



PLAN COMMISSION STAFF REPORT

To: Members of the Plan Commission

From: Tom Vander Woude, Planning Director

Meeting Date: September 14, 2021

Agenda Item: PC Docket No. 20-009

Hearing: **CONTINUED PUBLIC HEARING**

Application Type: **DEVELOPMENT PLAN**

Summary: Guy Costanza/GM Contracting requesting approval of a development plan for a commercial development at 407-411 Ridge Road.

Applicant: Guy Costanza/GM Contracting

Property Address: 407-411 Ridge Road

Current Zoning: CD-5 Urban Center Character District

Adjacent Zoning: North: CD-5
South: CD-5
East: CD-5
West: NICTD/Monon ROW

Action Requested: Approve Development Plan

Additional Actions Required: Findings of Fact
Approval of Final Plat

Staff Recommendation: **Approve with conditions**

Attachments: Ridge Café Addition plan set prepared by Torrenga
Engineering revised 06.15.2021
Landscape plan prepared by Hubinger Landscaping revised 07.20.2021
Photometric plan prepared by KSA Lighting and Controls dated 01.08.2021
Exterior Elevations prepared by Rohn Associates dated 09.2.2021

BACKGROUND

Staff has provided multiple staff reports documenting the proposed project.

The project has received the following variances:

Standard	Requirement	Proposed
Side setback	0'-24'	77'
Frontage buildout	80%	Approx. 39%
Entrances	Front Façade	East side of building
Building height	Two stories	One story
Off street parking	42 parking spaces	31 parking spaces
Setback*	20' planting strip	0' planting strip
Setback*	35' front building setback	0' setback

*Required under former zoning standards that have been changed to no longer require the variances.

The applicant appeared at a continued public hearing in August 2021 to present the most recent plans. The site plan, landscaping plan, lighting and photometric plans all comply with the standards of the Munster zoning ordinance or the applicable variances. The architectural plans had not been reviewed prior to the meeting and the petition was tabled to allow time for staff review. Subsequent to the meeting, staff reviewed the plans and provided comments.

Per the project architect, the following revisions were made:

- *raised building roof lines to make building appear taller and closer to a two story look. Making the building any taller than this would not look correct. This design was discussed in the past and were told that this would suffice*
- *extended stone base on east and west elevations*
- *added metal canopy at south elevation*
- *added additional windows with fabric awnings at west and north elevation*
- *changed rear doors on north elevation to be full lite storefront doors with a fabric awning above*
- *primary materials are still stone and brick with architectural accent wall panels above storefront at tower. We do not use any prohibited materials. Wall panels can be seen in many newer building in the Town of Munster*
- *vertical dimensions added*
- *We did not add a stone base at the tower portion. This would not look architecturally correct for this building style. The entire lower storefront serves as the base, the architectural wall panels is the middle and the upper clerestory windows and coping are the cap*
- *The front of the building is parallel with the property line. (the SE and SW corners are not 90 degrees)*

Staff notes that the following items need to be addressed:

1. It was the understanding of the staff that the BZA had wanted a building that appeared to be two stories. This building is tall, but it does not appear to be two stories. This is to be determined by the Plan Commission.

2. The façade must be based approximately either on (a) proportions that can be expressed as a fraction using whole numbers (e.g. 1:1, 2:1, 3:2, 4:3, etc) or (b) the following proportions: 1.414:1 or 1.618:1. This is height to width ratio. This has not been confirmed.
3. A storefront building in the Munster code is required to have a 12"-24" kneewall.
4. The west façade is at least 20% void (windows + doors). This has not been confirmed.
5. Windows on the west and east are to be spaced less than 20 feet apart, i.e. there are no 20 feet wide blank walls. This has not been confirmed.
6. Since the building is built on the west and south lot line, it appears that the doors, eaves, sconces, and awnings will encroach onto the public right-of-way or adjacent properties. This has not been confirmed.

Apart from comment 1, staff believes that an approval can be granted for the project conditioned upon a final staff review.

RECOMMENDATION

The Plan Commission may wish to consider the following motion:

Motion to approve PC Docket No. 20-009 subject to a final staff review of the building design to ensure compliance with the relevant zoning standards listed in this staff report.

RIDGE CAFE ADDITION

TO THE TOWN OF MUNSTER, LAKE COUNTY, INDIANA

INDEX	
PAGE	DESCRIPTION
COVER	TITLE PAGE
C-1.0	EXISTING TOPOGRAPHY & UTILITIES
C-2.0	SITE PLAN
C-3.0	GRADING & UTILITIES PLAN
C-4.0 TO C-4.1	DETAILS & SPECIFICATIONS
C-5.0	STORM WATER POLLUTION PREVENTION PLAN
C-6.0 TO C-6.1	SWPPP DETAILS & SPECIFICATIONS

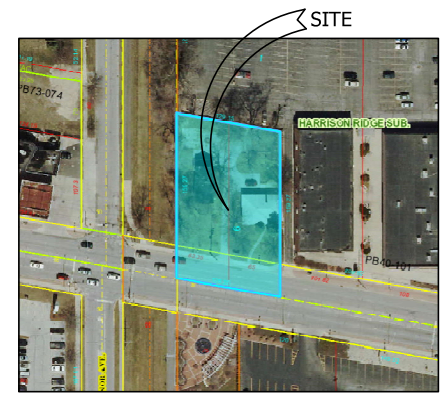
LEGAL DESCRIPTION:

PARCEL 1:

Lot 6, except all that part of said Lot 6, lying North of the South line of the North 480.5 feet, by parallel lines of said Lot 6, and also except the Easterly 65 feet, as measured along Ridge Road, of the remaining portion of said Lot 6, in Peter Jabaay's Subdivision of part of Section 13 and 24, Township 36 North, Range 10 West of the 2nd P.M. in Lake County, Indiana, as same appears of record in Plat Book 4, Page 28 in the Recorder's Office of Lake County, Indiana,

PARCEL 2:

The Easterly 65 feet as measured along Ridge Road of the Southerly 200 feet of Lot 6, as marked and laid down on the recorded plat of Peter Jabaay's Subdivision in Section 13 and 24, Township 36 North, Range 10 West of the Second Principal Meridian, in the Town of Munster, Lake County, Indiana, as the same appears of record in Plat Book 4, Page 28, in the Recorder's Office of Lake County, Indiana.



VICINITY MAP
NOT TO SCALE



NOTE: THESE PLANS ARE GOVERNED BY THE MOST CURRENT INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.



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PER INDIANA STATE LAW ICR-1-26,
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

County _____ Lake _____
NW 1/4 Sec. 24, T. 36 N. R. 10 W.
Township _____ NORTH _____

Date and Revisions:

NO.	DATE	DESCRIPTION	BY
7	08-15-2021	UNDERGROUND DETENTION REVISIONS	RAI/DCI
6	01-26-2021	SITE PLAN REVISIONS	RAI/DCI
5	01-06-2021	STORM SEWER REVISIONS	RAI/DCI
4	11-25-2020	DETENTION REVISIONS	RAI/DCI
3	04-10-2020	DRAINAGE REVISIONS	RAI/DCI
2	12-31-2019	DRAINAGE REVISIONS	RAI/DCI
1	11-27-2019	PRELIMINARY SUBMITTAL	RAI/DCI

CLIENT/DEVELOPER:

G.M. Contracting
1001 Perthshire Lane
Dyer, Indiana 46311
Ph: 219-682-7610

ENGINEER:

Torrenza Engineering, Inc.
907 Ridge Road
Munster, Indiana 46321
Ph.: (219) 836-8918
Fax: (219) 836-1138

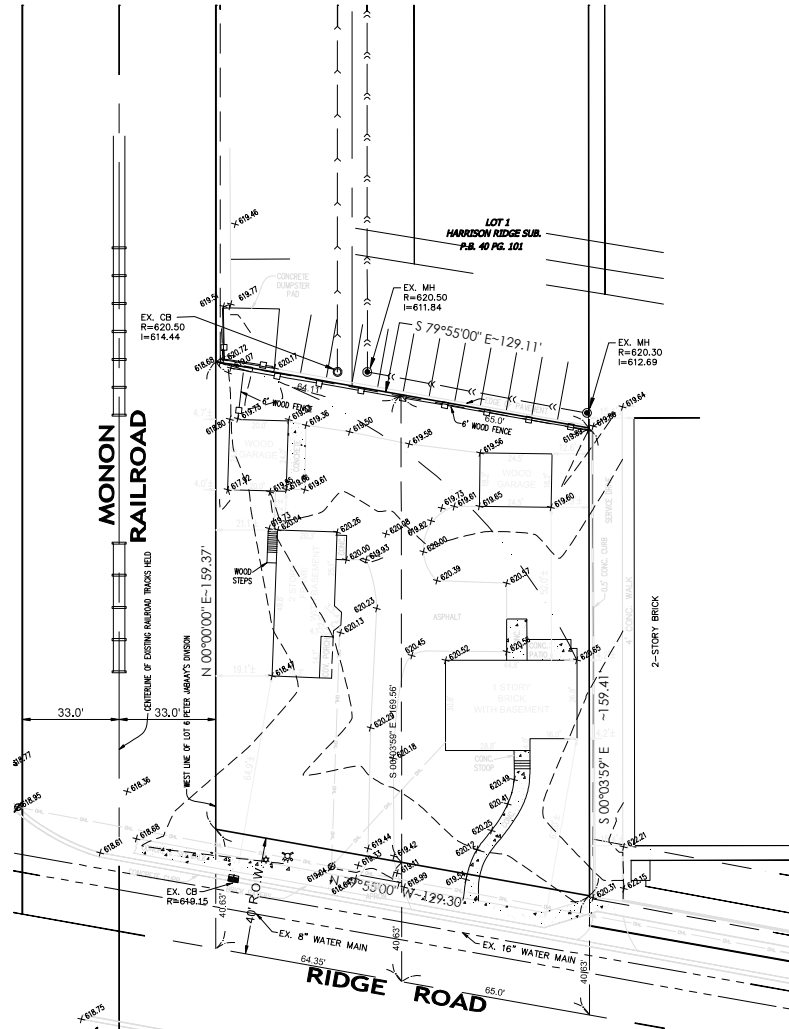
Job No.: 2019-5034

DRAWING SET PROGRESS:	
<input checked="" type="checkbox"/>	ENGINEERING PLAN - FOR REVIEW / APPROVAL
<input type="checkbox"/>	FINAL ENGINEERING - FOR CONSTRUCTION

CERTIFIED BY: DONALD C. TORRENGA
P.E. # 19868



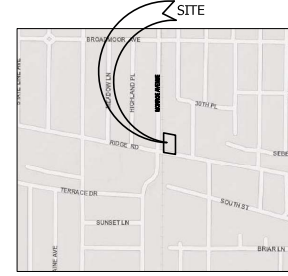
Donald C. Torrenza



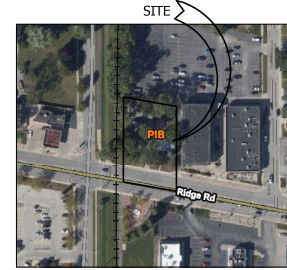
- NOTES:
1. TOTAL SITE AREA = 0.495± ACRES (21,579± S.F.)
 2. THIS PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS TAKEN FROM THE FLOOD INSURANCE RATE MAP (FIRM) FOR MUNSTER, LAKE COUNTY, INDIANA, MAP NUMBER 18089C0109E, EFFECTIVE DATE JANUARY 18, 2012.
 3. DEVELOPER:
G.M. CONTRACTING
1001 PERTYSHIRE LANE
DYER, IN 46311
 4. ALL VERTICAL DATUM IS BASED ON NAVD88.
 5. HYDROLOGIC UNIT CODES: 07120003030060 - LITTLE CALUMET RIVER - INDIANA/ILLINOIS LINE
 6. LOCATION:
LATITUDE - 41°33'46" N
LONGITUDE - 87°31'05" W
 7. CURRENT ZONING: CD-5 URBAN CENTER

LEGEND:

- EXISTING
- ⊗ WATER MAIN SHUT OFF
 - ⊕ WATER HYDRANT
 - ⊙ CATCH BASIN
 - ⊙ MANHOLE
 - + 000.00 EXISTING ELEVATION
 - BARRIER CURB
 - BUILDING LINE
 - EASEMENT LINE
 - BOUNDARY PROPERTY LINE
 - SANITARY SEWER
 - WATER MAIN
 - STORM SEWER
 - CONTOUR



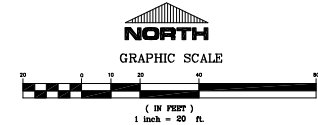
WETLAND MAP
NOT TO SCALE
Source: National Wetlands Inventory



SOIL MAP
NOT TO SCALE
Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)
Soil Survey Area: Lake County, Indiana
Survey Area Data: Version 22, Sep. 16, 2019
Date aerial images were photographed: Aug 26, 2019
- Oct 9, 2019
SOIL TYPE LEGEND
PIB - Plainfield fine sand, 0 to 6 percent slopes



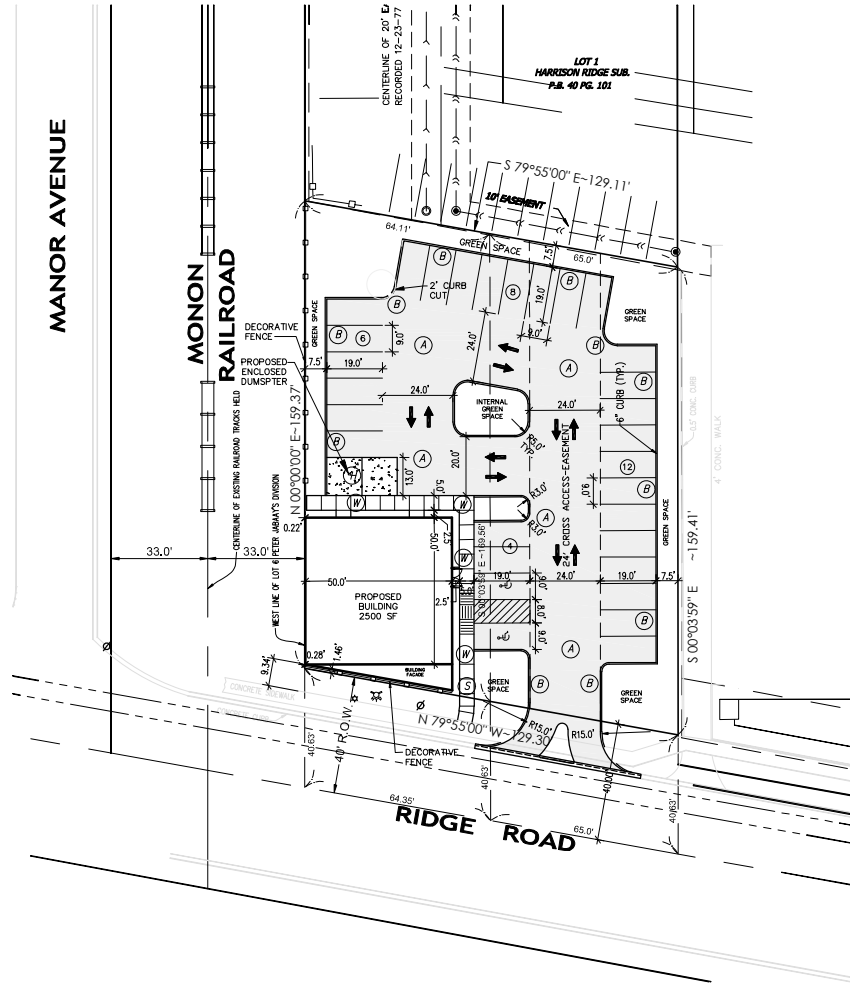
VICINITY MAP
NOT TO SCALE



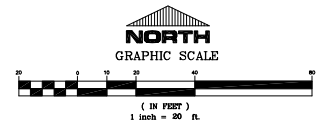
TORRENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD, MUNSTER, INDIANA 46321
Tel. No. (219) 636-8818
website: www.torrenge.com

RIDGE CAFE ADDITION
MUNSTER, INDIANA
EXISTING TOPOGRAPHY AND UTILITIES

CLIENT:
G.M. Contracting
1001 Pertyshire Lane
Dyer, IN 46311
JOB NO: 2019-5034
SHEET
C-1.0
11-25-2020
REV: 001
DATE: 11-27-2019



David G. Torrence



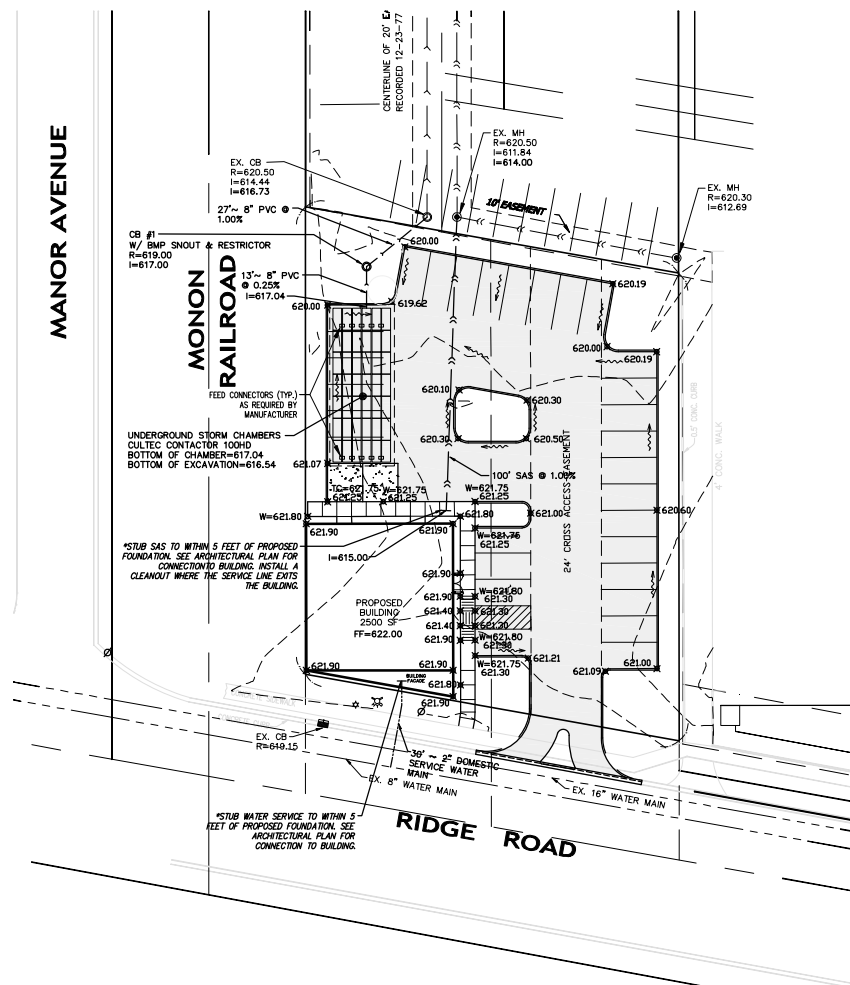
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Tel. No. (219) 636-8818
website: www.torrenga.com

**RIDGE CAFE ADDITION
MUNSTER, INDIANA
SITE PLAN**

06-15-2021
01-28-2021
01-28-2021
04-10-2020
03-17-2020
REVISIONS:
DATE: 02-18-2020

CLIENT:
G.M. Contracting
1007 Westview Lane
Dyer, IN 46037
JOB NO: 2019-5034
SCALE: 1"=20'

SHEET
C-2.0



NOTES:

1. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING SITE CONDITIONS AND SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND ALL PROPOSED IMPROVEMENTS IN THE CONSTRUCTION DRAWINGS.
2. A MINIMUM 8'-0" SEPARATION MUST BE MAINTAINED BETWEEN THE WATER MAIN, HYDRANTS, AND ANY SEWER MANHOLE AND/OR CATCH BASIN STRUCTURE.
3. ALL PROPOSED ELEVATIONS REPRESENT THE ASPHALT PAVEMENT OR GROUND ELEVATION GRADE UNLESS OTHERWISE NOTED AS W FOR SIDEWALK.

PROPOSED

GRADE

DRAINAGE FLOW

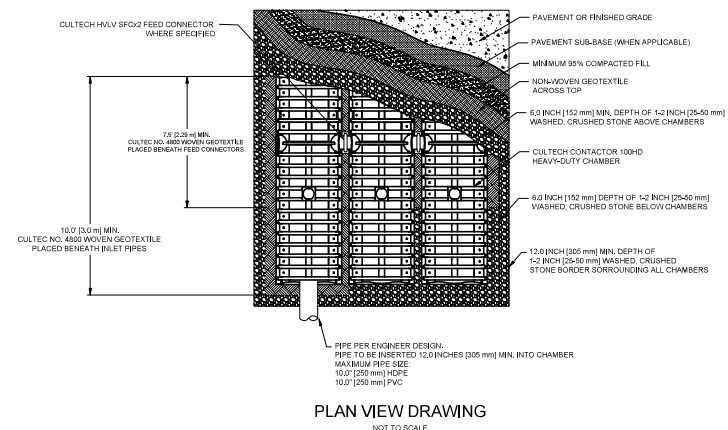
B-BOX

SANITARY SEWER

WATER MAIN

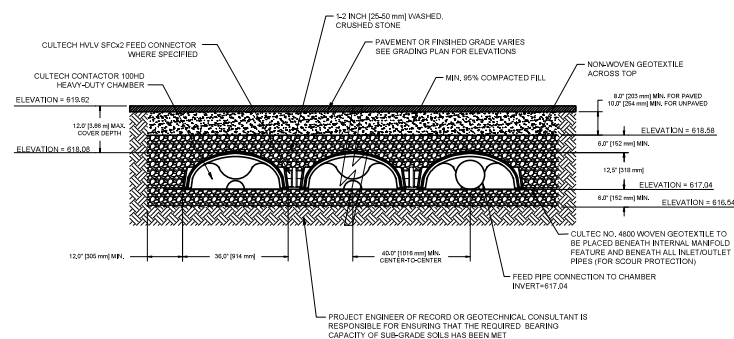
STORM SEWER

W TOP OF SIDEWALK



PLAN VIEW DRAWING

NOT TO SCALE



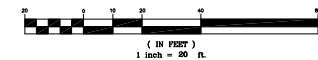
TYPICAL CROSS SECTION

NOT TO SCALE

1. PAVEMENT ELEVATIONS ARE SUBJECT TO CHANGE BASED ON GRADING PLAN.
2. REFER TO PAVEMENT DETAIL (C-5.1) FOR SIZING OF PAVEMENT AND COMPACTED FILL.
3. ELEVATION OF NON-WOVEN GEOTEXTILE PLACED ACROSS TOP OF SYSTEM SHALL BE CONSISTENT THROUGHOUT. EXTRA COMPACTED FILL SHALL BE USED TO RAISE ELEVATION IN AREAS WHERE PAVEMENT IS HIGHER THAN THE MINIMUM ELEVATION OVER SYSTEM THAT IS SHOWN.



Rosal C. Tanager



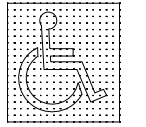
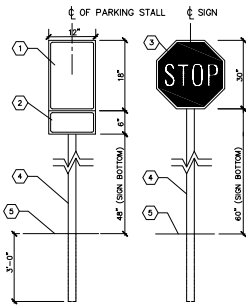


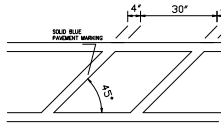
Figure 43a
INTERNATIONAL SYMBOL OF
ACCESSIBILITY PROPORTIONS
NOT TO SCALE



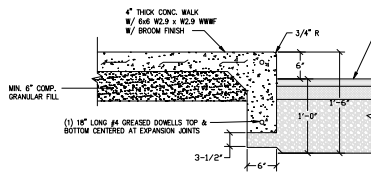
ACCESSIBILITY SIGNAGE
NOT TO SCALE



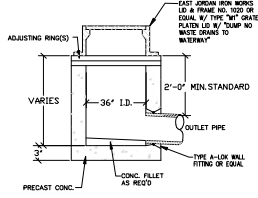
SIGN AND POST (FREE STANDING)
NOT TO SCALE



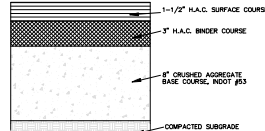
ACCESSIBILITY AND PARKING
STRIPING DETAIL
NOT TO SCALE



CURB-WALK SECTION
NOT TO SCALE

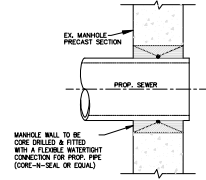


STANDARD INLET
NOT TO SCALE

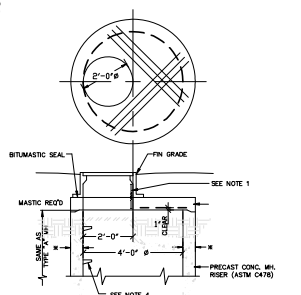


TYPICAL PAVEMENT
SECTION
NOT TO SCALE

NOTES:
1. PAVEMENT & AGGREGATE THICKNESS MAY VARY DEPENDING ON OR SOL
TESTING RESULTS.
2. WHERE FILL IS REQUIRED, SUBGRADE SHALL BE COMPACTED TO 95% OF
THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM METHOD OF
TESTING.

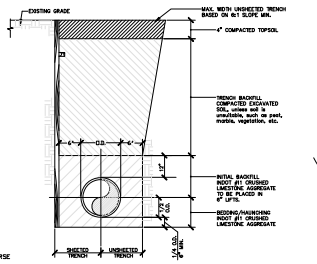


PIPE CONNECTION DETAIL
TO EXISTING MANHOLE
NOT TO SCALE

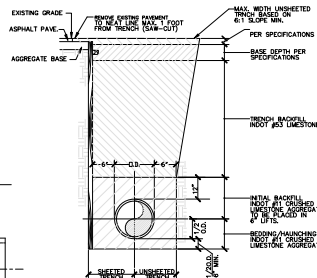


TYPE "C" (FLAT TOP) MANHOLE
NOT TO SCALE

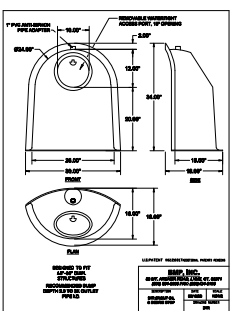
USED WHERE RESTRICTED HEAD ROOM
WILL NOT ALLOW FOR TAPERED WALLS



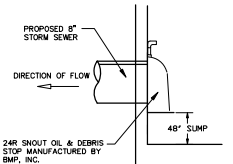
PIPE BEDDING DETAIL
FOR TRENCH IN GRASS AREAS
NOT TO SCALE



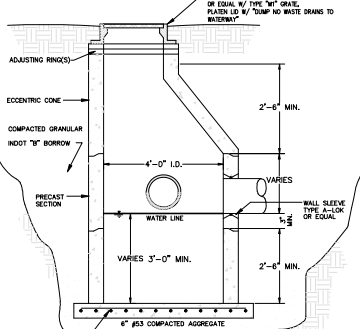
PIPE BEDDING DETAIL
FOR TRENCH IN PAVED AREAS
NOT TO SCALE



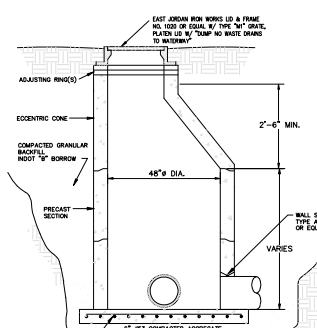
BMP SNOOT
NOT TO SCALE



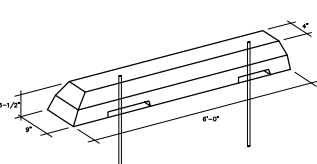
SNOOT CONNECTION DETAIL
NOT TO SCALE



TYPE "A" CATCH BASIN
NOT TO SCALE



STORM TYPE "B" MANHOLE
NOT TO SCALE

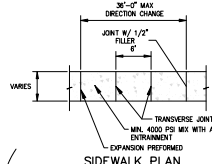


PRECAST CONCRETE PARKING
CHOCKS/WHEEL STOPS
NOT TO SCALE

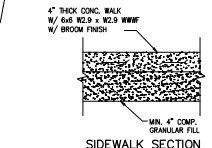
ALL PARKING STOPS SHALL BE PINNED TO THE ASPHALT WITH #4 REBAR
ANCHORED 18" INTO THE GROUND. PARKING STOPS PLACED OVER THE
PAVERS SHALL BE UNPINNED.

SPECIFICATIONS FOR STORM SEWERS

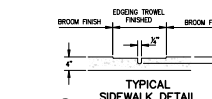
- All work shall be performed in accordance with the Codes, Ordinances and Standards of the Town of Munster, Lake County, Indiana.
- All storm sewer pipe, branches and fittings shall conform to either of the following: (A) Polyvinyl chloride SDR 35 (ASTM D-3034) with push on rubber gasket joints (ASTM C-3212 for pipe 15" in diameter or under or: (B) Extra strength verified day pipe (ASTM C-700) with bell and spigot push-on rubber gasket joints (ASTM C-435) or: (C) Reinforced concrete pipe (ASTM C-76) with bell and spigot or tongue and groove push on mastic joints. Class V reinforced concrete pipe shall be used for lines 15" diameter or under and Class III shall be used for lines 18" and over.
- Gasketed joints shall be used on all storm sewers.
- Storm sewers 18" to 27" with less than 3' cover shall be Class IV pipe.
- All storm sewer manholes shall be standard precast concrete units (ASTM C-478) conforming to the standard detail sheet of these plans.
- All improvements installed across paved or future paved areas shall be backfilled with sand or graded stone aggregate to the subgrade.
- All sewers shall be laid at least 10 feet (3.0m) horizontally from any existing or proposed water main. The distance shall be measured edge to edge. All sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches (46 cm) between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main. When it is impossible to obtain proper horizontal and vertical separation as stipulated above, the sewer shall be designed and constructed equal to water pipe.
- The Contractor is responsible for the preparation of "As Built" construction drawings showing actual sizes and lengths of pipe installed (i.e. from manhole to manhole or tee to valve, etc.), location of service taps and any structures added or omitted in comparison with these engineering plans. The Contractor shall supply the Developer (through the Project Engineer) with one set of reproducible original "As-Built" and shall supply the Town of Munster with 2 copies thereof prior to and as a condition of final acceptance.
- All infrastructure being constructed shall be in accordance with the Town of Munster Proposed Infrastructure Specifications. Any difference between Munster's Specification and these engineering drawings shall be brought to the attention of the Engineer immediately for review.
- Dumped Rip-Rap will be provided at all end sections, to produce a surface of approximate regularity. The finished surface shall not vary by more than 9 inches and the depth of Rip-Rap shall not be less than 12 inches nor more than 24 inches.
- No storm sewer manhole, catch basin and inlet shall be within eight (8) feet of a water main as measured from the outside edge of the storm sewer manhole, catch basin and inlet to the outside edge of the water main.



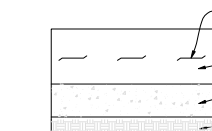
SIDEWALK PLAN



SIDEWALK SECTION



TYPICAL SIDEWALK DETAIL
NOT TO SCALE



HEAVY DUTY CONCRETE
DUMPSTER PAD
SECTION VIEW
NOT TO SCALE



David C. Shilling

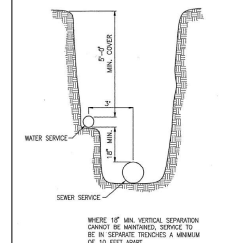
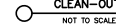
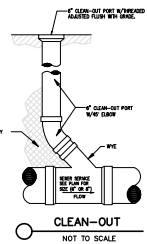
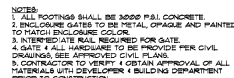
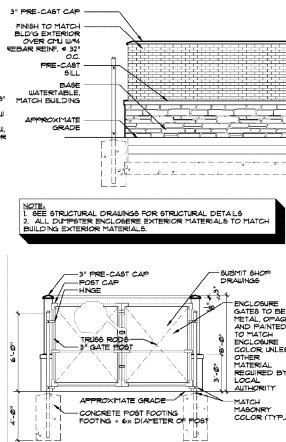
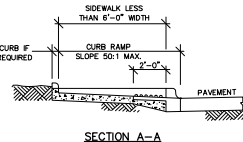
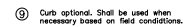


TORENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD, MUNSTER, INDIANA 46321
Tel. No.: (219) 636-8818
website: www.torenga.com

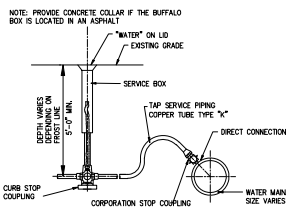
RIDGE CAFE ADDITION
MUNSTER, INDIANA
DETAILS AND SPECIFICATIONS

CLIENT: C.A.M. Contracting
1007 Northgate Lane
Dyer, IN 46037
JOB NO: 2019-3034
DATE: 11-27-2019
SCALE: NONE

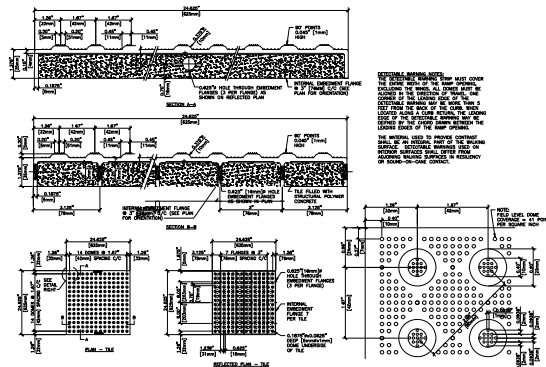
SHEET
C-4.0



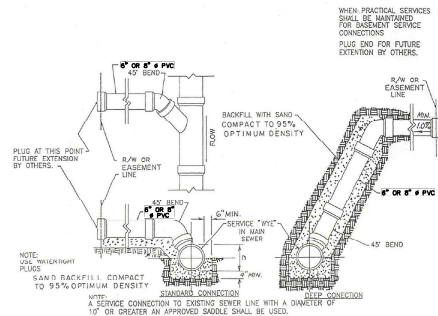
**BUILDING SERVICE CONNECTION
(COMMON TRENCH SECTION)**



TYPICAL WATER TAP SERVICE PIPING



TRUNCATED DOME TACTILE
- WARNING STRIP
NOT TO SCALE



SERVICE CONNECTION DETAILS



RIDGE CAFE ADDITION
MUNSTER, INDIANA

CLIENT: G.M. Contracting 1001 Perthshire Lane Dyrer, IN 46311	06-15-2021 01-28-2021 11-23-2020 04-10-2020	REVISIONS: DATE: 11-27-2019
JOB NO: 2019-5034		SCALE: NONE

SHEET
C-4.1

C-4.1

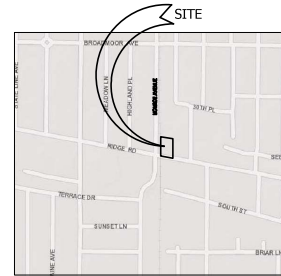
MANOR AVENUE

MONON
RAILROAD

SWPPP LEGEND:

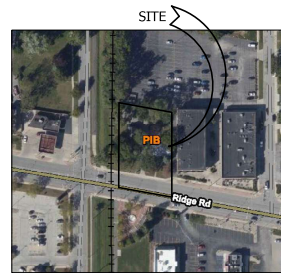
- TEMPORARY ENTRANCE/EXIT (GRAVEL OR MAT)
- SOIL STOCK PILE
- BASKET INLET/CATCH BASIN PROTECTION
- GRADE LIMITS
- SILT FENCE (SEDIMENT FENCE)
- CONCRETE WASH OUT AREA
- TEMPORARY SEEDING
- POSTING (RULE'S NO.1 AND NOS LETTER AND LOCAL SWPPP PERMIT)
- GRADES (PROPOSED)
- BMP SNOUT

NOTES:
1. FOR POST CONSTRUCTION STORM WATER POLLUTION PREVENTION:
- ALL TEMPORARY SEEDING AREAS ARE TO BE PERMANENTLY SEEDING.



WETLAND MAP

NOT TO SCALE
Source: National Wetlands Inventory



SOIL MAP

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

Soil Survey Area: Lake County, Indiana
Survey Area Date: Version 22, Sep. 16, 2019
Date aerial images were photographed: Aug 28, 2019
- Oct 9, 2019

SOIL TYPE LEGEND
PB - Planted fine sand, 0 to 6 percent slopes



VICINITY MAP

NOT TO SCALE

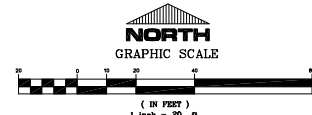
GENERAL NOTES:

- THIS PROPERTY IS LOCATED IN FLOOD ZONE "X" (SHADED) AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS TAKEN FROM THE FLOOD INSURANCE RATE MAP (FIRM) FOR MONSTER, LAKE COUNTY, INDIANA, MAP NUMBER 18867-0006, EFFECTIVE DATE JAN. 18, 2012. NO FLOODWAYS OR FLOODPLAIN FRINGES EXIST ON THIS PROPERTY.
- HYDROLOGIC UNIT CODES: 07120003000600 LITTLE CANYON RIVER - INDIANAPOLIS LINE
- STATE OR FEDERAL WATER QUALITY PERMITS ARE REQUIRED FOR THE PROJECT, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT, A WATER QUALITY PERMIT IS REQUIRED.
- THE SITE CONSISTS OF EXISTING HOUSES, PAVED DRIVEWAYS, AND TYPICAL LANDSCAPING FOR RESIDENTIAL AREAS.
- THERE IS NO PRESENCE OF HYDRIC SOILS ON THIS PROPERTY.
- THERE ARE NO EXISTING WETLAND AREAS ON THIS PROPERTY, OR ITS SURROUNDING AREAS AS CLASSIFIED BY THE U.S. FISH AND WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY, AND THE UNITED STATES DEPARTMENT OF THE INTERIOR. THERE ARE NO LAKES, PONDS OR WATER COURSES ON THE PROJECT SITE OR ON ADJACENT PROPERTY. HART DITCH (PLUM CREEK) IS THE WATER COURSE WHICH THE STORMWATER FROM THE PROPOSED SITE WILL ULTIMATELY DISCHARGE INTO. ITS LOCATION APPROXIMATELY 1/2 MILE EAST OF THE PROJECT SITE, AND IS CLASSIFIED AS A WATER OF THE U.S. WITH A RWL - 6.88.
- POTENTIAL SOURCE OF STORM WATER DISCHARGE ENTERING THE GROUNDWATER FROM THIS DEVELOPMENT WILL BE THROUGH NATURAL GROUND ABSORPTION ONLY. THERE ARE NO ABANDONED WELLS OR SINKHOLES ON THE PROPERTY.
- THERE ARE NO SENSITIVE AREAS ASSOCIATED WITH THIS PROPERTY, OR ITS SURROUNDING AREAS.
- THERE ARE NO REGULATED DRAINS WITHIN THIS PROPERTY, OR ON ADJACENT PROPERTIES. THERE IS NO RECORD OR KNOWLEDGE OF EXISTING FARM DRAINS OR FIELD TILE, INLETS AND OUTFALLS LOCATED WITHIN THE EXISTING PROPERTY LIMITS.
- SOIL STOCKPILES, BORROW AND DISPOSAL AREAS ARE LOCATED WITHIN THE PROJECT SITE. SOIL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCING AT ALL TIMES TO PREVENT EXCESSIVE EROSION, AND IF LEFT UNDISTURBED FOR A PERIOD OF MORE THAN 14 DAYS, IT SHALL BE TEMPORARILY SEEDING.
- AREAS WHERE THE PROPOSED BUILDINGS, PARKING LOTS, AND DRIVES AS WELL AS AREAS WHERE PROPOSED UTILITIES ARE LOCATED WILL BE DISTURBED DURING CONSTRUCTION. IN ALL OTHER AREAS, EXISTING VEGETATIVE COVER WILL BE PRESERVED.
- FUEL STORAGE AREA IF REQUIRED SHALL BE WITHIN THE CONSTRUCTION STAGING AREA. FUEL SHALL BE STORED IN APPROVED MOBILE REFUELING TANK, LOCATED AWAY FROM DRAINAGE STRUCTURES AND CHANNELS. FUEL EXTINGUISHERS SHALL BE LOCATED NEAR FUEL STORAGE AREA AND BE OF SUITABLE TYPE, POSTED, AND BE MAINTAINED IN GOOD CONDITION.
- TEMPORARILY SEED ALL AREAS OF BARE SOIL (WITH THE ADDITION OF A BLANKET WHERE SLOPES ARE GREATER THAN 3:1) THAT WILL REMAIN UNDISTURBED FOR A PERIOD OF MORE THAN 14 DAYS. SEEDING: OPTIMUM SEEDING DATES ARE MARCH 1 - MAY 10 AND AUGUST 10 - SEPTEMBER 30. SEEDING DATES BETWEEN MAY 10 AND AUGUST 10, MAY NEED TO BE IRRIGATED. FOR SEEDING RECOMMENDATIONS SEE PRACTICE 3.12, INDIANA STORM WATER QUALITY MANUAL.
- ALL SOIL STOCKPILES, AREAS THAT ARE DISTURBED DURING CONSTRUCTION, AND DRAINAGE SWALES WITHIN ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FOURTEEN (14) CALENDAR DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY SEEDING WITH MEASURES APPROPRIATE FOR THE SEASON.
- LOCATION OF INACTIVE POSTING OF THE COMPLETE RULE'S NO.1 AND NOS LETTERS, SHALL BE AVAILABLE AT THE ENTRANCE TO THE SITE AND VISIBLE TO THE PUBLIC.
- SITE ELEVATIONS ARE BASED ON NAVD 88, AND HORIZONTAL DATUM IS BASED ON INDIANA STATE PLANE COORDINATES NAD 83.

Temporary stabilization plans and sequence of implementation.

- On site posting of the complete Rule's NO.1 and NOS Letters. Location of the posting and plans shall be made available by the owner/contractor.
- Installation of all erosion/sedimentation controls including stabilized construction entrance, silt fences, etc., per the engineering plans.
- Clearing and grubbing.
- Topsoil stockpile surrounded with silt fencing.
- Grading and fill of all prepared parking lot, building pad, and other major grading per the engineering plans shall be done to rough grades at start of construction to prevent excessive soil erosion due to construction.
- Construction of storm sewers, sanitary sewers, water mains, and other utility, and implementation of storm sewer inlet protection at each open-grate structure (fabric drop inlet protection, basket inlet protection, etc., as per engineering plans).
- Grading and construct parking lot, building pad, and sidewalks.
- Final grading of all disturbed areas with permanent seeded, mulched, and landscaping, when no additional disturbance is anticipated.
- Complete permanent erosion control and restoration of site vegetation. Erosion control measures are to be removed upon permanent vegetation cover being established.

RESPONSIBLE INDIVIDUAL FOR SWPPP
NAME: Guy Costanza
COMPANY: G.M. Contracting
ADDRESS: 1001 Perthshire Lane
Dyer, IN 46311
PHONE NO.: (219) 682-7610



TORENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD, MONSTER, INDIANA 46321
Tel. No.: (219) 686-8988
Website: www.torenga.com

RIDGE CAFE ADDITION
MONSTER, INDIANA

STORMWATER POLLUTION PREVENTION PLAN

DATE: 02-18-2020
REVISIONS:
03-17-2020
04-10-2020
11-29-2020
01-06-2020

CLIENT:
G.M. Contracting
1001 Perthshire Lane
Dyer, IN 46311
JOB NO: 2019-5034
SCALE: 1"=20'

SHEET
C-5.0

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

Purpose: To provide a stable entrance/exit condition from the construction site, and to keep mud and sediment off public roads.

"GRAVEL"

Requirements:

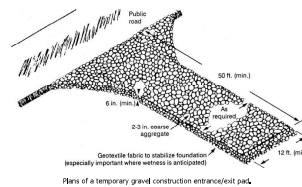
- Width: 12 feet minimum or full width of entrance
- Length: 50 feet minimum
- Material: 2-4 inch diameter washed stone (INDOT CA No. 2), with Geotextile Fabric Underlayment
- Thickness: 4 inch minimum

Installation:

- Remove all vegetation and other objectionable material from the foundation area.
- Install pipe under mat if needed to provide proper site drainage.
- Install Geotextile fabric on the graded foundation area prior to stone placement.
- Divert all surface runoff and drainage from the stone to sediment trap.

Maintenance:

- Inspect entrance pad for sediment deposits weekly and after storm events or heavy use.
- Recharge pad as needed for drainage and runoff control.
- Topdress with clean stone as needed.
- Remove mud and sediment tracked or washed onto public road by brushing or sweeping. No flushing of sediment off the street.
- Repair any broken road pavement immediately.

**"MAT"**

Requirements:

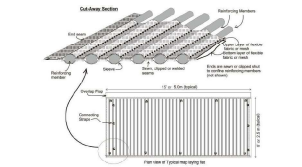
- Width: 12 feet minimum or full width of entrance
- Length: 50 feet minimum
- Material: Geotextile-Type mats, AGES Mat Mat or approved equal

Installation:

- Install pipe under mat if needed to provide proper site drainage.
- Install Geotextile-Type mat on the graded foundation area.
- Divert all surface runoff and drainage from the mat to sediment trap.

Maintenance:

- Inspect entrance mat for sediment deposits weekly and after storm events or heavy use.
- Recharge pad as needed for drainage and runoff control.
- Repair or replace mats as needed.
- Remove mud and sediment tracked or washed onto public road by brushing or sweeping. No flushing of sediment off the street.



PLANS OF TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD

TEMPORARY SEEDING

Purpose: To stabilize disturbed areas especially along both sides of the streets and courts after final grading work is completed and where additional work is not scheduled.

Requirements: Site and seedbed preparation: Graded, and lime and fertilizer applied.

Seed Selected:

Selected on the basis of quick germination, growth, and time of year, see Table for temporary seeding recommendations.

Fertilizer:

According to soil test or use 600 lbs/acre 12-1-21 analysis or equivalent.

Mulch:

1.5-2 inch new straw. Straw must be dry, unchopped and free of undesirable seeds.

Application:

- Fertilize and lime as recommended by the soil test.
- Till the soil to obtain a uniform seedbed, working the fertilizer and lime into the soil 2-4" deep with a disk or rake operated across the slope.
- Apply seed uniformly with a drill or cultipacker-reducer, or by broadcasting, and cover to a depth as shown on Table for temporary seeding recommendations.
- If drilling or broadcasting, firm the seedbed with a roller or cultipacker.
- Match all seeded areas. (Note: If seeding is done with a hydro-seeder, fertilizer and mulch can be applied with the seed in a slurry mixture.)

Maintenance:

- Inspect periodically after planting to note that vegetative stands are adequately established, reseed if necessary.
 - Check for erosion damage after storm events and repair, reseed and mulch if necessary.
- Notes:**
- Vegetative Filter Strip: permanent or temporary, shall be done on all disturbed areas along both sides of the streets and courts to reduce erosion where additional work is not scheduled.
 - Permanent Seeding or reseed shall be done at the time of final finishing.

Exhibit 3.11-B. Temporary Seeding Recommendations.

Seed species*	Rate/acre	Planting depth	Optimum dates**
Wheat or rye	120 lbs.	1 to 1 1/2 in.	9/12 to 10/30
Spring oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	5/1 to 5/11
German millet	40 lbs.	1 to 2 in.	8/1 to 9/1
Sudangrass	32 lbs.	1 to 2 in.	5/1 to 6/2
			5/1 to 7/20

* For best results, (a) legume seed should be inoculated; (b) seeding materials containing legumes should preferably be spring seeded, although the grass may be fall-seeded and the legume first-seeded; and (c) if legumes are used, they should be applied at 10 to 15 lbs/acre.

** Fall-fescue provides little cover for, and may be toxic to, some species of wildlife. The IDNR recognizes the need for additional research on alternatives to fall-fescue, such as buffalagrass, orchardgrass, smooth bromegrass, and switchgrass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

PERMANENT SEEDING

Purpose: To stabilize disturbed areas especially along both sides of the streets and courts after final grading work is completed and where additional work is not scheduled.

Requirements:

Site and seedbed preparation: Graded, and lime and fertilizer applied.

Seed Selected:

Selected on the basis of Site Conditions, Soil PH, intended land use, and expected level of maintenance see Table for permanent seeding recommendations.

Fertilizer:

According to soil test or use 600 lbs/acre 12-1-21 analysis or equivalent.

Mulch:

1.5-2 inch new straw. Straw must be dry, unchopped and free of undesirable seeds.

Application:

- Fertilize and lime as recommended by the soil test.
- Till the soil to obtain a uniform seedbed, working the fertilizer and lime into the soil 2-4" deep with a disk or rake operated across the slope.
- Apply seed uniformly with a drill or cultipacker-reducer, or by broadcasting, and cover to a depth of 1/2 to 1 inch.
- If drilling or broadcasting, firm the seedbed with a roller or cultipacker.
- Match all seeded areas. (Note: If seeding is done with a hydro-seeder, fertilizer and mulch can be applied with the seed in a slurry mixture.)

Maintenance:

- Inspect periodically, especially after storm events, until the stand is successfully established. (Characteristics of a successful stand include: vigorous dark green or bluish-green seedlings; uniform density with many plants, legumes, and grasses well intermixed; green leaves; and the perennials remaining green throughout the summer, at least at the plant base.)
- Plan to add fertilizer the following summer according to soil test recommendations.
- Repair damaged, bare or sparse areas by filling any gullies, re-fertilizing, over-seeding, and mulching.
- If plant cover is sparse or patchy, review the plant materials chosen, soil fertility, moisture conditions, and mulching, then repair the affected area either by over-seeding or by reseeded, and mulching.
- If vegetation fails to grow, consider soil testing to determine acidity or nutrient deficiency problems. (Contact your SWCD or Cooperative Extension office for assistance.)
- If additional fertilization is needed to get a satisfactory stand, do so according to soil test recommendations.

Notes:

- Permanent seeding optimum dates are March 1 to May 10 and August 10 to September 30, seeding done between May 10 to August 10 may require irrigation. Temporary seeding may be used as an alternative until preferred date for Permanent Seeding.
- Retention/Detection areas shall have seed and mulch as soon as possible using permanent seeding when possible, mulch or erosion control blankets are to be used on seeded areas to protect the soil from wind and water impact. Install all fences around Retention/Detection area until seed is established.

Seeding Recommendations.

This table provides several seeding options. Additional seed species and mixtures are available commercially. When selecting a mixture, consider site conditions, including soil properties (e.g., soil pH and drainage), slope aspect and the tolerance of each species to shade and droughtiness.

Seed species and mixtures	Permanent	Rate per acre	Dormant or frost	Optimum soil pH
OPEN AND DISTURBED AREAS (REMAINING IDEL MORE THAN 1 YR.)				
1. Perennial ryegrass	35 to 50 lbs.	50 to 75 lbs.	1.5 to 1.8	5.6 to 7.0
+ white or ladino clover*	10 to 15 lbs.	15 to 20 lbs.		
2. Kentucky bluegrass	20 lbs.	30 lbs.	5.5 to 7.5	
+ smooth bromegrass	10 lbs.	15 lbs.		
+ orchardgrass	3 lbs.	5 lbs.		
+ timothy	4 lbs.	6 lbs.		
+ perennial ryegrass	10 lbs.	15 lbs.		
+ white or ladino clover*	1 to 2 lbs.	1.5 to 3 lbs.		
3. Perennial ryegrass	35 to 50 lbs.	50 to 75 lbs.	5.6 to 7.0	
+ tall fescue**	15 to 30 lbs.	22 to 45 lbs.		
4. Tall fescue**	35 to 50 lbs.	50 to 75 lbs.	5.5 to 7.5	
+ ladino or white clover*	1 to 2 lbs.	1.5 to 3 lbs.		
STEEP BANKS AND CUTS, LOW MAINTENANCE AREAS (NOT MOWED)				
1. Smooth bromegrass	25 to 35 lbs.	35 to 50 lbs.	5.5 to 7.5	
+ red clover*	10 to 20 lbs.	15 to 30 lbs.		
2. Tall fescue**	35 to 50 lbs.	50 to 75 lbs.	5.5 to 7.5	
+ white or ladino clover*	1 to 2 lbs.	1.5 to 3 lbs.		
3. Tall fescue**	35 to 50 lbs.	50 to 75 lbs.	5.5 to 7.5	
+ red clover*	10 to 20 lbs.	15 to 30 lbs.		
(Recommended north of US 40)				
4. Orchardgrass	10 to 20 lbs.	30 to 45 lbs.	5.6 to 7.0	
+ red clover*	10 to 20 lbs.	15 to 30 lbs.		
+ ladino clover*	1 to 2 lbs.	1.5 to 3 lbs.		
5. Cowpea***	10 to 22 lbs.	15 to 18 lbs.	5.6 to 7.0	
+ tall fescue**	20 to 30 lbs.	30 to 45 lbs.		
(Recommended south of US 40)				
LAWNS AND HIGH-MAINTENANCE AREAS				
1. Bluegrass	100 to 140 lbs.	180 to 220 lbs.	5.5 to 7.0	
2. Perennial ryegrass (buff-type)	45 to 60 lbs.	70 to 90 lbs.	5.6 to 7.0	
+ bluegrass	70 to 90 lbs.	105 to 135 lbs.		
3. Tall fescue (buff-type)**	130 to 170 lbs.	195 to 250 lbs.	5.6 to 7.5	
+ bluegrass	20 to 30 lbs.	30 to 45 lbs.		
CHANNELS AND AREAS OF CONCENTRATED FLOW				
1. Perennial ryegrass	50 to 150 lbs.	150 to 225 lbs.	5.6 to 7.0	
+ white or ladino clover*	1 to 2 lbs.	1.5 to 3 lbs.		
2. Kentucky bluegrass	20 lbs.	30 lbs.	5.5 to 7.5	
+ smooth bromegrass	10 lbs.	15 lbs.		
+ orchardgrass	3 lbs.	5 lbs.		
+ timothy	4 lbs.	6 lbs.		
+ perennial ryegrass	30 lbs.	45 lbs.		
+ white or ladino clover*	1 to 2 lbs.	1.5 to 3 lbs.		
3. Tall fescue**	100 to 150 lbs.	150 to 225 lbs.	5.5 to 7.5	
+ ladino or white clover*	1 to 2 lbs.	1.5 to 3 lbs.		
4. Tall fescue**	100 to 150 lbs.	150 to 225 lbs.	5.5 to 7.5	
+ Perennial ryegrass	50 to 100 lbs.	150 to 225 lbs.		
+ Kentucky bluegrass	15 to 20 lbs.	22 to 30 lbs.		

* For best results, (a) legume seed should be inoculated; (b) seeding materials containing legumes should preferably be spring seeded, although the grass may be fall-seeded and the legume first-seeded; and (c) if legumes are used, they should be applied at 10 to 15 lbs/acre.

** Tall fescue provides little cover for, and may be toxic to, some species of wildlife. The IDNR recognizes the need for additional research on alternatives to tall fescue, such as buffalagrass, orchardgrass, smooth bromegrass, and switchgrass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

Seeding method	How to apply
Hand sowing	Crump or punch the straw or hay into the soil 2-4 in.
Machine sowing	Operate machinery on the contour of the slope.
Flare disk (dull, serrated, and straight)	Flare disk (dull, serrated, and straight)
Clearing with dozer tracks	Operate dozer up and down slope, not across, or else the tracks will form rills.
Apply 1-2 tons/acre using a hydro-mulcher at a rate of 750 lbs./acre with a backing agent (or according to contractor specifications). Do not use in areas of concentrated flow.	Apply 1-2 tons/acre using a hydro-mulcher at a rate of 750 lbs./acre with a backing agent (or according to contractor specifications). Do not use in areas of concentrated flow.
Wood hydro-mulch fibers	Apply 1-2 tons/acre using a hydro-mulcher at a rate of 750 lbs./acre with a backing agent (or according to contractor specifications). Do not use in areas of concentrated flow.
Asphalt emulsion	Emulsified asphalt should conform to the requirements of ASTM Spec. #977. Apply with suitable equipment at a rate of 0.05 gal./sq. yd. Do not use in areas of concentrated flow.
Synthetic tackifier, binder or soil stabilizer	Apply according to manufacturer's recommendations.
Biodegradable netting (polypropylene or similar materials)	Apply over mulch and staple with 6-8 in. wire staples. Follow manufacturer's recommendations for installation. Run stakes or staple application.

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DORMANT AND FROST SEEDING

- To provide early germination and soil stabilization in the spring.
- To reduce sediment runoff to downstream areas.
- To repair previous seedings.

Requirements:

Site and seedbed preparation: Graded, lime and fertilizer applied.

Seed Selected:

Selected on the basis of Site Conditions, Soil PH, intended land use, and expected level of maintenance. See Table for dormant or frost seeding recommendations.

Fertilizer:

According to soil test or use 400-600 lbs/acre 12-1-21 analysis or equivalent.

Application:

Dormant seeding is a temporary or permanent seeding application at a time when soil temperatures are too low for germination to occur (less than 50°F). Frost seeding is a temporary or permanent seeding application in early spring when soils are in the Bare/Exposed stage.

For Dormant Seeding (Seeding date: Dec 1-4th Dec)

- Site preparation and mulching can be done months ahead of actual seeding, apply mulch upon completion of grading (Practice 3-15).
- Broadcast fertilizer as recommended by soil test.
- Broadcast seed on top of the mulch and/or into existing ground cover at the rate shown in table. (If site preparation occurs within the recommended date, fertilizer and lime, seed, and mulch of the time.)

For Frost Seeding (Seeding date: Feb. 28-Mar. 28)

- Broadcast fertilizer as recommended by a soil test.
- Select an appropriate seed species or mixture from table for temporary seeding or table for permanent seeding. Broadcast the seedbed at the rate shown in the table during ground cover at the rate shown. (Do not work the seed into the soil.)

Maintenance:

- Apply 200-400 lbs./acre of 12-1-21 or equivalent fertilizer between Apr. 15 and May 15 or during period of vigorous growth.
- Revised and mulch the area that have inadequate cover by mid-to late April. For best results, revised within the recommended dates shown for temporary seeding or for permanent seeding.

Temporary Dormant or Frost Seeding Recommendations.

Seed species*	Rate per acre
Wheat or rye	150 lbs.
Spring oats	150 lbs.
Annual ryegrass	50 lbs.

* Perennial species may be used as temporary cover, especially if the area to be seeded will remain idle for more than a year.

MULCHING

Purpose: To promote seed germination and seedling growth, temporary surface stabilization, and protecting the soil from wind and water impact.

Requirements:

Material: Straw, hay, wood fiber or excelsior, see table for Mulch Materials, Rates, and Comments.

Comments:

Coverage: 75% of the soil surface.

Anchoring: Required to prevent displacement by wind or water, see table for Mulch Anchoring Methods.

Application:

- Apply mulch at the recommended rate.
- Spread uniformly by hand, hay fork, mulch blower, or hydro-mulcher with no more than 25% of the surface visible.
- Anchors immediately if using straw or hay, using one of the following methods:
 - Crimp with mulch anchoring tool.
 - Hydro-mulch with dual chaff

BASKET INLET / CATCH BASIN PROTECTION

Purpose: To prevent excessive sediment from entering storm sewers at inlet/catch basin, allowing full use of the storm drain system during the construction period.

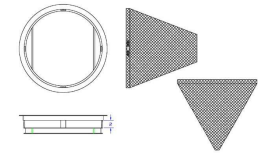
Requirements: Steel Frame with top wall-length dimensions such that the basket fits into the inlet and/or catch basin (circular and/or rectangular), and a replaceable (dewaterable) fabric bag attached with a steel band locking cap that is suspended from the frame.

Installation:

1. Install protection to existing and newly installed inlet/catch basin in a new development before final dewatering activities begin in a stabilized area.
2. Remove the grate, and place the basket assembly under the grate on the lip of the structure frame.
3. Replace the inlet/catch basin grate.

Maintenance:

1. Inspect weekly during construction and after each storm event of a minimum of 1/2 inch rainfall, and remove tail-end sediment.
2. Replace bag every six (6) months.
3. Replace the (dewaterable) fabric bag if there is a hole and/or worn part water.
4. Replace the (dewaterable) fabric bag after any oil, gasoline or solvent spill.



GENERAL NOTES:
FRAME: Top flange fabricated from 3/4"x1/4"x1/4" angle. Base rim fabricated from 1/2"x1/4"x1/4" channel. Hardware and suspension hardware fabricated from 304L stainless steel. All steel conforming to ASTM A36.
250000' and Bag: Fabricated from 6 mil/10 mil nonwoven polypropylene geotextile reinforced with polyester mesh. Bag secured to base rim with a stainless steel band and lock.

TYPICAL INLET/CATCH BASIN PROTECTION INSERT DETAIL

STREET AND PARKING LOT SWEEPING

Purpose: To reduce the amount of pollutants that get washed into the storm drain and ultimately transported and deposited in waterbodies.

Application:

1. Sweeping at points of access where sediment is tracked from project site into public or private streets and roads.

Limitations:

1. Sweeping may be ineffective if soil is wet or heavy accumulation of mud.
2. May require repeat cleanings.

Maintenance:

1. Inspect potential sediment tracking ingress and egress points locations: daily, and after rain events.
2. Visible sediment observed outside the construction limits shall be swept and removed daily.
3. Do not use kick boards or creeper attachments. These tend to spread the dirt rather than remove it.
4. If not mixed with debris or trash, consider incorporating the removed sediment back into the project.
5. Be careful not to re-erect up any unknown substance or any object that may be potentially hazardous.
6. Adjust brooms frequently, maximize efficiency of sweeping operations.
7. After sweeping is finished, properly dispose of creeper water at an approved dumpsite.

SILT FENCE

Purpose: To retain sediment from small sloping disturbed areas by reducing the velocity of sheet flow.

Requirements: Trench: 6" minimum depth, flat bottom, filled with compacted soil to bury lower portion of fence fabric.

Support: 2" x 2" hardwood stakes set at least 4-inches to 12-inch deep.

Spacing of Support: 6-foot maximum on center.

Fence Height: A 2-4' minimum in high enough so depth of impounded water does not exceed overall height of the fence or any post along the line.

Attachment: Hardwood lath secured to stake with five (5) 1/4-2 inch staples.

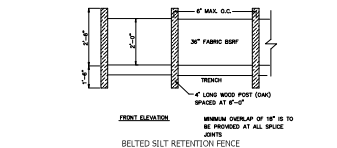
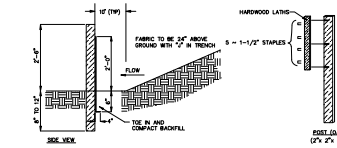
Fence Fabric: Symmetrical polyester material with a fiberglass scrim or not embedded in between the layers, 85-90 mils/aver or approved equal.

Installation:

1. Along the entire intended fence line, maintain contour as much as possible, dig a 6" deep flat bottom trench.
2. On the downslope side of the trench, drive the post 8" to 12" into the ground.
3. Run a continuous length of fence fabric along upslope side of posts.
4. Fasten fence fabric to the upslope side of the stake, extending it into the trench, and securing it with hardwood lath secured with five (5) 1/4-2" staples. The bottom 12" of the fence fabric shall be left unsecured to allow for entrenchment.
5. If a joint is necessary, staple the covering to the nearest post with a wood nail.
6. Place the bottom 1' of fabric in the 6" deep trench, extending the remaining 6" of fabric toward the upslope side.
7. Backfill the trench with compacted earth.

Maintenance:

1. Inspect all fence once every seven calendar days and 24 hours after each storm event of minimum of 1/2 inch rainfall.
2. If fence fabric tears, starts to decompose, or becomes ineffective, replace the affected portion, as outlined by the manufacturer.
3. Remove deposited sediment when it reaches one-half the height of the fence at its lowest point or is causing the fabric to bulge.
4. Take care to avoid undermining the fence during clean out.
5. After sediment has been stabilized, remove fence and sediment deposits, bring the disturbed area to grade and stabilize.



FRONT ELEVATION

MINIMUM OVERLAP OF 18" IS TO BE PROVIDED AT ALL JOINTS

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CONCRETE WASHOUT

Purpose: To reduce the discharge of pollutants associated with concrete waste through consolidation of solids and retention of liquids.

Requirements:

1. Locate concrete washout systems at least 5' from any cracks, wetlands, ditches, least features, or storm drains/streams/contaminated areas.
2. Locate concrete washout systems in relatively flat areas with established vegetation cover and do not receive runoff from adjacent land areas.
3. Locate in areas that provide easy access for concrete trucks and other construction equipment.
4. Locate away from other construction traffic to reduce the potential for damage to the system.
5. Minimum of ten millimeter polyethylene sheeting that is free of holes, tears, and other defects. The sheeting retained should be of an appropriate size to fit the washout system without seams or overlap of the lining.
6. Signage.
7. Orange safety fencing or equivalent.
8. Sturdy bales, sandbags (bags should be ultraviolet-stabilized geotextile fabric), soil material, or other appropriate materials that can be used to construct a containment system (above grade systems).

Installation:

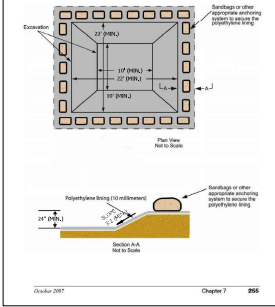
1. Dependent upon the type of system, either excavate the pit or install the containment system.
2. A base shall be constructed and prepared that is free of rocks and other debris that may cause tears or punctures in the polyethylene lining.
3. Install the polyethylene lining. For excavated systems, the lining should extend over the entire excavation. The lining for bermed systems should be installed over the pooling area with enough material to extend the lining over the berm or containment system. The lining should be secured with pins, staples, or other fasteners.
4. Place flag, safety fencing, or equivalent to provide a barrier to construction equipment and other traffic.
5. Place a non-slippping, nonwoven holding cover over the washout facility prior to a predicted rainfall event to prevent accumulation of water and possible overflow of the system (optional).
6. Install signage that identifies concrete washout area.
7. Post sign directing contractors and suppliers to designated locations.

Maintenance:

1. Inspect daily and after each storm event.
2. Inspect the integrity of the overall structure including, where applicable, the containment system.
3. Inspect the system for leaks, spills, and tracking of soil by equipment.
4. Inspect the polyethylene lining for failure, including tears and punctures.
5. Once concrete waste has been removed, remove and dispose of the material.
6. Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean the structure. Prefabricated systems should also utilize this criterion, unless the manufacturer has alternate specifications.
7. Upon removal of the solids, inspect the structure. Repair the structure as needed or construct a new system.
8. Dispose of all concrete in a legal manner. Reuse the material on site, recycle, or haul the material to an approved construction/demolition landfill site. Recycling of material is encouraged. The waste material can be used for multiple applications including but not limited to roadbed and building. The availability for recycling should be checked locally.
9. The plastic lining should be replaced after every cleaning. The removal of material will usually damage the lining.
10. The concrete washout system should be replaced or enlarged as necessary to maintain capacity for concrete waste.
11. Concrete washout systems are designed to promote evaporation. However, if this liquid is not evaporated and the system is near capacity it may be necessary to contain or remove the liquids and dispose of them in an acceptable method. Disposal may be allowed at the local sanitary sewer authority provided their National Pollutant Discharge Elimination System permits allow for acceptance of this material. Another option would be to utilize a secondary containment system or basin to further dewatering.
12. Prefabricated units are often pumped and the company supplying the unit provides this service.
13. Inspect construction activities on a regular basis to ensure supplies, contractors, and others are utilizing designated washout areas. If concrete waste is being disposed of improperly, identify the violator and take appropriate action.
14. When concrete washout systems are no longer required, the concrete washout systems shall be closed. Dispose of all lined concrete and other materials used to construct the system.
15. Holes, depressions and other land disturbances associated with the system should be backfilled, graded, and stabilized.

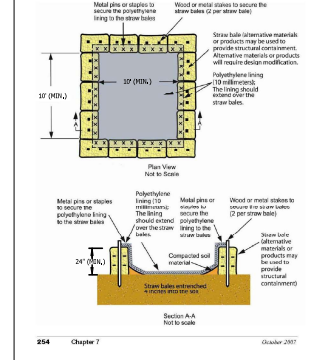
CONCRETE WASHOUT

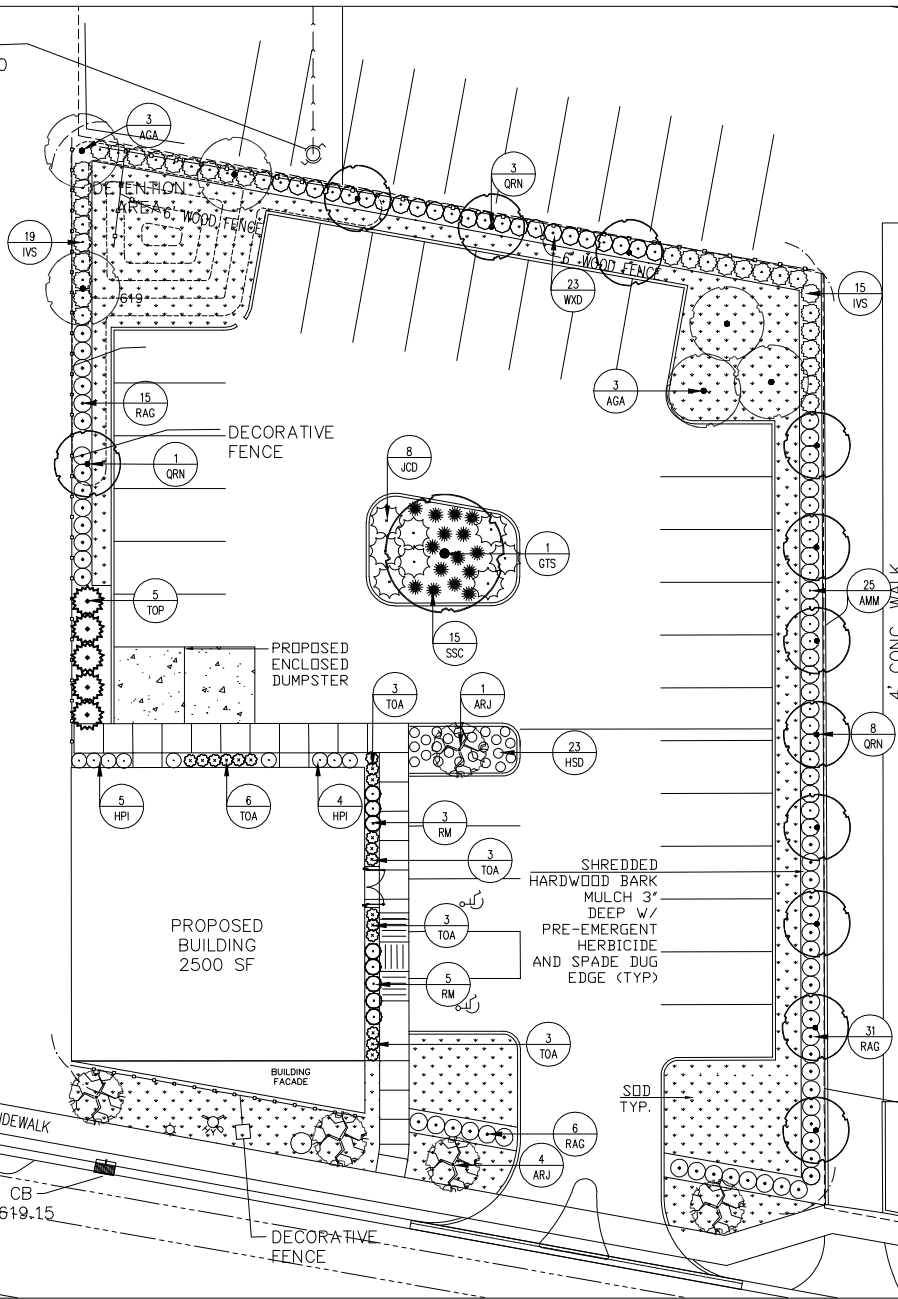
Concrete Washout (Below Grade System) Worksheet



CONCRETE WASHOUT

Concrete Washout (Above Grade System) Worksheet





PLANT LIST			
Symbol	Botanical Name	Common Name	Size
Trees			
AGA	Amelanchier grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	5-6' MS
ARJ	Acer rubrum 'FJS-KW78'	Armstrong Gold Maple	2"
GTIS	Gleditsia triacanthos 'Suncoke'	Sunburst Honeylocust	2"
NSN	Nyssa sylvatica 'NSUHH'	Green Gable Blackgum	2"
TOP	Thuja occidentalis 'Pyramidal'	Pyramidal Arborvitae	6'
QRN	Quercus x warei 'Nadler'	Kindred Spirit Oak	2"
Shrubs			
AMM	Aronia melanocarpa 'Iroquois Beauty'	Iroquois Beauty Chokeberry	#3
HPI	Hydrangea paniculata 'Ivobol'	Bobo Hydrangea	#3
IVS	Itea virginica 'Sprich'	Little Henry Sweetgum	#3
JCD	Juniperus chinensis 'Daub's Frosted'	Daub's Frosted Juniper	#3
RAG	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	#3
RM	Rosa 'Meidrandora'	Coral Drift Rose	#3
TMD	Taxus x media 'Densiformis'	Dense Yew	#3
TOA	Thuja occidentalis 'Anna Van Vloten'	Anna's Magic Ball Arborvitae	#2
WDX	Weigela 'Dark Horse'	Dark Horse Weigela	#3
Perennial			
SSC	Schizachyrium scoparium 'Carousel'	Carousel Little Bluestem	#1
HSD	Heimerocallis 'Stella de Oro'	Stella de Oro Daylily	#1

Landscape Requirements					
Calculations	Total Linear Feet (LF) or Square Feet (SF)	Trees Required	Trees Provided	Shrubs Required	Shrubs Provided
Interior Landscaping					
1 Tree/125 SF	1,135.59 SF	16-20	20		
1 Tree/30 LF Buffer Zone	129.31 LF	4	4		
	N/A				
Parking Lot					
Continuous Screening Hedge Required Around Perimeter of Parking Lot-Provided					

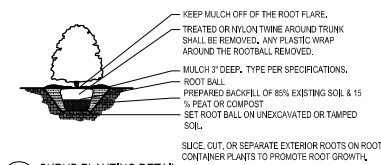
Owner's Sworn Statement
The undersigned acknowledges that the landscape planting plan shown on the attached landscaping plan(s) for the property of 8501 Colanet Ave, Town of Munster, Indiana has to the best of the undersigned applicant's knowledge, been designed and will be installed, maintained and replaced as required by current and subsequent owners in accordance with the requirements of the Town of Munster Municipal Code, the landscaping standards of the Town of Munster Zoning Ordinance, and the Guide to the Town of Munster Landscape Ordinance.

Signature _____
Date 1-9-21

Landscape Architect's Sworn Statement
The undersigned landscape architect, David R. Hubinger, registered in the State of Indiana, acknowledges that the landscape planting plan and construction details shown on the attached landscape plan(s) for the property of 8501 Colanet Ave, Town of Munster, Indiana has been designed in accordance with the requirements of the Town of Munster Municipal Code, the landscaping standards of the Town of Munster Zoning Ordinance, and the Guide to the Town of Munster Landscape Ordinance.

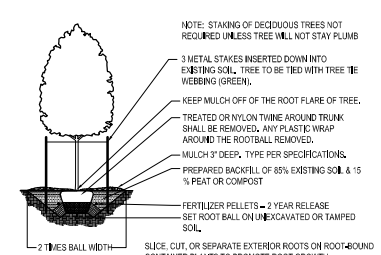
Signature _____
Date 1-9-21

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. SHRUB PIT WIDTH TO BE TWO TIMES THE WIDTH OF THE ROOT BALL. PRUNE OFF ALL DEAD, BROKEN OR SCARRED BRANCHES, AND SHAPE PRUNE AS DIRECTED BY THE LANDSCAPE ARCHITECT. LOCATE ROOT FLARE IN ROOT BALL AND SET SHRUB HEIGHT SO THAT ROOT FLARE IS FLUSH OR SLIGHTLY HIGHER THAN FINISH GRADE. DEPENDING ON EXISTING SOIL CONDITIONS, WATER IN THE PLANTING MIX THOROUGHLY, WHILE KEEPING THE SHRUB PLUMB. STRAIGHTEN SHRUB IF SETTLING OCCURS. MULCH LIMITS FOR SHRUBS TO EXTEND TO ALL EDGES OF PLANTING BEDS. SEE PLANS FOR BED LAYOUTS.



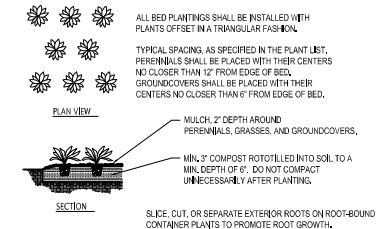
1 SHRUB PLANTING DETAIL
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. TREE PIT WIDTH TO BE TWO TIMES THE WIDTH OF THE ROOT BALL. PRUNE OFF ALL DEAD, BROKEN OR SCARRED BRANCHES, AND SHAPE PRUNE AS DIRECTED BY THE LANDSCAPE ARCHITECT. LOCATE ROOT FLARE IN ROOT BALL AND SET TREE HEIGHT SO THAT ROOT FLARE IS FLUSH OR SLIGHTLY HIGHER THAN FINISH GRADE. DEPENDING ON EXISTING SOIL CONDITIONS, WATER IN THE PLANTING MIX THOROUGHLY, WHILE KEEPING THE TREE PLUMB. STRAIGHTEN TREE IF SETTLING OCCURS.



2 DECIDUOUS & EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. AMEND PLANTING BED SOIL WITH COMPOST PRIOR TO PLANT INSTALLATION. BED HEIGHT IS TO BE 2\"/>



3 PERENNIAL, GROUNDCOVER, AND ANNUAL PLANTING DETAIL
NOT TO SCALE

NORTH
GRAPHIC SCALE
1" = 10' FT.
1 inch = 10 ft.

HOLEY MOLEY SAYS
'DIG SAFELY'

IT'S THE LAW
CALL US FOR A FREE ESTIMATE
800-992-5544
P.O. BOX 1131, LAWRENCE, IN 46042
P.L. 10-1-20
IF A PERMIT IS REQUIRED TO EXCAVATE, THE PERMIT SHALL BE OBTAINED PRIOR TO ANY EXCAVATION WORK.

This Drawing and Design is the Property of Hubinger Landscaping Corp. and is not to be reproduced or used without the permission of Hubinger Landscaping Corp.

Notes:

Landscape Beds, Stand alone trees and Perennial Areas to have Shredded Hardwood Bark Mulch 3" Deep w/ Pre-emergent herbicide and have spade dug edge.

All Lawn Areas to have Sod.

All Landscaping to be Irrigated.

David R. Hubinger

Site Plan Revisions	7/20/2021
Parking Lot Revision	1/19/2021
Site Plan Revisions	1/8/2021
Revisions:	1/7/2020

HUBINGER
Landscaping
Corp.

210 East 113th Avenue
Crown Point, Indiana
Phone: 219-662-9911
www.hubingers.com

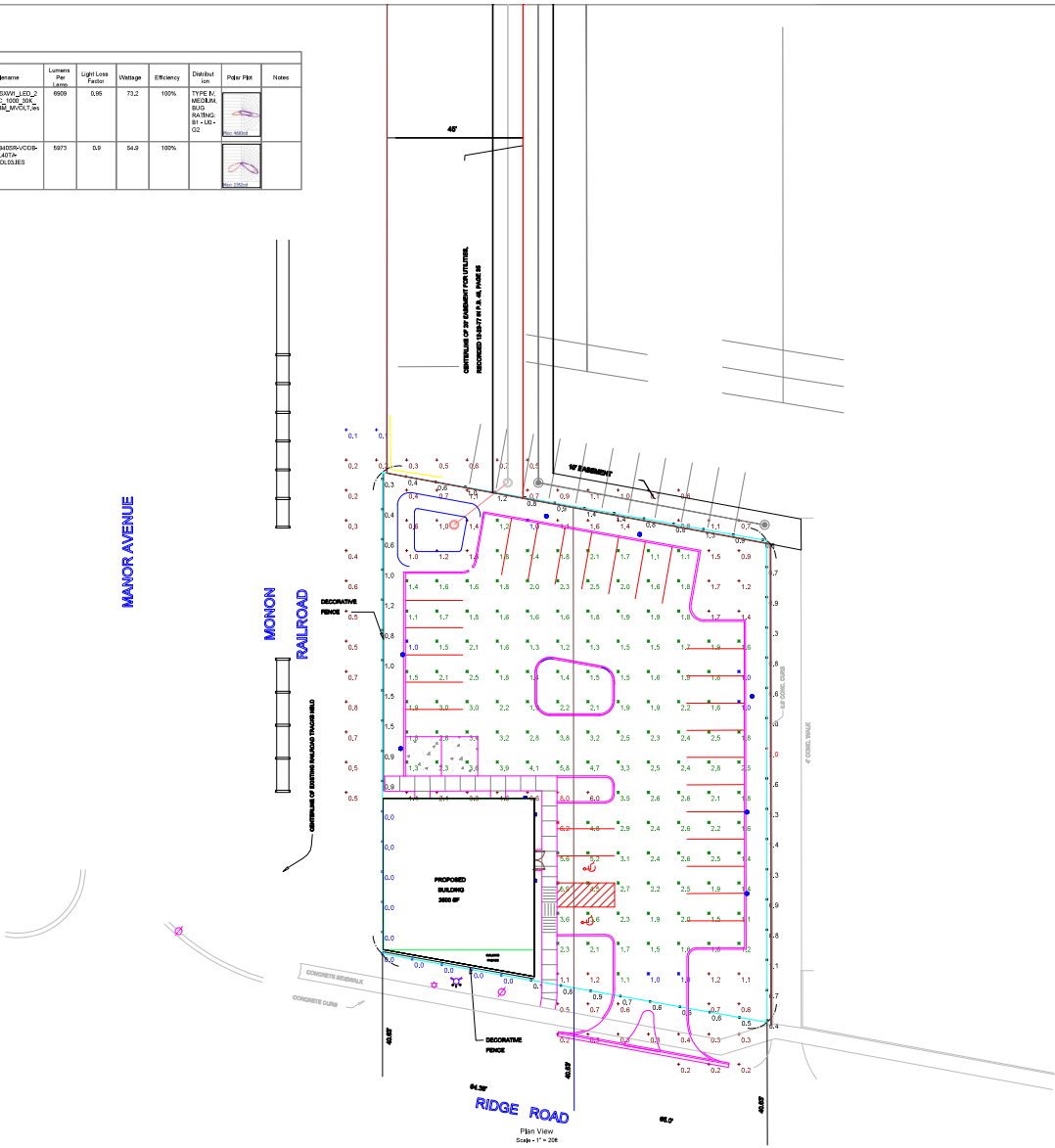
407 RIDGE ROAD
MUNSTER, IN

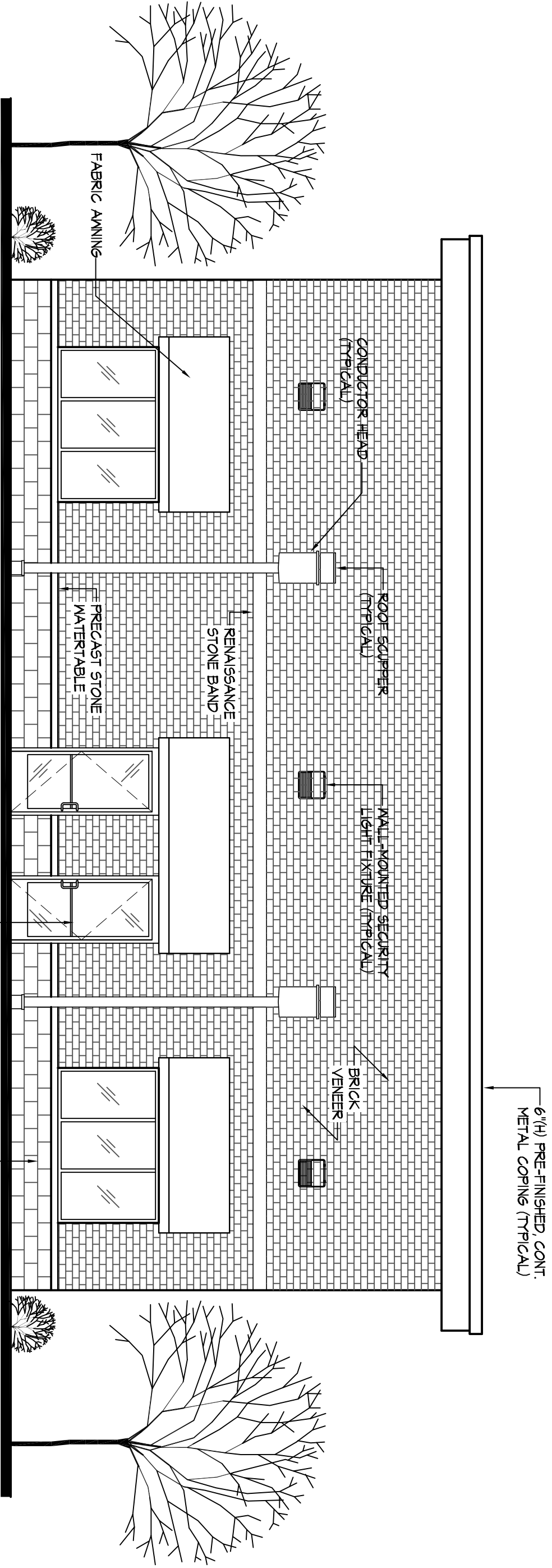
Drawn By: J.B.K./A.V.T.
Date: 11/27/19
Scale: 1/10

Schedule											
Symbol	Label	Image	Quantity	Manufacturer	Combining Number	Description	Lamp	Number Lamps	File Name	Lumens Per Lamp	Light Loss Factor
	W		3	Utronic Lighting	DSWW LED 200 1000 30K T84 M0C1	DSWW LED WITH (3) 10 LED LIGHT BURNERS TYPE T84 OPTIC 3000K @ 1000mA	LED	1	DSWW_LED_200_1000_30K_T84_M0C1.dwg	8000	0.96
	SA		7	Shenling Lighting	ABMSA-VCOB-4L307A-M0L03	ABMSA-VCOB Vertical COB tower CM Tower Series Asym. new LED 1000mA 1A	Classen COB	1	ABMSA-VCOB-4L307A-M0L03.dwg	9870	0.9
											Efficiency
											100%
											Control
											on
											Polar Plot
											Notes

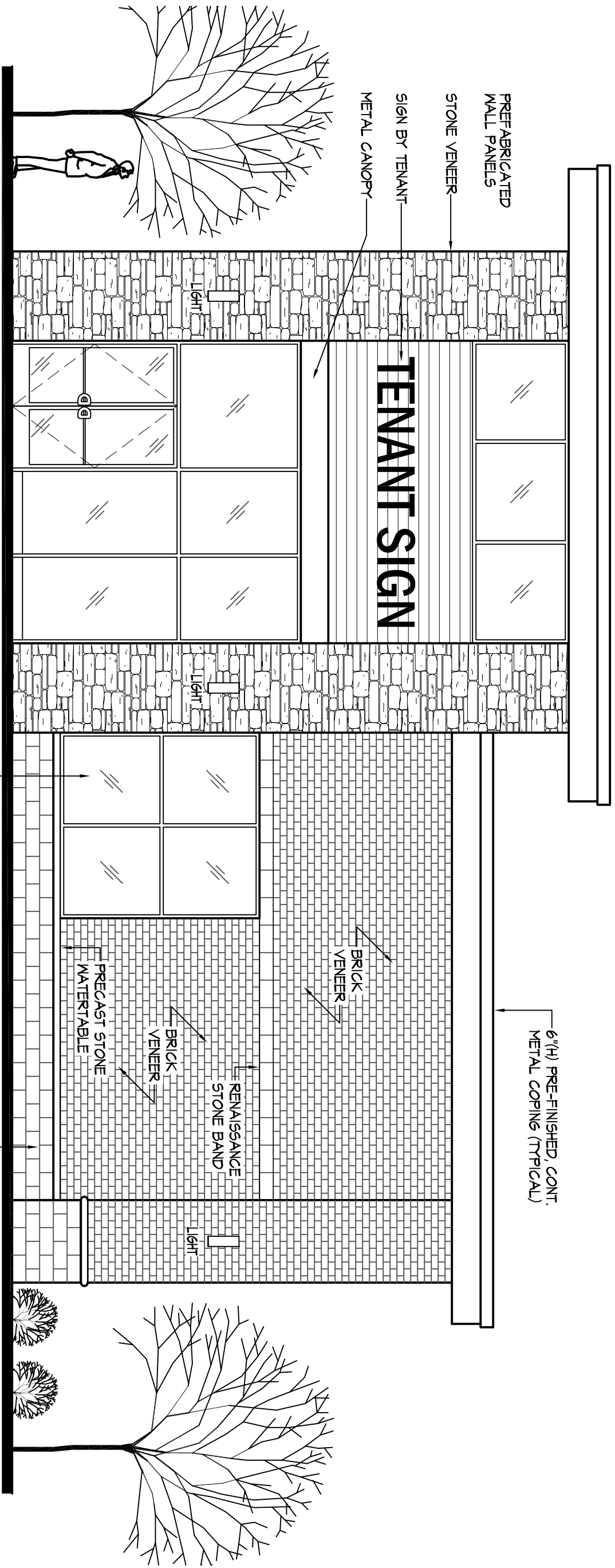
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Cut Zone Entire Site		1.6 ft	8.0 ft	0.1 ft	80:1	18:1
Cut Zone Parking Area		2.2 ft	6.3 ft	1.0 ft	6:1	2:1
Cut Zone Property Line		0.8 ft	2.0 ft	0.0 ft	N/A	N/A

Luminaire Locations						
No.	Label	Location		MH	Orientation	Tilt
		X	Y			
1	SA	127.30	89.80	20.00	270.00	0.00
2	SA	125.60	51.60	20.00	270.00	0.00
3	SA	125.60	24.50	20.00	270.00	0.00
4	SA	59.25	149.40	20.00	190.00	0.00
5	SA	90.15	143.40	20.00	190.00	0.00
6	SA	11.70	103.60	20.00	90.00	0.00
7	SA	11.00	72.50	20.00	90.00	0.00
1	W	52.25	56.50	12.00	0.00	0.00
2	W	55.75	50.75	12.00	90.00	0.00
3	W	55.75	28.75	12.00	90.00	0.00

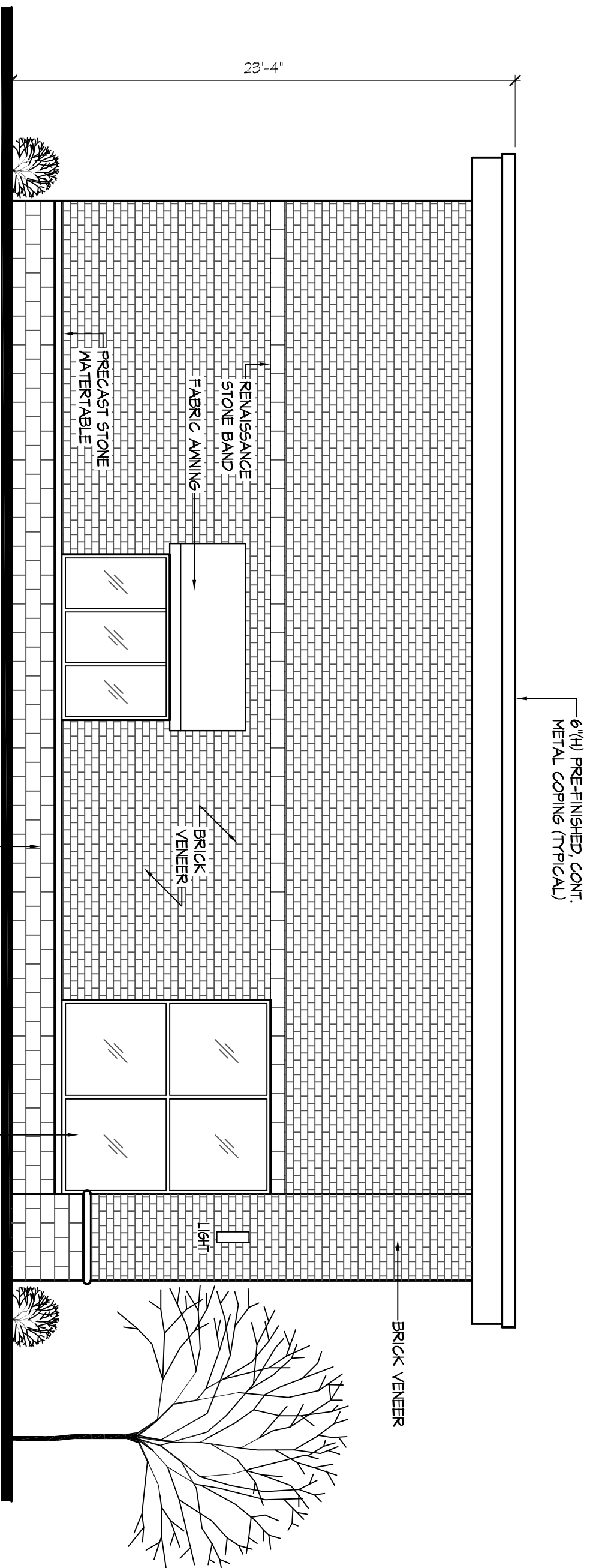




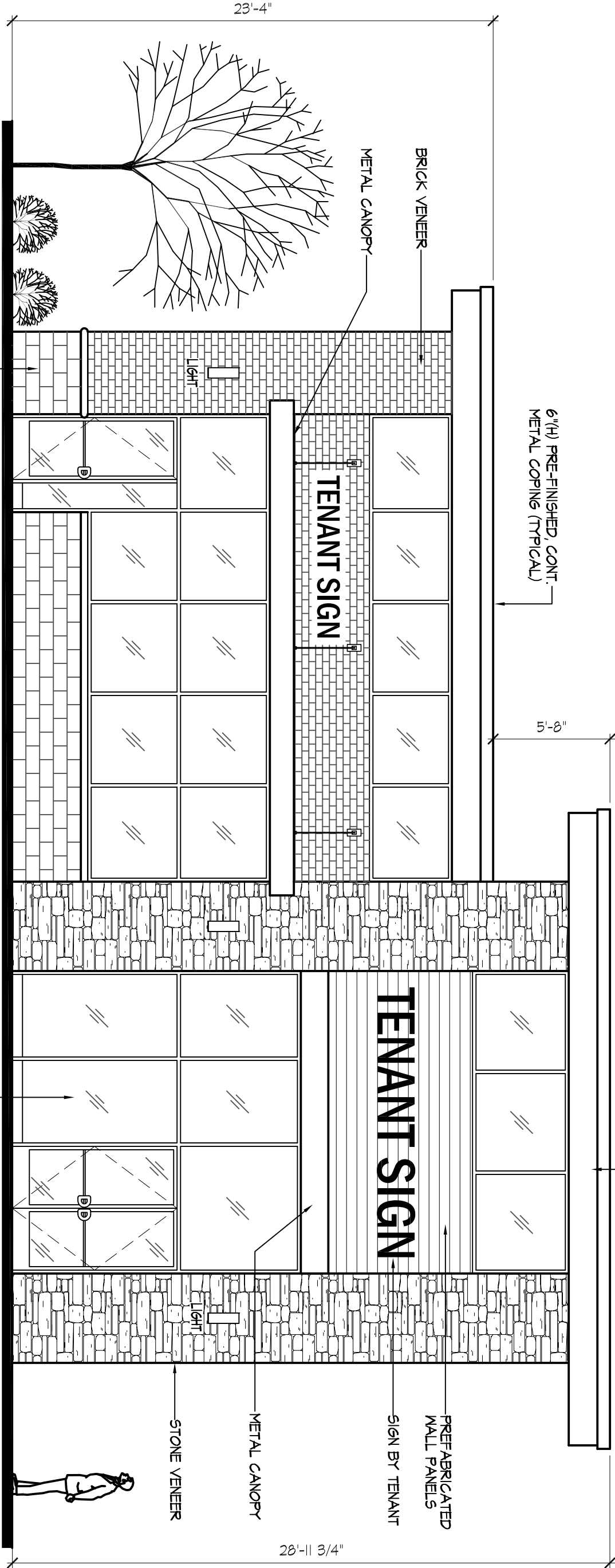
NORTH ELEVATION



EAST ELEVATION



WEST ELEVATION

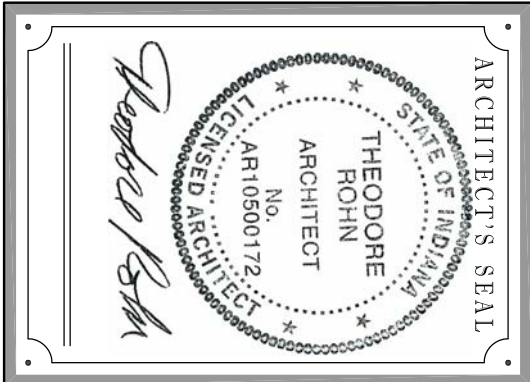


SOUTH ELEVATION

MUNSTER RETAIL
RIDGE ROAD
MUNSTER, INDIANA
46321

ROHN ASSOCIATES
ARCHITECTS & PLANNERS
13177 RHODE STREET
CEDAR LAKE, IN 46303
PHONE: (708) 906-4670

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NOT FOR CONSTRUCTION
REVISIONS REQUIRED
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ISSUE FOR.	
7/25/20	DESIGN
9/2/21	DESIGN

EXTERIOR
ELEVATIONS

SCALE: AS NOTED
PROJECT NO.: 20-438

AI