

FOR 1360 WALTON BOULEVARD

SITE DEVELOPMENT PLANS

PID: 15-09-476-030 1360 WALTON BOULEVARD CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

PROPOSED STARBUCKS

OWNER / APPLICANT

VERUS DEVELOPMENT GROUP 36400 WOODWARD AVE, SUITE 240 **BLOOMFIELD HILLS, MI 48304**

FRANK.ARCORI@VERUSDG.COM

SERRA-MARKO & ASSOCIATES INC 184 E BIG BEAVER ROAD, SUITE 106 **TROY, MI 48083**

ARCHITECT

rationale for the full access

Site Plan Review

Reviewed for compliance to the City Ordinance, Building and Fire Codes

Department	Reviewer	Approved
Planning	Kristen Kapelanski 248-841-2772 KapelanskiK@RochesterHills.org	Yes
Building	Mark Artinian 248-841-2446 ArtinianM@RochesterHills.org	Yes
Engineering	Jason Boughton 248-841-2490 BoughtonJ@RochesterHills.org	Yes
Traffic	Keith Depp 248-841-2503 DeppK@RochesterHills.org	Yes
Nat. Resources	Matt Einheuser 248-841-2551 EinheuserM@RochesterHills.org	Yes
Fire	Capt. Ann Echols 248-841-2701 EcholsA@RochesterHills.org	Yes

City of Rochester Hills Planning & Economic Development

Conditions and mark-ups noted throughout the plan set must be addressed prior to final approval.

NOT APPROVED FOR CONSTRUCTION





B

360





CITY FILE #21-030 SECTION #9 SCALE: AS SHOWN PROJECT ID: DET-200412

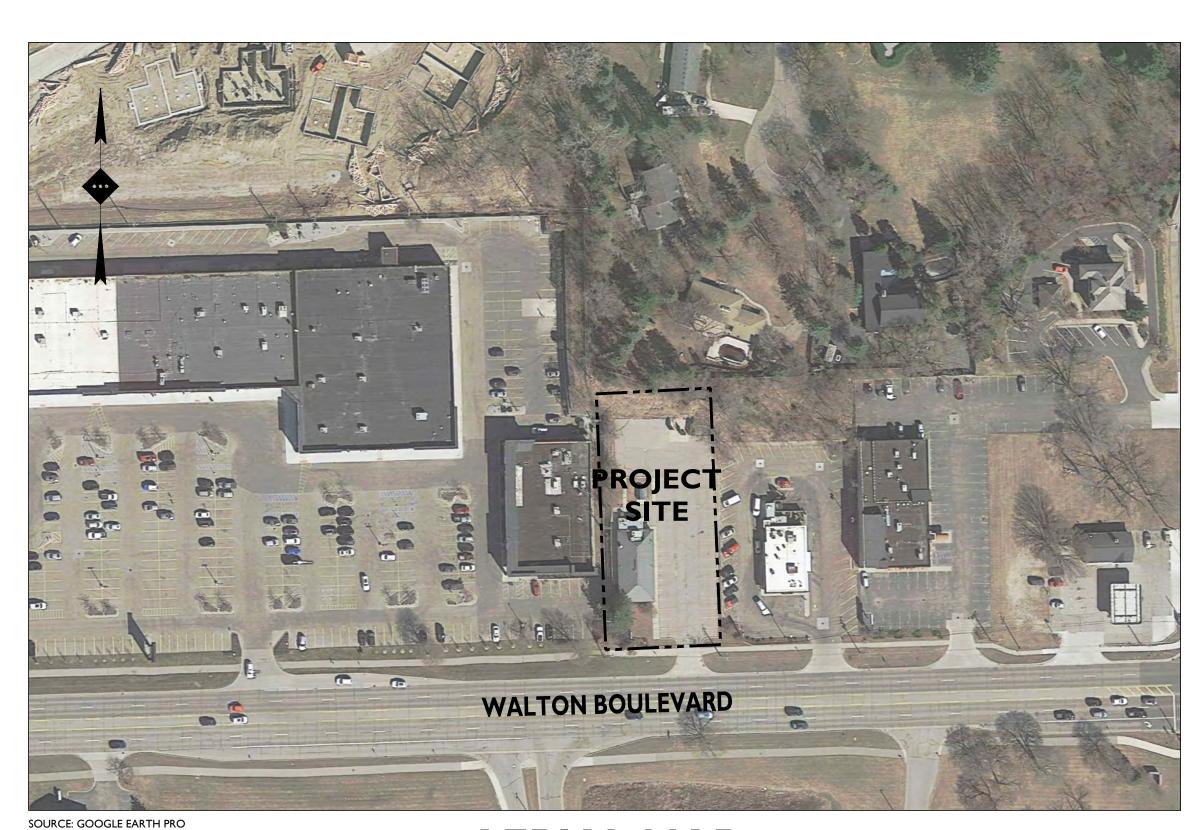
COVER SHEET

DRAWING:

C-I

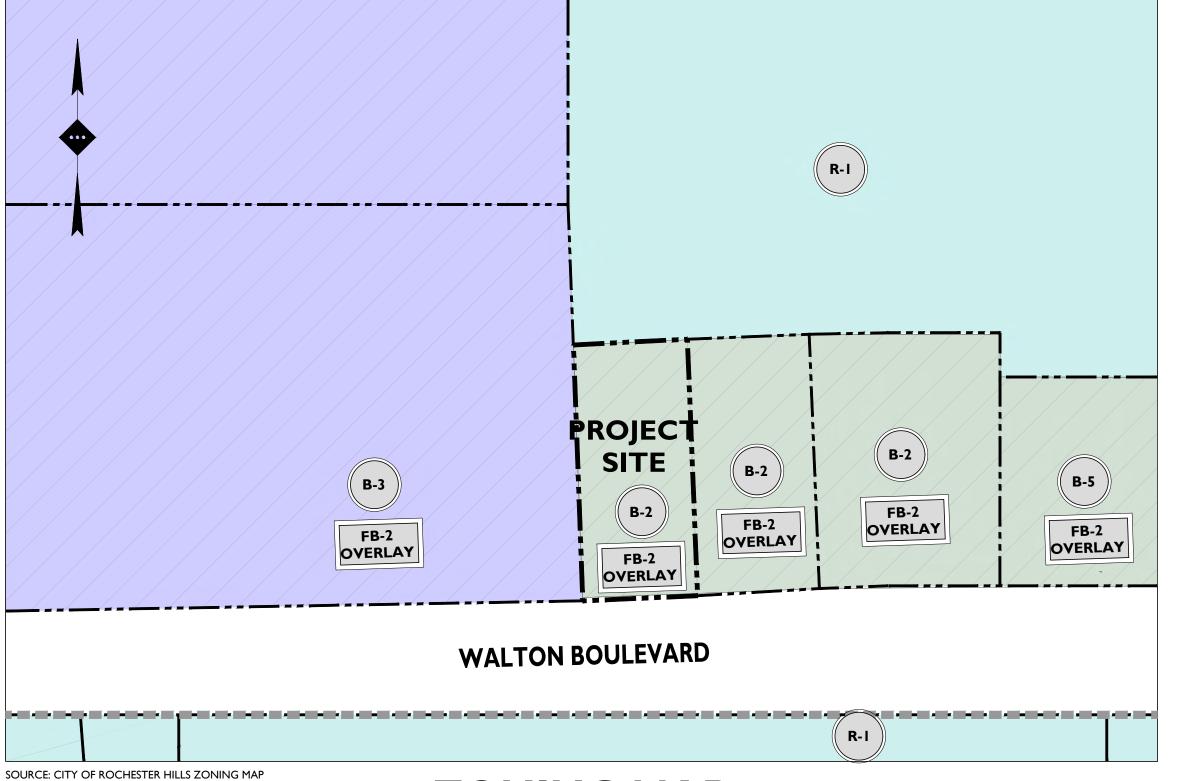
LOCATION MAP

SCALE: $I'' = 2,000' \pm$



AERIAL MAP

SCALE: I" = 100'±



ZONING MAP

SCALE: $I'' = 100' \pm$

PLANS PREPARED BY:

PLAN REFERENCE MATERIALS:

- I. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS **INCLUDING, BUT NOT LIMITED TO:**
- ALTA/NSPS SURVEY OBTAINED FROM KEM-TEC, **DATED 12/27/2021** ARCHITECTURAL PLANS OBTAINED FROM SERRA-MARKO **& ASSOCIATES, DATED 08/20/2021**
- AERIAL MAP REFERENCED FROM GOOGLE EARTH PRO LOCATION MAP OBTAINED FROM USGS NATIONAL
- ZONING MAP REFERENCED FROM CITY OF ROCHESTER HILLS ZONING MAP
- 2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF



Call before you dig.



Detroit, MI · New York, NY · Rutherford, NJ Princeton, NJ · Tampa, FL · Boston, MA www.stonefieldeng.com

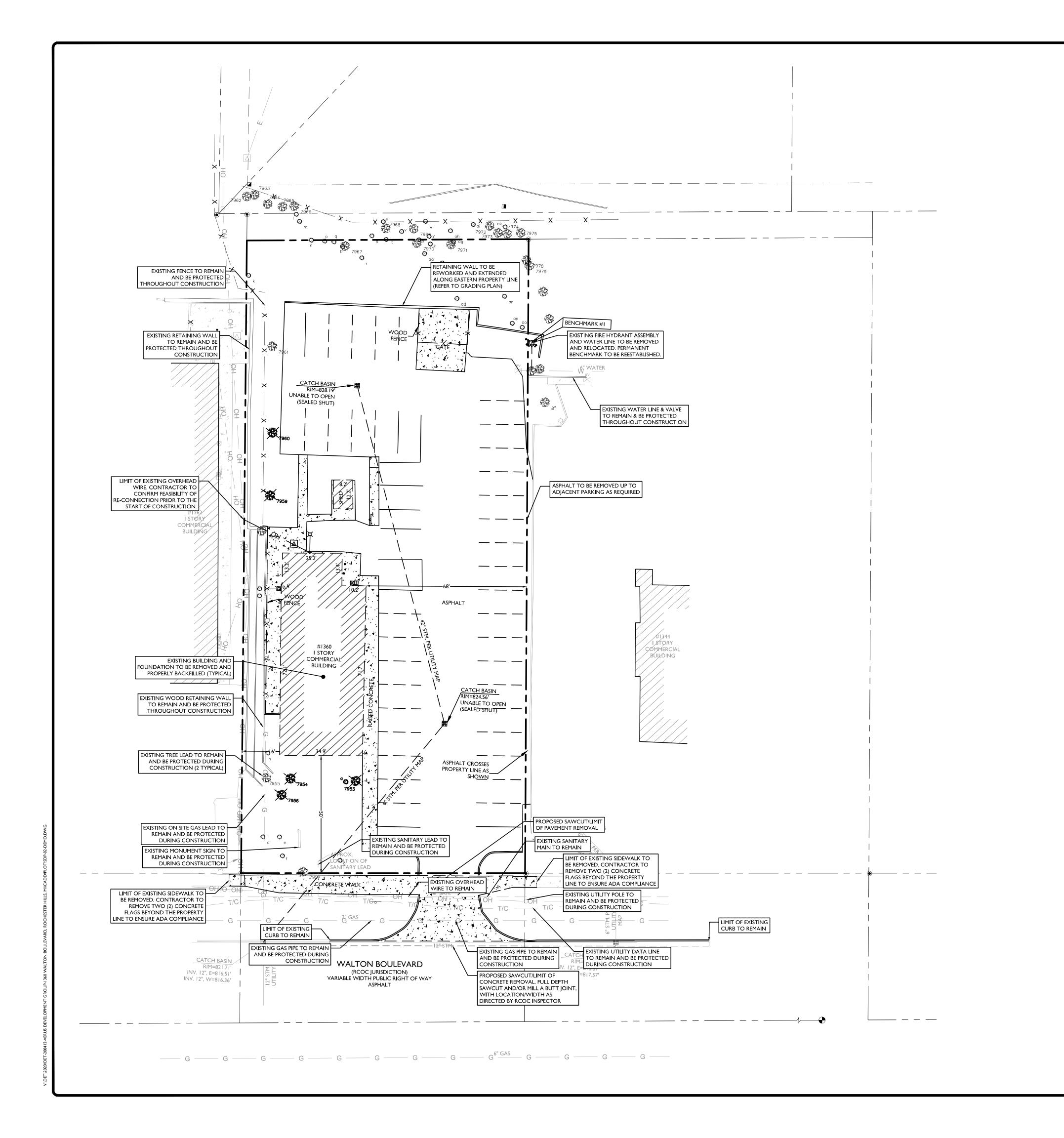
607 Shelby Suite 200, Detroit, MI 48226 Phone 248.247.1115

	ADDITIONAL SHE	ETS
	DRAWING TITLE	SHEET#
with site plan	ALTA / TOPOGRAPHIC SURVEY	I OF I
	CITY WATER MAIN STANDARD DETAILS	I OF 3
	CITY WATER MAIN STANDARD DETAILS	2 OF 3
	CITY WATER MAIN STANDARD DETAILS	3 OF 3
	CITY SANITARY SEWER STANDARD DETAILS	I OF 2
	CITY SANITARY SEWER STANDARD DETAILS	2 OF 2

CITY STORM SYSTEM STANDARD DETAILS

I OF I

SHEET INDEX				
DRAWING TITLE	SHEET#			
COVER SHEET	C-I			
DEMOLITION PLAN	C-2			
SITE PLAN	C-3			
GRADING PLAN	C-4			
STORMWATER MANAGEMENT PLAN	C-5			
UTILITY PLAN	C-6			
FIRE PROTECTION PLAN	C-7			
LIGHTING PLAN	C-8			
SOIL EROSION & SEDIMENT CONTROL PLAN	C-9			
LANDSCAPE PLAN	C-10			
TREE REPLACEMENT PLAN	C-11			
CONSTRUCTION DETAILS	C-12 TO C-16			
SIGHT DISTANCE PLAN	C-17			





SYMBOL

DESCRIPTION

FEATURE TO BE REMOVED / DEMOLISHED

4 4

LIMIT OF DISTURBANCE

TREES TO BE REMOVED

CONCRETE PAVEMENT TO BE REMOVED

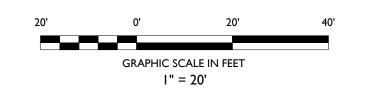
ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD **ENGINEERING & DESIGN, LLC. IF SIGNIFICANT** DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS



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

DEMOLITION NOTES

- I. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE
- SITE IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
 EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM
- BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
- 4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
- 5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.



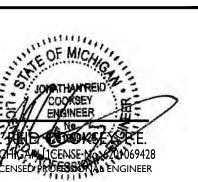
		SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER CITY SECOND SITE PLAN REVIEW	REVISED PER CITY SITE PLAN REVIEW	SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER FIRE DEPARTMENT COMMENTS	REVISED PER CITY COMMENTS	SUBMISSION FOR PRE-APPLICATION MEETING	DESCRIPTION
		JRC / ECM	JRC / ECM	JRC / ECM	RAC / ECM	RAC	ЕСМ	JRC	ВҮ
		05/26/2022	02/09/2022	12/28/2021	09/08/2021	08/20/2021	08/02/2021	07/08/2021	DATE
		7	9	2	4	٣	2	_	ISSUE
T	T APPROVED FOR CONSTRUCTION								



B

0

9

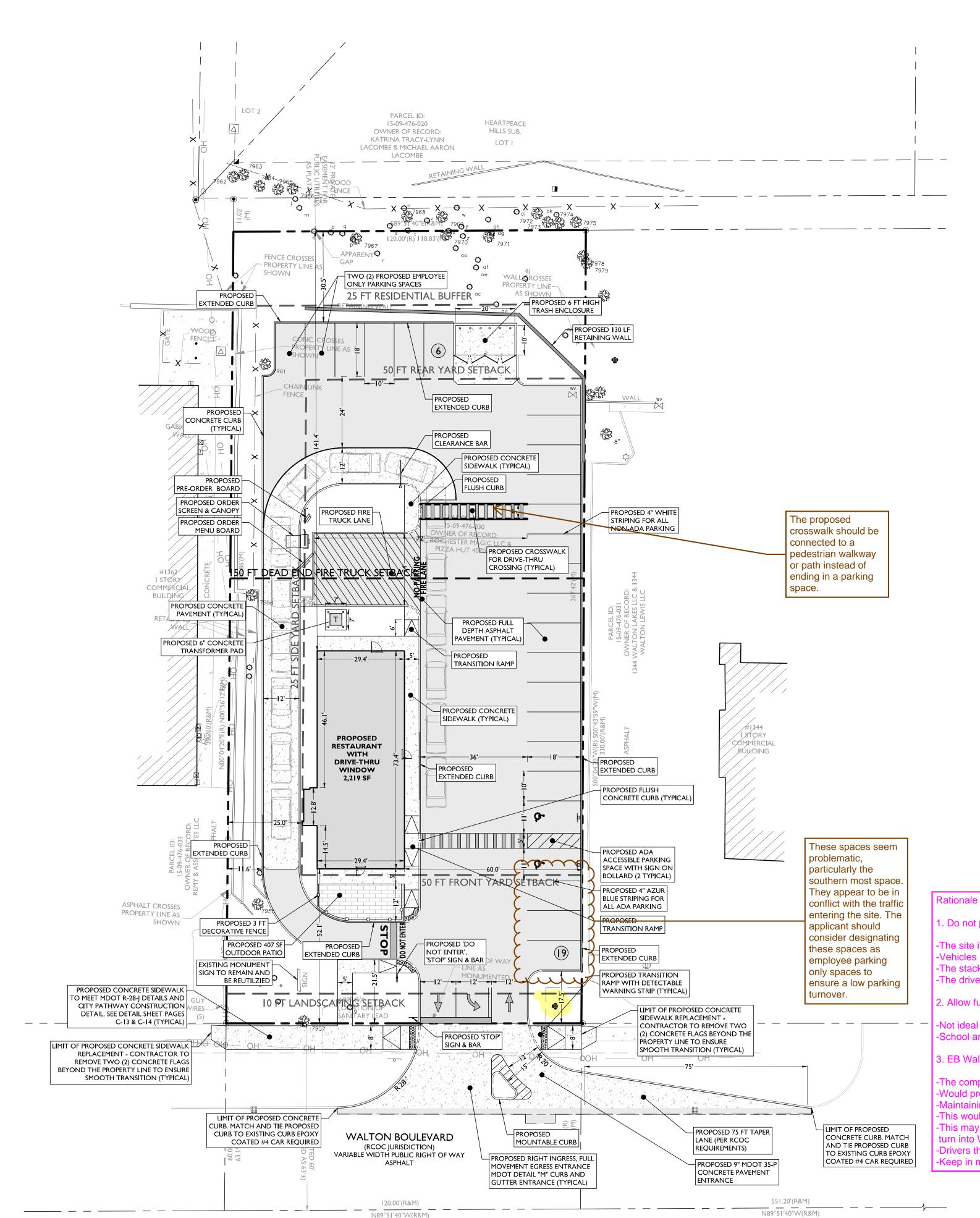


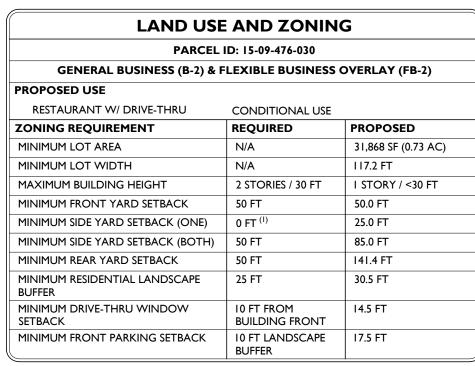


CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412

DEMOLITION PLAN





25 FT SETBACK IS REQUIRED FOR THE EXTERIOR SIDE OF PARCEL OR LOT ON THE EXTERIOR OF THE DISTRICT

CODE SECTION	REQUIRED	PROPOSED
§ 138-11.204	REQUIRED RESTAURANT PARKING:	25 SPACES
	I SPACE PER 2 PERSONS AT MAX OCCUPANCY	
	(50 PERSONS)(I SPACE / 2 PERSONS) = 25 SPACES	
§ 138-11.204	REQUIRED DRIVE-THRU STACKING:	15 SPACES
	10 STACKING SPACES	
§ 138-11.302	DIMENSIONAL REQUIREMENTS:	18 FT X 10 FT
	75°-90°: 18 FT X 10 FT W/ 24 FT TWO-WAY AISLE	W/ 24 FT AISLE

SYMBOL	DESCRIPTION
	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB
	PROPOSED EXTENDED CURB
= = = = =	PROPOSED FLUSH CURB
 0	PROPOSED SIGNS / BOLLARDS
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	PROPOSED AREA LIGHT
	PROPOSED BUILDING DOORS
	PROPOSED HANDRAIL

GENERAL NOTES

- I. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES
- DURING CONSTRUCTION. 3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING

Rationale for full access drive option, the following would be the order of suggestions:

1. Do not permit this type of heavy drive thru use at this location.

-The site itself is very narrow and not deep, which is not ideal for a drive thru coffee shop.

Vehicles may pack up into Walton Blvd especially if they are not pulling up as far as they can into the drive thru/parking lot.

-The stacking length is relatively short and only exacerbated the more that drivers don't pull up as far as they can to the car in front of them due to being on cell phones and not paying attention. -The drive thru itself does not have a bypass lane so patrons parking to go inside will be competing with backing up vehicles when leaving the dining area.

2. Allow full access drive (assuming option 1 is not feasible)

Not ideal due to the high AM peak use that will be competing with AM school traffic at Rochester High School. -School and drive thru traffic will be competing for limited CLTL storage length and weaving in and out of the lane to get around staged vehicles.

3. EB Walton Blvd Traffic restricted with NO Lefts into the Driveway Approach

-The compliance rate for EB motorists to adhere to the NO Left turn to enter the site could be low.

-Would probably need a very low profile curb & gutter raised island to allow emergency vehicles easy access in and out of the site, which makes it more enticing to simply drive over it.

-Maintaining a high compliance rate will only be as good as OCSO ability to provide the necessary resources for adequate enforcement.

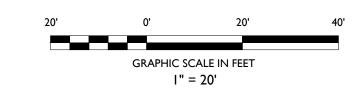
This would be the only commercial site in the City that we know of with a single drive approach to have turn movement restrictions. All the others have multiple access points.

This may place an undue burden on Wendy's. Drivers that do comply with the turning restriction will most likely just head EB on Walton Blvd and

turn into Wendys only to do a U-Turn to then head back west onto Walton Blvd to get to Starbucks.

Drivers that are coming from the east are unlikely to drive head east past the dual lane x-over at Livernois Rd to then head back west onto Walton Blvd. -Keep in mind that this site only has 1 access entrance where the other locations with the pork-chops islands have multiple options for ingress/egress

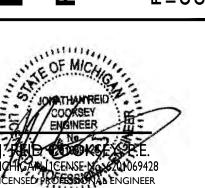
> CONSTRUCTION & DEMOLITION ACTIVITIES. 12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



	DESCRIPTION					SUBMISSION FO	REVISED PER C	REVISED PER C	
	PROPERTY LINE					JRC / ECM	JRC / ECM	JRC / ECM	
	SETBACK LINE SAWCUT LINE					05/26/2022	02/09/2022	12/28/2021	
	PROPOSED CURB					7	9	ıs	
	PROPOSED EXTENDED CURB		N	IOT	AP	PRO	VEI	FC)
= =	PROPOSED FLUSH CURB	lt							•
0	PROPOSED SIGNS / BOLLARDS								
	PROPOSED BUILDING					ا ا	=	Σ	[
7	PROPOSED CONCRETE					שושקר אסלים	ア 	D. 24.04	2
	PROPOSED ASPHALT						א א	Δ « « » × Ν »	
		- 1					_	2	



 $\mathbf{\Omega}$ N O





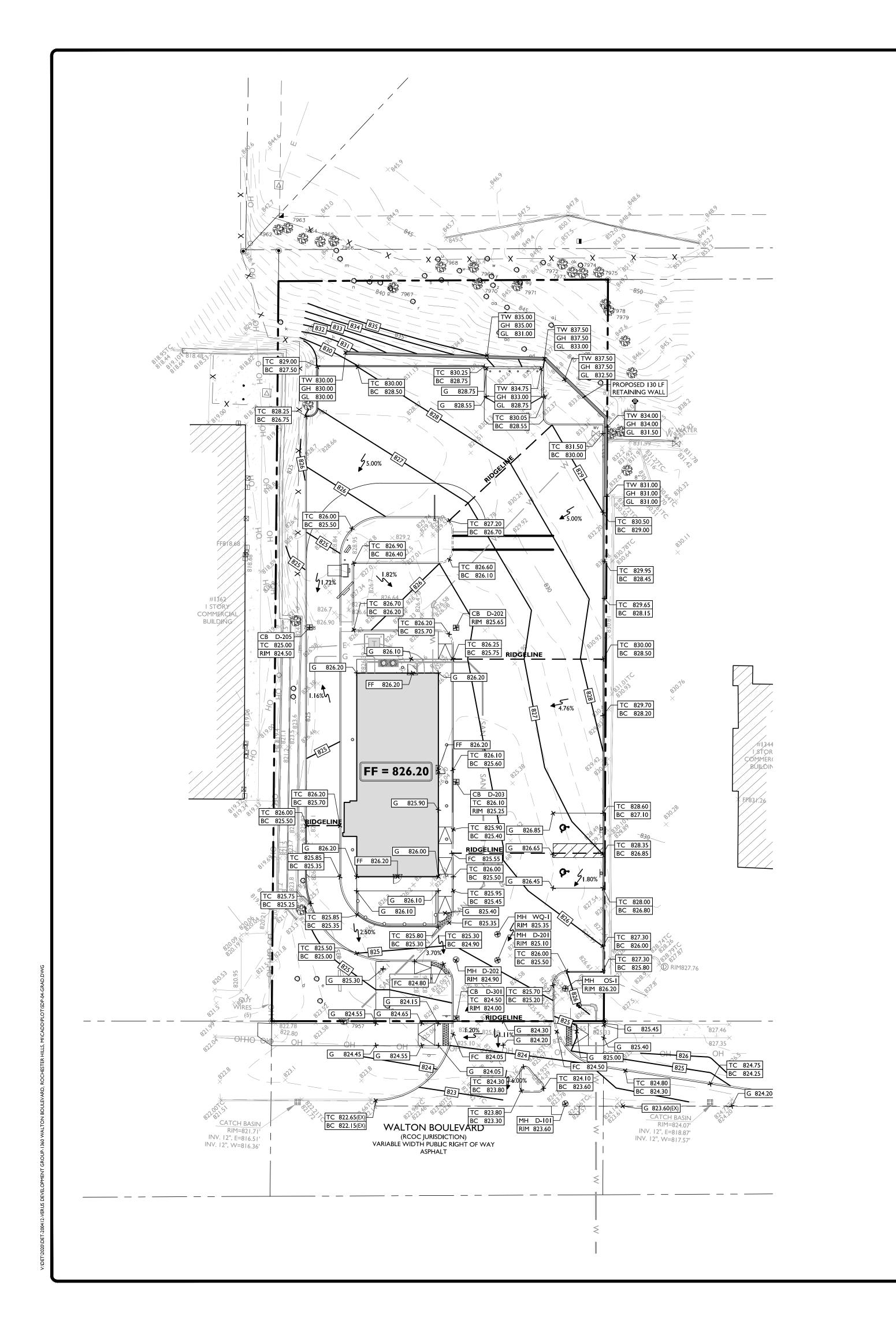
CITY FILE #21-030 SECTION #9

0

9

I" = 20' PROJECT ID: DET-200412

SITE PLAN



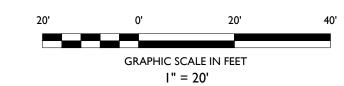


SYMBOL **DESCRIPTION**

GRADING NOTES

- I. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF
- 3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
- 4. THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY
- FOLLOWS: • CURB GUTTER:
 - CONCRETE SURFACES: 1.00%
- 5. A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD
- FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

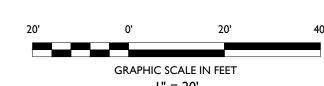
- ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS
- ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES. 3. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN
- 4. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- 6. ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP. 7. A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE
- ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS. 8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4 INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4 INCHES AND 1/2 INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP 1/4 INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN I UNIT
- 9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/2 INCH.



	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
RIDGELINE	PROPOSED GRADING RIDGELINE
4	PROPOSED DIRECTION OF DRAINAGE FLOW
X [G 100.00]	PROPOSED GRADE SPOT SHOT
TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
× FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
X TW 102.00 BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT

- ALL FILL MATERIALS BROUGHT TO THE SITE. 2. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
- 5. MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS
- ASPHALT SURFACES:
- ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET. 6. FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL

- I. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN
- 2. THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL
- THE PLAN SET.
- 5. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
- VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).



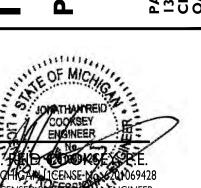
7	05/26/2022	JRC / ECM	SUBMISSION FOR SITE PLAN APPROVAL
9	02/09/2022	JRC / ECM	REVISED PER CITY SECOND SITE PLAN REVIEW
2	12/28/2021	JRC / ECM	REVISED PER CITY SITE PLAN REVIEW
4	09/08/2021	RAC / ECM	SUBMISSION FOR SITE PLAN APPROVAL
٣	08/20/2021	RAC	REVISED PER FIRE DEPARTMENT COMMENTS
2	08/02/2021	ECM	REVISED PER CITY COMMENTS
_	07/08/2021	JRC	SUBMISSION FOR PRE-APPLICATION MEETING
ISSUE	DATE	ВУ	DESCRIPTION

NOT APPROVED FOR CONSTRUCTION





 $\mathbf{\Omega}$ N O





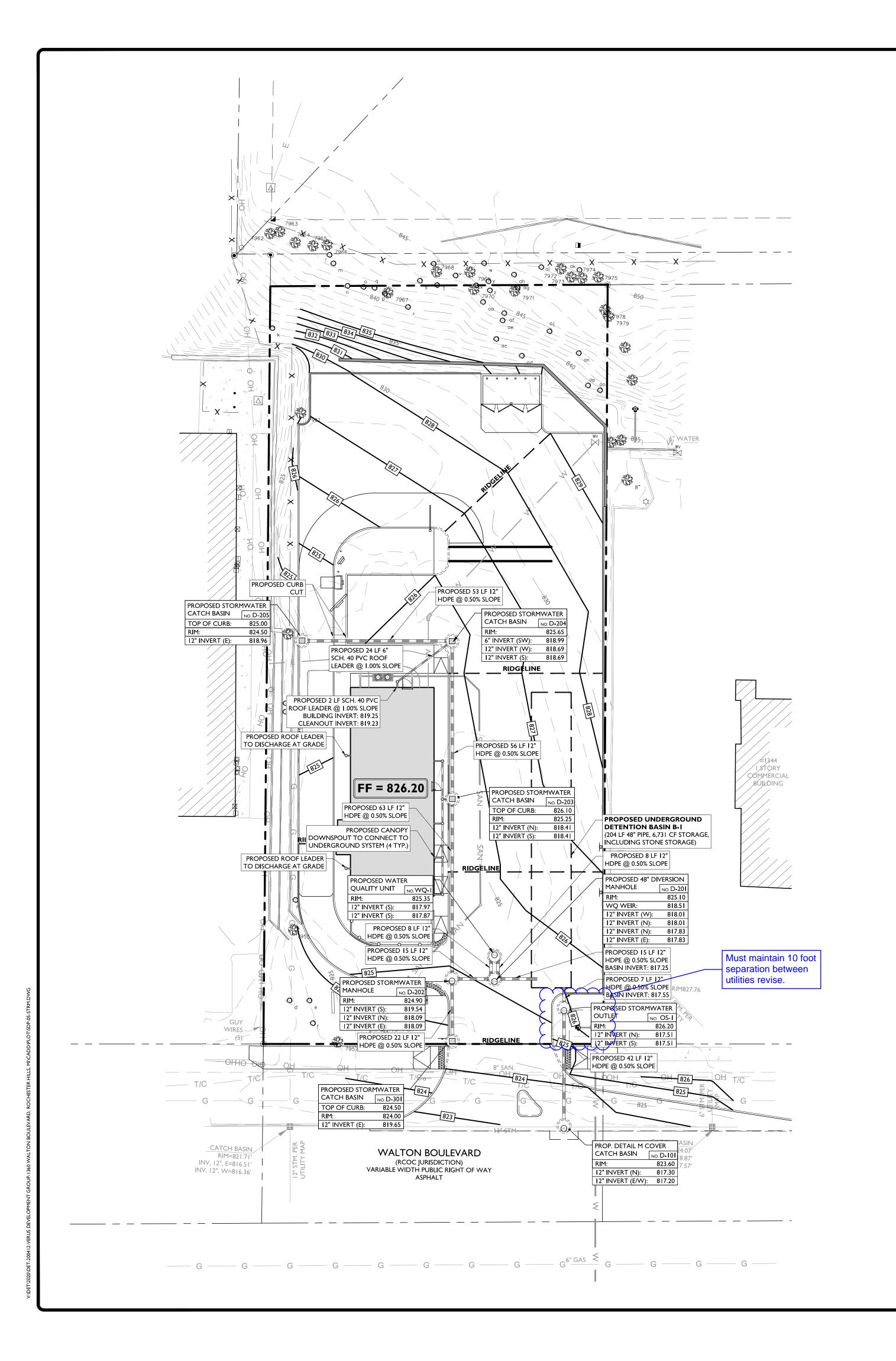
CITY FILE #21-030 SECTION #9

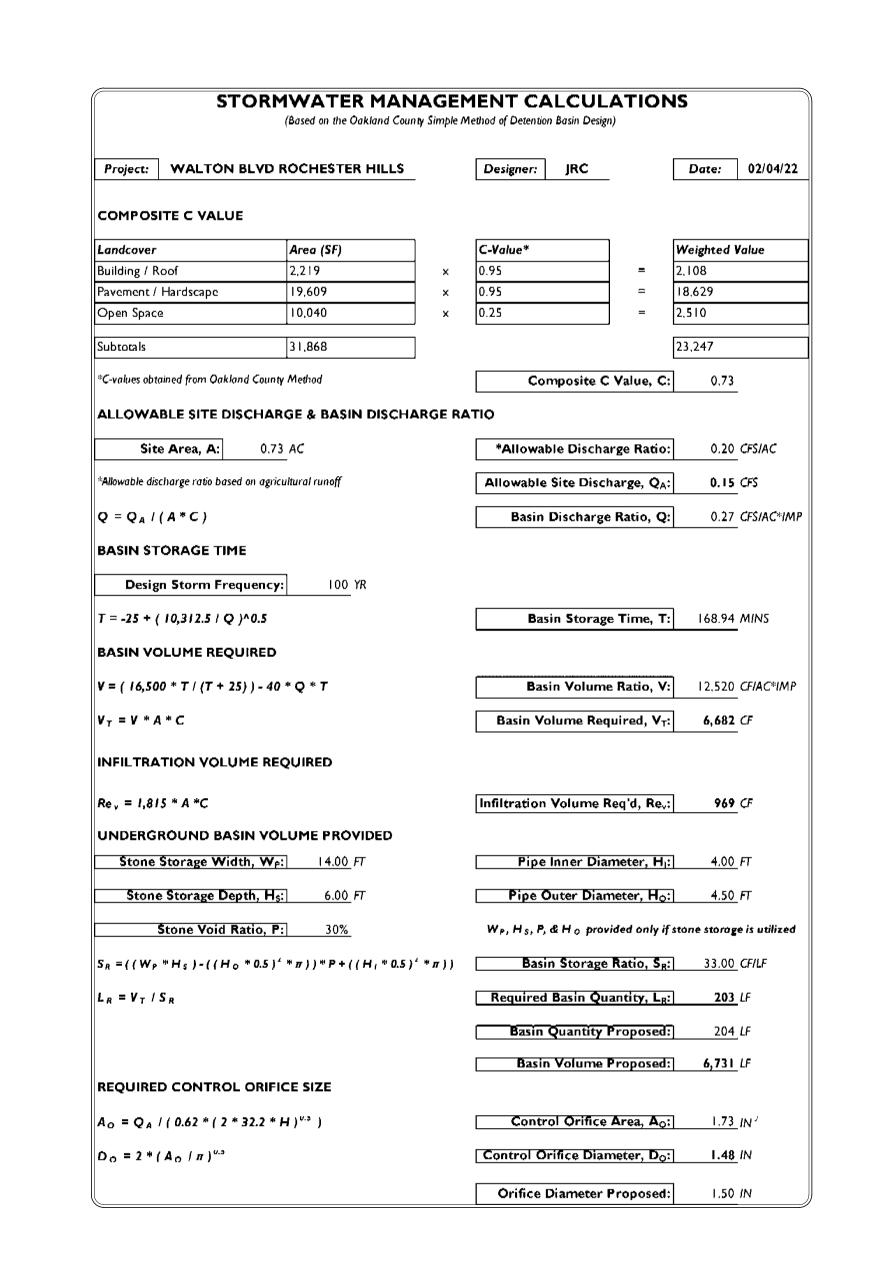
0

9

I" = 20' PROJECT ID: DET-200412

GRADING PLAN







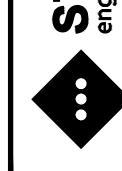
SYMBOL DESCRIPTION

PROPERTY LINE PROPOSED GRADING CONTOUR PROPOSED GRADING RIDGELINE RIDGELINE

PROPOSED STORMWATER STRUCTURES

PROPOSED STORMWATER PIPING

NOT APPROVED FOR CONSTRUCTION



 $\mathbf{\Omega}$

0

0

9

DRAINAGE AND UTILITY NOTES

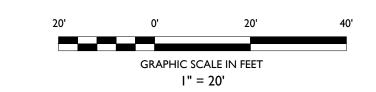
- I. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY
- NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING. 2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP-GRADIENT.
- 3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
- 4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

- I. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET. 2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE
- GEOTECHNICAL ENGINEER OF RECORD. 3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START OF CONSTRUCTION. 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN
- EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS. 5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER

STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES

- I. THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- 2. UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%.
- 3. NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM A FIXED POSITION OVER THE BASIN.

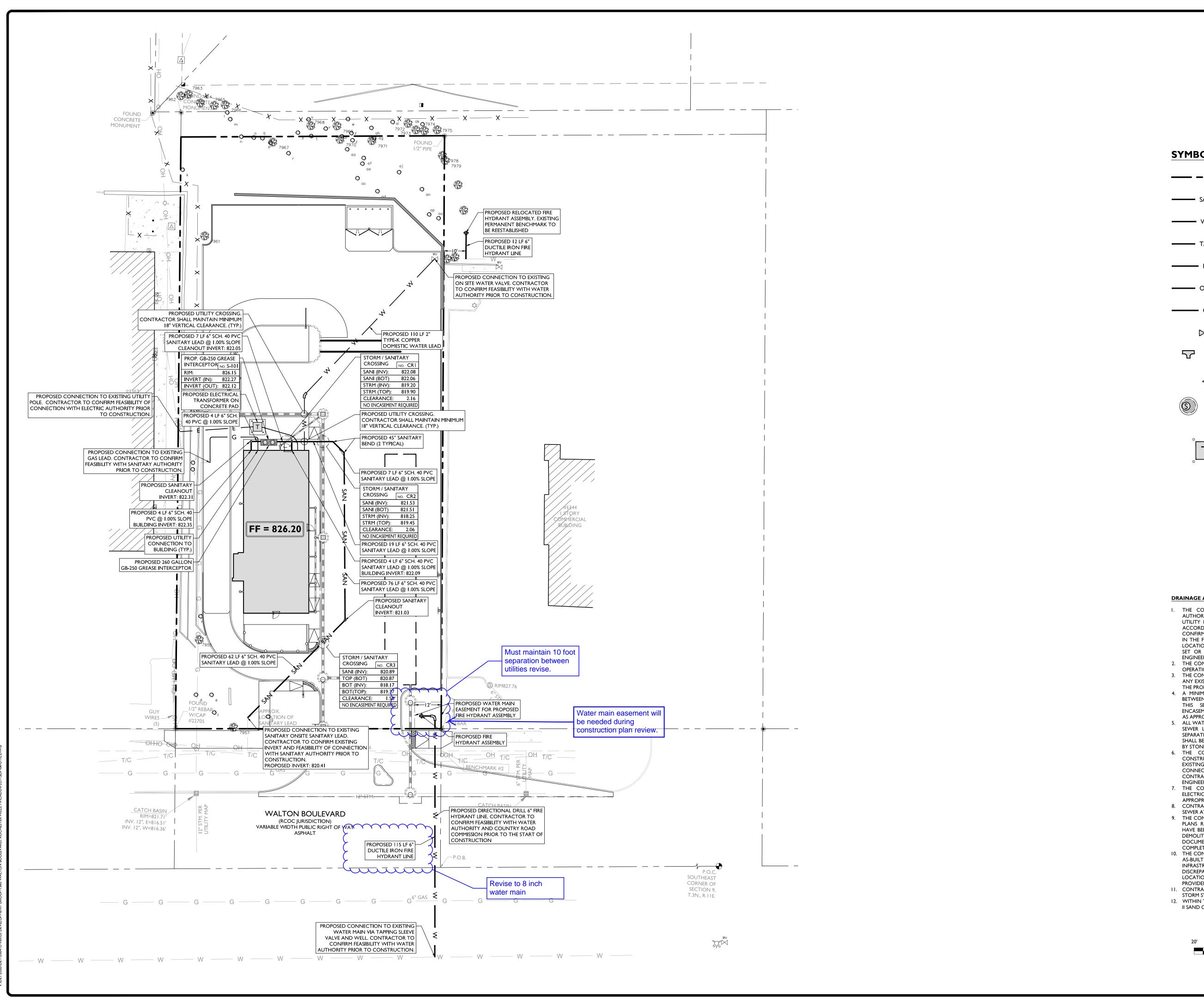


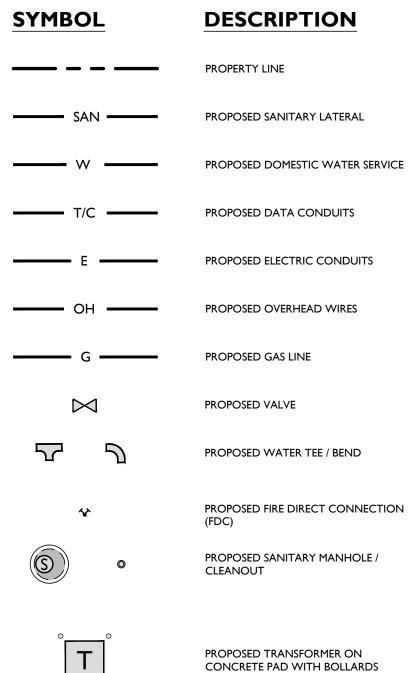
STONEFIELD engineering & design

CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412 TITLE:

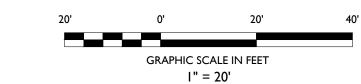
STORMWATER MANAGEMENT PLAN



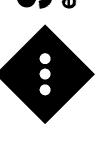


DRAINAGE AND UTILITY NOTES

- I. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
- 2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED. 3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF
- THE PROPOSED WORK DURING CONSTRUCTION. 4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE
- AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC. 5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
- 6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
- 8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADIENT. 9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
- 10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
- 11. CONTRACTOR TO HAND DIG AROUND ALL EXISTING UTILITIES AND STORM SYSTEMS. 12. WITHIN THE INFLUENCE OF THE ROAD AND SIDEWALK, MDOT CLASS
- II SAND COMPACTED TO 95% MAXIMUM UNIT DENSITY IS REQUIRED.



NOT APPROVED FOR CONSTRUCTION







 $\mathbf{\Omega}$ 0

0

9

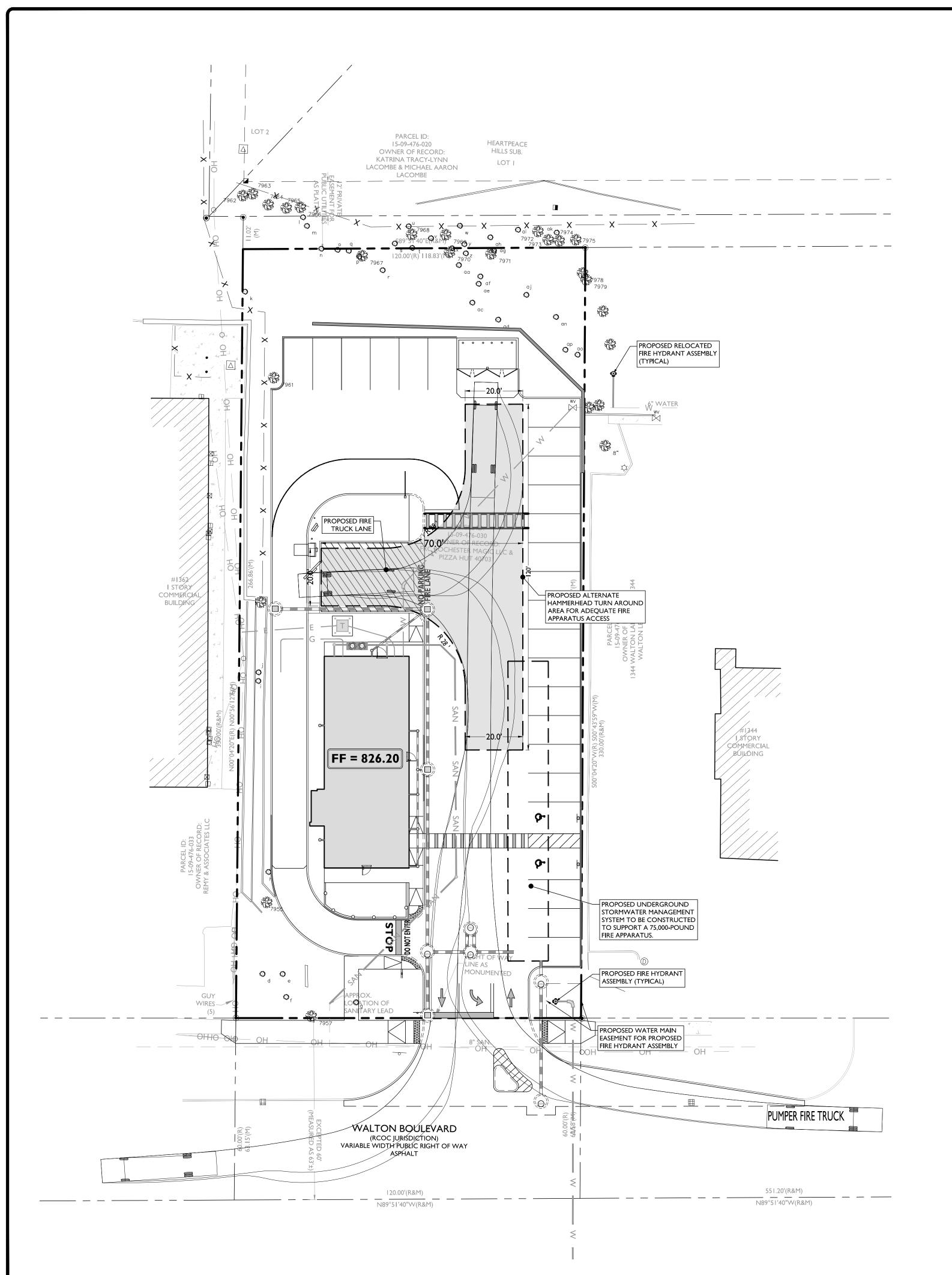


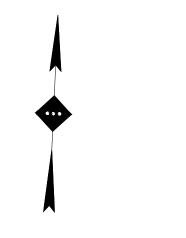


CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412

UTILITY PLAN





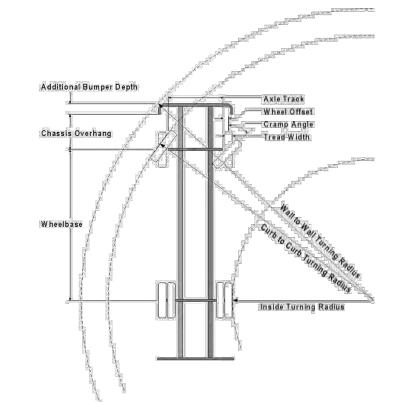
SYMBOL

DESCRIPTION

PROPERTY LINE

02/28/2018

Chassis: Arrow XT Chassis, Aerials/Tankers, Tandem Axle Body: Aerial, HD Ladder 105', Alum Body



Bid Number: 1102

Department: Citry of Rochester Hills

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	16.3 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	16 in.
Front Overhang:	84.99 in.
Wheelbase:	245.5 in.
Calculated Turning Radii:	
Inside Turn:	19 ft. 5 in.
Curb to curb:	35 ft. 3 in.
Wall to wall:	39 ft. 7 in.

COIIIII	ients	٠.	
RHFD	105'	turn	radiu

Turning Performance Analysis

Category	Option	Description
Axle, Front, Custom	0018453	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Qtm/AXT/DCF
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot
Tires, Front	0594821	Tires, Front, Goodyear, G296 MSA, 425/65R22.50, 20 ply
Bumpers	0606536	Bumper, 16" Extended, Steel Painted, Arrow XT
Aerial Devices	0673137	Aerial, 105' Heavy Duty Ladder (500 dry/500 water)

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

		SUBMISSION FOR SITE PLAN APPROV	REVISED PER CITY SECOND SITE PLAI	REVISED PER CITY SITE PLAN REVIEW	SUBMISSION FOR SITE PLAN APPROV	REVISED PER FIRE DEPARTMENT COP	REVISED PER CITY COMMENTS	SUBMISSION FOR PRE-APPLICATION	DESCRIPTION
		JRC / ECM	JRC / ECM	JRC / ECM	RAC / ECM	RAC	ECM	JRC	ВҮ
		05/26/2022	02/09/2022	12/28/2021	09/08/2021	08/20/2021	08/02/2021	07/08/2021	DATE
		7	9	5	4	3	2	-	ISSUE
OT APPROVED FOR CONSTRUCTION									

NOT APPROVED FOR CONSTRUCTION





BL

NOL

360





CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412

FIRE PROTECTION PLAN

DRAWING:

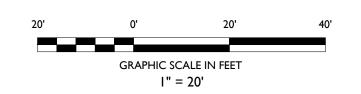
FIRE DEPARTMENT NOTES

I. A KNOX KEY SYSTEM SHALL BE INSTALLED IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT WWW.KNOXBOX.COM - IFC 2006

2. FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE" AND SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 503

3. CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14

4. OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND / OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES - FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 307.6.2 & 307.6.2.3

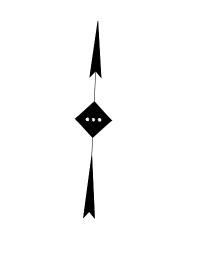


LIGHTING REQUIREMENTS							
CODE SECTION	REQUIRED	PROPOSED					
§ 138-10.201.A	ALL OUTDOOR LIGHTING SHALL BE SHIELDED	PROVIDED					
3138-10.201.B	MAXIMUM ILLUMINATION ON SITE:						
	10 FC	9.0 FC					
138-10.201.B	MAXIMUM ILLUMINATION AT:						
	PROPERTY LINE: 0.5 FC	0.5 FC					
	RIGHT OF WAY PROPERTY LINE: I FC	0.9 FC					
§ 138-10.202	MINIMUM FIXTURE HEIGHT:						
	20 FT ⁽¹⁾	I8 FT					

(I) 15 FEET HIGH IF WITHIN 50 FEET OF A RESIDENTIAL PROPERTY

WALTON BOULEVARD

PROPOSED LUMINAIRE SCHEDULE									
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER	IES FILE		
	A	1	EATON LUMARK PREVAIL AND FIXTURE COMBO WITH HOUSE SIDE SHIELD	TYPE IV	0.9	EATON	PRV-C40-D-UNV-T4-BZ-7030-HSS.ies		
	В	I	EATON LUMARK PREVAIL AND FIXTURE COMBO WITH HOUSE SIDE SHIELD	TYPE IV	0.9	EATON	PRV-C25-D-UNV-T4-BZ-7030-HSS.ies		
	С	I	EATON LUMARK PREVAIL AND FIXTURE COMBO WITH HOUSE SIDE SHIELD (2 @ 90°)	TYPE IV	0.9	EATON	PRV-C25-D-UNV-T4-BZ-7030-HSS.ies		
P	D	8	OXYGEN LEDA OUTDOOR SCONCE	TYPE IV	0.9	EATON	3-712-222 Leda.ies		
	E	2	MIRADA LED WALL SCONCE - 8K LUMEN PACKAGE	FT	0.9	LSI INDUSTRIES	XWM-FT-LED-12L-40		
	F	I	MIRADA LED WALL SCONCE - 8K LUMEN PACKAGE	FT	0.9	LSI INDUSTRIES	XWM-3-LED-03-30		



SYMBOL

A (XX')

 $^+$ X.X

GENERAL LIGHTING NOTES

VARIABLE FIELD CONDITIONS.

LIGHTING FIXTURE MODEL.

HIGH PRESSURE SODIUM:

ENGINEERING & DESIGN, LLC.

SPECIFIED WITHIN THE PLAN SET.

BE PROVIDED BY THE CONTRACTOR.

METAL HALIDE:

ATM LIGHTING NOTES:

• LIGHT EMITTING DIODES (LED): 0.90

I. THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER

2. WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR

3. UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:

4. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS. 5. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD

I. THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALLAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. THE EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE. THE LIGHTING DESIGN IS SUBJECT TO CHANGE IF THE EXISTING LIGHT FIXTURES ARE NOT GREATER

2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING IF THE EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE

3. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHT POLES IDENTIFIED FOR REUSE WITH A PROPOSED LIGHT FIXTURE(S) SHALL BE IN ACCEPTABLE WORKING CONDITION AND HAVE THE CAPACITY TO SUPPORT THE PROPOSED LIGHT FIXTURE(S). ANY MOUNTING EQUIPMENT REQUIRED TO ATTACH THE PROPOSED LIGHTING FIXTURE TO THE EXISTING LIGHT POLE SHALL

THAN OR EQUAL TO THE FOLLOWING WATTAGE: FIXTURE 'X' = MINIMUM X WATTS

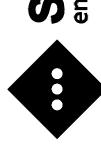
PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)

PROPOSED AREA LIGHT

DESCRIPTION

PROPOSED LIGHTING INTENSITY (FOOTCANDLES)

PROPOSED BUILDING MOUNTED LIGHT





 $\mathbf{\Omega}$ N O

0 9

4. THE CONTRACTOR SHALL CONFIRM THAT THE LOCATION OF ANY PROPOSED BUILDING MOUNTED LIGHTING FIXTURE WILL NOT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING OF ANY FIXTURE CONFLICT PRIOR TO THE START OF CONSTRUCTION. 5. ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT ATM RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL SHRUBS WITHIN THE 60 FOOT ATM RADIUS SHALL BE TRIMMED TO A MINIMUM OF 36 INCHES ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM WHEN TRIMMING

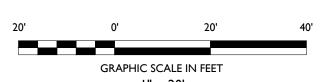
FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE. 6. PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC. OF DAMAGED OR INOPERABLE LIGHTS. THE CONTRACTOR SHALL REPAIR ALL INOPERABLE LIGHTS UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET.

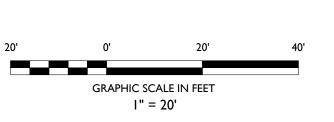
LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING

7. THE ILLUMINATION LEVELS DEPICTED WITHIN THE PLAN SET ARE BASED ON REGULATORY STATE STANDARDS FOR SAFETY LIGHTING

AND ON CLIENT STANDARDS. 8. ALL LIGHTING FIXTURES, UNLESS OTHERWISE NOTED WITHIN THIS

PLAN SET, HAVE THE PHOTOCELL OPTION ENABLED. 9. EXISTING LIGHTING FIXTURES CONTROLLED BY OUTSIDE ENTITIES (E.G. LANDLORD) HAVE BEEN EXCLUDED FROM THE LIGHTING ANALYSIS REFLECTED WITHIN THE PLAN SET. THE PROPOSED LIGHT LEVELS HAVE BEEN DESIGNED TO COMPLY WITH ALL APPLICABLE ATM AND SAFETY LIGHTING REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.

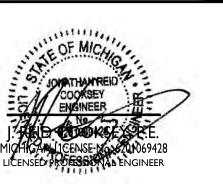




		SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER CITY SECOND SITE PLAN REVIEW	REVISED PER CITY SITE PLAN REVIEW	SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER FIRE DEPARTMENT COMMENTS	REVISED PER CITY COMMENTS	SUBMISSION FOR PRE-APPLICATION MEETING	DESCRIPTION	
JRC / ECM JRC / ECM JRC / ECM RAC / ECM ECM JRC							JRC	ВҮ		
		05/26/2022	02/09/2022	12/28/2021	09/08/2021	08/20/2021	08/02/2021	07/08/2021	DATE	
		7	9	2	4	3	2	_	ISSUE	
	APPROVED FOR CONSTRUCTION									

NUI AFFRUYED FOR CONSTRUCTION



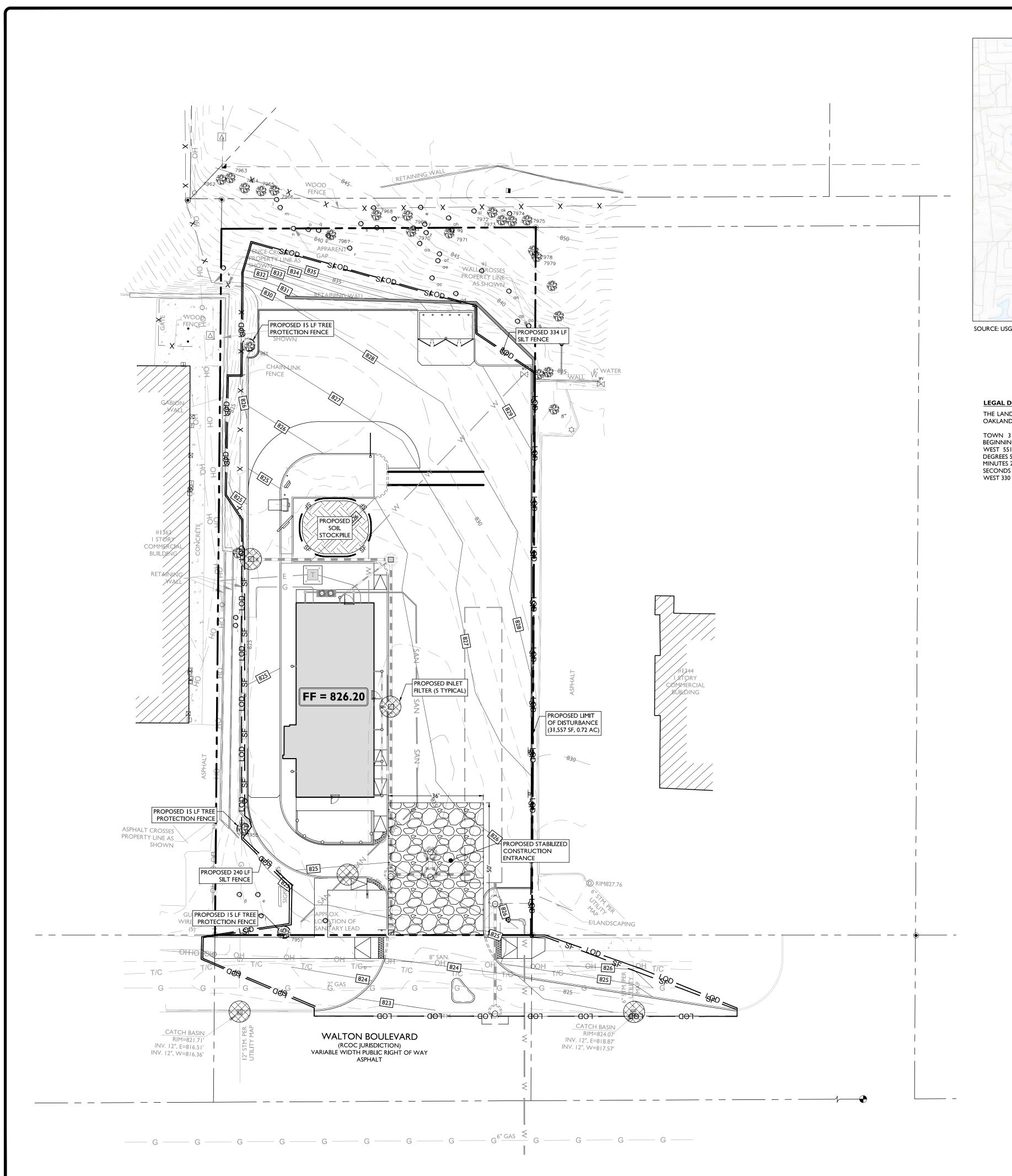


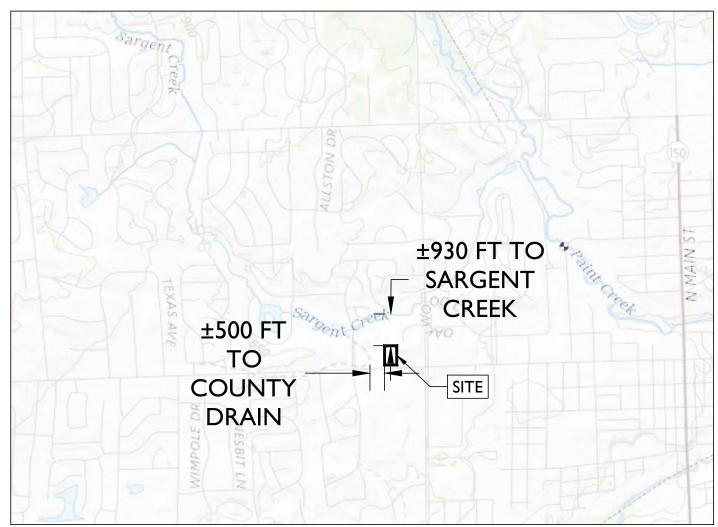


CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412

LIGHTING PLAN





SOURCE: USGS NATIONAL MAPPING SYSTEM

LOCATION MAP

SCALE: $I'' = 2,000' \pm$

THE LAND IS DESCRIBED AS FOLLOWS: CITY OF ROCHESTER HILLS, COUNTY OF OAKLAND, STATE OF MICHIGAN

TOWN 3 NORTH, RANGE II EAST, SECTION 9. PART OF SOUTHEAST 1/4 BEGINNING AT POINT DISTANCE NORTH 89 DEGREES 51 MINUTES 40 SECONDS WEST 551.20 FEET FROM SOUTHEAST SECTION CORNER, THENCE NORTH 89 DEGREES 51 MINUTES 40 SECONDS WEST 120 FEET, THENCE NORTH 00 DEGREES 04 MINUTES 20 SECONDS EAST 330 FEET, THENCE SOUTH 89 DEGREES 51 MINUTES 40 SECONDS EAST 120 FEET, THENCE SOUTH 00 DEGREES 04 MINUTES 20 SECONDS WEST 330 FEET TO BEGINNING, EXCEPT SOUTH 60 FEET IN ROAD.

SYMBOL **DESCRIPTION** PROPERTY BOUNDARY

ADJACENT PROPERTY BOUNDARY PROPOSED LIMIT OF DISTURBANCE PROPOSED SILT FENCE

PROPOSED TREE PROTECTION FENCE

PROPOSED STABILIZED CONSTRUCTION ENTRANCE

PROPOSED INLET PROTECTION FILTER

PROPOSED STOCKPILE &

EQUIPMENT STORAGE

SOIL CHARACTERISTICS CHART							
TYPE OF SOIL	59 - URBAN LAND						
PERCENT OF SITE COVERAGE	100%						
HYDROLOGIC SOIL GROUP	N/A						
DEPTH TO RESTRICTIVE LAYER	N/A						
SOIL PERMEABILITY	N/A						
DEPTH TO WATER TABLE	N/A						

SEQUENCE OF CONSTRUCTION

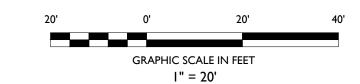
- INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE (2 DAYS). ROUGH GRADING AND TEMPORARY SEEDING (20 DAYS).
- EXCAVATE AND INSTALL DRAINAGE PIPING, AND INLETS (20 DAYS). INSTALL INLET FILTERS (I DAY). BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (90 DAYS).
- CONSTRUCT RIGHT OF WAY IMPROVEMENTS (2 DAYS). LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS). REMOVE SOIL EROSION MEASURES (I DAY).
- NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR, CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY



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

SOIL EROSION AND SEDIMENT CONTROL NOTES

- I. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY
- STANDARDS. 3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN I INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.



		SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER CITY SECOND SITE PLAN RI	REVISED PER CITY SITE PLAN REVIEW	SUBMISSION FOR SITE PLAN APPROVAL	REVISED PER FIRE DEPARTMENT COMME	REVISED PER CITY COMMENTS	SUBMISSION FOR PRE-APPLICATION MEE	DESCRIPTION
		JRC / ECM	JRC / ECM	JRC / ECM	RAC / ECM	RAC	ECM	JRC	ВҮ
		05/26/2022	02/09/2022	12/28/2021	09/08/2021	08/20/2021	08/02/2021	07/08/2021	DATE
		7	9	2	4	3	2	-	ISSUE
OT APPROVED FOR CONSTRUCTION									

NOT APPROVED FOR CONSTRUCTION



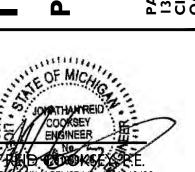
NOL

0

9



B





CITY FILE #21-030 SECTION #9

I" = 20' PROJECT ID: DET-200412

SOIL EROSION &

SEDIMENT CONTROL PLAN