishop Date 12/7/16

Mark F. Bishop, P.E.
Project Manager
For and on behalf of Jehn Engineering

Special Agreements

January 30, 2017

To Erie Planning Department,

Our Main Street property is free of any special agreements that would restrict our ability to develop it. There are no reservations, leases, easements, restrictions, covenants, or any other impertinences that limit our use of the land.

There *was* only one – a 1922 Coal Reservation, which quietly passed from owner to owner until it landed, in its entirety, in a Wells Fargo charitable trust. We completely resolved this mater by purchasing the reservation, recording that purchase (Weld County Assessor 2/25/16), and thus permanently rejoining it to our land. Copies of those recorded documents are attached here.

Sincerely,

Thomas Poppitz

Old Town Living, LLC.
1036 Walnut Street, Louisville, CO 80027
Telephone: (650) 948-9778
Cellphone: (650) 888-3464

QUIT CLAIM DEED

THIS DEED is a conveyance from the individual, corporation or other entity named below as GRANTOR to the individual or entity named below as GRANTEE of whatever interest the GRANTOR may have in the real property described below.

In exchange for the sum of Five Thousand Dollars ($5,000), the receipt and sufficiency of which are hereby confessed by GRANTOR, the GRANTOR hereby sells and quit claims to the GRANTEE the real property described below with all its appurtenances.

The specific terms of this deed are:

Grantor: Wells Fargo Bank, N.A., as Trustee of the Lucile Drinkwater Allen Trust

Grantee: Old Town Living, LLC
1036 Walnut Street
Louisville, CO 80027

Form of Co-Ownership: n/a

Property Description:

All coal rights together with the right of ingress and egress and the use of the surface of the ground so far as may be reasonably necessary or proper in order to beneficially mine and remove such coal, which rights may be in, under, upon or appurtenant to the following described property:

All as set forth in the attached Exhibit "A" which is incorporated herein by this reference.

Property Address: n/a

Reservations-Restrictions:

Executed by the Grantors on February 24, 2016.

WELLS FARGO BANK, N.A., AS TRUSTEE OF THE LUCILE DRINKWATER ALLEN TRUST

Title: Oil & Gas Advisory Specialist

STATE OF COLORADO)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me this 24 day of February, 2016 by Bret Melton, as Oil & Gas Advisory Specialist of Wells Fargo Bank, N.A., Trustee of the Lucile Drinkwater Allen Trust.

WITNESS my hand and official seal

My Commission Expires:

Notary Public

OYUKY RODRIGUEZ FRANCO
Notary Public
State of Colorado
Notary ID 20134059657
My Commission Expires Sep 20, 2017

EXHIBIT "A"

Attached Legal Description

LOTS 1 THROUGH 10, INCLUSIVE, BLOCK 1 AND LOT 1, BLOCK 3, ERIE HEIGHTS AS RECORDED ON MAY 22ND, 1889 AT RECEPTION No. 32997, TOGETHER WITH PART OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF WELD, STATE OF COLORADO. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF SPARKS SUBDIVISION AS RECORDED MAY 11TH, 1971 AT RECEPTION No. 1567605, POINT ALSO BEING ON THE NORTH RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD; THENCE N24°41'07"E ALONG THE EAST LINE OF SAID SPARKS SUBDIVISION A DISTANCE OF 382.10 FEET TO A POINT ON THE SOUTH LINE OF LOT 5, SILVRANT'S ADDITION; THENCE N89°09'44"E ALONG THE SOUTH LINES OF SAID SILVRANT'S ADDITION AND FLETCHER ADDITION A DISTANCE OF 249.15 FEET TO THE NORTHWEST CORNER LOT 6, BLOCK 3 OF SAID ERIE HEIGHTS; THENCE S00°01'30"W ALONG THE WEST LINE OF BLOCK 3 OF SAID ERIE HEIGHTS A DISTANCE OF 81.35 FEET TO A POINT OF A NON-TANGENT CURVATURE; THENCE CONTINUING ALONG SAID WEST LINE AND ALONG A 3041.64 RADIUS CURVE TO THE RIGHT (SAID CURVE HAVING A CENTRAL ANGLE OF 00°50'18" AND A CHORD BEARING S11°55'26"E A DISTANCE OF 44.47 FEET) AN ARC LENGTH OF 44.47 FEET; THENCE N89°07'14"E ALONG THE SOUTH LINE OF LOT 2, BLOCK 3 OF SAID ERIE HEIGHTS A DISTANCE OF 115.95 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF HIGH STREET; THENCE S00°02'16"E ALONG SAID WEST LINE A DISTANCE OF 25.00 FEET TO THE SOUTHEAST CORNER OF LOT 1, BLOCK 3, OF SAID ERIE HEIGHTS; THENCE S89°07'15"W ALONG THE SOUTH LINE OF SAID LOT 1 A DISTANCE OF 111.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 1 TO A POINT OF A NON-TANGENT CURVATURE; THENCE ALONG A 3041.64 RADIUS CURVE TO THE RIGHT (SAID CURVE HAVING A CENTRAL ANGLE OF 01°08'46" AND A CHORD BEARING S10°27'12"E A DISTANCE OF 60.84 FEET) AN ARC LENGTH OF 60.84 FEET TO THE NORTHWEST CORNER OF LOT 10, BLOCK 1, SAID ERIE HEIGHTS; THENCE N89°07'17"E ALONG SAID NORTH LINE A DISTANCE OF 100.00 FEET TO THE NORTHEAST CORNER OF SAID LOT 10, POINT ALSO BEING ON THE WEST RIGHT OF WAY LINE OF HIGH STREET; THENCE S00°02'16"E ALONG SAID WEST LINE A DISTANCE OF 248.19 FEET TO THE SOUTHEAST CORNER LOT 1, BLOCK 1 OF SAID ERIE HEIGHTS; THENCE S89°28'01"W A DISTANCE OF 365.63 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF UNION PACIFIC RAILROAD; THENCE N57°07'26"W ALONG SAID NORTH LINE A DISTANCE OF 200.51 FEET TO THE POINT OF BEGINNING;
COUNTY OF WELD,
STATE OF COLORADO

Legal description prepared by Ehrhart Land Surveying, John P. Ehrhart, Colorado P.L.S. #29414, dated January 15, 2015, Project S095094

and Outlot "A" of Sparks Subdivision, a subdivision of the Town of Erie, County of Weld, State of Colorado.

CASH Rec.

TBR
Steve

Weld County
Carly Koppes, Clerk and Recorder
1402 N 17th Ave
Greeley, CO
80632

Receipt: 16-8463

Product	Name	Extended
QCD	QUIT CLAIM DEED	$21.50
	Document #	4183486
	Document Info:	OLDTOWNLIVINGLLC
	#Pages	3
	#TD1000Page(s)	0
	Consideration Amount	$5,000.00
	#AdditionalOversizedPages	0
Total		**$21.50**
Tender (Cash)		**$21.50**

Paid By OLDTOWNLIVINGLLC

Thank You!

2/25/16 12:40 PM jjett
Greeley

Document # 4183486 Weld County records

Heritage Title Company
Making Transactions Personal
Commonwealth Land Title Insurance Company

351 Coffman St, Ste. 215,
Longmont, CO 80501
Phone: (303) 684-6655
Fax: (303) 628-1675

DATE: December 2, 2016
FILE NUMBER: 598-H0449209-042-WRC, Amendment No. 1
PROPERTY ADDRESS: 0, Erie, CO
BUYER/BORROWER:
OWNER(S): Old Town Living, LLC, a Colorado limited liability company
YOUR REFERENCE NUMBER:
ASSESSOR PARCEL NUMBER:

PLEASE TAKE NOTE OF THE FOLLOWING REVISED TERMS CONTAINED HEREIN:

Amended effective date; Added exception #15

WIRED FUNDS ARE REQUIRED ON ALL CASH PURCHASE TRANSACTIONS. FOR WIRING INSTRUCTIONS, PLEASE CONTACT YOUR ESCROW OFFICE AS NOTED ON THE TRANSMITTAL PAGE OF THIS COMMITMENT.

TO:	**Heritage Title Company, Inc.** **351 Coffman St, Ste. 215** **Longmont, CO 80501**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	**Wendy Cioni** **(303) 684-6655** **(303) 628-1623** **wcioni@heritagetco.com**
TO:	**Old Town Living, LLC, a Colorado limited liability company**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	 **sbpoppitz@gmail.com**
TO:	**Canaday Real Estate** **P.O. Box 13** **Erie, CO 80516**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	**Noreen Canaday** **(000) 000-0000** **(000) 000-0000** **noreencanaday@aol.com**
TO:	**Jack Wolfe**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	**Jake Wolfe** **wolfelaw@frii.com**
TO:	**Heritage Title Company** **4582 S Ulster St Pkwy Ste 1300** **Denver, CO 80237**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	**HTC**
TO:	**Longmont Escrow** **351 Coffman St, Ste. 215** **Longmont, CO 80501**	**ATTN:** **PHONE:** **FAX:** **E-MAIL:**	**Wendy Cioni** **(303) 684-6655** **(303) 628-1675** **wcioni@heritagetco.com**

END OF TRANSMITTAL

Commonwealth Land Title Insurance Company
COMMITMENT

SCHEDULE A

Commitment No: **598-H0449209-042-WRC, Amendment No. 1**

1. **Effective Date:** **November 28, 2016 at 7:00 A.M.**

2. **Policy or policies to be issued:**

	Proposed Insured	Policy Amount
(a) ALTA Owners Policy 6-17-06		**$0.00**
FOR INFORMATION ONLY-NO POLICY TO BE ISSUED OR COVERAGE TO BE AFFORDED		
(b) None		$
		$

3. **The estate or interest in the land described or referred to in this Commitment is:**

   A Fee Simple

4. **Title to the estate or interest in the land is at the Effective Date vested in:**

   Old Town Living, LLC, a Colorado limited liability company

5. **The land referred to in this Commitment is described as follows:**

   See Attached Legal Description

(for informational purposes only) 0, Erie, CO

PREMIUMS:

Info Only Fee: $550.00
Update Fee: $150.00

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Attached Legal Description

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COUNTY OF WELD,
STATE OF COLORADO

Legal description prepared by Ehrhart Land Surveying, John P. Ehrhart, Colorado P.L.S. #29414, dated January 15, 2015, Project S095094

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AMERICAN LAND TITLE ASSOCIATION

SCHEDULE B – Section 1

Requirements

The following requirements must be met:

a. Pay us the premiums, fees and charges for the policy.

Note: For Information Only-No Policy To Be Issued or Coverage To Be Afforded

END OF REQUIREMENTS

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AMERICAN LAND TITLE ASSOCIATION

SCHEDULE B – Section 2

Exceptions

Any policy we issue will have the following exceptions unless they are taken care of to our satisfaction:

1. Any facts, rights, interests or claims that are not shown by the Public Records but which could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.

2. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.

3. Any encroachments, encumbrances, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by Public Records.

4. Any lien or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

5. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the Public Records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires of record for the value the estate or interest or mortgage thereon covered by this Commitment.

6. Water rights, claims of title to water, whether or not these matters are shown by the Public Records.

   All taxes and assessments, now or heretofore assessed, due or payable.

7. The right of the proprietor of a vein or lode to extract or remove his ore, should the same be found to penetrate or intersect the premises thereby granted and rights-of-way for ditches and canals as reserved in United States Patent recorded August 15, 1873 in Book 10 at Page 119, and any and all assignments thereof or interests therein.

8. Notes and all other items set forth on the Plat of Erie Heights.

9. A coal right held by Drinkwater, as disclosed by the Deed recorded March 11, 1954 in Book 1384 at Page 258, and any and all assignments thereof or interests therein.

10. Right of Way for a water main held by the Town of Erie across said land, as disclosed by the Deed recorded March 11, 1954 in Book 1384 at Page 258, wherein the location of the water main is not specifically described, and any and all assignments thereof or interests therein.

11. An Oil and Gas Lease, executed by Mike and Dora Castro, as lessor(s) and by The Vessels Company, as lessee(s), for a primary term of three years, recorded June 18, 1982 at Reception No. 1895064, and any and all assignments thereof or interests therein.

12. An Oil and Gas Lease, executed by the heirs of Mike Castro, deceased, as lessor(s) and by Vessels Oil & Gas Company, as lessee(s), for a primary term of three years, recorded March 27, 1984 at Reception No. 1960604, and any and all assignments thereof or interests therein.

13. 14All matters shown on the Maps recorded May 19, 2010 at Reception No. 3694195 and recorded February 28, 2013 at Reception No. 3913570.

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AMERICAN LAND TITLE ASSOCIATION

14. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by Improvement Location Certificate,

Job No.: S095094
Dated: January 15, 2015
Prepared by: Ehrhart Land Surveying
Matters shown: Fences, waterline and shed (affects Lot 1, Block 3)

15. The effect of Quit Claim Deed recorded February 25, 2016 at Reception Number 4183486.

END OF EXCEPTIONS

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AFFIDAVIT AND INDEMNITY AGREEMENT

TO Heritage Title Company, Inc. a Colorado Corporation and Commonwealth Land Title Insurance Company, a Nebraska Corporation.

1. This is written evidence to you that there are no unpaid bills, and to the extent there may be unpaid bills, that the undersigned undertakes and agrees to cause the same to be paid such that there shall be no mechanics or materialmen's liens affecting the property for materials or labor furnished for construction and erection, repairs or improvements contracted by or on behalf of the undersigned on property:

   legally described as:
   See Attached Affidavit and Indemnity Agreement Legal Description

   Property Address: **0, Erie, CO**

2. We further represent that to the actual knowledge and belief of the undersigned there are no public improvements affecting the property prior to the date of closing that would give rise to a special property tax assessment against the property after the date of closing.
3. We further represent that to the actual knowledge and belief of the undersigned there are no pending proceedings or unsatisfied judgments of record, in any Court, State, or Federal, nor any tax liens filed or taxes assessed against us which may result in liens, and that if there are judgments, bankruptcies, probate proceedings, state or federal tax liens of record against parties with same or similar names, that they are not against us.
4. We further represent that there are no unrecorded contracts, leases, easements, or other agreements or interests relating to said premises of which we have knowledge.
5. We further represent that to the actual knowledge and belief of the undersigned we are in sole possession of the real property described herein other than leasehold estates reflected as recorded items under the subject commitment for title insurance.
6. We further represent that there are no unpaid charges and assessments that could result in a lien in favor of any association of homeowners which are provided for in any document referred to in Schedule B of Commitment referenced above.
7. We further understand that any payoff figures shown on the settlement statement have been supplied to Heritage Title Company, Inc. as settlement agent by the seller's/borrower's lender and are subject to confirmation upon tender of the payoff to the lender. If the payoff figures are inaccurate, we hereby agree to immediately pay any shortage(s) that may exist. If applicable as disclosed or referred to on Schedule A of Commitment referenced above.

   The undersigned affiant(s) know the matters herein stated are true and indemnifies **Heritage Title Company, Inc.**, a Colorado Corporation and Commonwealth Land Title Insurance Company, a Nebraska Corporation against loss, costs, damages and expenses of every kind incurred by it by reason of its reliance on the statements made herein.

   This agreement is executed with and forms a part of the sale and/or financing of the above described premises, and is given in addition to the conveyance and/or financing of the premises in consideration for the conveyance and/or financing, and forms a complete agreement by itself for any action thereon.

SELLER: **SELLER:**

_____ _____

Old Town Living, LLC, a Colorado limited liability company

SELLER: **SELLER:**

_____ _____

State of Colorado }ss:
County of **Larimer**

The foregoing instrument was acknowledged, subscribed, and sworn to before me on _____ by Old Town Living, LLC, a Colorado limited liability company.

(SEAL) _____

Notary Public
My Commission Expires:

ATTACHED AFFIDAVIT AND INDEMNITY AGREEMENT
LEGAL DESCRIPTION

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COUNTY OF WELD,
STATE OF COLORADO

Legal description prepared by Ehrhart Land Surveying, John P. Ehrhart, Colorado P.L.S. #29414, dated January 15, 2015, Project S095094

Commonwealth™
LAND TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE

Issued by

Heritage Title Company, Inc.

AS AGENT FOR

Commonwealth Land Title Insurance Company

Commonwealth Land Title Insurance Company, a Nebraska corporation ("Company"), for a valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedule A and B and to the Conditions of this Commitment.

The Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate 6 months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not fault of the Company.

The Company will **provide** a sample of the policy form upon request.

IN WITNESS WHEREOF, Commonwealth Land Title Insurance Company has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

Attest: _____ Secretary

SEAL — COMMONWEALTH LAND TITLE INSURANCE COMPANY — NEBRASKA

By: _____ President

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AMERICAN LAND TITLE ASSOCIATION

CONDITIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.
2. If the proposed Insured has or acquired actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act of reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions.
3. Liability of the Company under this Commitment shall be only to the named proposed insured and such parties included under the definition of Insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policies or policies committed for and such liability is subject to the insuring provisions and Conditions and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed Insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.
4. This Commitment is a contract to issue one or more title insurance policies and is not an abstract of title or a report of the condition of title. Any action or actions or rights of action that the proposed Insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.
5. The policy to be issued contains an arbitration clause. All arbitrable matters when the Amount of Insurance is $2,000,000 or less shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. You may review a copy of the arbitration rules at http://www.alta.org.

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DISCLOSURE STATEMENT

- Pursuant to Section 38-35-125 of Colorado Revised Statutes and Colorado Division of Insurance Regulation 3-5-1 (Section 7), if the parties to the subject transaction request us to provide escrow-settlement and disbursement services to facilitate the closing of the transaction, then all funds submitted for disbursement must be available for immediate withdrawal.
- Colorado Division of Insurance Regulation 3-5-1, Paragraph G of Section 7, requires that "Every title insurance company shall be responsible to the proposed insured(s) subject to the terms and conditions of the title insurance commitment, other than the effective date of the title insurance commitment, for all matters which appear of record prior to the time of recording whenever the title insurance company, or its agent, conducts the closing and settlement service that is in conjunction with its issuance of an owners policy of title insurance and is responsible for the recording and filing of legal documents resulting from the transaction which was closed". Provided that Heritage Title Company, Inc. conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception No. 5 in Schedule B-2 will not appear in the Owner's Title Policy and Lender's Title Policy when issued.
- Colorado Division of Insurance Regulation 3-5-1, Paragraph L of Section 7, requires that prospective insured(s) of a single family residence be notified in writing that the standard exception from coverage for unfiled Mechanics or Materialmans Liens may or may not be deleted upon the satisfaction of the requirement(s) pertinent to the transaction. These requirements will be addressed upon receipt of a written request to provide said coverage, or if the Purchase and Sale Agreement/Contract is provided to the Company then the necessary requirements will be reflected on the commitment.
- If the sales price of the subject property exceeds $100,000.00 the seller shall be required to comply with the Disclosure of Withholding Provisions of C.R.S. 39-22-604.5 (Nonresident Withholding).
- Section 39-14-102 of Colorado Revised Statutes requires that a Real Property Transfer Declaration accompany any conveyance document presented for recordation in the State of Colorado. Said Declaration shall be completed and signed by either the grantor or grantee.
- Recording statutes contained in Section 30-10-406(3)(a) of the Colorado Revised Statutes require that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right, and bottom margin of at least one-half of an inch. The clerk and recorder may refuse to record or file a document that does not conform to requirements of this paragraph.
- Section 38-35-109 (2) of the Colorado Revised Statutes, 1973, requires that a notation of the purchasers legal address, (not necessarily the same as the property address) be included on the face of the deed to be recorded.
- Regulations of County Clerk and Recorder's offices require that all documents submitted for recording must contain a return address on the front page of every document being recorded.
- Pursuant to Section 10-11-122 of the Colorado Revised Statutes, 1987 the Company is required to disclose the following information:
  - The subject property may be located in a special taxing district.
  - A Certificate of Taxes Due listing each taxing jurisdiction shall be obtained from the County Treasurer or the County Treasurer's authorized agent.
  - Information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder or the County Assessor.
- Pursuant to Section 10-11-123 of the Colorado Revised Statutes, when it is determined that a mineral estate has been severed from the surface estate, the Company is required to disclose the following information: that there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and that such mineral estate may include the right to enter and use the property without the surface owner's permission.

Note: Notwithstanding anything to the contrary in this Commitment, if the policy to be issued is other than an ALTA Owner's Policy (6/17/06), the policy may not contain an arbitration clause, or the terms of the arbitration clause may be different from those set forth in this Commitment. If the policy does contain an arbitration clause, and the Amount of Insurance is less than

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the amount, if any, set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties.

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FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE

At Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF", "our" or "we"), we value the privacy of our customers. This Privacy Notice explains how we collect, use, and protect your information and explains the choices you have regarding that information. A summary of our privacy practices is below. We also encourage you to read the complete Privacy Notice following the summary.

Types of Information Collected. You may provide us with certain personal information, like your contact information, social security number (SSN), driver's license, other government ID numbers, and/or financial information. We may also receive information from your Internet browser, computer and/or mobile device.	**How Information is Collected.** We may collect personal information directly from you from applications, forms, or communications we receive from you, or from other sources on your behalf, in connection with our provision of products or services to you. We may also collect browsing information from your Internet browser, computer, mobile device or similar equipment. This browsing information is generic and reveals nothing personal about the user.
Use of Your Information. We may use your information to provide products and services to you (or someone on your behalf), to improve our products and services, and to communicate with you about our products and services. We do not give or sell your personal information to parties outside of FNF for their use to market their products or services to you.	**Security Of Your Information**. We utilize a combination of security technologies, procedures and safeguards to help protect your information from unauthorized access, use and/or disclosure. We communicate to our employees about the need to protect personal information.
Choices With Your Information. Your decision to submit personal information is entirely up to you. You can opt-out of certain disclosures or use of your information or choose to not provide any personal information to us.	**When We Share Information.** We may disclose your information to third parties providing you products and services on our behalf, law enforcement agencies or governmental authorities, as required by law, and to parties with whom you authorize us to share your information.
Information From Children. We do not knowingly collect information from children under the age of 13, and our websites are not intended to attract children.	**Privacy Outside the Website.** We are not responsible for the privacy practices of third parties, even if our website links to those parties' websites.
Access and Correction. If you desire to see the information collected about you and/or correct any inaccuracies, please contact us in the manner specified in this Privacy Notice.	**Do Not Track Disclosures.** We do not recognize "do not track" requests from Internet browsers and similar devices.
The California Online Privacy Protection Act. Certain FNF websites collect information on behalf of mortgage loan servicers. The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through those websites.	**International Use.** By providing us with your information, you consent to the transfer, processing and storage of such information outside your country of residence, as well as the fact that we will handle such information consistent with this Privacy Notice.
Your Consent To This Privacy Notice. By submitting information to us and using our websites, you are accepting and agreeing to the terms of this	**Contact FNF.** If you have questions or wish to contact us regarding this Privacy Notice, please use the contact information provided at the end of this

Privacy Notice.	Privacy Notice.

FIDELITY NATIONAL FINANCIAL, INC.
PRIVACY NOTICE

FNF respects and is committed to protecting your privacy. We pledge to take reasonable steps to protect your Personal Information (as defined herein) and to ensure your information is used in compliance with this Privacy Notice.

This Privacy Notice is only in effect for information collected and/or owned by or on behalf of FNF, including collection through any FNF website or online services offered by FNF (collectively, the "Website"), as well as any information collected offline (e.g., paper documents). The provision of this Privacy Notice to you does not create any express or implied relationship, nor create any express or implied duty or other obligation, between FNF and you.

Types of Information Collected

We may collect two types of information: Personal Information and Browsing Information.

Personal Information. The types of personal information FNF collects may include, but are not limited to:

- contact information (*e.g.*, name, address, phone number, email address);
- social security number (SSN), driver's license, and other government ID numbers; and
- financial account or loan information.

Browsing Information. The types of browsing information FNF collects may include, but are not limited to:

- Internet Protocol (or IP) address or device ID/UDID, protocol and sequence information;
- browser language;
- browser type;
- domain name system requests;
- browsing history;
- number of clicks;
- hypertext transfer protocol headers; and
- application client and server banners.

How Information is Collected

In the course of our business, we may collect *Personal Information* about you from the following sources:

- applications or other forms we receive from you or your authorized representative, whether electronic or paper;
- communications to us from you or others;
- information about your transactions with, or services performed by, us, our affiliates or others; and
- information from consumer or other reporting agencies and public records that we either obtain directly from those entities, or from our affiliates or others.

We may collect *Browsing Information* from you as follows:

- Browser Log Files. Our servers automatically log, collect and record certain Browsing Information about each visitor to the Website. The Browsing Information includes only generic information and reveals nothing personal about the user.
- Cookies. From time to time, FNF may send a "cookie" to your computer when you visit the Website. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. When you visit the Website again, the cookie allows the Website to recognize your computer, with the goal of providing an optimized user experience. Cookies may store user preferences and other information. You can choose not to accept cookies by changing the settings of your Internet browser. If you choose not to accept cookies, then some functions of the Website may not work as intended.

Use of Collected Information

Information collected by FNF is used for three main purposes:

- To provide products and services to you, or to one or more third party service providers who are performing services on your behalf or in connection with a transaction involving you;
- To improve our products and services; and
- To communicate with you and to inform you about FNF's products and services.

When We Share Information

We may share your Personal Information (excluding information we receive from consumer or other credit reporting agencies) and Browsing Information with certain individuals and companies, as permitted by law, without first obtaining your authorization. Such disclosures may include, without limitation, the following:

- to agents, representatives, or others to provide you with services or products you have requested, and to enable us to detect or prevent criminal activity, fraud, or material misrepresentation or nondisclosure;
- to third-party contractors or service providers who provide services or perform other functions on our behalf;
- to law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- to other parties authorized to receive the information in connection with services provided to you or a transaction involving you.

We may disclose Personal Information and/or Browsing Information when required by law or in the good-faith belief that such disclosure is necessary to:

- comply with a legal process or applicable laws;
- enforce this Privacy Notice;
- investigate or respond to claims that any information provided by you violates the rights of a third party; or
- protect the rights, property or personal safety of FNF, its users or the public.

We make efforts to ensure third party contractors and service providers who provide services or perform functions on our behalf protect your information. We limit use of your information to the purposes for which the information was provided. We do not give or sell your information to third parties for their own direct marketing use.

We reserve the right to transfer your Personal Information, Browsing Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors. You expressly agree and consent to the use and/or transfer of this information in connection with any of the above-described proceedings. We cannot and will not be responsible for any breach of security by any third party or for any actions of any third party that receives any of the information that is disclosed to us.

Choices With Your Information

Whether you submit your information to FNF is entirely up to you. If you decide not to submit your information, FNF may not be able to provide certain products or services to you. You may choose to prevent FNF from using your information under certain circumstances ("opt out"). You may opt out of receiving communications from us about our products and/or services.

Security And Retention Of Information

FNF is committed to protecting the information you share with us and utilizes a combination of security technologies, procedures and safeguards to help protect it from unauthorized access, use and/or

disclosure. FNF trains its employees on privacy practices and on FNF's privacy and information security policies. FNF works hard to retain information related to you only as long as reasonably necessary for business and/or legal purposes.

Information From Children

The Website is meant for adults. The Website is not intended or designed to attract children under the age of thirteen (13). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

Privacy Outside the Website

The Website may contain links to other websites, including links to websites of third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites.

International Users

Because FNF's headquarters is located in the United States, we may transfer your Personal Information and/or Browsing Information to the United States. By using our website and providing us with your Personal Information and/or Browsing Information, you understand and consent to the transfer, processing and storage of such information outside your country of residence, as well as the fact that we will handle such information consistent with this Privacy Notice.

Do Not Track Disclosures

Currently, our policy is that we do not recognize "do not track" requests from Internet browsers and similar devices.

The California Online Privacy Protection Act

For some websites which FNF or one of its companies owns, such as the Customer CareNet ("CCN"), FNF is acting as a third party service provider to a mortgage loan servicer. In those instances, we may collect certain information on behalf of that mortgage loan servicer, including:

- first and last name;
- property address;
- user name and password;
- loan number;
- social security number - masked upon entry;
- email address;
- security questions and answers; and
- IP address.

The information you submit is then transferred to your mortgage loan servicer by way of CCN. **The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through this website. For example, if you believe that your payment or user information is incorrect, you must contact your mortgage loan servicer.**

CCN does not share consumer information with third parties, other than those with which the mortgage loan servicer has contracted to interface with the CCN application. All sections of this Privacy Notice apply to your interaction with CCN, except for the sections titled Choices with Your Information, and Access and Correction. If you have questions regarding the choices you have with regard to your personal information or how to access or correct your personal information, contact your mortgage loan servicer.

Access and Correction

To access your Personal Information in the possession of FNF and correct any inaccuracies, please contact us by email at privacy@fnf.com or by mail at:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

Your Consent To This Privacy Notice

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of information by FNF in compliance with this Privacy Notice. We reserve the right to make changes to this Privacy Notice. If we change this Privacy Notice, we will post the revised version on the Website.

Contact FNF

Please send questions and/or comments related to this Privacy Notice by email at privacy@fnf.com or by mail at:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

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