FISHER CONTRACTING

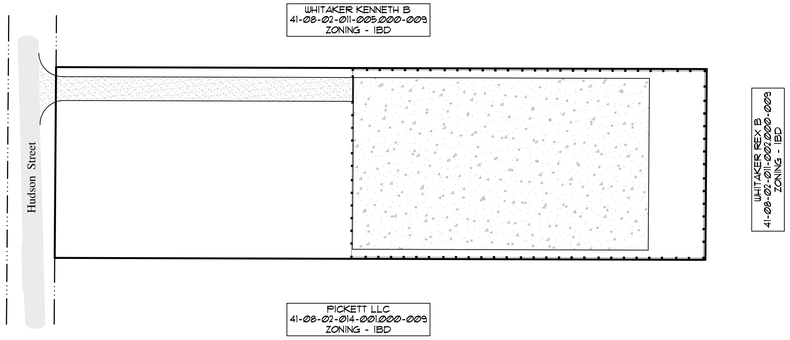
3031 Hudson Street, Franklin, Indiana 46131

SITE DATA

SITE DESCRIPTION:
PROPOSED COMMERCIAL DEVELOPMENT
3.08 ACRES
PROPOSED IMPROVEMENTS:
DRIVE ACCESS TO PROPOSED STONE STORAGE AREA FOR FISHER CONTRACTING. STONE AREA TO BE ENCLOSED WITH A 6-FOOT HIGH PRIVACY FENCE.

ZONING:
SITE: IBD
ADJOINER NORTH: IBD
ADJOINER EAST: IBD
ADJOINER SOUTH: IBD
ADJOINER WEST: IBD

SITE DEVELOPMENT PLANS



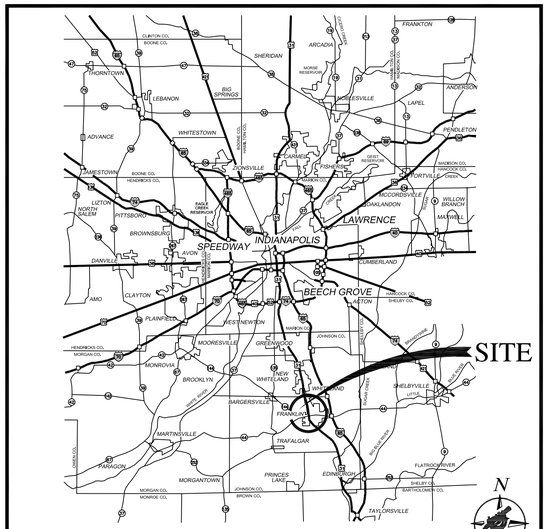
Site Map

Scale: NTS

CLIENT

FISHER
CONTRACTING. LLC

P.O. Box 545
Franklin, Indiana 46131

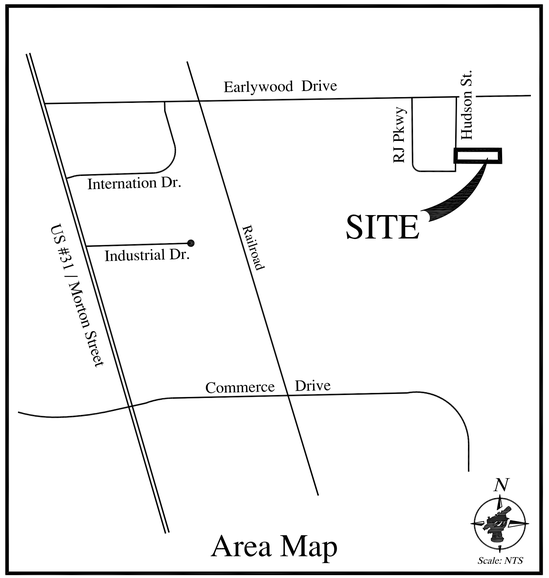


Location Map

Scale: NTS

INDEX OF DRAWINGS

SHEET NUMBER	SHEET DESCRIPTION
1	TITLE SHEET
2	EXISTING SITE CONDITIONS
3	DEVELOPMENT PLAN
4-6	EROSION CONTROL PLAN



Area Map

Scale: NTS

PLAN REVISIONS

REVISION DATE	REVISION DESCRIPTION

DESCRIPTION

Part of Block "A" of Replat of Block "A" Plat of Lot. No. 3 Pickett/Whitaker Minor Plat recorded March 18, 2014 in Plat Cabinet E, page 123 A&B in the Office of the Recorder of Johnson County, Indiana, more particularly described as follows:

Beginning at the Southeast comer of said Block "A" marked by a capped 5/8" iron pin found in place, thence North 89 degrees 49 minutes 24 seconds West on and along the South line thereof a distance of 682.01 feet to a 5/8" iron pin w/cap found this survey; thence North 00 degrees 24 minutes 53 seconds East (reference plat bearing) on and along the West line thereof a distance of 200.00 feet to a 5/8" iron pin w/cap set this survey; thence South 89 degrees 49 minutes 24 seconds East a distance of 682.01 feet to a point on the East line of Block "A" marked by a 5/8" iron pin w/cap set this survey; thence South 00 degrees 24 minutes 53 seconds West on and along said East line a distance of 200.00 feet to the Point of Beginning of this described tract containing 3.1313 acres, more or less, subject however to all legal rights-of-way and easement of record including but not limited to a ten foot right-of-way dedication off the West side thereof to the City of Franklin leaving after said dedication 3.0854 acres more or less.

UTILITY CONTACTS

SANITARY - **City of Franklin**
796 South State Street
Franklin, Indiana 46131
Contact: Rick Littleton
(888) 736-3640

GAS - **Vectren**
600 Industrial Drive
Franklin, Indiana 46131
Contact: Steve Washburn
(317) 736-2989

WATER - **Indiana American Water Company**
110 South Park Boulevard
Greenwood, Indiana 46143
Contact: Ron Ballard
(317) 881-0270

ELECTRIC - **Duke Energy**
2515 North Morton Street
Franklin, Indiana 46131
Contact: Jerry Troxel
(317) 736-2019

TELEPHONE - **Century Link**
1147 Morthon Street
Franklin, Indiana 46131
Contact: Larry Talbot
(317) 736-4863

CABLE - **Comcast**
2520 Endress Place
Greenwood, Indiana 46143
Contact: George Solhan
(317) 535-4198

Indiana811
Know what's **below. Call** before you dig.

BENCHMARK:

INDOT - S 18
Bronze marker #S-18 locate on northwest wing of bridge on County Road 300 North, over I-65, 5 miles Northeast of Franklin, Indiana.

Elevation - 779.30 NAVD 88

Plans Prepared By:

NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Engineering, Land Surveying
Consulting & Inspection

Donna Jo Smithers
Professional Land Surveyor
President / Owner

Venus L.L. Thorne
Professional Engineer
Vice President

6125 South East Street, Suite "B"
Indianapolis, Indiana 46227-2147
Office - 317-884-3020
www.npes.biz

CERTIFIED BY:

DONNA JO SMITHERS REGISTERED No. 20100076 STATE OF INDIANA PROFESSIONAL SURVEYOR

11-12-15
Donna Jo Smithers
Professional Surveyor
State of Indiana
Registration Number 20100076

VENUS L.L. THORNE REGISTERED No. 11200278 STATE OF INDIANA PROFESSIONAL ENGINEER

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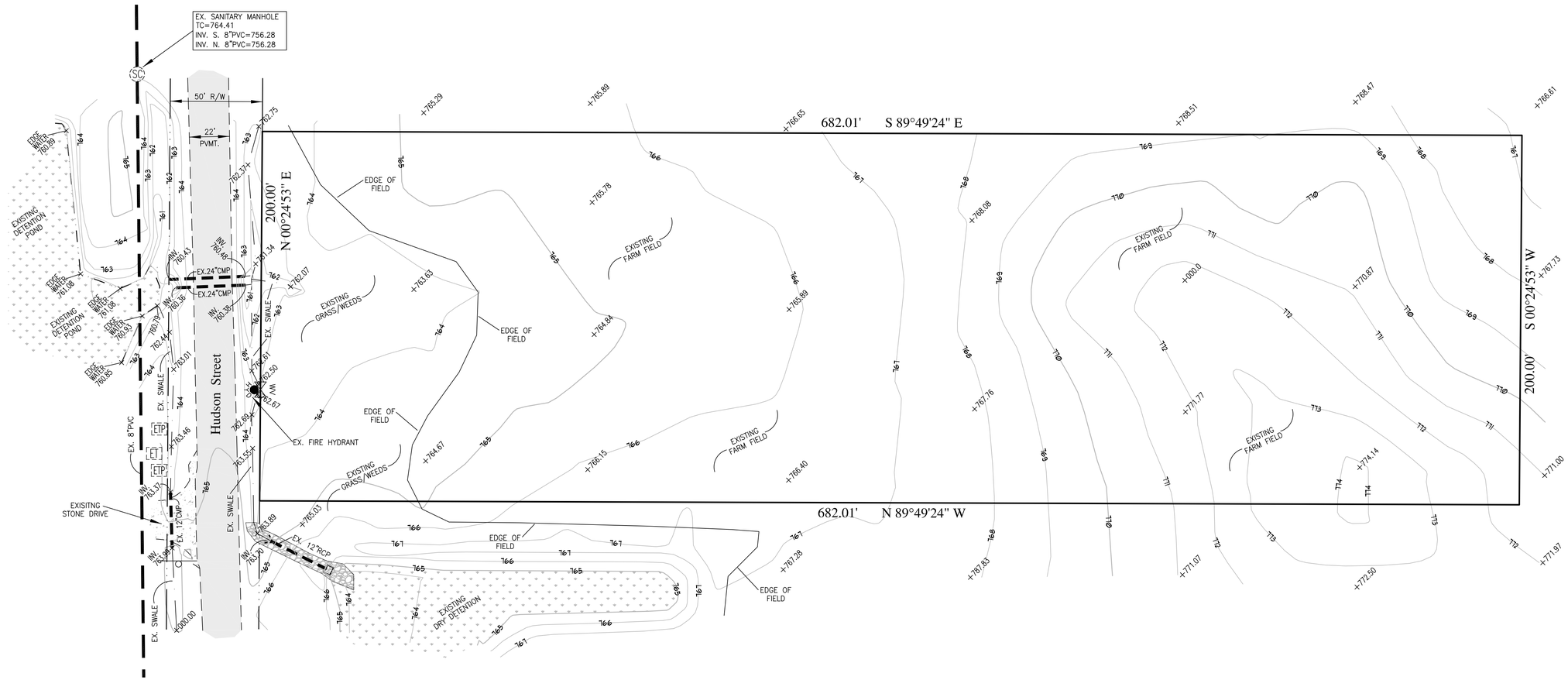

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Call before you dig
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PRO FORMA SURVEY
11-12-2015
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N

0 15 30 60
Bar Scale

Scale:1"=30'

BENCHMARK:

INDOT - S 18

Bronze marker #S-18 locate on northwest wing of bridge on County Road 300 North, over I-65, 5 miles Northeast of Franklin, Indiana.

Elevation - 779.30 NAVD 88

SITE BENCHMARK: TBM#1

Cut " " on top of east most corner of concrete structure located at the northwest corner of dry detention area.

Elevation = 767.67

UTILITY STATEMENT:
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DONNA JO SMITHERS
REGISTERED
No. 20100076
STATE OF INDIANA
PROFESSIONAL SURVEYOR
Seal 00.00.00

VENUS L.L. THORNE
REGISTERED
No. 11200278
STATE OF INDIANA
PROFESSIONAL ENGINEER
Seal 00.00.00

SCALE	DRAWN BY
1"=30'	
CHECKED BY	
DJS/VT	

PREPARED FOR
FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

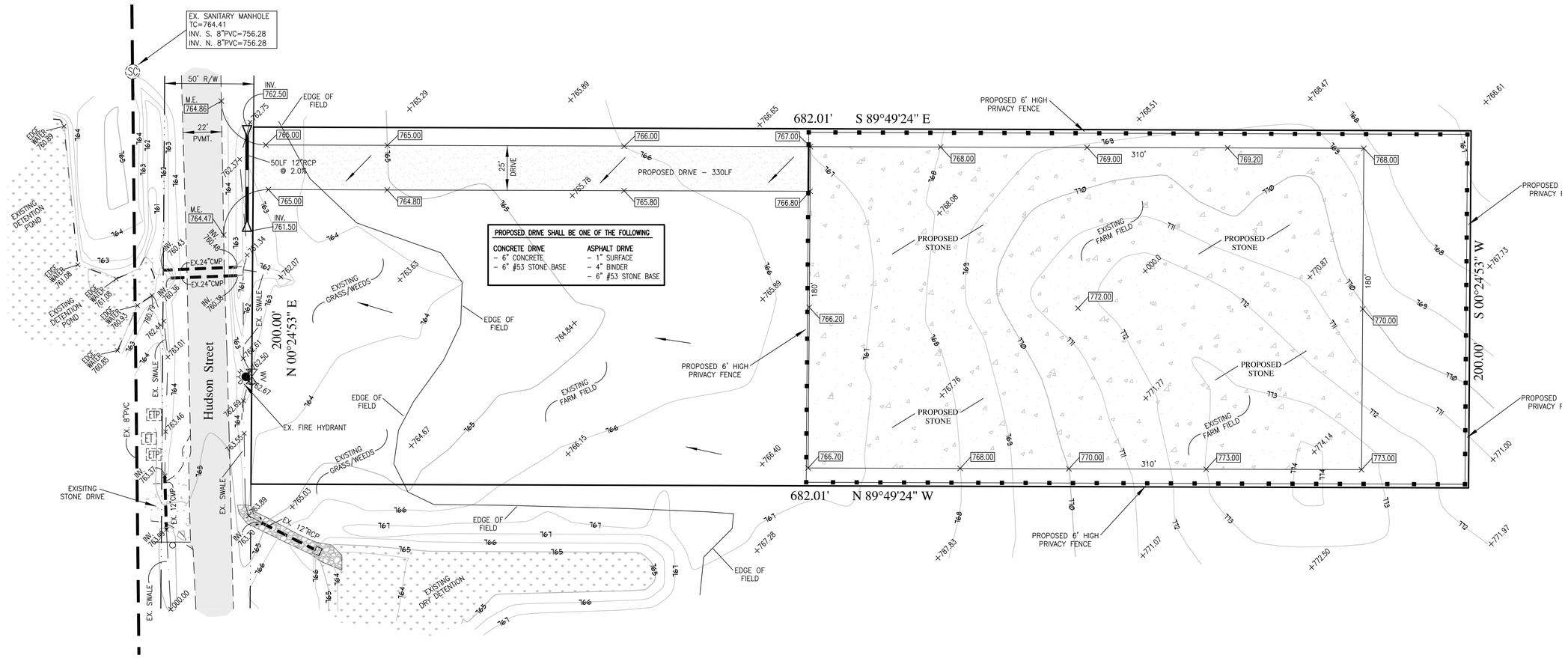
PROJECT NAME
Lot #3 Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

SHEET TITLE
EXISTING SITE CONDITIONS

Engineering, Land Surveying Consulting & Inspection
Donna Jo Smithers
Professional Land Surveyor
President / Owner
Venus L.L. Thorne
Professional Engineer
Vice President
6125 South East Street, Suite "B"
Indianapolis, Indiana 46227-2-147
Office - 317-884-3020
www.npes.biz
NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Sheet C2 of C6
Date: 11.12.2015
Job # 15-0047

BID SET: 00.00.0000



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- -EXISTING STREET SIGN
- -EXISTING TREE
- -EXISTING TREE LINE

LEGEND - PROPOSED

- -PROPOSED STORM STRUCTURE NUMBER
- -PROPOSED STORM INLET
- -PROPOSED DRAINAGE INLET
- -PROPOSED DRAINAGE MANHOLE
- -PROPOSED STORM SEWER
- -PROPOSED CONCRETE END SECTION
- -PROPOSED WATER QUALITY STRUCTURE
- -PROPOSED OUTLET CONTROL STRUCTURE
- -PROPOSED SANITARY STRUCTURE NUMBER
- -PROPOSED SANITARY MANHOLE
- -PROPOSED SANITARY SEWER
- -PROPOSED SANITARY CLEANOUT
- -PROPOSED SANITARY LATERAL
- -PROPOSED SWALE
- -PROPOSED FLOW ARROW
- -PROPOSED WATER LINE
- -PROPOSED FIRE HYDRANT
- -PROPOSED WATERLINE VALVE
- -PROPOSED WATERLINE TEE
- -PROPOSED WATERLINE BEND
- -PROPOSED GRANULAR BACKFILL
- -PROPOSED HANDICAP RAMPS
- -PROPOSED GRADE
- -PROPOSED CONTOUR
- -PROPOSED UNDERDRAIN
- -PROPOSED GAS LINE
- -PROPOSED ELECTRIC TRANSFORMER

DEVELOPMENT NOTES

1. ALL WORK SHALL CONFORM TO STATE AND LOCAL REGULATIONS.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AS SHOWN ON THIS PLAN PRIOR TO STARTING CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEERS/SURVEYORS IMMEDIATELY.

3. CONTRACTOR SHALL NOTIFY ANY AND ALL UTILITY COMPANIES WITH UTILITIES PRESENT ON SITE 72 HOURS BEFORE STARTING CONSTRUCTION. CONTRACTOR SHALL HAVE UTILITY COMPANIES VERIFY (i.e. LOCATION, DEPTH AND SIZE) ALL UTILITIES WITHIN LIMITS OF CONSTRUCTION.

4. ALL UTILITY SERVICES INTO THE PROPOSED BUILDING SHALL BE COORDINATED BETWEEN CONTRACTOR, DEVELOPER, ARCHITECT AND THE RESPECTIVE UTILITY COMPANY UNLESS OTHERWISE SHOWN.

5. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL AREAS (GRASS/LANDSCAPE AND CONCRETE/PAVEMENT) WHEN SITE WORK IS COMPLETE. TESTS SHALL BE PERFORMED TO INSURE AND CORRECT, IF NECESSARY, ANY PONDING, "BIRD BATH" CONDITIONS.

6. CONTRACTOR SHALL RESURFACE AND/OR RECONSTRUCT BACK TO ITS ORIGINAL CONDITION, ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITY AS WELL AS TRAFFIC FROM SUPPLIERS AND SUBCONTRACTORS AFTER CONSTRUCTION WORK IS COMPLETE.

7. ALL WATERLINE CONSTRUCTION, RELOCATION AND SERVICE INTO THE PROPOSED BUILDING SHALL BE DONE IN ACCORDANCE WITH LOCAL WATER COMPANY STANDARDS AND SPECIFICATIONS.

8. ALL CONSTRUCTION ACTIVITY ON THIS SITE SHALL BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.

9. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING THE MOST UPDATED SET OF CONSTRUCTION PLANS PRIOR TO COMMENCING CONSTRUCTION.

10. THE CONTRACTOR IS RESPONSIBLE TO CALCULATE THEIR OWN DIRT QUANTITIES TO DETERMINE A SITE BALANCE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CHECK EXISTING GRADES AGAINST PROPOSED GRADES TO DETERMINE ACCURACY OF DIRT TO BE MOVED ON THE SITE. ONCE THE CONTRACTOR MOVES ANY DIRT ON THE SITE THEY ARE RESPONSIBLE FOR ALL DIRT TO BE MOVED AT NO ADDITIONAL COST TO THE DEVELOPER OR ENGINEER.

N

0 15 30 60

Bar Scale

Scale:1"=30'

BENCHMARK:

INDOT - S 18

Bronze marker #S-18 locate on northwest wing of bridge on County Road 300 North, over I-65, 5 miles Northeast of Franklin, Indiana.

Elevation - 779.30 NAVD 88

SITE BENCHMARK: TBM#1

Cut " " on top of east most corner of concrete structure located at the northwest corner of dry detention area.

Elevation = 767.67

PRO FORMA SURVEY
11-12-2015

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COMPACTION NOTES:

PROPOSED FILL MUST BE COMPACTED TO 95% OF THE MAXIMUM DENSITY USING THE STANDARD PROCTOR TEST METHOD AND THE SURFACE FILL SHALL EXTEND AT LEAST TEN FEET HORIZONTALLY FROM THE PERIMETER OF THE BUILDING BEFORE SLOPING BELOW THE BFE.

Call before you dig
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Seal 00.00.00

SCALE	DRAWN BY	CHECKED BY
1"=30'		DJS/VT

PREPARED FOR

FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME

Lot #3
Pickett / Whitaker Minor Plat

City of Franklin, Johnson County, Indiana

SHEET TITLE

DEVELOPMENT PLAN

Engineering, Land Surveying
Consulting & Inspection

Donna Jo Smithers
Professional Land Surveyor
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6125 South East Street, Suite "B"
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NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Sheet C3 of C6
Date: 11.12.2015
Job # 15-0047

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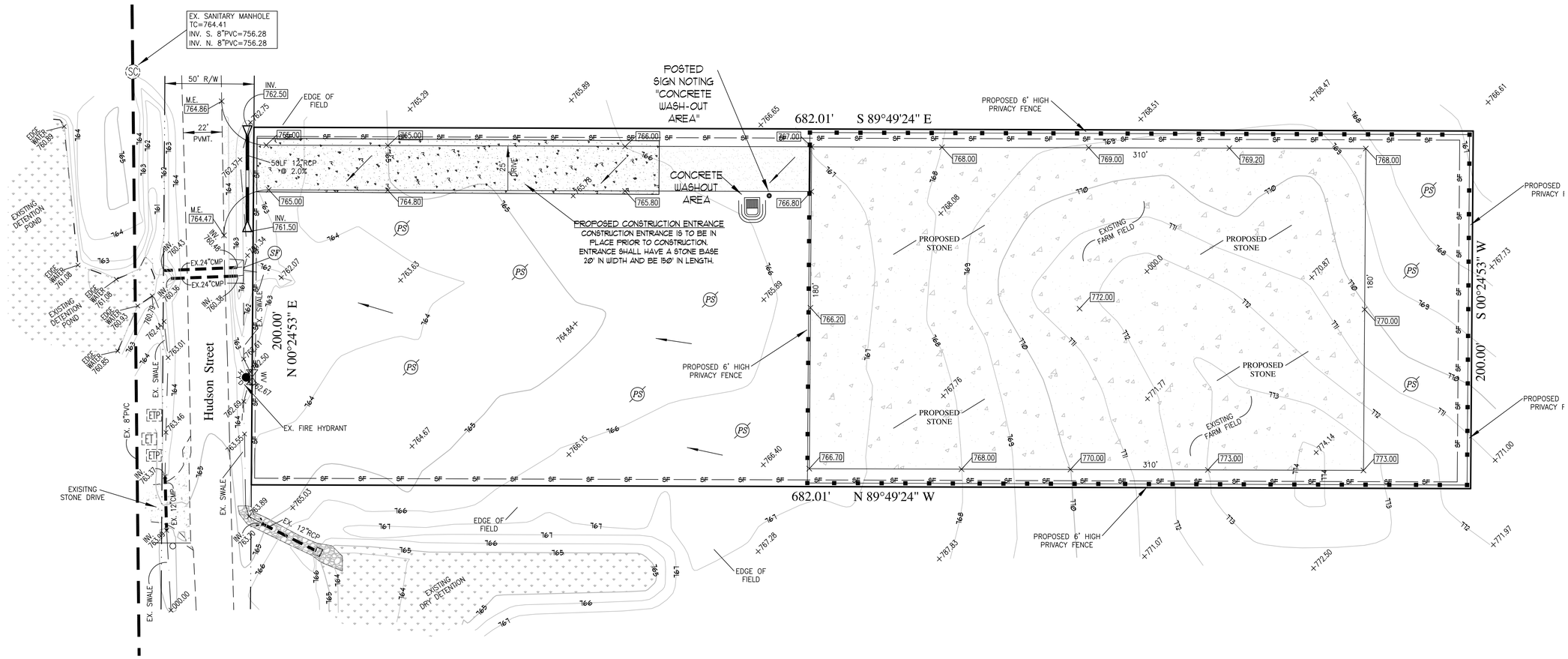

EROSION CONTROL PLAN LEGEND

- (IP) DROP BASKET INLET PROTECTION
- —— SF —— SILT FENCE
- ROCK RIP RAP (6" DIAMETER TYPICAL)
- TEMPORARY CONSTRUCTION ACCESS ROAD
- (PS) PERMANENT SEEDING
- EROSION CONTROL BLANKET

ADDITIONAL NOTES

- THE SILT FENCE AND APPROPRIATE EROSION CONTROL SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION
- ALL SLOPES EXPOSED DURING CONSTRUCTION SHALL HAVE SC-150 EROSION CONTROL BLANKETS INSTALLED ON THEM.
- ALL SILT FENCE MATERIAL SHALL BE "NUTEC 2 NWS-6 OR APPROVED EQUAL

PERSON RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES:

Kim Andersen - Schoolcraft Development
586 South State Road 135, Suite "G"
Greenwood, IN 46142
kim@schoolcraftdevelopment.com
(317) 889-6527

ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE INDIANA STORMWATER QUALITY MANUAL AND THE SCS "FIELD OFFICE TECHNICAL GUIDE".

SITE LATITUDE & LONGITUDE
LATITUDE - 39°36'24" / LONGITUDE - 86°09'28"

COMPACTION NOTES

ALL BUILDING PADS ARE TO BE COMPACTED TO 95% STANDARD PROCTOR OR EQUIVALENT

CLAY LINER MAY BE REQUIRED FOR THE POND IF THERE IS ANY EVIDENCE OF LEAKAGE DURING CONSTRUCTION.

THE CITY ENGINEER HAS THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES IN THE FIELD AS CONDITIONS WARRANT. ALL WORK SHALL CONFORM TO THE CITY EROSION CONTROL STANDARDS

THE STORM WATER QUALITY UNIT SHOWN ON THESE PLANS SHALL BE THE UNIT INSTALLED DURING THE DEVELOPMENT OF THIS PROPERTY. NO SUBSTITUTIONS SHALL BE PERMITTED.

ALL UTILITIES LOCATIONS (HORIZONTAL AND VERTICALLY) ARE TO BE LOCATED PRIOR TO CONSTRUCTION.

N

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SCALE	DRAWN BY	CHECKED BY
1"=30'		DJS/VT

PREPARED FOR
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P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME
Lot #3
Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

SHEET TITLE
EROSION CONTROL PLAN

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NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Sheet C4 of C6
Date: 11.12.2015
Job # 15-0047

BID SET: 00.00.0000

STORM WATER POLLUTION PREVENTION PLAN PROJECT INDEX

Assessment of Construction Plan Elements (Section A)

A1 - Index showing locations of required Plan Elements

A2 - 11 by 17 inch plat showing building lot numbers/boundaries and road layout/names
- 11"x17" plat has been submitted with application.

A3 - Narrative describing the nature and purpose of the project
- Proposed commercial development in Franklin, Johnson County.

A4 - Vicinity map showing project location
- A Vicinity Map is shown on the Title Sheet for this set of plans.

A5 - Legal Description of the Project Site
- The legal description for this site is shown on the Existing Boundary & Topo.

A6 - Location of all lots and proposed site improvements (roads, utilities, structures, etc.)
- The location of all proposed site improvements are as shown on the Site Development Plan.

A7 - Hydrologic unit code (14 digit)
- The Hydrologic unit code for this site is 05120204090030

A8 - Notation of any State or Federal water quality permits.
- No State or Federal water quality permits are required for this site.

A9 - Specific points where stormwater discharge will leave the site
- The stormwater runoff from this proposed development will flow to the existing storm system and detention located to the east of the site..

A10 - Location and name of all wetlands, lakes, and watercourses on and adjacent to the site
- No wetlands or Lakes are on site or adjacent to the site.

A11 - Identification of all receiving waters
- This site lies within the Youngs Creek-Brewers/Canary Ditches Watershed.

A12 - Identification of potential discharges to ground water (abandoned wells, sinkholes, etc.)
- No discharge to ground water will occur. Runoff from the site will be routed via the existing detention

A13 - 100-year floodplains, floodways, and floodway fringes
- There are no floodplains, floodways or fringes in this section. The Flood Map is shown on this sheet.

A14 - Pre-construction and post construction estimate of Peak Discharge (10-year storm event)
- The pre-development peak discharge for the 10-year storm event = 4.62 cfs
- The post-development peak discharge for the 10-year storm event = 10.02 cfs

A15 - Adjacent land use, including upstream watershed
- Commercial Use to the East, Farm land to the South, North and West.

A16 - Locations and approximate boundaries of all disturbed areas (Construction Limits)
- See the disturbed area detail on the Erosion Control Plan, which depicts the total disturbed area for the site

A17 - Identification of existing vegetation cover
- The existing site is grass covered.

A18 - Soils map including soil descriptions and limitations Per Indiana Erosion Control Manual
- See Soils Map This Sheet
CrA = Crosby Silt Loam, 0 to 2 percent slopes, moderate limitations for small commercial buildings due to wetness and low strength.
The proposed storm system will help properly drain the site. Appropriate backfill and footings will be used to stabilize all proposed infrastructure and buildings.

A19 - Locations, size and dimensions of proposed stormwater systems (e.g pipes, swales and channels)
- The proposed storm system is shown on the Development Plan and detailed on the storm plan and profiles.

A20 - Plans for any off-site construction activities associated with this project (sewer/water tie-ins)
- None

A21 - Locations of proposed soil stockpiles and/or borrow/disposal areas
- Excess dirt is to be removed from the site and disposed of by the contractor. No new stockpiles are proposed.

A22 - Existing site topography at an interval appropriate to indicate drainage patterns
- See the Existing Bondary & Topo sheet

A23 - Proposed final topography at an interval appropriate to indicate drainage patterns
- See the Development Plan

Assessment of Stormwater Pollution Prevention Plan (Section B)

B1 - Description of Potential pollutant sources associated with construction activities
- The potential pollutant sources associated with construction activities for this site would be material used for construction of the site, fuel storage areas, fueling locations, leaking vehicles and equipment, which could be exposed to the soils within the development. The contractor is urged to protect the site and maintain a single storage and fueling area on site. Although fuel leakage will happen, the contractor is urged to maintain this area so that pollutants to the soil is kept to a minimum. All pollutants that could enter the stormwater during construction would be routed through the existing pond, which is used for water quality.

B2 - Sequence describing stormwater quality measure implementation relative to land disturbing activities:
- Install perimeter sediment control measures (e.g. silt fence) Silt fence and appropriate erosion control measures shall be installed prior to any construction. Silt fence to be "NUTEC 2 NWS-6" or approved equal.
- Construct Construction Entrance per Detail immediately after silt fence installation
- Construct Concrete Washout Area
- As areas are brought of rough grade, permanent seed, fertilize & mulch all exposed areas. After rough grading, all areas that are to be parking areas. Stone shall be placed immediately. The stone is an excellent source of Sediment / Erosion Control.
- The site shall be constructed as follows:
Storm Sewer, Sanitary Sewer and Water Line installation
Final grading in conjunction with building construction
Complete final grading
Stone Placement (all underground utilities shall be in place before the placement of stone)
Curb and sidewalk installation
Pavement
- Protect storm inlets immediately after installation
- All installed erosion and sediment control practices must be monitored at least weekly and again after each rain event. Any noted deficiencies must be corrected immediately.
- Any area of disturbed soil, which will remain inactive for 15 days or more must be seeded with the appropriate temporary vegetative covers. (see temp. seeding dates)
- The contractor/developer has full responsibility of inspecting the erosion control measures on a daily basis. At a minimum, practices need to be inspected weekly, after each storm event, and daily during prolonged storm events.
Inspection of practices during a storm event is advantageous because the inspector can easily identify where measures need to be repaired or replaced. Failing practices should be repaired or replaced immediately. - Builders are to coordinate staging of erosion control as per detail labeled "Construction Sequence of Building Site Erosion Control Practices"
- Developers and Contractors must meet the design criteria, standards and specifications outlined in the Indiana Stormwater Quality Manual.
- Developer to place permanent seed on all side and rear easement areas and temporary seed in all other areas, at appropriate time during construction

B3 - Stable construction entrance locations and specifications (at all points of ingress and egress)
- Construction entrance shall be in accordance with Chapter 7 of the Indiana Stormwater Quality Manual.
Installation:
1. Remove all vegetation and other objectionable material from the foundation area.
2. Grade foundation and crown for positive drainage. If the slope of the construction entrance is toward a public road and exceeds two percent, construct an eight inch high diversion ridge with a ratio of 3-to-1 side slopes across the foundation area about 15 feet from the entrance to divert runoff away from the road (see Temporary Construction Ingress/Egress Pad Cross-Section View Worksheet).
3. Install a culvert pipe under the pad if needed to maintain proper public road drainage.
4. If wet conditions are anticipated, place geotextile fabric on the graded foundation to improve stability.
5. Place aggregate (INDOT CA No. 2) to the dimensions and grade shown in the construction plans, leaving the surface smooth and sloped for drainage.
6. Top-dress the first 50 feet adjacent to the public roadway with two to three inches of washed aggregate (INDOT CA No. 53) [optional, used primarily where the purpose of the pad is to keep soil from adhering to vehicle tires].
7. Where possible, divert all storm water runoff and drainage from the ingress/egress pad to a sediment trap or basin.
Maintenance:
Inspect daily.
Reshape pad as needed for drainage and runoff control / Top dress with clean aggregate as needed / Immediately remove mud and sediment tracked or washed onto public roads / Flushing should only be used if the water can be conveyed into a sediment trap or basin.

B4 - Sediment control measures for sheet flow areas
- Silt fence will be installed along the perimeter to collect sheet flow sediment runoff. See the Erosion Control Details for installation procedures.
Installation:
1. Lay out the location of the fence so that it is parallel to the contour of the slope and at least 10 feet beyond the toe of the slope to provide a sediment storage area. Turn the ends of the fence up slope such that the point of contact between the ground and the bottom of the fence end terminates at a higher elevation than the top of the fence at its lowest point (see Exhibit 1).
2. Excavate an eight-inch deep by four-inch wide trench along the entire length of the fence line (see Exhibit 2). Installation by plowing is also acceptable.
3. Install the silt fence with the filter fabric located on the up-slope side of the excavated trench and the support posts on the down-slope side of the trench. Drive the support posts at least 18 inches into the ground, tightly stretching the fabric between the posts as each is driven into the soil. A minimum of 12 inches of the filter fabric should extend into the trench. (If it is necessary to join the ends of two fences, use the wrap joint method shown in Exhibit 3.)
5. Lay the lower four inches of filter fabric on the bottom of the trench and extend it toward the up-slope side of the trench.
6. Backfill the trench with soil material and compact it in place.
Maintenance
Inspect within 24 hours of a rain event and at least once every seven calendar days / If fence fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately. /Remove deposited sediment when it is causing the filter fabric to bulge or when it reaches one-half the height of the fence at its lowest point. When contributing drainage area has been stabilized, remove the fence and sediment deposits, grade the site to blend with the surrounding area, and stabilize.

B5 - Sediment control measures for concentrated flow areas
- Erosion Control blankets are proposed for concentrated flow areas.
Installation
1. Select the type and weight of erosion control blanket to fit the site conditions (e.g., slope, channel, flow velocity) per the manufacturer's specifications.
2. Prepare the seedbed, add soil amendments, and permanently seed the area immediately following seedbed preparation.
3. Lay erosion control blankets on the seeded area so that they are in continuous contact with the soil with each up-slope or up-stream blanket overlapping the down-slope or down-stream blanket by at least eight inches, or follow manufacturer's recommendations.
4. Tuck the uppermost edge of the upper blankets into a check slot (slit trench), backfill with soil and tamp down. In certain applications, the manufacturer may require additional check slots at specific locations down slope from the uppermost edge of the upper blankets.
5. Anchor the blankets in place by driving staples, pins, or stakes through the blanket and into the underlying soil. Follow an anchoring pattern appropriate for the site conditions and as recommended by the manufacturer.
Maintenance:
Inspect within 24 hours of each rain event and at least once every seven calendar days / Check for erosion or displacement of the blanket / If any area shows erosion, pull back that portion of the blanket covering the eroded area, add soil and tamp, reseed the area, replace and staple the blanket.

B6 - Storm sewer inlet protection measures, locations and specifications
- Inlet protection is shown on the Erosion Control Plan. Basket Inlet Protection will be used during all stages of construction.
Drop Inlet Protection Installation:
1. Around the outer perimeter of the excavated area, lay a ring of riprap (INDOT uniform B riprap) to a height of 12 to 24 inches above the top of the storm drain inlet. Construct the aggregate donut such that it has a 2:1 or flatter outside slope and a 3:1 or flatter inside slope.
2. Cover the outside face of the aggregate donut with at least a 12-inch thick layer of INDOT CA No. 5 aggregate (for filtration). Maintain a 2:1 or flatter slope.
Maintenance
Inspect daily / Make needed repairs immediately / When the contributing drainage area has been stabilized, remove and properly dispose of all sediment and construction material and restabilize.

B7 - Runoff control measures (e.g. diversions, rock check dams, slope drains, etc.)
- These items are not proposed within this development.

B8 - Storm water outlet protection specifications
- These items are not proposed within this development.

B9 - Grade stabilization structures, locations and specifications
- These items are not proposed within this development

B10 - Location, dimensions, specifications, and construction details of each stormwater quality measure
- Locations of stormwater quality measures are shown on this sheet. Items used for stormwater quality during construction include silt fence, basket inlet protection and temporary seeding.

B11 - Temporary surface stabilization methods appropriate for each season (including sequencing)
- Temporary seeding shall utilize seed species, application rates, and dates set forth in the charts on the Erosion Control Plan.
- The duration of time which an area remains exposed shall be kept to a practical minimum. The area shall be stabilized as soon as possible. Temporary vegetation or mulching shall be used to protect exposed areas if permanent vegetation cannot be seeded within 15 days or activity ceases for more than 15 days or as directed by the engineer.
- Topsoil replacement shall take place from March 1 to October 31. Stockpile topsoil at all other time of the year. Permanent and final vegetation and structural erosion control devices shall be installed within seven (7) days after final grading or as soon as possible.
- See Sheet 7 for additional seeding notes.

B12 - Permanent surface stabilization specifications (include sequencing)
- At the propoer time, with the approval from the owner, and only after notifying the The City of Greenwood, the contractor shall dismantle the remaining erosion control elements only as required to finish all grading. Contractor shall notify the City of Greenwood in advance and arrance for the landscaping contractor to follow up immediately with revegatation of the remaining areas.
- Contractor shall remove any unsuitable material from the site left from the erosion control measures.
- Any bare disturbed areas will be graded, seeded and mulched or otherwise revegetated or stabilized, as per the erosion control plan.
- Final stabilization will be considered achieved when perennial vegetative cover has a density of ninety percent (90%) on all unpaved areas or an equivalent permanent stabilization measure has been utilized.
- See Sheet 7 for additional seeding notes.

B13 - Material handling and spill prevention plan
Expected materials that may appear at the site due to construction activities include, but are not limited to petroleum products, fertilizers, paint and solvents, and concrete. Materials shall be stored in the designated material storage area.
Spill prevention for vehicle and equipment fueling shall conform to the following practices: vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished b using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.
Limitations: Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Sending vehicles and equipment offsite should be done in conjuction with a Stabilized Construction Entrance/Exit.
Implementation: Use offsite fueling stations as much as possible. Discourage "topping-off" of fuel tanks. Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use. Drip pans or absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area. Use absorbent materials on small spills. Do not hose down or bury the spill.
Remove the absorbent materials promptly and dispose of properly. Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. Train employees and subcontractors in proper fueling and cleanup procedures. Dedicated fueling areas should be protected from the stormwater runon and runoff, and should be located at least 50 ft away from the downstream drainage facilities and watercourses. Fueling must be performed on level-grade area. Protect fueling areas with berms and dikes to prevent runon, runoff, and to contain spills. Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended. Federal, state, and local requirements should be observed for any stationary above ground storage tanks.
Spill prevention for solid waste shall conform to the following practices: Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors. Solid waste generated from trees and shrubs removed during land clearing, demolition of existing structures and building construction.
Packaging materials include wood, paper and plastic. Scrap or surplus building materials including scrap metals, rubber, plastic, glass pieces and masonry products. Domestic wastes including food containers such as beverage cans, coffee cups, paper bags, plastic wrappers, and cigarettes. Construction wastes including brick, mortar, timber, steel and metal scraps, pip and electrical cuttings, non-hazardous equipment parts, Styrofoam and other package constructors materials. Select designated waste collection areas onsite. Inform trash-hauling contractors that you will accept only watertight dumpsters for onsite use. Inspect dumpsters for leaks and repair any dumpster that is not watertight. Provide and adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy. Plan for additional containers and more frequent during the demolition phase of construction. Collect site trash daily, especially during rainy and windy conditions. Remove this solid waste promptly since erosion and sediment control devices tend to collect litter. Make sure that toxic liquid wastes (sued oils, solvents and paints) and chemicals(acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designed for construction debris. Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor. Arrange for regular waste collection before containers overflow. Clean up immediately if a container does not spill. Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas. Solid waste storage areas should be located at least 50 ft from drainage facilities and watercourses and should not be located in areas prone to flooding or ponding. Inspect construction waste area regularly. Spill prevention for concrete washout shall conform to the following practices: Store dry and wet material under cover, away from drainage areas. Avoid mixing excess amounts of fresh concrete. Perform washout of concrete trucks offsite or in designated areas only. Do not wash out concrete trucks into storm drains, open ditches, streets or streams. Do not allow excess concrete to be dumped onsite, except in designated areas. Locate washout areas at least 50 ft from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste. Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly. Avoid creating runoff by draining water to a bermed or level area when the concrete can set, be broken up, and then disposed properly. Avoid creating runoff by draining water to a bermed or level area when washing concrete to remove fine particles and expose the aggregate. Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.
The cleanup parameters shall conform to the following practices: The developer shall be continually kept informed, maintain lists of qualified contractors and available Vac-trucks, tank pumpers and other equipment readily accessible for clanue operations. In addition, a continually updated list of available absorbent materials and cleanup supplies should be kept on site. All maintenance personnel will be made aware of techniques for prevention of spills. They will be informed of the requirements and procedures outlined in this plan. They will be kept abreast of current developments or new information on the prevention of spills and / or necessary alterevation to this plan. When spills occur which could endanger human life and this become primary concern, the discharge of the life saving protection function will be carried out by the local police and fire departments. Absorbent materials, which are used in cleaning up spilled materials, will be disposed of in a manner subject to the approval of the Indiana Department of Environmental Management.
Spill prevention for vehicle and equipment maintenance shall conform to the following practices: Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site". The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately. These procedures are suitable on all construction projects where an onsite yard area is necessary for storage and maintenance of heavy equipment and vehicles. Onsite vehicle and equipment maintenance should only be used where it is impractical to send vehicles and equipment offsite for maintenance and repair. Sending vehicles/equipment offsite should be done in conjuction with a stabilized construction entrance. Outdoor vehicle or equipment maintenance is a potentially significant source of stormwater pollution. Activities that can contaminate stormwater include engine repair and service, changing or replacement of fluids, and outdoor equipment storage and parking (engine fluid leaks). If maintenance must occur onsite, use designated areas, located away from drainage courses. Dedicated maintenance areas should be protected from stormwater runon and runoff, and should be located at least 50 ft from downstream drainage facilities and water courses. Drip pans or absorbent pads should be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable service in a dedicated maintenance area. Place a stockpile of spill cleanup materials where it will be easily accessible. All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices. Use absorbent materials on small spills. Remove the absorbent materials promptly and dispose of properly. Inspect onsite vehicles and equipment daily at the startup for leaks, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and transmission fluids. Provide secondary containment and covers for these material if stored onsite. Train employees and subcontractors in proper maintenance and spill cleanup procedures. Properly dispose of used oils, fluids, lubricants and spill cleanup materials. Properly dispose of or recycle used batteries. Do not place used oil in a dumpster or pour into a storm drain or water course. Properly dispose of used oils, fluids, lubricants, and spill cleanup materials. Do not bury tires. Repair leaks of fluids and oil immediately.
Spill prevention for fertilizers shall conform to the following practices: Fertilizer's used will be applies only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
Spill prevention for paint an solvents shall conform to the following practices: All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or State or local regulations.
Spill prevention and cleanup shall conform to IDEM form 327 IAC 2-6 and the Local Fire Department shall be contacted in the case of a material spill occurring. Contact Information: IDEM Emergency Response: 1-888-233-7745

B14 - Monitoring and maintenancing guidelines for each proposed stormwater quality measure
- The contractor/developer has full responsibility of inspecting the erosion control measures on a daily basis. At a minimum, practices need to be inspected weekly, after each storm event, and daily during prolonged storm events. Inspection of practices during a storm event is advantageous because the inspector can easily identify where measures need to be repaired or replaced. Failing practices should be repaired or replaced immediately. A written self inspection log log shall be kept and made available to reviewing authorities within 48 hours of request.

B15 - Erosion & sediment control specifications for individual building lots
- See Erosion Control details for individual building lot guidelines.

Stormwater Pollution Prevention Plan - Post Construction Component (Section C)

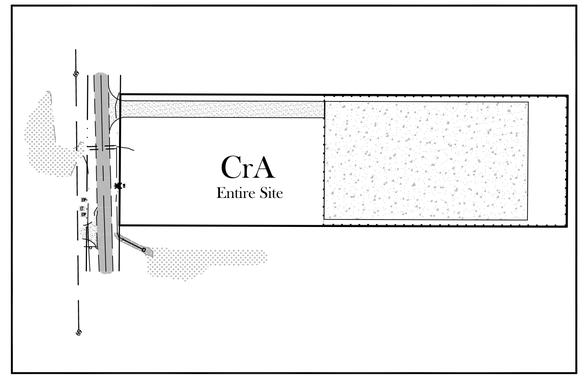
C1 - Description of pollutants and their sources associated with the proposed land use
- A majority of post construction pollutants expected from this project will come from the vehicles that are utilized at the site. Potential pollutants form the vehicles include: Grease, oil, gasoline, diesel, antifreeze, brake fluid, metals, rubber fragments and other hydrocarbons. Also sand and gravel from roadway surfaces and road weather treatments are assumed. Bacteria adn other biological agents from dumpster areas and littering area also considered potential pollutants.

C2 - Sequence describing stormwater quality measure implementation
- Stormwater quality is not proposed for the site.

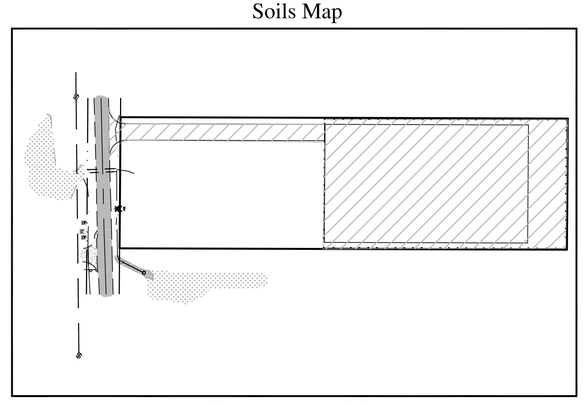
C3 - Description of proposed post construction stormwater quality measures
- Stormwater quality is not proposed for the site.

C4 - Location, dimensions, specifications, and construction details of each stormwater quality measure.
- Stormwater quality is not proposed for the site.

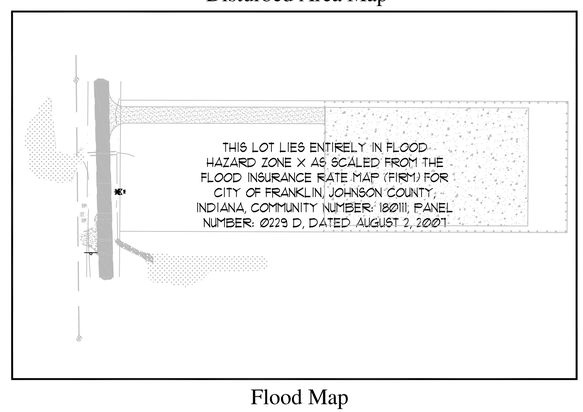
C5 - Description of maintenance guidelines for post construction stormwater quality measures
- Stormwater quality is not proposed for the site.



Soils Map



Disturbed Area Map



Flood Map

SEEDING NOTES

TEMPORARY SEEDING SPECIFICATIONS

SEED SPECIES	RATE PER ACRE	PLANTING DEPTH	OPTIMUM DATES
Wheat or Rye	150 lbs.	1 to 1.5 inches	Sept. 15 - Oct. 30
Spring Oats	100 lbs.	1 inch	March 1 - April 15
Annual Ryegrass	40 lbs.	0.25 inch	March 1 - May 1 Aug. 1 - Sept. 1
German Millet	40 lbs.	1 to 2 inches	May 1 - June 1
Sudangrass	35 lbs.	1 to 2 inches	May 1 - July 30
Buckwheat	60 lbs.	1 to 2 inches	April 15 - June 1
Corn (broadcast)	300 lbs.	1 to 2 inches	May 11 - Aug. 10
Sorghum	35 lbs.	1 to 2 inches	May 1 - July 15

Seedbed Preparation

1. Test soil to determine pH and nutrient levels.
2. Apply soil amendments as recommended by the soil test. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3. Work the soil amendments into the upper two to four inches of the soil with a disk or rake operated across the slope.

Seeding

1. Select a seed species or an appropriate seed mixture and application rate from Table 1.
2. Apply seed uniformly with a drill or cultipacker seeder or by broadcasting. Plant or cover seed to the depth shown in Table 1.

Notes:

- If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations.
- Daily seeding when the soil is moist is usually most effective.
- If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.

3. Apply mulch and anchor it in place.

Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days.
- Check for erosion or movement of mulch and repair immediately.
- Monitor for erosion damage and adequate cover (80 percent density); reseed, fertilize, and apply mulch where necessary.
- If nitrogen deficiency is apparent, top-dress fall seeded wheat or rye seeding with 50 pounds per acre of nitrogen in February or March.

PERMANENT SEEDING SPECIFICATIONS

Materials

Soil Amendments - Select materials and rates as determined by a soil test (contact your county soil and water conservation district or cooperative extension office for assistance and soil information, including available soil testing services) or 400 to 600 pounds of 12-12-12 analysis fertilizer, or equivalent. Consider the use of reduced phosphorus application where soil tests indicate adequate phosphorous levels in the soil profile.

Seed - Select an appropriate plant species seed or seed mixture on the basis of soil type, soil pH, region of the state, time of year, and intended land use of the area to be seeded.

Mulch -

- Straw, hay, wood fiber, etc. (to protect seedbed, retain moisture, and encourage plant growth).
- Anchored to prevent removal by wind or water or covered with premanufactured erosion control blankets.

Site Preparation

1. Grade the site to achieve positive drainage.
2. Add topsoil (see **Topsoil Salvage and Utilization** on page 25) or compost mulch (see **Compost Mulching** on page 59) to achieve needed depth for establishment of vegetation. (Compost material may be added to improve soil moisture holding capacity, soil friability, and nutrient availability.)

Seedbed Preparation

1. Test soil to determine pH and nutrient levels.
2. Apply soil amendments as recommended by the soil test and work into the upper two to four inches of soil. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3. Till the soil to obtain a uniform seedbed. Use a disk or rake, operated across the slope, to work the soil amendments into the upper two to four inches of the soil.

Seeding

Optimum seeding dates are March 1 to May 10 and August 10 to September 30.

Permanent seeding done between May 10 and August 10 may need to be irrigated. Seeding outside or beyond optimum seeding dates is still possible with the understanding that reseeding or overseeding may be required if adequate surface cover is not achieved. Reseeding or overseeding can be easily accomplished if the soil surface remains well protected with mulch.

1. Select a seeding mixture and rate from Table 1. Select seed mixture based on site conditions, soil pH, intended land use, and expected level of maintenance.
2. Apply seed uniformly with a drill or cultipacker seeder (see Figure 1) or by broadcasting (see Figure 2). Plant or cover the seed to a depth of one-fourth to one-half inch. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. (If seeding is done with a hydroseeder (see Figure 3), fertilizer and mulch can be applied with the seed in a slurry mixture.)
3. Mulch all seeded areas and use appropriate methods to anchor the mulch in place. Consider using erosion control blankets on sloping areas and conveyance channels

Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days until the vegetation is successfully established.
- Characteristics of a successful stand include vigorous dark green or bluishgreen seedlings with a uniform vegetative cover density of 90 percent or more.
- Check for erosion or movement of mulch.
- Repair damaged, bare, gullied, or sparsely vegetated areas and then fertilize, reseed, and apply and anchor mulch.
- If plant cover is sparse or patchy, evaluate the plant materials chosen, soil fertility, moisture condition, and mulch application; repair affected areas either by overseeding or preparing a new seedbed and reseeding. Apply and anchor mulch on the newly seeded areas.
- If vegetation fails to grow, consider soil testing to determine soil pH or nutrient deficiency problems.
- If additional fertilization is needed to get a satisfactory stand, do so according
- to soil test recommendations.
- Add fertilizer the following growing season. Fertilize according to soil test recommendations.
- Fertilize turf areas annually. Apply fertilizer in a split application. For cool-season grasses, apply one-half of the fertilizer in late spring and onehalf in early fall. For warm-season grasses, apply one-third in early spring, one-third in late spring, and the remaining one-third in middle summer.

DONNA JO SMITHERS REGISTERED No. 20100076 STATE OF INDIANA PROFESSIONAL SURVEYOR
Seal 11.12.15

VENUS L.L. THOME REGISTERED No. 11200278 STATE OF INDIANA PROFESSIONAL ENGINEER
Seal 11.12.15

SCALE	DRAWN BY	CHECKED BY
1"=30'		DJS/VT

PREPARED FOR

FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME

Lot #3
Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

SHEET TITLE

EROSION CONTROL PLAN

Engineering, Land Surveying
Consulting & Inspection

Donna Jo Smithers
Professional Surveyor
President / Owner

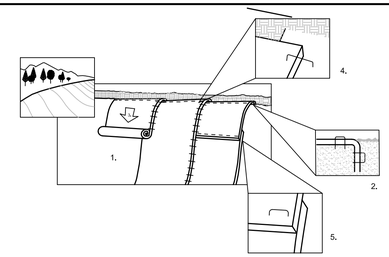
Venus L.L. Thome
Professional Engineer
Vice President

6125 South East Street, Suite "B"
Indianapolis, Indiana 46227-2-147
Office - 317-884-3020
www.npes.biz

NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Sheet C5 of C6
Date: 11.12.2015
Job # 15-0047

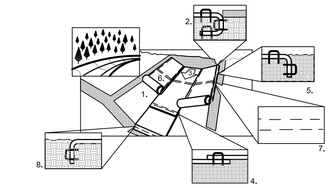
BID SET: 00.00.0000



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP, STAPLE THROUGH OVER-LAPPED AREA, APPROXIMATELY 12" APART.

REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

SLOPE APPLICATIONS for EROSION CONTROL BLANKET



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED.
7. IN MEDIUM/HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOM-MENDED AT 30 TO 40 FOOT INTERVALS, USE A ROW OF STAPLES 4" APART OVER THE ENTIRE WIDTH OF THE CHANNEL, PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CHANNEL APPLICATIONS for EROSION CONTROL BLANKET

ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES

TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FT. FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OF ACCESS AREA TO PREVENT DISTURBANCE OF TRACKING.

A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.

WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY.

ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASH OUT.

CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.

ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER WM-5, SOLID WASTE MANAGEMENT. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE)

- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THE THIS BMP, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS
- STRAW BALES, WOOD STAKES, AND SANDBAG MATERIALS SHOULD CONFORM TO THE PROVISIONS IN SE-9, STRAW BALE BARRIER.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

TEMPORARY CONCRETE WASHOUT FACILITY (TYPE BELOW GRADE)

- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THIS BMP, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

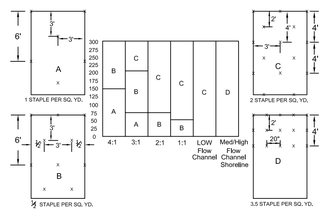
REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF WORK AND DISPOSED OF.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

INSPECTION AND MAINTENANCE

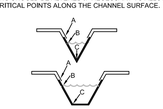
- INSPECT AND VERIFY THAT ACTIVITY-BASED BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES.L WHILE THE ACTIVITIES, WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY DURING THE RAINY SEASON AND OF TOW –WEEK INTERVALS IN THE NON-RAINY SEASON TO VERIFY CONTINUED BMP IMPLEMENTATION.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBARD OF 4 IN. FOR ABOVE GRAD FACILITIES AND 12 IN. FOR BELOW GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHOULD BE REMOVED AND DISPOSED OF.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

CONCRETE WASTE MANAGEMENT

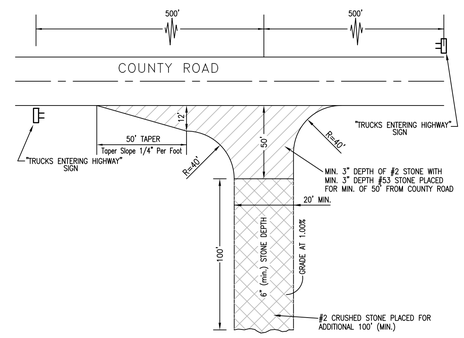


NOTE:
HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM SIDE SLOPE VERTICES

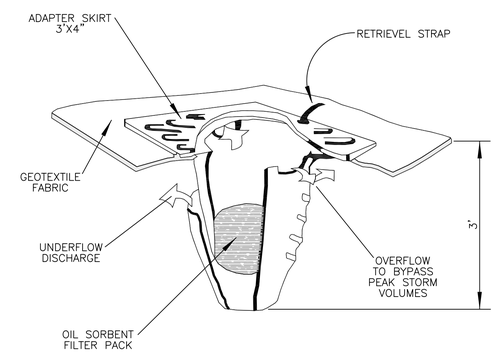


GENERAL STAPLE PATTERN AND RECOMMENDATIONS

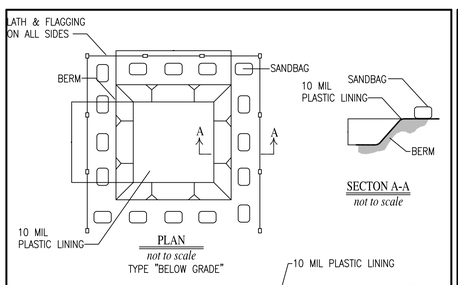


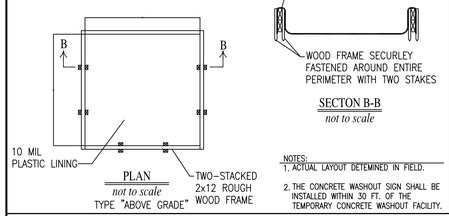
PLAN VIEW
NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRANCE DETAIL



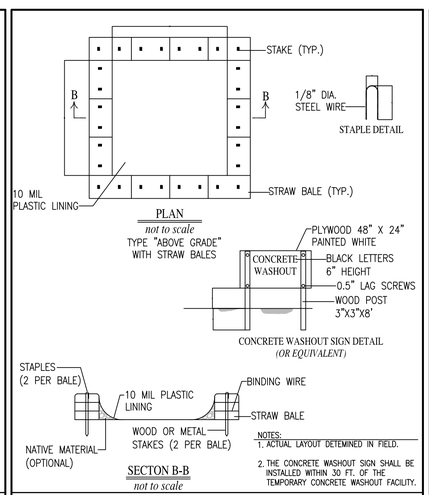
CATCH BASIN INSERT





NOTES:
1. ACTUAL LAYOUT DETEMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE WASTE MANAGEMENT



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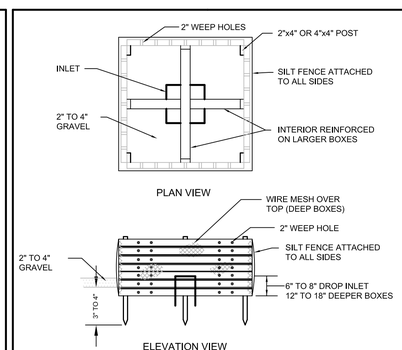
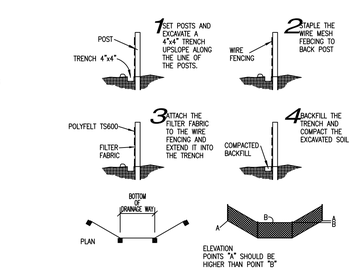


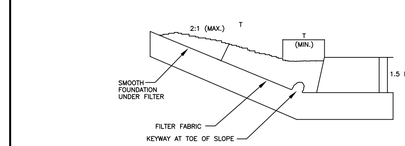
NOTE:
NO HOLES NEEDED ON BOXES MADE OF BOARDS SPACED 2" APART.
2" HOLES APPROX. 6" VERTICAL-6" HORIZONTAL ON PLYWOOD BOXES.
SILT FENCE FABRIC ATTACHED TO ALL SIDES OF BOX (COARSE WEAVE).
DIMENSIONS OF BOX WILL VARY ACCORDING TO THE SIZE OF INLET AND DEPTH BASE.
USE WIRE MESH OVER TOP OF DEEP HOLES.
SILT BOXES TO BE LOCATED AT EACH CATCH BASIN.

SILT FENCE FABRIC SPECIFICATIONS
POLYFELT TS600 OR EQUIVALENT

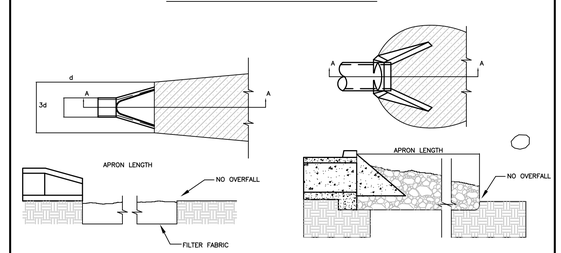
PROPERTY	TEST PROCEDURE	UNIT	VALUE
GRAB TENSILE	ASTM D4632	POUNDS	165
GRAB ELONGATION	ASTM D4632	PERCENT	>50
PUNCTURE	ASTM D4833	POUNDS	90
TRAPEZOIDAL TEAR	ASTM D4533	POUNDS	75
MULLEN BURST	ASTM D3786	PSI	255
WATER FLOW RATE	ASTM D4491	gpm/w^2	170
PERMITIVITY	ASTM D4491	SEC^{-1}	2.0
PERMEABILITY, K	ASTM D4491	CM/SEC	0.4
A.O.S.	ASTM D4751	Sieve Size	100–60
	ASTM D4751	MM	0.15–0.25
FABRIC WEIGHT	ASTM D3776	oz/yd^2	6.0
THICKNESS	ASTM D1777	M	80
U.V. RESISTANCE (500 HOURS)	ASTM D4355	PERCENT STRENGTH RETAINED	>80



FILTER FENCE DETAIL/FILTER FINCE INSTALLATION DETAIL



RIP RAP SLOPE DETAIL



RIP RAP OUTLET DETAILS

DONNA JO SMITHERS REGISTERED No. 20100076 STATE OF INDIANA PROFESSIONAL SURVEYOR
Seal 11.12.15

VENUS L.L. THORNE REGISTERED No. 11200278 STATE OF INDIANA PROFESSIONAL ENGINEER
Seal 11.12.15

SCALE	DRAWN BY	CHECKED BY
1"=30'		DJS/VT

PREPARED FOR
FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME
Lot #3
Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

SHEET TITLE
EROSION CONTROL PLAN

Engineering, Land Surveying Consulting & Inspection
Donna Jo Smithers
Professional Land Surveyor
President / Owner
Venus L.L. Thorne
Professional Engineer
Vice President
6135 South East Street, Suite "B"
Indianapolis, Indiana 46227-2147
Office - 317-884-3020
www.npes.biz
NORTHPOINTE ENGINEERING & SURVEYING, Inc.

Sheet C6 of C6
Date: 11.12.2015
Job # 15-0047

BID SET: 00.00.0000